



**UNITED STATES MARINE CORPS**  
**MARINE CORPS SAFETY MANAGEMENT SYSTEM**  
**VOLUMES 1-8**

**COMMANDANT OF THE MARINE CORPS**  
**(SAFETY DIVISION)**

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**DEPARTMENT OF THE NAVY**  
HEADQUARTERS UNITED STATES MARINE CORPS  
3000 MARINE CORPS PENTAGON  
WASHINGTON DC 20350-3000

MCO 5100.29C CH-2  
SD  
08 Feb 2022

MARINE CORPS ORDER 5100.29C CHANGE TRANSMITTAL 2

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS SAFETY MANAGEMENT SYSTEM (MCSMS)

Encl: (1) Marine Corps Safety Management System Listing of  
Volumes 1-9

Reports Required: Reports that are required, and their periodicity,  
will be listed in the front of each volume.

1. Situation. In coordination with COMNAVSAFECEN (OPNAV N09F), the Department of the Navy's procedures for the reporting, investigation and recording of ground/shore mishaps, hazards and related events, are fully revised and approved for publication. The U. S. Marine Corps will incorporate and promulgate these procedures into Marine Corps Order 5100.29C (Marine Corps Safety Management System), as Volume 9 (Navy and Marine Corps Safety Investigation and Reporting).

2. Cancellation

a. The publication of this Order in combination with the volumes published herein state volume-specific cancellations at the beginning of each volume.

b. The publication of Volume 9 cancels MCO P5102.1B, Naval Mishap Investigation, Reporting, and Record Keeping Manual of 7 January 2005.

3. Mission. To establish the Navy and Marine Corps Safety Investigation and Reporting Manual within the Marine Corps Safety Management System.

4. Execution. Add the Navy and Marine Corps Safety Investigation and Reporting Manual as Volume 9.

5. Administration and Logistics

a. Records Management. Records created as a result of this directive shall be managed according to National Archives and Records Administration (NARA)-approved dispositions per SECNAV M-5210.1 to ensure proper maintenance, use, accessibility and preservation,

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regardless of format or medium. Records disposition schedules are located on the Department of the Navy/Assistant for Administration (DON/AA), Directives and Records Management Division (DRMD) portal page at: <https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx>. Refer to MCO 5210.11F for Marine Corps records management policy and procedures.

b. Privacy Act. Any misuse or unauthorized disclosure of Personally Identifiable Information (PII) may result in both civil and criminal penalties. The Department of the Navy (DON) recognizes that the privacy of an individual is a personal and fundamental right that shall be respected and protected. The DON's need to collect, use, maintain, or disseminate PII about individuals for purposes of discharging its statutory responsibilities shall be balanced against the individuals' right to be protected against unwarranted invasion of privacy. All collection, use, maintenance, or dissemination of PII shall be in accordance with the Privacy Act of 1974, as amended ( 5 U.S.C. 552a) and implemented per SECNAVINST 5211.5F.

6. Command and Signal

a. Command. This Order is applicable to the Marine Corps Total Force to include all active duty military personnel on- or off-duty, reserve military personnel and DoD civilian personnel on duty. This Order extends to military family members, all other civilian personnel, including contractors, while on Marine Corps installations, participants in any Marine Corps sponsored events, operations, or training, and applies to all Marine Corps facilities, equipment, and materiel.

b. Signal. This Order is effective on the date signed.



ERIC M. SMITH  
Assistant Commandant  
of the Marine Corps

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**DEPARTMENT OF THE NAVY**  
HEADQUARTERS UNITED STATES MARINE CORPS  
3000 MARINE CORPS PENTAGON  
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MCO 5100.29C CH-1  
SD  
5 AUG 2021

MARINE CORPS ORDER 5100.29C CHANGE TRANSMITTAL 1

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS SAFETY MANAGEMENT SYSTEM (MCSMS)

Ref: (a) See Reference List at the Beginning of Each Volume  
(b) SECNAV 5100.10K, Department of the Navy Safety Program, May 12, 2015  
(c) DoDI 6055.01, Department of Defense Safety and Occupational Health (SOH) Program, October 14, 2014  
(d) 5 U.S.C.552a, Records maintained on individuals  
(e) SECNAVINST 5211.5F, Department of the Navy Privacy Program, May 20, 2019  
(f) SECNAV M-5210.1, Records Management Manual, November 16, 2007  
(g) MCO 5210.11F, Marine Corps Records Management Program, April 7, 2015

Encl: (1) Marine Corps Safety Management System Listing of Volumes 1-5, 7, and 8

Reports Required: Reports that are required, and their periodicity, will be listed in the front of each volume.

1. Situation. The subjects of Radiation Safety and Explosives Safety have been completed and are to be added to the Marine Corps Safety Management System (MCSMS).

2. Cancellation. The publication of this Order in combination with the volumes published herein state volume-specific cancellations at the beginning of each volume.

3. Mission. To establish the Marine Corps Radiation Safety Program and Explosives Safety Management Program within the Marine Corps Safety Management System.

4. Execution

- a. Apply administrative changes to Volumes 1 and 4.
- b. Add Marine Corps Radiation Safety Program as Volume 7.

c. Add Marine Corps Explosives Safety Management Program as Volume 8.

5. Administration and Logistics

a. Records Management. Records created as a result of this directive shall be managed according to National Archives and Records Administration (NARA)-approved dispositions per SECNAV M-5210.1 CH-1 to ensure proper maintenance, use, accessibility and preservation, regardless of format or medium. Records disposition schedules are located on the Department of the Navy/Assistant for Administration (DON/AA), Directives and Records Management Division (DRMD) portal page at: <https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx>. Refer to MCO 5210.11F for Marine Corps records management policy and procedures.

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6. Command and Signal

a. Command. This Order is applicable to the Marine Corps Total Force to include all active duty military personnel on- or off-duty, reserve military personnel and DoD civilian personnel on duty. This Order extends to military family members, all other civilian personnel, including contractors, while on Marine Corps installations, participants in any Marine Corps sponsored events, operations, or training, and applies to all Marine Corps facilities, equipment, and materiel.

b. Signal. This Order is effective on the date signed.



GARY L. THOMAS  
Assistant Commandant  
of the Marine Corps

DISTRIBUTION: PCN 10207241201



**DEPARTMENT OF THE NAVY**  
HEADQUARTERS UNITED STATES MARINE CORPS  
3000 MARINE CORPS PENTAGON  
WASHINGTON DC 20350-3000

MCO 5100.29C  
SD  
15 OCT 2020

MARINE CORPS ORDER 5100.29C

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS SAFETY MANAGEMENT SYSTEM (MCSMS)

Ref: (a) See Reference List at the Beginning of Each Volume  
(b) SECNAV 5100.10K, Department of the Navy Safety Program, May 12, 2015  
(c) DoDI 6055.01, Department of Defense Safety and Occupational Health (SOH) Program, October 14, 2014  
(d) 5 U.S.C.552a, Records maintained on individuals  
(e) SECNAVINST 5211.5F, Department of the Navy Privacy Program, May 20, 2019  
(f) SECNAV M-5210.1, Records Management Manual, November 16, 2007  
(g) MCO 5210.11F, Marine Corps Records Management Program, April 7, 2015

Encl: (1) Marine Corps Safety Management System Listing of Volumes 1-5

Reports Required: Reports that are required, and their periodicity, will be listed in the front of each volume.

1. Situation

a. This Order establishes the Marine Corps Safety Management System (MCSMS), a system designed to focus our Corps on Operational Excellence. References (a) through (g) provide the MCSMS minimum requirements. This Order prescribes strategic policy, procedures, and responsibilities for managing all categories of safety under Marine Corps control in compliance with Department of Defense (DoD) directives.

b. Operational Excellence is the professional, efficient, and expert execution of our warfighting missions, functions, and tasks. It demands a culture of continuous improvement and the pursuit of the highest standards. It requires vision and decisive action from every Marine. Specifically, Operational Excellence requires understanding there is a right way to do things, knowing what that way is, and the conscious choice to do things the right way, every time. We need to

focus more on Operational Excellence and less on safety, because "safety" is what naturally happens when we are performing to high standards.

c. Our Corps must choose to evolve beyond our legacy safety program and mindset. To accomplish this, commanders must actively strive to change our culture by re-focusing on Operational Excellence in all things, including safety and readiness.

d. This new Order, which defines the MCSMS, marks the beginning of our new approach to risk management. We do not manage risk for the sake of being safe. We manage risk in pursuit of Operational Excellence—to be ready and able to accomplish our assigned missions when we are called to action.

2. Cancellation. The publication of this Order in combination with the volumes published herein state volume-specific cancellations at the beginning of each volume.

3. Mission. Commanders at all levels shall create and implement their own Safety Management System within the framework provided by this overarching Marine Corps Safety Management System. Each unit's Safety Management System shall contain assigned personnel and deliberate procedures to identify hazards, assess risk, and implement safety controls. Each commander shall tailor their system to their unit's specific mission and the specific hazards, on and off duty, faced by their Marines.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. Change the culture of the Marine Corps by redefining safety to focus on the Operational Excellence of our units and Marines, and by refocusing all Marines on the continuous management of risk. At the most basic and useful level, safety is the identification of hazards, the assessment of risk, and the implementation of controls. When Marines view safety this way, and actively perform these tasks, operational readiness improves. When Marines fail to identify hazards, we lose combat power to preventable damage, injury, and death.

(a) The Assistant Commandant of the Marine Corps (ACMC) is the Designated Agency Safety and Health Official for the Marine Corps and shall be listed as such on all posted Occupational Safety and Health Protection for Employees of the Marine Corp Posters, available at <http://www.dtic.mil/whs/directives/forms/dd/ddforms2000-2499.htm>. The ACMC establishes Marine Corps safety policy and chairs the Marine Corps Executive Safety Board (ESB).

(b) Director, CMC Safety Division is the designated service safety chief and provides direct support to the ACMC in

establishing and executing the Marine Corps Safety Management System, and all associated policies and procedures.

(c) Commanders shall implement this Order including the requirements of this Order, its Volumes, and references (b) and (c) as applicable.

(d) All Marines, Civilian Marines, and sailors attached to Marine units will use Risk Management processes for operational, training, and on- and off-duty activities in accordance with this Order and their specific command's Safety Management System.

(2) Concept of Operations. The MCSMS details systematic policies, practices, and procedures for the improvement of operational readiness, the prevention of mishaps, and the management of safety activities. The MCSMS is comprised of four pillars:

(a) Policy and Leadership. Operational safety policy defines the safety methods, processes, and organizational structure needed to meet both readiness and capability goals. Visible senior leader advocacy for the universal application of risk management reinforces leader and subordinate commitment to continually improving safety processes. At the most fundamental level, correct policy matched with leader engagement will create the reporting culture required to improve readiness and prevent mishaps.

(b) Risk Management. The Marine Corps charges all leaders to continuously communicate that consistent application of Risk Management is critical to success. Leaders must embed the Risk Management process into day-to-day operations, deliberate planning processes, and most importantly into the mindset Marines apply to warfighting.

(c) Safety Assurance. The evaluation, review, and monitoring of activities that assures commanders the elements of the MCSMS are being implemented, and guide continuous improvement efforts.

(d) Safety Promotion and Training. The communication, training, and other actions that create a positive safety culture across all echelons of Marine Corps organizations and activities.

b. Subordinate Element Missions

(1) Commanders shall ensure adequate staff and budgets are provided to implement a comprehensive safety management system that meets the requirements and intent of this Order.

(2) Commanders shall publish local implementing guidance and appropriate supplemental policies when necessary. Such guidance and policy must be consistent with this Order, but commanders are directed to adopt more detailed rules to meet specific unit and location needs, when not covered by this Order. Safety and Occupational Health (SOH)



Program policies shall be integrated into appropriate orders, training and indoctrination programs, publications, checklists, and Standard Operating Procedures (SOPs).

(3) Commanders shall integrate Risk Management processes into all planning, unit orders, training and indoctrination programs, checklists, and SOPs.

## 5. Administration and Logistics

a. This Order is applicable to all Marine Corps activities, including non-appropriated fund activities, operations under the sponsorship of the Marine Corps Community Services (MCCS) Program Director, and MCCS morale, welfare, and recreation activities. This Order also applies to acquisition, operation, sponsorship, and maintenance for all facilities.

b. The official and current version of this Order will be posted to Marine Corps Publications Electronic Library (MCPEL)  
<http://www.marines.mil/News/Publications/ELECTRONICLIBRARY.aspx>.

c. Recommendations. Send recommendations for improving the Marine Corps Safety Management System to the Director, Commandant of the Marine Corps, Safety Division, via CMC Safety Division OMB account: <[M\\_HQMC\\_CMC\\_Safety\\_Division\\_UD@usmc.mil](mailto:M_HQMC_CMC_Safety_Division_UD@usmc.mil)>, and in coordination with their Command's safety office. Each individual volume states its own sponsor and means of sending recommendations or content contained within that volume.

d. Records Management. Records created as a result of this directive shall be managed according to National Archives and Records Administration (NARA)-approved dispositions per SECNAV M-5210.1 CH-1 to ensure proper maintenance, use, accessibility and preservation, regardless of format or medium. Records disposition schedules are located on the Department of the Navy/Assistant for Administration (DON/AA), Directives and Records Management Division (DRMD) portal page at: <https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx>. Refer to MCO 5210.11F for Marine Corps records management policy and procedures.

e. Privacy Act. Any misuse or unauthorized disclosure of Personally Identifiable Information (PII) may result in both civil and criminal penalties. The Department of the Navy (DON) recognizes that the privacy of an individual is a personal and fundamental right that shall be respected and protected. The DON's need to collect, use, maintain, or disseminate PII about individuals for purposes of discharging its statutory responsibilities shall be balanced against the individuals' right to be protected against unwarranted invasion of privacy. All collection, use, maintenance, or dissemination of PII

shall be in accordance with the Privacy Act of 1974, as amended ( 5 U.S.C. 552a) and implemented per SECNAVINST 5211.5F.

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b. Signal. This Order is effective on the date signed.



GARY L. THOMAS  
Assistant Commandant  
of the Marine Corps

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**Marine Corps Safety Management System Listing of Volumes**

<b>VOLUME</b>	<b>TITLE</b>	<b>Sponsor</b>	<b>DATE</b>
1	Marine Corps Safety Management System Overview	SD	5 AUG 2021
2	Risk Management	SD	15 OCT 2020
3	Marine Corps Traffic Safety Program	SD	5 AUG 2021
4	Marine Corps Aviation Safety	SD	15 OCT 2020
5	Recreation and Off Duty Program	SD	15 OCT 2020
6	Safety and Occupational Health	-	TBD
7	Marine Corps Radiation Safety Program	SD	5 AUG 2021
8	Marine Corps Explosives Safety Management Program	MCSC AMMO	5 AUG 2021
9	Navy and Marine Corps Safety Investigation and Reporting	SD / N09F	8 FEB 2022

Note: Volume 6 is in progress and will be incorporated into MCO 5100.29C, Marine Corps Safety Management System. Safety Division anticipates the publication of MCO 5100.29C Change 3 during the 2022 Fiscal Year (FY22).

VOLUME 1

**MARINE CORPS SAFETY MANAGEMENT SYSTEM OVERVIEW**

**SUMMARY OF VOLUME 1 CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

The original publication date of this Marine Corps Order (right header) will not change unless a full revision of the MCO has been conducted.

The date denoted by blue font (left header) will reflect the date this Volume was last updated.

All Volume changes denoted in blue font will reset to black font upon a full revision of this Volume.

**CANCELLATION:** The publication of this Volume cancels MCO 5100.29B, MARINE CORPS SAFETY PROGRAM, MCBUL 1650, AWARD FOR MISHAP-FREE FLIGHT TIME, and MCO 5100.32A, GROUND SAFETY AWARDS

<b>Culture VOLUME VERSION</b>	<b>SUMMARY OF CHANGE</b>	<b>ORIGINATIO N DATE</b>	<b>DATE OF CHANGES</b>
ORIGINAL VOLUME	N/A	15 OCT 2020	N/A
1	Administrative Changes		5 AUG 2021

Reports Required: U.S. Marine Corps Ground Climate Assessment Survey System (GCASS), i.e., Aviation Command Safety Assessment (CSA), Aviation Maintenance Climate Assessment Survey System (MCAS) or Ground Safety Assessment Survey (Report Control Symbol MC-5100-07), Volume 1, Chapter 2, para 020103.K, and Volume 1, Chapter 6, para 060402, and Volume 4, Chapter 5, para 050102.A.

Submit recommended changes to this Volume, via the proper channels, to the following address:

CMC SD  
701 S. Courthouse Road  
Suite 2O050  
Arlington, VA 22204

DISTRIBUTION: PCN 10207241200

VOLUME 1: MARINE CORPS SAFETY MANAGEMENT SYSTEM OVERVIEW

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  - 1. 29 CFR 1910.147, General Industry Standards, *The Control of Hazardous Energy*
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  - 3. 29 CFR 1910.1030, General Industry Standards, *Bloodborne Pathogens*
  - 4. 29 CFR 1910.146, General Industry Standards, *Permit-Required Confined Spaces*
  - 5. 29 CFR 1910.66, General Industry Standards, *Powered Platforms for Building Maintenance*
- (b) 29 CFR 1926.503, OSHA Construction Industry Standards, Training Requirements
- (c) 29 CFR 1960, OSHA Basic Program Elements for Federal Employees
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  - 2. 29 CFR 1960.35, OSHA Basic Program Elements for Federal Employees, *National Institute for Occupational Safety and Health*
- (d) 10 U.S. Code § 172 – Department of Defense Explosive Safety Board
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- (f) DoDI 6055.01, Department of Defense Safety and Occupational Health (SOH) Program
- (g) DoDI 6055.07, Mishap Notification, Investigation, Reporting, and Record Keeping
- (h) DoDI 1400.25 Vol 451 Civilian Awards
- (i) SECNAVINST 5100.10K, Department of the Navy Safety Program
- (j) SECNAV M-5214.1, Department of the Navy Information Requirements (Reports) Management Manual
- (k) SECNAVINST 3590.5, Award of Medals, Trophies, Badges, and Similar Honors In Recognition Of Accomplishments
- (l) OPNAVINST 3750.6S, Naval Aviation Safety Management System
- (m) OPNAVINST 5100.23H, Navy Safety Program Instruction Manual
- (n) OPNAVINST 5450.215D, Mission and Functions of the Bureau of Medicine and Surgery
- (o) MCO 5040.6J, Inspector General of the Marine Corps Inspections Program
- (p) MCO P5102.1B, Mishap Investigation, Reporting, and Record Keeping
- (q) MCO 5210.11E, Marine Corps Records Management Program
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- (s) MCO 12810.1, Federal Employees' Compensation Act Program
- (t) MCO 5100.29C, Marine Corps Safety Management System Base Order
- (u) MCO 3570.1C, Range Safety
- (v) MCO 3550.9, Ground Range Certification and Recertification Program
- (w) ANSI/ASSP Z10-2012, Occupational Health

**VOLUME 1: CHAPTER 1**

**MARINE CORPS SAFETY MANAGEMENT SYSTEM**  
**FRAMEWORK**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

The original publication date of this Marine Corps Order (MCO) Volume (right header) will not change unless/until a full revision of the MCO has been conducted.

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<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>
1	N/A	Administrative Changes	5 AUG 2021

CHAPTER 1

MARINE CORPS SAFETY MANAGEMENT SYSTEM

0101 PURPOSE

The purpose of the Marine Corps Safety Management System (MCSMS) is to provide a framework for managing Safety and Occupational Health (SOH) risks and opportunities. The aim and intended outcome of the MCSMS are to prevent injury and ill health to Marines, Sailors, and civilian Marines, and to provide safe and healthful places to work, live, and recreate; consequently, it is critically important for the organization to eliminate and/or mitigate hazards and minimize SOH risks by taking effective preventive and protective measures.

0102 JUSTIFICATION

When these measures are applied by the organization through the Safety Management System (SMS), they improve its performance. An SMS can be more effective and efficient when taking early action to address opportunities for improvement of performance. Implementing an SMS conforming to this Order enables the Marine Corps to manage its risks and improve its performance. The MCSMS will assist the organization with fulfilling its legal requirements and improve performance and efficiency through a systematic approach to safe operations that enhances operational effectiveness through the prevention of mishaps. We do this because it is one of our enduring principles delineated in MCDP 1-0 Marine Corps Operations – Marines take care of their own. As stewards of the Nation’s most important resource – its sons and daughters – we must effectively manage risk in every decision we make.

0103 BACKGROUND

The Marine Corps is responsible for the occupational health and safety of military personnel and others who can be affected by its activities. This responsibility includes promoting and protecting their physical and mental health. The adoption of the Marine Corps Safety Management System supports safe and healthful workplaces, prevents work-related injury, off-duty injury, occupational illness, and continually improves overall operational readiness. It is important to understand the difference between the MCSMS and the legacy Marine Corps Safety Program. The legacy Program amounted to a collection of required tasks – what to do. These tasks, performed as intended, resulted in significant increases in safety across the enterprise. What was lacking was unity of purpose and unity of effort between Headquarters Marine Corps (HQMC) and commanders at all levels. The Marine Corps Safety Program was an additive requirement, a program performed *in addition to* mission planning and execution. The MCSMS is a systematic approach that integrates principles, tasks, and requirements *into* mission planning and execution – how to do it. Implemented as intended, the MCSMS provides a framework commanders use to execute their missions safely, rather than executing a safety checklist. While HQMC and commanders will implement programs to accomplish certain elements of the MCSMS, the system is more than an amalgam of programs. The MCSMS provides a systematic approach to mission accomplishment using elements that work together to the following ends:

- Building a just culture
- Training Marines and units
- Planning, executing, and debriefing operations and activities on/off duty
- Assessing the effectiveness of the system
- Continuous process improvement

#### 0104 SUCCESS FACTORS

The implementation of the MCSMS is a strategic and operational decision for a commander. The success of the system depends on leadership, commitment, and participation from all levels and functions of the organization. The implementation and maintenance of the MCSMS, its effectiveness and its ability to achieve its intended outcomes are dependent on a number of key factors, which include the following:

- Top management leadership, commitment, responsibilities, and accountability
- Top management developing, leading, and promoting a culture in the organization that supports the intended outcomes of the system
- Clear, effective communication
- Consultation with and, if applicable, the participation of Marines, Sailors, civilian Marines, organized labor representatives and families
- Allocation of the necessary resources to implement and maintain it
- Policies compatible with the overall strategic objectives and direction of the organization
- Effective processes for identifying hazards, controlling risks, and taking advantage of opportunities
- Continual performance evaluation and monitoring of the SMS to improve SMS performance
- Integration of the SMS into all of the organization's processes
- SOH objectives that align with SOH policy and take into account the organization's hazards, SOH risks, and SOH opportunities
- Compliance with all legal requirements

Note: Demonstration of successful implementation of this Order can be used by a command/unit to give assurance to personnel and other interested parties that an effective SMS is in place. Publication of this Order, however, will not in itself guarantee the provision of safe and healthful workplaces, their improved performance, or the prevention of work-related injury and ill health to Marines, Sailors, and civilian Marines. The level of detail, the complexity, the extent of documented information and the resources needed to ensure the success of an organization's SMS will depend on a number of factors:

- The organization's context (e.g., number of personnel, size, geography, culture, legal requirements, and other requirements)
- The scope of the organization's SMS
- The nature of the organization's missions, tasks, and functions

0105 SCOPE AND APPLICABILITY

010501. SCOPE

This Order establishes the Marine Corps Safety Management System (MCSMS) and prescribes the roles, responsibilities, and requirements for Headquarters Marine Corps, each level of command, supporting establishment organizations, individual Marines, and unit members within the MCSMS.

010502. APPLICABILITY

A. The provisions of this Order apply to all Marine Corps military and on-duty civilian personnel and operations worldwide. Exceptions include military-unique equipment (see note below), systems, and operations; conditions governed by other statutory authorities or inter-service support agreements; and conditions governed by international agreements overseas.

Note: Per reference (f), the Marine Corps shall apply U.S. Department of Labor (DOL), Occupational Safety and Health Administration (OSHA), and other non-Department of Defense regulatory safety and health standards to military-unique equipment, systems, operations, or workplaces, in whole or in part, insofar as practicable, by utilizing the more stringent requirements.

B. When military design, specifications, or deployment requirements render compliance with existing Safety and Occupational Health (SOH) standards unfeasible, inappropriate, or when no standard exists for such military application, commands shall develop, publish, and follow special military SOH standards, rules, or regulations to protect personnel from hazardous exposures. Acceptable exposure measures and limits shall be derived from the use of a Risk Management (RM) process.

C. The provisions of this Order do not apply to contractors unless otherwise required by law.

D. Commanders shall apply this Order consistently with the provisions of reference (g), other provisions of law providing for collective bargaining agreements and procedures, and any agreements entered into under such provisions. Commanders shall determine matters of official leave for employee representatives involved in activities under this Order by the procedures of reference (g), or applicable collective bargaining agreements.

E. In accordance with reference (d), Explosives Safety is exempt from the requirements of this Order. However, this Order does apply to SOH issues in explosives and ordnance areas, such as the evaluation of exposure to hazardous materials, noise, machine guarding, etc.

## 0106 MCSMS COMPONENTS

The MCSMS requires and supports Four Pillars: Policy and Leadership, Risk Management, Safety Assurance, and Safety Promotion and Training. Ensuring continuous improvement within the MCSMS and in achieving our goal of operational excellence is the Plan-Do-Check-Act (PDCA) cycle: an iterative, 4-step management method to control and continuously improve processes and products. Applying the PDCA cycle across each of the MCSMS pillars ensures continuous improvement, reinforcing and transforming Marines and materiel into missions accomplished safely.

### 010601. MCSMS FOUR PILLARS

Commanders at all levels shall employ the Four Pillars in an iterative, systematic way to accomplish their assigned missions.

- Pillar 1: Policy and Leadership
- Pillar 2: Risk Management (RM)
- Pillar 3: Safety Assurance
- Pillar 4: Safety Promotion and Training

A. Pillar 1: Policy and Leadership. Safety policy provides the framework to build a sound and proactive safety program. Active leadership involvement in the implementation and execution of the MCSMS at all levels is critical.

1. Safety Policy. Policy provides the requirements for a fully functional MCSMS and establishes, through documentation, the organization's expectations, objectives, employee participation, risk tolerance, and SMS business rules for its personnel. Policy corresponds to the "plan" stage in the PDCA business cycle. How each organization implements, promotes, supports, and reinforces those policies is the "Do" in the PDCA cycle. Policy will also define, document, and communicate the safety and risk-related roles, responsibilities, and authorities throughout the organization. Each commander shall align MCSMS policies with applicable instructions and guidance from higher headquarters and then convey its respective

leadership's expectations, objectives, employee participation, risk tolerance, and SMS business rules to their personnel.

2. Leadership. Commanders, Commanding Officers, and leaders have overall responsibility for safe operations and must clearly establish safety responsibility and accountability throughout their organizations, communicating their commitment to the safety and health of our Marines, Sailors, and civilian Marines. Safety staff at all levels shall assist commanders with the implementation and integration of safety and Risk Management elements into all activities. Commanders set safety policies and goals, and lead the MCSMS implementation, communicating safety management throughout the organization by identifying and controlling hazards, applying RM principles, implementing safety controls where required, and promoting a strong safety culture. Commanders shall:

- a. Establish a documented safety policy, which is communicated to all personnel (military, civilian) making clear that they are required to actively engage in the MCSMS. Commanders shall establish and implement processes that facilitate effective participation by all personnel at all levels.
- b. Provide personal leadership and assume overall responsibility.
- c. Appoint safety personnel in writing with the authority to execute MCSMS processes and programs.
- d. Direct the organization to implement and maintain a command safety management system.
- e. Hold all personnel accountable for effective system implementation.
- f. Identify reporting requirements up and down the chain of command (i.e., subordinate units) to provide measures of effectiveness for the performance of the SMS and feedback on how it can be improved.
- g. Ensure SMS and overall safety performance is included in military and civilian performance plans, performance appraisals, compensation, rewards, and recognition.

B. Pillar 2: Risk Management. Marines plan and conduct operations and training on a daily basis. How Marines plan, operate, and train is a reflection of a unit's leadership, culture, training, and commitment to the MCSMS. It is critical to both mission accomplishment and the preservation of our Marines and assigned equipment that Risk Management (RM) principles and processes are incorporated into all levels of planning, transition, execution, and decision-making, all the way down to the individual. RM will be used to identify and assess hazards, and to develop mitigating controls. Implemented control measures are then continuously monitored and analyzed to assess their effectiveness.



1. Requirements. All levels of Marine Corps leadership must establish Risk Management procedures, supported by appropriate training and resources, in order to identify hazards and manage risk both on and off duty. Requirements include the following:

- a. Prioritize the identification and communication of hazards throughout the unit and to communities of interest.
- b. Establish a RM evaluation policy for subordinate commands using evaluation and inspection processes.
- c. Complete risk assessments as part of the decision-making processes.
- d. Prioritize hazards based on probability and severity.
- e. Tailor RM training to unit and group training, operations, and exercises.
- f. Review evaluations for gaps and best practices, and share results with higher headquarters so this information can be disseminated to communities of interest. Higher headquarters must communicate a risk management strategy with stakeholders when unmitigated residual risk is transferred up or down within the chain of command.
- g. Develop and implement a change management strategy to minimize the introduction of new hazards and risks into the environment. Identify and manage risk caused by changes that may affect established processes.

2. Principles. Risk Management must be integrated into mission and task planning, preparation, briefing, execution, and debriefing. During hazard analysis, commanders must identify, document, and communicate an understanding of conditions that could prevent mission accomplishment. Specifically, the identification of hazards and assessment of associated risks produces a list of potential causal and contributing factors for potential mishaps that must be addressed, and that if they occur, would prevent mission accomplishment.

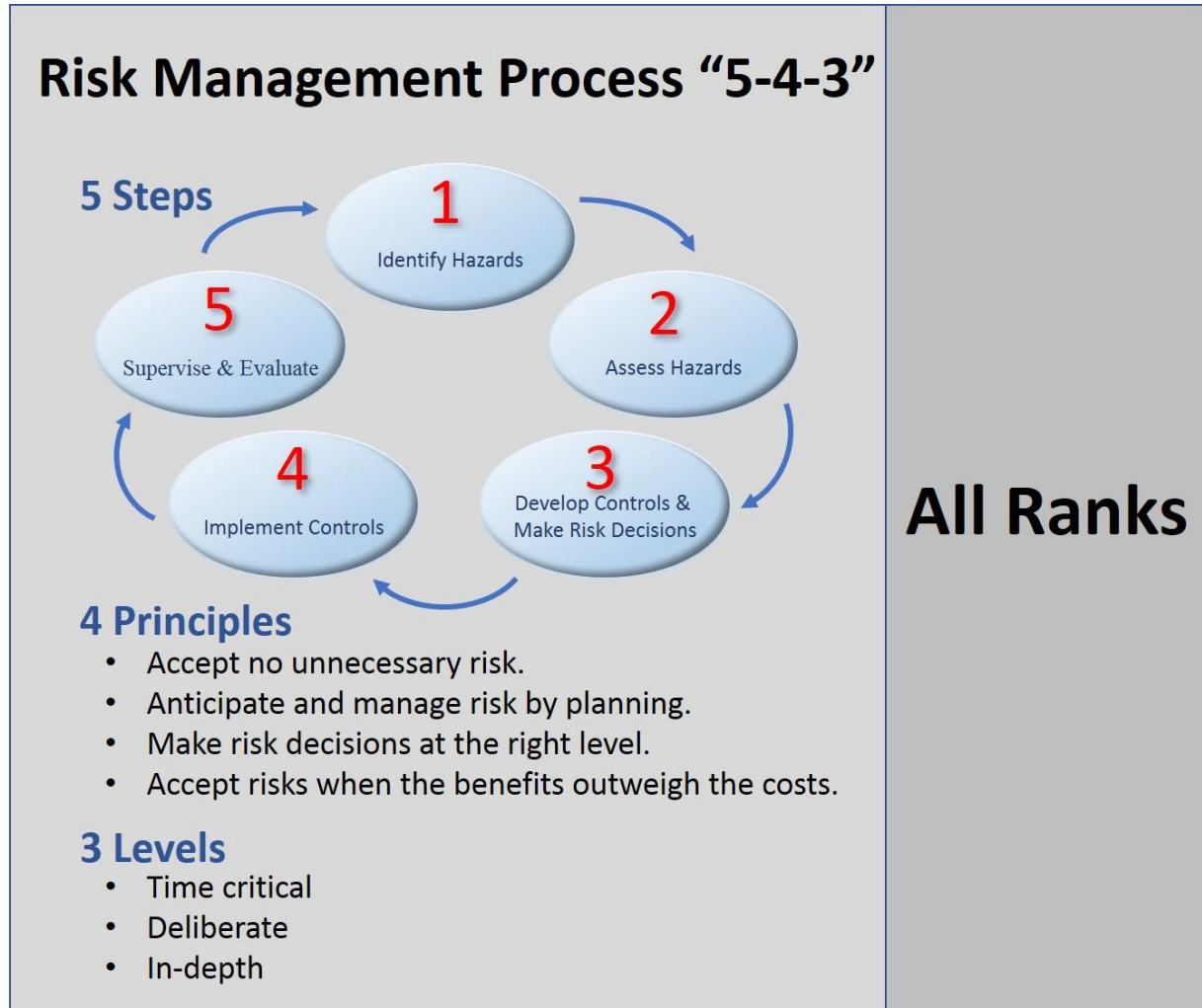
3. Risk is characterized by the probability and severity of a potential loss resulting from hazards, and is applicable to both on- and off-duty environments. Unidentified hazards lead to unassessed, and therefore unmanaged, risk.

4. Controls should include a methodology for monitoring and tracking their effectiveness while weighing risks against the benefits and value of the mission or task.

5. All risk decisions must be made at the appropriate level in the chain of command.

6. Risk management does not alleviate the inherent responsibility to comply with local, state, national, or host nation laws, regulations, and rules. Risk Management principles and steps will be covered in greater detail in Volume 2 - Risk Management.

Figure 1-1: Risk Management Process



C. Pillar 3: Safety Assurance. Safety assurance is the evaluation, review, and monitoring that assures commanders the elements of the MCSMS are being implemented, and guides continuous process improvement efforts. Assurance programs measure whether organizations conform to standards and are making progress toward established goals.

1. Requirements. Commands must evaluate system performance to identify hazards, determine conformity with risk controls, and assess SMS implementation. Headquarters commands must also monitor their internal and external data needs to analyze trends, identify hazards, measure effectiveness of risk controls, and assess their mission performance. Commands should use existing data streams and reports wherever possible to reporting burdens. Commanders shall support the safety assurance pillar by doing the following:

- a. Identify potential hazards and confirm risks during inspections, assessments and evaluations. This process focuses on compliance and conformance with the MCSMS and performance results achieved.
- b. Develop and implement a strategy to minimize the introduction of new hazards and risks into the work environment.
- c. Identify and manage risk caused by changes that may affect established processes and services.
- d. Ensure corrective actions are taken when non-conformance with SMS processes is identified.
- e. Establish, maintain, and monitor an anonymous reporting and feedback system to identify emerging hazards and to assess performance of applied risk controls.
- f. Ensure recommendations developed from acquired data are actionable and adequately measure SMS performance.
- g. Monitor the status of corrective and preventative actions, injury and illness metrics, and findings of incident investigations (i.e., including hazard and “near miss” reports), inspections, assessments, audit activities, performance measures, and trend analysis to determine whether the SMS is functioning properly.
- h. Investigate mishaps, near mishaps, hazards, and instances of potential regulatory noncompliance, and then share results with pertinent stakeholders.
- i. Ensure continuous improvement. Continuous improvement requires that commanders identify deficiencies, define and implement fixes, and measure results to ensure the deficiency has been corrected. The SMS supports continuous process improvement by creating a framework to review safety conformance and performance. It refines and improves suboptimal elements as trends develop by applying timely interventions. Leadership at all levels will use the PDCA cycle to continuously improve processes and products. The PDCA cycle is a requirement of an SMS in accordance with the voluntary consensus standards found in reference (w).
- j. Undertake MCSMS Program Management Review (PMR). The SMS PMR allows leadership and applicable process owners to conduct a strategic evaluation of the performance of the MCSMS, and to recommend improvements. Results and action items from this review shall be documented, prioritized, communicated to affected organizations, and tracked to completion. Further guidance on the MCSMS PMR process can be found in Chapter 6, *Safety Assurance*.

D. Pillar 4: Safety Promotion and Training. Safety Promotion and Training consists of a wide range of activities that shape organizational safety culture through multi-faceted communications and training. It is an essential piece of the MCSMS, which cannot succeed by mandate alone.

1. Promotion. Safety promotion increases awareness of MCSMS objectives and benefits to members of the command. Each command must communicate lessons learned, audit and evaluation results, mishap and near miss data, rationale behind the selection of controls, and preventative or corrective actions. This communication promotes transparency and a shared understanding of command priorities and goals. Each command's SMS must contain a safety education and awareness element that provides timely safety information and teaches personnel how to identify, assess, report, and manage hazards. This element must also include processes for two-way communication up and down the chain of command.

a. All personnel (military and civilian) shall know the MCSMS requirements that apply to their individual duties and responsibilities. Training records are generated and maintained as directed by this Order and other specified guidance.

b. Personnel Recognition. Timely recognition of personnel for their contribution to an effective SMS is a critical motivational tool that will drive continuous improvement of the MCSMS. Performance plans, performance appraisals, compensation, and reward and recognition systems include performance objectives related to the fundamental elements of a unit's SMS (see Chapter 5, *Safety Promotion and Training*).

2. Training. Both formal and informal training on safety and occupational health (SOH) and military unique activities and topics are necessary to ensure a fully functional SMS. Curriculum managers develop, document, deliver, and regularly evaluate formal training necessary to meet key safety and RM competency requirements. Personnel must receive regular training that is commensurate with their position and duty assignment in the organization, and their level of influence on the safety of the organization's operations. This training must meet the scope, content, and frequency of the objectives identified in this safety policy.

3. Safety Culture. An informed safety culture is composed of four culture types (Figure 1-2) that should be continuously promoted and reinforced through leadership actions throughout the organization:

- Just Culture
- Reporting Culture
- Learning Culture
- Flexible Culture

Figure 1-2: Foundations of an Informed Organizational Safety Culture

Culture Type	Description
Just	A Just Culture encourages personnel to report unsafe or unhealthful working conditions without fear of reprisal or adverse action. Commanders, commanding officers, officers in charge, and civilian equivalents must encourage reporting for safety analysis and mishap prevention purposes, while establishing clear guidelines on acceptable and unacceptable behavior. In a Just Culture, the immediate response by personnel who become aware of a hazard should be to find “what happened and why” versus “who to blame and punish.” A Just Culture fosters partnerships and builds trust between leaders and those led, and encourages the identification of hazards and the causes of mishaps.
Reporting	A Reporting Culture promotes the importance of voluntary reporting of hazards and errors in order to improve operational readiness, reduce mishap frequency and severity, and to prevent recurrence.
Learning	A Learning Culture requires a willingness to communicate lessons learned as well as to change procedures and practices based on known hazards and errors before a mishap results.
Flexible	A Flexible Culture empowers personnel to recommend procedural and behavioral changes within the organization.

a. Just Culture. The foundation of an informed culture is a Just Culture, which encourages personnel to provide safety-related information without fear of reprisal. A Just Culture should be continuously promoted and reinforced through leadership actions throughout organizations by encouraging members to address hazards and mitigate risk without fear of adverse actions. Commanders must encourage reporting for safety analysis and mishap prevention purposes, while establishing clear guidelines on acceptable and unacceptable behaviors. In a Just Culture, the immediate response by personnel who become aware of a hazard should be to find “what happened and why,” versus “who to blame and punish.” Leaders in a Just Culture should understand and promote the notion that more can be learned through full reporting and detailed investigation than blame and punishment. A Just Culture fosters partnerships for identifying hazards and the causes of events where safety was diminished. All personnel must clearly understand and recognize that it is unacceptable to punish all errors and unsafe acts regardless of their origins and circumstances while it is equally unacceptable to give blanket immunity from sanctions to all actions that could, or did, contribute to diminished safety. Commanders may not use safety investigation reports for any purpose except mishap prevention; however, other investigation types may be used as a basis for command disciplinary action, as appropriate. A “zero defect/tolerance” mentality prohibits a Just Culture.

b. Reporting Culture. As the second component of an informed culture, a Reporting Culture should be continuously promoted and reinforced by leadership actions throughout the command. Personnel must understand the connection between voluntary reporting of safety issues and being able to address them before they result in a mishap. A “zero defect/tolerance” mentality inhibits the self-reporting critical to a Reporting Culture due to fear

of punishment. Mistakes, which we must anticipate, accept, and account for, are not the same as patterns or habits of misconduct.

c. Learning Culture. As the third component of an informed culture, a Learning Culture should be continuously promoted and reinforced by leadership actions throughout the Marine Corps by showing a willingness to apply lessons learned and change procedures. A Learning Culture teaches both up and down, as well as laterally.

d. Flexible Culture. As the fourth component of an informed culture, a Flexible Culture, one where the organization and the people in it are capable of adapting effectively to changing demands, should be continuously promoted and reinforced by leadership actions throughout organizations by empowering personnel to recommend procedural and behavioral changes to manage risk.

#### 010602. PLAN-DO-CHECK-ACT

Plan-Do-Check-Act (PDCA) is an iterative, four-step management method used for the control and continuous improvement of processes and products. The MCSMS incorporates the PDCA cycle across each of the Four Pillars by creating deliberate opportunities to refine and refocus suboptimal elements as trends develop, **corrective actions** succeed or fail, and new technology is introduced. All leaders will use the PDCA methodology to ensure continuous improvement.

A. Plan. Establish the objectives and desired end state. Study programmatic shortfalls, emerging trends, and changing conditions. Outline possible countermeasures and the necessary policy, programs, processes, and actions necessary to deliver results in accordance with the desired outcome.

B. Do. Implement the plan, execute the process, **or** make the product.

C. Check. Compare the actual results (measured and collected in "DO" above) to the desired results (targets or goals from the "PLAN"). Look for deviations in implementation from the "PLAN" and "DO" that may have affected execution. Charting data will make it easier to see trends over several PDCA cycles, and to convert the collected data into the information needed to "ACT."

D. Act. Apply corrective actions to the causes of differences between actual and desired results. Determine where to apply changes to improve the process or product. This part of the cycle should produce evidence of the future direction of the mishap prevention program and any needed changes to the policy, priorities, objectives, resources, or other program elements.

#### 0107 MCSMS FRAMEWORK IMPLEMENTATION

Full implementation of the MCSMS creates a comprehensive and robust system that includes continuous process improvement. A systems approach fosters a strong RM culture that

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emphasizes procedural compliance. While other recognized SMSs closely align with the MCSMS for occupational safety and health programs, these other SMSs do not include other functional safety RM areas required by the Department of Defense (DoD): specifically RM, acquisition safety, environmental health, emergency response, explosives safety, fire and emergency services, radiation safety, operational safety, human systems integration, system safety, recreational and off-duty safety (RODS), traffic safety, and public safety.

## 010701. CUSTOMIZATION

Units will customize their SMS to support their Marine Corps functions and geographic locations in accordance with the provisions of this Order.

**VOLUME 1: CHAPTER 2**

**ROLES AND RESPONSIBILITIES**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 2

ROLES AND RESPONSIBILITIES

0201 GENERAL

There is only one Marine Corps Safety Management System (MCSMS). Every unit, element, and individual within the Marine Corps has a role and subsequent responsibilities within the system. The implementation of the Four Pillars must be tailored by commanders to a specific unit's level of command, location, and assigned mission. The Enterprise supports the MCSMS through policies and programs that organize, train, and equip the force, as well as assigns missions and allocates forces and resources to subordinate commanders.

020101. COMMANDANT OF THE MARINE CORPS

The CMC is responsible for providing safety policy, planning guidance, and intent to the Marine Corps. These must be communicated to HQMC elements, Commanding Generals, and Marines through direct communications, public affairs messaging and campaigns, expectations to general officers via the General Officer Symposium / Executive Off-Site, oncoming commanding officers via the Cornerstone Course, and in person through presentation and site visits across the Marine Corps.

020102. ASSISTANT COMMANDANT OF THE MARINE CORPS

The Assistant Commandant of the Marine Corps (ACMC) is the Designated Agency Safety and Health Official (DASHO) for the Marine Corps and shall be listed as such on all posted Occupational Safety and Health Protection for Employees of the Marine Corp posters. Posters can be found on the Commandant of the Marine Corps public website for download. The ACMC manages and provides regular revision to all safety policies, and chairs the Marine Corps Executive Safety Board (ESB).

020103. CMC SAFETY DIVISION

The Director of the Safety Division is the designated Service Safety Chief and assists the ACMC in establishing safety policies and objectives, developing procedures, preparing and implementing directives, and administering, coordinating, and managing the MCSMS. Specifically, the Director of the Safety Division has the following responsibilities:

- A. Oversee implementation of this Order.
- B. Serve as the HQMC advocate for all safety programs: Aviation, Ground, Safety and Occupational Health (SOH), Industrial Hygiene, Traffic Safety, Recreational Off-Duty Safety (RODS), Radiation, Explosives, and Range Safety.
- C. Establish the MCSMS policy and direction in coordination with the ESB, Deputy Commandants, commanders, and other DoD, government, and non-government agencies, as appropriate.

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D. Oversee the MCSMS policy in the following areas: aviation, ground, SOH, Industrial Hygiene, motor vehicle (personal, commercial, and tactical), ionizing and non-ionizing radiation, explosives, ranges, off-duty, recreation, and safety related quality of life.

E. In conjunction with Fleet Marine Forces and other Supporting Establishment Commands, annually review established safety program requirements and initiatives for inclusion in the Program Objective Memorandum (POM) budgeting cycle, Marine Corps Program Code (MCPC) 630604 (Safety), Installations Program Evaluation Board (PEB), Operation and Maintenance-Marine Corps (OMMC) appropriations (to include the Marine Corps Reserve program), BSS1 and 1A1A funding requirements. MCPC 630604 (Safety) provides resources associated with management and administrative costs for the safety program.

F. Serve as the point of contact for interpreting policy and providing subject matter expertise for SMS-related matters.

G. Ensure that relevant MCSMS training courses are developed and deployed.

H. Exercise Chapter 6, *Safety Assurance* oversight responsibility by conducting Command Safety Assessments (CSAs) to assess the status of command safety programs and provide significant safety trends to ACMC.

I. Work with Commander Naval Safety Center (COMNAVSAFECEN) to collect and analyze naval mishap, near miss, exercise, operational, and training data.

J. Analyze mishap data, identify causal factors, and recommend policy for preventing mishap recurrence. Provide safety trends to ACMC, Deputy Commandant for Aviation (DC/A), and Commander Naval Safety Center (COMNAVSAFECEN). Sources of mishap data include but are not limited to: personal casualty reports, OPREP-3, Department of Labor web site for the Division of Federal Employees Compensation (DFEC), DOD Force Risk Reduction (FR2), the Aviation Safety Awareness Program (ASAP), Enterprise Safety Application Management System (ESAMS), Medical Readiness Reporting System (MRRS), the Occupational Health Medical Surveillance and Hearing Conservation Readiness Applications, Web Enabled Safety System (WESS), Risk Management Information System-Streamline Incident Reporting (RMI-SIR), and Naval Aviation Safety Investigation Reports.

K. Track all Safety Investigation Report (SIREP) mishap recommendations (MISRECs) and Hazard Report (HAZREP) hazard recommendations (HAZRECs).

L. Serve as the Marine Corps Safety Program element point of contacts.

M. Represent the Marine Corps on all DoD and Department of the Navy (DON) safety policy formulation groups, the Defense Safety Oversight Council (DSOC), the DSOC Integration Group, the DSOC Steering Group, the Joint Services Safety Council and other safety councils and committees as required.

N. Assist Training and Education Command (TECOM) in developing safety

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training curricula.

O. Develop safety award criteria, collect nominations, select award recipients, and publicize appropriately in accordance with Chapter 5, *Safety Promotion and Training*.

P. Provide Risk Management Subject Matter Experts (SMEs) to assist other Marine Corps agencies in the identification of hazards, the assessment of risk, and the application of deliberate Risk Management processes to all Marine Corps operations.

Q. Assist the Assistant Secretary of Defense for Readiness, Assistant Secretary of the Navy for Energy, Installations and Environment (ASN E, I&E), the Bureau of Medicine and Surgery (BUMED), and CMC Health Services (HS) with the execution of Marine Corps SOH and Industrial Hygiene programs.

R. Manage the Marine Corps Aviation Survey System (MCASS) and the Ground Climate Assessment Survey System (GCASS). Report Control Symbol MC-5100-07 is assigned to this reporting requirement.

S. Develop and implement Marine Corps policies regarding the Radiation Safety Program in accordance with Volume 6, *Safety and Occupational Health Program*.

T. Direct the management of all Naval Radioactive Materials Permits (NRMP) issued to Marine Corps commands. Conduct an assessment every two years of all Marine Corps NRMP and X-ray radiography programs.

U. Publish and disseminate the MCSMS. Collaborate with Headquarters Marine Corps Communications Directorate to stimulate interest in safety through electronic and print media. Communicate safety success stories, and share hazard awareness and near-miss lessons learned in accordance with Chapter 5, *Safety Promotion and Training*.

V. Employ social media to communicate safety messages in accordance with Chapter 5, *Safety Promotion and Training*.

W. Employ new technologies to ensure safety programs operate and resources are used efficiently and effectively to achieve desired objectives.

### 0202 HEADQUARTERS MARINE CORPS AGENCY HEADS

#### 020201. DEPUTY COMMANDANT FOR AVIATION

Manage risk across the spectrum of USMC flight and aviation-related ground operations by directing the application of the Naval Aviation Safety Program and the Naval Air Training and Operating Procedures Standardization (NATOPS) program for the Marine Corps.

#### 020202. DEPUTY COMMANDANT FOR INSTALLATION AND LOGISTICS

Implement the MCSMS Installation Core Safety Services, as defined in Chapter 4, *Core*

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*Safety Services* that apply to fire protection and emergency services.

### 020203. DEPUTY COMMANDANT FOR PLANS, POLICIES, AND OPERATIONS

Act as the firearms safety point of contact for military police, guard forces, anti-terrorism/force protection forces, and the point of contact for motor vehicle safety as it relates to law enforcement. Coordinate with the CMC Safety Division staff at the Naval Safety Center (NSC) (Code 40), Norfolk, VA for review of all operational parachuting, and SCUBA mishap information, and all biannual parachute loft and dive locker safety inspection results.

### 020204. DEPUTY COMMANDANT FOR MANPOWER AND RESERVE AFFAIRS

A. Manage the inventory of available officers and staff noncommissioned officers to ensure appropriate-level staffing of all Marine Corps safety billets to facilitate full-time safety officer billets.

B. Ensure Injury Compensation Program Administrators (ICPA) support Marine Corps safety officers and managers to locally manage lost work time cases.

C. Ensure military and civilian supervisor appraisals specifically include an evaluation of their SOH program management performance.

### 020205. DEPUTY COMMANDANT FOR PROGRAMS AND RESOURCES

Ensure validated MCSMS requirements are funded through the Program Objective Memorandum (POM) process, per references (f), (i), and (l).

### 020206. DEPUTY COMMANDANT FOR COMBAT DEVELOPMENT AND INTEGRATION/COMMANDING GENERAL MARINE CORPS COMBAT DEVELOPMENT COMMAND

Primary responsibility for all Marine Corps Force Development, with all other Deputy Commandants in support as advocates who can provide subject matter expertise in their respective fields, rather than as advocates who direct force development action.

### 020207. COMMANDING GENERAL, TRAINING AND EDUCATION COMMAND

A. Incorporate relevant SOH and Risk Management (RM) regulations, techniques, tactics, and procedures into the curricula of all military and civilian training and education.

B. In coordination with CMC Safety Division develop, implement, and provide institutional oversight for the Marine Corps Range Safety Program, to include ground, aviation, and Light Amplification by Stimulated Emission of Radiation (LASER) training on operational ranges.

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C. Develop and publish appropriate range safety guidance. Develop and publish TECOM Safety of Use Memoranda (SOUM) for Marine Corps unique weapons, munitions, and training systems used on Marine Corps ranges and in training areas.

D. Fund the Marine Corps Range Safety Program within MCPC 460105-Ranges and Training Area Management.

E. Represent the Marine Corps on the NATO Range Safety Working Group (NRSWG), International Range Safety Advisory Group (IRSAG), and all other DoD-level range and training area safety groups, boards, and committees.

F. Ensure new weapons, ammunition, LASERs, and training systems have appropriate safety approvals, certifications, and required technical data prior to fielding and use on operational ranges.

G. Provide SMEs to support Marine Corps commands conducting Safety Investigation Boards (SIB) following mishaps on Marine Corps ranges and in training areas.

H. Ensure work-specific safety awareness training is implemented into Military Occupational Specialty (MOS) school curricula. Examples include respiratory protection for welders; confined space for wire communications, bulk fuel maintainers, combat engineers, explosives ordnance disposal technicians; and fall protection for aviation mechanics, field radio operators and combat engineers, etc.

### 020208. COMMANDER, MARINE CORPS SYSTEMS COMMAND

A. Incorporate SOH and RM principles into the materiel life cycle management process.

B. Ensure the Weapon Systems Explosives Safety Review Board, LASER Safety Review Board, Navy Radiation Safety Committee, and Lithium Battery Review Board reviews weapons and munitions during the system acquisition process.

C. Establish policy for suspending operations of Marine Corps ground equipment and weapons systems due to unsafe conditions, including issuance of appropriate instructions and safety of use alerts.

D. Ensure consideration of SOH features in the design, purchase, or procurement of all items over which the command exercises acquisition authority.

E. Implement the Marine Corps Explosives Safety Management Program, and represent the Marine Corps on the DoD Explosives Safety Board and other DoD-level explosive groups, boards, and committees.

F. Provide SMEs for SIBs involving material related failures of USMC-owned ground equipment and explosives when requested by the senior board member.

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G. Serve as the Marine Corps point of contact with external agencies for all systems safety and acquisition elements. Ensure the Marine Corps is represented on all DoD and DON safety policy formulation groups, including the Defense Safety Oversight Council (DSOC) and all pertinent task forces and working groups.

### 020209. COMMANDING GENERAL, LOGISTICS COMMAND

A. Develop and implement the Marine Corps Radiation Safety program, also known as the Radiological Controls (RADCON) program.

B. Serve as the lead agent for Naval Radioactive Materiel Permits associated with mortar sight systems, depleted uranium, and chemical detectors.

C. Conduct annual RADCON Program audits of all Marine Corps commands, report the results to audited commanders, and provide results to CMC SD.

### 020210. COMMANDER, MARINE CORPS INSTALLATIONS COMMAND

A. Ensure the resourcing and management of all installation Safety and Occupational Health programs to include the execution of the installation's Core Safety Services is in accordance with Chapter 4, *Core Safety Services*.

B. Ensure subordinate commands host quarterly Safety and Drive Safe Councils for all installation and tenant commands. The installation safety office shall provide support and ensure minutes are maintained, and distributed to council members.

C. Require tenant organizations to comply with all applicable safety standards per support agreements.

D. Ensure the local contracting officer provides safety oversight of all contractor operations where required by applicable civilian safety regulations and the terms contained in the specific contract.

E. Acquisition personnel, safety professionals, and other management officials are encouraged to apply fundamental SOH concepts to all contracting efforts regardless of the award amount.

### 020211. INSPECTOR GENERAL OF THE MARINE CORPS

Review implementation of the MCSMS for compliance during command inspections, and recommend corrective actions.

### 020212. DIRECTOR, HEALTH SERVICES

Health Services coordinates with Bureau of Medicine and Surgery (BUMED) to provide occupational health (industrial hygiene, occupational audiology, and occupational medical

surveillance) and public health (preventive medicine, field and camp sanitation) consultative support.

### 0203 OPERATIONAL AND SUPPORTING ESTABLISHMENT HEADQUARTERS

Headquarters elements are critical in establishing and supporting the safety culture within which subordinate elements operate. Operational and Supporting Establishment Headquarters are responsible for facilitating the establishment of the MCSMS at the Headquarters and subordinate units. Additionally, they shall ensure the allocation of appropriate resources for its execution.

### 0204 O-5/O-6 COMMANDERS

In the MCSMS, the base formations are O5 and O6 level commands. These commanders and their executive officer and sergeant major command teams disproportionately determine the outcome of day-to-day operations and the behaviors of their Marines and Sailors on- and off-duty. Unit commanders have the greatest influence on setting the conditions for mission accomplishment and troop welfare by establishing culture, facilitating training, mitigating risk through planning and effective decision-making, and measuring effectiveness, performance, and compliance.

Mishaps have a detrimental effect upon combat power, manpower availability, equipment readiness, and unit and individual performance. A properly integrated and emphasized safety management system is a force multiplier, not a barrier to effectiveness or efficiency. Safety processes are ineffective when applied reactively rather than proactively as a part of planning processes. Integration vice addition is synonymous with a systems approach to safety. Commanders have the following responsibilities:

A. Establish their own unit level safety management system that meets the requirements of the MCSMS framework, including a published command safety policy and mission statement. Disseminate the policy statement to all personnel within 30 days after assumption of command. A review of the MCSMS will be included as part of an in brief by the commander to all new personnel within seven days of joining the command. Commands, units, and activities shall post the policy statement on all official bulletin boards and by other means as appropriate. The policy statement will reflect the commander's commitment to operational excellence, and the critically important requirement to continuously identify hazards, assess risk, and implement controls.

B. Organize, staff, and maintain a safety office as required by Chapter 3, *Safety Organization and Staffing* of this Order. Assign SOH responsibilities to qualified personnel.

C. In accordance with Chapter 7, *Safety Programming and Budget*, review and coordinate budget requirements, requests, program objective memorandum, and budget submissions for SOH. Ensure that each command, unit, and activity has sufficient authority and responsibility to plan for and ensure funds for their SOH staff, their equipment, materials, and the required training to implement an effective SOH program.

D. Ensure that senior management, middle management, and first-line supervisory personnel receive SOH training and support the SOH program.

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E. Ensure all personnel are fully aware of their MCSMS obligations and personal responsibilities. Establish clear lines of accountability.

F. Establish safety councils and committees at appropriate command levels in accordance with Chapter 6, *Safety Assurance*. Chair the council at a senior level (e.g., Commanding Officer, Executive Officer, etc.) and ensure minutes are taken, maintained, and promulgated to all personnel in the command.

G. Establish and maintain liaison via the chain of command between the local installation safety office and other DoD commands, units, and activities. Coordinate specialty functions such as medical, fire, and security using memorandums of understanding or agreement, or inter-service support agreements to establish clear lines of responsibility.

H. Ensure compliance with all mishap investigation and reporting procedures in accordance with the appropriate references. Commands and units suffering mishaps related to naval aviation activities will report, investigate, and record as governed by reference (l), OPNAVINST 3750.1B, Naval Aviation Safety. All non-aviation Marine Corps mishaps are ruled by reference (p), MCO P5102.1B, Navy and Marine Corps Mishap Reporting, Investigation and Record Keeping Manual.

I. Ensure all workplaces are inspected annually or on the timelines established in Chapter 6, *Safety Assurance*.

J. Establish a Mishap Prevention and Hazard Abatement (MPHA) program as required by Volume 6, *Safety and Occupational Health Program*.

K. Establish procedures to protect all personnel from coercion, discrimination, or reprisals for participation in any part of the MCSMS. Ensure employees understand the appropriate grievance process for filing allegations of reprisals for making complaints of unsafe or unhealthful working conditions.

L. Develop procedures consistent with Office of Personnel Management, Manpower and Reserve Affairs, and MCSMS guidance to assess and recognize superior and deficient safety performance. Performance evaluations will include personal accountability consistent with the duties of the position and the SOH program. Specifically recognize both superior and deficient performance, as appropriate.

M. Coordinate occupational medicine and industrial hygiene field support with the supporting Medical Treatment Facility in accordance with Volume 6, *Safety and Occupational Health Program*.

N. Ensure compliance with applicable regulations and federal statutes governing the control of classified and controlled unclassified information.

O. Establish a comprehensive self-assessment program in accordance with Chapter 6, *Safety Assurance*.



0205 SAFETY AND OCCUPATIONAL HEALTH PROFESSIONALS, SAFETY MANAGERS, AND SAFETY OFFICERS

Safety and Occupational Health personnel are responsible for the following:

- A. Support the Deputy or Executive Officer (XO) in the execution of the command's SMS per this Order.
- B. Identify and train staff for required safety billets, i.e., safety officer or civilian manager, safety specialists, and safety representatives per this Order.
- C. Establish and evaluate the effectiveness of safety policies, plans, programs, and procedures.
- D. Provide technical advice, direction, guidance, and oversight on SOH matters to other commands, units, or activities, as well as bureau organizational elements and to subordinate field activities.
- E. Interpret SOH standards and regulations, and develop new or revised standards, when appropriate.
- F. Conduct assessments of the command's overall SOH program by performing subordinate command SOH management evaluations and reviewing self-assessments in accordance with Chapter 6, *Safety Assurance*. When subordinate commands, units, and activities utilize safety support services, the effectiveness of those services must be evaluated as part of the assessment.
- G. Serve as the command's SOH representative on safety councils, committees, and working groups established by installations, higher authority, and the private sector.
- H. SOH personnel shall serve as technical advisors to CMC SD on SOH-related matters in areas over which the command is assigned oversight.
- I. Utilize and disseminate SOH management and mishap prevention performance metrics established by CMC SD, COMNAVSAFECEN, and other higher commands. Establish specific metrics relevant to the mission and functions of the organization and disseminate them to subordinates.
- J. Review injury and illness analyses from commands, units, and activities to identify and initiate actions to improve the effectiveness of the SOH program and reduce instances of injury and illness.
- K. Foster safety awareness through appropriate promotional methods and channels of communication.

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L. Ensure compliance with applicable safety standards and specifications in the design, purchase, and procurement of items over which the command exercises acquisition authority.

M. Plan, develop, participate in, and evaluate employee safety training in coordination with relevant training groups, offices, and organizations.

N. Ensure subordinate commands, units, and activities are adequately staffed and organized to carry out the safety functions as required by this Order.

O. Coordinate with explosives safety officers to ensure explosives site plans comply with applicable safety criteria.

P. For all subordinate unit mishap investigations, safety investigation boards, or single investigating officer actions, ensure compliance with the reporting criteria per reference (p).

Q. Ensure a safety investigation board process is in place to identify and train potential safety investigation board members within the Command staff.

### 0206 WORK CENTER/UNIT/SHOP SUPERVISORS

A. Direct the implementation of and provide resources for the work center/unit/shop level of the safety management system, within the framework of and in accordance with the MCSMS.

B. Enforce the applicable safety and health standards for their areas and operations, and those involving their subordinates. Demonstrate knowledge of their roles and responsibilities with relation to Risk Management and mishap prevention.

C. Use RM techniques to analyze work environment and job tasks for hazards. Conduct a job hazard analysis to determine potential hazards for each work task not governed by a technical order or other definitive guidance, and anytime a new work task or process is introduced in accordance with Volume 6, *Safety and Occupational Health Program*.

D. Provide and document work area specific on-the-job training for safety, fire protection, and health to all military and civilian personnel before assigning them duty tasks requiring this specific training. Review work processes annually, when new tasks or equipment are added, or when existing tasks change.

E. Develop a work center-specific Job Safety Training Outline for safety, fire protection and prevention, and health requirements, per reference (c). Documents will be maintained and centrally located, readily available to supervisors and individuals. Job-specific items and any additional training identified in Industrial Hygiene surveys will be documented individually, as appropriate.

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1. Documentation will contain the following minimum data: trainee name (last, first, middle initial), rank, type of training, date of training.

2. Provide and document additional training when there is a change in equipment, procedures, or processes that affect the safety, health, or work environment of personnel.

F. Exercise control over job tasks to ensure personnel follow all precautions and safety measures, including the proper use of Personal Protective Equipment (PPE).

G. Report all on-and-off-duty mishaps involving assigned military personnel. Inform Human Resources when a mishap involves a civilian employee, and complete the required US Department of Labor, Office of Workers' Compensation Program forms. Adhere to local reporting requirements per host nation/US agreements for host nation employees.

H. Ensure NAVMC 11400, OSH Deficiency Notice or equivalent, issued by safety, fire protection, or Industrial Hygiene officials is posted annually to alert personnel of hazardous conditions and interim control measures. Take action promptly to eliminate hazards and correct deficiencies. Add all hazards to the Job Safety Training Outline. Train all employees on interim control measures and documents used.

I. Attend Supervisor Safety Training.

J. Conduct and document monthly spot inspections of employee work areas in accordance with Chapter 6, *Safety Assurance*.

K. Encourage and support employee participation in safety and health program activities and committees. Provide employees a positive and supporting environment where they can report work-related injuries and illnesses without fear of reprisal.

L. Ensure personnel requiring occupational health medical examinations attend scheduled medical appointments.

M. Ensure applicable SOH guidance for the workplace and operations is available to personnel, including SOPs as necessary for work processes.

N. Establish a supervisor safety committee in accordance with Chapter 6, *Safety Assurance*.

### 0207 MARINES AND DOD CIVILIAN PERSONNEL

Personnel are required to actively engage in the MCSMS. The organization shall establish methods that facilitate effective participation by all personnel at all levels. The inclusion of the MCSMS elements ensures Marines' engagement enhances the effectiveness of the MCSMS and drives continuous process improvement. Personnel support the MCSMS through the following:

A. Comply with safety instructions, technical manuals, and standard operating

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procedures.

B. Use and maintain appropriate PPE for job tasks. Inspect and maintain PPE in accordance with technical orders, manufacturer instructions, and Volume 6, *Safety and Occupational Health Program*, Chapter 19, *Personal Protective Equipment*.

C. Apply RM principles to both on- and off-duty activities to enhance the safety and well-being of all personnel.

D. Participate in safety and health programs by reporting the existence of any unsafe or unhealthful operations or working conditions, i.e., hazards, near misses, and work-related injuries and illnesses through established procedures and without fear of reprisal.

E. Military personnel shall report both on- and off-duty mishaps and near misses to their supervisors. DoD civilian personnel shall report all on duty mishaps and near misses to their supervisors.

F. Complete scheduled medical surveillance appointments and attend required training.

**0208 SUPPORTING/SUPPORTED AGENCIES/COMMANDS**

**020801. COMMANDER, NAVAL SAFETY CENTER (COMNAVSAFECEN)**

By Memorandum of Agreement with CMC SD, COMNAVSAFECEN supports the Marine Corps Safety Management System through the following:

A. Provide mishap report collection, data and statistical analysis, technical assistance, safety surveys, publications support, and safety program consultations, and conduct independent safety investigations of major mishaps.

B. Support Marine Corps commanders with mishap investigation advisors for Class A mishaps and other mishaps that require SIBs (e.g., rounds impacting off-range, explosive mishaps with injury, etc.), in accordance with reference (p).

C. Upon request, provides a mishap investigation advisor to assist commanders with any safety investigation.

**020802. MILITARY MEDICAL TREATMENT FACILITY (MTF) SUPPORT**

A. References (m) and (n) direct BUMED to support CMC in all aspects of occupational health, which includes industrial hygiene, occupational and environmental medicine, and occupational audiology.

B. All Marine Corps commands shall use the local MTF for all occupational health support.

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C. Marine Corps commanders shall ensure Marines and DoD civilian personnel receive occupational health services provided by the local MTF. Where such support is not available, commanders shall ensure the occupational health services are acquired from the nearest MTF or civilian medical center.

**VOLUME 1: CHAPTER 3**

**SAFETY ORGANIZATION AND STAFFING**

**SUMMARY OF SUBSTANTIVE CHANGES**

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<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>

CHAPTER 3

SAFETY ORGANIZATION AND STAFFING

0301 PURPOSE

An effective command safety management system requires a structure that provides all levels of the command with direct lines of communication to the commanding officer for safety matters. All commanders are charged with employing their available manpower and resources to meet the intent of this chapter to the maximum extent possible. This chapter contains the minimum requirements for safety offices at all command levels, and their functional responsibilities. In addition to this chapter, aviation commands, squadrons, and stations shall adhere to requirements outlined in Volume 4, *Marine Corps Aviation Safety* of this Order.

0302 BACKGROUND

The Marine Corps is viewed and held accountable as an “Agency” in the eyes of the Occupational Safety and Health Administration (OSHA). Therefore, activities associated with safety must be viewed from an Agency perspective. To comply with OSHA regulations the Marine Corps has organized safety to function as a matrix organization with shared accountability, authority, responsibility, and subject matter expertise. Core Safety Services (CSS) are provided to all commands, units, and activities on Marine Corps installations or are identified as a special area in the internet Navy Facilities Asset Data Store (iNFADS). In accordance with Chapter 4, *Core Safety Services*, the level and quality of support services provided by CSS to tenant commands will be equivalent to the level and quality of support the host installation provides to itself. The CSS host and tenant must agree to the level and quality of support if the level and quality differ from what the host furnishes to its own component organizations. This Chapter outlines how the accountability, authority, responsibility, and subject matter expertise are shared to comply with the OSHA “Agency” requirements.

0303 HIGHER HEADQUARTERS COMMANDS SAFETY STAFFING AND FUNCTIONAL RESPONSIBILITIES

All headquarters commands must designate a safety professional who has sufficient authority and responsibility to effectively represent the headquarters commander in the management and administration of the safety management system for all assigned personnel and subordinate commands. The designated safety professional must report directly to the headquarters commander. Headquarters commands must provide adequate resources and staff for the designated safety professional to perform the following tasks:

A. Guide and assist subordinate commands in establishing, coordinating, directing, and evaluating the effectiveness of safety policies, plans, programs, and procedures.

B. Conduct oversight of subordinate commands to ensure effective Safety and Occupational Health (SOH) programs are in place. Evaluate the effectiveness of the Core Safety Services provided to commands.

C. Serve as the command focal point for SOH, consolidating and communicating hazards, risks, and SOH information to the commander for the entire chain of command.

0304 SUBORDINATE COMMAND SAFETY ORGANIZATION AND STAFFING CRITERIA

A. Designation of Safety Officer/Manager

1. Every O5/O6 command shall appoint a ground safety officer/manager in writing as a full time, special staff officer with direct access to the commander for safety matters. This appointed position may be filled by a civilian safety specialist, officer, or Staff Non-Commissioned Officer (SNCO). Ground Safety Officers (GSOs) or Ground Safety Managers (GSMs) will complete, at a minimum, the Ground Safety for Marines (GSM) course within 90 days of assignment, and then the Ground Mishap Investigation Course (GMIC).

2. Safety Staffing

a. In addition to the designated safety officer/manager, each command shall be resourced and staffed to fulfill the organization's mission, function, and assigned tasks. The approved mission, function, and tasks of the command are translated into staffing positions provided in the approved table of organization and equipment.

b. Position Classification Considerations. The safety organization will be led by a fully qualified and trained safety professional supported by a staff of qualified professionals. Chapter 5, *Safety Promotion and Training* outlines the minimum core training required to be a Marine Corps safety professional. Classification guidance is provided as follows:

c. Safety manager positions range from GS-12 to GS-15; safety assistant managers range from GS-12 to GS-14; specialists and technicians range from GS-05 to GS-12 (the journeyman level is GS-11); and clerical support range from GS-03 to GS-07. It is strongly recommended that every position at the GS-13 or GS-14 level be filled by a Certified Safety Professional (CSP). Reference Chapter 5, *Safety Promotion and Training*.

d. Active duty Safety Personnel include those with the MOS designation 7596-Aviation Safety Officers and MOS 8012-Ground Safety Officer/Manager.

e. Classification series that apply to Safety and Occupational Health Managers, Assistants, and Specialists include the following:

- 1) 0017 Explosives Safety
- 2) 0018 Safety and Occupational Health Management
- 3) 0019 Safety and Occupational Health Technician
- 4) 0690 Industrial Hygiene
- 5) 0803 Safety Engineering



## 0305 SAFETY FUNCTION ORGANIZATION AND STAFFING

The commander of each installation or unit shall designate a safety manager or officer to carry out the responsibilities in Chapter 4, *Core Safety Services*. Safety personnel should have direct access to the commander for safety matters. The safety program shall not be subordinated to other programs or functions. A qualified "safety specialist," or military personnel assigned to a unit safety officer billet, shall meet the definition and training requirements contained in Chapter 5, *Safety Promotion and Training*.

030501. INSTALLATIONS

A. Installations having a total population of 10,000 or more military and civilian personnel, to include tenant commands and resident dependents, shall identify and staff the following safety personnel:

1. One full-time safety manager or officer, either a civilian qualified for civil service employment as a safety and occupational health manager (GS-0018 series), or field grade officer qualified in mishap prevention program administration. The safety manager must be a qualified safety and health specialist per this Volume, Chapter 5, *Safety Promotion and Training* and should have a minimum of 4 years safety function management experience. Installations meeting this category require the safety and occupational health manager to have GS-13 or higher managerial and technical experience.

2. One full-time technical assistant, either a qualified safety and occupational health specialist (GS-0018 series) or a trained safety officer.

3. Additional trained technical assistants as required. A minimum of one safety specialist shall be assigned for each 1,500 "occupationally employed personnel," military and civilian combined.

a. Where a traffic safety program is required, one of the technical assistants assigned shall be qualified in motor vehicle mishap prevention.

b. Additional technical assistants may be required if other functions are added such as tactical safety, explosives safety, radiation safety, industrial hygiene, environmental safety, or asbestos program manager.

4. Clerical support as required.

5. One qualified work center/unit/shop Safety Representative (civilian safety specialist, officer, or SNCO) in each separately administered unit, and in other activities as deemed necessary and appointed in writing by the commander. The Safety Representative will remain a minimum of one-year in the assigned additional duty position. Each installation safety office or command safety staff will train, in accordance with Chapter 5, *Safety Promotion and Training*, their respective Safety Representatives within 30 days of appointment.

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B. Installations having a total population of over 2,000 but less than 10,000 military and civilian personnel to include tenant commands and resident dependents shall staff the following safety personnel:

1. One full-time safety manager or officer, either a civilian qualified for civil service employment as a safety and occupational health manager (GS-0018 series), or a field/company grade safety officer as deemed necessary and appointed in writing by the commander. Installations under this category require the safety and occupational health manager to have managerial and technical experience at the GS-12 grade or higher.

2. Technical assistants, as required, a minimum of one safety specialist shall be assigned for each 1,500 "occupationally employed personnel," military and civilian combined.

a. Where a traffic safety program is required, one of the technical assistants shall have experience in motor vehicle mishap prevention.

b. Additional technical assistants may be required if other functions are added such as tactical safety, explosives safety, radiation safety, industrial hygiene, environmental safety, or asbestos program manager.

3. Clerical support as required.

4. One qualified work center/unit/shop Safety Representatives (civilian safety specialist, officer, or SNCO) in each separately administered unit, and in other activities as deemed necessary and appointed in writing by the commander. The Safety Representative will remain a minimum of one-year in the assigned additional duty position. Each installation safety office or command safety staff will train in accordance with Chapter 5, *Safety Promotion and Training*, their respective Safety Representatives within 30 days of appointment.

C. Installations having a total population of 2,000 or fewer military and civilian personnel to include tenant commands and resident dependents shall staff the following safety personnel:

1. One qualified full-time safety specialist (civilian safety specialist, officer or SNCO) as a minimum.

2. One qualified work center/unit/shop Safety Representatives (civilian safety specialist, officer or SNCO) in each separately administered unit and in other activities as deemed necessary by the commander. The Safety Representative will remain a minimum of one-year in the in the assigned additional duty position. Each installation safety office or command safety staff will train in accordance with Chapter 5, *Safety Promotion and Training*, their respective Safety Representatives within 30 days of appointment.

030502. CONTROLLING COMMANDS

The following commands shall establish a safety office staffed to coordinate the safety management system and mishap prevention programs:

- Commander, Marine Corps Forces Command (COMMARFORCOM)
- Commander, Marine Corps Forces Pacific (COMMARFORPAC)
- Commander, Marine Corps Forces Reserve (COMMARFORRES)/Commander, Marine Forces Northern Command (COMMARFORNORTHCOM)
- Commander, Marine Corps Cyber Command (COMMARFORCYBERCOM)
- Commander, Marine Forces Central Command (COMMARCENT)
- Commander, Marine Forces Southern Command (COMMARFORSOUTH)
- Commander, Marine Forces Europe/Africa Command (COMMARFOREUR/AF)
- Commander, Marine Forces Special Operations Command (COMMARFORSOC)
- Commanding General, Marine Corps Logistics Command (MARCORLOGCOM)
- Commanding General, Marine Corps Recruiting Command (MCRC)
- Commander, Marine Corps Installation Command (COMMCICOM)
- Commander, Marine Corps System Command (COMMARCORSYSCOM)

030503. APPOINTING AUTHORITY

Appointing authorities, such as each Marine Expeditionary Force, the associated Major Subordinate Commands/Elements, Marine Corps Embassy Security Group, and each regimental and aircraft group headquarters shall have a safety manager or officer (military or civilian) assigned the primary duty for safety. This safety manager/officer will coordinate mishap prevention efforts and provide assistance to battalion and squadron safety officers and other smaller, separate units of the command. Commands will comply with the following guidelines:

A. All command and unit safety officers down to and including the battalion or squadron level will be designated as a special staff officer, appointed in writing by their commanding officer, and given direct access to the commanding and executive officers for safety matters. The term safety officer includes any of the following personnel: a commissioned, warrant, staff non-commissioned, and civilian safety specialist, if assigned. Safety officers shall possess the necessary training and expertise to provide relevant, proactive mishap prevention, consultation, and advice to the command.

B. Division, wing, and higher will have a trained full-time (civilian or military) safety manager/officer.

C. Every unit down to the regimental level, aircraft group, aviation support group, or non-flying squadron shall employ a trained full-time unit safety officer, (e.g., Commissioned Officer or civilian GS0018).

D. Units staffed below the battalion or squadron level (e.g., Recruiting Stations) shall have a trained, additional duty unit Safety Representative appointed in writing by their

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commanding officer. The Safety Representative will be retained for one year in the assigned additional duty position. Each installation safety office or command safety staff will train their respective Safety Representatives in accordance with Chapter 5, *Safety Promotion and Training*, within 30 days of appointment.

E. All commands with aircraft (Marine forces, wings, groups, and squadrons) shall have a safety officer with the title of Director of Safety and Standardization (DSS). The Department of Safety and Standardization is functionally organized per Volume 4, *Marine Corps Aviation Safety*, to include the following billets:

1. Director of Safety and Standardization
2. Aeromedical Safety Officer (for Wings/Groups)
3. Aviation Safety Officer
4. Ground Safety Officer
5. Naval Air Training and Operating Procedures Standardization (NATOPS)
6. Enlisted NATOPS NCO, for organizations with enlisted aircrew assigned

Officer

**VOLUME 1: CHAPTER 4**

**CORE SAFETY SERVICES**

**SUMMARY OF SUBSTANTIVE CHANGES**

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1	N/A	Administrative Changes	5 AUG 2021

## CHAPTER 4

CORE SAFETY SERVICES

## 0401 EXECUTION OF SAFETY SERVICES

Every leader is responsible for identifying hazards and assessing risk. Safety accountability, authority, responsibility, and subject matter expertise is shared between the host installation, which provides Core Safety Services (CSS), and their tenants. CSS is a Marine Corps Installations Command (MCICOM) functional mission responsibility. CSS is defined as host installation safety functions provided as common-service (non-reimbursable) or cross service (reimbursable) support. The services normally provided at Common Output Levels (COLS) to receiving tenant activities are for the prevention of mishaps and mitigation of risk to the lowest acceptable level. CSS will be provided to all commands, units, and activities located on Marine Corps installations, or identified as a special area in internet Navy Facilities Assets Data Store (iNFADS). The specific services provided to tenant commands are based on their organic safety missions, functions, and tasks, and on the internal self-assessments, and risk assessments completed with the CSS provider. In the event of limited CSS resources, services will be prioritized to allow those commands, units, and activities with the most risk to receive services first. Services not provided and the associated risk incurred must be communicated in writing to the senior installation and operational tenant commanders.

## A. Core Safety Services Defined

## 1. Host installation services will provide the following:

a. Establish, coordinate, manage, and provide resources for a traffic safety and RODS program in accordance with Volume 3, *Marine Corps Traffic Safety Program*, and Volume 5, *Recreation and Off-Duty Safety Program*.

b. Provide assistance with Occupational Safety and Health Administration (OSHA) inspections in accordance with Volume 6, *Safety and Occupational Health Program*.

c. Provide consultation support for indoor environmental quality, facility assessment components (e.g., structural, electrical, mechanical, and facility-related), Safety and Occupational Health (SOH) programs (e.g., fall protection, hazard communication program, and confined space), or maintenance or sustainment issues owned by the installation.

B. Specific Core Safety Services. Tenant CSS will be determined by a CSS needs assessment.

1. Specific Core Safety Services include the following service authorities and responsibilities:

a. Services needs assessment to determine gaps in a unit's safety management system.

b. Safety Inspections. Trained safety and occupational health inspectors will inspect all installation and tenant work centers, buildings, training facilities, and ranges in accordance with Volume 6, *Safety and Occupational Health Program*. Tenant commands can request a review of applicable safety and occupational health programs and associated operations. **Note: Range certification policies are covered in references (u) and (v).**

c. Establish, coordinate, manage, and provide resources for a traffic safety and RODS program in accordance with Volume 3, *Marine Corps Traffic Safety Program*, and Volume 5, *Recreation and Off-Duty Safety Program*.

d. Investigation and documentation of all reports of unsafe or unhealthful work conditions, including occupational health hazards identified in an industrial hygiene survey. Maintain a log of identified and potential safety and occupational health hazards, interim abatement actions, and date corrected. For tenant commands, provide training, guidance, and support as requested.

e. Mishap Investigations. Tenant commands shall ensure all on- and off-duty mishaps and near misses are investigated, recorded, and reported by qualified personnel in accordance with reference (p) and local regulations.

f. SOH Program Support by subject matter experts.

1) Written catalog of CSSs provided to tenants.

2) Hazard assessments and surveys by SOH personnel.

3) Subject matter expertise and consultation for program elements such as procedures, training, and fit tests.

g. Personal Protective Equipment (PPE). During safety inspections and risk assessments, document PPE (e.g. head, sight, hearing, respiratory, and foot protection) requirements and compliance. Ensure appropriate PPE training and fit testing is conducted, and that PPE is available, used, and maintained per Volume 6, *Safety and Occupational Health Program*.

h. Support Military Operations and Training. Provide qualified safety professionals for operational training, pre-deployment, and deployment operations to Major Subordinate Commands. Ensure safety expertise, guidance, and assistance is available to identify hazards, assess risk, and develop and implement control measures to mitigate hazards, as required.

i. Safety Promotional Material. Ensure safety offices maintain a comprehensive public information program using posters, booklets, handouts, and other means to promote the safety management system aboard the base.

j. Accompany all federal and state safety and occupational health inspectors on SOH inspections in accordance with Chapter 6, *Safety Assurance*.

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k. Collaborate with Injury Compensation Program Administrators to assess all work related injuries and illnesses. Provide a professional opinion on light duty assignments related to workplace conditions and work practices. The goal is the reduction of DoD civilian personnel lost work time due to injury in accordance with reference (s).

l. Safety Training. Provide required safety training for all personnel on SOH programs covered by this Order.

m. Safety Consultation. Upon request, CSS personnel provide professional support for special events and exercises. CSS ensure risk management principles are applied to new construction, renovation projects, and service contracts.

Note: Military Field Training Exercises (FTX) will be supported by the Major Subordinate Commands (MSC). Tenants will incur labor costs for safety support by the installation when services occur outside of scheduled work hours.

n. Host installation safety council meetings and invite major supporting commands and all tenants.

### 2. Specific tenant command authorities and responsibilities:

a. Comply with this SMS and additional installation SMS requirements.

b. Commanding Officer attends installation safety council meetings. Members of all safety departments or offices will serve as advisors to the council.

c. Allow access to Installation Safety SMEs.

d. Request support from CSS provider for SOH issues or program questions.

e. Abate identified deficiencies that fall within the authority of the command. Track deficiency abatement where command employees are exposed to hazards, regardless of who is responsible for abatement.

f. Report mishaps to the installation safety office as required by the Host Tenant MOU/MOA.

g. Track completion of safety-related services and communicate to headquarters.



0402 CSS NEEDS ASSESSMENT

The CSS needs assessment determines what services are required by tenant commands.

A. Installation and tenant commands shall conduct an annual CSS needs assessment that includes the following:

1. An assessment of tenant command safety personnel missions, functions, and task responsibilities.
2. Commander, Marine Corps Installations Command will annually assess SOH SMS requirements based on specific tenant missions, functions, and tasks.
3. Determine the need for program managers or designated SOH personnel for high-risk programs such as hazardous energy control, electrical safety, confined space, fall protection, and respiratory protection.
4. Annual review of services provided, and services planned for the upcoming year.

B. HQMC MCICOM will provide the needs assessment format that installation safety offices will use without modification.

C. Support agreements shall be updated based on the results of the annual CSS needs assessment.

D. Commander Marine Corps Installation Command will provide an annual report to the Director, CMC SD, detailing the performance of CSS including what services were and were not provided to tenants.

**VOLUME 1: CHAPTER 5**

**SAFETY PROMOTION AND TRAINING**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by *bold, italic, blue and underlined font*.

The original publication date of this Marine Corps Order (MCO) Volume (right header) will not change unless/until a full revision of the MCO has been conducted.

All Volume changes denoted in **blue font** will reset to black font upon a full revision of this Volume.

<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>
1	N/A	Administrative Changes	5 AUG 2021

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SAFETY PROMOTION AND TRAINING

0501 SAFETY PROMOTION

Safety promotion consists of a wide range of activities that shape organizational safety culture through communication and training. It is essential to the overall function of the MCSMS, which cannot succeed by mandate alone.

050101. LEADERSHIP COMMITMENT

Commanders will promote safety awareness at all venues including commander calls, holiday safety briefings, and other events or functions. Promote the growth of a positive and proactive safety culture through the following actions:

A. Publish a safety policy for all personnel and subordinate commands, units, and activities.

B. Visibly demonstrate a commitment to the MCSMS by recognizing personnel for their contributions and achievements.

C. Clearly and regularly communicate MCSMS policy, goals, objectives, standards, responsibilities, and performance objectives to all organizational personnel.

D. Ensure essential resources (i.e., staffing, funding, and training) are available to implement and maintain the MCSMS.

E. Ensure the publication and dissemination of information about the MCSMS. Collaborate with Headquarters Marine Corps Communication Directorate to stimulate interest in safety through electronic and print media. Communicate safety success stories, hazard awareness, and information on near-miss events and lessons learned in accordance with this chapter. The Naval Safety Center's Knowledge Management & Safety Promotions Directorate, Lesson Learned Branch and the CMC Safety Division manage all Navy and Marine Corps, safety related, Lessons Learned products.

F. Provide safety promotion and education materials including posters, films, technical publications, and pamphlets. These are proven cost effective safety awareness tools and will be budgeted for and used by all echelons of the Marine Corps to promote safety.

0502 AWARDS

Awards will be used to recognize commands and individual military and government civilian employees for significant contributions and accomplishments made in the field of safety and mishap prevention.

050201. COMMAND SAFETY AWARDS PROGRAM

All Marine Corps controlling commands shall establish a safety awards program to recognize the outstanding safety performance of subordinate units and military and civilian personnel. For example: A Marine Accident Prevention Award presented to units that complete 12 consecutive months, a major training exercise, or a deployment of greater than 120 days without experiencing a class A, B, or C mishap. Commanders may incorporate additional awards to recognize significant accomplishments throughout their organization (Reference this Chapter, enclosures (6), Marine Corps Safety Awards Submission Timeline, and enclosure (7), Marine Corps Safety Award Grading Criteria).

050202. UNIT IMPACT AWARDS

Commanders should promote safety awareness through on-the-spot recognition of safety related actions that exceed what is normally expected of an individual or organization. Commanders may purchase commemorative items, utilizing local funds, and are authorized to design and use locally produced certificates, plaques, or trophies.

050203. CMC SD SAFETY AWARDS

A. Marine Corps Ground Safety Awards. The Director, Safety Division, will convene the Marine Corps Ground Safety Awards Board annually, on or about 1 February.

1. Warrior Preservation Award. This award is presented each fiscal year to the Marine Corps installation that has maintained the most comprehensive safety management system. Nomination packages are limited to a total of 10 pages, not including endorsements, and shall be organized per this Chapter, enclosure (1), *Warrior Preservation Award/Marine Corps Safety Award Nomination Format and Criteria*. This award consists of a commemorative wall plaque and a certificate signed by the Commandant of the Marine Corps, in accordance with reference (k).

a. Eligibility. All Bases, Stations, Depots, Support Activities, and Air Facilities that provide the core safety services identified in Chapter 4, *Core Safety Services*.

b. Award Criteria. Nominees will have made significantly greater contributions to safety than normally expected of those in their particular assignments during the fiscal year. A safety program must be established and maintained installation-wide, and will be judged on the awards criteria listed below. Nomination packages will be endorsed by the first General Officer in the chain of command. Criteria:

1) The safety department has direct access to the commander and is organized and staffed to accomplish the safety mission.

2) The safety department provides the core safety services as outlined in Chapter 4, *Core Safety Services*.

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3) The installation has received a rating of “Mission Capable” and “Effective” on their most recent Inspector General of the Marine Corps inspection, a rating of “Mission Capable” on their most recent Commanding General’s Readiness Inspection, a rating of “Satisfactory” on their most recent MARCORSSYSCOM Explosives Safety Inspection Compliance Review or their DoD Explosives Safety Board Evaluation, and has maintained range certification for those with live fire training ranges.

4) Commands submitting packages for the Warrior Preservation Award will not be considered for the Marine Corps Safety Award.

B. Marine Corps Safety Award. This award is presented each fiscal year to the Marine Corps command in each category (per this Chapter, enclosure 2, *Marine Corps Safety Award Activity Groupings*) that has maintained the most outstanding safety management system. Nominations will be in narrative style and limited to 10 pages, not including endorsements. Nominations will be submitted through the chain of command and endorsed by each General Officer. The award consists of a commemorative wall plaque, a Marine Corps Safety Division commemorative coin and a certificate signed by the Commandant of the Marine Corps, in accordance with references (h) and (k).

1. Eligibility. All Marine Corps commands.

2. Award Criteria. Commands shall submit nomination packages for the appropriate Higher Headquarters (HHQ) or unit category described below.

a. Operational Forces HHQ Safety Award. General Officer commands in the Operational Forces (MARFORs, MARSOC, Marine Expeditionary Forces, Divisions, Wings, and Groups).

b. Operational Forces Unit Safety Award. O-5 and O-6 commands in the Operational Forces.

c. Supporting Establishment HHQ Safety Award. General Officer commands in the Supporting Establishment (TECOM, LOGCOM, MARCORSSYSCOM, MCRC, and MCICOM).

d. Supporting Establishment Unit Safety Award. O-5 and O-6 commands in the Supporting Establishment.

e. Commands that submit packages for the Marine Corps Safety Award will not be considered for the Warrior Preservation Award.

C. Marine Corps Safety Excellence Award. This award is presented each fiscal year to one officer, one enlisted, and one government civilian employee (of any service/pay plan whose primary responsibilities are outside of Safety Occupational and Health) who have made the most significant contribution to the Marine Corps Safety Management System. Nomination packages will be in narrative style and limited to four (4) pages, not including endorsements and

photographs. Nominations will be submitted through the chain of command and endorsed by each General Officer. The award consists of a commemorative wall plaque, a Marine Corps Safety Division commemorative coin, and a certificate signed by the Commandant of the Marine Corps, in accordance with references (h) and (k).

1. Eligibility. All Marine Corps military and government civilian employees.

2. Award Criteria. Per this Chapter, enclosure (3), *Marine Corps Safety Excellence Award/Marine Corps Civilian Safety Professional of the Year Criteria*, the narrative will describe the contributions or noteworthy accomplishments the individual made to the Marine Corps Safety Management System during the fiscal year.

D. Marine Corps Civilian Safety Professional of the Year Award. This award recognizes a civilian government employee in the safety community for outstanding contributions to the Marine Corps Safety Management System.

1. Eligibility. All Community of Interest civilian career safety professionals (Occupational Series GS-0017/0018/0803/0019) are eligible.

2. Award Criteria. Per this Chapter, enclosure (3), *Marine Corps Safety Excellence Award/Marine Corps Civilian Safety Professional of the Year Criteria*, the narrative will describe the significant contributions and noteworthy accomplishments that the individual made to the Marine Corps Safety Management System during the fiscal year. Considerations:

- a. Accomplishments and innovations the nominee developed that reduced mishaps or increased the effectiveness of mishap prevention efforts.
- b. Incorporation of risk management principles and techniques.
- c. Participation in activities and recognition by local, national, and/or international safety agencies outside of the Marine Corps.
- d. Contributions to mishap and incident investigations.
- e. Contributions to safety publications.
- f. Mishap investigation reports and analysis.

E. Road Warrior Award: Individual Government Motor Vehicle Operator Award. This award is presented to the military and government civilian employees operating Government Motor Vehicles (GMVs) and tactical vehicles who achieve mishap/violation free driving mileage at 2,500 mile increments. The award consists of a certificate from the Commandant of the Marine Corps.

1. Eligibility. All Marine Corps military and government civilian employees operating GMVs and tactical vehicles.

2. Award Criteria. The individual command is responsible for tracking an operator's mileage record. Commanders will determine operator eligibility for this award and submit award requests with endorsements to the CMC SD using the sample letter format in this Chapter, *Safety Promotion and Training*, enclosure (4).

F. Road Warrior Award: Unit Government Motor Vehicle Operator Award. This award is presented to units driving GMVs and tactical vehicles who achieve cumulative mishap/violation free driving mileage at 25,000-mile increments. The award consists of a certificate from the Commandant of the Marine Corps.

1. Eligibility. All Marine Corps units.

2. Award Criteria. The individual command is responsible for tracking the unit's overall cumulative mileage record. Commanders will determine unit eligibility for this award and submit award requests with endorsements to the Commandant of the Marine Corps Safety Division (CMC SD) using the sample letter format in this Chapter, enclosure (5), *Unit Road Warrior Award Submission Format*.

G. Award for Mishap-Free Flight Time. The goal of the Marine Corps Aviation portion of the Safety Management System is to preserve human and material resources through the elimination of hazards that cause aircraft mishaps. This goal is attainable only through the dedicated efforts of individual aircrew members and squadrons. Accordingly, the awards herein promote safety awareness by recognizing those aircrew members and squadrons whose superior performance and commitment to professionalism enhance the readiness posture of Marine Aviation by ensuring a safe operating environment.

1. Eligibility. Aircrew members and squadrons.

2. Award Criteria.

a. All eligible Marine aircrew members will be presented a certificate in recognition of the attainment of each consecutive 1,000 hours of mishap-free flight time. Flight time shall include both pilot and copilot time and special crew time accrued while flying as a naval flight officer or enlisted aircrew member. Involvement in a Class "A, B, or C" mishap, as defined in reference (1), in which certain individual aircrew human factors are determined by the mishap board to be causal factors of the mishap, will remove an individual from eligibility for this award. The individual squadron commanders shall scrutinize all mishaps involving potential award recipients to make a determination on eligibility. Just as squadron commanders shall be responsible for disqualifying aircrew that do not meet the requirements for the award, they shall determine eligibility for aircrew involved in mishaps where the causal factors were clearly beyond the control or responsibility of said aircrew.

b. All eligible Marine squadrons will be presented a certificate in recognition of the attainment of each consecutive 10,000 hours of mishap-free flight time. A Class "A" mishap, as defined by reference (1), will remove a squadron from eligibility for this award. A squadron, however, will remain eligible for this award if the controlling custodian

determines causal factors were beyond the control of the individuals involved, and mishap-free flight time will continue to accrue per paragraph 918 of reference (l). Controlling custodians will determine a squadron's eligibility for this award.

c. Commanders should submit award requests for eligible individuals and units to CMC SD using the sample letter format provided (see this Chapter, enclosures (8), *Sample Letter Requesting Individual Award for Mishap-Free Flight Time* and (9), *Sample Letter Requesting a Unit Award For Mishap-Free Flight Time*. Any questions regarding individual or unit eligibility shall be directed to CMC SD, Aviation Branch. A new baseline for mishap-free flight time will begin on the first flight following the disqualifying mishap. The activity which has responsibility for maintaining an aircrew member's flight records will determine eligibility for this award.

d. Copies of certificates awarded to individual aircrew members should be forwarded to CMC Manpower Management Records and Performance Branch (MMRP) for inclusion in the Marine's Official Military Personnel File per reference (j). Ensure that copies forwarded to MMRP include the Marine's Electronic Data Interchange Personal Identifier (EDIPI).

## 0503 TRAINING

Training is integral to safety awareness. Both formal and informal training on safety-specific and operational topics are necessary to ensure a fully-functional SMS. Personnel must receive regular training appropriate to their billet in the organization, and their influence on the safety of the organization's operations and services. This training's scope, content, and frequency must meet the objectives identified in this safety management system, and should rapidly incorporate lessons learned.

### 050301. RESPONSIBILITIES

A. Marine Corps Safety and Occupational Health training contributes to operational readiness by embedding risk management processes in everything a unit does. The training must meet standards set forth in the activity and unit SOPs, Technical Manuals (TMs), Performance Manuals (PMs), applicable OSHA standards, and other Federal and state specified directives and standards.

B. Command Safety Officers and Managers shall provide new command leaders a safety orientation within 60 days of arrival or appointment that includes the following:

1. Safety responsibilities
2. Status of the command's safety management system
3. Last annual inspection results, open recommendations, unabated hazards, and hazard abatement plan



4. Command/unit specific mishap rate, trends, and open mishap recommendations

5. Special interest items such as high risk activities, motorcycle safety, OSHA Voluntary Protection Programs

6. Explosives site plans, facilities, and explosives safety deviations

7. Safety Awards Program

8. Command safety challenges

050302. TRAINING REQUIREMENTS

A. Leadership Training. All Marine Corps leaders, commanders, directors, managers, and supervisors will be provided specialized training to enable them to properly execute their SOH and RM leadership responsibilities.

1. Commanders. All Commanders are required to attend Cornerstone.

2. Aviation Commanders. Commanders of Marine Corps Aviation organizations that are aircraft reporting custodians shall complete the School of Aviation Safety (SAS) Aviation Safety Commanders (ASC) course within two years preceding assumption of command.

3. Supervisors. Supervisors are responsible for maintaining a safe and healthful environment. Supervisory personnel are defined as civilian personnel who give direction to one or more military or civilian personnel. For military personnel, commanding officers will identify supervisory personnel by billet (E-4 or above). Supervisor Safety Training (SST) provides supervisors skills needed to implement safety policies and programs, basic skills for fostering a workplace where hazards are identified and risks managed, and develops skills to recognize, control, report, and eliminate hazards. The installation/command/unit safety managers shall ensure SST is provided to all supervisory personnel. New supervisors shall be provided SST training within 90 days of appointment and annually thereafter. They shall provide documentation to each attendee's organization and maintain file copies of class rosters.

a. Initial training will be composed of safety indoctrination and mishap prevention specific to the supervisor's position. Initial SST shall cover an overview of the supervisors' responsibilities for providing and maintaining safe and healthful working conditions for personnel, as described in this Order, reference (c), Executive Orders, and the Marine Corps Safety Campaign Plan as they apply to procedures for reporting and investigating allegations of reprisal, procedures for abating hazards, and other appropriate rules, regulations and precautions, and mishap reporting.

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b. Mishap prevention methods shall cover processes, procedures, and programs used in identifying, eliminating, or reducing SOH hazards. At a minimum, this training shall include:

1) Development and use of job safety and hazard analysis, and other risk management techniques

2) Implementing, conducting, and documenting scheduled inspections

3) Implementing, documenting, and tracking hazard abatement actions

4) Mishap investigation, recording, and reporting procedures

5) How to train and motivate subordinates to assure safe and healthful work practices

6) Risk management

7) Hazard control principles

8) Implementing, conducting, and documenting a supervisor safety committee

c. Supervisors' Safety Training Annual Refresher and Update.

Installation/Command/Unit safety managers shall ensure supervisors receive annual training that is a refresher and update to their initial supervisors' safety training. The safety office shall maintain documentation of the training. The safety manager shall determine subject matter and duration of the training based on needs of the supervisors receiving the training. Training will be directed at supervisors' job tasks with the goal of progressively enhancing supervisors' skills in providing a safe and healthful work center for those supervised.

B. All Personnel (Military/Civilian). Per reference (c), all Marine Corps personnel will be provided Job Safety Training prior to being assigned work. This training shall be provided and documented by the person's supervisor upon initial assignment prior to starting work or when work conditions or tasks change.

1. Job Safety Training shall cover the following topics:

a) Hazards of the job and specific safety guidance that applies to their work center/unit/shop.

b) Hazards of the work area environment to include awareness of identified confined spaces (permitted and unpermitted), recognition of danger and caution tags, and the Hazard Communication Program requirement, i.e., Employee's Right to Know.

c) Proper personal lifting techniques.

- d) Location of medical facilities and procedures for obtaining treatment.
- e) Location and use of emergency and fire protection equipment.
- f) Workplace emergency procedures including evacuation, fire reporting, emergency numbers, and alarm and extinguisher location(s).
- g) Requirements and procedures for reporting mishaps, near misses, occupational injuries, and occupational illnesses.
- h) Reporting unsafe equipment, conditions, or procedures to supervisors.
- i) Requirements of the Marine Corps Traffic Safety portion of the SMS , including mandatory use of seat belts and helmets, speed limits, local traffic hazards, and personal RM. Additionally, brief the use of electronic devices while operating a government/private motor vehicles on- or off-base in accordance with Volume 3, Marine Corps Traffic Safety Program. When applicable, discuss motorcycle safety training requirements before riding a motorcycle.
- j) Purpose of and procedures for Hazard Reporting.
- k) Location and content of the Federal (Command) Occupational Safety and Health Protection for Employees Poster.

2. Job-Specific Safety Training. Supervisors are responsible for providing job specific safety training to all employees. Supervisors shall determine the specific training needs based on job tasks, job hazard analyses, safety inspections, and industrial hygiene surveys. Documentation of this training must be maintained in the work center. The supervisor shall provide the command/installation safety officer with a detailed summary of all safety training conducted. When personnel will be involved in work environments, processes, or tasks that may potentially expose them to hazardous conditions, in accordance with Volume 6, *Safety and Occupational Health Program*, job-specific safety training may include the following:

- a) Personal Protective Equipment (use, location, fit, care, limitations) in accordance with Volume 6, Chapter 19, *Personal Protective Equipment (PPE)*.
- b) Hazardous Energy Control (Lockout-Tagout) in accordance with 29 CFR 1910.147 and Volume 6, Chapter 18, *Hazardous Energy Control (Lockout and Tagout)*.
- c) Hazard Communication in accordance with Volume 6, Chapter 7, *Hazardous Materials Control Program*, and 29 CFR 1910.1200.
- d) Bloodborne Pathogens in accordance with Volume 6, Chapter 11 *Bloodborne Pathogens Program*, and 29 CFR 1910.1030.
- e) Hearing Conservation in accordance with Volume 6, Chapter 16, *Occupational Noise and Hearing Conservation Program*.

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f) Confined Space Program in accordance with Volume 6, Chapter 20, *Confined Spaces*, and 29 CFR 1910.146.

g) Material Handling Equipment in accordance with Volume 6, Chapter 24, *Material Handling With Powered Industrial Trucks*.

h) Respiratory Protection Program in accordance with Volume 6, Chapter 12 *Respiratory Protection Program*.

i) Fall Protection. Reference: Volume 6, Chapter 21, *Fall Protection*, 29 CFR 1910.66 and reference (b).

C. Ground Safety Officer/Ground Safety Manager (GSO/GSM) Training. Commanders shall ensure that appointed GSO/GSMs attend the Ground Safety for Marines Course (CIN # A-493-0047) within 90 days of assignment. Register in Marine Corps Training and Information Management System (MCTIMS) for Ground Safety for Marines using course code M02M8SS, M03M8SS, M10M8SA, M21M8S3, M22M8S3, or M44M8S2 (location-specific). Installation Safety Offices (ISOs) will track and document training of all safety officers. ISOs will conduct additional safety training designed to develop and enhance the skills needed in their safety duties and to keep safety officers updated on changing SOH standards. GSO/GSMs assigned to primary duty safety billets will also attend the Ground Mishap Investigation Course (GMIC).

D. Safety Representative (work center/unit/shop) Training. Command Safety offices will provide training to Safety Representatives (SRs) to ensure that they can sufficiently perform their SR duties. SR personnel are required to complete the following within 30 days of appointment:

1. Command and local safety and occupational health requirements
2. Evaluation and abatement of local hazards
3. Local procedures for reporting and investigating mishaps
4. Recognition of local potential hazardous conditions and environments
5. Identification and use of SOH standards

E. Safety and Occupational Health (SOH) professionals. Creating and maintaining a well-rounded cadre of SOH professionals is accomplished by a systematic approach to develop competencies and ensure that an appropriate level of proficiency is achieved and maintained by every individual. Supervisors must ensure that SOH professionals are fully trained in accordance with the guidelines established by the USMC Safety Community of Interest (COI) Leader and Manager and this Order and reference (r).

050303. ASSESSING PROFICIENCY

A. Initial training. Initial training is required for all safety and occupational health professionals; the specific course requirements are outlined below. Initial training requirements may be waived by the Safety COI Leader or Manager for SOH professionals that can demonstrate equivalent safety competencies through training, academic degree, experience, or professional certifications. For all safety professionals, supervisors must prioritize the required initial training as follows:

1. The first three training courses must be completed within one year, or attend the next available course:

a. Introduction to Navy Occupational Safety and Health (Ashore), A-493-0550 or Ground Safety for Marines

b. General Industry Safety Standards, A-493-0061 or OSHA 511

c. Mishap Investigation, A-493-0078 or Marine Corps Ground Mishap Investigations Course (GMIC)

2. The listed training courses, which are not an all-inclusive list to develop all safety competencies, should be prioritized by the command's organizational training requirements and incorporated into their gap analysis and Individual Development Plan (IDP):

a. Electrical Standards, A-493-0033 or OSHA #3095, Electrical Standards.

b. Introduction to Hazardous Materials (Ashore), A-493-0031 or A-493-0331 or OSHA #2015, Hazardous Materials.

c. Introduction to Industrial Hygiene for Safety Professionals, A-493-0035 or A-493-0335 or OSHA #521, OSHA Guide to Industrial Hygiene.

d. Navy Ergonomics Program, A-493-0085 or OSHA #2255, Principals of Ergonomics.

e. Machinery and Machine Guarding Standards, A-493-0073 or OSHA #2045, Machinery and Machine Guarding Standards.

f. NAVOSH Assessment Tools and Strategies, A-493-0889.

g. OSHA online course, #6010 Occupational Safety and Health Course for Other Federal Agencies.

B. Gap Analysis. A gap analysis must be performed by all civilian SOH professionals with the assistance of their supervisor. This gap analysis shall assess all competencies at the appropriate proficiency level. The gap analysis will document demonstrated competencies, proficiencies, and any applicable training completed. In the event an organization

has a sole safety professional (i.e., no safety supervisor), the next higher headquarters Safety Director/Manager or Safety Community Manager can assist.

C. Supervisors are responsible for mentoring employees on individual career development. Supervisors will ensure that IDPs are established and implemented for each SOH professional based on their gap analysis, and the initial and organizational training requirements. Each SOH professional is responsible for managing his or her own career and professional development. Personnel will establish an individual development plan to document career goals (short-term objectives and long-term goals) consistent with required job series competencies. The IDP must include a list of competency development processes in order to meet short- and long-term career goals. Individuals and supervisors will review and update IDPs at least annually, and review during performance evaluations.

050304. COMPETENCY DEVELOPMENT

Competency development can be achieved through the following training methodologies:

A. Formal Classroom Training. Personnel assigned specific program responsibilities may meet their training requirements through formal training and education, such as self-study, distance learning, seminars, classroom, and/or college courses. This specialized training will prepare them to perform assigned tasks, manage programs, and obtain technical knowledge.

B. Training requirements for personnel assigned to specific program responsibilities. The assigned supervisor working with the Safety COI Manager is responsible for determining approved training sources to meet training needs.

C. On-the-Job Training (OJT) - OJT must provide exposure to all knowledge, skills, and abilities (KSAs). Safety professionals should actively participate in all SOH program functional areas during their developmental period. OJT assignments develop basic abilities and should provide sufficient experience to perform effectively and independently at the appropriate level. The availability of OJT is situational dependent upon the requirements and mission of the activity.

D. Continuing Education Units

1. Full time SOH professionals must receive a minimum of seven (7.0) Continuing Education Units (CEU) or the equivalent of two weeks of training per year. The annual training must be consistent with the guidelines established by the SOH Career Manager and the individual's IDP.

Note: The International Association for Continuing Education and Training (IACET) defines one CEU as: "one (1) CEU equals ten (10) contact hours of learner interaction with the content of the learning activity." For example, a full 8-hour day of instruction that includes one hour of lunch only provides 7 hours of contact time. Therefore, the training only provides 0.7 CEUs (divide the number of contact hours by 10). A 5-day course (40hr) that

includes an hour for lunch each day provides 35 hours of contact time and equals 3.5 CEUs. A typical two-week course is equivalent to 7.0 CEUs. Overall, the SOH professional is responsible for tracking his or her CEUs as the number of CEUs per training program is dependent upon the number of contact hours and lunch breaks provided during the training.

2. Mentorship – A mentor is someone who teaches or gives help and advice to a less experienced person. It is highly recommended that SOH personnel have a mentor. Mentorship programs convey to employees that management is willing to invest in its personnel, contribute to the development of a better-trained and engaged workforce, develop relationships across commands, educate employees on how to accept feedback in important areas, such as communications, technical abilities, change management, and leadership skills, and improve the employees' interpersonal relationship skills.

3. Professional certification is a designation earned by an individual identifying that they have demonstrated a standard level of skill, experiences, and expertise within their field. Professional certifications are generally earned from a professional society with a certifying body and are granted based on a combination of education, experience, and knowledge, rather than solely by attending a course and passing an exam. Certification of individuals in their professional specialty is highly desirable and fully supported by the Marine Corps and the Department of the Navy. Commanders shall make every attempt to fund professional certifications which include credentialing preparation courses, applications, testing, and annual certification fees in accordance with reference (a).

Note: The Marine Corps Safety COI only recognizes professional certifications accredited through third-party organizations such as the American National Standards Institute (ANSI), Council on Engineering Standards Boards (CESB), or the Institute for Credentialing Excellence (ICE). Examples of professional societies with an accredited certifying body include the Board of Certified Safety Professionals (BCSP), Institute of Hazardous Materials Management (IHMM), and the American Board of Industrial Hygiene (ABIH). Specific examples of professional certifications include Associate Safety Professional (ASP®), Certified Safety Professional (CSP®), Certified Industrial Hygienist (CIH®), Safety Management Specialist (SMS®) (experience based – no academic degree required), Occupational Hygiene and Safety Technician (OHST®), Certified Safety & Health Manager (CSHM®), and Certified Hazardous Material Manager (CHMM®). Naval Safety and Environmental Training Center (NAVSAFENVTRACEN) offers CSP®, CIH®, or CHMM®.

#### 050305. TRAINING NEEDS ASSESSMENT

Each year commands, units, and activities with civilian SOH personnel will submit, via their chain of command, SOH related training needs for the next year based on employee IDPs. This training request may include courses from: NAVSAFENVTRACEN, OSHA Technical Institutes (OTI) education centers, National Safety Council, American Society of Safety Professionals, American Industrial Hygiene Association, universities and colleges, commercial safety training companies, and various NIOSH Education & Research Centers, which are located throughout the nation. They offer many basic and advanced classes for safety and occupational

health as well as CEUs for maintaining professional certifications or refresher training for maintaining competencies and skills.



**Warrior Preservation Award and Marine Corps Safety Award  
Nomination Format and Criteria**

Installations/commands submitting a nomination for a ground safety award must include information on the following criteria.

1. Provide safety budget expenditures that include the following:
  - a. Safety Training.
  - b. Safety Promotional Materials.
  - c. Personal Protective Equipment.
  - d. Safety Administration.
  - e. Command Safety Awards.
  - f. Contracted Services.
  
2. Provide population information for the following:
  - a. Command average population
    - (1) Military:
    - (2) Civilian:
    - (3) APF/NAF:
    - (4) Foreign Nationals:
    - (5) Marine Corps Family Members:  
(Installations only)
    - (6) Contractors:
  - b. Safety office staff
    - (1) Safety Officer/Manager grade/rank
    - (2) Number of Safety Specialists
    - (3) Number of Industrial Hygienists
    - (4) Number of Safety Technicians
  
3. Provide installation/command mishap reduction figures which show that the installation/command has met their Safety Campaign Goals. Fiscal Year figures will be used as a baseline for computing the following Safety Campaign Goals.
  - a. Military on-duty Class A and B (Ground) rate: \_\_\_\_\_
  - b. Military off-duty (Private Motor Vehicle and Recreational) rate: \_\_\_\_\_
  - c. Civilian on-duty (Industrial) injury rate: \_\_\_\_\_
  
4. The installation/command motor vehicle reportable mishap cases for the award period and the previous two years in the following categories.
  - a. Number of Fatalities
  - b. Number of Privately Owned vehicle Mishaps
  - c. Number of Government Operated Vehicle Miles Driven
  - d. Number of Mishaps
  
5. Has a Risk Management (RM) Program been implemented by the installation/command? Yes/  
No

**MARINE CORPS SAFETY MANAGEMENT SYSTEM**

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If yes, provide a copy of the implementing order.

6. Has installation/command formally engaged in the Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP)? Yes/ No  
Include narrative statement describing the command's progress toward VPP star status.

7. Has installation/command been recognized with OSHA VPP Star Status within award fiscal year?  
Yes/ No

**Marine Corps Safety Award Activity Groupings**

1. The following groupings are based on average population. Commands will apply only for the Achievement in Safety awards corresponding to their average population.

2. In determining average population, include all personnel (military and civilian, appropriated fund and non-appropriated fund), for whom safety services are provided. Installations will include all military family members and government contractors.

- a. Group I: Average population is over 10,000.
- b. Group II: Average population is 5,000 - 9,999.
- c. Group III: Average population is 1,000 - 4,999.
- d. Group IV: Average population is less than 1,000.

**Marine Corps Safety Excellence Award/Marine Corps Civilian Safety Professional of the Year Award Criteria**

Nominations must be fully substantiated and reflect a careful and conscientious evaluation of the nominee's accomplishment. Each nomination package shall include:

1. A cover page with nominee's full name, rank/rate, current duty station and address, current city, work phone number, email address, length of service (for military nominees), name of award being nominated for, point of contact name, rank/rate, address, commercial phone number (this cannot be a DSN number), fax number, email address, and signature of commanding officer.
2. A nomination achievement/justification section in paragraph or bulleted format. It should explain in a manner easily understood, and should avoid acronyms, generalities, or excessive use of superlatives.
3. A proposed citation in standard paragraph form.
4. The total submission packet, excluding the proposed citation, must not exceed four pages.

Individual Road Warrior Award Submission Format

HEADING

5100  
XXXX  
Date

From: Commanding General/Commanding Officer, (Unit-XXX)  
To: Commandant of the Marine Corps, Safety Division

Subj: INDIVIDUAL ROAD WARRIOR AWARD

Ref: (a) MCO 5100.29C

- 1. Per the reference, the following personnel have achieved the mishap and violation free miles necessary for the subject award.

<u>GRADE</u>	<u>NAME/UNIT</u>	<u>EDIPI/MOS</u>	<u>MILES</u>	<u>ATTAINED</u>	<u>DATE</u>
Major	Ima S. Driver	1234567897/XXXX	5,000	20200403	
Captain	I. M. Great	1234567897/XXXX	2,500	20200403	
Sergeant	Hard Charger	1234567897/XXXX	2,500	20200403	

- 2. Point of contact is Major Ima S. Driver, DSN XXX-XXXX or ima.s.driver@usmc.mil.

C.O. SIGNATURE

For Official Use Only – Privacy Sensitive

Any unauthorized disclosure may result in both civil and criminal penalties.

Note: Include Marine’s full name and middle initial as desired on certificate.

Unit Road Warrior Award Submission Format

HEADING

5100  
XXXX  
Date

From: Commanding General/Commanding Officer, (Unit-XXX)

To: Commandant of the Marine Corps, Safety Division

Subj: UNIT ROAD WARRIOR AWARD

Ref: (a) MCO 5100.29C

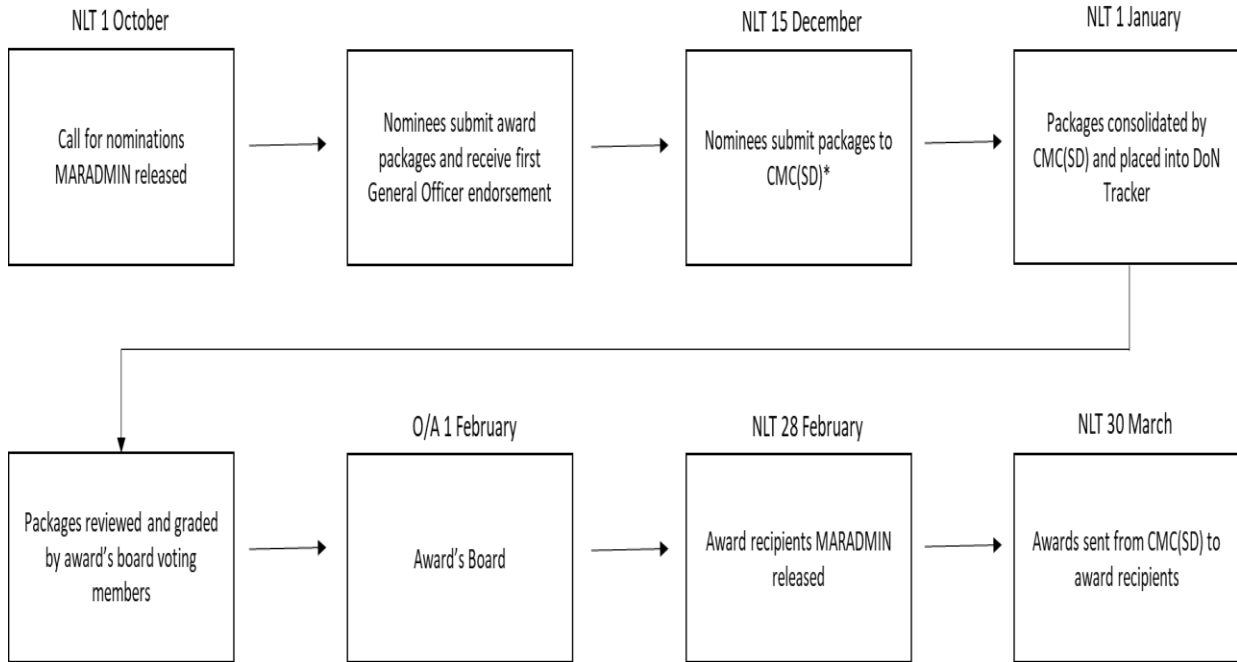
1. Per the reference, the following unit has attained the mishap and violation free miles necessary for the subject award.

<u>UNIT</u>	<u>MILES</u>	<u>DATE ATTAINED</u>
1st Truck Co	25,000	20200403

2. Point of contact is Major Ima S. Driver, DSN XXX-XXXX or ima.s.driver@usmc.mil.

C.O. SIGNATURE

Marine Corps Ground Safety Awards Submission Timeline



\* Extension requests will not be approved by CMC(SD) .

**Marine Corps Safety Award Grading Criteria**

1. **Culture:** The nominee changed the organizational culture to reflect an increased commitment to safety.
2. **Creativity:** The nominee demonstrated creativity and innovation in their approach.
3. **Decreased Mishaps:** The nominee's approach led to decreased mishap rates and/or costs for military and/or civilian employees both on- and off-duty.
4. **Enduring Impact:** The nominee used lessons learned, budget, hiring of safety personnel, equipment, councils, committees, organizations, training, continuing education, awards, reporting procedures, assessments, inspections, or other means to ensure safety progress will continue in the future.
5. **Excellence:** Nominee has gone above and beyond required duties to promote safety.
6. **Commitment to the Safety Vision:** Nominee demonstrated enhanced mission readiness by preventing mishaps through aggressive leadership, safe and reliable equipment, adequate resource allocation, effective training, accountability, and proven risk management principles.
7. **Format Criteria:** The nominee's package followed the submission criteria (page limit, endorsements, etc.) outlined in this Chapter, enclosures (1), *Warrior Preservation Award/Marine Corps Safety Award Nomination Format and Criteria* and (2), *Marine Corps Safety Award Activity Groupings*.
8. Packages will be assessed on a numerical scale of "1" to "5" in each of the categories listed above. "1" is the lowest score and "5" is the highest score. If a category is not addressed, the item will be scored as "0". The highest score possible is "35".



Sample Letter Requesting Individual Award For Mishap-Free Flight Time

HEADING

IN REPLY  
REFER TO:

5100  
DOSS  
28 May 20

From: Commanding Officer  
To: Commandant of the Marine Corps (SD), Arlington, VA 22204

Subj: INDIVIDUAL AWARD FOR MISHAP-FREE FLIGHT TIME

Ref: (a) MCO 5100.29C

1. Per the reference, the following Marines attained the 1,000 mishap-free hours necessary for the subject award.

<u>Rank</u>	<u>Name</u>	<u>EDIPI/MOS</u>	<u>HOURS</u>	<u>DATE HOURS ATTAINED</u>
Major	Ima S. Flyer	XXXXXXXXXXXX/7532	3,000	03 Feb 2020
Captain	Really M. Great	XXXXXXXXXXXX/7532	1,000	03 Apr 2020
Sergeant	Hard R. Charger	XXXXXXXXXXXX/6176	1,000	27 Mar 2020

2. Point of Contact is Major Ima S. Officer, Aviation Safety Officer, who can be reached via e-mail at ima.officer@usmc.mil. Phone contact is DSN XXX-XXX, commercial (XXX)XXX-XXXX.

SIGNATURE

Note: Include Marine's full first name and middle initial as desired on certificate. Do not include Social Security Numbers. EDIPI's are authorized.

For Official Use Only – Privacy Sensitive  
Any unauthorized disclosure may result in both civil and criminal penalties.

Sample Letter Requesting A Unit Award For Mishap-Free Flight Time

HEADING

IN REPLY  
REFER TO:

5100  
DOSS  
28 May 20

From: Commanding Officer, (UNIT-XXX)  
To: Commandant of the Marine Corps (SD), Arlington, VA 22204  
Subj: UNIT AWARD FOR MISHAP-FREE FLIGHT TIME  
Ref: (a) MCO 5100.29C  
Encl: (1) Proof of absolution from controlling authority (if req)

1. Per the reference, the following squadrons have attained the 10,000 mishap-free flight hours necessary for the subject award. Squadron call-sign is “\_\_\_\_\_.”

<u>SQUADRON</u>	<u>HOURS</u>	<u>DATE HOURS ATTAINED</u>
VMM-265	10,000	03 Feb 2020

2. During the period covering the mishap free flight hour milestone, the squadron reported # Class “A” mishaps. This/These mishap(s) has/have been absolved by the controlling custodian per encl (1).

3. Point of Contact is Major Ima S. Officer, Aviation Safety Officer, who can be reached via e-mail at ima.officer@usmc.mil. Phone contact is DSN XXX-XXX, commercial (XXX) XXX-XXXX.

SIGNATURE

Note: Include squadron call-sign.

**VOLUME 1: CHAPTER 6**

**SAFETY ASSURANCE**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by *bold, italic, blue and underlined font*.

The original publication date of this Marine Corps Order (MCO) Volume (right header) will not change unless/until a full revision of the MCO has been conducted.

All Volume changes denoted in blue font will reset to black font upon a full revision of this Volume.

<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>
1	N/A	Administrative Changes	5 AUG 2021

## CHAPTER 6

SAFETY ASSURANCE

## 0601 GENERAL

Safety Assurance is the evaluation, review, and monitoring that confirms the MCSMS is being effectively implemented and guides continuous improvement efforts. Safety Assurance identifies system deficiencies and opportunities for improvement, identifies new hazards, measures the effectiveness of and the conformity with risk controls, and ensures compliance with regulatory requirements. Safety Assurance validates operations, processes, and systems through the collection and analysis of objective evidence and data evaluation, the review and monitoring of data tracking and analysis, and investigations. This assures compliance with MCSMS requirements. Safety Assurance is accomplished using these elements:

A. Inspections. Inspections check MCSMS conformance and performance (e.g., Commanding Generals Readiness Inspection Program, Command Safety Assessments, Higher Headquarters Assessments, etc.).

B. Self-Assessment. Self-assessment is used by leaders to evaluate the performance of their MCSMS, and to recommend improvements. Results and action items from this review must be documented, prioritized, and communicated to the affected organizations, and tracked to completion.

C. Monitoring. Leadership will determine whether the system is performing effectively and meeting regulatory requirements by monitoring the status of corrective and preventive actions, injury or illness metrics, and findings of incident investigations including mishap recommendations and hazard reports, inspections, assessments, audits, performance measures, and trend analysis.

D. Safety Climate Assessment Surveys. Unit commanders shall ensure surveys are used to obtain feedback on the effectiveness of the command's safety management system. Surveys are a valuable tool for assessing the safety climate and culture of both ground and aviation units. The value of the feedback is greatly improved if unit leaders understand the importance of hearing from their Marines, and take the time/effort to both explain to all participants why their opinions are desired and back brief the survey results to the unit.

E. Command Culture Workshops. Commanders in their second and subsequent years may conduct Command Culture Workshops in lieu of annual MCASS or GCASS surveys. Workshops are an open-forum discussion process, facilitated by experienced senior post-command officers. These discussions allow the facilitator to provide the unit commander with information on levels of trust, integrity, and effective communication, both up and down the chain of command within the unit. Facilitators lead and focus the discussion on these three key areas, but may discuss any issue unit members feel is an impediment to operational excellence

within their command. The culture workshop process is specifically designed to help the commander or officer in charge to look introspectively at the organization and determine whether their perception of the command, unit, or activity's culture and climate is accurate. More importantly, the culture workshop allows the command, unit, or activity to identify issues that presently cause concern or generate hazards, as well as those that pose a risk to future sustained operational excellence, or may cause a mishap or other hazard to a command, unit, or activity. See this Chapter, enclosure (1) for the Command Culture Workshop Program. The Culture Workshop is a tool for commanders to understand what is going on in their unit and prioritize their time and energy.

0602 EVALUATIONS (ASSESSMENTS AND INSPECTIONS)

060201. COMMAND SAFETY ASSESSMENTS

Command Safety Assessments (CSAs) evaluate Safety Management System compliance and oversight of subordinate organizations' safety management systems. The evaluation provides commanders an independent perspective of the effectiveness and efficiency of their SMS. CSAs shall be conducted at least every 36 months. These assessments are conducted in accordance with DoDI, OSHA Standards, and federal law.

1. A written report will be prepared following each CSA and sent to the commander and the safety staff of the Command being evaluated. This report will contain a statement declaring whether the MCSMS met standards and is effective, met standards but needs minor improvements, met standards but needs significant improvements(s), or were not effective.

2. CMC SD shall conduct CSAs of the following Commands:

- Marine Corps Forces Command (MARFORCOM)
- Marine Corps Forces Pacific (MARFORPAC)
- Marine Corps Forces Reserve (MARFORRES)/Commander, Marine Forces Northern Command (MARFORNORTHCOM)
- Marine Corps Training and Education Command (TECOM)
- Marine Corps Cyber Command (MARFORCYBERCOM)
- Marine Forces Central Command (MARCENT)
- Marine Forces Southern Command (MARFORSOUTH)
- Marine Forces Europe/Africa Command (MARFOREUR/AF)
- Marine Forces Special Operations Command (MARFORSOC)
- Marine Corps Logistics Command (MARCORLOGCOM)
- Marine Corps Recruiting Command (MCRC)
- Marine Corps Installation Command (MCICOM)
  - Marine Corps Installations East
  - Marine Corps Installations West
  - Marine Corps Installations Pacific
  - Marine Corps Installations National Capital Region

- Marine Corps System Command (MARCORSYSCOM)

Note: CMC SD may conduct CSAs of Commands not listed as deemed necessary or upon request.

3. All Higher Headquarters commands will conduct CSAs of subordinate commands and field activities at least every 36 months to ensure safety management conformance and performance. These evaluations may be part of a command inspection. The evaluation will review all aspects of the MCSMS.

Note: Commands may request assistance from CMC SD to coordinate expertise from across the Department of the Navy to assist commands with their own CSAs of subordinate commands.

a. The headquarters commands at all levels must ensure that safety management system evaluations are conducted at subordinate commands, units and activities every 36 months in accordance with reference (f).

b. CSAs must include at a minimum:

- 1) Progress in the reduction of mishaps
- 2) Effectiveness of processes to identify, assess, and prioritize hazards and system deficiencies
- 3) Effectiveness in addressing underlying causes of hazards, and the management of assessed hazard risks and system deficiencies
- 4) Status of corrective and preventive actions, and changing circumstances
- 5) Follow-up actions from previous assessments and inspections.
- 6) The overall performance of the MCSMS taking into consideration changing circumstances, resources needing to be staffed, competencies of SOH personnel, alignment of the mission, and consistency with Safety and Occupational Health policy.
- 7) Evaluation of the effectiveness of provided Core Safety Services.

060202. SAFETY MANAGEMENT SYSTEM SELF-ASSESSMENT

All Commands shall complete a Safety Management System Self-Assessment, conducted by qualified safety personnel in accordance with Chapter 5, *Safety Promotion and Training*, to assess each standalone unit's safety management system every 24 months.

## MARINE CORPS SAFETY MANAGEMENT SYSTEM

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A. The MCSMS Self-Assessment is not part of the Inspector General process. Results of the most recent MCSMS Self-Assessments should be summarized and included in the Annual Program Management Review.

B. The MCSMS Self-Assessment will cover all applicable safety disciplines. Safety staffs will conduct multi-discipline (e.g., Aviation, Occupational, etc.) assessments that address commander and supervisor support, compliance with MCSMS directives, and the overall effectiveness of the MCSMS. These assessments may be conducted in conjunction with the annual safety inspection.

C. For each MCSMS Self-Assessment, send a copy of the written report to the commander of the organization. The report may be combined with the annual inspection report. This report must contain:

1. Statement declaring whether the conformance and performance under the systematic processes of the MCSMS was met and effective, met but needs minor improvements, met but needs significant improvements, or was not effective.

2. Unit assessed

3. Date of assessment

4. Assessed level of management and supervisory support for safety

5. Mishap trends

6. Compliance with safety management system directives

7. Program deficiencies or policy shortfalls and applicable references

8. Recommendations for improvement and compliance

9. Best Practices

D. Command Safety staffs will develop assessment checklists to assess compliance and performance of core safety program elements. Safety checklists will be reviewed annually for accuracy and relevancy, and dated accordingly. Higher commands provide notice prior to conducting assessments.

E. The assessed unit will submit a Corrective Action Plan (CAP) to the safety staff. Safety personnel will track and monitor the status of all open assessment findings.

F. When directed by CMC SD, subordinate safety staffs will submit required documentation of Safety Program Assessments to CMC SD.

G. The self-assessment schedule and summary elements for all commands, units, and activities, including headquarters commands, are as listed:

1. CMC SD will establish annual information requirements.
2. Commands, units, and activities shall complete their annual self-assessments by 31 December using previous fiscal year data. Risk Management (RM) assessment should include a review of risks to mission and risks to force and should be broken out clearly in the annual self-assessment. The assessment should highlight gaps and seams that require intervention to resolve. Commands, units, and activities must formulate improvement plans as a part of the self-assessment process and must take all necessary steps to correct hazards and deficiencies when discovered. Additionally, commands, units, and activities must consolidate this information at each command, unit, and activity level in the chain of command.
3. Headquarters commands must consolidate this information and send to CMC SD by 1 February.
4. CMC SD will review Headquarters command submissions and prepare a service-level report for submission to the Office of the Assistant Secretary of the Navy, Energy, Installations, and Environment (OSN EI&E), Deputy Assistant Secretary of the Navy (DASN) Safety no later than 1 March, in support of the DON submission to the annual Department of Labor (DoL) OSHA Report, DoD Program Management Review, and Bureau of Labor and Statistics data call. The report identifies actionable information and recommends appropriate actions (DoD modifies the required data elements annually).

060203. ANNUAL SAFETY INSPECTIONS

Safety inspections help identify hazards and measure compliance with applicable safety guidance and standards. Annual safety inspections may be combined with the scheduled safety management system self-assessments. Commanders, commanding officers, and officers in charge must ensure that annual safety inspections are conducted by a trained and competent safety professional and the supporting MTF provides industrial hygiene and occupational health support as required. Annual safety inspections shall be conducted as follows:

A. All facilities, workplaces, and operations must be inspected by trained and competent safety inspectors at least annually (12 month cycle). They must inspect high hazard areas more frequently based upon an assessment of the potential for injuries, occupational illnesses, or damage to property. Procedures shall be established to document and follow-up every 30 days on the correction of identified hazards and deficiencies.

Note: This Chapter, enclosure (2) provides job hazard categories.

B. Per Host/Tenant MOU/MOA, assigned safety personnel will inspect facilities, workplaces, and operations annually, maintain a copy of the report on file, and provide a copy to the supported commander and the installation safety office. An annual fiscal year inspection schedule shall be developed and distributed to units no later than 30 September for the upcoming fiscal year. A copy shall be provided to unions, as applicable. When possible, coordinate assessments and inspections with the command's Commanding General's Inspection Program.



C. The safety manager will ensure safety personnel are properly qualified, have been task certified to perform all aspects of facility, workplace, and operational inspections, and that all facilities assigned to the unit are inspected regardless of whether or not there were findings.

D. Each hazard identified during the inspections will be assigned a Risk Assessment Code (RAC). The safety staff conducting the inspection will assist the responsible supervisor in developing hazard mitigation and abatement actions. Program management deficiencies identified during the inspection will be assigned a deficiency designator of Critical, Significant, or Minor. Hazards and deficiencies will be recorded, and tracked through closure.

1. Critical deficiencies are any validated deficiencies that result in, or could result in, widespread negative mission impact or failure.

2. Significant deficiencies are validated deficiencies that have, or could have, negative mission impact and require corrective actions.

3. Minor deficiencies are validated deficiencies that do not meet the definition of Critical or Significant deficiency, but require corrective action.

E. Inspection checklists located in Volume 6, *Safety and Occupational Health Program*, shall be used to identify hazards, deficiencies, and other work-related violations. Command safety staff may develop supplemental checklists as needed. Safety staff will ensure checklists are available to all applicable commands. Supplemental safety checklists will be reviewed annually for accuracy and relevancy.

F. The host installation safety office will assist tenant organizations' safety inspections if they are in the process of training a qualified safety professional. Host/tenant/associate support agreements will define who conducts inspections.

G. Provide an out-brief to the commander within 5 duty days and a formal written report within 15 calendar days of inspection completion. These reports along with the unit's corrective actions are to be staffed through the installation commander. When the installation safety office conducts inspections of tenant units, the installation safety office will send a copy of the report to the tenant safety office. The formal inspection report shall contain:

1. The unit activity or work area inspected
2. Date of the inspection
3. Facilities, work areas and operations inspected
4. Description of any hazards, deficiencies, or unsafe work practices with risk assessment codes, as applicable. Highlight any repeat incidents and trends.
5. Causes of deficiencies and hazards noted, if known

6. Recommendations for improvement and compliance

7. Instructions for follow-up actions such as requiring units to provide monthly updates on open items until closure.

H. Follow-up procedures and actions. The inspected unit will submit a summary of corrective actions taken to the safety staff. Safety personnel will track and monitor the status of all open inspection findings until closed. Use spot inspections and follow-up reporting to ensure corrective actions are taken and hazards are mitigated. All hazards identified during inspections will be reported in accordance with Volume 6, *Safety and Occupational Health Program*.

060204. QUARTERLY SAFETY INSPECTIONS

Work center/unit/shop Safety Representatives shall conduct quarterly safety inspections of assigned facilities, processes, and equipment. These inspections are intended to augment the annual safety inspection conducted by qualified safety and occupational health specialists. These inspections shall include:

A. Review of the Standard Operating Procedures (SOPs), Technical Manuals (TMs), and all other directives that govern the operations, processes or management of the facility to assure that:

1. Guidance materials, orders, regulations, TM's, etc., are present, current, and available.
2. Applicable procedures are followed in operations.

B. New processes or equipment shall be reported to the Installation Safety Office for job hazard analysis and workplace characterization.

060205. ANNUAL FACILITY AND WORKPLACE INSPECTION REPORT

In conjunction with the annual Program Management Review, CMC SD will send a data call for annual facility and workplace inspection report information required to complete the DoD report called for within reference (f). SD will send this data call to each MARFOR and Supporting Establishment for distribution to their subordinate safety offices. Each tasked safety staff will compile the total number of facilities and workplaces they are responsible for inspecting, the total number of facilities and workplaces inspected the preceding fiscal year, as well as the percentage of facilities and workplaces inspected the preceding fiscal year. They will provide this information to their Parent Command who will compile the cumulative data and send the composite product back to CMC SD within the suspense date assigned.

060206. SPOT INSPECTIONS

Spot inspections are an effective way to find and eliminate transitory hazards and ensure compliance with safety requirements. Supervisors, Safety Representatives (SRs), and safety

personnel will perform spot inspections to check the day-to-day safety and health of an organization, work center, facility, etc. Work center/unit/shop supervisors and SRs will conduct and document monthly spot inspections.

A. The Safety Manager will develop a spot inspection program for their safety staff to ensure coverage of installation on- and off-duty activities.

B. Documentation of spot inspections by safety staffs will include the following:

1. The organization, unit, activity, or work area inspected
2. The date and time of the inspection
3. The inspector's name and their organization or office symbol
4. A brief description of the areas, equipment, processes, and procedures reviewed as well as observations (including positive findings), hazards, or unsafe work practices. When qualified safety personnel identify hazards or deficiencies, assign RACs or deficiency codes, as prescribed by this Order.
5. Causes of deficiencies and hazards
6. Recommendations for corrective actions
7. Name, phone number, and e-mail address of the responsible person
8. Documentation of follow-up checks, as appropriate, conducted and individually documented every 30 days until corrective actions are completed.

C. Documentation of spot inspections by work center/unit/shop supervisors and SRs will include the following as a minimum:

1. The activity or work area inspected
2. The date and time of the inspection
3. The name of the person conducting the spot inspection
4. A brief description of the area, equipment, process, and procedure reviewed as well as observations of hazards, deficiencies, or unsafe work practices. The description may also include positive findings.
5. The applicable RAC or deficiency code, if assigned by a qualified fire, safety, or health person
6. Corrective actions taken or planned. Ensure appropriate follow-up actions are conducted every 30 days and documented until findings are closed.

060207. SPECIAL AND SEASONAL INSPECTIONS

A. Marine Corps Inspector General - Functional Area Inspections. The Inspector General of the Marine Corps conducts functional area 5100 safety inspections in accordance with reference (o). The Inspector General functional area 5100 results are provided to the commander and the safety officer or manager.

B. Special inspections are conducted to ensure work and recreational environments are safe and healthful. These inspections shall be identified and conducted per host/tenant MOU/MOA and include seasonal, targeted mishap preventive activities, special events, and mission readiness exercises. Special inspections will be conducted of installation Child Development Centers (CDCs) and playgrounds that are part of real property.

C. Seasonal inspections will be conducted of on-base recreational areas (e.g., sports fields, swimming pools, camp grounds, and recreational vehicle parks and other recreational areas). MCCS will coordinate with the safety staff to jointly conduct pre-season inspections of seasonal areas.

D. Safety Assist Visits. An assist visit helps develop solutions to identified problems, and provides observations and recommendations for improvement. An assist visit is not an inspection or evaluation. An assist visit may be conducted at any level at any time when requested by a unit commander. Upon completion, a written report shall be provided to the commander.

**MARINE CORPS SAFETY MANAGEMENT SYSTEM**

**Figure 6-1: Frequency and Type of Evaluations and Inspections**

<b>Type</b>	<b>Level</b>	<b>Frequency</b>	<b>By</b>
<b>Command Safety Assessment</b>	MARFORCOM, MARFORPAC, MARFORRES, MARFORNORTHCOM, TECOM, MARFORCYBERCOM, MARCENT, MARFORSOUTH, MARFOREUR/AF, MARFORSOC, MARCORLOGCOM, MCRC, MCICOM, MCIEAST, MCIWEST, MCIPAC, MCINCR, MARCORSYSCOM	36 months	CMC SD
<b>Command Safety Assessment</b>	Subordinate Commands	36 months	Higher Headquarter Command Safety Manager
<b>Safety Management System Self-Assessment</b>	Command	24 months	Command Safety Personnel
<b>Annual Safety Inspection</b>	Standalone/Command/Unit Activities	12 month	Installation Safety Office/Command Safety Office
<b>Quarterly Inspection</b>	Work Center/Unit/Shop	Quarterly	Work Center/Unit/Shop Safety Representative/Supervisor
<b>Spot Inspections</b>	Work Center/Unit/Shop	Monthly	Installation Safety Office/Command Safety Office/Work Center/Unit/Shop Safety Representative/Supervisor
<b>Seasonal Inspections</b>		Varies	

Note: Program Assessments are specified at a 24-month frequency, while safety inspections are at a 12-month frequency. Annual safety program assessments and inspections should be combined when conducted the same year to reduce the footprint within the affected organization.

060208. DEPARTMENT OF LABOR (DOL) INSPECTIONS, AND INVESTIGATIONS OF DOD WORKING CONDITIONS

A. OSHA officials may conduct announced or unannounced inspections of nonmilitary-unique workplaces and operations where Marine Corps civilian personnel work. In accordance with 29 CFR 1960.31 and 1960.35, OSHA and National Institute of Occupational Safety and Health (NIOSH) officials, acting as representatives of the Secretary of Labor, are authorized to conduct announced or unannounced inspections of DoD workplaces. They are not authorized to conduct inspections of uniquely military workplaces and operations, and nonmilitary-unique workplaces staffed exclusively by military personnel. The DoD Components are authorized to request through the Assistant Secretary Defense, Personnel and Readiness [ASD (P-R)] that NIOSH perform hazard evaluations. OSHA inspection procedures for federal agency workplaces are provided in OSHA Directive Number CPL 02-00-150.

B. As part of its evaluation program, the DoL may conduct annual targeted inspections or program assistance visits of Marine Corps installations based on the comparative incidence of worker compensation claims. The DoL will prescribe special procedures in the notification process. OSHA representatives may question or privately interview any employee, supervisory employee, or official in charge of an operation or workplace. Federal or state OSHA representatives must present identifying credentials and state the purpose of the visit to the installation commander or authorized representative before conducting an inspection of a workplace on a Marine Corps installation. Installation commanders will:

1. Ensure Security notifies the installation safety office of OSHA's arrival at the gate.
2. Ensure the OSHA representatives will be met and escorted during their visit.
3. Host an initial in-brief with DoL OSHA representatives.
4. Upon request, provide access to available safety, fire protection, and health information on workplaces.
5. While OSHA officials may review "For Official Use Only" mishap reports in the workplace during the course of their inspection, do not release "For Official Use Only"-marked reports or materials to them. OSHA requests for copies of such reports or materials must be obtained through the DoL.
6. OSHA officials with the appropriate need-to-know may review exposure records and specific parts of medical records pertaining to the OSHA complaint. The OSHA official must safeguard the individual's medical information according to Health Insurance Portability and Accountability Act (HIPAA) laws and Privacy Act.
7. Provide photographic or video support, if required. Videos or photographs taken on installations fall under the exclusive control of the installation commander. Marine

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Corps officials may review negatives, photographs, and videos before release if they suspect possible disclosure of classified or proprietary and or protected personal information. Photos and video images where individuals are identifiable are PII.

8. Arrange a closing conference with the OSHA official if requested and invite labor representatives to attend.

9. Treat DoL OSHA notices of hazards in the same manner as a Marine Corps inspector's report. Evaluate and assign a RAC to each hazard identified by OSHA inspectors.

10. Ensure installation safety personnel verify DoL inspection results, including all testing. Marine Corps tests or sampling for future testing should be accomplished at the same time and at the same location as the DoL testing, if possible.

11. Ensure that DoL personnel conducting the inspection receive a coordinated response to DoL inspection reports as required and prescribed by the OSHA Citation instructions. If an OSHA inspection team visits the installation and it appears there may be possible notices of safety or unhealthful workplace violations, the installation commander's staff should be notified and involved in the establishment of an abatement plan. If a unit is cited individually at a particular location, the identified hazard may, in fact, be classified a "repeat" citation if a similar finding was previously cited at another installation. This is due to OSHA treating the Marine Corps as an "Enterprise" organization, where the finding is considered a corporate matter rather than a singular installation matter. In such cases, notify CMC SD so they can be involved in tracking the hazard from identification through the proposed response to OSHA and subsequent closure. Upon receiving a citation, the cited unit will draft a proposed official response to the violation, which will be sent simultaneously to the applicable Command safety office and CMC SD, SOH Branch for review prior to releasing the response to OSHA. Units need to account for this coordination time in order to meet the suspense to OSHA.

### 0603 MONITORING

All commands, units and activities will conduct mishap reporting, investigation, and record keeping in accordance with appropriate references. Commands and units suffering mishaps related to naval aviation activities will report, investigate, and record as governed by reference (l), OPNAVINST 3750.1B, Naval Aviation Safety. All non-aviation Marine Corps mishaps are ruled by reference (p), MCO P5102.1B, Navy and Marine Corps Mishap Reporting, Investigation and Record Keeping Manual.

060301. PRE-MISHAP PLAN

All commands, units, and activities shall have a pre-mishap and mishap plan with associated checklists. A mishap plan describes the steps that must be taken when a mishap occurs. Anticipate all reasonable eventualities and devise measures to cope with them. Deficiencies are to be identified during periodic drills to ensure smooth execution following a mishap. A copy of the plan and this Manual should be available to all investigators. This plan may also be included in the command, unit, or activity's anti-terrorism/force protection plan or disaster preparedness plan.

060302. MISHAP REVIEW

Commanders, commanding officers, and officers in charge, and their respective deputies, chiefs of staff, or executive officers, must review all mishaps. At a minimum, commands, units, and activities must review any mishap that requires submission of a mishap investigation report in accordance with reference (p). The specific review mechanism is left to the command's discretion and can take many forms. This review will include the cognizant first-line supervisor and next level of management, and the injured employee if needed for amplifying information. The review must involve safety, medical, compensation, and other management personnel, as appropriate. The review ensures the mishap report identifies the underlying causes of the mishap and corrective actions required to prevent recurrence.

060303. MISHAP ANALYSIS AND RESPONSE

Commands, units, and activities must conduct detailed analyses of their mishap experiences and develop annual Fiscal Year (FY) or Calendar Year (CY) mishap reduction goals. The safety department will analyze mishap data, including "near miss" data, on a regular basis to identify significant trends. These trends will be used to adjust safety program efforts and training requirements and also identify goals, accountability issues, and potential failures of command, unit, and activity infrastructure. These goals should be included in command goals and specific strategies. Commanders and safety representatives are encouraged to contact CMC Safety Division for additional guidance and input when conducting these analyses and creating these goals.

0604 SAFETY CLIMATE SURVEYS AND CULTURE WORKSHOPS (GROUND AND AVIATION)

Unit commanders shall invest time, energy and presence in the health of their command safety management system, and seek a command climate focused on operational readiness and doing things the right way. Safety climate surveys and culture workshops are valuable tools for receiving feedback from the members of the unit. Surveys and workshops are powerful tools to improve communication and trust within a unit. The utility of these tools is directly related to the commander's approach to using them, and requires engagement in the process through pre-briefs and out-briefs to the unit. If it is important enough to ask personnel to take the time to provide thoughtful input, it is important enough to explain why they are being asked to do so. Within 14 days of receiving their survey/assessment results, Commanding Officers and Officers in Charge



shall provide a written or verbal debrief to their Higher Headquarters on their Ground Climate Assessment Survey (GCAS), Command Safety Assessment (CSA), Maintenance Climate Assessment Survey (MCAS), and the Administrative Support Personnel Assessment (ASPA). [Aviation and Ground Culture Workshops are exempt from this debriefing requirement.](#)

060401. HIGHER HEADQUARTERS

Commanders of Marine Forces Command, Marine Forces Pacific, Marine Forces Reserves, Marine Forces Special Operations Command, Marine Corps Combat Development Command, Marine Corps Logistics Command, Marine Corps Systems Command, Marine Corps Recruiting Command, Marine Corps Installations Command, Marine Expeditionary Forces, Marine Expeditionary Brigades, Marine Expeditionary Units, Marine Divisions, Marine Aircraft Wings, Marine Aircraft Groups, Marine Logistics Groups, and Marine regiments shall complete the Higher Headquarters (HHQ) survey within 90 days following a change of command (to establish a baseline for the new commander) and annually thereafter. The CMC SD website contains links to access the Ground Climate Assessment Survey System (GCASS) and the Marine Corps Aviation Survey System (MCASS) websites.

Note: Annually is 365 days after the commander receives the results of the prior applicable survey out brief.

060402. O5 and O6 LEVEL COMMANDS

O5 and O6-level (and recruiting station) commanders shall complete the appropriate safety climate survey to assess their command climate within 90 days following a change of command (to establish a baseline for the new commander) and annually thereafter. The CMC SD website contains links to access the Ground Climate Assessment Survey System (GCASS) and the Marine Corps Aviation Survey System (MCASS) websites. Report control symbol MC-5100-07 is assigned to this reporting requirement. [Commanders in their second and subsequent years shall conduct one of the following annually.](#)

A. [CSA/MCAS/ASPA surveys \(ensure the proper survey is assigned to appropriate personnel\)](#)

B. [Command Culture Workshop](#)

C. [NAVSAFECEN Aviation Safety Assessment](#)

Note: Annually is 365 days after the commander receives the results of the prior applicable survey out brief.

060403. AVIATION

A. All flying, Unmanned Aircraft System (UAS), Marine Aircraft Logistics Squadron (MALS), and aviation detachments shall complete a survey to assess their command climate within 30 days following a change of command in order to establish a 30-day baseline

for the new commander. These command climate surveys from the MCASS shall include the following components as applicable to the command:

1. The Command Safety Assessment (CSA) Survey is taken by aircrew - those individuals who operate aircraft.
2. The Maintenance Climate Assessment Survey (MCAS) is taken by aircraft maintenance personnel.
3. The Administrative Support Personnel Assessment (ASPA) survey is available for non-aircrew and non-maintenance personnel within these aviation units and organizational level maintenance units (S-shop personnel who do not fly or perform maintenance).

B. Commanders in their second and subsequent years shall conduct one of the following annually.

1. CSA/MCAS/ASPA surveys (ensure the proper survey is assigned to appropriate personnel)
2. Command Culture Workshop
3. NAVSAFECEN Aviation Safety Assessment

C. The CSA/MCAS/ASPA surveys shall also be conducted following a change of aircraft model, permanent change of operating base, or a change of a significant number of personnel in key billets.

D. All aviation support squadrons (MWSG squadrons, MACG squadrons, and Marine Wing Headquarters squadrons) shall adhere to the Marine Corps GCASS requirements.

#### 0605 OPTIONAL SURVEYS/WORKSHOPS

All commanding officers (Ground and Aviation) are encouraged to use the following optional surveys (via the GCASS website) to assess the posture of their safety and leadership programs:

- A. Private Motor Vehicle (PMV) survey
- B. Motorcycle (MTRCYCL) survey
- C. Drinking & Driving (D&D) survey
- D. Off Duty and Recreation (OD&R) survey
- E. Command Culture Survey (CCS)
- F. Hazing Survey

G. Command Culture Workshop (Aviation and Ground)

0606 COUNCILS AND COMMITTEES

As directed by reference (f), each command shall establish an SOH council to allow groups and individuals at various organizational levels to express their viewpoints and interests on safety issues. The council identifies, defines, and assesses issues, problems, and needs, and recommends corrective measures. New or revised policies, procedures, and practices may develop from these recommendations to improve the effectiveness of the MCSMS.

The safety council has three basic functions:

- A. To provide program assistance to the commander, including proposing policy and program objectives and recommendations.
- B. To create and maintain an active interest in SOH matters.
- C. To serve as a means of communicating SOH matters.

060601. EXECUTIVE SAFETY BOARD

A. The Assistant Commandant of the Marine Corps (ACMC) chairs the Executive Safety Board (ESB), which meets twice annually (in person, via VTC, or via electronic briefing as appropriate) as a decision-making forum for Marine Corps senior leaders. Reference the ESB Charter for amplifying information not covered below. The functions of the ESB are as follows:

1. Consider and approve initiatives and policies to improve the Marine Corps Safety Management System, prevent loss of life, reduce mishaps and injuries, and enhance unit and individual readiness.
2. Review and assess losses due to incidents that undermine unit readiness. Evaluate relevant trends and initiatives in Department of Defense, other government agencies, and the private sector for applicability to the Marine Corps.
3. Provide a forum for senior Marine Corps leaders to exchange ideas, and to evaluate and facilitate expedited approval of initiatives, changes to policy, or other activities that will improve efforts to reduce fatalities, injuries, occupational illnesses, and destructive behaviors throughout the Marine Corps.
4. Ensure strategic communication of all approved readiness enhancements, injury and mishap prevention policies, and implementing instructions throughout the enterprise.
5. Refine mechanisms for gathering operational forces and supporting establishment feedback on the effectiveness of the MCSMS.

B. Chaired by the ACMC, the ESB will be composed of senior Marine Corps leaders from the following:

- Director, Marine Corps Staff
- Deputy Commandant, Plans, Policies and Operations
- Deputy Commandant, Programs and Resources
- Deputy Commandant, Installations and Logistics
- Deputy Commandant, Manpower & Reserve Affairs
- Deputy Commandant, Aviation
- Deputy Commandant, Combat Development and Integration
- Deputy Commandant, Information
- Commander, Marine Forces Command
- Commander, Marine Forces Pacific
- Commander, Marine Forces Reserves
- Commander, Marine Forces Central
- Commander, Marine Forces Cyber
- Commander, Marine Forces Strategic
- Commanding General, I Marine Expeditionary Force
- Commanding General, II Marine Expeditionary Force
- Commanding General, III Marine Expeditionary Force
- Commander, Marine Forces Special Operations Command
- Commander, Marine Corps Installations Command
- Commander, Marine Forces Europe/Africa
- Commander, Marine Forces South
- Commanding General, Training and Education Command
- Commanding General, Marine Corps Logistics Command
- Commanding General, Marine Corps Recruiting Command
- Commander, Marine Corps Systems Command
- Inspector General of the Marine Corps
- Staff Judge Advocate, HQMC
- Commander, Marine Corps Installations – West
- Commander, Marine Corps Installations – East
- Commander, Marine Corps Installations – Pacific
- Director, Health Services
- Director, Marine and Family Programs
- Director, Office of Marine Corps Communication
- Chaplain of the Marine Corps
- Sergeant Major of the Marine Corps

060602. USMC SAFETY AND OCCUPATIONAL HEALTH COUNCIL

A. The Safety and Occupational Health Council (SOHC) provides a forum to evaluate the effectiveness and viability of existing USMC SOH policies and programs, to evaluate safety best practices, and to review and analyze the Marine Corps unit self-assessment data. All of these actions are taken to identify trends and actionable information, and to make recommendations for SOH policy and program improvement.

B. The core safety members from commands represented on the ESB comprise the SOHC. Various commands, units, and activities will be called to serve as advisors on the Council as needed.

C. The SOHC will convene quarterly. The responsibilities of the council are as follows:

1. Evaluate the effectiveness and viability of existing USMC safety and occupational health policies and programs. Propose changes to policies and programs that have the potential to reduce mishaps and injuries.

2. Evaluate safety best practices and determine improvements to USMC safety policies and programs.

3. Perform additional tasks assigned by the ESB and provide status reports as needed.

4. Establish and support working groups.

5. Annually review safety data, conduct analysis, identify trends, and gather facts from consolidated command, unit, and activity annual unit safety self-assessments. Prepare a summary report to the ESB highlighting key trends, and issue results from the analysis of USMC unit self-assessments.

6. Review and recommend ESB topics.

060603. SAFETY COUNCILS

A. Safety councils will be established at each Marine Corps Installation, command, unit, and activity. Squadrons, air stations, and other large aviation commands, units, and activities will form an Aviation Safety Council per Volume 4, *Marine Corps Aviation Safety*.

Note: The requirement for a safety council can be met by any formally established staff meeting, board, or council that addresses safety issues, even if it also addresses other issues, as long as it meets the basic intent and criteria of this chapter and has similar attendance. For commands, units, and activities that participate in OSHA's Voluntary Protection Program (VPP), the VPP Steering Committee may serve as the Safety Council.

B. Safety Councils are chaired by the Commanding Officer or the Executive Officer, and facilitated by the appropriate SOH Manager. Councils will perform the functions listed below as determined by the authority that establishes the council:

1. Coordinate mutually beneficial mishap prevention and safety programs with local communities (e.g., locally assigned tenant commands, units, and activities).
2. Review mishaps and near-miss incidents, recommend improvements to the safety management system, and identify corrective measures needed to eliminate or control recognized hazards.
3. Identify the resources needed to educate personnel in safety techniques, concepts, and principles to maintain a healthful work environment and conduct operations (on- and off-duty, occupational, and operational support) in a safe and healthful manner.
4. Identify hazards and assess risks to people, facilities, and equipment, and communicate findings and recommendations to responsible authorities of DoD operations.
5. Identify and assess mishap causal factors and potentially unsafe practices or conditions, and recommend corrective actions to prevent mishap recurrence and reduce exposures to hazardous conditions.
6. Update and implement command, unit, and activity mishap prevention plans and safety initiatives.
7. Update and implement command, unit, and activity safety awareness programs with current, relevant, and user-friendly information to promote installation safety. Safety awareness programs include but are not limited to safety awards, safety initiatives, outreach programs, promotions, and marketing activities.
8. Verify the status of the installation's CSS delivery and ways to improve tenant safety management systems, and to address gaps in command self-assessments.
9. Establish mishap prevention goals and plans.
10. Review command plans, policies, procedures, conditions, and instructions to ensure their currency, correctness, and responsiveness to safety recommendations.
11. Review issues and recommendations identified by annual self-assessments or submitted by subordinate committees.
12. Periodically review open issues from previous meetings and reviews.
13. Review compliance with Risk Management implementation in all applicable operations and evolutions.

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C. Safety Council Membership. The commander should chair the safety council. By exception the deputy commander, chief of staff, or executive officer may chair the safety council if the commander is unavailable. COs must designate their stand in chair either by council charter or by title or position in a local instruction. Membership must include military and civilian personnel, when possible, as well as safety and health professionals. Civilian personnel must be represented on the council by union representatives if local labor-management agreements contain provisions concerning employee representation. Minimum membership should include maintenance, medical, and training personnel, MCCS officials, safety managers and officers, and the provost marshal. Commands, units, and activities that do not have a safety staff and receive CSS shall participate in the host command safety council meetings. Commands, units, and activities that are temporarily unable to participate in a safety council meeting must be provided minutes of the meetings.

D. Meeting Frequency. Command, unit and, activity safety councils will meet quarterly, or more often as directed by the chairperson.

E. Agenda. The council develops agendas and action items based on the nature of the command's, unit's, or activity's scope of operations and its hazard and mishap experience. Subject matter discussed by the council will include goals, program improvement plans, mishap prevention experience, mishap drills and exercise planning, requirements and initiatives, compliance issues, and hazard abatement. The safety office will develop proposed agendas and presentations for the council and ensure meetings are scheduled on behalf of the commander.

F. Council Meeting Minutes. Minutes of each safety council meeting will be recorded (electronic or hard copy) and retained by the safety manager or officer, with proof that the chair has reviewed and approved the minutes (initials, signature, or electronic record). Preparation, publication and maintenance of safety council meeting minutes shall be maintained in accordance with reference (q).

G. Traffic safety councils will also be established in accordance with this Volume and Volume 3, *Marine Corps traffic Safety program*. This can be combined with other existing councils or committees if council requirements are met and documented.

### 060604. COMMITTEES

A. Supervisors' Safety Committee. Each installation, command, or unit with a population greater than 500 shall have a supervisor's safety committee. For units that have a population under 500 personnel a supervisor safety committee may not be required if the unit conducts their own safety council or participates in the higher headquarters or host installation safety council.

1. Committees will perform the listed functions as determined by the authority that establishes the council:

a. Consider new standards, policies, procedures, recommendations, SOP's, etc., involving safety and health.

- b. Review command mishap trends and analyses.
- c. Recommend changes to policies or procedures to minimize unsafe acts and strengthen the command's safety management system.
- d. Develop recommendations for physical or structural alterations to eliminate or control hazards.
- e. Develop educational and promotional activities that create and maintain an interest in safety and increase awareness of mishap prevention efforts.

2. Membership. Committee membership shall consist of military and civilian supervisors. Membership shall be open to civilian employee representatives when the supervisors' safety committee contains or represents civilian employees. A supervisor shall be annually elected as chairperson from membership. The safety manager shall provide members with counsel and advice.

3. Meetings. The committee shall meet quarterly, or more frequently if circumstances warrant.

4. Minutes. The recorder of this committee shall be elected from the members. Meeting minutes shall be forwarded to the safety council for review and appropriate action. Safety managers and officers shall ensure the preparation, publication and maintenance of the minutes of all safety council meetings are in accordance with reference (q).

B. Shop Safety Committee. Each Marine Corps organization or unit shall establish appropriate shop safety committees to increase interest in safety at the worker level and decrease the potential for mishaps.

1. Membership. Five or more employees of each work center (e.g., office, shop crew, section, department) will constitute a shop safety committee. All members shall be from that work center and shall be chaired by a supervisor or a journeyman level member.

2. One or more committee meetings will be held each month at times and locations scheduled by the supervisor. Meetings should be of short duration and have minimal effect on work schedules.

3. Meeting Minutes. A roster of attendees and topics discussed will be provided to the supervisor, maintained in department records, and distributed to work center/unit/shop personnel. Supervisors will then forward any pertinent safety information to their work center/unit/shop safety representative, supervisors' safety committee or safety council as appropriate.



### Command Culture Workshop Program

- Encl: (1) CCW Process  
(1) Unit Point of Contact Responsibilities  
(1) Commander's CCW Critique

1. Situation. Successful organizations require trust, integrity, and effective communication, created and sustained through effective leadership. CMC SD promotes the Command Culture Workshop (CCW) Program to assist unit commanders with identifying organizational strengths, weaknesses, and potential hazards within their unit. The CCW Program assists commanders in identifying critical, technical, and social elements, hazards, and risks influencing the unit's culture. Enclosure (1-A) outlines the CCW process. Enclosure (1-B) describes the unit point of contact (POC) responsibilities. Enclosure (1-C) is a tool for commanders to provide feedback to Commandant of the Marine Corps (CMC), Safety Division (SD) on the CCW process. The CCW supports commanders in developing and implementing an intervention strategy to address policy, procedure, and resource shortfalls.

2. Mission. Upon request, facilitators will execute a unit level CCW to identify and provide current, relevant, and actionable information on a unit's culture in order to assist the commander in creating or reinforcing a positive command culture.

### 3. Execution

#### a. Commander's Intent

(1) Provide a culture assessment tool for commanders (O5/O6 level) that is thorough, non-retributive, and accommodates the commander's operational requirements.

(2) Ensure adherence to the 90-Day Ground Command Safety Assessment (GCSA) requirement mandated by Headquarters Marine Corps (HQMC).

(3) Publish procedures for requesting and conducting CCWs for I, II, and III MEF battalions, squadrons, and logistic groups in the Fleet Marine Forces.

#### b. Concept of Operations

(1) Commanding Officers may request a CCW to aid in assessing their organizational culture and climate and to improve communication and trust with their unit.

(2) Trained facilitators use guided individual and group discussions with command personnel to discover underlying cultural strengths and weaknesses within a specific unit. To maximize objectivity and ensure confidentiality, the CCW Program uses [selected \(O-5/O-6\)](#) USMC reserve officers trained as CCW facilitators.

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(3) CCW feedback is presented to the unit's commander during a candid debrief. Specific results are not disseminated outside the unit. The commanding officer will complete and return enclosure (1-C) to CMC SD to aid in the enhancement of the CCW Program.

(4) The CCW is designed to ensure minimal disruption to a unit's activities.

### c. Tasks

(1) CMC SD CCW Program Manager (PM) shall:

- (a) Manage the CCW Program.
- (b) Select and approve CCW facilitators.
- (c) Ensure CCW facilitators [are trained and meet the standardization requirements set forth by the Commander of Naval Air Forces and the Director of CMC SD.](#)
- (d) Coordinate CCW facilitator availability to support unit requirements.
- (e) Provide official correspondence to the requesting unit on the process and conduct of the CCW.

(2) CCW Facilitators shall:

- (a) Undergo initial CCW training as directed by the CCW PM.
- (b) Conduct CCWs for respective units as directed by the CMC SD.
- (c) Coordinate funding for lodging, rental cars, airfare, and per diem with their parent unit.

(3) Requesting Unit Commanders shall:

- (a) Provide a point of contact to coordinate and assist CCW facilitators with workshop requirements.
- (b) Provide a classroom space free from distractions, capable of seating a minimum of 15 CCW participants.
- (c) Provide a computer and an overhead projector with screen, white board, markers and eraser, or flip chart with markers for use during workshops.
- (d) Provide access to a computer with printer and use of copy machine to produce workshop materials.

(e) Provide CCW participants per enclosure (1). Each session will have between eight and 15 participants. The participants should be a representative sample from various sections such as S-1, S-3, etc., to best facilitate the workshop discussion and provide an honest assessment.

d. Coordinating Instructions

(1) Unit commanders may request a CCW at any time by contacting the CCW PM at CMC SD. Requests should be coordinated six to eight weeks prior to the desired workshop date to allow for proper logistical support. Requests inside of six weeks will be considered, but may not be supportable due to personnel availability.

(2) CMC SD has overall responsibility for the CCW Program and facilitator selection process.

(3) Facilitator funding is at no cost to the supported unit.

### Command Culture Workshop Process

**“Operational Excellence exists on a foundation of trust, integrity, and leadership, created and sustained through effective communication”**

1. Overview. The CCW is normally a three day evolution. Commands can request a CCW by submitting a request to the CMC SD. The workshop should not significantly impact day-to-day operations.

2. Team Composition. The CCW Team consists of one to two facilitators.

3. Mechanics

- An in-brief will be conducted by the facilitators with the unit commanding officer.
- Facilitators may visit unit spaces in order to conduct individual interviews. These interviews are informal and the purpose is to identify any items for discussion at the workshops.
- Seven group workshops will be held in a conference-style setting. Group workshops are approximately two and a half hours in length. After workshop completion, participants will provide written anonymous participant questionnaires to the unit commander. Examples of the workshop compositions are as follows:
  - (2) Workshops consisting of eight to 15 E1-E3s.
  - (2) Workshops consisting of eight to 15 E4-E5s.
  - (1) Workshop consisting of eight to 15 E6-E8s.
  - (1) Workshop consisting of eight to 15 junior officers (not to include company commanders).
  - (1) Workshop: Senior Leadership Seminar/Debrief

\*\*Workshop composition will be tailored to the specific unit\*\*

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**Sequence of Events**

<b>Time</b>	<b>Location</b>	<b>Personnel</b>	<b>Subject</b>
<b>Day 1</b>			
0700-0730	TBD	Facilitator(s)	Setup/prep
0730-0800	CO's Office	Facilitator(s)/CO	CO In-Brief
0800-1030	TBD	E1-E3	Workshop
1100-1330	TBD	E1-E3	Workshop**
1400-1630	TBD	E4-E5	Workshop
<b>Day 2</b>			
0730-1000	TBD	E4-E5	Workshop
1030-1300	TBD	E6-E8	Workshop**
1330-1600	TBD	Junior Officers	Workshop
<b>Day 3</b>			
0730-1000	TBD	Senior Leaders	Workshop
1030-1430	TBD	Facilitator(s)	Data Coordination
1430-1530	CO's Office	Facilitator(s)/CO	CO Debrief

\*\*Working lunch may be provided by the unit. Unit is not responsible for providing the facilitators meals.

- During the workshops, the facilitators will discuss the CCW process and people, and programs will be discussed. In addition, participants will complete an anonymous Participant Questionnaire for their commanding officer. The following three pillars will be discussed in detail during the workshops:

- **Communication:** Review of unit communication tools (formations, meetings, plan of the day, email, etc.).

- **Trust:** Review level of trust throughout the unit (leadership and peers).

- **Integrity:** Review of programs requiring equality and transparency (training, quality control, maintenance procedures, non-judicial punishment (NJP), awards, pro/con marks, fitness reports, standard operating procedures, local directives, etc.).

- The facilitators will debrief the unit commanding officer via the summary debrief sheet; sensitive information will be provided to the unit commanding officer during a private debrief.

- The unit's commanding officer will complete and return the Commander's CCW Critique, enclosure (1-C), to the CMC SD CCW Program Manager within 30 days of receipt.

### Unit Point of Contact Responsibilities

The following information is provided to assist the unit POC in setting up the CCW. The unit POC must have the direct support of the commanding officer. This process has been designed to minimize administrative functions. For that reason, the unit POC can expect to complete the necessary arrangements in very little time.

- Point of Contact. The CCW requires a company grade officer (O2 or O3) or staff non-commissioned officer (E6 or E7) to serve as the POC. Historically, the Safety Officer or Equal Opportunity Officer from the respective unit has assisted the facilitators as a POC. This Marine should be sharp, professional, and highly motivated. Provide the name and contact information of the POC to the CCW PM at the earliest possible opportunity.

- Workshop/Classroom/Space. Facilities for the workshops should be conference-style, comfortable for at least 15 participants, and free from distractions. The room should be equipped with a computer, overhead projector with screen, white board with markers and eraser, or flip chart with markers. Facilitators will require access to a computer with printing capability and use of a copy machine to produce workshop materials.

- Workshop Participant Selection. Workshop participants should be selected and notified of the time and place for the workshop. It is critically important that participants be present at the appointed time. Participants should be a true cross-section of the command (Example: A workshop should not consist entirely of Marines from Alpha Company or a particular work center/unit/shop).

**Commander's CCW Critique**

As a follow-up to the CCW process, your continued feedback/comments are important for us to highlight issues/concerns you have as a leader. Your candid inputs may be collated with responses from other CCW participants and forwarded to Marine Corps senior leadership. Please provide answers on a numeric scale with 10 being the highest regarding your unit participation in this workshop. In addition, please include any comments that would enhance our understanding of your experience of the process.

1. Was the workshop useful in identifying your unit's culture and possible improvement areas?

1 2 3 4 5 6 7 8 9 10

Comments:

2. Will this concept assist the Marines in improving operational excellence, force preservation, and reducing mishaps?

1 2 3 4 5 6 7 8 9 10

Comments:

3. To what extent will you act on issues identified through the process?

1 2 3 4 5 6 7 8 9 10

Comments:

4. To what extent would you recommend this program for other units?

1 2 3 4 5 6 7 8 9 10

Comments:

5. What are the top three "hazards" to operational excellence, force preservation, and mission accomplishment that you face as a leader?

Comments:

Unit:            Name:            Date:

Return to:

CMC SD  
CMC SD CCW PM  
CMC SD  
**Phone: 703-604-4172**

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**Job Hazard Categories**

Review manpower authorization lists to identify all jobs by hazard exposure category as listed. Most commands, units and activities will have employees in more than one category. The listed work center/unit/shop descriptions are examples of the type of work performed in each job hazard category. They are not all inclusive:

<b>Hazard Category Level</b>	<b>Work Center/Unit/Shop Description</b>
<b>High</b>	<p><u>INDUSTRIAL OPERATIONS</u>: Machine shop (cutting, grinding, machining, drilling, planning and shaping metal); arc and acetylene welding; foundry operations (work with molten metals); electroplating; abrasive blasting; solvent cleaning operations; high-voltage electrical work; power plants (i.e., steam or electrical generation); ship repair work; aircraft corrosion control; aircraft rework; and spray painting.</p> <p><u>MEDICAL</u>: Radiation sources, communicable diseases, contaminated medical substances and handling chemicals.</p> <p><u>HEAVY EQUIPMENT OPERATIONS AND MAINTENANCE</u>: Heavy equipment operations (bulldozers, cranes and earth movers); repair and maintenance of large motors, engines and materials handling equipment (i.e., tower and bridge cranes).</p> <p><u>TOXIC/HAZARDOUS MATERIALS HANDLING</u>: Work involving use or cleanup of acids, corrosives, reactives, pyrophoric materials, carcinogens, pesticides, radioactive material and other high hazard chemicals or materials (asbestos, PCBs, asbestos, cadmium, beryllium, chromium, etc.).</p> <p><u>CONSTRUCTION</u>: Construction or repair of piers, warehouses and buildings to include all building trades (i.e., painters, carpenters, sheet metal workers, plumbers, electricians, roofers, tilers, masons, concrete workers, and work on scaffolding, communication towers, or other high risk work).</p> <p><u>HIGH RISK TRAINING</u>: All basic or advanced, individual or collective training in a traditional or non-traditional environment which exposes the crew, staff, students or assets to the potential risk of death, permanent disability, or loss during training.</p> <p><u>OTHER</u>: Work involving extreme exposures to heat, cold, diving and salvage, heights or other high risk work. Stevedore and longshoring operations.</p>
<b>Moderate</b>	<p><u>SUPPLY/TRANSPORTATION</u>: Movement of materials in aviation cargo or storage facilities using forklift trucks, overhead cranes and powered hand trucks, where materials are stacked above three feet in height. Manual material handling and lifting (i.e., assembly line, exchanges and warehouse operations).</p> <p><u>MECHANICS</u>: Repair and maintenance of automotive vehicles, building maintenance, and aircraft maintenance.</p> <p><u>RDT&amp;E</u>: Engineers, test mechanics, and laboratory personnel involved in the RDT&amp;E of systems.</p>
<b>Low</b>	<p><u>ADMINISTRATIVE, CLERICAL, CLASSROOM</u>: Those positions that involve primary work in an office environment but may include visits to worksites for inspection or evaluation.</p>



**VOLUME 1: CHAPTER 7**

**SAFETY PROGRAMMING AND BUDGET**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 7

SAFETY PROGRAMMING AND BUDGET

0701 ANNUAL PROGRAM REVIEW

The Commandant of the Marine Corps provides the Marine Corps' Program Objective Memorandum (POM) annually to the Department of the Navy for further submission to the Office of the Secretary of Defense. As part of POM development, a comprehensive and astute review of all resource requirements is required in order to optimize warfighting capability and capacity across the Future Years Defense Program. With each new fiscal year, Assistant Deputy Commandant, Programs and Resources coordinates a comprehensive review of each specific program requiring monetary resources for the purpose of developing the service's POM submissions. Program Reviews also serve to educate and equip stakeholders with an analytical understanding of the various Marine Corps programs to better inform subsequent planning and programming actions for the next POM cycle.

0702 SAFETY PROGRAM ELEMENT

The Department of Defense Program Element (PE) for Safety Programs is 0202057M and the associated Marine Corps Program Code (MCPC) for Safety is 630604. CMC SD performs service level programming functions as the Programming Office MCPC 630604 (Safety) by consolidating and defending funding requirements via the Installations Program Evaluation Board (PEB). MCPC 630604 (Safety) contains appropriations for Operations and Maintenance Marine Corps (OMMC), Operations Maintenance and Marine Corps Reserve (OMMCR), Research, Development, Test and Evaluation (RDT&E), and DON Civilian Personnel salary. Budget Line Items to be utilized in this effort are: 1A1A (Operational Forces), 1A3A (Depot Maintenance), 3A1C (Recruit Training), 3C1F (Recruiting and Advertising) and BSS1 (Base Operating Support).

0703 COST ACCOUNT CODES

The Cost Account Codes for Safety are NFSG (Ground Safety), NFTS (Tactical Safety Program), NFSM (Military Safety Operations), and NFST (Safety Training and Prevention). The BEA/BESA for Safety is SA; the Fund Code is JD.

0704 ANNUAL BUDGET

Based on the aforementioned approved POM submission for the safety management system, each safety manager or officer is responsible for developing, submitting, and executing an annual budget. The budget requests are submitted through the chain of command supporting the safety management system and carry out the responsibilities contained in Chapter 2, *Roles and Responsibilities*.

A. The safety budget shall be carried on a separate line item and all safety expenditures accounted for in the Standardized Accounting and Budget Reporting System

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(SABRS). Where local comptrollers do not use SABRS, a separate budget line item will be established. Also, the command's comptroller will authorize the use of U.S. Government Credit Card Purchase Card programs to support safety management system purchase requirements.

B. MCPC 630604 (Safety) provides resources associated with the following:

1. Management and administrative costs for the safety management system. This includes the following areas: aviation, tactical safety, explosives/range safety, risk management, occupational safety, ground safety, motor vehicle/traffic safety, and off-duty activities safety (i.e. sports, recreation).

2. Occupational and environmental health program areas excluding those areas that were funded by PE 0807705 (Military Public/Occupational Health) as provided to Marine Corps organizations by the Bureau of Medicine and Surgery, or other supporting elements of the Defense Health Agency.

3. Activities of safety inspections, hazard identification, facilities design and construction review, safety training, mishap/injury and illness investigation/reporting programs, self-assessments, external assessments, and safety research.

4. Direct personnel and administrative costs, travel, training, supplies, safety equipment/materiel, test equipment, safety awards, contracts, studies and analyses, and personal protective equipment (PPE), (e.g., hazardous gas and noise detectors, steel toe safety shoes, air-purifying respirators, eye and ear protective devices, etc.).

5. Safety related training/education costs for civilian and military safety personnel. Also included are the participation costs for safety conferences and workshops by both military and civilian personnel.

6. Safety education, promotional materials, and media/visual aids.

C. Readiness improvement is emphasized, as well as combat effectiveness and flexibility, through initiatives that focus on energy reliability, resiliency, and efficiency. Safety and occupational health programs have an immediate impact on readiness. Ongoing investments in and professional development of the safety community, combined with streamlining policies and processes, improve the efficiency and lethality of the Fleet Marine Force.

**VOLUME 1: APPENDIX A**

**ABBREVIATIONS AND ACRONYMS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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APPENDIX A

ABBREVIATIONS AND ACRONYMS

ABIH - American Board of Industrial Hygiene

ACMC - Assistant Commandant of the Marine Corps

ANSI - American National Standards Institute

ASAP - Aviation Safety Awareness Program

ASC - Aviation Safety Command

ASD (P-R) - Assistant Secretary Defense, Personnel and Readiness

ASP® - Associate Safety Professional

ASPA - Administrative Support Personnel Assessment

ASN E, I&E - Assistant Secretary of the Navy for Energy, Installations and Environment

BCSP - Board of Certified Safety Professionals

BUMED - Bureau of Medicine and Surgery

CAP - Corrective Actions Plan

CCS - Command Culture Survey

CCW - Command Culture Workshop

CDCs - Child Development Centers

CESB - Council on Engineering Standards Boards

CEU - Continuing Education Unit

CHMM® - Certified Hazardous Material Manager

CIH® - Certified Industrial Hygienist

CMC – Commandant of the Marine Corps

CMC SD – Commandant of the Marine Corps Safety Division

COI - Community of Interest

COLS - Common Output Levels

COMMARCENT - Commander, Marine Forces Central Command

COMMARCORSSYSCOM - Commander, Marine Corps System Command ()

COMMARFORCOM - Commander, Marine Corps Forces Command

COMMARFORCYBERCOM - Commander, Marine Corps Cyber Command

COMMARFOREUR/AF - Commander, Marine Forces Europe/Africa Command

COMMARFORNORTHCOM - Commander, Marine Forces Northern Command

COMMARFORPAC - Commander, Marine Corps Forces Pacific Command

COMMARFORRES - Commander, Marine Corps Forces Reserve

COMMARFORSOC - Commander, Marine Forces Special Operations

COMMARFORSOUTH - Commander, Marine Forces Southern Command

COMMCICOM - Commander, Marine Corps Installation Command

COMNAVSAFECEN - Commander, Naval Safety Center

CSA – Command Safety Assessment

CSHM® - Certified Safety & Health Manager

CSP - Certified Safety Professional

CSS – Core Safety Services

CY - Calendar Year

DC/A - Deputy Commandant for Aviation

D&D - Drinking & Driving

DFEC - Division of Federal Employees Compensation

DoD – Department of Defense

DoL - Department of Labor

DON - Department of the Navy

DOSS – Department of Safety and Standardization

DSOC - Defense Safety Oversight Council

DSS - Director of Safety and Standardization

EDIPI - Electronic Data Interchange Personal Identifier

ESAMS - Enterprise Safety Application Management System

ESB – Executive Safety Board

FR2 - DOD Force Risk Reduction

FTX - Field Training Exercises

FY - Fiscal Year

GCASS - Ground Climate Assessment Survey System

GCSA - Ground Command Safety Assessment

GMIC - Ground Mishap Investigation Course

GMV - Government Motor Vehicles

GSMs - Ground Safety Managers

GSO - Ground Safety Officer

HHQ - Higher Headquarters

HIPAA - Health Insurance Portability and Accountability Act

HQMC - Headquarters Marine Corps

HS - Health Services

IACET - International Association for Continuing Education and Training

ICE - Institute for Credentialing Excellence

ICPA - Injury Compensation Program Administrators

IDP - Individual Development Plan

iNFADS - internet Navy Facilities Asset Data Store

IRSAG - International Range Safety Advisory Group

ISHM - Institute for Safety and Health Management

ISO - Installation Safety Office

KSA - Knowledge, Skills, and Abilities

LASER - Light Amplification by Stimulated Emission of Radiation

MALS - Marine Aircraft Logistics Squadron

MARCENT - Marine Forces Central Command

MARCORLOGCOM - Marine Corps Logistics Command

MARFORCOM - Marine Corps Forces Command

MARFORCYBERCOM - Marine Corps Cyber Command

MARFOREUR/AF - Marine Forces Europe/Africa Command

MARFORPAC - Marine Corps Forces Pacific

MARFORNORTHCOM - Marine Corps Forces Reserve (MARFORRES)/Commander, Marine Forces Northern Command

MARFORSOC - Marine Forces Special Operations Command

MARFORSOUTH - Marine Forces Southern Command

MARCORSYSCOM - Marine Corps System Command

MCAS - Maintenance Climate Assessment Survey

MCASS - Marine Corps Aviation Survey System

MCICOM - Marine Corps Installations Command

MCRC - Marine Corps Recruiting Command

MCPC – Marine Corps Program Code

MCSMS - Marine Corps Safety Management System

MCTIMS - Marine Corps Training and Information Management System

MMRP - Manpower Management Records and Performance Branch



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MOA/MOU – Memorandum of Agreement/Memorandum of Understanding

MOS - Military Occupational Specialty

MPHA - Mishap Prevention and Hazard Abatement

MRRS - Medical Readiness Reporting System

MSC - Major Subordinate Command

MTF – Medical Treatment Facility

NIOSH - National Institute of Occupational Safety and Health

NATOPS - Naval Air Training and Operating Procedures Standardization

NJP - Non-Judicial Punishment

NRMP - Naval Radioactive Materials Permits

NRSWG – North Atlantic Treaty Organization Range Safety Working Group

NSC - Naval Safety Center

OCS - Operational Contract Support

OD&R - Off Duty and Recreation

OHST® - Occupational Hygiene and Safety Technician

OJT - On-the-Job Training

OMMC - Operation and Maintenance-Marine Corps

OMMCR - Operations Maintenance and Marine Corps Reserve

OSHA – Occupational Safety and Health Administration

OTI - OSHA Technical Institutes

PDCA – Plan-Do-Check-Act

PE - Program Element

PEB - Program Evaluation Board

PM - Performance Manual

PM – Program Manager

PMR – Program Management Review

PMV - Private Motor Vehicle

POC - Point of Contact

POM – Program Objective Memorandum

PPE - Personal Protective Equipment

RAC - Risk Assessment Code

RADCON - Radiological Controls

RDT&E - Research, Development, Test and Evaluation

RM – Risk Management

RMI-SIR - Risk Management Information System-Streamline Incident Reporting

RODS - Recreational and Off-Duty Safety

SAS - School of Aviation Safety

SIB - Safety Investigation Boards

SME - Subject Matter Expert

SMS® - Safety Management Specialist

SMS – Safety Management System

SOH – Safety and Occupational Health

SOHC - Safety and Occupational Health Council

SOUM - Safety of Use Memoranda

SR - Safety Representative

SST - Supervisor Safety Training

TECOM - Training and Education Command

TM - Technical Manual

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UAS - Unmanned Aircraft System

USC - United States Code

VPP - Voluntary Protection Program

WESS - Web Enabled Safety System

XO - Executive Officer

## VOLUME 2

**RISK MANAGEMENT****SUMMARY OF VOLUME 2 CHANGES**

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**INTRODUCTION TO RISK MANAGEMENT**

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CHAPTER 1

INTRODUCTION TO RISK MANAGEMENT

0101 OVERVIEW

This chapter provides an introduction to Risk Management (RM) and how RM is used to identify and assess hazards to develop mitigating controls, which are then continuously monitored and analyzed to assess their effectiveness. The focus of RM is to reduce hazards and prevent mishaps in order to preserve resources (i.e., personnel and equipment) and maintain operational readiness.

0102 APPLICABILITY

Risk Management is as important at the small unit level as it is up through the higher organizational levels. The application of RM may differ between a squad and a battalion, but the process and desired results are the same. RM should be a part of how ALL Marines think, and how they make decisions on or off the job. Everyone benefits from a force focused on operational excellence that proactively looks to identify hazards, assess risks, and implement controls. Doing so protects Marines and equipment during training and operations.

0103 INHERENT RISK

Risk is inherent in every phase of tasking, specific mission execution, and overall operations due to today's complex and dynamic environment. Off-duty activities present their own set of hazards and risks, and off-duty "mission success" is much more likely with the continuous application of RM processes and principles. With hazards and risks present both on and off-duty, it is incumbent upon all Marines, both military and civilian, to understand how to assess and manage risk to achieve mission success and preserve combat readiness.

0104 RISK MANAGEMENT

In its most simplified terms, RM is the process of 1) identifying hazards, 2) assessing risks associated with those hazards and 3) implementing safety controls to prevent those hazards from causing mishaps. "Safety" is the byproduct of this continuous cycle of tasks, and is increased, improved, and enhanced by this Risk Management process.

0105 PRINCIPLES OF RISK MANAGEMENT

The acceptance of risk is not an imprudent willingness to gamble, but rather a deliberate calculation that weighs the risks against potential benefits in pursuit of mission success. Four basic principles are the foundation for RM, and the framework for implementing the RM process.

- Risk is anticipated and managed by planning.
- We make risk decisions at the right level.

- We do not accept unnecessary risk.
- We accept risk when benefits outweigh costs.

It is critical to both mission accomplishment and the preservation of our Marines and assigned equipment that RM principles and processes are incorporated into all levels of planning, transition, execution, and decision-making, all the way down to the individual whether on or off duty.

010501. ANTICIPATE AND MANAGE RISK BY PLANNING

Integrating RM into planning at all levels, and as early as possible, provides the greatest opportunity to make well-informed risk decisions and to implement effective risk controls. This engaged approach enhances the overall effectiveness of RM by reducing mishaps, injuries, and costs. Hazards and controls that have been identified during reconnaissance and preplanning should be in the operations order.

010502. MAKE RISK DECISIONS AT THE RIGHT LEVEL

Risk decision is defined as the decision to accept or not accept the risk(s) associated with an action. RM decisions should be made by the commander, or individual directly responsible for the operation. While anyone can make a risk decision, the appropriate decision level should reside with the leader who has overall responsibility for the decisions to accept, eliminate, or reduce the risk. Prudence, experience, judgment, intuition, and situational awareness of leaders directly involved in the planning and execution of the mission are the critical elements in making effective RM decisions. When leaders responsible for executing a mission determine the risk associated with that mission cannot be controlled at their level, or goes beyond the commander's stated intent, the risk(s) decision shall be elevated to the next higher leader within the chain of command. If unable to mitigate the risk at the unit level, the risk decision shall be elevated to the next commander in the chain of command. It is the responsibility of the senior commander in a given chain of command to provide clear guidance to subordinate leaders on what echelons are granted authority to make specific risk decisions.

010503. ACCEPT NO UNNECESSARY RISK

Unnecessary risk is defined as risk, when considered from a potential gain relative to potential loss, which cannot be tolerated and must be eliminated or mitigated. Unnecessary risk, if taken, does not contribute meaningfully to task or mission accomplishment, and needlessly jeopardizes personnel or materiel. Risk is managed through relentless training, recognition of the risk being confronted, and a clear-eyed understanding of the mission at hand. Training, experience, and well-founded confidence directly result in increased performance and better mitigation of risk on and off duty. The RM process identifies hazards that might otherwise go unnoticed and provides tools to reduce or offset risk. End state: Decide at the right level to only take risks that are necessary to accomplish the task, activity, or mission when the benefits outweigh the risk.

010504. ACCEPT RISK WHEN BENEFITS OUTWEIGH THE COST

Acceptable risk is defined as identified risk that is understood and intentionally allowed to persist during the task or mission. Marine Corps tradition is built upon principles of seizing the initiative and taking decisive action. The goal of RM is not to eliminate risk, but rather to manage risk so the mission can be accomplished with the minimum amount of loss. The process of weighing risks against the value of the task or mission and the benefits of its completion maximizes the likelihood of success. Assessing costs and benefits requires training and experience, and is a largely subjective process supported by deliberate planning and associated planning tools and processes.

0106 RISK MANAGEMENT FUNDAMENTALS

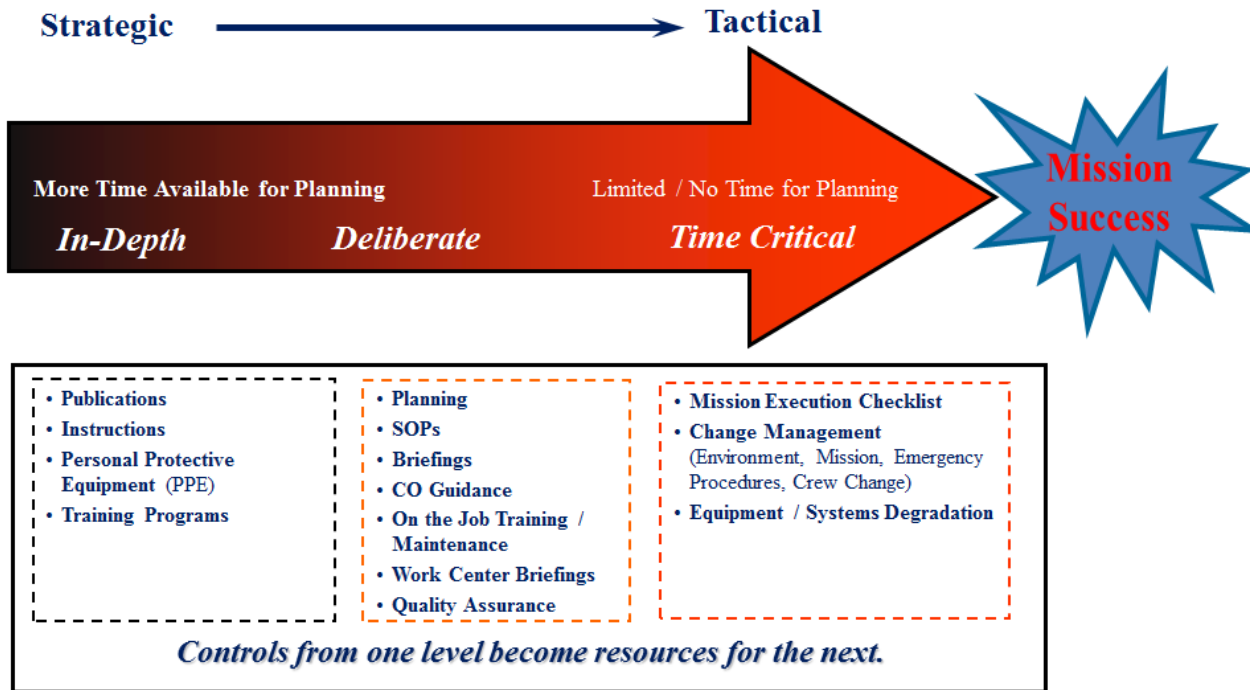
010601. RISK MANAGEMENT PROCESS

Risk management is a five step process used to identify hazards, assess the associated risks, and implement controls. It is a systematic, cyclical, and repeatable process. By using RM, organizations, leaders, and individuals are better able to make informed risk decisions that reduce or offset risk. The process is applicable across the full spectrum of tasks and missions, both on-duty and off-duty. The five steps of risk management are as follows (detailed explanation of these steps are included in Chapter 3, Risk Management Process):

1. Identify Hazards
2. Assess Hazards
3. Make Risk Decisions
4. Implement Controls
5. Supervise (and Evaluate)

010602. LEVELS OF RISK MANAGEMENT

Figure 1-1: Levels of Risk Management



A. In-Depth. The in-depth level refers to situations when available time for planning is not a limiting factor and involves a very thorough risk assessment. Tools and methods available to identify and assess hazards at this level include a thorough review of available tactical, engineering, and safety data, as well as use of diagram and analysis tools, trends, formal testing, and long-term tracking of the hazards associated with the operation or activity with the assistance of technical experts if needed. The in-depth level of RM is used to more thoroughly study the hazards and associated risk in a complex operation or system, or one in which the hazards are not well understood. Examples of in-depth applications include long-term planning of complex operations; introduction of new equipment, materials, and missions; development of tactics and training curricula; and major system overhaul or repair.

B. Deliberate. The deliberate RM level applies when there is ample time for detailed planning of a mission or task. This level uses primarily experienced personnel and brainstorming to identify hazards, review mishap trends, and develop controls. It is most effective when done in a group. The USMC Rapid Response Planning Process (R2P2) is a good example of deliberate RM. Other examples of deliberate RM include long range planning of upcoming operations; review of standard operating, maintenance, or training procedures; and the development of damage control and disaster/emergency response plans. The deliberate BAMCIS and MCPP planning processes are described in Appendix A and C of this Volume.

C. Time Critical Risk Management (TCRM). Time critical risk management is used during the execution phase of training or operations as well as in planning during crisis response scenarios. This level of planning rarely includes formal documentation or planning resources and is rapid, hasty and usually developed in ‘real time’ throughout execution. TCRM can and should happen as often as necessary to adapt to new or changing conditions. This real time assessing and deciding risk is quick and can be frequent, very much like we operate personally on a daily basis both on and off-duty. Changes to a risk assessment should be applied continuously to the plan and necessary updates to the plan should be briefed. At this level, sometimes there is little or no time to develop and brief a formal written plan. This usually results in an “on the spot” mental or oral review of the situation and an adjustment to previously conducted risk assessments. This review and update process is supported by the use of mission execution checklists, or drilled emergency action plans. Since time is limited, the application of the formal RM process cannot be practically applied. Therefore, to facilitate use of RM in real time while engaged in any training or operations, personnel are encouraged to use the time critical risk management, *ABCD* Model as a tool to manage time compressed decision making. The time critical risk management *ABCD* Model is described in detail in Appendix B of this Volume.

#### 0107 FORMAL TERMS AND DEFINITIONS

A. Mishap. An unplanned event or series of events resulting in death, injury, or occupational illness; damage to or loss of equipment or property; or damage to the environment.

B. Hazard. Any real or potential condition that can cause injury, illness, or death to personnel; damage to or loss of equipment or property; degradation of mission capability or impact to mission accomplishment; or damage to the environment. (Synonymous with the term “threat.”) A hazard is a mishap cause, or mishap causal factor, waiting to happen.

C. Exposure. A rating of the frequency, length of time, and percentage of people or assets subjected to a hazard. Exposure is a component of risk, but is not directly used to assign a level of risk. Rather, it is a consideration in determining probability and severity

D. Active Failure. Any errors and violations having immediate negative results; can be caused by scheduling problems, inadequate training, or lack of resources.

E. Latent Failure. Any event or presence from background circumstances in the environment surrounding a mishap, and is more endemic of something external to the immediate situation. These failures typically have contributing supervisory or organizational influences. The hazards that lead to latent failure need to be addressed by the application of a deliberate Risk Management process. Latent failures “set the stage” for an active failure to exist that then leads to a near miss or a mishap. These latent failures or conditions include deficiencies, errors, oversights, omissions, ineffective or obsolete procedural documents, ineffective material design, or unanticipated changes. Latent failures lead to active failures.

F. Additive Condition. Any items that compete for an individual or crew's attention during the execution of a task or mission. These might include: equipment malfunctions, change in weather, multiple crew members, unpredictable information, and change to the mission. Additive conditions increase task loading and uncertainty, and lead to distraction and channelized focus.

G. Task Loading. The number of tasks to be completed in a set period of time. Higher task loading increases the potential for error. Task loading can be minimized by either reducing the number of tasks or taking more time.

H. Human Factors. Mishaps rarely have a single cause, rather they are usually the end result of a series of errors. Human factors which negatively affect the capabilities of the individual, crew, or team increase the potential for errors. Human factors are defined as environmental, organizational, and job factors and human and individual characteristics which influence behavior in a way which can affect health and safety. Examples include attitudes, personalities, level of training, experience, fatigue, and physiological factors.

I. Human Error. An action or decision that results in one or more unintended negative outcomes. Human errors are the leading cause of mishaps across the Marine Corps.

J. Consequential Error. An error that leads to undesired consequences to property, personnel, or mission (e.g., mishap, personal injury, mission failure, etc.).

K. Risk. Chance of adverse outcome or bad consequence, such as failed or degraded mission, injury, illness or loss. Risk level is expressed in terms of hazard probability and severity.

L. High-Risk Training. Training which exposes personnel and trainers to the risk of death, serious injury, or permanent disability despite the presence of proper safety controls.

M. Risk Assessment. A structured process to identify and assess hazards. Risk Assessment results in an expression of potential harm, described in terms of severity, probability, and exposure to known hazards. It is accomplished in the first two steps of the RM process.

N. Risk Assessment Level. An expression of the risk associated with a hazard that combines its severity and probability into a risk assessment level that can be used to help determine hazard abatement priorities, often depicted using a risk assessment matrix.

O. Resource. Something that can be used to develop controls and includes time, money, people, and equipment. With respect to TCRM, a resource is something used to prevent errors, speed up decision making, or improve team coordination. Resources are typically applied as part of safety controls at the in-depth or deliberate levels of RM, and include policies, procedures, routines, checklists, automation, briefings, and knowledge, skills, and techniques.

P. Controls. Actions taken or measures put in place to eliminate a hazard or mitigate the associated identified risk. Some types of controls include engineering controls, administrative controls, physical controls, and Personal Protective Equipment (PPE).

Q. Engineering Control. Engineering methods to reduce risks by design, material selection, or substitution when technically or economically feasible. An example is using an extension rod for cleaning rather than climbing a ladder.

R. Administrative Control. Controls that reduce risk through specific administrative actions such as providing suitable warnings, markings, placards, signs, and notices; establishing written policies, programs, instructions, and standard operating procedures; training personnel to recognize hazards and take appropriate precautionary measures; and limiting the exposure to a hazard. An example is limiting the number of alcoholic beverages a person consumes, or a placard warning of high noise hazards and requirement to wear hearing protection in workspace.

S. Personal Protective Equipment. The final control type to use when engineering and administrative controls do not adequately mitigate the risk. An example is wearing body armor and Kevlar helmets while traveling on a main supply route, or eye and hearing protection while working on or near operating aircraft or heavy equipment

T. Residual Risk. Risk remaining after controls have been identified and applied.

U. Root Cause. Any basic underlying cause that does not have further underlying causes. A root cause is at the base or beginning of a causal chain of events where an intervention could be implemented to prevent an undesirable outcome. The analysis of a hazard may identify multiple causes; however, applying controls to the root cause is ultimately more effective than merely addressing an intermediate cause.

**VOLUME 2: CHAPTER 2**

**RISK MANAGEMENT RATIONALE**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

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CHAPTER 2

RISK MANAGEMENT RATIONALE

0201 OVERVIEW

This chapter covers the reasons why the risk management process is used, the benefits of the process, and what RM does not do.

0202 SCOPE

This chapter is intended for personnel of all ranks, assigned missions, and organizational levels. It is imperative that leaders at all levels understand the fundamental importance of embedding these principles within the culture of their organizations.

0203 WHY MANAGE RISK

Using the RM process provides commanders with the critical information needed to make informed decisions that reduce or offset risk, thereby increasing operational effectiveness and the probability of mission success. It is at its most basic level a systematic, continuous, cyclical process of identifying hazards, assessing associated risks, and implementing controls that mitigate and reduce those risks. The process is applicable across the spectrum of tasks and missions, both on-duty and off-duty. Failure to use RM allows unnoticed or unacknowledged and unmitigated risks to be present and to have negative effects not anticipated or planned for, significantly lowering the likelihood of a mission accomplishment without loss or damage to personnel and equipment.

020301. RISK MANAGEMENT BENEFITS FOR ENHANCED READINESS

- A. Provides a systematic structure to perform risk assessments.
- B. Enhances decision making skills based on using a systematic, reasoned, and repeatable process.
- C. Reduces risk to acceptable levels commensurate with the benefit or value of mission or task accomplishment while providing a method to effectively manage resources.
- D. Identifies feasible and effective control measures, particularly where specific standards do not exist.
- E. Provides an adaptive process for continuous feedback through the planning, preparation, and execution phases of any evolution.
- F. Preserves personnel and materiel by avoiding unnecessary risk, thus reducing mishaps and their associated consequences.

G. Enhances task and mission accomplishment by increasing the probability of success.

H. Provides improved confidence for the individuals making informed risk decisions. Detailed risk analysis provides a clear picture of hazards and allows commanders the information needed to implement effective controls.

020302. THINGS RISK MANAGEMENT DOES NOT DO

A. Does not inhibit flexibility, initiative, or accountability.

B. Does not remove risk altogether or support a “zero defect” mindset. “Zero Defect” is a mindset where mistakes are never acceptable. This mentality does not promote mission flexibility, adaptability, or improvisation, but rather mission stagnation for fear of repercussion if a mistake is made.

C. Does not remove the necessity for practice, drills, rehearsals, and the application of known tactics, techniques, and procedures.

D. Does not justify violating orders or the law.

0204 RISK MANAGEMENT AS A LEADERSHIP COMPETENCY

The Marine Corps charges all leaders to understand and teach that RM is vital to the success of any organization. Being able to envision and communicate scenarios that may occur in the lifecycle of a unit is a skill as well as an art supported by active engagement with known hazard and safety information, and safety lessons learned. Leaders at every level are ultimately responsible for everything their unit does or fails to do; their responsibility to systematically applying RM is no different.

**VOLUME 2: CHAPTER 3**

**RISK MANAGEMENT PROCESS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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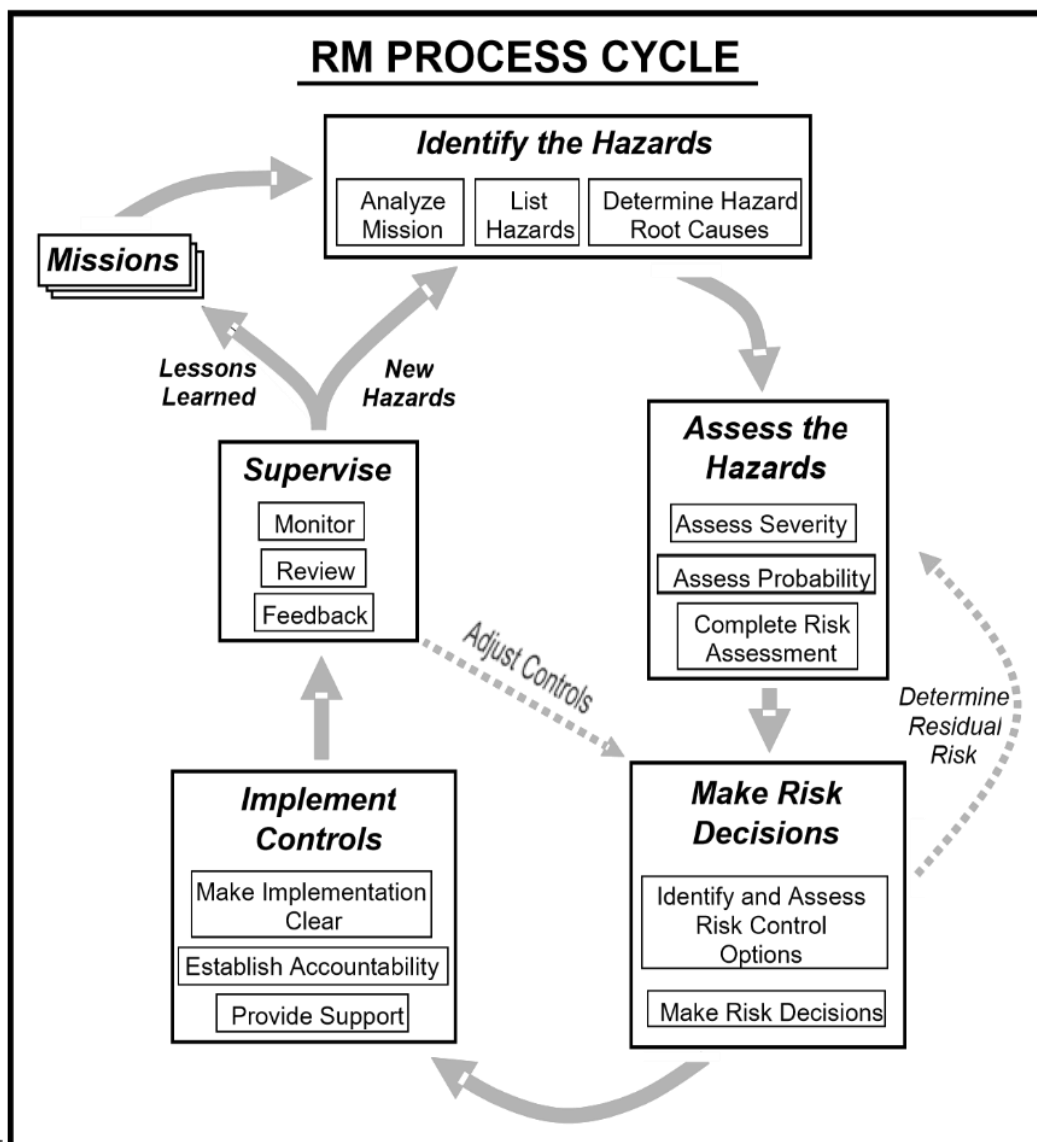
CHAPTER 3

RISK MANAGEMENT PROCESS

0301 OVERVIEW

This chapter will discuss in detail the five-step process of RM. The guidelines and resources that support these steps are outlined and explained, followed by a detailed explanation of each step of the RM process and the tools used to assist in those steps (i.e., tables defining Probability and Severity categories and the Joint Risk Assessment Matrix).

Figure 3-1: The RM Process Cycle



## 0302 PROCESS APPLICATION GUIDELINES

The following guidelines are provided to gain the maximum benefit and desired effects of the RM process.

A. Apply the process in sequence. Each element is a building block for the next step and should be applied as a sequential step that is also an integral part of mission planning, rather than each step being applied as a separate standalone procedure.

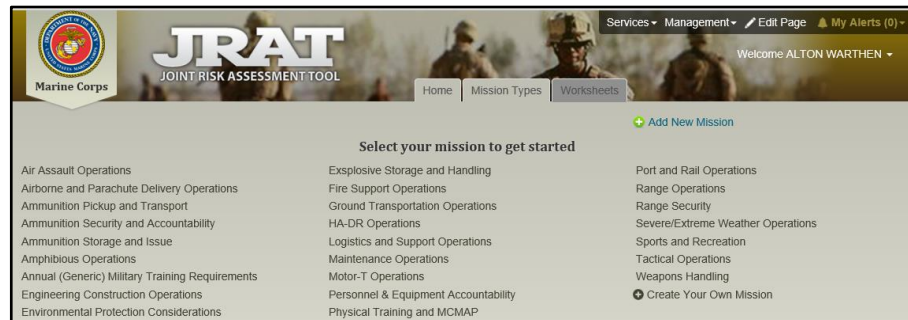
B. Maintain balance in the process. Every step and element of the process is important and should be afforded due diligence. The objective is to assess the time and resources available for RM and to allocate them in a manner most likely to produce the best result.

C. Apply the process as a cycle. The RM process is not a one-way cycle (refer to Figure 3-1). The process contains elements that require review and feedback, which provides checks and balances, and also the flexibility to make adjustments as the situation changes.

D. Involve personnel. The RM process is effective only if the personnel exposed to the risks and those who possess subject matter expertise in the task or mission are fully involved. These stakeholders have a vested interest in the outcome and will ensure the process is sound. Stakeholders help identify hazards and shape risk decisions. Leadership includes higher command levels in these risk decisions when necessary based on briefed risk decision levels from higher levels of command, and to ensure proper resourcing, visibility and oversight for implemented controls.

E. Document the process. Documenting the results of the RM assessment helps to organize ideas, identify courses of action, and brief and debrief the event. Documentation provides a valid reference to evaluate progress during the execution phase and a record for future use, which allows an organization to capitalize on lessons learned to improve performance and minimize repeat shortcomings.

F. Use the Joint Risk Assessment Tool (JRAT). The JRAT is a Web-based software application that assists the user with completing a deliberate joint risk assessment matrix. The software guides the user through each of the steps in an intuitive fashion with help screens and process information. The JRAT allows the chain-of-command to supervise and conduct quality control of the risk assessment process. **The site will also provide up-to-date and relevant safety information and tutorials, and will serve as the primary transition tool for the Marine Corps to the Joint Risk Assessment Matrix (Figure 3-4).** Upon completion of an assessment, reports can be printed and the assessment can be shared electronically. The USMC JRAT site is available via CAC access at: <https://jrat.safety.army.mil/login.aspx>.



G. Other Resources. The following resources focus on tactics, techniques, and procedures of immediate importance to the operating forces. There is also information that assists with identifying gaps and best practices, and recommend solutions across the doctrine, organization, training, materiel, leadership, personnel and facilities (DOTMLPF) spectrum.

1. Marine Corps Center for Lessons Learned (MCCL):

<https://www.mcwl.marines.mil/MCCLL>

2. Naval Safety Center Lessons Learned\* (includes Marine Corps Lessons

Learned): <https://intelshare.intelink.gov/sites/navsafe>

\*Note:

1. New Users: Request access to the website.
2. Click the "Lessons Learned" icon on the main page (right side; looks like a chalkboard).
3. Under "Lessons Learned Communities", click the relevant community folder.
4. On each community page, click the "Lessons Learned Products" folder (Note: The "Sanitized Reports" folder is empty. All contents have been consolidated into the single LL folder. In pending website improvements, both of these sub-folders will be eliminated and all community LL/SSIR products will be visible upon completing step 3).
5. Select the LL/SSIR of interest.

### 0303 FIVE STEPS OF THE RISK MANAGEMENT PROCESS

#### 030301. STEP 1: IDENTIFY HAZARDS

A hazard is defined as any condition with the potential to negatively impact the task or mission. Hazards can also cause property damage, injury to personnel, or death, which highlights the

importance of hazard identification as the foundation of the RM process. Personnel need to ensure a larger portion of available time is allotted to this step due to the simple fact that, if a hazard is not identified, it cannot be assessed or controlled. There are three sub-actions to be completed in this step.

A. Conduct an Operational Analysis. An operational analysis is a chronological, sequential list of the major events and elements in a task or mission. This complete picture of what is expected to happen assures that all elements of a mission or task are evaluated for all potential hazards. It begins with an outline listing the major steps in the operation. Next, it reviews plans, orders, and supporting documentation pertaining to the mission or tasking and the requirements needed for mission success. Last, it breaks down the task or mission into manageable phases in chronological order providing a clear picture of expectations and potential sources of hazards and threats.

B. Conduct a Preliminary Hazard Analysis (PHA). Building on the operational analysis, the PHA creates an initial list of hazards that may exist in a task or mission. With the phases broken down into manageable events in sequential order, each event is reviewed for associated hazards and causes. During the PHA, ensure a list is generated identifying these hazards for each event. Brainstorming and asking “what if” questions regarding what could go wrong throughout the task or mission helps uncover additional hazards. This technique guides a group in an interactive exchange of ideas deferring judgment until the end of the session. It is a good way to quickly generate many diverse ideas. This technique is also particularly effective when participants feel free to offer their ideas without fear of criticism.

C. Determine the Root Causes of Hazards. For each identified hazard, make a list of the associated causes with emphasis on clearly identifying the root cause. Hazards often have multiple causes. The root cause is the fundamental variable that potentially leads to mission degradation or failure. With causes identified, risk controls can be applied to mitigate and reduce risk. When possible, apply controls at root causes to have a greater effect in mitigating risks.

#### 030302. STEP 2: ASSESS HAZARDS

For each hazard identified, determine the associated degree of risk in terms of probability and severity. The result of the risk assessment is a prioritized list of hazards ensuring controls are first identified for the most serious threats to task completion or mission success.

A. Determine Severity. Assess the potential consequence intensity that can occur as a result of exposure to a hazard; the degree of injury, illness, property damage, loss of asset (time, money, personnel), or task or mission impairing factors. Risk analysis prepares for the worst credible outcome. Consideration must be given to the number of personnel and resources potentially exposed to a hazard when determining potential severity. Hazard severity categories are assigned as Roman numerals according to the criteria in Figure 3-2.

Figure 3-2: Severity Categories

Category		Description
<b>Catastrophic</b>	<b>I</b>	<ul style="list-style-type: none"> <li>• Loss of the ability to accomplish the mission</li> <li>• Death or permanent total disability</li> <li>• Loss of a mission-critical system or equipment</li> <li>• Major facility damage</li> <li>• Severe environmental damage</li> <li>• Mission-critical security failure</li> <li>• Unacceptable collateral damage</li> <li>• Objectives unachievable</li> </ul>
<b>Critical</b>	<b>II</b>	<ul style="list-style-type: none"> <li>• Significantly degraded mission capability or unit readiness</li> <li>• Permanent partial disability or severe injury or illness</li> <li>• Significant damage to property, systems, or the environment</li> <li>• Shortfalls to critical mission requirements</li> <li>• Significant collateral damage</li> <li>• Able to only partially achieve objectives</li> </ul>
<b>Moderate</b>	<b>III</b>	<ul style="list-style-type: none"> <li>• Degraded mission capability or unit readiness</li> <li>• Minor damage to equipment, systems, property, or the environment</li> <li>• Minor injury or illness</li> <li>• Most requirements are met</li> </ul>
<b>Negligible</b>	<b>IV</b>	<ul style="list-style-type: none"> <li>• Little or no adverse impact on mission capability or unit readiness</li> <li>• Minimal threat to personnel safety or health</li> <li>• Little or no property, systems, or environmental damage; fully functional and serviceable</li> <li>• Little or no impact to mission success</li> <li>• Objectives achievable</li> </ul>

B. Determine Probability. This is a measure of the likelihood that a potential consequence will occur. An assessment of the probability that a hazard will result in a mishap or loss is defined by considerations of location, exposure (cycles or hours of operation), affected populations, experience, or previously established statistical information. Probability categories are assigned a letter according to the criteria in Figure 3-3.



Figure 3-3: Probability Categories

Category		Description
<b>Frequent</b>	<b>A</b>	<ul style="list-style-type: none"> <li>• Frequently occurs.</li> <li>• Continuously experienced by an individual item or person.</li> <li>• Continuously experienced over a service life of an inventory of items or group.</li> </ul>
<b>Likely</b>	<b>B</b>	<ul style="list-style-type: none"> <li>• Likely to occur, immediately or within a short period of time.</li> <li>• Expected to occur frequently to an individual item or person.</li> <li>• Expected to occur continuously over a service life of an inventory of items or group.</li> </ul>
<b>Occasional</b>	<b>C</b>	<ul style="list-style-type: none"> <li>• Occasionally will occur in time.</li> <li>• Expected to occur several times to an individual item or person.</li> <li>• Expected to occur occasionally over a service life of an inventory of items or group.</li> </ul>
<b>Seldom</b>	<b>D</b>	<ul style="list-style-type: none"> <li>• Seldom may occur in time.</li> <li>• Can reasonably be expected to occur at some time to an individual item or person.</li> <li>• Can reasonably be expected to occur at some time over a service life for an inventory of items or group.</li> </ul>
<b>Unlikely</b>	<b>E</b>	<ul style="list-style-type: none"> <li>• Unlikely it will occur in time.</li> <li>• Unlikely to occur, but possible in the service life for an inventory of items or group.</li> </ul>

C. Assign the Risk Assessment Level. The Risk Assessment Level is an expression of risk that combines the elements of hazard severity and probability of mishap occurrence. The Risk Assessment Level is a level of risk for each hazard expressed in the Joint Risk Assessment Matrix in Figure 3-4. Although not required, the matrix is helpful in identifying the Risk Assessment Level and in determining hazard abatement priorities. Additionally, the combination of two or more hazards may increase the overall level of risk. In some cases, the worst credible consequence of a hazard may not correspond to the highest Risk Assessment Level for that hazard. For example, one hazard may have two potential consequences. The severity of the worst consequence-Catastrophic (I) may be seldom (D)), resulting in a Risk Assessment Level of **HIGH**. The severity of the lesser consequence-Critical (II) may be Likely (B), resulting in the Risk Assessment Level of **HIGH**. Therefore it is important to consider less severe consequences of a hazard if they are more likely than the worst credible consequence, since this combination may actually present an equal or greater overall risk.

Figure 3-4: Joint Risk Assessment Matrix

Risk Assessment Matrix			PROBABILITY					
			Frequency of Occurrence Over Time					
			A Frequent (Continuously experienced)	B Likely (Will occur frequently)	C Occasional (Will occur several times)	D Seldom (Unlikely; can be expected to occur)	E Unlikely (Improbable; but possible to occur)	
SEVERITY	Effect of Hazard	Catastrophic (Death, Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H	H	M
		Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H	M	L
		Moderate (Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)	III	H	M	M	L	L
		Negligible (Minimal Injury or Damage, Little or No Impact to Mission Readiness or Unit Readiness)	IV	M	L	L	L	L

**Risk Assessment Levels**  
EH=Extremely High H=High M=Medium L=Low

D. Risk Assessment Pitfalls. The following pitfalls should be avoided during the assessment.

1. Over-optimism – not being totally honest or not looking for root causes.
2. Misrepresentation – individual perspectives may distort the data.
3. Alarmism – worst case scenarios are used regardless of their possibility.
4. Indiscrimination – all data is given equal weight.
5. Prejudice – subjective or hidden agendas are used instead of facts.
6. Inaccuracy – bad or misunderstood data nullify accurate risk assessment.
7. Enumeration – difficulty in assigning a numerical value to human behavior.

030303. STEP 3: MAKE RISK DECISIONS

Making risk decisions involves identifying the safety controls available to mitigate known hazards, and also assessing the potential effectiveness of the controls to determine the most favorable course of action.

A. Identify and Assess Risk Control Options. Starting with the most serious hazard, develop one or more control options that will either eliminate the hazard or reduce the risk of its occurrence to an acceptable level consistent with task or mission accomplishment.

1. Identify control options which can either eliminate the hazard altogether (e.g., physically remove it) or substitute it (i.e., replace it with a less hazardous alternative). These options include the following:

a. Reject the Risk. If overall risk exceeds the benefit, then do not take the risk. This is a valid option when you do not have the authority to apply proper or necessary controls.

b. Avoid the Risk. It may be possible to avoid specific risks altogether by conducting the task or mission in a different way. Be aware that conducting a mission by an alternate means may present new hazards that require consideration.

c. Delay an Action. If there is not a hard timeline or other benefit to quickly accomplishing a task or mission, it may be prudent to reduce the risk by delaying the action until favorable conditions present themselves.

d. Transfer the Risk. Risk may be reduced by transferring all or some portion of a particular task or mission. Transferring risk to another individual, unit, or platform that is better positioned to face the risk decreases the probability or severity of the risk to the total force.

e. Compensate for the Risk. A known risk can be compensated for by the inclusion of additional controls to ensure task or mission success despite the presence of that risk. Controls can take many forms but they fall into three basic categories:

1) Engineering Controls (isolate people from the hazard). Engineering controls protect workers from hazardous conditions by placing a barrier between the worker and the hazard, or by removing a hazardous substance, through air ventilation for example. Engineering controls involve a physical change to the workplace itself, rather than relying on workers' behavior or requiring workers to wear protective clothing. Examples include local exhaust ventilation to capture and remove airborne emissions, or machine guards to shield the worker.

2) Administrative Controls (change the way people work). These are controls that reduce risk through specific administrative actions such as providing suitable warnings, markings, placards, signs, and notices; establishing written policies, programs, instructions, and standard operating procedures; training personnel to recognize hazards and take

appropriate precautionary measures; and limiting the exposure to a hazard. Some examples are signs on a flight line requiring hearing protection, weapons range placards that identify when the range is in use, or a shoot house sign that lists authorized and unauthorized munitions.

3) Personal Protective Equipment (Protect the worker with personal protective equipment). PPE is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests, and full body suits.

2. Assess Control Options. For each hazard, develop one or more control options that either avoids the hazard or reduces its risk to an acceptable level. Examples of criteria for effective control options are listed in Figure 3-5.

Figure 3-5: Criteria for Effective Controls

<b>Control Criteria</b>	<b>Remarks</b>
Suitability	Control removes the threat or mitigates (reduces) the risk to an acceptable level.
Feasibility	Has the capability to implement the control.
Acceptability	Benefit or value gained by implementing the control justifies the cost in resources and time.
Explicitness	Clearly specifies who, what, where, when, why, and how each control is to be used.
Support	Adequate personnel, equipment, supplies, and facilities necessary to implement a suitable control are available.
Standards	Guidance and procedures for implementing a control are clear, practical, and specific.
Training	Knowledge and skills are adequate to implement a control.
Leadership	Leaders are ready, willing, and able to enforce standards required to implement a control.
Individual	Individual personnel are sufficiently self-disciplined to implement a control.

B. Make Risk Decisions. Consider selected controls; decide if the residual risk that remains after the control is in place is acceptable and the benefits outweigh the costs. This decision must be made at the right level and by the appropriate individual who can balance the risk against the benefits of completing the task or mission. If it is determined that the risk level is too high, then additional controls must be developed, the plan must be modified, or the course of action must be rejected. Additionally, if risks outweigh the benefit, or if assistance is required to implement controls, communicate this up the chain of command.

**030304. STEP 4: IMPLEMENT CONTROLS**

Once the risk control decisions are made, the next step is implementation. It is critical at this step to ensure that any controls are implemented with clear, simple execution orders understood at all levels. The plan is clearly communicated to all involved, accountability established, and necessary support provided.

**030305. STEP 5: SUPERVISE AND EVALUATE**

Supervision requires conducting follow-up evaluations of the controls to ensure they remain in place and have the desired effect. Engaged supervision includes three basic actions:

(1) monitor risk controls' effectiveness; (2) determine if further assessment of the task or mission is needed due to unanticipated change (this might change the overall risk of the mission and require approval from a higher level); and (3) evaluate using a feedback system to capture lessons learned, identify any needed adjustments, and identify new hazards that may arise.

**VOLUME 2: CHAPTER 4**

**RISK MANAGEMENT TRAINING AND EVALUATION**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 4

RISK MANAGEMENT TRAINING AND EVALUATION

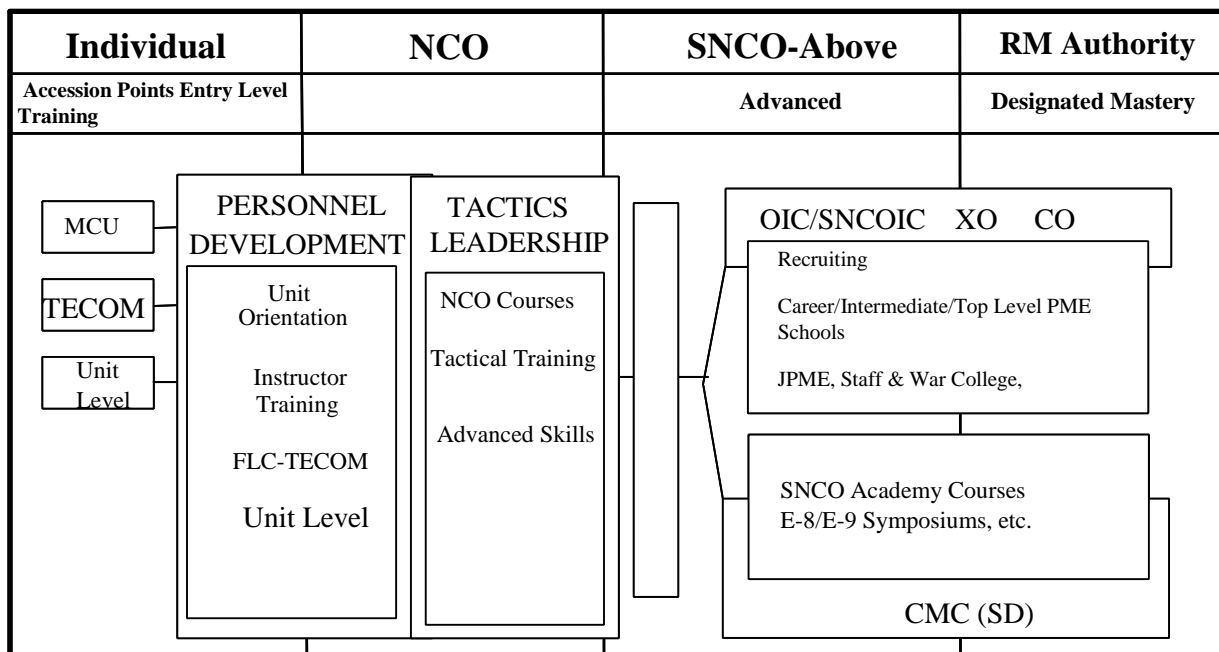
0401 OVERVIEW

An individual’s Risk Management knowledge must be integrated into the training curriculum provided over the course of their entire career. RM is most effective when included within the occupational learning structure and reinforced through the professional military education process. Learning RM independent of necessary professional skills is an ineffective educational strategy. A career-long RM training continuum must be infused, targeted, and tailored to the appropriate leadership or training program within the current organizational infrastructure. For both formal and unit training programs, adding RM concepts will require thoughtful analysis of all training objectives to make it a viable part of learning. It is not simply a matter of adding an extra chapter, slide, or presentation to meet an external requirement where the learner must make an independent judgment to connect the RM to the training. It must be reinforced through leader led engagement sessions at least every two years, but ideally this is taught and reinforced continuously.

0402 CONTINUUM

Figure 4-1 is a **simplified** illustration depicting various milestones an individual may pass during a career. The top line breaks a career into four general categories, which are used to determine the focus of RM training. **The separation between these is not rigid as overlaps are a natural part of any Marine Corps career progression.**

Figure 4-1: RM Training Continuum



040201. INDIVIDUAL

A. Most individuals will enter military service without formal RM skills, but will likely have made personal risk decisions in a real time situation. With the transition to a military occupation, such decisions will likely have an impact on a team, mission, or task, not just on the individual. Therefore, every individual must be trained to manage risk using the RM principles and process.

B. The accession point of military service is the first structured encounter with formal military education and training for most individuals and offers a one-time opportunity to introduce and integrate RM concepts with initial military skills training. The alignment of basic skills and RM concepts will instill a confidence in the individual that RM will help them manage the demands of training and lay the groundwork to handle their missions and assignments on- and off-duty in the future. This is the time to establish the individual RM mindset.

C. The duties of Marine Corps personnel, whether officer or enlisted, are focused on execution of tasks; they operate primarily at the real time level. Therefore, it is logical that their RM introduction focus on TCRM.

D. The civilian workforce will follow prescribed Marine Corps RM training as directed by this Order.

040202. SUPERVISOR (NCO'S AND ABOVE)

For the purposes of this discussion, the supervisor is categorized as anyone who oversees and is responsible for the actions of others. Supervisors model behaviors and mentor subordinates every day. Those behaviors should include RM techniques. Supervisors are involved in planning for and executing tasks as well as managing available resources (equipment, personnel, etc.) to complete the mission or task. Therefore, the focus of their RM training should be tailored toward these skills. Thus, their training must not only build on earlier TCRM skills but provide them the skills and tools necessary to conduct RM at the deliberate level. Supervisors must be able to make informed personal and team risk decisions and recognize when to elevate risks that they cannot control to the right level.

040203. RISK MANAGEMENT AUTHORITY AND INSTRUCTORS

A. Designation of Risk Management Authority is determined by the Unit Commander. Examples of designees include the Executive Officer (XO) or civilian equivalent or based on RACs as follows:

Risk decision authority in a command has the following echelons:

- RAC 1 – Base Commanding Officer
- RAC 2 – Base Executive Officer
- RAC 3 – Division Directors
- RAC 4 – Company Grade Officers, Branch Heads
- RAC 5 – SNCO, First-line Supervisor



B. They are also responsible to provide the leadership, tools, resources, and controls for their personnel to successfully complete assigned missions and tasks.

Designation of a trained Risk Management Instructor is determined by the Unit Commander. Examples of designees include the Safety Officer, XO, or civilian equivalent. Commanders shall designate in writing at least one command RMI. Consideration should be given to rank, experience, and credibility when choosing an RMI to ensure a robust and dynamic RM program. It is recommended commanders also designate an Assistant RMI. The RMI and Assistant RMI should hold significant leadership or supervisory positions within the command. RMI qualification shall be completed prior to, or within 30 days of, designation and can be earned by completing all of the modules of the USMC RM Distance Learning Course Curriculum or graduating from one of the following: the U.S. Army Combat Readiness Center Career Program (CP-12) course, the Ground Safety for Marines course, the Aviation Safety Officer course, or the Aviation Safety Command course."

040204. TRAINING REQUIREMENTS

A. The Risk Management Authority will ensure a command-specific RM overview for all military and civilian personnel during the check-in process. The level of training shall be commensurate with rank, experience, and position.

B. RM training is a biennial requirement. The responsibility for conducting and ensuring the training is completed is under the direction of the unit commander. Biennial training may be accomplished by the following:

1. Completion of the appropriate module(s) of the USMC RM Distance Learning Course Curriculum. The website <https://www.marinenet.usmc.mil> provides a baseline understanding of RM fundamentals and attitudinal objectives intended to operationalize RM across the USMC Total Force. There are four separate modules. The first is aimed at USMC ranks E1-E3; the second targets USMC ranks E4-E6, WO1-WO2, and O1-O3; the third is aimed at USMC ranks E7-E9, WO3-WO5, and O4-O6, and the final module is aimed at USMC civilian and contracted employees.

2. Classroom instruction or practical application exercises (i.e. small group, scenario-based, etc.) led by a designated RM Instructor.

C. RM training shall be appropriately documented with an "AK" code via the Marine Corps Training Management System (MCTMS).

D. The Inspector General of the Marine Corps shall inspect the effectiveness of RM implementation and the completion of initial and biennial RM training, as defined by this Order and reference, during inspections.

040205. TRAINING FOCUS

A. Training should provide Marines with an understanding of the wide spectrum of RM considerations and how safety-oriented decisions are not so different from tactical

decisions. Marines innately manage risk in everything we do and must recognize that safety concerns are not always the same as “risk averse decision making,” but rather an understanding of a situation due to a particular vantage point.

B. The RM training shall be tailored, through the Unit Commander’s intent, to a more strategic application where preservation of resources, personnel, and mission or task accomplishment is the focus.

C. Training must be relevant, progressive, and sequential. Figure 4-1 illustrates graphically the shift which should occur in the focus of RM training as the individual progresses through a career and responsibilities increase.

D. Training needs to focus equally on off-duty as well as on-duty, as an off-duty loss also decreases readiness and therefore mission or task accomplishment.

E. It is important to target RM training to the audience and the environment in which they operate. The Instructors should create their own scenarios, specific to the unit (e.g., mission, size, average age, geo-location, trends, etc.) in order to make the discussion relevant. Participants are more likely to engage if the topic and learning outcome are directly related to their work or personal life.

F. The discussion should foster group participation through leadership and encouragement, as well as increase awareness of how RM principles and practices apply to both on- and off-duty activities, in garrison or deployed.

#### 0403 HIGH-RISK TRAINING (HRT)

##### 040301. BACKGROUND

All training involves some risk, which is why we apply a deliberate RM process. Many normal training evolutions in the Marine Corps would be considered “high risk” by outside observers in that we are dropping bombs, breaching obstacles with explosives, firing machine guns while assaulting objectives at night, and driving tactical vehicles off road. However, not all the training we do is “high risk”. For the Marine Corps, and the rest of the Joint Force, high risk training is necessary to be operationally ready and prepared to execute certain Mission Essential Tasks. High-Risk Training has a very specific definition, and associated additional risk mitigation requirements. These additional risk mitigation requirements exist to provide an elevated level of leader visibility and engagement. The use of checklists ensures all aspects of the training environment are carefully considered during planning. Additionally, high risk training checklists assist in identifying and considering any changes that have occurred since planning prior to execution. Mishaps associated with high risk training events usually are caused by risk decisions being made at the wrong level, or by a failure to update the plan prior to execution based on changing conditions.

040302. DEFINITION

High-Risk Training is defined as training which exposes personnel and trainers to the risk of death, serious injury, or permanent disability despite the presence of proper safety controls.

High-Risk Training is further defined as any training event that maintains a residual Risk Assessment Level of IA, IB, IIA or IIB even after safety controls have been implemented. See the boxes outlined in RED in Figure 4-2. Specifically, hazards have been identified, an initial Risk Assessment Level is assessed, a risk mitigation plan is applied, and the reduced or residual Risk Assessment Level remains as IA, IB, IIA or IIB.

Figure 4-2: Risk Assessment Matrix

Risk Assessment Matrix		PROBABILITY						
		Frequency of Occurrence Over Time						
		A Frequent (Continuously experienced)	B Likely (Will occur frequently)	C Occasional (Will occur several times)	D Seldom (Will occur once or less frequently)	E Unlikely (Will occur once or less frequently)		
SEVERITY	Effect of Hazard	Catastrophic (Death, Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H	H	M
		Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H	M	L
		Major (Severe Injury or Damage, Mission Capability or Unit Readiness Degraded)	III	H	M	M	L	L
		Minor (Minor Injury or Damage, Little to No Mission Capability or Unit Readiness Degraded)	IV	M	L	L	L	L

**Risk Assessment Levels**  
EH=Extremely High H=High M=Medium L=Low

040303. HIGH-RISK TRAINING EXAMPLES

The following are examples of High-Risk Training:

- Survival, Evasion, Resistance, Escape (SERE) Training
- Parachuting (Static Line & Freefall) Training
- Combatant Diver Training (Open & Closed Circuit)
- High Altitude and/or Severe Weather Mountaineering Training
- MRZR/ATV/Dirt Bike Training
- Direct Action Live Fire Close Quarters Battle in Urban Terrain
- Helicopter Rope Suspension Techniques (HRST) Training
- Visit, Board, Search and Seizure (VBSS) Training
- Special Operations and Reconnaissance Amphibious Infiltration and Exfiltration Training
- Breaching and Explosive Entry Training
- Underwater Egress Training

040304. SUPERVISION, AUTHORITY, AND GUIDANCE

A. All High-Risk Training events should be approved in writing by the first O-5 Commander in the training unit's chain of command. For multiple unit training, each unit's commanders should approve.

B. High Risk Training events should use a risk assessment worksheet. For regularly repeated training events the same worksheet can be used once it is updated with current information, and all risk assessments and assumptions are carefully reviewed and verified. The requirement for High-Risk Training to be approved in writing may take the form of a signature on the risk assessment worksheet. There is no required form for the risk assessment worksheet, but it should include the following:

1. An Emergency Action Plan (EAP) which is an internal plan to be implemented immediately upon advent of a mishap to aid involved persons and to control and safeguard the scene. This plan must include at a minimum: primary and alternate communications; telephone numbers; radio channels; call signs; locations of emergency response personnel; locations of emergency equipment; equipment shutdown procedures; muster site and methods to maintain control of the scene; non-affected personnel; and all immediate emergency procedures. The EAP should be a simple checklist or sequential list of responses of expected and immediate actions by personnel in control of the event to aid and extract mishap victims from the scene. Individual EAPs shall be validated quarterly by a walk-through from the unit HRTSO  
NOTE: a Pre-Mishap plan is what is to be used on the scene once the injured personnel are removed from the scene. Refer to OPNAVINST 5102.1D.

2. Procedures shall be outlined WRT personnel/student Cease Training (CT)/Training Time Out (TTO) requirements, and training will not reconvene until the identified issue is resolved

3. A primary and secondary communications plan for stopping training if anyone observes an unsafe condition.

4. A pre-execution final brief checklist to confirm any changes are accounted for.

**APPENDIX: RISK MANAGEMENT PLANNING TOOLS AND PROCESSES****APPENDIX A****Troop Leading Steps (BAMCIS)****Begin Planning (BAMCIS)**

The receipt of a mission triggers the BAMCIS cycle. To make effective use of available time, the leader issues a Warning Order, an abbreviated set of instructions to inform subordinates of an impending action; this allows their subordinates to execute the Warning Order while the leader conducts a detailed analysis, which we call the tactical thought process. Here, unit leaders will develop questions and make assumptions about the enemy to continue planning. The level of risk the leader chooses to assume is directly related to the depth of analysis they perform during the tactical thought process. At the end of this step, you have an initial plan that you expect to execute, pending the answers to your questions, and the validation of the assumptions you made about the enemy. To begin answering these questions you Arrange for Reconnaissance.

**Arrange for Reconnaissance (BAMCIS)**

Following the detailed analysis (tactical thought process) performed during planning, the leader then asks, "What information am I lacking in order to complete my plan and achieve mission success?" To get the information needed to mitigate the hazards and associated risks identified and assessed during the tactical thought process, the leader must arrange for a reconnaissance of the enemy and terrain. First, the commander must select the most effective means from the available reconnaissance options. This may be a physical reconnaissance during which the commander visits the ground on which they will fight. Second, the commander determines the priority of information needed to satisfy identified information gaps. The first priority must be the gaps regarding the enemy; focusing on confirming or denying any assumptions made about his location, orientation, or current tactical activity. The second priority is identifying elements of the friendly Scheme of Maneuver (SOM) such as the route, assault position, or defensive positions. Finally, the leader must determine which subordinate leaders will participate in the collection of this information. The personnel will vary according to the tactical situation, but the leader should take only as many subordinate leaders as necessary, while others remain behind to supervise mission preparation.

**Make Reconnaissance (BAMCIS)**

The commander now acts to answer his questions and validate any assumptions based on his priorities of reconnaissance and the time available. Every effort must be made to conduct a physical reconnaissance and get "eyes on the enemy". In addition to a physical recon, the commander should use all other available assets (imagery, air reconnaissance, etc.) to help fill information gaps. The reconnaissance is only successful if it answers the questions needed to successfully accomplish the mission.

Complete the Plan (BAMCIS)

The unit leader must now take the information gained during the reconnaissance and validate the initial plan. This is done by conducting repeating the tactical thought process, now armed with the answers to our questions. This analysis ensures necessary changes are made to our plan. Leaders make a critical error when they receive updated information that conflicts with their previous analysis or established plan, but fail to update their Mission, Enemy, Terrain, Troops, Time, and Civilians (METT-TC) assessment or revise their scheme of maneuver. At the conclusion of the second conduct of the tactical thought process, leaders write a Five Paragraph Order and use it to communicate the plan to subordinates.

Issue the Order (BAMCIS)

Leaders then verbally communicate their analysis and scheme of maneuver using proper order-issuing techniques. Clear communication of a well thought out plan is required to turn a leader's decisions into an executed plan that achieves mission success.

Supervise (BAMCIS)

Leader ensure compliance with the details of the plan until the mission is accomplished. This includes the timeline the commander set forth, realistic mission rehearsals, Pre-Combat Checks (PCCs) and Pre-Combat Inspections (PCIs) of personnel prior to execution, and the complete execution of the mission. Task delegation to subordinate unit leaders is almost always required. Leaders must check that the plan is being executed as intended.

**APPENDIX B**

**Time Critical Resource Management Assess, Balance, Communicate, and Do/Debrief (ABCD) Model**

Experience is culmination and sum of all learning events. Everyone has some experience to draw upon when responding to an event or stimulus. Leaders should marshal and coordinate the experience of all personnel involved in accomplishing a task or mission. This collective experience is valuable when using Time Critical Risk Management for quick real time hazard identification and risk assessments. We often do this personally both on duty and off-duty and we don't even realize it.

The ABCD (Assess, Balance, Communicate, and Do/Debrief) Model (Figure 1 and 2) is a process used to conduct Time Critical Risk Management. It is a simple process that can be used by individuals, teams, squads, or crews to learn new or complex behaviors and skills, or to incorporate Risk Management into planning.

**DECISIONS**

A. Using the ABCD Model daily helps establish a habit and trains the brain to continue thinking under less than optimal conditions, duress, or stress.

1. The model is designed to assist you when:

- a. Working in a dynamic environment.
- b. Monitoring a static or routine situation to capture errors.
- c. Making a decision with partial information.

2. In all three situations, it is necessary to develop habits that trigger the process to: Assess the situation; Balance your resources; Communicate risk and intentions; and Do and De-brief the event.

3. These situations require the continuous use of Assess, Balance, Communicate, Do and Debrief as necessary. An added benefit of the ABCD Model is the continuous improvement of skills and knowledge which occurs with self-assessment.

B. Time critical decision making requires practicing a unique set of skills. In a real-time event, personnel assess the situation, balance their resources, communicate risk and intentions to all concerned, and execute (Do) actions that complete the mission or task while mitigating risk by responding to the conditions observed. Follow-up by debriefing the results in order to gain lessons learned.

C. Time critical decision making relies on the decision maker's previous experience, training, and availability to recall resources from in-depth or deliberate RM.

D. Time critical decisions are based on pattern matching to past training and experience and the recall of resources in the ABCD Model format.

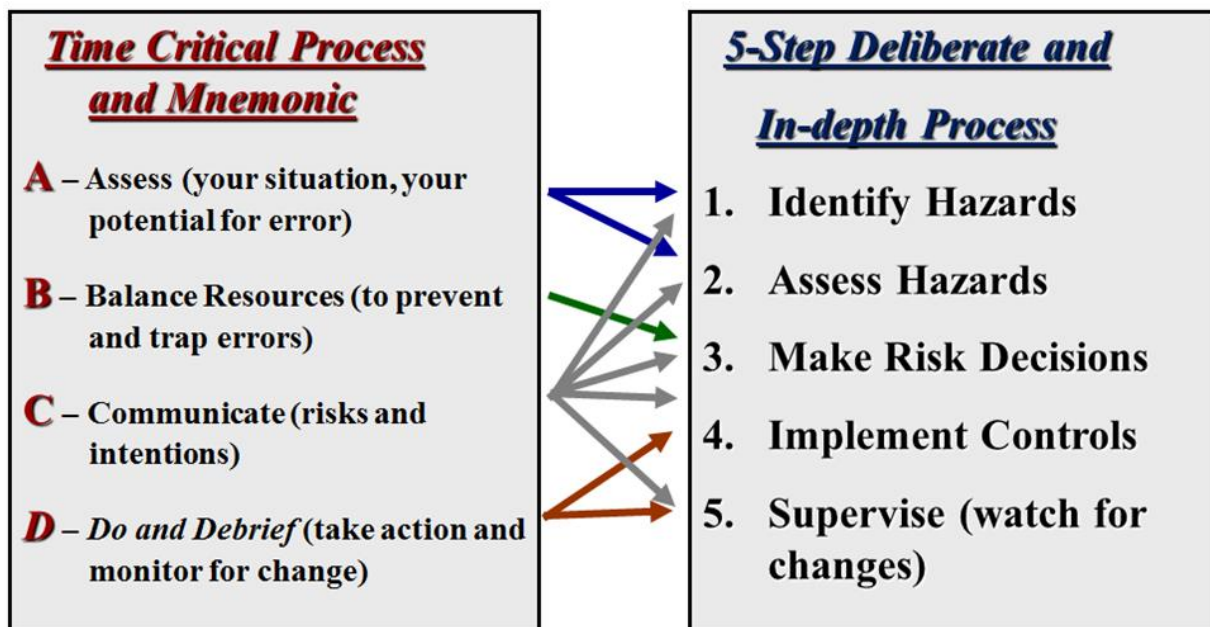
E. Standardizing the communication structure reduces conflicts and errors, and it improves the ability to manage risk and resources.

### THE ABCD MODEL

The ABCD Model (Assess the situation, Balance your resources, Communicate risk and intentions, and Do and Debrief the event) provides common language and structure for a measured response when an individual, team, or crew is executing a routine task, or when they are under duress in a more complex situation. This simple mnemonic provides individuals with a means to evaluate risks and form mitigation strategies on-the-run and can easily be applied in both on and off-duty situations. These pressures in these situations can range from additive conditions, time compression, personnel factors, or task loading. Increased experience improves the consistency of the response. Using the ABCD Model improves the ability to match a previous task or mission to a new experience and allows for more uniform and consistent responses. Training to the ABCD Model will embed a set of patterns that will help personnel recognize and recall a set of actions to counter risk even when distracted.

The ABCD Model is not a replacement for the 5-step RM process or a different RM process. It is the practical application of the 5-step process in environments where time is limited and we are most susceptible to risk. Figure 1 identifies the relationship between the 5-step RM process and TCRM using the ABCD Model.

Figure 1. Time Critical Risk Management Link to the 5-Step Risk Management Process





### ASSESS THE SITUATION

“A” in the mnemonic combines the first two steps of the 5-step RM process. In a real-time situation, it is essential for individuals to consider the event in which they are engaged and choose the appropriate resources or controls to meet the hazards they identify. In a real time situation, an assessment of the situation requires an accurate perception of what is happening in a relatively short time and projecting its effect. In other words, maintaining good situational awareness (SA) is key. In TCRM, where there is limited time to assess hazards, it is an individual’s ability to quickly and effectively comprehend the situation and apply appropriate, available resources that determines the difference between success and failure.

### BALANCE RESOURCES

“B” in the mnemonic is tied to making risk decisions (RM step 3s) to mitigate risks. After assessing the situation, personnel must consider how to use the resources available to complete the task or mission. Thorough planning prior to an event will increase the availability of the resources needed to implement effective controls. A clear understanding of the task or mission, proper training, PPE use, and recognition of personal limitations are all essential aspects of balancing resources.

### COMMUNICATE RISK AND INTENTIONS

Clear, concise, two-way communication is essential for effective mission execution. “C” reminds us to communicate clearly during the event, and it is tied to all 5 steps of the RM process. Maintaining good SA of additive conditions, task loading, and crew factors is critical to communication because an individual’s perception and communication skills deteriorate as they lose SA. As stress increases or events become more time constrained, communication tends to become limited or non-existent. Individuals who understand this relationship are better able to adjust and mitigate additional risk when they recognize a loss of SA. Although communicating intentions works best when multiple individuals are involved in the event, situations may occur where individuals must weigh decisions on their own. To insure positive and effective communications, it is critical that a continual internal assessment be conducted by asking relevant questions such as, “Who needs to know about the situation?,” “Can this be done differently?,” or “Who can provide help if needed?”

### DO AND DEBRIEF

The “D” in ABCD is italicized to emphasize the two parts: Do and Debrief. This mnemonic is tied to steps four and five of the 5-step process. Do the task or mission. However, to be successful in the event, the individual must select and use the appropriate resources while adjusting actions as required to ensure mission success. It is vital that a feedback loop, the “Debrief” part of the “D”, be performed. It is beneficial for individuals complete the ABCD loop and identify what worked and what did not, and to disseminate lessons learned. Debriefs improve performance and provide the experience and the tools to help manage risks faced in future missions. Debriefs are essential to completing the ABCD loop. To ensure future activities are improved and risks are reduced, ask questions during debriefs such as, “Was our

assessment accurate?”, “Were we lucky?”, “How well did we use our resources?”, “Was communication effective?”, and “What can we do to improve events in the future?” Detailed and thorough debriefs are the mark of a professional.

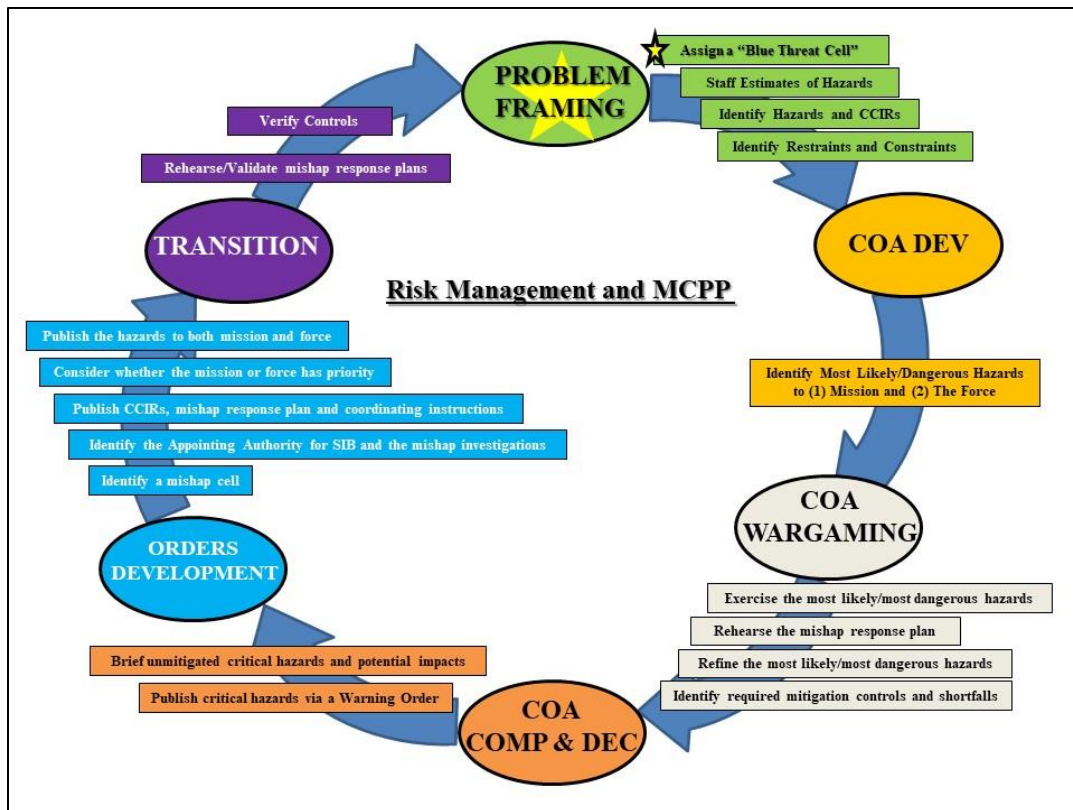
The practical use of the *ABCD* Model to assist individuals during TCRM and decision making will sustain a responsive capability to effectively meet personal challenges or mission contingencies now and in the future. Standard Operating Procedures should be the foundation of TCRM.

APPENDIX C

Marine Corps Planning Process (MCPP)

MCPP provides a means for Commanders and their staffs to understand a problem and develop an appropriate Course of Action (COA). The MCPP consists of six primary steps and RM is a continuous and central component ongoing throughout the process (See Figure 1).

Figure 1: Marine Corps Planning Process and the Blue Threat



BLUE THREAT

The hazards a force is exposed to during mission execution can be both adversary and non-adversary based. This concept is commonly referred to as the “red” vs. “blue” threat. Losses caused by the “blue” threat the readiness and effectiveness of the force. Commanders and their Staff should incorporate non-adversary based hazards (blue threats) into planning to ensure there is sufficient information for risk decision-making and control implementation with the intent of preserving the force’s readiness and effectiveness.

RM PLANNING

RM planning is done within the all six steps of MCPP but is particularly important to the planning process during the first three steps: Problem Framing, Course of Action (COA) Development, and COA Wargaming.

PROBLEM FRAMING

Problem framing identifies what the command must accomplish, when and where it must be done and, most importantly, why it is being done at all—the purpose of the operation. The purpose is articulated in the mission statement (task and purpose). Within Problem Framing, “Conduct Risk Management” is integrated into the Ongoing Activities-Risk Management. Marine Corps Doctrinal Publication (MCDP) 1 (Warfighting) states, “Risk is inherent in war and is involved in every mission. Risk may be related to gain; greater potential gain requires greater risk.” RM enables the commander to make informed decisions about real or potential risks in the accomplishment of their mission. In Problem Framing, commanders and their staffs identify initial risks to the mission and to the force (personnel, material, etc.). Some specific tasks include:

- A. Within the Red Cell, assign a “Blue Threat Cell/Team” to analyze hazards and develop mitigation strategies.
- B. Produce staff estimates of hazards that pose a risk to mission or a risk to force.
- C. Identify hazards or events for Commander’s Critical Information Requirements (CCIR) consideration.
- D. Identify assumptions with associated hazards/risks.
- E. Identify and assess hazards stemming from constraints and restraints.

COA DEVELOPMENT

COA Development produces options for accomplishing the mission in accordance with the commander’s intent. This step produces options for the commander; refines the design; and promotes understanding of the environment, problem, and the approach to solving the problem. During COA Development, “Continue Risk Management Planning” is an on-going activity. As the MCPP continues, the staff uses the RM process to further identify risks, assess hazards, and provides control options to the commander for his risk decisions. Controls are paired with specific risks. Many identified risks to the mission or the force are addressed through MCPP by assigning controls (e.g. positioning of the reserve or the alert status of the Tactical Recovery of Aircraft and Personnel (TRAP) force during a particular part of the operation). Risks can be assessed using the Risk Assessment Matrix as well as other tools and methods detailed in this order. When briefing, Action Officers or Staff will list identified hazards and associated mitigations or controls. The COA Development Brief includes the Risk Management Plan in the list of topics under the “Conduct COA Brief.” Some specific tasks include:

- A. Identify most likely/most dangerous hazard to the mission.
- B. Identify most likely/most dangerous hazard to the force.
- C. Identify Risk Controls.

### THE COA WARGAME

The COA wargame examines and refines the COA options in light of adversary capabilities and potential actions/reactions, as well as the characteristics peculiar to the operating environment such as weather, terrain, local culture, and the presence of non-Department of Defense (DOD) entities or stakeholders. This detailed operational environment and possible adversary reaction examination should produce a greater understanding of the environment, the problem, and possible solutions. During COA Wargaming risk management plans are addressed and continually revised. Some specific tasks include:

- A. Exercise the most likely or most dangerous hazards to both force and mission during the wargame.
- B. Rehearse the mishap response plan.
- C. Develop a Decision Support Matrix for events considered High Risk (ex: RAC of Extremely High).
- D. Refine the most likely/most dangerous hazards to force and mission.
- E. Identify required mitigation controls and shortfalls.
- F. Assess Controls.

### COA DECISION, COMPARISON AND TRANSITION

In steps four and five of the MCPP, RM plans are briefed during COA Decision and Comparison and then formally captured in writing the Operations Order (OPORD). The final step, Transition, occurs after mission accomplishment as the force reconstitutes and prepares for follow on tasking.

- A. COA Comparison and Decision.
  - 1. Brief unmitigated critical hazards and potential impacts.
  - 2. Publish critical hazards via a Warning Order for subordinate element analysis.
- B. Orders Development.
  - 1. Publish the hazards to both mission and force.

2. Consider whether the mission or force has priority.
3. Publish CCIRs, mishap response plans/tasks, and coordinating instructions.
4. Identify a mishap cell (ex: Mishap Investigation team, Safety Investigation Board (SIB), evidence preservation/collection).
5. Identify the Appointing Authority for SIB and the mishap investigation controlling command.

C. Transition

1. Verify Controls.
2. Rehearse/Validate mishap response plans.

SAFETY APPENDIX

An appendix placeholder for the RM Plan is found within Annex C (Operations), if the command includes a Risk Assessment Matrix in its published OPORD. Another consideration is including the mishap response plan as an appendix or tab to the RM Plan.

A. RM Roles and Responsibilities.

1. Commander's Intent. As a function of the Commander's Orientation in the MCPP, the process should review the command philosophy paying special attention to the unit's mission, culture, and command attitudes towards risk. The Commander's Intent as it pertains to RM should consider how mishaps impact the unit's readiness as well as the effectiveness of RM efforts. Finally, the commander should provide RM focus areas for planners to consider.

2. Planners. Ultimately, planners should seek to enable units to implement RM processes that continuously identify hazards, assess risks and implement controls in order to prevent mishaps.. An effectively applied RM process preserves operational readiness, combat capability, and overall unit effectiveness.

3. Execution. The Marines assigned the task of executing the plan should clearly understand the plan, know what needs to be communicated and to whom, understand who has the authority and responsibility to make decisions as the situation changes, be empowered to report changes as they are discovered or occur, and have the guidance needed to make appropriate decisions. Considerations during execution might be: Do I have to do this? If the answer is no, then there is probably something else to do instead. If a Marine must complete the activity in question than they might ask: Can I do this better, is there a different option? If there is not a better way and there is risk of danger, injury, or something worse than a consideration might be: Who do I need to tell? If an individual identifies a hazard, then someone else will likely benefit from knowing about it. This is where the chain of command should be informed. A decision maker needs to assess the risk and potentially change the plan to mitigate the hazard and associated risk. What effect can the individual identifying the hazard have on that decision?

When we consider RM and what we want from our Marines, we have to foster and encourage them to actively report. Building an effective RM culture isn't just reading a RM worksheet, talking about risk mitigation, and enforcing policy, it's communicating that everyone is expected and encouraged to participate.

4. Importance of Transition. It is important to discuss the plan, risks, and controls with all parties ensuring they understand the entire picture. Should things go wrong, all Marines need to understand the "why" behind the chosen control so that they can make informed risk decisions as needed and choose a new control or properly escalate the risk. Example considerations might be: "What authority do you have to make risk decisions?", "Do you know what specific decisions must be elevated up and to whom?", and "Is there unit guidance that gives Commander's Intent for situations not specifically covered?", "Do the Marines below you have the same understanding as it applies to their sphere of influence?"

The Marine Corps functions as a team. To ensure that you continue to build your unit and positively shape the climate away from individuality towards the team; all parties must understand the plan, their role, and be an active participant in the debrief/feed-back loop. Remember the four principles:

- (1) Accept risk when the benefit is greater than the cost.
- (2) Accept no unnecessary risk.
- (3) Anticipate and manage risk by planning.
- (4) Make risk decisions at the appropriate level.

5. Discussion. Articulating the need to consider both adversary (red) & non-adversary (blue) based hazards can be incorporated into the MCPP without making it unwieldy and unusable. With all of this in mind it becomes much clearer that Marines shouldn't look at risk management as the protection of fingers and toes, but as a critical and continuous process that when properly applied creates significant advantages and sets the condition for mission success.

**VOLUME 3**

**MARINE CORPS TRAFFIC SAFETY PROGRAM**

**SUMMARY OF VOLUME 3 CHANGES**

Hyperlinks are denoted by *[bold, italic, blue and underlined font.](#)*

The original publication date of this Marine Corps Order (right header) will not change unless/until a full revision of the MCO has been conducted.

The date denoted by [blue font](#) (left header) will reflect the date this Volume was last updated.

All Volume changes denoted in [blue font](#) will reset to black font upon a full revision of this Volume.

**CANCELLATION:** The publication of this Volume cancels MCO 5100.19F, MARINE CORPS TRAFFIC SAFETY PROGRAM (DRIVESAFE)

VOLUME VERSION	SUMMARY OF CHANGE	ORIGINATION DATE	DATE OF CHANGES
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- (a) DoD Instruction 6055.4, DoD Traffic Safety Program, W/CH4, August 31, 2018
- (b) Manual on Uniform Traffic Control Devices (MUTCD), Dec, 2009
- (c) OPNAVINST 5102.1D/MCO P5102.1B
- (d) SECNAV M-5210.1, Chg. 1
- (e) SECNAVINST 5211..5F
- (f) 5 U.S.C. 552a
- (g) DoD 4500.36, Acquisition, Management and Use of DoD Non-Tactical Vehicles, September 19, 2017
- (h) Parts 571 and 571.500 of title 49, Code of Federal Regulations
- (i) DoD Instruction 5000.02, Operation of Defense Acquisition System, December 8, 2000
- (j) Military Standard MIL-STD-1180B, Change 1, Safety Standards for Ground Vehicles, August 7, 1991
- (k) Federal Motor Vehicle Safety Standards (FMVSS)
- (l) Standard licensing policy for Operators of Military Motor Vehicles, MCO 11240.66D
- (m) Joint Forces Travel Regulation
- (n) SECNAV M-5214.1
- (o) Federal Motor Vehicle Safety Standard No. 218 (DOT)
- (p) United Nations Economic Commission for Europe (UNECE) Standard 22.05
- (q) British Standard 6658, or Snell Standard M2005
- (r) American National Standards Institute (ANSI) Standard Z87.1
- (s) UNECE 22.05 or BS6658
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- (u) National Highway Traffic Safety Administration (NHTSA)'s bicycle safety initiatives
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**VOLUME 3: CHAPTER 1**

**MOTOR VEHICLE AND ROADWAY SAFETY**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER VERSION	PAGE PARAGRAPH	SUMMARY OF SUBSTANTIVE CHANGES	DATE OF CHANGE

CHAPTER 1

MOTOR VEHICLE AND ROADWAY SAFETY STANDARDS

0101 DISCUSSION

This Chapter reviews minimum standards for government and non-government motor vehicles, and installation roadways.

0102 GOVERNMENT-OWNED VEHICLES (GOV)

A. Commercial GOVs for use in the United States, US territories, and US possessions will meet all applicable requirements per references (g) and (h), and the Commercial Motor Vehicle Safety Act of 1986 for the year of manufacture.

B. Per reference (a), Commercial GOVs of foreign manufacture purchased, leased, or rented outside of the United States, and US territories and possessions will meet all applicable safety requirements of the country in which they are used.

C. Except for school buses, procured and leased commercial vehicles will be equipped with air bags, anti-lock braking systems, and electronic stability control, where available.

D. If available, safety monitoring devices shall be ordered on government-owned or leased commercial vehicles. These monitoring devices support safe vehicle operations and influence driving behavior.

E. Tactical vehicles and equipment manufactured for DoD Components in accordance with contractual specifications are exempt from the provisions of reference (j). Tactical vehicles and equipment will have safety belts, shoulder harnesses, and occupant rollover protection, except where the risk acceptance authority accepts risk as allowed by reference (i). Tactical vehicles and equipment will comply with reference (j) unless compliance negates essential military capability.

F. Ensure Low-Speed Vehicles (LSVs) used on installation or public roadways meet the design requirements listed in reference (k).

0103 VEHICLE INSPECTIONS

010301. SAFETY INSPECTIONS

All Marine Corps-maintained vehicles, including non-appropriated fund vehicles and GOVs, must pass annual safety inspections that conform to state or host nation requirements.

010302. EMISSION INSPECTIONS

GOV inspections will ensure exhaust emissions are in accordance with federal, state, and local regulations.



0104 INSTALLATION ROADWAYS

010401. TRAFFIC CODES AND LAW

All Marine Corps installation traffic codes will include the state or host nation codes in which the installation is located to the maximum extent practical.

010402. SPEED CONTROL

Maximum and minimum speed limits will be determined by traffic engineering requirements and safe operating requirements, and may be increased or decreased based on traffic analysis and speed surveys.

010403. RADAR AND LASER DETECTION DEVICES

Radar and laser detection devices are prohibited on Marine Corps installations.

**VOLUME 3: CHAPTER 2**

**MOTOR VEHICLE SAFETY PROGRAM**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 2

MOTOR VEHICLE SAFETY PROGRAM

0201 DISCUSSION

This chapter provides safe motor vehicle operations policy and guidance.

0202 MOTOR VEHICLE OPERATOR LICENSE

A. GOV and Privately Owned Vehicle (POV) operators will be properly licensed for the vehicle being operated.

B. Operators of vehicles over 15,000 lbs. Gross Vehicle Weight Ratio (GVWR) shall possess a valid U.S. Government Motor Vehicle Operator's Identification Card (OF-346) for the vehicle to be operated and a valid state or host nation driver's license.

C. Civilian U.S. Government Motor Vehicle Operator's Identification Card (OF-346) applicants must possess a valid state, U.S. territory, or host nation driver's license for the class and weight of vehicle they will be operating per reference (1).

0203 MEDICAL CERTIFICATES FOR DRIVERS

A valid Department of the Navy Medical Examiner's certificate (OPNAV 8020/6) signed by a competent authority is mandatory for all Marine Corps military and civilian personnel who, by military occupational specialty or position description, are required to operate motor vehicles in the performance of their job. Examples include motor transport personnel, facility maintenance personnel, security/military police personnel, and mail service personnel.

0204 DUTY-RELATED OPERATOR DRIVING TIME

To reduce fatigue-related mishaps, commanders will establish specific duty hour limits for GOV operators. These limits will consider the degree of risk involved in various motor vehicle operations such as weapons convoys, reserve drill, annual training, flight line operations, and public highway operation. Duty hour limits will include the following:

A. Drivers shall be provided the opportunity for at least eight (8) consecutive hours of rest (off-duty) during any 24-hour period. Commanders shall ensure that the required off-duty rest period will be free of work-related requirements and spent at rest or asleep.

B. An operator will not drive more than ten (10) consecutive hours in a 24-hour duty period. Commanders shall establish written rest-recovery guidance. At a minimum, the guidance will include the following:

1. Conduct a deliberate risk assessment when operations require performing the maximum allowed 10 hours of driving. Fatigued personnel are not allowed to operate motor

vehicles. Such an assessment will consider time on duty, the individual's physical condition, driving conditions, and length of travel.

2. Specific procedures will be established for mission essential billets such as recruiting, security patrols, and snow removal that may require driving time in excess of 10 hours.

3. Incorporate fatigue control measures such as alternate means of transportation or designating rest stops to ensure personnel are sufficiently rested.

#### 0205 DIRECTED TRAVEL

A. Per reference (m), authorized TDY travel by POV/GOV is limited to 400 miles per travel day.

B. Allow a 15-minute rest break for every two hours of driving.

C. Allow a 30 min meal break for every 10-hour driving period.

#### 0206 OFF-DUTY DRIVING LIMITS

Commanders will establish maximum driving times, hours of permitted operation, and mileage limits for Marines on orders, leave, and/or special liberty.

#### 0207 DRIVING DISTRACTIONS

Distractions are any actions that interfere with the safe operation of the motor vehicle. Traffic safety education will address the hazards of driving while distracted.

A. Marine Corps military and civilian personnel shall not use electronic and handheld equipment, such as a cell phone, be it issued by the Government or personal, for any reason other than navigation while driving a GOV or POV while on official Government business. If using an electronic device for navigation it must be mounted or positioned in a way that allows both hands to be on the steering wheel, and line of sight to remain out the front of the vehicle.

B. Marine Corps military and civilian personnel shall only use electronic devices in a hands-free mode while operating a vehicle on DoD or Coast Guard installations.

C. Operators of tactical, emergency, or law enforcement vehicles, while performing mission critical duties, may use in-car mobile data terminals and other in-car electronic devices not personal in nature, as required to support mission execution.

D. Marine Corps military and civilian personnel, while driving a vehicle on official government business, are prohibited from wearing listening devices other than hearing aids, single ear-piece hands-free phone devices, and motorcycle helmet-integrated intercom devices where allowed by law.

E. Vehicles will be safely parked prior to conducting activities that detract from driving. If you have to text, pull over. If you have to dial a phone number, pull over. If you have to manually answer an incoming call, or hold the phone in your hand even while it is in speaker mode, pull over.

## 0208 OCCUPANT PROTECTION

All motor vehicle occupants will wear lap and shoulder belts. Occupants are required to wear seat belts if they have been installed in the vehicle. The senior ranking occupant and the driver are equally responsible for all occupants being properly restrained prior to placing the vehicle in motion.

### 020801. TACTICAL VEHICLES

Tactical vehicles used for transporting personnel will have fixed seating for each person. While operating tactical motor transport vehicles on paved roads outside of a training area, the wearing of Kevlar helmet and Armored Protection Level (APL) is not required when the occupant is seated in the crew compartment and securely fastened with a functional safety restraint/seatbelt.

A. Upon leaving paved roads and in all training areas, all vehicle occupants will wear, at a minimum Kevlar helmet and APL level 1 vest.

B. All passengers in a cargo compartment shall wear Kevlar helmet and APL level 1 at all times.

C. O-5 commanders may determine type and level of PPE used while driving or riding in tactical trucks and support vehicles on paved surfaces during administrative movements.

### 020802. CHILD SAFETY

All children will use a child safety seat approved by the Department of Transportation, host nation, or state laws while riding in a motor vehicle on any Marine Corps Installation.

### 020803. EXCEPTIONS

This section does not apply to vehicles not designed for seat belts such as buses, certain off-road motor vehicles, combat/tactical vehicles or vehicles with a manufactured year of 1966 or earlier. This section will not require seat belt installation into these vehicles unless mandated by applicable host nation, state, or territory laws.

0209 TRANSPORTING PUPILS (K-12)

020901. OPERATING DEPARTMENT OF DEFENSE (DOD) SCHOOL BUSES IN THE UNITED STATES

Mark, equip, operate, and maintain government-owned or contractor-owned school buses consistent with HSPG NUMBER 17 and applicable Federal Motor Vehicle Safety Standards, reference (k), in addition to any contractual requirements, to reduce the risk of injury or death of children while they are being transported on DoD school buses.

020902. OPERATING DEPARTMENT OF DEFENSE (DOD) SCHOOL BUSES OUTSIDE THE UNITED STATES

Mark, equip, operate, and maintain government-owned or contractor-owned school buses consistent with applicable local, combatant command, or host-nation requirements in addition to any contractual requirements, subject to any applicable international agreements, and in accordance with local force protection and threat conditions.

0210 DRIVER EDUCATION TRAINING

Driver education is intended to improve operator skills and habits in order to reduce motor vehicle mishaps.

021001. DRIVERS UNDER 26 YEARS OF AGE

All military personnel under the age of 26 will complete a traffic safety course. For all Marines under the age of 26 the first gaining unit will ensure the Marine receives at least four hours of driver's awareness training within 60 days of reporting to the command. Training will include at least 30 minutes of local traffic familiarization. This one-time training will be documented by S-3/Training via Marine Corps Training Information Management System (MCTIMS). Reservists under the age of 26, on active duty for 60 days or more, will receive the same training. This one-time training will be documented by S-3/Training via MCTIMS. Approved traffic safety training courses can be found on the CMC Safety Division's website: [www.safety.marines.mil](http://www.safety.marines.mil).

021002. REMEDIAL DRIVER TRAINING COURSE

Anyone convicted of a moving traffic violation or who is found at-fault in a motor vehicle mishap while operating any GOV will attend a remedial driver training course. The remedial course will provide 6 to 8 hours of classroom instruction. The course will be independent of other driving programs. Commands can refer individuals that exhibit high-risk behaviors to this course.

A. Remedial driver training students will not be mixed with other driver education classes.

B. Installations may use court-approved local community driver improvement programs to fulfill this requirement.

021003. VERIFICATION OF COURSE COMPLETION

Each Marine is responsible for ensuring S-3/Training enters the appropriate course completion codes into MCTIMS and MCTFS.

0211 GOV OPERATOR TRAINING

Operators of government-owned/leased vehicles will be trained per references (a) and (l).

021101. TRAINING REQUIREMENTS

Written requirements and procedures will specify vehicle type, content of initial training required, certification procedures, driving restrictions, and frequency of refresher training. Special attention will be paid to non-tactical vehicles over 15,000 lbs. GVWR.

021102. TRAINING RECORD KEEPING

S-3/Training will document all completed GOV training on the driver's U.S. Government Motor Vehicle Operator's Identification Card (OF-346) and in the driver's personnel training record or driver's history file. Written results of all knowledge tests and performance skills tests will be maintained in the driver's history file in accordance with record schedule 1000-27 of reference (d).

0212 REVOCATION OF GOVERNMENT VEHICLE DRIVING PRIVILEGES

Marine Corps personnel will not operate government motor vehicles when the driver:

A. Is under a period of suspension or revocation of driving privileges by any state or host nation.

B. Has had base driving privileges suspended or revoked.

C. Has failed a urinalysis, has received a driving under the influence suspension, or any other indication of chemical and/or substance abuse.

D. As directed by the unit or installation commander.

0213 GOVERNMENT VEHICLE OTHER (GVO)

A. The majority of GVOs are off-highway motorized vehicles such as specialty/special purpose, material handling, construction, or tactical vehicles. Commanders will limit the use of GVOs to off-road areas and tactical operations as much as possible.

B. The use of GVOs on public roads is considered incidental to their travel between off-road areas. Users will ensure their movement on and off Marine Corps installations complies with applicable traffic laws and codes.

C. The installation commander may authorize the routine use of GVOs on public roads and industrial or pedestrian environments based on mission requirements and following a detailed risk assessment.

#### 0214 LOW SPEED VEHICLES (LSV)

A. All LSVs, including personal, Government-owned, unit-owned, non-appropriated fund vehicles, and government-owned contractor-operated vehicles must be manufactured in accordance with reference (k) or Host Nation requirements.

B. The installation commander may authorize the use of LSVs in traffic, industrial, or pedestrian environments based on a risk assessment. Use of LSVs on public roads is contingent on manufacturer-recommendation and registration/plating for road use.

C. Routine use of LSVs will be restricted to low-risk roadways on Marine Corps installations with max speed limits of 25 miles per hour.

D. LSV operators will use manufacturer-recommended PPE.

#### 0215 PERSONALLY-OWNED RECREATIONAL OFF-HIGHWAY VEHICLES (ROHV)

A. ROHVs cover a broad spectrum of motorized vehicles including agricultural, recreational, personal conveyance devices, industrial, aviation support, and commercial and non-commercial vehicles. Users of ROHVs on Marine Corps installations will comply with applicable traffic laws and codes.

B. The installation commander may authorize the use of ROHVs in designated areas based on a risk assessment. Use of ROHVs on public roads is contingent on installation authorization, being in accordance with manufacturer-recommendations and registration/plating for road use.

C. ROHV operators will use manufacturer-recommended PPE.

#### 0216 PERSONALLY-OWNED AUTONOMOUS VEHICLES

##### 021601. DEFINITION

An autonomous vehicle is any vehicle that has the capability to execute steering, acceleration, deceleration, and monitor the driving environment either with or without the aid of the human driver.



021602. USE

The use of autonomous vehicles on Marine Corps installations is authorized when the driver is assisted in either steering or acceleration/deceleration or both.

021603. USE OF FEATURES

The use of autonomous features where the vehicle's system controls all aspects of the dynamic driving task, known as high or full automation, is not authorized.

**VOLUME 3: CHAPTER 3**

**MOTORCYCLE AND ALL-TERRAIN VEHICLE SAFETY**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 3

MOTORCYCLE AND ALL-TERRAIN VEHICLE SAFETY

0301 DISCUSSION

This chapter outlines motorcycle and all-terrain vehicle safety policy.

0302 STATE/HOST NATION LICENSE, REGISTRATION AND INSURANCE COMPLIANCE

All operators of street-legal motorcycles, three-wheeled motorcycles, and auto-cycles, will comply with state licensing, registration, and insurance requirements. For tactical motorcycle operators, a valid U.S. Government Motor Vehicle Operator's Identification Card (OF 346) with a motorcycle endorsement and a valid state driver's license is required.

0303 OPERATIONALIZING THE MOTORCYCLE SAFETY PROGRAM

030301. COMMANDING OFFICERS RESPONSIBILITIES

- A. Establish a Motorcycle Mentorship Program (MMP).
- B. Identify all active and inactive riders during check-in.
- C. Ensure riders understand their responsibilities and comply with the requirements established in this order.
- D. Verify that each rider holds a valid driver's license with motorcycle endorsement.
- E. Ensure S-3/Training schedules and reports rider training in MCTIMS/MCTFS.
- F. Ensure riders attend scheduled training.
- G. Commanders will promote riders' participation in Marine Corps' sponsored and approved motorcycle safety events.

030302. MOTORCYCLE OPERATOR RESPONSIBILITIES

- A. Report to S-3/Training and the MMP President to register riding status, schedule training, and record training completion.
- B. Report immediate change in rider status (active/inactive) to unit leadership and the MMP President.
- C. Read and comply with motorcycle safety training and PPE requirements outlined in this Order.

D. Comply with base, state or host nation licensing and registration laws.

030303. S-3/TRAINING RESPONSIBILITIES

A. Enter completed training requirements into MCTIMS/MCTFS.

B. Assist Marines in registering for required motorcycle safety courses.

C. Ensure Marines receive orders to the required motorcycle safety courses.

0304 MOTORCYCLE SAFETY TRAINING

Motorcycle safety training provides military personnel with beginner and advanced riding skills.

030401. LEVEL 1 TRAINING

Initial training teaches the basic principles and skills of riding. All military personnel who plan to purchase or operate a motorcycle, regardless of intent to ride on a DoD installation, are required to successfully complete an initial motorcycle rider safety course.

A. Commanders will ensure riders requesting motorcycle safety training are scheduled for the earliest available class.

B. Military personnel are not required to attend Level 1 training if the member possesses a valid state or host nation motorcycle endorsement. The Level 2 training requirement begins when the member is initially identified as a licensed rider.

C. New, unlicensed riders must be properly licensed prior to riding a motorcycle, on or off base. This requirement should be satisfied by taking a Level 1 course and then obtaining a license with motorcycle endorsement, but the requirement can be satisfied by successfully passing the drivers skills test required to obtain a license with motorcycle endorsement.

D. Commanders may authorize operators who possess a valid motorcycle learner's permit to ride on and off base subject to the restrictions of the learner's permit.

E. New, unlicensed riders are encouraged to take an initial safety course, and must obtain a valid license with motorcycle endorsement before proceeding to higher level training.

F. Commanders will accept an instructor signed completion card from any military or state motorcycle training course.

G. Level 1 training provided at Marine Corps/DoD installations will be at no cost to the member.

030402. LEVEL 2 TRAINING

Intermediate or mid-level rider training provides sustainment training for licensed riders.

A. All military motorcycle riders will complete Level 2 motorcycle training within 180 days of completing Level 1 training or being identified as a licensed rider.

B. Level 2 training provided at Marine Corps/DoD installations will be at no cost to the member.

030403. LEVEL 3 TRAINING

Advanced rider training provides skills practice at realistic speeds with street cornering scenarios in a controlled environment.

A. Level 3 training is highly recommended for all military motorcycle riders who have completed Level 2 training.

B. Level 3 training provided at Marine Corps/DoD installations will be at no cost to the member.

030404. REFRESHER TRAINING

All military riders will take refresher training at least every five years from their last date of training. Military riders are strongly encouraged to take refresher training annually. Refresher training provided by the Marine Corps is at no cost to the participant.

A. Refresher training can be any Level 2 or 3 training that includes classroom and on-motorcycle skills-based instruction offered at Marine Corps/DoD installations. Online training does not meet this requirement.

B. Military riders may obtain Level 2 or 3 training from civilian providers at the member's own expense. Riders completing civilian Level 3 training must present a course completion card or certificate to S-3/Training for entry into MCTIMS/MCTFS.

C. Military motorcycle safety training coaches and instructors will be exempt from refresher training as long as they maintain their certification.

030405. THREE-WHEELED MOTORCYCLE TRAINING

Operators of three-wheeled motorcycles to include trikes, motorcycles with attached sidecars, and auto-cycles such as Slingshots will be exempt from motorcycle safety training requirements. Military riders of three-wheeled motorcycles are encouraged to take training where available. State regulations vary in definition. Refer to your state licensing authority for further guidance.

030406. SPACE AVAILABLE TRAINING

DoD civilian personnel, military retirees, and military dependents may attend motorcycle safety training on a space-available basis at no cost to the member.

030407. ALTERNATE TRAINING COURSES

Marine Corps installations are authorized and encouraged to provide advanced training opportunities beyond what is currently provided. Training providers shall issue course completions cards/certificates to attendees. Attendees will receive refresher training credit for completed training.

0305 REQUIRED MOTORCYCLE PERSONAL PROTECTIVE EQUIPMENT (PPE)

The following minimum PPE is mandatory for all operators and passengers on a motorcycle, to include three-wheeled motorcycles and auto-cycles, when on a Marine Corps installation. Military personnel will wear at least the minimum PPE as directed in this Order while operating a motorcycle off installation and regardless of less restrictive state laws. Riders participating in training will wear at least the minimum PPE and full-fingered gloves designed for motorcycle riding. Fingerless gloves are not authorized to be worn while participating in training.

030501. HEAD PROTECTION

A helmet, certified to meet or exceed standards outlined in references (o-q), Federal Motor Vehicle Safety Standard No. 218 (DOT), United Nations Economic Commission for Europe (UNECE) Standard 22.05, British Standard 6658, or Snell Standard M2005 or higher, shall be worn and properly fastened under the chin.

030502. EYE PROTECTION

Goggles, glasses, or a full-face shield designed to meet or exceed standards outlined in references (r-s), American National Standards Institute (ANSI) Standard Z87.1, UNECE 22.05, or BS6658 in effect when manufactured, will be properly worn. A windshield does not constitute proper eye protection.

030503. PROTECTIVE CLOTHING

Wearing of a garment or jacket that fully covers the arms, long trousers, and full-fingered or fingerless gloves or mittens designed for motorcycle riding is required. Gloves or mittens will be made from leather or other abrasion-resistant material. Wearing a motorcycle jacket and pants constructed of abrasion-resistant materials and containing impact absorbing padding is strongly encouraged. Riders are encouraged to select PPE that incorporates fluorescent colors and reflective material.

030504. FOOT PROTECTION

Riders will wear sturdy, above the ankle shoes or boots that provide support and traction when stopping or starting. Any shoe or boot that has an open toe, open foot/heel design, an extensive heel over 2 inches, or a total canvas or rubber material construction is unacceptable. Most importantly, the footwear should protect the rider in the event of a crash. Dress for the crash.

0306 LANE SPLITTING

Lane splitting is not authorized on Marine Corps installations. Marine motorcycle riders are highly discouraged from lane splitting while operating their motorcycles off base. Although lane splitting is legal in some states, Marines should NOT lane split as it puts riders at significantly increased risk for a crash and associated injury or death due to car drivers changing lanes unexpectedly and without signaling.

0307 INSTALLATION ACCESS

This Order provides rider training and PPE requirements for installation access in paragraphs 0304 and 0305, respectively.

0308 MOTORCYCLE MENTORSHIP PROGRAM (MMP)

All battalion, squadron, and higher commands will establish an MMP. The MMP will identify and mentor inexperienced riders, foster respectful riding practices, and ensure continuing education opportunities are available for all command motorcycle riders throughout their riding career.

030801. KEY POSITIONS

Each MMP will have a president and mentor, appointed in writing by the unit's commanding officer. The president should be appointed based on leadership characteristics, maturity, and desire to promote motorcycle safety. The mentors should represent different motorcycle groups to foster camaraderie within the MMP. The MMP and command requirements will be inspected as part of the Inspector General's Inspection Program and CMC (SD) Command Safety Assessments.

030802. DOCUMENTATION

Each unit MMP president will develop an SOP that describes goals, objectives, and rules for their MMP. Examples are available on the SD website: [www.safety.marines.mil](http://www.safety.marines.mil).

030803. MEMBERSHIP

Membership in the command's MMP is mandatory for all motorcycle riders in the command.

030804. ROSTER

Each MMP President will maintain a current roster of all active motorcycle riders active within the command. The MMP will ensure the unit safety officer is advised of any changes to the roster.

030805. MEETINGS

MMP meetings will be conducted monthly during normal working hours at a command-provided meeting place. Attendance is mandatory for active riders as operational duties permit. Attendance rosters and minutes for each meeting will be forwarded to the unit executive officer and unit safety officer.

A. Commanders will attend MMP meetings at least once per quarter.

B. Each MMP will maintain a minimum of two riders that have advanced motorcycle operator training.

C. Units with minimal ridership or no available experienced riders to mentor may participate in another unit's MMP, with both commanders' concurrence and approval.

030806. MMP RESOURCES

MMP resource materials are available at [www.safety.marines.mil](http://www.safety.marines.mil).

0309 OFF-ROAD MOTORCYCLE AND ALL-TERRAIN VEHICLE (ATV)/UTILITY VEHICLE (UTV) SAFETY PROGRAM

030901. PERSONALLY-OWNED OFF-ROAD MOTORCYCLE AND ATV/UTV TRAINING

A. Individuals who operate personally-owned, off-road motorcycles, ATVs/UTVs on or off installation are required to meet state, local, or installation requirements for training, registration, and licensing.

B. Installation ATV/UTV training, where available, will be at no cost to the member.

030902. GOVERNMENT-OWNED ATV/UTV TRAINING

Government ATV/UTV operators will complete an approved ATV/UTV training course. The training can be tailored to satisfy specific mission objectives. A certificate of completion and an endorsement on a U.S. Government Motor Vehicle Operator's Identification Card (OF-346) will be issued to each individual upon successful completion of the course.



030903. PERSONAL ATV, UTV, AND OFF-ROAD MOTORCYCLE PERSONAL PROTECTIVE EQUIPMENT (PPE)

A. ATV and Off-Road Motorcycle operators and passengers will wear protective gear for off-road operation and include the required PPE outlined in 0305 above with the addition of knee/shin guards, off-road boots, and padded full-fingered gloves.

B. UTV drivers and passengers will meet all manufacturer recommended PPE requirements.

030904. GOVERNMENT ATV, UTV, AND OFF-ROAD MOTORCYCLE PERSONAL PROTECTIVE EQUIPMENT (PPE)

Riders' PPE will meet Technical/User manual and mission requirements.

**VOLUME 3: CHAPTER 4**

**EMERGENCY VEHICLE OPERATIONS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 4

EMERGENCY VEHICLE OPERATIONS

0401 DISCUSSION

This chapter contains emergency vehicle operations and training policy.

0402 EMERGENCY VEHICLE OPERATION

Operators of emergency vehicles will complete an Emergency Vehicle Operator Course. Emergency vehicle operators will, at all times, operate their vehicles with due regard for the safety of others and at a speed that is reasonable for existing weather, visibility, traffic, and roadway conditions.

0403 EMERGENCY VEHICLE OPERATOR COURSE (EVOC)

040301. EVOC INITIAL TRAINING

Before being assigned as a Marine Corps emergency vehicle driver, all drivers will meet the selection and training requirements specified in reference (g) in addition to the following:

- A. Emergency vehicle operation is a job-related requirement. Units are responsible for obtaining initial and refresher training. Training cost is a unit responsibility.
- B. All training will occur during duty hours.
- C. All emergency vehicle operators will complete refresher training every four years.
- D. EVOC training obtained from local government fire and police academies, state police academies, any DoD fire academy, and the Federal Law Enforcement Training Center must be approved by CMC (SD).
- E. Commanders may consider certifying unit EVOC instructors.
- F. A U.S. Government Motor Vehicle Operator's Identification Card (OF-346) will be issued to operators who successfully complete EVOC training. An EVOC endorsement on a license should not be confused with vehicle-specific training. All training and test results will be documented in the operator's driver history file.

040302. EVOC REMEDIAL TRAINING

- A. Any emergency vehicle operator who is found at-fault in a motor vehicle mishap shall complete remedial EVOC training. Remedial training will be completed within 30 days of the mishap date. The unit is responsible for the cost of remedial training.

B. Supervisors may also direct personnel who demonstrate deficiencies in their driving habits or attitudes to complete remedial EVOC training.

C. Remedial training is not a punitive action. It is used to reinforce positive skills, knowledge, and behavior.

**VOLUME 3: CHAPTER 5**

**PEDESTRIAN AND BICYCLE SAFETY**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 5

**PEDESTRIAN AND BICYCLE SAFETY**

0501 DISCUSSION

This chapter contains pedestrian and bicycle safety policy.

0502 PEDESTRIAN SAFETY

Pedestrian safety will be emphasized throughout the Marine Corps as part of the overall traffic safety program. The program emphasizes the importance of separating pedestrians and bicyclists from motor vehicle traffic to the maximum extent possible, and provides guidance and direction for adequate sidewalks, pedestrian crossings, handicapped access ramps, and bicycle lanes/trails per reference (e).

050201. PROTECTION OF YOUNG PEDESTRIANS

Strong emphasis will be placed on protecting children walking to and from school, getting on and off school buses, and playing in military housing areas.

050202. REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE)

Appropriate fluorescent or reflective apparel that meets performance class 2 or 3 of ANSI/ISEA 107 standards, reference (t), will be utilized by Marine Corps personnel who are exposed to vehicle traffic in their assigned duties and when within six feet of any traveled portion of a roadway, highway, parking lot, or vehicle assembly points. Examples of affected personnel include: traffic control personnel, roadway maintenance and construction crews, and gate guards.

050203. REQUIREMENTS FOR RUNNERS AND WALKERS

Installation commanders will designate and publish approved roadways and appropriate time periods for runners, to include running in formations, and walkers based on an evaluation of local roadways and traffic patterns. Personnel are encouraged to wear brightly colored clothing during daylight hours. Personnel will wear reflective clothing (including reflective vests or belts) or an actively lit vest or belt during periods of darkness or reduced visibility. Personnel will run or walk facing traffic, and will obey all traffic rules and regulations.

050204. MOTORIZED PERSONAL TRANSPORTATION VEHICLES

Powered scooters, skateboards, pocket bikes, and other similar equipment not meeting host nation standards/laws and DOT motor vehicle standards for public roadways will only be used on installation roadways designated by the installation commanding officer. Local written policy shall ensure the mandatory use of approved bicycle helmets and other PPE approved by the American National Standards Institute or Snell by all personnel operating these vehicles on Marine Corps installations.

0503 BICYCLE SAFETY

Bicycle safety policy will be set at the installation level and complied with by all tenant activities as a part of the Marine Corps Traffic Safety Program. The bicycle safety policy will comply with National Highway Traffic Safety Administration (NHTSA) bicycle safety initiatives, reference (u): <https://www.nhtsa.gov/road-safety/bicycle-safety>. NHTSA's focus is on encouraging safer choices by bicyclists and drivers to help reduce deaths and injuries on our roads.

A. Bicyclists will use a bicycle helmet approved by the U.S. Consumer Product Safety Commission (CPSC), American National Safety Institute (ANSI), Snell Memorial Foundation, or host nation equivalent.

B. Every bicycle, when in use between sunset and sunrise, will be equipped with a headlight on the front emitting a white light visible in clear weather from a distance of at least 500 feet to the front, and a rear emitting red light visible from a distance of at least 600 feet to the rear.

C. Bicyclists will wear a reflective belt or vest during low visibility environmental conditions and between the period from one hour prior to sunset until one hour after sunrise.

D. Bicyclists will ride with the flow of traffic as close to the shoulder as safely possible and will obey all traffic laws, rules, and regulations to include stop signs, traffic signals, and speed limits.

0504 REQUIREMENTS FOR SKATERS

Installation commanders will establish specific skating areas and PPE requirements for roller blading and skateboarding. Helmets are required for all skaters; elbow pads, kneepads, and wrist guards are strongly recommended.

0505 LISTENING DEVICES

Wearing headphones, earbuds/phones, or other listening devices while walking, running, skating, skateboarding, or bicycling, within three (3) feet of roadways is prohibited per reference (a). This does not apply to hearing aids nor does it negate the requirements for PPE where work conditions dictate hearing protection.

**VOLUME 3: CHAPTER 6**

**COUNCILS AND WORKING GROUPS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 6

COUNCILS AND WORKING GROUPS

0601 DISCUSSION

This chapter contains safe driving council and working group policy.

0602 COUNCILS AND WORKING GROUPS

060201. SAFE DRIVING COUNCIL

Marine Corps O-5 and higher commands will have a quarterly Safe Driving Council.

A. Safe Driving Council membership should include the Executive Officer or Chief of Staff who will serve as Chairman, Sergeant Major, Safety Officer, Engineering (if applicable), Facilities (if applicable), and Security (if applicable). Additional members will be included, as required, to supplement the work of the council in mishap investigations, traffic engineering studies, and educational and informational services.

B. Each meeting will review traffic safety training needs, all mishaps from the previous quarter, and goals for the next quarter.

C. The Safe Driving Council will:

1. Advise the Commander on the effectiveness of the Traffic Safety Program.
2. Evaluate and recommend specific command traffic safety policies.
3. Identify trends and prevent future traffic mishaps through mishap investigations, traffic safety surveys, reporting, and analysis.

D. The Safe Driving Council may be consolidated with the Force Preservation Council, Safety Council, or other scheduled staff meetings at the discretion of the Commander. Consolidated councils will ensure minutes of the meeting reflect a specific Safe Driving Council schedule and agenda.

E. The Safe Driving Council will meet at least quarterly or more frequently if circumstances warrant. The safety office shall retain the minutes and attendance rosters in accordance with record schedule 1000-34 of reference (d). A copy of the minutes will be provided to all council members and the commander.

F. The installation safety officer or manager will liaise with national, state, and local traffic safety agencies, civil authorities and neighboring military commands on behalf of the Safe Driving Council.

060202. SAFE DRIVING WORKING GROUP (SDWG)

Commands may consider establishing a SDWG to review, plan, and carry out special projects as directed by the Safe Driving Council Chairman.

**VOLUME 3: CHAPTER 7**

**TRAFFIC SAFETY PROGRAM RESPONSIBILITIES**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 7

TRAFFIC SAFETY PROGRAM RESPONSIBILITIES

0701 DIRECTOR,CMC SAFETY DIVISION (SD)

A. Maintain and regularly revise this Marine Corps Traffic Safety Program policy and ensure it is effectively implemented across the Marine Corps.

B. Promote traffic safety via seminars, conferences, in person and online training, and safety fairs.

C. Coordinate and evaluate traffic safety programs, policies, and equipment with the Department of Defense (DoD), other services, and governmental and non-governmental agencies.

D. Develop and distribute traffic safety training and awareness products.

E. Engage with industry, academia, and government and non-government agencies in order to maintain awareness of new and emerging programs and technologies.

F. Maintain and publish a list of Safety Division approved motorcycle safety and traffic safety training courses.

G. Review each unit's traffic safety program as part of the Command Safety Assessment (CSA) program.

H. Incorporate Marine Corps Traffic Safety program requirements in the Inspector General functional area checklist.

I. Analyze mishap data to identify mishap trends and causal factors. Provide conclusions and recommendations to the Assistant Commandant of the Marine Corps (ACMC) to support improvements to this policy.

J. Plan, budget, execute, monitor, and continuously improve the Marine Corps Traffic Safety Program.

0702 COMMANDER, NAVAL SAFETY CENTER (COMNAVSAFECEN)

A. Serve as the repository for Marine Corps reportable motor vehicle mishap reports, and provide traffic safety statistics, trend analyses, and recommendations to improve the overall Marine Corps Traffic Safety Program.

B. Support Marine Corps commanders with Class A mishap investigations, and other mishaps as requested, by providing access to mishap advisors and investigators.

0703 COMMANDER, MARINE CORPS INSTALLATIONS COMMAND (MCICOM)

A. Provide traffic safety services through installation commands to all Marine Corps military and civilian personnel. These safety services should include all Private Motor Vehicle (PMV) and motorcycle safety training.

B. Coordinate, manage, and provide resources for an effective Traffic Safety Program within each MCICOM region and on each installation.

C. Maintain a traffic law enforcement system at Marine Corps installations.

D. Maintain installation roads and sidewalks. Capital improvements will meet the safety standards established by the Federal Highway Administration (FHA), Department of Transportation (DOT), and reference (b).

E. Provide a quarterly report to Safety Division identifying deficiencies and corrective actions for all traffic, motorcycle, and Emergency Vehicle Operator Course (EVOC) training programs. This report should include current training status, training backlogs, range deficiencies, equipment shortages, unfilled seat numbers, and funding shortfalls. This reporting requirement is exempt from the reports control in reference (n).

F. Provide adequate training areas and facilities to meet training requirements.

G. Provide support for Levels 1, 2, and 3 motorcycle training.

H. Analyze mishap data to determine trends and hazards. Develop recommendations and countermeasures to support traffic education, enforcement, and engineering efforts.

0704 MARINE CORPS INSTALLATIONS COMMAND (MCICOM) REGIONAL COMMANDERS

A. Designate a Regional Traffic Safety Program Manager in writing.

B. Coordinate, manage, and provide resources for effective Traffic Safety Programs at designated installations.

C. Plan, budget, execute, monitor, and continuously improve Traffic Safety Programs.

D. Provide traffic safety training resources to tenants based on a needs analysis.

E. Maintain an education program to improve the knowledge, skills, and judgment of all motor vehicle operators.

F. Work with internal and external organizations such as Mothers Against Drunk Driving, National Highway Traffic Safety Administration (NHTSA), National Safety Council,

Motorcycle Safety State Coordinators, and local law enforcement to promote the traffic safety program.

G. Follow the NHTSA's Highway Safety Program Guidance. Requests for a variance to HSPG must be in writing and routed through MCICOM to Safety Division prior to implementing any less stringent requirements. Requests must identify the variance as not reducing or degrading highway safety.

H. Coordinate with host nation, state, and local officials to resolve on- and off-base traffic safety problems.

I. Provide quarterly reports to MCICOM identifying the current status, deficiencies, and resource requests for all traffic, motorcycle, and EVOC training programs. This report should include current training status, training backlogs, range deficiencies, equipment shortages, no-show rates, and funding shortfalls. This reporting requirement is exempt from the reports control in reference (n).

#### 0705 INSTALLATION COMMANDERS

A. Establish a Traffic Safety Program and assign a program manager responsible for developing, issuing, implementing, and enforcing program regulations.

B. Designate an Installation Traffic Safety Program Manager in writing.

C. Provide traffic safety training to tenant commands.

D. Plan, budget, execute, monitor, and continuously improve the Traffic Safety Program.

E. Maintain oversight of traffic safety, roads, traffic control, security issues, and base access.

F. Maintain an education program to improve the knowledge, skills, and judgment of all motor vehicle operators.

G. Enforce all motorcycle and recreational vehicle PPE requirements.

H. Coordinate with host nation, state, and local officials to resolve on- and off-base traffic safety problems.

I. Conduct and document quarterly Safe Driving Council meetings.

Follow the NHTSA's HSPG. Requests for a variance to HSPG must be in writing and routed through MCICOM to SD prior to implementing any less stringent requirements. Requests must identify the variance as not reducing or degrading highway safety.

J. Coordinate and implement traffic safety surveys and engineering services with the Federal Highway Administration and other agencies as applicable. Evaluate the condition of Marine Corps installation roads and streets in accordance with applicable codes and directives.

K. Provide quarterly reports to MCICOM identifying the current status, deficiencies, and resource requests for all traffic, motorcycle, and EVOC training programs. This report should include current training status, training backlogs, range deficiencies, equipment shortages, no-show rates, and funding shortfalls. This reporting requirement is exempt from the reports control in reference (n).

0706 COMMANDERS MARINE FORCES COMMAND, MARINE FORCES PACIFIC, MARINE FORCES RESERVES, MARINE FORCES SPECIAL OPERATIONS COMMAND, AND MARINE FORCES EUPORE AND AFRICA

A. Ensure Traffic Safety Programs are established at subordinate commands, including assigned reserve commands.

B. Ensure adequate resources are provided to subordinate unit Traffic Safety Programs.

C. Ensure O-5 and above commands conduct and document quarterly Safe Driving Councils. Safe Driving Councils may coincide with Force Preservation Councils or Safety Councils at the discretion of the commander.

D. Ensure subordinate commands maintain an education program to improve the knowledge, skills, and judgment of all motor vehicle operators.

0707 COMMANDER, MARINE CORPS RECRUITING COMMAND (MCRC)

A. Ensure Traffic Safety Programs are established at subordinate commands.

B. Ensure adequate resources are provided to support subordinate unit Traffic Safety Programs.

C. Ensure subordinate commands maintain an education program to improve the knowledge, skills, and judgment of all motor vehicle operators.

0708 COMMANDING OFFICERS (COs) AND OFFICERS-IN-CHARGE (OICs)

A. Establish in writing a traffic safety program within their unit's Safety Management System, with an assigned program manager responsible for developing, maintaining, implementing, and enforcing program regulations in accordance with enclosure (1). COs/OICs have the option to enter into a traffic safety program participation Memorandum of Agreement (MOA) with a MARFOR, MEF, Region, or Installation in lieu of establishing a traffic safety program.

B. Enter into an applicable traffic safety services MOA with the host installation safety office. Conduct traffic safety needs assessment in coordination with the installation safety office.

C. Implement the DoD Impaired Driving Prevention Program per reference (a).

D. Report and investigate all required motor vehicle mishaps per reference (c). Work with law enforcement, safety, and medical treatment facilities to ensure the accuracy and completeness of all mishap investigation reports.

E. Provide and document the completion of a local traffic safety hazards briefing for new personnel within 30 days of arrival. Examples of local traffic safety information include: host nation, state, and local laws; driving under the influence (DUI) legal penalties; traffic and driving patterns of the local area; emergency information; bicycle safety; and applicable traffic instructions.

F. Incorporate Risk Management principles into all motor vehicle operations. Emphasize the hazards associated with drinking and driving, speeding, driving while fatigued, long distance driving, and the dangers of distracted driving and smartphone use while driving. Emphasize the importance of completing mandatory motorcycle training and the wearing of proper PPE. Discuss proposed travel plans, mode of travel, length of travel time, and other contingencies prior to approving leave and special liberty, especially if out of bounds travel is being approved.

G. Provide traffic safety briefs to all personnel when:

1. Executing Permanent Change of Station (PCS),
2. Prior to major holidays,
3. Liberty periods,
4. Visiting foreign ports,
5. Returning from deployment, and
6. Temporary Assigned Duty (TAD) to an overseas location where a rental car will be driven to fulfill mission requirements.

H. Administer and document required traffic safety training for all command personnel.

I. O-5 and higher commands will conduct and document Safe Driving Councils quarterly. Safe driving councils may be consolidated with Force Preservation Councils or safety Councils at the discretion of the commander.

J. Communicate and enforce all motor vehicle PPE requirements.



K. Ensure mandatory motorcycle training is completed.

L. Incorporate traffic safety and risk management principles in all unit operations.

M. Establish motorcycle mentorship programs. The motorcycle mentorship program identifies inexperienced riders, fosters respectful riding practices, and provides continuing education opportunities for all riders throughout their military career.

N. Identify high-risk riders and drivers who pose the greatest risk for motorcycle and private motor vehicle mishaps. Establish additional measures such as tailored training to provide them with additional support and visibility to prevent potential mishaps. These individuals may be inexperienced vehicle/motorcycle operators, individuals with multiple traffic violation convictions, license suspensions or revocations. Identification as high risk is non-punitive and does not constitute a basis for Non-Judicial Punishment or adverse administrative action.

O. Permit personnel to attend required traffic and motorcycle safety training during duty hours. Course attendees will not be charged leave.

P. Educate personnel on installation rules and regulations for walking, running, bicycling, and rollerblading.

#### 0709 INDIVIDUAL RESPONSIBILITY

Individuals shall become familiar with the installation's rules and regulations.

A. All Marines, Sailors (serving with Marine Corps units or stationed on Marine Corps installations), and Civilian Marines are responsible for compliance with the provisions of this Order and applicable traffic laws.

B. Marine Reserve personnel are to refer to MARFORRES Force Order 5100.29, reference (v), for additional guidance.

**VOLUME 3: APPENDIX A**

**GLOSSARY**

**PART I. ABBEVIATIONS AND ACRONYMS**

**PART II. DEFINITIONS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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APPENDIX A

GLOSSARY

PART I. ACRONYMS AND ABBREVIATIONS

ANSI	-	American National Standards Institute
ATV	-	All-Terrain Vehicle
BRC	-	Basic Rider Course
CFR	-	Code of Federal Regulations
DoDI	-	Department of Defense Instruction
DOT	-	Department of Transportation
EVOC	-	Emergency Vehicle Operators Course
GMV	-	Government Motor Vehicle
GOV	-	Government Owned Vehicle
GVO	-	Government Vehicle Other
HSPG	-	Highway Safety Program Guidelines
JFTR	-	Joint Federal Travel Regulations
LSV	-	Low-Speed Vehicle
MIL-STD	-	Military Standard
MSF	-	Motorcycle Safety Foundation
NHTSA	-	National Highway Traffic Safety Administration
OHV	-	Off-Highway Vehicles
PPE	-	Personal Protective Equipment
SDWG	-	Safe Driving Working Group
TSM	-	Traffic Safety Manager
U.S.C.	-	United States Code

## APPENDIX A

GLOSSARYPART II TERMS AND DEFINITIONS

All-Terrain Vehicle (ATV) - Any motorized off-highway vehicle designed to travel on three or four low-pressure tires, having a seat designed to be straddled by the operator and handlebars for steering control, with or without passenger capability.

Civilian personnel - Civil service employees of the DoD Components (including Reserve Component Military Reserve Technicians unless in a military duty status), non-appropriated fund employees (excluding military personnel working part-time to avoid dual reporting), Corps of Engineers Civil Works employees, youth or student assistance program employees, Navy civil service mariners with the Military Sealift Command, and Army and Air Force Exchange Service employees.

Commercial Motor Vehicle - any self-propelled or towed motor vehicle used on a highway in interstate commerce to transport passengers or property when the vehicle:

A. Has a gross vehicle weight rating or gross combination weight rating, or gross vehicle weight or gross combination weight, of 4,536 kg (10,001 pounds) or more, whichever is greater; or

B. Is designed or used to transport more than 8 passengers, including the driver, for compensation; or

C. Is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or

D. Is used in transporting material found by the Secretary of Transportation to be hazardous under 49 U.S.C. 5103 and transported in a quantity requiring placarding under regulations prescribed by the Secretary under 49 CFR, subtitle B, chapter I, and subchapter C.

Conviction - An official determination or finding as authorized by applicable Federal, State, city, county, or host-nation laws or regulations, including a final conviction by a court or court-martial, whether based on a plea of guilty or a finding of guilty and regardless of whether the penalty is deferred, suspended, or probated; an un-vacated forfeiture of bail or other collateral deposited to secure a defendant's appearance in court; or a plea of nolo contendere accepted by a court.

Driving - Operating a motor vehicle on an active roadway or parking area with the motor running, including while temporarily stationary because of traffic, a traffic light, or stop sign. Does not include operating a motor vehicle with or without the motor running when pulled over to the side of, or off, an active roadway or parking area and has halted in a location where the driver can safely remain stationary.

Driving privileges - The authorization to operate any motor vehicle on an installation or in areas where traffic operations are under military supervision.

Emergency vehicles - Police, ambulance, fire, crash and rescue, explosive ordnance disposal, and hazardous material response vehicles.

Government Motor Vehicle - A motor vehicle that is owned, leased, or rented by a DoD Component (not an individual), primarily designed for over-the-road operations, and whose general purpose is the transportation of cargo or personnel. Examples of GMVs are passenger cars, station wagons, vans, ambulances, buses, motorcycles, trucks, and tractor-trailers. Vehicles on receipt to and operated by non-DoD persons, agencies, or activities such as the U.S. Postal Service or the American Red Cross are not GMVs.

Government Vehicle Other - Vehicles designed primarily for off-the-highway operation such as construction-tracked vehicles, forklifts, road graders, agricultural-type wheeled tractors, and aircraft tugs. Includes military combat and tactical vehicles (e.g., tanks, self-propelled weapons, armored personnel carriers, amphibious vehicles ashore, and high-mobility multipurpose wheeled vehicles).

Government Vehicle Other mishap - A vehicle mishap involving the operation of a GVO.

Highway Safety Program Guidelines - Section 402 of title 23 of the United States Code requires the Secretary of Transportation to promulgate uniform guidelines for State highway safety programs. These guidelines offer direction to States in formulating their highway safety plans for highway safety efforts that are supported with section 402 and other grant funds. The guidelines provide a framework for developing a balanced highway safety program and serve as a tool with which States can assess the effectiveness of their own programs. National Highway Traffic Safety Administration encourages States to use these guidelines and build upon them to optimize the effectiveness of highway safety programs conducted at the State and local levels.

Impaired Driving - Operating a motor vehicle under any impairment or intoxication caused by drugs or alcohol in violation of section 911 of reference (g) (for persons subject to jurisdiction under the Uniform Code of Military Justice) or in violation of equivalent laws in the state or other jurisdiction in which the vehicle is being operated.

Low Speed Vehicle (LSV) - Any 4-wheeled motor vehicle whose top speed is greater than 20 miles per hour but less than 25 miles per hour, and whose gross vehicle weight rating is less than 3,000 pounds.

Marine Corps Personnel - Military and civilian members of the USMC.

Military Personnel - All U.S. military personnel on active duty, Reserve or National Guard personnel on active duty or performing inactive duty training, service academy cadets, officer candidates in Officer Candidate School and Aviation Officer Candidate School, Reserve Officer Training Corps cadets when engaged in directed training activities, and foreign national military personnel assigned to the DoD Components.

Motorcycle - Any motor vehicle having a seat or saddle for the use of its operator and designed to travel on not more than three wheels (includes mopeds, motor scooters, and pocket bikes; does not include ATVs).

Motor Vehicle - Any transportation device with a motor powered by fossil fuels, electricity, or other external sources of energy, except devices moved by human power or used exclusively on stationary rails or tracks. For the purpose of this Order, LSVs, mopeds, and scooters are considered motor vehicles when operated on highways.

Motor Vehicle Mishap - A DoD mishap involving the operation of a motorized land vehicle by DoD personnel or the operation of a Government-owned motorized land vehicle by non-DoD personnel while operationally controlled by a DoD Component. Motor vehicle mishaps include collisions with other vehicles, objects, terrain features, animals, or pedestrians; personal injury or property damage due to cargo shifting in a moving vehicle; personal injury occurring within or by falling or jumping from a moving vehicle; and towing or pushing mishaps.

Note: Does not include ground and industrial mishaps such as injuries occurring while loading, unloading, mounting, or dismounting a nonmoving vehicle; cargo damaged by weather; damage to a parked government vehicle unless caused by an operating government vehicle; damage to a government vehicle caused by objects thrown or propelled into it by weather, natural phenomena, or fire when no collision occurred; or damage to a government vehicle when it is being handled as a commodity or cargo and not operating under its own power.

Recreational Off-Highway Vehicle (ROHV) - ROHVs are motorized off-road vehicles designed to travel on four or more non-highway tires, with a steering wheel, non-straddle seating, seat belts, an occupant protective structure, and engine displacement up to 1,000cc. Sometimes referred to as side-by-sides or utility vehicles.

State-approved course - Any course for which the sponsoring State or host nation grants a waiver of the riding skills portion of their requirements for the issuance of a motorcycle license or endorsement.

Text Messaging - Reading from or entering data into any handheld or other electronic device, including for the purpose of short message service (SMS) or SMS texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication.

Underage Drinking - Consumption of alcohol by military personnel under the legal drinking age for the location in which the consumption takes place.

**VOLUME 3: APPENDIX B**

**TRAFFIC SAFETY PROGRAM OVERVIEW CHECKLIST**

**SUMMARY OF SUBSTANTIVE CHANGES**

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**TRAFFIC SAFETY PROGRAM OVERVIEW CHECKLIST**

1) Installation Commanders

- a) Has an installation Traffic Safety Program Manager been designated in writing by the installations commander? Reference: 0705.B
- b) Is traffic safety training provided at the installation? Does the training meet the needs of the tenant commands? Reference: 0705.C
- c) Are PPE requirements for all vehicles being enforced on the installation? Reference: 0705.G
- d) Are quarterly Safe Driving Council meetings being held and documented? Reference: 0705.I
- e) Does the installation commander provide quarterly traffic safety reports to MCI Regional Traffic Safety Manager? Reference: 0705.L

2) Commanding Officers (COs)/Officers-in-Charge (OICs)

- a) Has a written Traffic Safety Program been established or has an MOA been entered into with the installation safety office? Reference: 0708.A
- b) Are local traffic safety orientation briefs being conducted and documented to all new personnel reporting for duty within 30 days of arrival? Reference: 0708.E
- c) Does the command identify, coordinate and document required traffic safety training to all command personnel? Reference: 0708.H
- d) Have the commands established Motorcycle Mentorship Programs? Reference: 0708.M

3) Chapter 2: Motor Vehicle Safety Program

- a) Is there a procedure in place to confirm GOV and POV operators are properly licensed for the vehicles they operate on public roadways? Reference: 0202.A
- b) Has a “Duty Related Operator Driving Time limits” policy been established? Reference: 0204
- c) Has an “Off-Duty Driving Limits” policy been established? Reference: 0206
- d) Have all military personnel under the age of 26 completed a minimum four hour course in traffic safety? Reference: 021001



4) Chapter 3: Motorcycle and Specialty Off-Road Vehicle Safety

a) Operationalizing Motorcycle Safety

1. Have all active and inactive riders been identified? Reference: 030301.B
2. Do motorcycle riders understand their responsibility to comply with the requirements outlined in this Order? Reference: 030301.C
3. Do riders report to S-3/Training and MMP President to register riding status, schedule training, and record training completion? Reference: 030302.A
4. Have riders training requirements and completion of required training been entered into MCTMS/MCTFS? Reference: 030303.A
5. Do riders receive orders to attend motorcycle safety training? Reference: 030303.C

b) Motorcycle Safety Training

1. Are riders scheduled for Level 1 training within 30 duty days of making the request and scheduled for the earliest available class? Reference: 030401.A
2. Are riders attending Level 2 training as soon as possible but in no case more than 180 days after completing Level 1 training, or being identified as licensed rider? Reference: 030402.A
3. Are riders taking refresher training at least every five (5) years from last date of training, and are they encouraged to take the refresher training annually? Reference: 030404

c) Motorcycle Mentorship

1. Has a MMP President been appointed in writing? Reference: 030801
2. Are MMP meetings conducted monthly during normal working hours? Reference: 030805
3. Do Commanders attend MMP meetings at least once per quarter? Reference: 030805.A

5) Chapter 5: Pedestrian and Bicycle Safety

- a) Does the Installation Commander designate and publish approved roadways and appropriate time periods for runners, to include running in formation, joggers, and walkers? Reference: 050203

- b) Does the Installation Commander designate and publish approved roadways where unauthorized vehicles may operate? Reference: 050204
  - c) Does the Installation Commander designate and publish specific skating areas and PPE requirements? Reference: 0504
- 6) Chapter 6: Councils and Working Groups
- a) Have O-5 and higher commands established a Safe Driving Council? Reference: 060201
  - b) Does the Safe Driving Council meet at least quarterly? Reference: 060201.E
  - c) Are the minutes and attendance rosters maintained for at least five (5) years? Reference: 060201.E

## VOLUME 4

MARINE CORPS AVIATION SAFETY

## SUMMARY OF VOLUME 4 CHANGES

Hyperlinks are denoted by *[bold, italic, blue and underlined font](#)*.

The original publication date of this Marine Corps Order (right header) will not change unless/until a full revision of the MCO has been conducted.

The date denoted by [blue font](#) (left header) will reflect the date this Volume was last updated.

All Volume changes denoted in [blue font](#) will reset to black font upon a full revision of this Volume.

**CANCELLATION**: The publication of this Volume cancels MCBUL 1650, AWARD FOR MISHAP-FREE FLIGHT TIME, MCO 1650.23E, AWARDS FOR MISHAP-FREE FLIGHT TIME, and MCO 5100.32A, GROUND SAFETY AWARDS

VOLUME VERSION	SUMMARY OF CHANGE	ORIGINATION DATE	DATE OF CHANGES
ORIGINAL VOLUME	N/A	15 OCT 2020	N/A
1	Administrative Changes		5 AUG 2021

Submit recommended changes to this Volume, via the proper channels, to:

CMC (SD)  
701 S. Courthouse Road  
Suite 2O050  
Arlington, VA 22204

DISTRIBUTION: PCN 10207241200

Reports Required:

- I. Serious Incident Report (SIR) (Report Control Symbol OPNAV 3750-1), Chapter 1, para 010401.C and Chapter 4, para 040101
- II. Hazard Report (Report Control Symbol OPNAV 3750-19), Chapter 1, para 010401.C and Chapter 4, para 040101
- III. Mishap Data Report (Report Control Symbol OPNAV 3750-20), Chapter 1, para 010401.C and Chapter 4, para 040101
- IV. Direct Enemy Action Incident Report (Report Control Symbol OPNAV 3750-21), chapter 1, para 010401.C and Chapter 4, para 040101
- V. U.S. Marine Corps Ground Climate Assessment Survey System (GCASS), i.e., Aviation Command Safety Assessment (CSA), Aviation Maintenance Climate Assessment Survey System (MCAS) or Ground Safety Assessment Survey (Report Control Symbol MC-5100-07), Chapter 5, para 050102.A

VOLUME 4: MARINE CORPS AVIATION SAFETY

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# MARINE CORPS SAFETY MANAGEMENT SYSTEM

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## REFERENCES

- (a) OPNAVINST 3750.6S
- (b) CNAF M-3710.7
- (c) SECNAVINST 6410.1A
- (d) OPNAVINST 3710.37A
- (e) MARINE AVIATION WEAPONS AND TACTICS SQUADRON ONE (MAWTS-1)  
NIGHT VISION DEVICE (NVD) MANUAL: 10TH EDITION
- (f) CNAP/CNAL INST 4790.7
- (g) MCO 5104.1C
- (h) OPNAVINST 4790.2J
- (i) MCO 5100.29C MARINE CORPS SAFETY MANAGEMENT SYSTEM

**VOLUME 4: CHAPTER 1**

**ROLES AND RESPONSIBILITIES**

**SUMMARY OF SUBSTANTIVE CHANGES**

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1	N/A	Administrative Changes	5 AUG 2021



CHAPTER 1

ROLES AND RESPONSIBILITIES

0101 AVIATION ACTIVITIES

Reference (a) defines the overarching Naval Aviation Safety Management System. This order supplements reference (a) with additional U.S. Marine Corps specific requirements.

0102 COMMANDING OFFICER

Commanding Officers of flying squadrons, Marine Unmanned Aerial Vehicle (VMU) Squadrons, Marine Aviation Logistic Squadrons (MALS), and Marine Aircraft Groups (MAGs) shall meet all of the designated timelines for their organization's reoccurring safety requirements in accordance with reference (i), this Volume, Chapter 5, *Aviation Safety Requirements*, and Figure 5-1.

010201. REQUIRED COURSES

Marine Corps aviation commanders who are aircraft reporting custodians shall complete the School of Aviation Safety (SAS) Aviation Safety Command (ASC) course within two years of assuming command. MALS Commanders, as aircraft reporting custodians and participants in the mishap investigation process, are encouraged but not required to attend.

0103 DEPARTMENT OF SAFETY AND STANDARDIZATION (DOSS) STRUCTURE AND RESPONSIBILITIES

All reporting custodian squadrons and permanent aviation detachments shall establish a Department of Safety and Standardization (DOSS) as detailed below.

010301. DIRECTOR OF SAFETY AND STANDARDIZATION (DSS)

A. Responsibilities

1. To the Commander and Executive Officer:

a. Access. Directly responsible to the commander on all safety and standardization matters. The DSS requires direct access to the commander and executive officer in order fulfill this billet's responsibilities. Fundamental to establishing the desired unit culture based on high standards is leaders understanding the DSS provides a critical quality assurance and oversight function. The DSS is to a squadron what the Quality Assurance Officer is to a maintenance department.

b. Programs and Policies. Responsible for implementing the commander's safety and standardization policies.

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c. Safety Requirements. Responsible to the commander for monitoring and completing all requirements detailed in Chapter 5 and Figure 5-1.

d. Procedures and Process. Develop and implement procedures which synchronize maintenance, operations, safety, and training towards a common goal of continuously managing risk. Ensure resources provided by the commander to support the Marine Corps Safety Management System are used efficiently and effectively to manage risk.

### 2. Squadron Training and Programs:

a. Training. The DSS shall ensure all unit training uses detailed planning processes that include deliberate Risk Management as detailed in Volume 2 of this Order.

b. Programs. Manage the Naval Air Training and Operating Procedures Standardization (NATOPS) program, and the aviation safety and ground safety portions of the safety management system. Use all available resources to identify, mitigate and if possible eliminate hazards to squadron personnel, aircraft, and property.

c. Standing Councils and Boards. Shall form the following standing bodies and ensure they meet as required in reference (a), (b) and this Order: Aviation Safety Council, Enlisted Aviation Safety Committee, Standardization Board, Human Factors Council, and Instrument Flight Board.

d. Risk Assessment Worksheets. In accordance with reference (b), pilots in command and mission commanders shall conduct a risk assessment prior to flight. This Order adds the requirement to use a Risk Assessment Worksheet specific to type, model, and series of aircraft. The Risk Assessment Worksheet may take any form the unit commander deems appropriate and shall be aligned with and include all risk assessment guidance provided by MAG and MAW commanders.

1) Risk assessments are critical components of a commander's safety management system. All the policy guidance in the world is meaningless if it fails to translate into tailored, practical, and relevant actions at the operator level to identify hazards, assess risk, and implement controls. The Risk Assessment Worksheet is the commander's list of factors that his or her Marines SHALL NOT forget to consider. It does not need to be lengthy, and it should not contain administrative minutia. It should be a checklist that assists in identifying hazards. The Risk Assessment Worksheet should be viewed by both the commander and the Marines who use it as a useful and relevant safety control that identifies hazards, specifically previously unidentified hazards presented by changes to planning assumptions or the operating environment. The RAW should be reviewed just prior to execution and at the most basic level should validate planning assumptions and allow Marines to account for any changes.

2) There is not a one-size-fits-all worksheet that covers all aircraft, missions, or commanders. MAG and MAW SOPs should include examples of Risk Assessment Worksheets to provide a starting point for commanders and their safety and operations teams.

Creativity and innovation are encouraged. A thoughtful examination of our risk assessment processes and our risk assessment tools is fertile ground for USMC process improvement.

3) A signed flight schedule with accompanying Risk Assessment Worksheets is the commander's confirmation to the world that a risk assessment has been completed to his or her satisfaction.

B. Qualifications and Restrictions

1. Qualifications

a. The DSS shall be a highly-qualified, winged aviator with credibility and demonstrated leadership performance. Due to the critical quality assurance and oversight functions performed by the DSS, this billet should be assigned to a field grade officer. Flight qualifications, leadership ability, and operational experience should be on par with all other department heads in order for effective checks and balances to occur.

b. Should be a graduate of the School of Aviation Safety Aviation Safety Officer (ASO) Course.

2. Restrictions

a. Should not be assigned collateral duties or responsibilities outside the DOSS.

b. Shall not be assigned to non-safety investigative duties to include: preliminary inquiries, JAGMAN Investigations and Field Flight Performance/Flight Status Selection Boards.

010302. AVIATION SAFETY OFFICER (ASO)

A. Responsibilities

1. To the Commander:

a. Advise and have direct access to the commander, the executive officer, and the DSS on all matters pertaining to the organization's aviation safety management system.

2. Squadron Training and Programs.

a. Develop, implement, and execute a proactive aviation safety management system in order to identify, mitigate, and if possible eliminate hazards.

b. Monitor flight and aircraft maintenance activities for compliance with appropriate safety and standardization directives.

c. Assist the Quality Assurance Officer with monitoring quality assurance and collateral duty programs as outlined in reference (h).

d. Conduct pre-mishap plan drills and training annually. Ensure the pre-mishap plan is updated prior to any change of operating base or area. Pre-mishap training should focus on risk assessment, mishap prevention, and on-post mishap duties and responsibilities. This training shall emphasize watch-stander roles and responsibilities during emergency situations to ensure personnel are trained and skilled in actions that prevent emergency situations from becoming mishaps.

e. Shall conduct quarterly Aviation Mishap Board (AMB) training to ensure the squadron can activate both a primary and alternate AMB if required. This can be as simple as a quick meeting to review checklists, confirm recall rosters and appointment letters, and receive updated guidance from the commander or executive officer. AMB membership should not be a voyage of discovery for the command post-mishap.

f. The ASO should be assigned the role of Aviation Safety Awareness Program (ASAP) administrator.

B. Qualifications and Restrictions

1. Qualifications

a. Commanders shall select ASOs with the same credibility, capability and decision making capacity as those selected for Weapons and Tactics Instructor (WTI) and Quality Assurance Officer (QAO). Commanders should consider experience level, demonstrated judgment and maturity, and an officer's ability to work with and lead other departments within the squadron.

b. Shall meet the prerequisites listed in paragraph 020101, and shall be a graduate of the SAS Aviation Safety Officer Course. Every effort should be made to assign an officer that has completed the ASO course within the previous four years.

2. Restrictions

a. Should not be assigned collateral duties or responsibilities outside the DOSS.

b. Shall not be assigned non-safety investigative duties.

010303. NATOPS OFFICER

A. Responsibilities

1. Establish and maintain a proactive standardization program per appropriate NATOPS flight manuals.

2. Administer the NATOPS program per reference (b).
3. Conduct NATOPS jacket audits per reference (b).
4. Coordinate Unit NATOPS evaluations with the respective T/M/S program manager.

010304. ENLISTED NATOPS NCO/AVIATION SAFETY SPECIALIST

A. Responsibilities

1. The NATOPS NCO/Aviation Safety Specialist shall assist the NATOPS Officer and ASO in all matters pertaining to NATOPS and Aviation Safety programs, enlisted flight crew training, standardization, human factors council, and enlisted safety committees.

B. Qualifications

1. All organizations with enlisted aircrew assigned shall have a NATOPS NCO/Aviation Safety Specialist.
2. The Enlisted NATOPS NCO shall be a highly-qualified, winged aircrew, on flight orders, and shall be an NCO or higher.
3. The Enlisted NATOPS NCO shall be an Assistant NATOPS Instructor (ANI), or in the ANI syllabus.
4. Shall not be assigned collateral duties or responsibilities outside the DOSS.

0104 AEROMEDICAL TEAM

The Flight Surgeon (FS), Aeromedical Safety Officer (AMSO), and Aeromedical Safety Corpsman (AMSC) comprise the Aeromedical team and are assigned throughout the Marine Corps chain of command. The Aeromedical team participates in risk management through their engaged and proactive efforts to ensure the highest levels of health and safety for aviation squadrons. In order to improve unit operational performance and readiness, it is paramount that each team member be highly visible and routinely interact with squadron members in the workspaces.

010401. RESPONSIBILITIES

- A. Inform commanding officers of aeromedical factors affecting operations, readiness, and safety per reference (a) and (c).
- B. Participate fully in squadron safety boards, human factors boards, and councils per reference (a) and (c).

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C. Investigate environmental hazards associated with the flight environment and the aircraft maintenance environment. Assist the ASO with preparing all Physiological Episodes (PHYSEP) reports, Hazard Reports (HAZREP), and Safety Investigation Reports (SIREPs) that contain physiological and Aviation Life Support Systems (ALSS) causal factors, per reference (a).

D. Participate as members of aviation mishap boards. Provide expertise in the aeromedical and physiological aspects of the flight environment, human factors, and aviation life support systems to the board.

010402. FLIGHT SURGEON (FS)

A. Responsibilities

1. Shall spend at least 50 percent of their regular duty time directly engaged in aeromedical activities in the squadron spaces per reference (c), and be provided suitable work spaces to conduct those activities.

2. If assigned to an aviation mishap board, 100 percent of their duty time will be dedicated to completing the board's assigned investigation. They may perform clinic duty as their duties on the board allow while waiting on the completion of Engineering Investigations, per reference (a) and (c)

3. Assist the AMSO in managing and mitigating all issues related to Aeromedical safety - (sleep and fatigue, Light Amplification by Stimulated Emission of Radiation (LASER) safety, Chemical/Biological/Radiological (CBR), heat and cold related injuries, nutrition and diet, and aircrew endurance), per reference (b) and (c).

B. Qualifications

1. The Flight Surgeon shall be a licensed physician with at least a one year internship completed who has graduated from the 6-month Aeromedical Officer Course.

010403. AEROMEDICAL SAFETY OFFICER (AMSO)

A. Responsibilities

1. Assist the ASO in managing and mitigating all hazards related to Aeromedical safety - (sleep and fatigue, LASER safety, Chemical/Biological/Radiological (CBR), heat and cold related injuries, nutrition and diet, and aircrew endurance), per reference (b) and (c).

2. Assigned as the primary academic instructor for aircrew annual and pre-deployment training requirements, per reference (b).

3. Assigned as the Fleet Air Introduction/Liaison of Survival Aircrew Flight Equipment (FAILSAFE) program manager, per reference (b).

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4. Liaise with Naval Aviation Survival Training Program (NASTP) on all matters regarding survival training, per reference (b).

5. Administer a local Anthropometric Program, per reference (d).

6. Supervise the Night Image Threat Evaluation (NITE) Lab program and provide NITE Lab training as required, per reference (e).

7. Manage the Aircrew Survival Radio Program, per reference (f).

### B. Qualifications

1. The AMSO shall be a Naval Aerospace and Operational Physiologist (NAOP) who has graduated from the School of Aviation Safety, Aviation Safety Officer (ASO) Course.

2. Shall be a MAWTS-1 NITE Lab instructor, Technical LASER Safety Officer and Administrative LASER Safety Officer.

### 010404. AEROMEDICAL SAFETY CORPSMAN (AMSC)

#### A. Responsibilities

1. Assist the AMSO in managing and mitigating all hazards related to Aeromedical safety - (sleep and fatigue, LASER safety, Chemical/Biological/Radiological (CBR), heat and cold related injuries, nutrition / diet, and aircrew endurance), per reference (b) and (c).

2. Assist the AMSO with performing the duties required by the Aeromedical Safety Program noted in paragraph 010401 and 010402(A).

3. Liaise with local medical personnel to cultivate a relationships that contribute to the unit's readiness.

4. Provide medical intelligence health threat briefs for all potential deployment sites.

5. Conduct basic medical training such as Cardiopulmonary Resuscitation (CPR) and other appropriate self and buddy aide life-saving skills.

6. Provide medical support during operations and training.

7. Assist in the administration of the unit's LASER Safety Program. Manage the LASER inventory, per reference (g).

8. Provide NITE Lab training as required, per reference (e).

9. Serve as the Aircrew Survival Radio Web Application Operator and provide over-the-horizon radio training support, per reference (f).

**B. Qualifications**

1. The AMSC is an integral part of the Aeromedical team. The AMSC shall be a designated Aerospace Physiology Technician (L07A) assigned to the Marine Corps from the Navy.

2. Qualify as a MAWTS-1 NITE Lab instructor.

3. Qualify as an Administrative LASER Safety Officer (ALSO). It is also highly recommended the AMSC be a qualified Tactical LASER Safety Officer (TLSO).



**VOLUME 4: CHAPTER 2**

**SCHOOL OF AVIATION SAFETY**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 2

SCHOOL OF AVIATION SAFETY (SAS)

0201 NOMINATION GUIDANCE

020101. Aviation Safety Officer (ASO) COURSE

A. Piloted Platform Squadron Guidance:

1. ASOs should possess the operational experience commensurate with that of a squadron Weapons and Tactics Instructor (WTI) of Quality Assurance Officer (QAO). ASO candidates for manned aircraft squadrons should have completed an overseas deployment in the type/model/series aircraft flown by the sponsoring squadron.

2. The ASO candidate shall be a highly-qualified winged aviator, and shall be the rank of captain or higher.

3. VMA and VMFA: the ASO candidate (both pilot and NFO) shall possess the minimum flight leadership designation of section lead / section lead equivalent. ASO candidates near completion of the syllabus may be nominated with a designation waiver.

4. VMGR, VMR: the ASO candidate shall be a designated transport plane commander.

5. HMH, HMLA, VMM: The ASO candidate shall be a designated helicopter aircraft commander, attack helicopter commander, utility helicopter commander, or tiltrotor aircraft commander with at least 50 hours as the aircraft commander in the type aircraft flown by the sponsoring squadron.

B. Remotely-Piloted Aircraft Squadron:

1. The ASO candidate shall be designated a mission commander for unmanned aircraft squadrons. This designation need not be limited to the specific unmanned system of the sponsoring squadron.

2. The ASO candidate should be of the rank of captain or higher. 1stLts who are mission commanders may be nominated with a rank waiver.

C. Aeromedical safety officers and flight surgeons may attend the ASO course with no flight leadership designations.

D. Nomination process: See paragraph 0202.

E. Waiver criteria and authority:

1. Exceptional candidates ready to serve as ASOs ahead of their peers and prior to meeting the enumerated requirements will be considered on a case-by-case basis. Waiver authority to deviate from these requirements resides with the next higher echelon in the chain of command.

020102. AVIATION SAFETY COMMAND (ASC) COURSE

This course trains commanding officers, executive officers, prospective executive officers and detachment officers-in-charge in policies, philosophy, and techniques for managing an effective Safety Management System (SMS). The ASC course is a senior-level forum, and candidates should be the rank of major or higher. Waiver authority to deviate from these requirements resides with the next higher echelon in the chain of command.

020103. AVIATION SAFETY MANAGER (ASM) COURSE

This course prepares captains, majors, lieutenant colonels, and DoD civilians to be aviation safety managers in Marine Aircraft Group (MAG), Marine Air Wing (MAW), MARFOR, HQMC, and air station staffs. This course builds upon the knowledge gained in the ASO and ASC courses. It satisfies the four year ASO currency training requirement. This course is given annually.

0202 SAS NOMINATION PROCESS

SAS publishes USMC quotas in March for the following fiscal year quotas.

A. No later than 1 June, sponsoring units (MARFORCOM, MARFORPAC, 4th MAW, MCIEAST, MCIWEST, MCIPAC, VMX-1, HMX-1 and MAWTS-1) will provide CMC Safety Division with their number of required seats for ASO, ASC and ASM for the upcoming FY. Particular attention will be given to change of command dates and deployment return dates. Units do not need to provide specific head counts broken down by session, just total required seats.

B. CMC Safety Division will publish unit allocations by 01 August. This publication will provide a list of available class seats and nomination due dates for each ASO, ASC and ASM class.

C. MARFORs, MAWs and MAGs shall establish timelines which allow adequate review by Higher Headquarters (HHQ). Sponsoring units who fail to meet submission deadlines compromise the ability to send additional students when extra seats are made available and risk wasting valuable safety training.

D. ASO and ASC are TECOM-funded courses. Upon submission of the final roster to SAS for each course, CMC Safety Division will coordinate TECOM and send TECOM funding letters to students and sponsors no later than one week prior to course commencement. ASM and Crew Resource Management Instructor (CRMI) are unit-funded courses by SQDN/MAW/MARFOR.

**VOLUME 4: CHAPTER 3**

**AVIATION SAFETY AWARENESS PROGRAM (ASAP)**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 3

AVIATION SAFETY AWARENESS PROGRAM (ASAP)

0301 GENERAL

ASAP is a reporting tool that provides Marines and their commanders a mechanism for identifying hazards, and a communication loop that confirms this information has been successfully transmitted to the leaders assigned the responsibility for making risk decisions. ASAP transmits safety related information directly from Marines and Sailors to safety officers and squadron leadership, and allows these identified hazards to be addressed at the lowest level. ASAP is a program of record, reference DADMS ID 57342. Participation in ASAP is required by reference (b), NATOPS General Flight and Operating Instructions Manual, paragraph 3.15.

030101. Procedures will ensure proper control and use of de-identified operational and human performance data entered by Marine Corps personnel and contractors into ASAP.

030102. ASAP data shall not be used as evidence to support punitive or administrative action. Fostering and maintaining a non-retributive environment that focuses on eliminating hazards in support of a just culture vice a punitive culture is essential to increasing operational readiness and reducing preventable mishaps.

A. ASAP is designed to accomplish the following tasks:

1. Identify errors, potential precursors to mishaps, and improve operational efficiency.
2. Identify and proactively address unfavorable trends in aircrew training, aircraft maintenance, and flight and ground operations using human factors data and error reporting.
3. Validate existing operating and maintenance procedures.
4. Identify required changes to procedures based on metrics using aggregate data.
5. Establish leading indicators using human factors that may lead to mishaps and diminish readiness.
6. Track all command safety requirements.

030103. ASAP Program Implementation

A. ASAP Officers shall assigned at the squadron level and designated in writing by the Commanding officer. ASAP Reviewer roles shall be assigned at the MAG, MAW, MARFOR, and HQMC levels. The ASAP User Manual can be found under “User Manual” at: <https://asap-usmc.com>.

B. The squadron and air station are the primary focus levels for ASAP data collection and initial review. All personnel who operate on and around airfields should participate and have access to the program. The squadron Aviation Safety Officer (ASO) or designated unit ASAP Officer should be the first ASAP administrator to detect critical and time-sensitive issues; the MAG and MAW ASOs or designated MAG and MAW ASAP reviewers are responsible for tracking MAG and MAW trends.

C. ASAP Reviewers shall be Naval Aviators, Naval Flight Officers, senior Naval Aircrew, senior Maintenance Personnel, or Government employees/contractors designated by CMC Safety Division, MARFOR and MAW Commanding Generals, MAG Commanding Officers, and squadron Commanding Officers. Selected reviewers should be experienced members of the aviation community capable of identifying critical emerging hazard and risk information being reported using the ASAP.

030104. ASAP Reporting

A. One member of each flight event shall submit an ASAP report for each flight event. The Division Lead, Section Lead, Pilot in Command, or Mission Commander is responsible for submitting the report. For cross country or multiple leg flights, one report per day is the minimum requirement. Additionally, one maintenance member from each maintenance shift shall submit an ASAP report; the senior member of Maintenance Control is responsible for meeting this requirement. To ensure anonymity, each squadron utilizes a common username and password to make an entry. The user name and password assigned will depend on the role of the individual in the squadron: Aviator, Aircrew (where applicable), or Maintenance. The squadron ASAP Officer will manage the usernames and passwords for each grouping.

B. An ASAP report can be designated as either an “Event” report or a “No Event” report.

C. “Event” reports provide details regarding a specific hazard to operations that was observed before, during, or after the flight event. “Event” reports also collect data related to command climate and other specific questions as directed by squadron CO, MAG, MAW, MARFOR, or HQMC. Separate events should be logged in separate reports to assist with data collection.

D. “No Event” reports are submitted when no significant hazards were observed before, during, or after a flight event or shift of maintenance. “No Event” reports collect data related to command climate and other specific questions as directed by squadron CO, MAG, MAW, MARFOR, or HQMC.

C. Other flight event and maintenance personnel are encouraged to submit ASAP reports if they observe additional hazards to operations; there is no limit on how many reports an individual, flight event, or maintenance shift may submit. Commanders, safety officers, and leaders at all levels should regularly encourage Marines to make ASAP reports, and provide feedback on the reports made.

D. ASAP Officers should screen their unit's "Event" reports daily. Once the report has been reviewed and in the case of any significant hazard identified responded to by the commanding officer, other ASAP Reviewers external to the unit will be able to see the event details and command response contained within the report. However, command climate data will not be visible outside the reporting squadron.

**VOLUME 4: CHAPTER 4****MISHAP REPORTING****SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 4

MISHAP REPORTING

0401 GENERAL

040101. Reporting of defined naval aviation mishaps shall be in accordance with reference (a) except as made more restrictive by this Order.

040102. Squadrons and units experiencing a mishap will apply cost estimate procedures in accordance with reference (a) to obtain an initial mishap classification. Depot-level Planner and Estimator teams or a Marine Aviation Logistics Squadron representative shall participate in and approve the final cost. Commanding officers must capture the worst-case cost estimate to determine what initial mishap investigation steps need to be taken. When in doubt, assume the worst, convene the AMB, and begin the required post-mishap procedures. The safety information lost by delaying the investigation sets the conditions for the next identical mishap. The mishap classification may be updated as the cost estimate is updated per reference (a). Modifying an initial mishap classification will not be viewed adversely.

040104. Squadrons and units should not hesitate to request investigation assistance from COMNAVSAFECEN and the CMC Safety Division.

040105. All safety message traffic shall include CMC (SD) as an information recipient.

040106. Squadrons should contact CMC (SD) at 703-604-4173 with any questions on the above.

040107. Reporting timeline is per reference (a).

**VOLUME 4: CHAPTER 5**

**AVIATION SAFETY REQUIREMENTS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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## CHAPTER 5

AVIATION SAFETY REQUIREMENTS

## 0501 SURVEYS AND ASSESSMENTS

050101. SAFETY CLIMATE SURVEYS

Safety climate surveys are valuable tools for assessing the health of a unit's safety culture, as well as levels of trust and communication within the unit.

A. All aviation group headquarters (i.e., Marine Air Group (MAG), Marine Wing Support Group (MWSG), Marine Air Control Group (MACG) and their Personnel Support Detachments) shall conduct the Higher Headquarters (HHQ) survey within 90 days of change of command and annually thereafter. HHQ surveys can be accessed through the Ground Climate Assessment Survey System (GCASS) website. The CMC (SD) website (<https://www.safety.marines.mil/>) contains a button that the user may use to access the GCASS website (<https://www.semperisurveys.org/>).

B. All flying, Unmanned Aircraft System (UAS), MALS, and permanent aviation detachments shall conduct a survey to assess command climate within 30 days of a change of command in order to establish a baseline for the new commander. All surveys can be accessed through the Marine Corps Aviation Survey System (MCASS) website. The CMC SD website contains an icon to access the MCASS website (<https://www.marineaviation.org/>). This survey shall include the below components as applicable to the command:

1. The Command Safety Assessment (CSA) obtains input from aircrew - those individuals who operate aircraft.

2. The Maintenance Climate Assessment Survey (MCAS) obtains feedback on safety climate perceptions from aircraft maintainers.

3. The Administrative Support Personnel Assessment (ASPA) survey is available for non-aircrew, non-maintenance personnel within aviation units and organizational level maintenance units to include S-Shop personnel who do not fly or perform maintenance.

C. Commanders in their second and subsequent years shall conduct one of the following annually from the date of the last survey.

1. Appropriate CSA/MCAS/ASPA surveys. Ensure the proper survey is assigned to each division within the squadron.

2. Culture Workshops. Aviation contact Commander Naval Air Forces (CNAF). Ground units contact Safety Division. See Volume 1, *Marine Corps Safety Management System Overview*, Chapter 6, *Safety Assurance*.

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3. A NAVSAFECEN Risk-Based Safety Assessment. The command may use a NAVSAFECEN assessment as a post-change of command baseline survey as long as the 30-day requirement is satisfied.

D. Any of the above listed surveys shall also be conducted following a change of aircraft model, permanent change of operating base, or a change of significant number of personnel in key billets.

E. All aviation support squadrons (MWSG squadrons, MACG squadrons and Marine Wing Headquarters squadrons) shall adhere to the Marine Corps GCASS requirements detailed in Volume 1 of this order.

F. Aviation commanding officers should access, via the GCASS website, a set of ground safety climate surveys to assess the posture of a commander's ground safety management system. Marine squadrons shall access all ground safety climate surveys on the GCASS website.

G. Completion of the baseline and annual safety climate surveys (or their authorized replacements) are considered a minimum acceptable requirement.

H. Squadron CO/OICs shall verbally debrief their Higher Headquarters on their CSA, MCAS, and ASPA results within 14 days of receiving their survey debrief.

### 050102. COMMAND SAFETY ASSESSMENT

A. CMC SD will conduct command safety assessments upon request, and at a minimum of every 36 months. See Volume 1, *Marine Corps Safety Management System Overview*, Chapter 6, *Safety Assurance*.

### 0502 COUNCILS, COMMITTEES AND BOARDS

#### 050201. AVIATION SAFETY COUNCIL

A. Squadrons, air stations and facilities, and other large aviation commands shall form an Aviation Safety Council (ASC) per reference (a). The council will set goals, manage assets, review safety-related recommendations, and keep records of their meetings.

B. ASCs meet at least quarterly.

C. The council, with the ASO, GSO and the unit FS or AMSO as permanent members, should review command plans, policies, procedures, conditions and instructions to ensure currency, correctness and responsiveness to safety recommendations. Membership should also include the XO, and the Aviation Ordnance Officer. Composite squadrons shall include the detachment officers-in-charge (OICs), and at least one safety representative from each detachment.

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D. Minutes from council meetings shall be routed for endorsement, comment and action to CO via his designated routing chain. The ASO shall ensure the minutes are published and disseminated to all officers, staff NCOs, and aircrew.

E. The CO shall ensure aviation detachments not co-located with the squadron are included in the squadron's ASC, and may direct additional supporting aviation safety council duties to the remotely located detachment commanders.

### 050202. ENLISTED AVIATION SAFETY COMMITTEE (EASC)

A. Flying squadrons and MALS shall form an EASC. The EASC shall identify and review safety deficiencies and make recommendations for improving safety practices and awareness. Membership shall include, but is not limited to, enlisted representatives from all work centers and divisions.

B. EASCs meet at least [monthly per reference \(a\)](#).

C. Minutes from the meeting shall be routed for endorsement, comment, and action to the CO via his designated routing chain. The Enlisted NATOPS NCO or Aviation Safety Specialist shall ensure the minutes are published and disseminated to all work centers, aircrew and maintenance personnel.

D. The CO shall ensure aviation detachments not co-located with the squadron are included in the squadron's EASC, and may direct additional EASC duties to remotely located detachment commanders.

### 050203. STANDARDIZATION BOARD

A. Shall review flight operations execution within the squadron or unit, to include all tactics, techniques and procedures to ensure standardization, and that flight operations are in accordance with the appropriate OPERATING AREA Course Rules, Maneuver Description Guides (MDG), NATOPS, and squadron SOP. The Standardization Board shall ensure all designated instructors are held to the highest standards of performance and conduct. When instructors do not meet standards, the board will recommend corrective actions to the CO.

B. Shall recommend approval of new flight designations to the CO, review previous designations of all members of the command, and review current selection and designation requirements.

C. Membership will consist of the XO, DSS, Operations Officer, ASO, NATOPS Officer, Weapons and Tactics Instructor (WTI), unit Flight Leadership Standardization Evaluator (FLSE), WTI Crew Chief Instructor, and flight surgeon, where applicable, and other personnel as directed by the CO. Composite squadrons shall include the detachment OIC or other representative from each detachment.

D. Contract Instructors shall be Standardization Board members at Fleet Replacement Squadrons (FRS) and should be included as squadron standardization board

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members for non-FRS squadrons. Marine Aviation Training System Site (MATSS) officers-in-charge at each Marine Corps Air Station shall ensure standardization of Contract Instructors per Training and Readiness Programs of Instruction (POI), T/M/S specific directives, and all other applicable Marine Corps directives.

E. The CO shall make comments on published minutes. A formalized tracking tool such as a read and initial board should be used to ensure all aircrew have read Standardization Board results.

F. Active duty squadron Standardization Boards meet at least monthly; reserve squadron boards meet at least quarterly.

G. The CO shall ensure aviation detachments not co-located with the squadron are included in the squadron's Standardization Board, or delegate the Standardization Board duties to the detachment commander.

### 050204. HUMAN FACTORS COUNCIL (HFC)

A. The HFC is a non-punitive forum used to evaluate an individual's current level of training, qualification progress, flight discipline, and job performance. The HFC shall review the personal and professional characteristics of all aircrew that fly in squadron aircraft. The HFC shall include the CO or XO, SgtMaj, ASO, Operations Officer, Pilot Training Officer (PTO), NATOPS Officer, the FS and other personnel as directed by the commander. Composite squadrons shall include the detachment officers-in-charge, or other designated representatives from each detachment.

B. Active duty squadron HFCs meet at least monthly; reserve squadron HFCs meet at least quarterly.

C. HFC reports, notes, materials or other products shall be retained by the CO and the Human Factors Board. All materials shall be treated and labelled as For Official Use Only (FOUO). This information should be protected against inappropriate disclosure, and retained until no longer relevant. This information is for the CO's use to identify hazards and manage associated risks; it shall be kept in confidence and not be used for disciplinary or administrative action.

D. The CO shall ensure aviation detachments not co-located with the squadron are included in the squadron's HFC, or delegate the HFC to the detachment commander.

### 050205. HUMAN FACTORS BOARD (HFB)

A. HFBs are an administrative, formal review of all known factors potentially affecting an individual's ability to perform aircrew responsibilities in a safe and efficient manner. The HFB shall identify specific problems and provide a course of action for resolution. A formal report with conclusions and recommendations shall be produced and forwarded to the CO for

determination of final action. HFBs are non-punitive, and results shall not be used for disciplinary action.

B. COs shall convene an HFB whenever an aircrew's ability to safely perform flight duties is in question. Normal board composition includes the XO (chairman), an ASO, a flight surgeon, and another experienced officer. In the event an enlisted crew member is the subject of the HFB, a senior enlisted crew member shall be included.

050206. INSTRUMENT FLIGHT BOARD

Squadrons may be required to maintain an Instrument Flight Board in accordance with reference (b). The members of this board are charged with conducting instrument evaluations. **Board members shall be designated in writing.** Instrument flight procedures, standardization issues, or concerns not adjudicated by the Standardization Board shall be forwarded for resolution to the Instrument Flight Board.

**Figure 5-1: The Safety Requirements Matrix**

The Safety Requirements Matrix provides commanders and safety officers a visual reference tool for the specific completion of aviation requirement contained in this order. These requirements are the minimum acceptable standards for flying squadrons, VMU squadrons and MALS. Satisfaction of all minimum requirements demands close coordination across all departments within the squadrons, groups, wings and MARFORs. Deviations from these requirements must be intentional, and authorized only after a deliberate risk management process has been applied and the identified deviation risks have been accepted in writing at the appropriate level. Compliance with all aviation safety management requirements will be tracked using the Aviation Safety Awareness Program at <https://asap-usmc.com> under the tracker tab > standard report. Updates to populate the standard report will be made under the tracker tab > updates > requirements.

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<b>Safety Requirements Matrix</b>				
<b>Status Elements</b>	<b>Requirement</b>	<b>Reference</b>	<b>Background</b>	<b>Notes</b>
30-Day Command Safety Assessment /Survey Baseline	Within 30 days of Change of Command	MCO 5100.29C OPNAVINST 3750.6S	Determine baseline command climate.	
Annual Command Safety Assessment /Survey	Annually, from the date of completion of the 30-day baseline survey	MCO 5100.29C OPNAVINST 3750.6S	Determine command climate.	Cultural Workshop or Safety Assessment may be substituted to meet this requirement.
CMC SD Command Safety Assessment Visit	Every 36 months, conditionally, or upon request	MCO 5100.29C	Not to be confused with the surveys	Subject to CMC SD evaluator availability
Human Factors Council	Monthly for active component / Quarterly for reserve component	MCO 5100.29C OPNAVINST 3750.6S	Review of the physical condition, psychological well-being, attitude and motivation of aircrew and squadron personnel	
Standardization Board	Monthly for active component / Quarterly for reserve component	MCO 5100.29C	Discuss standardization within the squadron and maintain selection and qualification process of aircrew.	
Enlisted Aviation Safety Committee	Monthly	MCO 5100.29C OPNAVINST 3750.6S	Discuss safety deficiencies and recommend improvements to safety practices and awareness.	
Aviation Safety Council	Quarterly	MCO 5100.29C	Review command plans, policies, procedures, conditions and instructions to ensure their currency, correctness and responsiveness to safety recommendations.	
NATOPS Inspection	18 Months	OPNAVINST 3710.7	Ensure squadron and aircrews are adhering to NATOPS procedures and requirements.	
Naval Safety Center Risk-Based Safety Assessments	Substitute for Command Safety Assessment /Survey	MCO 5100.29C OPNAVINST 3750.6S	Identify organizational strengths and potential hazards, which are often the results of a unit's culture.	Squadrons are selected by NAVSAFECEN
CO Aviation Safety Commanders Course	Prior to change of command	MCO 5100.29C OPNAVINST 3750.6S	Officers slated for command must complete appropriate aviation command related training.	Complete prior to assuming command.
Aviation Safety Officers Course	As per OPNAVINST	MCO 5100.29C OPNAVINST 3750.6S	Ensure officers assigned complete SAS ASO Course prior to assuming billet	



**VOLUME 5**

**RECREATION AND OFF-DUTY SAFETY (RODS) PROGRAM**

**SUMMARY OF VOLUME 5 CHANGES**

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**CANCELLATION:** The publication of this Volume cancels MCO 5100.30B, MARINE CORPS RECREATION AND OFF DUTY SAFETY (RODS) PROGRAMS

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VOLUME 5: RECREATION AND OFF-DUTY SAFETY (RODS) PROGRAM

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**REFERENCES**

- (a) SECNAVINST 5100.10K, Department of the Navy Safety Program 12 May 2015
- (b) MCO 5100.29C, Volume 2, Risk Management
- (c) MCO P1700.27B CH 1, MCCA Policy Manual, 9 Mar 2007
- (d) DODI 6055.07, Mishap Notification, Investigation, Reporting, and Record Keeping, June, 6, 2011
- (e) MCO P5102.1B CH 2, Navy and Marine Corps Mishap and Safety Investigation Reporting, and Record Keeping Manual of 7 Jan 2005
- (f) MCO 5100.29C, Volume 1, Marine Corps Safety Management System (MCSMS)
- (g) MCO P1710.30E
- (h) MCO 1700.39, Marine Corps Recreation Program
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**VOLUME 5: CHAPTER 1**

**RECREATION AND OFF-DUTY SAFETY PROGRAM**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 1

RECREATION AND OFF-DUTY SAFETY PROGRAM

0101 DISCUSSION

This chapter assigns responsibilities and establishes requirements for the Marine Corps Recreation and Off-Duty Safety (RODS) Program. This chapter significantly revises prior policy by emphasizing the continuous application of the Risk Management (RM) principles and process as detailed in Volume 2 of this order, and the requirements detailed in reference (a).

0102 BACKGROUND

The Marine Corps is committed to the safety of all Marines, their families, and the public. This commitment extends to all recreational and off-duty activities, as the loss of personnel to mishaps adversely affects both unit readiness and our Marines' families and communities. An effective RODS program is vital to individual and unit health, and overall operational readiness.

The RODS program has historically been managed separately from other operational safety program elements. This chapter incorporates RODS into the new Marine Corps Safety Management System (MCSMS) to better align the RODS program requirements and to highlight the fundamental goal of the system, to have Marines continuously identifying hazards, assessing risk, and implementing controls. Integration of RODS into the MCSMS framework allows the Marine Corps to systemically extend RM and other safety principles to the recreational and off-duty environment, which is critical because historically most Marines are injured and killed when they are off-duty.. This Volume and the larger MCSMS provide leaders with management tools to help identify recreational and off-duty hazards and make sound risk decisions.

0103 SCOPE

010301. THIS CHAPTER APPLIES TO THE FOLLOWING:

- A. All Marine Corps active duty military members, on-duty and off-duty.
- B. All Marine Corps reserve personnel, on-duty and off-duty while in any type of active duty status.
- C. All Marine Corps civilian employees while on-duty or in an official travel status.
- D. All individuals participating in recreational activities on Marine Corps owned or controlled property.

0104 CORE PROGRAM REQUIREMENTS

010401. SAFETY POLICY STATEMENT

Commander's intent regarding RODS will be included in the Safety and Occupational Health (SOH) policy statement required by this Order. Commanders should regularly emphasize RODS Risk Management.

010402. SUPPLEMENTAL SOH POLICIES

SOH policies developed to supplement this chapter will include specific procedures for RODS program management.

010403. RISK MANAGEMENT

As required in reference (b), the RM process will be applied to manage and control risk for RODS at all levels. Potential hazards associated with RODS events and activities will be fully assessed in advance. Risk assessment and implementation of controls will be made at the lowest authority level possible. The goal is to ensure all hazards are accounted for and mitigated.

A. Continuous Engagement. Individual military members require direct one on one communication from leaders at all levels to reinforce the need to incorporate risk management into all recreational and off-duty decision making. Group discussions (safety briefs) are acceptable for multiple participants of specific on-duty organizational or general off-duty RODS events and activities. All briefs and discussions should reinforce the need to continuously identify hazards, assess risk, and implement safety controls for both individual and group activities.

B. High-risk Recreational Activities. Military members that participate in high-risk recreational activities must review the details of their plan with the unit safety officer prior to engaging in the activity. Examples of high-risk recreational activities include skydiving, paragliding, scuba diving, white water rafting/kayaking, vehicle racing to include formal racing/defensive driving instruction, remote hiking and camping, and rodeo participation. Commands may define their own list of high-risk activities. The review will include an assessment of the participant's knowledge and ability to perform the activity, and hazard analysis of the activity. Supervisors will ensure members participating in high-risk activities complete an assessment prior to execution. The individual assessment is not a briefing, but rather a discussion with the individual to determine state of readiness, training, and physical ability to perform the activity. This assessment may be conducted by the command RODS Program Manager (PM), supervisor, or another command-directed designee.

C. Recreational Operations and Equipment. Equipment and facilities provided by Marine Corps Community Service (MCCS) for off duty recreational purposes must meet rigid safety standards. Introduction of large scale recreational operations or local purchase/installation of recreational equipment outside of the MCCS needs to meet the same safety standards and requirements used by MCCS. Commands establishing their own recreational operations or purchasing RODS equipment will consult with their local MCCS staff or another qualified safety authority to ensure a thorough risk analysis is completed. At a minimum, the safety considerations

listed in manufacturer instructions and reference (c) will be maintained for MCCA type operations and equipment.

010404. HAZARD IDENTIFICATION

Hazard identification for RODS-related facilities will be accomplished during the inspections required in Volume 1 Chapter 4 of the MCSMS. SOH inspections of these areas will focus on the identification of hazards that may cause injury or illness to on-duty workers, off-duty USMC personnel (military and civilian), and patrons of MCCA areas.

010405. DOCUMENTATION, TRACKING AND ABATEMENT

Inspection findings will be documented and abated. Inspectors will document and assign a Risk Assessment Code (RAC) for each RODS-related deficiency in the same manner as other SOH hazards. RODS deficiencies assigned a RAC 1, 2, or 3 not abated or mitigated within 30 days will be documented in a unit's formal hazard abatement plan. Hazardous areas and equipment must be taken out of service or restricted from further use until full abatement is accomplished or effective interim controls are in place that adequately prevent injury or illness.

010406. MISHAP REPORTING AND INVESTIGATION

Department of Defense (DoD) mishaps related to RODS will follow the reporting, investigation, and recordkeeping requirements in accordance with reference (d) and reference (e)

010407. SELF-ASSESSMENT AND MANAGEMENT EVALUATION

RODS will be included as a standard element under the command annual SOH self-assessment detailed in Volume 1 Chapter 4 of this Order. Higher Headquarters will provide oversight of RODS program effectiveness during review of subordinate command SOH self-assessments.

010408. REQUIRED TRAINING

This paragraph details the minimum requirements for all RODS programs. Additional training requirements may be developed at all levels of command to support regional, installation, activity, or local programs.

A. Command Indoctrination Training. Commands will ensure that all military members and civilian employees receive training on the requirements of this and other supplemental RODS policies as part of their command indoctrination. Training will include awareness of the RODS program, individual responsibilities, and local hazard awareness training which should include known local hazards, local laws, restricted areas, and common geographic high-risk recreational activities.

B. RODS Briefs. RODS briefs are required for all military members prior to any holiday, foreign port visits, returning from deployment, seasonal change, or when RODS mishaps highlight the need for additional training. RODS briefs may be informal or formal and encompass a variety of training methods including safety stand-downs, division and department briefs,



supervisory briefs, mishap testimonials, videos, and guest speakers. These briefings should be carefully prepared to minimize the time burden on the command. Local installation RODS program managers will provide assistance with RODS training information and briefing materials.

C. Specific Participant Training. Individuals desiring to engage in RODS activities with mandatory training will successfully complete the required training. Commands may also choose to require the completion of training that would otherwise be optional before allowing members to participate in high-risk recreational activities specific to a geographic location.

D. MCCS Patron Training. MCCS-authorized patrons will be provided training in safety techniques and procedures associated with the use or receipt of MCCS-controlled recreational areas or equipment that potentially exposes the user to safety or health hazards. Patrons will be trained by staff qualified to provide instruction on safety measures specific to the equipment or activity. Training qualifications of MCCS staff providing instruction will meet the requirements in reference (c). Patrons may be allowed to show proof of safety course completion by recognized and approved organizations to meet MCCS patron training requirements.

E. Group Physical Training/Recreational Events. Participants in command directed recreational events outside of MCCS-controlled facilities will receive guidance on safety precautions to prevent mishaps in advance of the activity. This guidance may include techniques for pre- and post-activity exercise and how to properly use required personal protective equipment. Commands may request this guidance from local MCCS staff on recreational safety procedures for events outside MCCS facilities.

**MARINE CORPS SAFETY MANAGEMENT SYSTEM**

<b>REQUIRED RODS TRAINING</b>			
	<b>REQUIRED FOR</b>	<b>PERIODICITY</b>	<b>RESPONSIBILITY TO PROVIDE</b>
<b>COMMAND INDOCTRINATION TRAINING</b>	Military/Civilian	At Indoc/Check-In	Command RODS PM
<b>SAFETY BRIEFS</b>	Military	Prior to Holiday/Foreign Port Visits/Return from Deployment/Change of Seasons/Lessons Learned After Significant RODS Mishaps	Command RODS PM
<b>SPECIFIC PARTICIPANT TRAINING</b>	Military-Situational	In advance of subject activity participation	Obtained by Member
<b>MWR PATRON TRAINING</b>	Patrons at MCCS Facilities	Situational-Based on Activity and/or Locally Established Policy	MCCS Staff
<b>GROUP PHYSICAL TRAINING/ RECREATIONAL EVENTS</b>	Military/Civilian in advance of command directed activities	Situational-Based on Activity and/or Locally Established Policy	Command RODS PM

010409. SAFETY COUNCILS AND COMMITTEES

Safety councils and committees will include RODS as a standard agenda item. Safety working groups, councils, or committees established for specific concerns are exempted from this requirement.

010410. COMMUNICATION

Supplementary RODS materials will be provided to military members and civilian employees and should be posted in public spaces to reinforce the requirements of this policy, requirements of supplemental polices, common risk management or mishap prevention solutions, or local concerns. These materials may include emails, social media messages, articles, pamphlets, signage, and other command approved communication mediums. Safety councils and committees that review RODS-related issues will ensure any official decisions or findings are communicated to the affected personnel.

**VOLUME 5: CHAPTER 2**

**ROLES AND RESPONSIBILITIES**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 2

ROLES AND RESPONSIBILITIES

0201 DIRECTOR, COMMANDANT OF THE MARINE CORPS (CMC) SAFETY DIVISION (SD)

A. Develop Recreational Off-Duty Safety (RODS) program policies, objectives, and directives and provide management of all aspects of mishap prevention.

B. Ensure proper interpretation of RODS program requirements and conduct RODS assessments for Marine Corps commands and activities as directed or requested.

C. Consult the Director, Personal and Family Readiness Division for all MCCA-related safety matters.

D. Develop and distribute RODS awareness products and actively promote RODS via seminars, conferences, training, and safety fairs.

E. Analyze mishap data to identify mishap trends and causal factors. Facts, conclusions, recommendations, and countermeasures developed as a result of these analyses will be provided to the CMC to support recommended policies to improve the RODS program.

0202 COMMANDER, NAVAL SAFETY CENTER (COMNAVSAFECEN)

Serve as the repository for all reportable RODS mishap reports, and provide RODS statistics, trend analysis and recommendations to improve the overall RODS program in accordance with reference (d).

0203 SAFETY DIRECTOR, MARINE CORPS INSTALLATIONS COMMAND (MCICOM)

A. Provide resources and guidance to MCICOM installations in support of RODS program compliance in accordance with this chapter.

B. Ensure installations provide tenants the RODS core program requirements.

C. Conduct oversight of RODS program elements.

0204 DIRECTOR, MANPOWER AND RESERVE AFFAIRS (M&RA)

A. Per references (h), (i), and (j), ensure that MCCA recreation program policy addresses safety standards necessary to conduct activities within an acceptable level of risk.

B. Ensure that safety specialists participate in multi-disciplinary inspections of all youth programs annually.

**0205 INSTALLATION COMMANDERS**

Installation Commander are responsible for ensuring full implementation of the safety standards prescribed by this order. These requirements include the following:

A. Appoint in writing a qualified Safety & Occupational Health specialist to serve as the installation RODS Program Manager with the authority to successfully execute the program.

B. Routinely distribute recreational and off-duty promotional materials. This information may include the following: home safety, RM, Consumer Product Safety Commission (CPSC) Publications, Coast Guard Consumer Fact Sheets, and National Safety Council Bulletins. Other resource information is available at the Naval Safety Center website ([www.safetycenter.navy.mil](http://www.safetycenter.navy.mil)) and the Headquarters Marine Corps Safety Division website ([www.safety.marines.mil](http://www.safety.marines.mil)).

C. Ensure safety and health inspections of recreational activities, to include facilities and equipment, are conducted at least annually, per reference (e). Inspection criteria identified in references (c) and (f) will be used for swimming pools and waterfront areas. In addition to applicable Marine Corps orders, federal OSHA standards and other national consensus standards will be reviewed and used if applicable.

D. Ensure a written report is provided to the official in charge of any inspected facility no later than 15 working days after completion of inspection, per reference (e).

E. Ensure deficiencies which are not corrected within 30 days are tracked in the installation's Hazard Abatement Log, per reference (e), until corrected.

F. Ensure daily mishap incident logs, required by reference (e), are reviewed during inspections, and assistance is provided with developing preventive measures.

G. Review training records during inspections to ensure personnel and patrons receive activity-specific safety training, as appropriate.

H. Review Standard Operating Procedures (SOPs) annually and whenever significant program or facility changes are completed.

I. Review all safety checklists used by unit safety officers annually. Sample checklists can be found on the Naval Safety Center website in the recreation section.

J. Review all plans for proposed construction or renovation to facilities for safety and health considerations prior to and during all phases of construction.

K. Per reference (d), ensure timely and accurate investigations and reporting of injuries and deaths.

0206 INSTALLATION MCCS DIRECTORS

Installation MCCS Directors shall accomplish the following:

A. Assign an MCCS safety officer in writing, who shall be trained per references (e) and (g).

B. Develop and publish SOPs, including minimum safety requirements, for the use of all MCCS facilities and equipment. The facility supervisor shall provide activity-specific safety training to patrons, as appropriate. SOPs shall be displayed in appropriate locations. The area/activity/facility supervisor will develop a process for tracking the completion of all required training and testing requirements. Training records will be maintained per reference (d).

C. Ensure safety and health inspection reports are reviewed and appropriate written responses are returned to the Installation Safety Office within 30 days of unit receipt. Abatement actions shall be reported for each item identified during the inspection.

D. Ensure written emergency action plans are properly posted and include medical, fire, and evacuation plans. Include emergency phone numbers, specific billet responsibilities and any other pertinent information and training.

E. Enforce the use of required Personal Protective Equipment (PPE) for patrons participating in all MCCS-sponsored activities.

F. Attend installation Safety Council meetings.

G. Forward initial and final accident and incident reports for accidents occurring during MCCS program to CMC Safety Division within 48 hours for liability reporting to commercial carriers and claims adjudication.

0207 COMMANDING OFFICERS (COs) AND OFFICERS IN CHARGE (OICs)

A. Establish a command RODS program compliant with the requirements detailed in this chapter.

B. Include RODS specific commander's intent in the SOH policy statement. Where established, ensure SOH policies developed to supplement this chapter include local RODS requirements.

C. Appoint a command RODS Program Manager with the authority to successfully execute the program. The position can be filled by the ground safety officer.

D. Coordinate safety inspections of command owned or controlled MCCS recreational areas.

E. Ensure RODS training is provided to command military members and civilian employees as required.

F. Ensure self-assessment of the command RODS program is conducted as a part of the SOH self-assessment at least annually, and complies with all requirements specified by higher level commands.

G. Ensure command RODS Program Managers participate in safety councils, safety committees, or and contribute to the creation of safety promotion materials.

H. Ensure RODS mishaps are reported, investigated, and documented in accordance with this order's requirements, and corrective actions are implemented to mitigate risks associated with identified hazards.

I. Provide local area/host nation hazard briefs to newly assigned and tenant military members and civilian employees within 30 days of arrival.

J. Enforce compliance with appropriate personal protective equipment requirements for all command directed or sponsored RODS events.

K. Ensure risk management is integrated into all off-duty activities.

L. Ensure purchases or installation of command procured RODS equipment not provided through local MCCA office meets all safety requirements. Local MCCA staff may be consulted for guidance.

#### 0208 COMMAND RODS PROGRAM MANAGERS

A. As directed by the CO/OIC, maintain a command RODS program that meets the requirements of this chapter.

B. Provide RODS indoctrination, safety briefs, or group event training required by this chapter to command military members and civilian employees.

C. Coordinate annual safety inspections of command owned or controlled MCCA recreational areas.

D. Maintain records of command military members participating in high-risk recreational activities.

E. Conduct and assist supervisors with RODS high-risk recreational activity assessments.

F. Represent the command and communicate RODS-related concerns at safety council or committee meetings.

G. Complete the RODS section of annual command SOH program self-assessments, as required by this chapter and higher command policies.

0209 SUPERVISORS

- A. Require military members and civilian employees to comply with all safety and PPE requirements during all RODS activities.
- B. Ensure military members and civilian employees receive required RODS training.
- C. Incorporate and encourage the application of RM principles into all RODS programs and activities.
- D. Prohibit military members from participating in high-risk recreational activities alone.
- E. Encourage military members and civilian employees to stop and reevaluate risk when RODS activities become unsafe or are more hazardous than anticipated, and to have a plan that includes abort criteria and a plan to halt the activity if required.
- F. Review RM assessments submitted by military members preparing to engage in high-risk on-duty and off-duty recreational activities prior to execution.
- G. Ensure RODS mishaps are correctly reported, investigated, and documented, and corrective actions are implemented to reduce the risk of future mishaps.
- H. Ensure subordinates understand and meet their responsibilities required by this chapter.

0210 INDIVIDUAL RESPONSIBILITY

- A. Use the RM process to identify hazards, assess risk, and implement controls before and during participation in recreational and off-duty activities. Stop and reevaluate risk when RODS activities become unsafe or more hazardous than anticipated, and to have a plan that includes abort criteria, and a plan to halt the activity if required.
- B. Have the required level of knowledge and physical ability before participation in any RODS activity.
- C. Wear all required or appropriate personal protective equipment.
- D. Refrain from engaging in high-risk recreational activities alone.
- E. Stay aware of the command's list of high-risk recreational activities and inform the chain of command before participating.
- F. Complete a high-risk recreational activity assessment with the command RODS program manager or supervisor in advance of high-risk recreational activity participation.



G. Complete any required training, gain certifications, or meet applicable qualifications in advance of participation in any high-risk recreational activities and submit documentation to a supervisor and the command RODS program coordinator.

H. Report RODS-related mishaps to a supervisor or chain of command as soon as possible.

I. Report hazards or deficiencies in M CCS recreational areas to M CCS staff.

J. Comply with all local, state, national, or host nation laws, regulations and rules when participating in RODS activities.

K. Wear all required or appropriate personal protective equipment during participation in recreational activities while on-duty or off-duty at M CCS-controlled recreational areas.

L. Report on-duty and off-duty recreational mishaps to a supervisor or the chain of command as soon as possible.

M. Comply with all local, state, national, or host nation laws, regulations and rules when participating in recreational activities while on- or off-duty.

VOLUME 7

**MARINE CORPS RADIATION SAFETY PROGRAM**

**SUMMARY OF VOLUME 7 CHANGES**

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**CANCELLATION**. The publication of this Volume cancels MCO 5104.3C, MARINE CORPS RADIATION SAFETY PROGRAM (MCRSP)

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VOLUME 7: MARINE CORPS RADIATION SAFETY PROGRAM

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## REFERENCES

- a) NAVSEA S0420-AA-RAD-010, Radiological Affairs Support Program Manual(NOTAL)
- b) SECNAVINST 5100.10K
- c) Nuclear Regulatory Commission (NRC) Master Materials License 45- 23645-01NA (NOTAL)
- d) OPNAVINST 6470.3B
- e) OPNAVINST 5100.23G w/CH-1
- f) NAVSEAINST 5100.18B
- g) DODI 4715.27
- h) NAVMC 4000.5C
- i) MCO 4400.201
- j) DTR 4500.9-R, "Defense Transportation Regulation," Part (2), April 2017
- k) 10 CFR 71, "Packaging and Transportation of Radioactive Material," January 01, 2018
- l) 49 CFR 173, "Shippers-General Requirements for Shipments and Packaging," October 01, 2017

**VOLUME 7: CHAPTER 1**

**RADIATION SAFETY AND THE FOUR PILLARS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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**CHAPTER 1**

**RADIATION SAFETY AND THE FOUR PILLARS**

**0101 PURPOSE**

Volume 7 provides the requirements applicable to the Marine Corps Radiation Safety Program. A radiation safety program is the sum of all methods, plans, and procedures used to protect human health and the environment from exposure to sources of ionizing radiation. It includes the Radiation Health Program and Radiological Controls (RADCON) Program and shall be incorporated among the Four Pillars of the Marine Corps Safety Management System (MCSMS) as much as possible.

Interpretation of Volume 7 requires knowledge of radiation safety to ensure proper implementation of a successful Radiation Safety Program. Headquarters Marine Corps, Safety Division is the final authority within the Marine Corps on the subject matter contained herein.

The purpose of the Radiation Safety Program is to preserve and maintain the health of personnel while they work in or around areas contaminated with radioactive material, or in areas where they are exposed to ionizing radiation.

The purpose of the Radiation Health Program is to protect Marine Corps personnel and the general public from hazardous or unnecessary radiation exposure from ionizing radiation sources

The purpose of the Radiological Controls Program is to ensure commands' radiological operations are conducted in a manner that ensures the health and safety of all service members, government employees, contractors, and the general public. To achieve this objective, commands shall ensure that radiation exposures to its personnel, public, and releases of radioactivity to the environment are maintained below regulatory limits, and deliberate efforts are taken to further reduce exposures and releases as low as reasonably achievable.

Combined, these programs assure protection of personnel, property, and the general public during routine operations and emergency situations involving ionizing radiation.

**0102 DON RADIATION HEALTH PROTECTION**

A. Exposure to personnel from ionizing radiation must be reduced to levels as low as reasonably achievable (ALARA). Efforts will be made to fulfill this objective without compromising operational and training efforts.

B. Personnel engaged in work with the risk of being exposed to ionizing radiation must be trained in radiological controls and radiation safety practices and protective measures.

C. Supervisors of personnel working with radioactive materials or devices that produce ionizing radiation shall be cognizant of their responsibilities regarding the

execution of safety and protective measures.

D. Proper protective equipment, and training in its use, must be available to and utilized by all occupationally exposed personnel.

E. Personnel not employed by the Department of the Navy (DoN) must comply with these regulations when engaged in a Marine Corps-sponsored program or operation.

F. It is recognized that these regulations may not be applicable to procedures initiated after an accident, incident, or attack in which a radiological or nuclear device is utilized; however, the provisions of these regulations, insofar as they are feasible, must remain in effect after such an attack.

Volume 7 complies with federal, Department of Defense (DoD) and DoN radiation safety program requirements. Additional site-specific requirements may be contained within Navy Radioactive Material Permits (NRMPs) that supplement the direction of this volume.

#### 0103 RADIOLOGICAL AFFAIRS SUPPORT PROGRAM (RASP)

The RASP has established mechanisms for the receipt, ownership, possession, use, repair, maintenance, storage, distribution, transportation, and disposal of all sources of ionizing radiation within the Marine Corps for operational, industrial, and research activities, afloat and ashore. These mechanisms include RASP Standard Applications, RASP Information Notices, RASP Policy Memoranda, and RASP Regulatory Guides.

These potential radiation sources include Nuclear Regulatory Commission (NRC) licensed radioactive material, radioactive waste, machine sources such as x-ray machines, particle accelerators, electron microscopes, laboratory analytical devices, vehicle and package inspection systems, and all other equipment capable of producing ionizing radiation.

The RASP also applies to commodities containing radioactive material, such as electronic devices (electron tubes), luminescent/self-illuminating devices (watches), ionization devices (smoke detectors), analytical devices (gauges), and those containing natural radioisotopes (aircraft/vehicle parts and welding rods) that are not specifically licensed by the NRC.

Finally, the RASP applies to environmental restorations associated with general radioactive materials and the Department of the Navy (DON) low-level radioactive waste (LLRW) disposal program. It is the DON's goal when using RASP sources to keep occupational radiation exposures as low as reasonably achievable (ALARA) and never exceed the federal limits. To accomplish this goal, commands who use RASP sources must implement a radiation safety program, incorporating the Four Pillars of the MCSMS.

#### 0104 RADIATION SAFETY PILLARS

This guidance applies to all Marine Corps activities possessing or using sources of ionizing



radiation which may affect the health of personnel.

Volume 7 supports MCSMS by providing a system of radiological safety practices and controls to be implemented on a command-to-command basis and should be tailored to meet radiation safety needs. Commensurate with Volume I, this volume provides guidance for increasing command involvement in identification and implementation of appropriate controls. Like the RADCON process, an effective MCSMS emphasizes the development and implementation of controls that are commensurate with the hazards associated with any specified activity. Failure to effectively implement and manage the Radiation Safety Pillars of the MCSMS may lead to unnecessary risk, resulting in damage to equipment and or injury to personnel, reducing mission effectiveness. Additionally noncompliance will result in the appropriate Nuclear Regulatory Commission enforcement actions.

**VOLUME 7: CHAPTER 2**

**ROLES AND RESPONSIBILITIES**

**SUMMARY OF SUBSTANTIVE CHANGES**

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CHAPTER 2

ROLES AND RESPONSIBILITIES

0201 GENERAL

Federal regulations for radiation protection are issued by the Nuclear Regulatory Commission (NRC), Department of Health and Human Services, Department of Labor, Department of Transportation, and the Environmental Protection Agency. Instructions, manuals, and work procedures are issued by the Department of Defense, Chief of Naval Operations (CNO), and Commandant of the Marine Corps (CMC).

0202 ROLES

A. Per reference (b), the Secretary of the Navy assigned CNO the responsibility to establish and manage the Navy Safety and Occupational Safety and Health Program, including the promulgation of appropriate directives, in coordination with the CMC for those matters that affect the U.S. Marine Corps. The CNO and CMC must exercise overall coordination and policy control of the radiation protection programs under their cognizance in the fields of organization, equipment, safety, personnel qualifications, assignments, and training. Unless superseded or stated otherwise, the requirements of this volume shall be incorporated into the command policies, procedures and practices upon issuance.

B. The NRC issued reference (c), a Master Materials License (MML), to the DoN to control the receipt, acquisition, possession, use, and transfer of NRC regulated Radioactive Material (RAM) at Navy and Marine Corps activities. Reference (d) established the Naval Radiation Safety Committee (NRSC) to provide control and dispose of all RAM used in the Navy and Marine Corps; except for nuclear propulsion reactors and associated radioactivity, nuclear weapons, munitions and/or subsequent components thereof. NRMPs are used to maintain this control. Radiation Safety Officers (RSO's), Assistant Radiation Safety Officers (ARSO's), Radiation Safety Managers (RSM's), and Radiation Protection Assistants (RPA's) shall be employed to manage Marine Corps radiation safety programs and ensure NRMP compliance with the NRC.

C. Per reference (e), CNO described and assigned to Commander, Naval Sea Systems Command (COMNAVSEASYSCOM), specific program responsibilities pertaining to ionizing radiation. Per reference (f), COMNAVSEASYSCOM is the Technical Manager for the Radiological Affairs Support Program (RASP) to act authoritatively on matters concerning Radiological Controls (RADCON). The RASP is the responsibility of NAVSEASYSCOM (SEA 04N) and includes all aspects of radiation safety with respect to the design, construction, and control of radiation from ionizing radiation producing machines (x-ray devices, accelerators, etc.) as well as from RAM not otherwise controlled by Naval Nuclear Propulsion, Navy Medicine, or the Strategic Systems Program.

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D. The Chief, Bureau of Medicine and Surgery is responsible for the Radiation Health Program (RHP) that serves the Navy and Marine Corps. The RHP includes the areas of medical examinations, radiation protection standards, exposure records, personnel dosimetry, and all ionizing radiation producing machines and sources within medical treatment facilities. Successful radiation protection programs include Radiation Health and Radiation Safety elements.

E. Per (e), NAVSEA DET RASO serves as technical support center to SEA 04N and the NRSC. NAVSEA DET RASO also provides guidance to Navy and Marine Corps commands in the following areas:

1. Naval Radioactive Materials Permit Program. NAVSEA DET RASO, as the technical support center, provides guidance on applying for and maintaining individual command NRMPs.

2. X-ray Radiography. NAVSEA DET RASO provides guidance on establishing and maintaining IRPMAs for x-ray radiography programs.

3. Other Usage Codes. NAVSEA DET RASO also provides guidance on establishing and maintaining programs that do not require an NRMP or involve radiography. These usage codes are listed within reference (a) table 4-1 and while they may not require a permit, commands interested in acquiring and utilizing a new radiological asset need to consult with CMC (SD) to fully understand the requirements necessary to manage the safety program for the asset.

4. Naval Low-Level Radioactive Waste (LLRW) Program. NAVSEA DET RASO manages the Navy's LLRW Program that covers all RASP-related LLRW generated by the Navy and Marine Corps. The program also provides contractual support for both command-specific and Naval Facilities Engineering Command managed radiological contamination and remediation projects at Navy and Marine Corps commands. The program is an integral part of the Department of Defense (DoD) LLRW Program managed by the U.S. Army per reference (g). Any alternative path for disposal of waste shall be initiated and coordinated via CMC (SD).

5. Radiation Safety Training. NAVSEA DET RASO provides initial qualification training, continuing education, symposiums, and communities of practice to prospective RSO's and ARSO's.

F. To accomplish radiation safety responsibilities in the Marine Corps, the Director, SD shall maintain an effective and unified Marine Corps Radiation Safety Program (MCRSP) in coordination with COMNAVSEASYSCOM and appoint a member to the NRSC. The appointed NRSC member shall be knowledgeable in the MCRSP and shall function as liaison and central point of contact for radiological affairs within the Marine Corps. Appendix A shows the functional chain of command for the MCRSP.

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G. Marine Corps commands can submit applications for NRMPs to use NRC regulated radioactive materials in a local radiation safety program. Applications are submitted via the chain of command to CMC (SD) for endorsement and forwarding to NAVSEA DET RASO for review and processing. When an NRMP is issued, the command shall comply with its locally developed operating procedures, NRMP requirements, and applicable Federal regulations. Non-compliance with NRMP requirements could impact not only an individual command program, but could implicate all NRMPs across the Navy, with potential adverse consequences involving life-saving medical treatment of patients, critical repairs of ships and aircraft, and research and development of warfighting technologies.

H. Marine Corps commands interested in acquiring generally licensed or exempt quantity devices shall contact CMC (SD) to discuss the programmatic requirements prior to acquisition. CMC (SD) shall liaise between the Command and RASO to ensure all requirements are understood and implemented prior to acquisition.

I. NRMPs are also issued to Major Commands with the ultimate goal of distribution of radioactive assets to the fleet. Any command storing, utilizing or deploying with these assets shall abide by its locally developed operating and safety procedures, NRMP requirements, associated Major Command orders, and applicable Federal regulations. Failure to comply with these requirements can jeopardize the NRMP, and potentially the MML.

J. Industrial x-ray radiography represents a potential for serious radiation injury to radiography personnel and members of the general public. In order to minimize the hazard, it is incumbent upon all radiography-capable Marine Corps commands to operate their programs in strict compliance with standards established in reference (a). These standards reflect the minimum radiation safety requirements necessary to safely conduct x-ray radiography operations. In addition to the requirements in reference (a), each Marine Corps radiography command will establish Standard Operating Procedures (SOPs) which will incorporate any additional radiation safety measures necessary to support command operations, as dictated by local conditions.

### 0203 RESPONSIBILITIES

#### 020301. DIRECTOR, COMMANDANT OF THE MARINE CORPS (CMC) SAFETY DIVISION (SD)

A. Appoint in writing, a qualified Naval Radiation Health Officer (RHO) to serve as Senior Marine Corps Health Physicist at CMC (SD). This RHO shall be responsible for the following actions:

B. Oversee management of all NRMPs issued to Marine Corps commands and take appropriate actions to ensure compliance with this Order and all other applicable directives.

C. Serve as a voting member of the NRSC and function as the liaison and central point of contact for radiological affairs within the Marine Corps.

## MARINE CORPS RADIATION SAFETY PROGRAM

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D. Develop and implement Marine Corps policies regarding the Radiation Safety Program.

E. Develop, maintain, and provide training programs for material and processes not covered by NAVSEA DET RASO training programs, to all Marine Corps RSOs and Managers.

F. Provide advice to Marine Corps commands on radiation safety matters.

G. Except as specified in an NRMP, serve as the primary point of contact for the reporting of incidents involving applicable radioactive assets. This includes generally licensed and license-exempt radioactive assets, and items not otherwise specifically permitted for use in the Marine Corps (i.e., unknown radioactive assets or items that bear the radioactive materials symbol that may belong to the Marine Corps).

H. Conduct biennial (every two years) assessments of all Marine Corps NRMPs, x-ray radiography operations, analytical measurement instrument programs and other codes listed in reference (a) table 4-1.

I. Assist in coordinating the procurement of radioactive assets by Marine Corps commands to ensure adequacy of permit coverage and establishment of radiation safety.

J. Provide technical assistance that is beyond the ability (training and experience) of local resources.

K. In coordination with the Capabilities Processing Branch within the Capabilities Development Directorate at Marine Corps Combat Development Command, review all Urgent Universal Needs Statements (UUNS) through the Virtual UUNS (VUUNS) system. This review will focus on any capabilities solution or recommendation that may have ionizing radiation components.

### 020302. COMMANDING GENERAL (CG), MARINE CORPS LOGISTICS COMMAND (MARCORLOGCOM)

A. Coordinate the Inter-Service Support Agreements with the Defense Logistics Agency (DLA) for radioactive asset storage and distribution requirements.

B. Provide disposition instructions for radioactive assets in the Marine Corps using the current Accountability Property System of Record and directives.

C. Ensure Equipment Specialists and Item Managers have the appropriate training and awareness to provide detailed instructions for special handling, demilitarization, and transportation of radiological assets.

D. Direct and maintain inventories of MARCORLOGCOM NRMPs and NRC regulated and exempt radioactive assets.

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E. Assign appropriate authority, responsibility, and funding to the MARCORLOGCOM Radiological Controls (RADCON) Office to ensure compliance with this Order and all NRMPs issued to CG MARCORLOGCOM.

F. Ensure adequate resources are available for supporting radioactive sample analysis and instrument calibration as a service to other Marine Corps commands as required by specific NRMPs.

G. Promulgate radiation safety compliance requirements commensurate with materiel management and supply procedures to support Marine Corps equipment containing radioactive sources.

H. Establish and maintain oversight for Marine Corps stock, storage, issue, and use of MARCORLOGCOM licensed radiological assets.

I. Receive, consolidate and report results of semi-annual inventories of radiological assets from each applicable Marine Corps unit associated with MARCORLOGCOM NRMPs. The RSO shall submit a copy of the inventory to NAVSEA DET RASO no later than 31 January of each year that includes all inventoried RASP radioactive assets and machines possessed by the command on 31 December of the preceding year.

### 020303. COMMANDER, MARINE CORPS SYSTEMS COMMAND (MARCORSYSCOM)

A. Coordinate the development, procurement, acquisition, testing, evaluation, and distribution of systems involving ionizing radiation sources, or equipment containing RAM with CMC (SD) and MARCORLOGCOM, RADCON Division. This coordination ensures compliance with new or established NRMPs or NRC licenses. Coordination with MARCORLOGCOM will ensure that radioactive assets are managed properly by MARCORLOGCOM, which is responsible for the maintenance, repair, replacement, storage, and distribution of all materials brought into the Marine Corps inventory.

B. Coordinate the procurement of any generally licensed or license-exempt radioactive assets with CMC (SD) and MARCORLOGCOM, RADCON Division. Reference (a) and Appendix B requirements must also be met for generally licensed radioactive asset acquisition.

C. Direct and maintain inventories of MARCORSYSCOM NRMP and NRC regulated and exempt radioactive assets.

D. Assign appropriate authority, responsibility, and funding to the MARCORSYSCOM RSO to ensure compliance with this Order and all NRMPs issued to CG MARCORSYSCOM.

E. Assign, in writing, a Command Radiation Safety Manager (CRSM) to oversee NRMP compliance, at each command, that receives, uses, handles, and stores

radioactive assets or produces ionizing radiation.

F. Incorporate Marine Corps radiation safety requirements in the research, development, testing, and evaluation phases for an end item or system component that contains RAM or is a source of ionizing radiation. Make appropriate provisions for specific licensing and disposition requirements when planning life-cycle management of new systems.

G. Coordinate with CMC (SD) the promulgation of documents for radioactive assets to ensure the availability of training, maintenance, and pertinent regulatory information.

H. Establish and maintain oversight for Marine Corps stock, storage, issue, and use of MARCORSYSCOM licensed radiological assets.

I. Receive, consolidate and report results of semi-annual inventories of radiological permitted assets associated with MARCORSYSCOM NRMPs. The RSO shall submit a copy of the inventory to NAVSEA DET RASO as required by reference (a).

020304. MARINE CORPS TOTAL FORCE

Specifically, Commanding General, MCCDC; Commander, U.S. Marine Corps Forces Command; Commander, U.S. Marine Corps Forces Pacific; Commander Marine Corps Installation Command; Commander, U.S. Marine Corps Forces Reserve; Commander, U.S. Marine Corps Forces Special Operations Command; Commander Marine Corps Forces Europe/Africa; Commander Marine Corps Forces Central; Commander, U.S. Marine Corps Forces Korea; and Commanding General, Marine Corps Recruiting Command.

A. Ensure that radiation safety programs reflect command support and fulfill the requirements of NRMPs and their associated orders (see Appendix B) as well as applicable host-country and federal regulations.

B. Ensure subordinate commands adhere to the requirements of this Order and applicable NRMP requirements and their associated orders (see Appendix B). This includes pertinent requirements laid out in reference (a).

C. Publish procedures implementing formal radiation safety programs in accordance with reference (a), pursuant to the requirements of this order, and commensurate with command operations involving sources of ionizing radiation..

D. Assign, in writing, a Major CRSM (MCRSM) to oversee radiation safety compliance of subordinate commands as applicable.

E. Report any incidents of loss, theft, or damage of radioactive assets to CMC (SD), to include reporting to the pertinent RSO for any permitted items.

F. Coordinate the procurement of any generally licensed or license- exempt radioactive assets with CMC (SD).



020305. COMMANDING GENERAL (CG), TRAINING AND EDUCATION  
COMMAND (TECOM)

A. Ensure training and readiness manuals and programs of instruction for equipment containing and operations utilizing radioactive assets or capable of producing radiation, include basic radiation safety information and training.

B. Coordinate with CMC (SD) on obtaining subject matter expertise for the radiation safety training material.

C. Coordinate the procurement of any generally licensed or license-exempt radioactive assets with CMC (SD).

020306. RADIATION SAFETY OFFICERS (RSO)

The RSO is directly responsible for the radiation safety program associated with an NRMP, x-ray radiography, and other usage codes listed in reference (a) Table 4-1. Installation instructions, Command safety instructions, and position descriptions using the term/title RSO shall be stricken unless they meet the requirements of Table 4-1 in addition to section 0203.F.3 below.

A. ARSOs are assigned to assist an RSO and/or manage the program in the stead of an RSO per reference (a) guidelines.

B. All other radiation safety personnel in the Marine Corps shall be designated as an RSM, MCRSM, CRSM, IRSM, URSM or a RPA. Radiography personnel are responsible for safe operations of radiographic equipment, but are not considered radiation safety personnel.

C. Prior to assuming duties as the RSO, the following are required:

1. Successful completion of the applicable RSO course(s) provided by NAVSEA DET RASO. Only designated, or soon to be designated, RSOs that meet the above requirements shall be given consideration for attendance.

2. For an NRMP RSO the following are required:

a. A signed NRMP amendment listing the RSO on the permit.

b. Attend the RSM course within three months of being designated as the RSO on a permit.

3. For an x-ray radiography RSO the following are required:

a. Appointment in writing as the IRPMA RSO, with RASO concurrence.

b. X-ray radiographers will only be required to attend RSM training if they are also assigned in writing as an RSM.

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D. For all other non-NRMP and non-radiography usage codes (see reference (a) table 4-1), that require an RSO, will require the following:

1. The RSO shall ensure all requirements within reference (a) for their specific program are met.

2. The RSO will only be required to attend RSM training if they are also assigned in writing as an RSM. The RSO shall:

a. Per reference (a), be designated in writing (see Appendix C) by the commanding general, commander, or commanding officer directly (i.e., not “By direction”) and document in writing their acceptance of the responsibilities and position of RSO.

b. Have independent authority to stop operations associated with their NRMP, x-ray or other usage code program that they consider unsafe.

c. Have sufficient time and commitment from management to fulfill their duties and responsibilities as outlined in their specific NRMP or IRPMA, all radiation safety directives and their local SOP, to ensure that radioactive assets and/or sources of ionizing radiation are used in a safe manner.

d. Have direct, unimpeded access to the commanding general, commander, or commanding officer for all matters concerning radiation safety.

e. Recommend to the commanding general, commander, or commanding officer a suitable candidate to serve as ARSO with the same training and qualifications as the RSO.

f. Ensure that a radiation safety review, audit, and inspection program is implemented and results are forwarded to the commanding general, commander, or commanding officer via the chain of command and that program deficiencies are corrected expeditiously.

g. The RSO or ARSO shall provide an annual commander’s brief to the commanding general, commander, or commanding officer on the status of the radiation safety program for which they are responsible. This briefing shall include the general topics listed in reference (a), Sections 2.8.2.3 items a. through i., all inspections or assessments since the last commander’s brief and any NRMP actions or correspondence. A copy of the completed brief, signed by the CO, and a copy of the Annual Program Review, shall be forwarded to CMC (SD) for review.

h. Complete refresher training as outlined in reference (a), Section 2.8.3.

E. To maintain proficiency in radiation safety practices and to remain current with guiding regulations, the RSO and ARSO, shall complete continuing training credits in accordance with reference (a). Credits may be earned by attending the annual RSO Communities

of Practice (COP), and completing other RASP-sponsored and virtual training courses. If this requirement cannot be met, the RSO and ARSO shall be required to successfully complete the RSO course again. RSOs shall attend the COP that is most appropriate for the program that they are managing.

F. RSOs shall notify CMC (SD) of deficiencies in RSM manning per Appendix B.

G. RSOs may serve as RSMs, once trained as an RSM, however the RSO must be in a position that bears responsibility for and has visibility of the radioactive asset.

**020307. RADIATION SAFETY MANAGERS (RSM)**

The RSM is the individual responsible for the coordination and management of a Radiation Safety Program at all levels of command via the guidance of the respective RSO (when considering specifically licensed items), higher headquarters, and CMC (SD). The term RSM refers generically to all RSM's (MCRSM, CRSM, IRSM, and URSM). The RSM will support the entire spectrum of radioactive assets throughout the Marine Corps.

A. An RSM shall manage all specifically licensed and generally licensed radioactive assets in direct support of the RSO's NRMP at their command.

B. For all exempt quantity assets an RSM shall ensure a qualified RPA is assigned responsibilities over the assets.

1. Requests for exemption from requiring an RSM within exempt quantity only programs will be made directly to CMC (SD) via the chain of command.

2. Exemptions shall expire after three years or if the command acquires a specifically or generally licensed asset, whichever comes first.

C. As appropriate to the level of the command, the RSM general duties and responsibilities include, but are not limited to:

1. Develop and implement the appropriate level radiation safety SOP, and publish and distribute applicable messages, bulletins, or notices, as required.

2. In coordination with the installation logistics office, develop and implement procedures for shipping radioactive assets. Those procedures shall establish and maintain a logbook that documents the receipt and transfer of radioactive material. At a minimum, the logbook shall contain the asset name, national stock number (NSN), serial number (if applicable), radioactive isotope, original radioactive quantity (in terabecquerels (TBq), given 1 TBq = 27.027 Ci), pre-shipping radiation surveys, date, time, and name of person packaging the items.

3. Maintain inventories and storage locations of radioactive assets located within their purview and provide the quantities and locations of those assets to the IRSM. If

there is no IRSM assigned within your installation, then report locations of radioactive inventories to the fire department and emergency response personnel and as applicable, provide periodic training to these organizations on emergency response procedures involving radiation sources.

4. Coordinate the procurement of any generally licensed or license-exempt radioactive assets with CMC (SD) and MARCORLOGCOM, RADCON Division. The MCRSM will be notified of any acquisition and the IRSM will also receive notification prior to procurement of said asset and upon receipt.

5. Establish local procedures and maintain close liaison with the Defense Logistics Agency Disposition Services (DLA-DS) and other base organizations to prevent the unauthorized transfer or delivery of any radioactive assets to the DLA-DS. This includes license-exempt radioactive assets “Controlled Items - Sensitive” military equipment. Ensure the Marine Corps Base Installation establishes a local unwanted/unserviceable “military equipment with radioactive materials” (i.e., URM) storage area for ultimate disposal by the Low-Level Radioactive Materials Program.

6. Maintain liaison with the RSO and other RSMs within the installation or command that have been appointed oversight of specific radiation safety programs (RADIAC calibration laboratory, x-ray radiography, etc.).

7. Serve as the point of contact for radiological incident reporting, to include receiving initial notification of broken, damaged, or leaking radiological sources, or the receipt of a radiological shipment with damaged packaging. The RSM shall contact the IRSM (Base/Installation Safety if no IRSM exists) as soon as possible when such an incident transpires, to discuss appropriate actions and receive guidance on response and cleanup. The RSM shall make notification of such incidents to the NRMP RSO and CMC (SD) and provide support for leak test and contamination survey requirements resulting from such incidents per Appendix B.

8. Report to the IRSM any requests for or identification of external sources of ionizing radiation being brought onto the installation by outside contractors, DoD services, or federal agencies. Examples include, but are not limited to, x-ray/gamma radiography operations, moisture density testing, or testing of research and development equipment. In the absence of an IRSM contact CMC (SD) with the pertinent information.

9. Conduct leak tests and contamination surveys in accordance with Orders and Instructions specified in Appendix B.

10. Coordinate and track the initial and periodic training and actions of appointed Radiation Protection Assistants in the administration of command radiation safety programs. Prepare and conduct command specific training with new RPAs to familiarize them with the command and assets for which they will be responsible.

11. Retain responsibility for RPA’s actions that are appointed to assist them in their radiation safety program.

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D. RSMs shall coordinate the disposal or transfer of any unwanted radioactive assets from the command with CMC (SD) via their chain of command for licensed or generally licensed radioactive assets and request disposition instructions from the appropriate Item Manager (see Appendix B for POC information). For operational equipment, send to the URM storage area or return to the Primary Inventory Control Activity (PICA). Requests for disposition must be submitted to the Item Manager in accordance with references (a), (h) and (i).

E. All RSMs shall successfully complete Radiation Safety Manager training endorsed by CMC (SD) within 3 months of assuming duties as RSM.

1. CMC (SD) owns RSM training and coordinates training for Marine Expeditionary Forces (MEF) annually and upon request given sufficient attendees, lead-time, and resources. Requests for RSM training shall be sent to CMC (SD) and MARCORLOGCOM, RADCON Division for evaluation. CMC (SD) approves the MARCORLOGCOM, RADCON Division announcement released annually, providing COP, RSM training, and site audit information.

2. In order to maintain proficiency in radiation safety practices and to remain current with guiding regulations, all RSMs designated in writing shall accumulate three continuing education credits approved by CMC (SD) within the previous five years. Credits may be earned by attending the annual USMC COP (1 credit attendee, 2 credits lecturer), and RSM-RADCON (RSM-R) training (2 credits). If this requirement cannot be met, the RSM shall be required to successfully complete the RSM course again within the 5-year period after initial completion.

### 020308. MAJOR COMMAND RADIATION SAFETY MANAGER (MCRSM)

The MCRSM is the individual designated in writing at the major command level. Because major commands do not typically possess radioactive assets, the MCRSM will normally be responsible for oversight of subordinate command RSMs, RSOs, and their associated programs. Whenever possible, assignment of the major command RSM should be from the major command safety office. Designation letters and training certificates (see Appendix C) for MCRSMs shall be forwarded to CMC (SD). Exemptions from this MCO 5100.29 requirement shall be considered for programs that only possess exempt quantity assets.

### 020309. COMMAND RADIATION SAFETY MANAGER (CRSM)

The CRSM is the individual designated in writing at the Marine Expeditionary Force (MEF) or Major Subordinate Command (MSC) level who is responsible for coordinating the Radiation Safety Program for sources of ionizing radiation under the control of that MEF or MSC. Designation letters and training certificates (see Appendix C) for CRSMs shall be forwarded to the MCRSM.

Whenever possible, assignment of the CRSM should be from the command safety office. Exemptions from this requirement shall be considered for programs that only possess exempt quantity assets. Additional duties for the CRSM are as follows:

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A. The CRSM will be responsible for administering access to Radiation Protection Assistant (RPA) training for their Area Of Responsibility (AOR).

B. The CRSM shall maintain an accurate roster of URSMs that fall within their AOR and will provide a copy annually to the MCRSM and the respective RSO (utilize Appendix B to determine which RSO(s)).

**020310. UNIT RADIATION SAFETY MANAGER (URSM)**

URSMs shall be E-5 and above and designated to support specifically licensed and generally licensed radioactive assets in which the RSO/ARSO responsible for said license is not geographically located and per Appendix B. Designation letters (see Appendix C) for URSMs shall be forwarded to the CRSM and the IRSM.

**020311. INSTALLATION RADIATION SAFETY MANAGER (IRSM)**

The IRSM is the individual designated in writing by the commanding general, commander, or commanding officer at the installation, base, air station, combat center, or other fixed activity, who is responsible for coordinating the Radiation Safety Program for sources of ionizing radiation under the control of that installation, as well as maintenance of an inventory of all radioactive assets physically located on the installation.

A. Whenever possible, assignment of the IRSM should be from the installation safety office.

B. The IRSM shall successfully complete RSM-R training endorsed by CMC SD within six months of assuming the duty of IRSM.

1. Once qualified the IRSM shall retake RSM-R within five years as part of their continuing education credits or requalification per 0202.E.2 of this volume.

2. IRSMs who also hold the title of RSO (excludes radiographer RSOs) are also required to attend RSM-R for continuing education credits or requalification per 0202.E.2.

C. Upon notification of a spill or breach of radioactive assets by a tenant command on the installation, the IRSM shall direct recovery actions in coordination with the NRMP RSO and/or CMC (SD). The tenant command RSM/RPA will provide any/all support necessary to the IRSM to ensure a safe recovery from the spill or breach. This in no way makes the IRSM responsible for any reporting or disposition requirements.

D. The IRSM's contact info shall be posted within all components of an installation that store/use radioactive assets to include instructions to contact the IRSM in the event of theft, loss, or damage should the designated RSM/RPA not be available or an RSM/RPA is not assigned to the space.

E. The IRSM as applicable, shall provide periodic training to emergency response organizations on response procedures involving radiation sources within the scope of

their installation.

F. The IRSM shall report inventory locations and quantities of all radioactive assets on the installation to the fire department, custodians, and emergency response personnel upon initial receipt of assets, change of location, and annually.

G. The IRSM shall report to CMC (SD) any new requests for or identification of any external sources of ionizing radiation being brought onto their installation by outside contractors, DoD services, or federal agencies, whether for storage or utilization, to ensure a Radiological Contract Oversight Management Authorization (RCOMA) has been processed as necessary per reference (a). Examples include, but are not limited to, x-ray/gamma radiography operations, moisture density testing, or testing of research and development equipment.

H. Designation letters (see Appendix C) for IRSMs shall be forwarded to CMC (SD).

**020312. RADIATION PROTECTION ASSISTANT (RPA)**

The RPA is the unit-level, collateral duty radiation safety professional, and is appointed by the Commanding Officer/ Officer-In-Charge to assist the RSM in administration of the command radiation safety program. RPAs shall be assigned to support license exempt radioactive assets. An RPA is not authorized to assume the responsibility for the management of specifically licensed or generally licensed radioactive assets in the stead of an RSM with the exception of deployable units where an RPA can support the program in the stead of an RSM until another RSM can be trained. Under these circumstances, the RPA shall be designated in writing as the RSM, assuming the responsibilities of the program, and will thus be required to attend RSM training within three months unless another candidate has been identified to replace the RSM.

A. RPAs shall successfully complete a radiation safety training program endorsed by the CMC (SD) within three months of assuming duties as RPA and shall complete an annual refresher thereafter. CMC (SD) provides the training material to RSMs to administer all RPA training.

B. RPAs shall maintain an inventory of radioactive assets within the unit.

C. In the event any inventory items, which the RPA is aware of and assists with, are broken, damaged, or leaking, the RPA shall contact the IRSM, via the chain of command, to receive guidance on response, cleanup, and disposal of the radioactive asset.

D. Report to the IRSM, via the chain of command, any requests for or identification of external sources of ionizing radiation being brought onto the installation by outside contractors, DoD services, or federal agencies. Examples include, but are not limited to, x-ray/gamma radiography operations, moisture density testing, or testing of research and development equipment. In the absence of an IRSM contact CMC (SD) with the pertinent information.

020313. RESPONSIBLE OFFICER (RO)

The unit having custody of licensed or permitted radioactive assets must assign an RO. The RO is appointed in writing by the Commanding Officer and assumes custodial responsibility for property and accountability of supplies for units. The RO shall receive radiation safety training that is commensurate with one's duties and responsibilities. The RO shall be responsible for the following actions:

A. Perform or ensure the conduct of radiation safety program requirements for the receipt, handling, storing, physical inventory, packaging, and shipping of licensed sources of ionizing radiation.

B. Respond to radiological inventory inquiries within specified tasking timelines. Semi-annual inventories will be conducted and submitted to the permit holder within 30 days of tasking date.

C. Obtain the signature on inventories of radiological assets from the assigned Commanding Officer (CO)/ Accountable Officer (AO) in accordance with reference (h).

D. Perform or ensure that documentation and reporting requirements are fulfilled.

020314. ACCOUNTABLE OFFICER (AO)

Accountability of radiological assets is the responsibility of the assigned AO. In accordance with reference (i), accountability of public resources is inherent to command. In pecuniary (monetary) and fiduciary (trusted person responsible for money and property) terms, this responsibility is a commander's role as an AO.



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**COORDINATING INSTRUCTIONS**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by *bold, italic, blue and underlined font*.

The original publication date of this Marine Corps Order (MCO) Volume (right header) will not change unless/until a full revision of the MCO has been conducted.

All Volume changes denoted in blue font will reset to black font upon a full revision of this Volume.

<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>

CHAPTER 3

COORDINATING INSTRUCTIONS

0301 MAINTENANCE

Maintenance on equipment containing radioactive assets shall only be conducted per the following guidance:

A. Maintenance shall only be conducted in accordance with the equipment's Source Maintenance, Recoverability, and Code (SMRC), as described in the equipment's technical manual.

B. The radiation safety for facility maintenance operations must adhere to the requirements delineated in the specific NRMP (see Appendix B for further guidance).

0302 UNWANTED RADIOACTIVE MATERIAL (URM) AND LOW-LEVEL RADIOACTIVE WASTE (LLRW)

A. In the Marine Corps, URM includes items that contain intact and unbroken radioactive assets for which the possessing command has no further use. These items include, but are not limited to, license-exempt radioactive assets, e.g., advanced combat optical gunsights (ACOG), rifle combat optics (RCO), and tritium compasses. RSOs, RSMs, and IRSM's should contact the appropriate Item Manager for disposition instructions on these items (see 0202 D.).

B. LLRW includes assets that contain RAM or any item which is contaminated with RAM, or any radioactive asset which is known to be broken and leaking RAM. Once designated as LLRW, the RSO will work directly with NAVSEA DET RASO to coordinate the disposal. The RSM shall contact CMC (SD) via their chain of command for all matters concerning actual or potential LLRW under their purview.

C. Items designated for disposal and transfer as LLRW will only be added to the LLRW pickup list if approved by RASO. Therefore, close coordination with NAVSEA DET RASO is required to ensure proper classification and final disposition of anticipated LLRW. Do not transfer unwanted radioactive assets for demilitarization to the DLA-DS.

0303 TRANSPORTATION OF RADIOACTIVE MATERIALS

A. The transportation of RAM is regulated by references (j), (k), and (l) and shall only be certified and shipped by qualified individuals per reference (j).

B. Shipments of RAM shall be carefully coordinated with the local DLA office and the installation Traffic Management Branch, as applicable, to ensure all regulations pertaining to shipment of RAM are followed.

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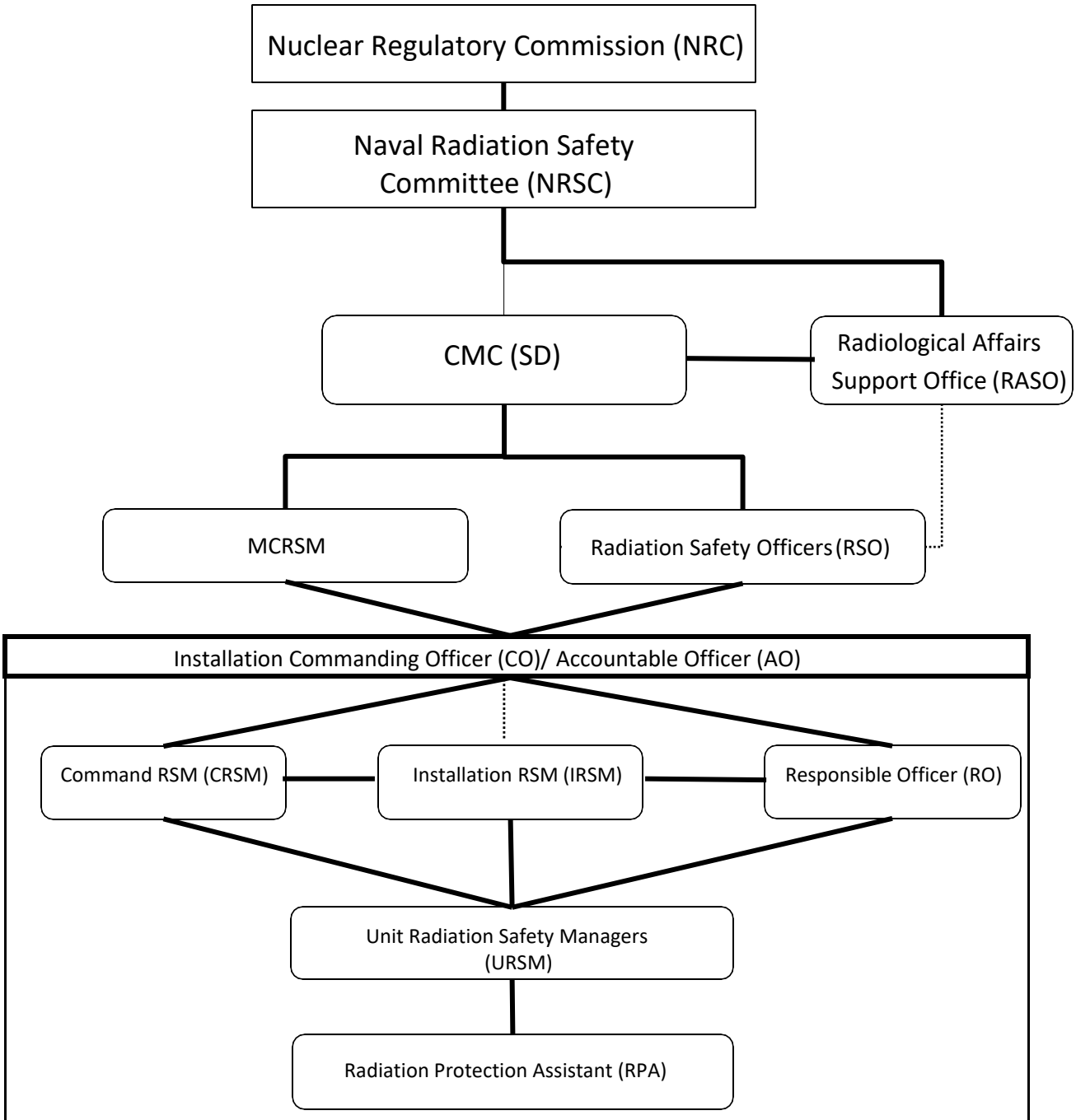
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C. A RAM Movement Form available on-line at: <https://navalforms.documentservices.dla.mil/web/public/forms>, shall accompany radioactive asset movements to include on-base permanent transfer from one building to another, transfer from one command to another, and for any RAM being prepared for shipment.

D. A RAM Movement Form is not required for temporary movement of items remaining on the installation; however, all personnel must take appropriate safety measures and comply with protocol found in references (j) and (k) while transporting radioactive material.

E. The RSM will ensure that a copy of each completed RAM Movement Form is provided to the IRSM (CRSM if there isn't an IRSM) and maintained on file at the generating command for seven years. After seven years, original RAM Movement Forms shall be turned over to the IRSM (CRSM if there isn't an IRSM) to be retained indefinitely in accordance with reference (a).

APPENDIX A  
MARINE CORPS RADIATION SAFETY PROGRAM (MCRSP) LINES OF COMMUNICATION



———— Direct lines of communication \*

- - - - Alternate lines of authorized communication

*\*Although RSMs and RSOs have direct lines of communication with higher commands, they should continue to keep their chain of command informed.*

APPENDIX B

**RADIATION SAFETY MANAGER (RSM) DESIGNATION AND DIRECTIVES**

1. The following guidance is designed to clarify where to designate Unit Radiation Safety Managers (URSM) and the guidance that shall be adhered to in their radiation safety program in order to comply with Naval Radioactive Material Permit conditions, the associated orders to the NRMP, and ultimately the federal regulations. All other permits associated with the Marine Corps have a local dedicated RSO and thus don't require URSMs unless specified within their permit conditions, the associated orders, or at the discretion of their RSO.
  - a. Commander Naval Air Force (CNAF) is responsible for the strontium-90 (Sr-90) in the In-Flight Blade Inspection Systems (IBIS) and americium-241 (Am-241) contained within the Electro-Optical Targeting System (EOTS). The NRMP and instructions/directives listed below provide the URSM with mandatory guidance to manage the IBIS and EOTS program. A URSM shall be qualified and designated within each Marine Aviation Logistics Squadron, HMH Squadron (CH/MH-53), and VMFA Squadron (F-35 only) that have an IBIS or EOTS associated with their aircraft. The RSO and ARSO contact info are listed below.
    - (1) IBIS: NRMP No. 04-57025-T2NP
    - (2) IBIS: COMNAVAIRFORINST 5104.2
    - (3) EOTS: NRMP No. 04-57025-T1NP
    - (4) EOTS: COMNAVAIRPAC/COMNAVAIRLANT INST 5104.2A
      - (a) POC Info (both permits share RSO and ARSO):
      - (b) RSO Phone: (619) 545-1436 ARSO Phone: (619) 545-4955
  - b. Marine Corps Logistics Command (MARCORLOGCOM) is responsible for the nickel-63 (Ni-63) within the various chemical agent detectors (see the permit listed below for all assets). The NRMP and LOGCOM orders shall be utilized by the URSM to manage the safety program for various Ni-63 assets. Units possessing equipment containing Ni-63 shall have a qualified and designated URSM. Users of this equipment must have knowledge as stated in the LOGCOM order associated with the NRMP. The RSO and ARSO contact info are listed below.
    - (1) NRMP 10-67004-T1NP
    - (2) MARCORLOGCOM Order (LCO) 5104.1
    - (3) MARCORLOGCOM Order (LCO) 5104.2
    - (4) POC Info:

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- (a) RSO Phone: (229) 639-7670
  - (b) ARSO Phone: (229) 639-7146
  - (c) Item Managers Phone: (229) 639-8275/6739
- c. MARCORLOGCOM maintains a permit for tritium (H-3) sighting assets. These assets are listed in the NRMP listed below. The NRMP and LOGCOM orders listed below shall be used by the URSM to manage the safety program for the various H-3 assets. Armories which manage permitted H-3 sighting assets shall have a qualified and designated URSM. If an armory has multiple cages one URSM is sufficient but the individual cages shall have a qualified and designated RPA. Units without items specified in the below permit are not required to abide by this requirement. Repairable Issue Points (RIP) shall have a qualified and designated URSM as well. Personnel who stock, store and issue permitted items containing H-3 will have user knowledge appropriate to their position. Other areas which maintain permitted items in any capacity shall have a qualified and designated URSM. These areas will also ensure handlers of the items have appropriate hazardous awareness knowledge. The RSO, ARSO, and Item Managers contact info are listed below.
- (1) NRMP 10-67004-T2NP
  - (2) MARCORLOGCOM Order (LCO) 5104.1
  - (3) MARCORLOGCOM Order (LCO) 5104.2
  - (4) POC Info:
    - (a) RSO Phone: (229) 639-7670
    - (b) ARSO Phone: (229) 639-9478
    - (c) Item Manager's Phone: (229) 639-8275/6739
- d. MARCORLOGCOM maintains a permit for depleted uranium (DU) on the USMC M1A1 and M1A2 tanks. Units maintaining M1A1 and M1A2 tanks shall have a qualified and designated URSM. The NRMP and LOGCOM orders shall be utilized by the URSM to manage the safety program for the various DU assets. The RSO, ARSO, and Item Managers contact info are listed below.
- (1) NRMP 10-67004-T3NP
  - (2) MARCORLOGCOM Order (LCO) 5104.1
  - (3) MARCORLOGCOM Order (LCO) 5104.2
  - (4) POC Info:

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- (a) RSO Phone: (229) 639-7670
  - (b) ARSO Phone: (229) 639-7146
  - (c) Item Manager's Phone: (229) 639-8275/6739
- e. Marine Corps Systems Command (MARCORSYSCOM) is responsible for DU ammunition within the Marine Corps. The RSO and ARSO's contact info are listed below and both fall within the PM Ammo division of MARCORSYSCOM. For deployed units a CRSM shall be qualified and designated to support all DU ammunition. As DU shall never be stocked within the Continental United States (CONUS), there is no need for assigning RSMs to support on CONUS installations. The following NRMP, instructions/directives, and POC information provide the RSM with mandatory guidance and assistance in managing the DU ammunition safety program.
- (1) NRMP No. 45-67854-L1NP (pending)
  - (2) MCO 5104.2
  - (3) POC info:
    - (a) RSO Phone: (703) 432-8784
    - (b) ARSO Phone (703) 432-8938
2. When a command obtains a generally licensed radioactive asset, not under an NRMP, a URSM shall be trained, designated and assigned to support the asset per reference (a) as the Generally Licensed Material Officer (GLMO). A URSM/GLMO is not required if there is a local RSO, who can take responsibility for the asset (new device and RSO fall under the same command). All requirements (see reference (a)) for the generally licensed asset shall be identified and included in a local SOP.

APPENDIX C

LETTER OF DESIGNATION

From: *Commanding General/ Commanding Officer (as appropriate)*

To: *(Insert appointee name here)*

Subj: APPOINTMENT AS A(N) (ASSISTANT) RADIATION SAFETY OFFICER

Ref:

(a) NAVMC DIR 5100.8 MARCOR OSH Program Manual

(b) MCO 5100.29C-V7 Marine Corps Radiation Safety Program

(c) NAVSEA S0420-AA-RAD-010, Radiological Affairs Support Program (RASP)  
Manual (NOTAL)

1. Per references (a) through (c), you are appointed as a *(n)* *(Assistant)* RSO.
2. This appointment does not constitute a replacement appointment or serve as a cancellation of the RSO appointment of any other individual. *(For replacements utilize: This appointment constitutes a replacement appointment and serves as a cancellation of the RSO appointment of (insert outgoing RSO name here))*
3. You are directed to familiarize yourself with references (a) through (c) as well as the permit conditions and ensure strict adherence to the same as they will guide you in the execution of your duties and responsibilities.
4. You will keep the chain of command informed of problems encountered in the execution of your duties. Further, you have direct access to the Commander, CO, or OIC on matters dealing with the RASP and have independent authority to stop any RASP operation he/she considers to be unsafe.
5. This appointment shall remain in effect until your reassignment, transfer, or is rescinded by proper authority.

*(Printed name)*

---



**APPOINTMENT ACKNOWLEDGMENT**

From: *(Appointee name)*

To: *Commanding General/ Commanding Officer (as appropriate)*

Subj: APPOINTMENT AS (ASSISTANT) RADIATION SAFETY OFFICER

1. I have read and understand references (a) through (c) as well as the permit conditions pertaining to this billet.
2. I hereby assume the duties and responsibilities of this billet.

*(Printed name)*

Copy To:

CMC (SD)

**LETTER OF DESIGNATION**

From: *Commanding Officer*

To: *(Insert appointee name here)*

Subj: APPOINTMENT AS RADIATION SAFETY MANAGER (RSM)

Ref: (a) NAVMC DIR 5100.8

(b) MCO 5100.29

1. Per references (a) and (b), you are appointed as a *(Insert Major Command, Command, Installation, or Unit)* RSM.
2. This appointment does not constitute a replacement appointment or serve as a cancellation of the RSM appointment of any other individual. *(For replacements utilize: This appointment constitutes a replacement appointment and serves as a cancellation of the RSM appointment of (insert outgoing RSM name here))*
3. You are directed to familiarize yourself with references (a) and (b) and ensure strict adherence to the same as they will guide you in the execution of your duties and responsibilities.
4. You will keep the Chief of Staff informed of problems encountered in the execution of your duties.
5. This appointment shall remain in effect until your reassignment, transfer, or is rescinded by proper authority.

*(Printed name)*

**APPOINTMENT ACKNOWLEDGMENT**

From: *(Appointee name)*

To: *Commanding Officer*

Subj: APPOINTMENT AS RSM

1. I have read and understand references (a) and (b) pertaining to this billet.
2. I hereby assume the duties and responsibilities of this billet.

*(Printed name)*

Copy To: Apply guidance on pages 2-5 through 2-6 in determining whom to copy for MCRSM, CRSM, IRSM, or URSM

**LETTER OF DESIGNATION**

From: *Officer-In-Charge*

To: *(Insert appointee name here)*

Subj: APPOINTMENT AS RADIATION PROTECTION ASSISTANT (RPA)

Ref: (a) NAVMC DIR 5100.8

(b) MCO 5100.29

1. Per references (a) and (b), you are appointed as a Radiation Protection Assistant.
2. This appointment does not constitute a replacement appointment or serve as a cancellation of the RPA appointment of any other individual. *(For replacements utilize: This appointment constitutes a replacement appointment and serves as a cancellation of the RPA appointment of (insert outgoing RPA name here))*
3. You are directed to familiarize yourself with references (a) and (b) and ensure strict adherence to the same as they will guide you in the execution of your duties and responsibilities.
4. You will keep the Radiation Safety Manager informed of problems encountered in the execution of your duties.
5. This appointment shall remain in effect until your reassignment, transfer, or is rescinded by proper authority.

*(Printed name)*

**APPOINTMENT ACKNOWLEDGMENT**

From: (Appointee name)

To: Officer-In-Charge

Subj: APPOINTMENT AS RPA

3. I have read and understand references (a) and (b) pertaining to this billet.
4. I hereby assume the duties and responsibilities of this billet.

(Printed name)

Copy To: Apply guidance on pages 2-5 through 2-6 in determining whom to copy.

**VOLUME 8**

**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM**

**SUMMARY OF VOLUME 8 CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

The original publication date of this Marine Corps Order (right header) will not change unless/until a full revision of the MCO has been conducted.

The date denoted by **blue font** (left header) will reflect the date this Volume was last updated.

All Volume changes denoted in **blue font** will reset to black font upon a full revision of this Volume.

**CANCELLATION.** The publication of this Volume cancels MCO 8020.10 and participation in OPNAVINST 8020.14, and MCO 8020.13A/OPNAVINST 8020.15A.

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**VOLUME 8: CHAPTER 1**

**ROLES AND RESPONSIBILITIES**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

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<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>



**CHAPTER 1**

**ROLES AND RESPONSIBILITIES**

**0101 OVERVIEW**

The storage, handling, transportation, and employment of military munitions is inherently hazardous. Therefore, it is imperative that a safety program designed to minimize the potential explosives hazards be aggressively pursued at all levels. This Volume provides policy and guidance for the implementation and oversight of the Marine Corps' Explosives Safety Management Program (ESMP) and the corresponding command responsibilities.

**0102 APPLICABILITY**

A. The Secretary of Defense has established basic explosives safety policies to be observed by Department of Defense (DoD) components in the performance of operations involving munitions in accordance with reference (a).

B. The provisions of this Volume shall apply when DoD munitions are located in overseas areas, except when compliance with more restrictive standards is mandated by International Agreement (IA).

C. Operations conducted at installations under the command of another Service shall be in accordance with an approved Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA).

D. In case of conflicting policies or regulations, contact Commander, Marine Corps Systems Command (COMMARCORSSYSCOM) for guidance.

E. Integrate risk management processes into the explosives safety management program per this Order.

**0103 RESPONSIBILITIES**

An effective Explosives Safety Management Program (ESMP) is dependent upon command support at all levels. The commands listed below have the following responsibilities that support the creation and maintenance of an effective ESMP, though this list, and the individual tasks they represent, is not to be considered all inclusive.

**010301. MARINE CORPS SYSTEMS COMMAND (MCSC)**

Generate, manage, and approve all guidance and policy for the storage, handling, transportation, and employment of munitions for the Marine Corps. The content within this Volume is owned and approved by MCSC. Safety Division (CMC SD) will facilitate its implementation and subsequent revisions as they become necessary.

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010302. COMMANDANT OF THE MARINE CORPS SAFETY DIVISION (CMC (SD))

Provide overall administration of the Marine Corps Safety Program, MCO 5100.29C and its associated volumes, facilitating necessary changes and revisions from the individual volume sponsors.

010303. CHIEF OF NAVAL OPERATIONS (CNO) DIRECTOR, ENERGY AND ENVIRONMENTAL READINESS (OPNAV N45)

Provide program resources for the execution of required munitions response at all Department of the Navy (DON) Environmental Restoration Program sites.

010304. DEPUTY COMMANDANT FOR AVIATION (DC A) (ASL-30)

A. Serve as the single point of contact for aviation operations Class V(A) explosives safety as delegated by CMC SD.

B. Provide amplifying instructions to policies involving the safe use of Class V(A) ordnance.

C. Coordinate with COMMARCORSYSCOM to provide aviation ordnance personnel to assist in executing the Marine Corps ESMP.

010305. DEPUTY COMMANDANT FOR INSTALLATIONS AND LOGISTICS (DC, I&L)

Coordinate operational and policy matters relating to Class V materiel with COMMARCORSYSCOM to ensure that specific explosives safety requirements are addressed.

010306. COMMANDING GENERAL MARINE CORPS COMBAT DEVELOPMENT COMMAND (CG MCCDC)

A. Provide/publish policy and procedures for Marine Corps range safety as delegated by CMC SD.

B. Serve as the single point of contact for range operations involving the use of Class V material.

C. Provide range certification/recertification oversight and range Technical Assistance Visits (TAVs).

D. Provide guidance on non-standard training.

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010307. COMMARCORSYSCOM

A. Provide/publish policy and procedures for the Marine Corps explosives safety program as delegated by CMC SD.

B. Assign two qualified individuals to serve as the Marine Corps voting members (one primary and one alternate) to the Department of Defense Explosives Safety Board (DDESB).

C. Assign a military representative to serve as the Marine Corps liaison to the DDESB.

D. Approve/endorse Marine Corps explosive safety deviations on Marine Corps installations involving facility planning or installation directed functions.

E. Approve/endorse explosives safety site plans at all Marine Corps installations or training/contingency locations.

F. Provide Marine Corps representation to the Weapons Systems Explosives Safety Review Board, and other joint service weapons safety working groups, for matters pertinent to ground ammunition and explosives (A&E) safety.

G. Provide Marine Corps representation to joint service and multi-national working groups or teams.

H. Provide assistance for explosives safety matters involving the Military Services, U.S. Coast Guard, foreign services, and other appropriate public and private agencies.

I. Manage the Marine Corps Munitions Response and Ordnance Environmental Programs.

J. Execute the Marine Corps Explosives Safety Inspection and Compliance Review Program.

K. Maintain an electronic repository of all Marine Corps explosives safety and environmental submissions.

L. Provide guidance, oversight, and verification of Marine Corps munitions response actions.

M. Provide guidance on managing Material Potentially Presenting an Explosives Hazard (MPPEH).

N. Provide/publish policy and procedures for the A&E personnel qualification and certification program.

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O. Monitor changes to explosives safety publications and directives that may affect the Marine Corps ESMP.

P. Communicate with the DDESB regarding explosives safety technical issues.

Q. Implement and manage the Radiological Affairs Support Program for the management of Marine Corps Depleted Uranium (DU) ammunition. Maintain the DU Naval Radioactive Material Permit, ensuring compliance with Nuclear Regulatory Commission, Naval Radiation Safety Committee, and Naval Sea Systems Command (NAVSEA) Radiological Affairs Support Office directives.

R. Participate in explosives mishap investigations.

S. Provide tactical explosives safety expertise and training in support of contingencies, combat operations, military operations, and associated training.

T. Participate on Explosives Safety and Munitions Risk Management and Consequence and Risk Identification assessments when requested by a Service Component Commander.

U. Coordinate, as required, all issues, plans and reports for munitions responses to ensure that explosives safety, land use, remediation, and other relevant issues are addressed.

010308. MARINE CORPS COMPONENT COMMANDERS, (MARINE FORCES COMMAND)

A. Provide management and oversight for all explosives safety matters within area of responsibility.

B. Conduct and approve Explosives Safety and Munitions Risk Management Assessments (MRMA) for Operational Forces munitions related activities at OCONUS locations within the area of responsibility whether on or off Marine Corps installations when assigned risk acceptance authority from the Geographic Combatant Commander (GCC).

C. Provide explosives safety expertise in support of contingencies, combat operations, military operations, and associated training.

D. Provide technical review, recommendations and endorsements on explosives safety site plan requests and explosives safety deviations for major subordinate commands.

E. Coordinate with COMMARCORSYSCOM on explosives safety issues.

F. Shall be designated in writing as the Command Explosives Safety Officer (ESO). The ESO shall be organizationally placed in the command safety office and have direct access to the commander on all matters pertaining to explosives safety.

G. Provide endorsements and/or approvals of explosives safety deviations as outlined in this Order.

010309. COMMANDER, MARINE CORPS INSTALLATIONS  
COMMAND

A. Provide management and oversight for all explosives safety matters via regional commanders.

B. Provide management and oversight of manning and resource management issues.

010310. NAVAL FACILITIES ENGINEERING COMMAND (NAVFACENCOM)

A. Develop Explosives Safety Submissions (ESS) for COMMARCORSYSCOM review and endorsement to the DDESB.

B. Develop safety and health plans, personnel qualification documentation, and quality assessment and control procedures that address explosives safety.

C. Coordinate munitions responses with the appropriate Explosives Safety Officer (ESO) and, when applicable, supporting Explosive Ordnance Disposal (EOD) personnel

D. Conduct munitions responses per the approved ESS, amendment, or correction as appropriate.

E. Amend or correct, as appropriate, approved ESSs to reflect changes in the selected munitions response and submit the amendments via COMMARCORSYSCOM to the DDESB and corrections to COMMARCORSYSCOM.

F. Amend as required, approved ESSs to reflect changes in the selected munitions response and submit the amendments via COMMARCORSYSCOM to the DDESB for approval.

G. Submit requests for an extension of approved ESSs to COMMARCORSYSCOM.

H. Prepare After Action Reports (AAR) for the selected or amended munitions response and provide to COMMARCORSYSCOM for review and submission to the DDESB or other entities as appropriate.

I. Prepare Navy land disposal, transfer and out lease, documentation packages addressing explosives safety criteria associated with the presence or possible presence of MEC or MPPEH and required protective measures such as notices, restrictions and conditions for MARCORSYSCOM's review and, as appropriate, endorsement to the DDESB for approval.

010311. MARINE CORPS INSTALLATIONS COMMAND (MCICOM) REGIONAL EXPLOSIVES SAFETY OFFICER

- A. Implement and maintain oversight of an effective regional ESMP.
- B. Review, endorse, and/or approve projects that may affect explosives safety.
- C. Establish a TAV Program to assist installations with explosives safety issues.
- D. Review, recommend, and endorse explosives safety site plans.
- E. Review, recommend, and endorse explosives safety deviations.
- F. Provide direct explosives safety support in the absence of an installation's Explosives Safety Officer (ESO).
- G. Coordinate operational and policy matters relating to Class V materiel with COMMARCORSYSCOM.

010312. INSTALLATION COMMANDER

- A. Establish an effective ESMP.
- B. Adequately staff and resource the explosives safety office to manage the explosives safety program.
- C. Designate, in writing, an individual either government civilian or military as the installation ESO. The ESO is considered the senior explosives safety professional (ESP) on the installation. The following guidance is provided regarding the ESO:
  - 1. The ESO shall be organizationally placed in the installation safety office.
  - 2. The ESO shall have direct access to the installation commander on all matters pertaining to explosives safety.
  - 3. Explosives safety should be the ESO's primary duty.
  - 4. The installation may have several explosives safety specialist to assist the ESO. However, only one individual will be designated as the ESO.

010313. EXPLOSIVES SAFETY OFFICER

- A. Serve as the senior explosives safety specialist.
- B. Develop, implement, and manage a robust explosives safety program that complies with the provisions of this Volume.

**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM**

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- C. Implement a records management process that documents and supports the ESMP.
- D. Participate as an active member of the facilities planning Integrated Product Team (IPT) per reference (b).
- E. Maintain approved explosives safety site plan packages.
- F. Maintain the facility databases in the Environmental and Explosives Safety Web Portal with all potential explosives sites (PES) and exposed sites (ES).
- G. Develop written procedures to implement new and modified approved site plans.
- H. Ensure compensatory measures, either from deviations or explosives site plans, are addressed in the appropriate SOP or order and all commands affected are notified in writing of the requirements.
- I. Ensure that installation operations involving the transportation, storage, and handling of Class V materiel are conducted in compliance with applicable directives, and executed in a safe manner.
- J. Provide the installation commander with reasoned, informed advice regarding explosives safety levels of risk.
- K. Monitor and evaluate the explosives training of personnel involved with explosives operations to verify the effectiveness of the training.
- L. Conduct pre-operational checks of explosives operating lines, in conjunction with safety personnel trained to perform safety analyses, as new systems or processes are implemented.
- M. Ensure all A&E specific standard operating procedures (SOPs) meet the requirements of this Volume.
- N. Ensure commands have an effective qualification and certification program as required by reference (c).
- O. Inspect maintenance/repair operations involving hot work and issue permits as necessary.
- P. Monitor accountability of ordnance display items.
- Q. Conduct/support mishap investigations in accordance with reference (d). Maintain records per reference (e).
- R. Maintain the activity's explosives safety publications and directives.

**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM**

S. Assign safety observers to pier or wharf areas in accordance with reference (f) and this Volume.

T. Monitor the facility grounding/lightning protection program.

U. Conduct annual Explosives Safety Self-Assessments (ESSAs).

V. Provide notification of munitions of explosives concerns (MEC) or munitions potentially presenting an explosives hazard (MPPEH) discoveries to COMMARCORSYSCOM.

W. Provide oversight of munitions responses.

X. Establish and publish installation explosives laden vehicle routes.

Y. Verify a current review of all electronic transmitting equipment has been conducted to ensure compliance with respect to Hazards from Electromagnetic Radiation to Ordnance (HERO) and ensure installation has obtained the necessary reviews from Space and Naval Warfare Systems Command (SPAWARSYSCOM) and Naval Surface Warfare Center Dahlgren.

Z. Ensure the following reviews are conducted annually and documented. Unless otherwise indicated, these reviews can be documented by a Memorandum for the Record. Maintain copies of the current year and two previous year's documentation.

1. Magazine inspection to ensure compliance with explosives safety and construction standards.

2. Inspection of all active explosives operating buildings or workplaces.

3. Encroachment review.

4. Map review of explosives safety arcs to ensure all ESQD arcs and PESs and ESs within ESQD arcs are shown and accurate.

010314. COMMANDING OFFICERS (CO) AND OFFICERS-IN-CHARGE (OIC)

All COs and OICs that requisition, receive, handle, store, or transport munitions are responsible for the following:

A. Publish SOPs that govern explosives operations performed within their unit.

B. Ensure that all personnel involved in the storage, transport, handling, maintenance, receipt/issue, and use of munitions receive required training prior to their assignment to duties involving munitions.

C. Provide copies of all work requests for any work inside the 110% ESQD arcs to the ESO.



D. Provide copies of all Malfunction, Mishap, and A&E Reports to the ESO.

E. Assign an Explosives Safety Representative (ESR).

010315. EXPLOSIVES SAFETY REPRESENTATIVE

ESRs shall function as liaison between the unit and the installation ESO. ESRs will assist the installation ESO with the unit's explosives safety mission.

010316. MARINE CORPS EXPLOSIVES SAFETY COUNCIL

The council shall consist of, but not be limited to, the following permanent members: Environmental and Explosives Safety Branch, COMMARCORSYSCOM (Chair); CMC SD; HQMC (ASL-30); MARFORCOM; MARFORPAC; MARFORRES; MARCENT; MARFOREUR/AF; MCICOM; Marine Corps Installations East (MCIE); Marine Corps Installations West (MCIW); Marine Corps Installations Pacific (MCIPAC); and Marine Corps Installations National Capital Region (MCI-NCR).

A. Review and evaluate issues identified during the Executive Safety Board, chaired by the Assistant Commandant of the Marine Corps, which may affect the Marine Corps ESMP.

B. Review explosives mishaps and incidents, explosives safety inspections and ongoing explosives safety initiatives to evaluate impact to existing policies, programs, and investments.

C. Review and revise guidance, policy, and procedures governing the Marine Corps ESMP.

D. Review proposed or enacted updates to DoD and/or joint service explosives safety policy and provide requisite feedback to the initiating agency.

E. Review and provide recommendations on DDESB voting actions to the Marine Corps DDESB voting member.

**VOLUME 8: CHAPTER 2**

**GENERAL/MISCELLANEOUS**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

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<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>

**CHAPTER 2**

**GENERAL/MISCELLANEOUS**

0201 BACKGROUND

This chapter provides guidance on general requirements affecting the Marine Corps ESMP.

0202 DEFINITION OF TERMS

As used in this order:

- A. "Government" means U.S. Federal Government.
- B. "Naval" means both Navy and Marine Corps.
- C. "Commanding Officer" refers to the installation Commander or a Battalion/Squadron Commander and above.
- D. "Shall," "will," and "must" are directive in nature and require mandatory compliance.
- E. "Should" is advisory in nature. Advisory requirements shall be followed unless exempted by the CO.
- F. "May" and "can" are optional in nature.

0203 COMMUNICATIONS WITH EXTERNAL ORGANIZATIONS

- A. Unsolicited direct liaison from Marine Corps activities with DDESB and NOSSA is not authorized unless coordinated through COMMARCORSYSCOM.
- B. All policy guidance or interpretation questions will be addressed to COMMARCORSYSCOM.
- C. COMMARCORSYSCOM will be copied on all explosives safety correspondence from Marine Corps activities to external organizations.

0204 TENANT RELATIONSHIPS

- A. The installation Commanding Officer is responsible for the safety of all explosives activities aboard the installation. The installation ESO is responsible for providing explosives safety oversight of all commands and organizations aboard the installation.
- B. Marine Corps tenant commands and organizations will follow the installation's explosives safety regulations unless a Memorandum of Understanding (MOU),

Memorandum of Agreement (MOA), or Inter-Service Support Agreement (ISSA) is in place that outlines specific explosives safety roles and responsibilities.

C. All non-Marine Corps organizations or activities located aboard a Marine Corps installation will have an MOU/MOA/ISSA with the host installation commander. The MOUs, MOAs, or ISSAs will at a minimum outline the following:

1. Service specific documents providing explosive safety standards to be followed.
2. Explosives safety oversight and compliance responsibilities.
3. Routing and approval authority of explosives safety deviations.
4. Installation specific requirements.
5. Funding or other support.

## 0205 MUNITIONS INERTING, DISPLAY, AND 3-D MANUFACTURING

### A. Munitions Inerting

1. Inert munitions do not contain explosives, energetics, or other hazards. Only inert munitions shall be used for classroom training, training aids, or displays unless approved by COMMARCORSYSCOM.
2. Only Explosive Ordnance Disposal (EOD) personnel are authorized to conduct inerting and stripping operations in accordance with reference (g).
3. Inspection and marking of inert-filled and empty ordnance items shall be in accordance with this Volume.
4. Ammunition that is manufactured specifically for display purposes, empty or with inert material installed, does not require inert certification.
5. Ammunition that has had explosives material removed and left empty or replaced with inert material shall be certified inert. These items will be included in the master inert inventory.
6. An inert certification is a determination that the ammunition or component does not contain an explosive or energetic hazard. The examination may be visual or by a nondestructive testing method such as an X-ray. The certification shall be performed by EOD personnel or other personnel certified in writing by the CO as technically qualified to make such a determination. Activities shall maintain a record of all inerted ammunition. The following data, at a minimum, shall be recorded:

- a. Item description
- b. Assigned serial number
- c. Certifying official's name
- d. Certifying official's signature
- e. Date certified
- f. Method by which the item was certified inert
- g. Item location
- h. Final disposition

7. Data may be maintained electronically provided all requirements identified above are met. Electronic signatures are authorized. A sample form is provided in Chapter 2 of reference (f).

8. Items transferred from the certifying organization will be accompanied by a copy of the inert certification. The inert certification must be maintained with the item until the item is destroyed. The accompanying inert certification must contain a statement requiring the return of the inert item when no longer needed or a statement verifying the proper disposition of the item.

#### B. Inerted Ammunition Markings and Identification

1. The original color code, nomenclature, and other identification shall not be removed or altered without COMMARCORSYSCOM approval. Items that have had their color markings changed in accordance with earlier guidance are not required to have their original color and markings restored.

2. Items shall be identified by serial number. The serial number shall consist of the Unit Identification Number or Routing Unit Identification of the activity where the item was certified inert, and a unique identification number.

3. The serial number will be affixed to each item by metal engraving tool, steel stamping, indelible ink, or a locally produced label.

4. Four holes, 90 degrees apart, will be drilled in each item as a ready identifier that the item has been inerted. Exceptions to this requirement include:

- a. Items physically too small to drill.
- b. Items whose historical importance could be diminished by the drilling of holes (or metal stamping or engraving).

c. Items whose physical characteristics would be altered by the drilling of the holes.

5. ESO's will conduct and document audits of inert ordnance items as part of the annual ESSA.

C. Manufactured Inert Items

1. Ammunition that is manufactured for display purposes empty or with inert material installed does not require inert certification. All other ammunition that has had explosive material removed and left empty or replaced with inert material shall be certified inert in accordance with paragraph 0205A of this chapter.

2. Manufactured Inert ammunition items shall be accounted for via logbook or electronic means. At a minimum, the logbook or electronic accountability process will identify the manufactured inert munition by item description/nomenclature, quantity, and location.

3. Manufactured inert munitions transferred from one organization to another unit or organization will include a copy of the manufacturer's documentation or receipt of the item transferred. If manufacturer's documentation is not available, documentation of the items manufactured inert status from the owning unit is required.

4. 3-Dimension Printed Items

a. 3-Dimension (3-D) printed items are produced to duplicate the physical characteristics of munitions and improvised explosives devices (IED) used for display and training. 3-D printed items do not contain explosive or energetic material or other hazards.

b. 3-D printed items could potentially be mistakably identified as live items, 3-D printed munitions or items which are intended to be used as a training aid shall be clearly marked as a training aide or inert item and accounted for by the owner via logbook or recorded by electronic means. At a minimum, the logbook or electronic accountability process will identify the 3-D training or display aide by item description/nomenclature, quantity, location, and final disposition.

0206 CLEARING BARRELS

A. Clearing Barrel Locations. Clearing barrels will be provided at designated weapons clearing locations, which are generally located outside arms rooms and ranges. Commands must post positive control and procedural guidelines for all weapons at clearing barrels and ensure personnel use them during weapons clearing.

B. Clearing Barrel Construction

1. Local construction

a. A 30 to 50 gallon container, filled with pea gravel or sand. (Pea gravel has the greater projectile stopping ability.)

b. If sand is used, it must be dry and free of rocks and other debris. Properties of wet sand and rocks can cause ricochets. Place dry sand in a plastic bag and tie the bag closed prior to placing into clearing barrel.

c. Locally constructed clearing barrels will have ¾ inch plywood or thick rubber matting covering the interior surface diameter of the container fitted directly behind the lid to reinforce the lid against muzzle blast (not applicable to Commercial Off The Shelf (COTS)).

d. Locally constructed barrels will be at least 14 inches wide, 24 inches deep, and be mounted at a height and angle to permit safe and smooth firearms clearing.

e. Locally constructed barrels will have an aiming point in the center of the lid at least 4 inches in diameter.

f. Locally constructed barrels will be painted red with yellow 1-inch stenciling “Weapon Clearing Barrel” on two opposing sides and lid.

g. Owning unit is responsible for ensuring the clearing barrel is constructed, maintained, inspected and documented for serviceability in accordance with the requirements of this Volume.

h. Weapons clearing procedures for all weapons approved to be cleared at the designated point will be displayed prominently near the clearing barrel.

2. General Services Administration approved COTS clearing barrels may be used. If COTS clearing barrels are used, the owning unit will obtain and maintain product test and specification data from the manufacturer for as long as the clearing barrel is in use/service. COTS clearing barrels shall be securely mounted and oriented in a safe direction to preclude having individuals in the line of fire in the event of a negligent discharge. COTS barrels will be inspected and documented for serviceability and maintained in accordance with the manufacturers’ specifications.

0207 AMNESTY PROGRAM

A. The amnesty program is not intended to circumvent standard ammunition management procedures. Implementation of an amnesty program is at the discretion of the installation commander.

B. For an amnesty program to be effective, turn-ins should be made without fear of disciplinary action. Therefore, individuals making amnesty turn-ins are normally not subject to investigation.

C. Units discovering ammunition after having completed their turn-ins and having their accounts reconciled are not authorized to use the amnesty process. These units shall make amended turn-ins using the procedures set forth in reference (h).

D. All ammunition larger than .50 caliber small arms (with the exception of shotgun ammunition) is considered potentially hazardous and should be moved only by trained personnel. If an item's explosives safety status cannot be immediately determined, it will not be handled, and EOD must be contacted for assistance.

E. Small arms ammunition (up to and including .50 caliber), may be delivered directly to the ammunition supply point (ASP), station ordnance, or Provost Marshal Office.

F. Civilian ammunition must be managed per environmental management requirements and not the Designated Disposition Authority (DDA) process.

G. Amnesty days may be scheduled as often as deemed necessary. The installation ESO will establish collection points at locations that afford Inhabited Building Distance (IBD) levels of protection consistent with a reasonable estimation of the Hazard Class Division (HC/D) and Net Explosives Weight (NEW) expected to be received. To ensure that proper care is exercised, ammunition personnel must be available and on-hand to supervise amnesty turn-ins.

#### H. Siting of Amnesty Program Containers

1. Due to the hazardous nature of munitions, the use of amnesty containers is the least desirable method of supporting an amnesty program. If implemented, care must be exercised as to the physical location, numbers, and construction of amnesty containers.

2. Permanent off range locations for Hazard Class and Division (HC/D) 1.1, 1.2 (all subdivisions), 1.3, and 1.4 materials shall be explosively sited in accordance with reference (f), as above-ground unbarricaded magazines and provide IBD protection.

3. COs can approve containers intended for HC/D 1.4S small arms ammunition only. These containers do not require explosives siting. These containers will be provided 50 foot fire safety separation distance whenever possible.

4. Containers placed on operational ranges do not require an explosives safety site approval as long as the associated explosives safety arcs do not extend beyond the established range borders. These containers should be approved and monitored by the installation's range management organization.



I. Construction of Amnesty Program Containers

1. Amnesty program containers designed for small arms ammunition will be constructed of at least 10-gauge steel, permanently mounted, and secured with a lock in accordance with reference (i).

2. Slots in containers for HC/D 1.4S material will be sized to accept no larger than a .50 caliber cartridge. Containers shall be clearly marked "AMNESTY BOX FOR SMALL ARMS AMMUNITION ONLY-NO SMOKING WITHIN 50 FT."

J. Amnesty Program Containers Checks

1. Permanently sited amnesty containers will be checked daily and all munitions removed. Amnesty containers for HC/D 1.4S will be checked on a regular schedule as documented by the installation.

2. Personnel performing checks on permanently sited amnesty program containers must be qualified and certified in accordance with reference (c).

3. Personnel not qualified and certified in accordance with reference (c) may perform checks of small arms ammunition (HC/D 1.4S) amnesty program containers only.

4. Non-qualified/certified personnel conducting checks will contact EOD or qualified ASP personnel to remove unauthorized munitions contents in accordance with base procedures. All munitions recovered, deemed safe to move, shall be returned to the installation's ASP or station ordnance. Items that appear to be damaged or unsafe to move shall be left in place until examined by EOD.

K. Responsibilities

1. Commanders Responsibilities. Approve, in writing, all physical locations of amnesty program containers. One letter, listing all approved locations, is acceptable.

2. ESO Responsibilities

a. Ensure a copy of the CO's approval letter is maintained by the explosives safety office, the unit managing the amnesty program, and the ASP/Station Ordnance OIC.

b. Monitor execution of the amnesty program to ensure guidelines are being properly followed.

c. Ensure, if required, an A&E SOP has been developed that addresses the amnesty program for all permanent, off range, HC/D 1.1, 1.2, 1.3 and 1.4 locations. HC/D 1.4S small arms locations not covered by an SOP must be covered by documented procedures.

d. Periodically brief personnel on the existence and guidelines for the use of the amnesty program.

e. Ensure key control procedures have been implemented for amnesty program containers.

f. Ensure permanent amnesty box locations are identified on the installation's fire maps.

g. Inspecting Personnel. Personnel conducting amnesty program container inspections are responsible for the following:

1. Monitor amnesty program containers and remove any A&E material.

2. Respond to requests from personnel not qualified/certified to handle or transport munitions and remove any A&E material.

3. Ensure material is safe for transportation and storage. If the condition of the A&E material is in doubt, contact EOD for assistance.

4. Mark and package material for storage and transportation as required.

5. Ensure disposition instructions are requested from the DDA, or in the case of civilian ammunition, the installation's environmental office.

6. Document amnesty program inspections via locally developed log book. This book will, at a minimum, identify required inspection frequency, date inspected, the person conducting the inspection, and a list of the items found.

## 0208 VISITOR HAZARDS AWARENESS BRIEF

All personnel not part of the A&E operation will be provided a hazards awareness brief addressing the specific hazards and requirements prior to entering the area.

A. Below are examples of topics that should be addressed in the hazards brief. This list is not all inclusive, nor is it meant to indicate minimum requirements.

1. Applicable hazards of the explosives area or operation.

2. Prohibited items or actions.

3. Emergency actions (signals, escort, rallying points).

B. Hazards Awareness briefs provided to visitors will be documented and must include the visitor's signature. Documentation shall be retained for a minimum of 30 days.

**VOLUME 8: CHAPTER 3**

**EXPLOSIVES SAFETY DEVIATIONS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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## **CHAPTER 3**

### **EXPLOSIVES SAFETY DEVIATIONS**

#### **0301 BACKGROUND**

Many situations involving contingency, readiness, and/or operational requirements can only be satisfied by deviating from established explosives safety criteria. The Secretary of the Navy has delegated authority to the CMC to issue deviations (waivers, exemptions, and event waivers) from explosives safety criteria contained in references (a) and (f) when strategic or other compelling reasons dictate.

#### **0302 WAIVERS**

A. A waiver is written authority to deviate from mandatory explosives safety requirements for temporary satisfaction of readiness or operational requirements. Waivers will not be granted without a corrective action plan.

B. Waivers are issued for a maximum of two years.

C. Waivers should be canceled upon completion of the corrective actions.

#### **0303 EXEMPTIONS**

A. An exemption is written authority to deviate from mandatory explosives safety requirements for the purpose of long-term satisfaction of readiness or operational requirements.

B. Exemptions are issued for a maximum of five years, but will not be granted for longer than required to correct the deficiency.

C. Exemptions will not be granted without a corrective action plan except where authorization to purchase real estate for sufficient ESQD clearances has not been granted; where it is in the best interest of the United States to grant agricultural leases of encumbered land; or where significant impairment of the defense posture of the United States would result.

#### **0304 REQUEST FOR WAIVERS OR EXEMPTIONS**

A. Marine Corps shore activities will submit all exemption and waiver requests for installation-directed operations which deviate from explosives safety requirements to COMMARCORSYSCOM for approval in accordance with Appendix D, or for activities reviewed during the Explosives Safety Inspection – Compliance Review (ESI-CR), in accordance with the ESI-CR report.

B. Explosives safety deviations for GCC or Service Component Commander (SCC) directed training and exercises on or off OCONUS Marine Corps installations will follow

the deviation processes contained in paragraphs 0307 and 0308 below, and will be submitted to the Command delegated risk acceptance authority.

C. All requests from installations for exemptions or waivers deviating from explosives safety quantity distance will include an assessment from Automated Safety Assessment Protocol Explosives (ASAP-X) or other COMMARCORSYSCOM approved hazard assessment tool.

#### **0305 RENEWAL OF WAIVERS OR EXEMPTIONS**

A. Activities requiring the renewal of either a waiver or exemption shall follow the procedures outlined in Appendix D.

B. The complete package should arrive at COMMARCORSYSCOM at least three months prior to the existing expiration date.

C. Activities that are reviewed during the ESI-CR will renew their waivers and exemptions through procedures contained in the ESI-CR report.

D. Waiver/Exemption renewal requests that do not include a plan of action and milestone for incremental correction or elimination of the deviation will not be processed. This does not apply to Exemptions in place per paragraph 0303C of this chapter.

E. When the renewal of a waiver or exemption is required, each activity shall validate the continuing operational necessity for the deviation.

F. Modifications, alterations, or additions to facilities covered under existing waivers or exemptions shall comply with current regulations, or a revised deviation shall be requested.

#### **0306 EVENT WAIVERS**

A. An event waiver is a deviation that addresses specific non-recurring short term operational requirements.

B. Event waivers will not be authorized as a matter of convenience.

C. Event waivers approved by COMMARCORSYSCOM will not be approved for more than one year. Event waivers required past their one year authorization must be resubmitted as a waiver/exemption.

D. Event waivers approved by the SCC will not be approved for more than one year. Event waivers required past their one year authorization or the operation is a reoccurring event, will be resubmitted as an MRMA per reference (j) to the Command delegated risk acceptance authority.

0307 REQUEST FOR EVENT WAIVERS

A. Marine Corps Activities

1. Marine Corps activities will submit event waiver requests to COMMARCORSYSCOM for approval in accordance with the requirements of Appendix D.
2. The first endorser will verify operational necessity as part of the endorsement.
3. Event waivers which deviate from explosives safety quantity distance requirements will include an assessment from the current version of ASAP-X or other COMMARCORSYSCOM approved hazard assessment tool.

B. Service Component Commanders (SCCs)

1. When delegated risk acceptance authority from the GCC, the SCCs (MARFORCOM, MARFORPAC, MARFOREUR/AF, MARCENT) can approve event waivers to meet operational needs on or off OCONUS Marine Corps installations.
2. SCC directed training and exercises on or off OCONUS Marine Corps installations will follow the deviation process contained in reference (j) and Appendix D.
3. All event waivers exceeding one year or the operation is a reoccurring event will be resubmitted as an MRMA per reference (j).

0308 MRMA FOR JOINT OPERATIONS, PLANNING, TRAINING, AND EXERCISES

A. Per reference (j), Functional Combatant Commanders (FCCs) and SCCs delegated risk acceptance decision authority by a GCC, can approve MRMA at overseas operating locations, on or off a Marine Corps installation that do not meet explosives safety criteria.

B. Marine Corps commands acting as the executive agent, Base Operating Support-Integrator (BOS-I), or delegated risk acceptance authority will prepare an MRMA package per reference (j) and Appendix D for risk decision authority approval.

C. When time does not permit the completion of an MRMA, an event waiver may be prepared and submitted for approval to the delegated risk acceptance authority prior to the operation. Event waivers may be approved for a maximum of one year. Event waivers required for more than one year or the operation is a reoccurring event will be resubmitted to the risk acceptance authority as an MRMA per reference (j) for approval.

D. The composition of an MRMA team will be established by the SCC. The team should consist of personnel familiar with explosives safety requirements (i.e., Explosives Safety Specialists, Ammunition, Aviation Ordnance, or EOD). Assistance can be requested from COMMARCORSYSCOM to augment the assessment team.

E. MRMAs will be evaluated by the risk decision approval authority at the periodicities contained in reference (j).

F. Copies of all MRMAs relating to Marine Corps explosives operations shall be forwarded to COMMARCORSYSCOM.

G. MRMA packages should be submitted to MARCORSYSCOM for technical review prior to approval by the Marine Corps risk decision authority.

#### 0309 SECRETARIAL CERTIFICATION

A. Secretarial Certifications are deviations that require approval by the Assistant Secretary of the Navy; as such, they are seldom requested and the operational necessity must be fully justified prior to submission.

B. Secretarial Certifications are required for all installation new or modified construction that cannot meet explosives safety requirements.

C. Construction in support of overseas training, exercises, or contingencies, unless exempted by paragraph 0309F below, off Marine Corps installations, where MILCON appropriated funds are required and the project does not meet explosives safety requirements of, or requires a Secretarial Certification or Exemption in accordance with reference (a), will follow the submission requirements of reference (j).

#### D. Request for a Secretarial Certification

1. A Secretarial Certification request must consider all available alternatives and be submitted in the same manner as a site approval request.

2. If none of the alternatives will achieve the desired result, and no other site is available where explosives safety criteria can be met, then the following guidance applies.

a. The activity or SCC will submit a Secretarial Certification request to COMMARCORSYSCOM via the chain of command, with endorsements from Naval Facilities Engineering Command and Commandant, Marine Corps (CMC) (LFL).

b. COMMARCORSYSCOM will review and endorse the submission to the Assistant Secretary of the Navy (ASN) (EI&E) for approval.

3. If approved, a certification letter will be sent to the DDESB stating that, in order to satisfy an operational requirement, a facility which does not meet all explosives safety criteria is authorized.

4. Requests for changes to a Secretarial Certification will be submitted in the same manner as an initial request.

E. Criteria for Secretarial Certification. The following information is required in order to prepare the memorandum to the Secretary of the Navy:

1. Full justification, including the complete background, to support the need to construct the facility at the proposed site, and certification that this is the only site where the facility can be constructed.

2. A detailed description of the operations to be conducted at the facility and the impact on operations and readiness if the facility is not constructed. A certification that an operational necessity exists must be included.

3. Advantages and disadvantages of:

a. Building the proposed facility.

b. All alternatives, including the reason why each was not recommended. A no-build alternative must also be addressed.

c. Complete information on all explosives safety considerations taken into account to provide maximum safety and protection for the facility and personnel. The following considerations should be included:

1) Exact distances from PES, quantities and classes of explosives present, and frequency of use.

2) The number of personnel who will be present inside ESQD arcs, with a breakdown of personnel by the categories: active duty, civilian employees, and civilian non-employees.

3) How long the personnel, by categories, will be within the arcs.

4) Any type of building hardening, window glazing, etc. proposed, as well as other considerations which improve safety.

5) Resource implications, to include the latest projected facility cost and the year in which it is budgeted.

6) A quantitative munitions risk assessment utilizing ASAP-X or other COMMARCORSYSCOM approved hazard assessment tool.

F. Review of Secretarial Certifications

1. Each secretarial certification will be reviewed during an ESI-CR. Activities reviewed during the ESI-CR will only need to submit a complete package during every other ESI-CR review. Those ESI-CR reviews in-between will only require submission of the CO's statement of compliance with the existing certification.



2. The secretarial certification review package will include:

a. A copy of the original secretarial certification request with endorsements and approval letters.

b. A letter, signed by the commanding officer, identifying any changes to the existing approval or verification that no changes have occurred.

G. Combatant Commanders (CCDRs) and subordinate commanders are not required to obtain Secretarial Certification or Exemption, as required by reference (a), for construction activities performed in support of contingency operations at contingency locations that violate explosives safety criteria of reference (a) but do not exceed the established MILCON low-cost threshold. The SCC in conjunction with the GCC will develop risk acceptance level and approval process for projects falling under this criteria.

#### 0310 NON-DOD AMMUNITION AND EXPLOSIVES STORAGE AUTHORITY

A non-DoD storage authority is the approval to handle or store commercial or foreign ammunition at Marine Corps installations. This authorization is not an approval for use. Exemptions and categories of non-DoD ammunition and explosives are contained in reference (f).

A. During peacetime, with the exception of safe haven storage, only formally DoD cataloged Class V material may be stored on Marine Corps installations or in a Marine Corps storage facility unless a non-DoD ammunition storage request is approved.

B. Required Information. All non-DoD storage requests must include the following:

1. Complete item description and National Stock Number or other identifying information, if known.

2. Item quantity.

3. HC/D and Storage Compatibility Group (SCG) or interim hazard classification documentation.

4. Net Explosives Weight (NEW).

5. Justification for and type of storage required.

6. Expected duration of storage.

7. Approved munitions retrograde plan for unexpended ammunition.

**0311 STORAGE AND DISPOSAL IN SUPPORT OF OTHER GOVERNMENTAL AGENCIES**

The temporary storage or disposal of non-DoD and/or foreign explosives is available in order to protect the public or to assist agencies responsible for Federal, State, or local law enforcement in storing or disposing of non-DoD and/or foreign explosives when no alternate solution exists. Storage or disposal authorizations are established in 10 USC 2692 in accordance with an agreement between the Secretary of Defense and the head of the Federal, State, or local agency concerned. These requests will be forwarded to COMMARCORSYSCOM who will, in turn, coordinate with DC (CD&I) and (I&L), and the ASN (EI&E) for approval.

**0312 CONSTRUCTION WORKER AUTHORIZATION (CWA)**

A CWA is required to temporarily allow construction personnel within unbarricaded intraline distance (K18) of a Potential Explosives Site (PES). A CWA may also permit the presence of temporary construction trailers used only by workers on-site. Any trailers used to house administrative personnel related to the construction must be located at inhabited building distance. CWAs are approved at the following levels.

A. Routine maintenance and repair work described in reference (f), does not require a CWA and may be approved by the installation. The installation will develop a process for requesting and approving routine maintenance and repair projects.

B. Maintenance and repair work conducted that is not routine and does not alter/modify the facility, Lightning Protection System and/or change the currently sited operation will be approved by the Regional Commander. The Environmental and Explosives Safety (EES) web portal will be used for submission and approval of CWAs at the regional level.

C. Maintenance and repair work CWAs that affects or modifies an explosives facility will be submitted to COMMARCORSYSCOM for approval.

**0313 SUBMISSION OF DEVIATION REQUESTS**

A. Marine Corps activities requesting an explosives safety deviation shall submit the request to COMMARCORSYSCOM, via the EES web portal. The chain of command (Region or MEF) shall provide operational necessity and endorsement of the deviation request. Alternate methods of submission must be approved by COMMARCORSYSCOM.

B. The GCC will identify the method of submission for OCONUS installations and training and contingency areas not located at Marine Corps enduring locations where no ESMP has been established.

**0314 EXPLOSIVES SAFETY DEVIATION APPROVAL AUTHORITIES**

A. ASN (IE&E) is the approval authority for Secretarial Certifications.

B. COMMARCORSYSCOM is the approval authority for all waivers, exemptions, non-DoD storage, and CWAs which affect installation specific explosives facilities or operations.

C. The SCC is the approval authority for event waivers and MRMAs when assigned as the lead service or BOS-I for the conduct of operations directed by the GCC or SCC on or off Marine Corps OCONUS installations.

#### 0315 JOINT BASING/INTER-SERVICE DEVIATION SUBMISSIONS

The lead service is responsible for establishing explosives safety policy on Joint DoD installations. Tenant activities must comply with the explosives safety regulations of the lead service unless exempted by MOU/MOA that specifies the applicable regulations. Copies of all deviations relating to Marine Corps explosives operations on joint bases and inter-service operations will be submitted to COMMARCORSYSCOM.

#### 0316 RISK MANAGEMENT

All deviations present an increased level of risk. Risk Management (RM) is a vital element when evaluating the risk associated with deviating from established explosives safety criteria. All deviations will include an RM assessment per reference (k). In addition to the RM assessment, ESQD deviations will include the DDESB approved ASAP-X worksheet or other RM tools approved by COMMARCORSYSCOM.

#### 0317 COMPENSATORY MEASURES

All compensatory measures associated with deviations, with the exception of event waivers, shall be incorporated into required issuances (SOPs, Base Orders, etc.) and updated regularly. Additionally, the EES web portal will be updated with the compensatory measure information.

**VOLUME 8: CHAPTER 4**

**EXPLOSIVES SAFETY REVIEWS**

**SUMMARY OF SUBSTANTIVE CHANGES**

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## **CHAPTER 4**

### **EXPLOSIVES SAFETY REVIEWS**

#### **0401 BACKGROUND**

The objective of the Marine Corps ESMP is to mitigate explosives mishaps and resulting losses in terms of injuries, deaths, property damage, and mission effectiveness. Root cause analysis of mishaps involving A&E provides methods of interrupting the chain of events, which leads to explosive incidents. Historical analysis has determined the majority of incidents could have been avoided had commands or individuals involved been effectively trained, inspected, supervised, or followed prescribed operational procedures. Accordingly, periodic evaluations, inspections, technical assistance, and self-assessments will be conducted and documented to assess the effectiveness of the Marine Corps ESMP at all command levels. Compliance evaluations/inspections serve as a means to ensure commands are aware of explosives safety criteria, apply lessons learned, transfer information, communicate problem areas to a higher authority, and identify root causes that may lead to an explosives-related incident or mishap.

#### **0402 EXTERNAL REVIEW BOARDS, SURVEYS, AND INSPECTIONS**

Representatives from DDESB and CMC will make periodic inspections and assistance visits to munitions storage and operating areas at Marine Corps installations to ascertain compliance with prescribed explosives safety regulations. All explosives safety inspections, surveys, and assistance visits to Marine Corps installations by agencies external to the Marine Corps will be coordinated through COMMARCORSYSCOM.

#### **0403 DDESB EXPLOSIVES SAFETY MANAGEMENT PROGRAM EVALUATION**

In accordance with reference (1), the DDESB Explosives Safety Management Evaluation Program evaluates the effectiveness of the Marine Corps ESMP. This is a Service-level evaluation that takes a programmatic approach in assessing explosives safety compliance. The evaluation identifies program strengths and weaknesses, analyzes root causes of explosives safety noncompliance, and recommends solutions to possible problem areas. This is accomplished through data point collection and evaluations of the headquarters element (COMMARCORSYSCOM), intermediate element (Regional Explosives Safety Offices), and installations.

#### **0404 EXPLOSIVES SAFETY INSPECTION - COMPLIANCE REVIEW PROGRAM**

COMMARCORSYSCOM will conduct Explosives Safety Inspections – Compliance Reviews (ESI-CR) per reference (m). The ESI-CR is designed to assess and validate the explosives safety program, explosives safety deviations, and installation master planning for explosives safety compliance per DoD, DON, and Marine Corps directives and technical criteria.

A. The ESI is an inspection conducted to assess and validate the explosives safety program for explosives safety compliance per DoD, DON, and Marine Corps directives and technical criteria.

B. The compliance review portion of the ESI-CR is an advisory review that works with local commands to achieve a proper balance between operational readiness and acceptable levels of safety. The compliance review will be conducted concurrently with the ESI and will:

1. Review and recommend the cancellation, modification, or continuation of any deviation in effect.
2. Review or validate Munitions Response sites.
3. Assess and re-validate all Safety Assessment for Explosives Risk (SAFER) issued explosives safety site approvals, on-base Public Traffic Routes (PTR) exposures, and roll-on/roll-off (RORO) operations.

C. Installation requirements during the ESI-CR are outlined in reference (m). These procedures require specific actions be taken to provide adequate command attention and support to the ESI-CR. Commanders of Marine Corps activities must direct all correspondence to the Commander, MARCORSYSCOM via the chain of command.

#### 0405 EXPLOSIVES SAFETY EVALUATIONS

COMMARCORSYSCOM will conduct ESMP evaluations of Marine Corps Operating Forces, Marine Corps Reserve Forces, and MCI Regional commands per reference (m). ESMP evaluations are programmatic and objectively assess the effectiveness of explosives safety responsibilities and will be evaluated concurrently with the installation ESI of the same geographic location.

#### 0406 EXPLOSIVES SAFETY SELF-ASSESSMENT (ESSA)

The ESSA is the formal program by which installations conduct on-going appraisals of A&E operations to determine the effectiveness of the installation ESMP. A complete ESSA will be conducted by each installation on an annual basis per reference (m).

#### 0407 TECHNICAL ASSIST VISITS (TAV)

An evaluation requested by the unit or directed by a senior commander and conducted per reference (m). TAVs are used exclusively for the purpose of training unit personnel and will not be used to compare or to provide the basis for an evaluation of past performance.

A. TAVs must be formally requested from COMMARCORSYSCOM or the appropriate regional command at least 60 days prior to the date of the intended visit. The request will include preferred and alternate TAV dates and will indicate the primary issues or questions to be addressed.

B. TAVs should not be scheduled 120 days before or after a scheduled ESI.

**0408 COMMARCORSYSCOM DIRECTED EVALUATIONS**

COMMARCORSYSCOM may elect to conduct an out of cycle evaluation with 14 days written notice to the installation commander.

**VOLUME 8: CHAPTER 5**

**EXPLOSIVES SAFETY SITE PLANNING**

**SUMMARY OF SUBSTANTIVE CHANGES**

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**CHAPTER 5**

**EXPLOSIVES SAFETY SITE PLANNING**

**0501 BACKGROUND**

Explosives safety standards contained in reference (a) and implemented by reference (f) and this Volume, apply to all U.S. titled munitions wherever they are stored unless more restrictive local standards are mandated by an IA. These standards must be considered the minimum, with greater protection provided when practical.

**0502 FACILITIES PLANNING**

Facility planners are responsible for preparing and routing all planned construction projects per reference (b), for both explosives and non-explosives facilities that may encumber or be encumbered by explosives operations or violate existing ESQD arcs. Projects will be routed through the installation ESO for review, recommendation, and concurrence. Planners are responsible for preparing and forwarding all documentation required for analysis, review, and approval of the site plan. The site approval process can be both complex and labor intensive. Facility planners should submit site approval requests as early as possible to avoid construction delays. No construction will occur prior to the receipt of an approved site plan.

**0503 INTEGRATED PRODUCT TEAM (IPT)**

An IPT will be established at all Marine Corps installations per reference (b). The following guidance will govern the IPT.

- A. The installation's CO or designated representative will establish the IPT in writing.
- B. All planned new facilities or modifications to existing facilities that are impacted by an explosives safety arc must be reviewed by the IPT.
- C. The IPT's decisions or recommendations will be documented in writing.
- D. The IPT should meet at regular intervals to discuss up-coming projects.
- E. At a minimum, the IPT shall include the facility planners, the Public Works Department, ESO, and, if required, a technical representative from the command conducting the explosives operations. As required, the team may also include representatives from Naval Facilities responsible for the facility's design. In cases where protective construction is required, a representative from the Naval Facilities Engineering Service Center and Expeditionary Warfare Center responsible for developing a basis-of-design for protective construction and review of protective construction design drawings may be required.

**0504 LOCATIONS REQUIRING SITE APPROVAL/PLANS**

An explosive safety site approval request (ESSAR) is required by references (a), (f), and this Volume for all locations where A&E is handled, manufactured, modified, or stored. This requirement includes permanently fixed containers located on ranges, containers used in conjunction with an amnesty program, exposed sites encumbered by explosives arcs, and those areas used for the storage and permitted treatment of waste military munitions.

**0505 EXPLOSIVES SAFETY SITING**

Explosives safety site plans are either quantity distance (QD) based safety submissions, risk-based safety submissions (RBSS), or hybrid safety submissions (HSS).

A. QD-based safety submissions evaluate the relationships between PESs and ESs to determine exposure, placement, and construction of PESs and ESs. Application of QD criteria does not provide for risk-free protection, nor does it quantify the assumed risk.

B. RBSSs address ESs and PESs that do not meet the deterministic QD criteria in reference (f), but meet DDESB-approved, risk-based siting acceptance criteria. RBSSs are prepared using a quantitative risk assessment tool such as the Safety Assessment for Explosives Risk (SAFER). Paragraph 0512 of this chapter contains information on preparation, review, and submission of RBSS.

C. HSSs address facilities and operations that do not completely conform to criteria or meet the risk-based criteria in reference (f). The non-conforming portion of the explosives site plan is accepted by the service through a deviation approval process, outlined in Chapter 3, and the conforming portions of the HSS are forwarded to the DDESB for approval.

**0506 ENCROACHMENT REVIEW**

A. Encroachment reviews of all non-ammunition related facilities encompassed by ESQD arcs will be conducted and documented annually.

B. Encroachment reviews may be documented using an MFR. The current and previous year's review will be maintained.

C. Encroachment issues will be reported to the installation commander, public works, and affected organizations.

D. Encroachment issues will be mitigated immediately and within 10 working days of identifying the encroachment issue, a plan will be implemented to eliminate the hazards.

**0507 EXPLOSIVES SAFETY SITE APPROVALS**

A. An approved explosives safety site plan is required for locations, regardless of the date of construction, where ammunition and explosives are handled or stored. The exception to this requirement is for ammunition temporarily, less than 24 hours, stored and handled in

direct support of training events on operational training ranges. These events are permitted by the Installation Range Control.

B. An explosives site plan must be approved before starting any new construction project (either planning or actual construction).

C. Requests for an expedited review of an ESSAR will be submitted using the standard Naval format. The letter will be addressed to COMMARCORSYSCOM, include the rationale for an expedited review, and be approved by the CO of the requesting activity/command. Expedited reviews should be reserved for urgent requirements and shall not serve as a substitute for lack of prior planning.

D. Munitions Response Explosives Safety Submissions (MRESS) address explosives safety requirements for munitions responses that involve either intentional physical contact with Munitions and Explosives of Concern (MEC) or ground-disturbing or intrusive activities in areas known or suspected to contain MEC. Chapter 7 of this Volume provides additional guidance to facilitate and enhance the development and review of MRESSs.

E. ESSAR approval for locations storing  $\leq 300$  pounds NEW of HC/D 1.2.2, 1.3, or 1.4 combined may be obtained from COMMARCORSYSCOM.

F. ESSAR approval for locations storing  $> 300$  pounds NEW of HC/D 1.2.2, 1.3 or 1.4, with the exception of 1.4S, or for any quantity of HC/D 1.1, 1.2.1, or 1.2.3 must be submitted to DDESB via COMMARCORSYSCOM for approval.

G. Any modification to existing facilities that are within 110% of existing IBD arcs requires evaluation by the IPT to ensure adequate safety measures are in place, especially for vulnerable facilities such as schools, medical facilities, housing, and dining facilities.

H. Construction of new facilities outside of IBD but within 110% of IBD requires approval from COMMARCORSYSCOM.

#### 0508 CONTRACTOR SITE PLANS

A. Government Owned/Contractor Operated facilities will submit explosives safety site plans to COMMARCORSYSCOM for review, endorsement/approval based on the Hazard Class/Division of the ammunition and explosives being developed, manufactured, or stored.

B. Contractor Owned/Contractor Operator facilities, when the Marine Corps is the Procurement Contracting Officer, will submit explosives safety site plans to COMMARCORSYSCOM per reference (n).

0509 STORAGE AUTHORITY FOR MARINE CORPS INSTALLATIONS

Installation commanders may approve AE storage as outlined below.

A. General Requirements

1. All storage must comply with fire protection, safety, and physical security requirements of references (f) and (i).

2. Storage approvals will be reviewed annually and updated as required. Storage approval reviews may be documented using a MFR.

3. Changes that affect the conditions of storage authorizations require a new approval letter.

4. Copies of storage approvals must be maintained at the storage location, and the data entered into the EES portal.

5. Deviation from these requirements requires approval from COMMARCORSYSCOM.

B. Safety and Security Ammunition

1. The storage authorization is only for safety and security ammunition, HC/D 1.3 and 1.4, designated specifically for the safety and security of the facility or installation.

2. The following storage authority limitations apply to all Marine Corps commands.

a. No more than 25 pounds NEW of HC/D 1.4 can be stored.

b. No more than 10 pounds NEW of HC/D 1.3 can be stored.

c. When combining HC/D 1.3, and 1.4, no more than 35 pounds total NEW can be stored, of which no more than 10 pounds NEW can be HC/D 1.3.

C. EOD Units. EOD units are authorized to store up to 50 pounds NEW of HC/D 1.3 and 1.4 in EOD operating buildings as part of the immediate response kit.

D. Bird Abatement Strike Hazard (BASH) Program. Storage of ammunition in support of the BASH Program using the guidance contained in subparagraph 0509A of this chapter.

E. Cartridge and Propellant Actuated Devices. The temporary storage of cartridge actuated devices, or propellant actuated devices is authorized for after working hour deliveries via approved commercial carrier.

F. Privately Owned Small Arms Ammunition. Limited quantities of privately owned ammunition are authorized to be stored in local armories. Private ammunition will be kept segregated from DoD stocks and be subject to locally written accountability/custody procedures.

0510 HAZARD CLASS/DIVISION 1.4S STORAGE

Installation commanders or operational commanders training at host nation ranges may approve up to 3,000 pounds NEW of HC/D 1.4S ammunition. This storage authorization is not applicable to armories. Authorizations for storage must be documented through local procedures. Storage exceeding 3,000 pounds NEW of HC/D 1.4S requires approval from MARCORSSYSCOM or the GCC delegated risk decision authority in accordance with Chapter 3.

0511 RISK BASED EXPLOSIVES SAFETY SUBMISSIONS

Risk Based Explosives Safety Submissions (RBESS) may be used in situations where the siting requirements of reference (f) cannot be met and all available options have been exhausted. DDESB has approved the use of risk assessment models, such as Safety Assessment for Explosives Risk (SAFER), in lieu of qualitative distances contained in reference (f). RBESS provide both acceptable risk criteria, and the statistical methodology necessary to calculate the probability of a fatalities through data input. RBESS that meet the criteria of reference (a) will be approved by DDESB without a waiver. RBESS will be reviewed and validated during explosives safety compliance reviews per reference (m).

A. Initial Submittal. The initial request for a RBESS siting will be developed by a user who has completed training in the latest version of the applicable risk management software. The following items must be specifically addressed and included in the package:

1. Elements of a standard site plan submission, to include maps showing the required ESQD arcs and all alternative locations considered.
2. A detailed written explanation of the situation which created the need to deviate from standard QD criteria, options considered, reasons for rejection of options, and all locations that are effected by the deviation (e.g., building number, usage, sited NEW).
3. The applicable datasheets generated by the risk management software.
4. Site plans will be submitted to the DDESB, via COMMARCORSYSCOM, for approval.

B. Recertification of RBESS. RBESS are valid for five years, provided there are no changes to conditions identified in the original submission. Recertification of RBESS is as follows:

1. Changes to the original submission require the installation to notify COMMARCORSYSCOM and, if required, develop a new RBESS. The new RBESS will be prepared using the latest version of the risk management software.

2. Recertification is required every five years. If, at the end of five years there have been no changes to the original submission and there have been no updates to the risk management software used to develop the original site plan; the installation commander will submit a letter to COMMARCORSYSCOM confirming no changes have occurred during the installation's explosives safety compliance review per reference (m).

3. If an updated version of the risk management software has been developed, a new package must be prepared, using the updated version of the risk management software, five years from the original approval date.

#### 0512 AUTOMATED SITE PLANNING TOOL (ASPT)

When implemented at the installation, the use of ASPT is required for the development of all explosive safety site plans.

#### 0513 JOINT BASE/OPERATIONS COORDINATION

The lead Military Service having the responsibility for joint base facilities and installation master planning will coordinate with all involved units and submit explosives safety site plans.

#### 0514 DOD MUNITIONS ON HOST NATION INSTALLATIONS

##### A. DoD Exposures from Host Nation PESs

1. An explosives safety site plan for a DoD PES or ES encumbered by a host nation's PES must contain enough information regarding the host nation PES to show that the DoD exposure is located at the minimum required separation distance from the host nation PES.

2. The service preparing the explosives safety site plan should request this information from the host nation responsible authority. When specific information is not available, an explanation regarding the lack of information plus any rationale for assumptions regarding the host nation PES should be included in the safety submission. The military service-level explosives safety office must include concurrence with those assumptions in the military service-approved explosives safety site plan that is forwarded to the DDESB for review and approval.

3. Per reference (j) the lead service will notify host nation government officials via the U.S. Embassy of the risk associated with DoD operations involving DoD military munitions. Notification to the host nation's responsible government authority should be made per applicable laws, state-to-state agreements, including Status of Forces Agreements and US Command policies. Every attempt should be made to obtain host nation concurrence. The

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responsible U.S. authority should consult legal counsel and, when necessary, the U.S. Department of State representative.

**0515 TRAINING**

All personnel responsible for preparing, reviewing, and endorsing explosives safety site approval requests are required to have completed AMMO-36 within the last 5 years.

**VOLUME 8: CHAPTER 6**

**EXPLOSIVES SAFETY SITE PLANNING**

**SUMMARY OF SUBSTANTIVE CHANGES**

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## CHAPTER 6

### MATERIAL POTENTIALLY PRESENTING AN EXPLOSIVE HAZARD

#### 0601 BACKGROUND

This chapter establishes criteria for processing and handling material potentially presenting an explosive hazard so it can be safely managed and disposed of.

#### 0602 SCOPE

This chapter establishes procedures used to handle, certify, and dispose of or recycle munitions and munitions related items. Requirements in this chapter apply to munitions responses.

#### 0603 MATERIAL STATUS

##### A. Material Potentially Presenting an Explosive Hazard (MPPEH)

1. MPPEH is material whose explosives safety status has not been determined. These items may contain a high enough concentration of explosives to represent an explosive hazard.

##### 2. MPPEH does not include:

a. Munitions within the Marine Corps munitions management system that are or can be used for their original purpose.

b. Items that are not munitions but may present an explosive hazard, such as gasoline cans or compressed gas cylinders.

B. Material Documented as Safe (MDAS). MDAS is material that has been documented as not presenting an explosive hazard.

C. Material Documented as Having an Explosives Hazard (MDEH). Material that cannot be documented as safe or that has been assessed and documented to present an explosive hazard.

D. Munitions and Explosives of Concern (MEC). Specific categories of military munitions that may possess unique explosives safety hazard/risks; includes UXO, Discarded Military Munitions (DMM) or Munitions Constituents (MCs) present in high enough concentrations to pose an explosive hazard.

#### 0604 REPORTING MPPEH INCIDENTS

Explosive incidents involving MPPEH or MDEH shall be immediately reported to COMMARCORSYSCOM. This requirement is in addition to requirements for reporting explosive mishaps and incidents.

0605 MPPEH MANAGEMENT

A. MPPEH Requirements Apply to:

1. Munitions/munitions debris and targets collected and removed during range clearance/munitions response activities.
2. Munitions containers and packaging material.

B. MPPEH Requirements do not Apply to:

1. Military munitions and munitions-related materials within the Marine Corps munitions management system.
2. Non-munitions-related material and solid metal fragments.
3. Subsurface material that has not been investigated.

0606 MPPEH PROCEDURES

A. MPPEH Processing. All munitions related material will be MDAS certified prior to being taken off the range or point of use. Expended munitions material downloaded from aircraft will be MDAS certified at the location where the items are downloaded. Other MPPEH processing locations must be explosively sited.

B. MPPEH Processing Locations

1. Will be sited as an ES, at not less than ILD from surrounding PESs.
2. Will be sited as a PES, when the MPPEH has not been certified.
3. DDESB site approval is not required for temporary locations on operational training ranges.
4. DDESB site approval is required for permanent processing locations on operational training ranges.
5. Will be managed as a restricted area until the MPPEH has been certified safe.

C. Authorized Inspection Personnel

1. Personnel, who are authorized to inspect MPPEH and document the explosives safety status, must be designated in writing by the CO or responsible individual.
2. The designation letter must list the personnel who are qualified and authorized to assess and document the explosives safety status of MPPEH, identify the type of

MPPEH they are authorized to inspect, and include sample signatures. This designation is valid for one year from date of authorizing signature.

3. Designated individuals will receive training or be knowledgeable about the items they are certifying.

4. A current copy of this designation letter must be on file and provided to the Defense Logistics Agency (DLA) Disposition Service or Qualified Recycling Program (QRP) receiving MDAS.

5. A copy of this designation letter will be maintained at each location where these items are accepted, processed, or stored.

0607 MDAS Inspection Certification and Documentation

A. Inspection

1. Must have two 100% independent visual inspections. Visual inspection completes the inspection process for pieces that have no cavities, holes, or other obscured features. For pieces with these features, paragraphs 0607A.2 through 0607A.4 apply.

2. Processed by a DDESB-approved technical method followed by a specified post-processing sampling inspection.

3. Expert knowledge may be used to determine MDAS status. Use of expert knowledge requires COMMARCORSYSCOM approval.

4. MDAS may contain residual explosives; however, these residues shall not be in concentrations or configurations sufficient to pose an explosive hazard.

B. Certification

1. Documentation for MDAS will consist of an Issue/Release/Receipt Document DD Form 1348-1A, or a local form as authorized by the CO. Each DD Form 1348-1A or local form must include the following statement:

“The material listed on this form has been inspected or processed by DDESB-approved means, as required by DoD policy, and to the best of my knowledge and belief does not pose an explosive hazard”.

2. The MDAS certification documentation must identify the material type. For example, expended small arms cartridge casings, empty ammunition containers, or expended Mk 76 practice bombs.

3. Documentation as MDAS requires dual signatures on the certification document by authorized individuals conducting the visual inspection. The first signature may be provided by either a DoD employee or DoD contractor. The second signature must be provided

by a U.S. citizen who may be either a DoD employee or a DoD contractor and independent of the first inspector.

4. Each of the two signatures must be directly above the typed or clearly stamped or legibly printed full name, rank/rate/grade, complete organization name and address, and phone numbers (commercial and DSN) of the respective inspector.

5. If the required documentation is incomplete or lost or if the chain of custody is compromised, this material is no longer considered MDAS and reverts back to MPPEH and must be rescreened or handled as an explosives operation.

6. MDAS may be released for further demilitarization (e.g., mutilating, crushing, smelting) only if the integrity of the containers and the chain of custody is maintained. The explosives safety status documentation must accompany the material during transfer within or release from Marine Corps control.

#### 0608 MDEH CERTIFICATION AND DOCUMENTATION

A. Certification documentation for MDEH will consist of a DD Form 1348-1A, Decontamination Tag (DD Form 2271), or a local form as authorized by the CO.

B. Documentation as hazardous requires a 100% visual inspection. When an initial inspection by a qualified and authorized person determines that the material is hazardous, a second independent inspection is not required, and the certification shall be prepared by the inspector.

C. Items may also be designated as MDEH if:

1. There are potential internal cavities or devices that contain explosives.
2. The material has not been 100% inspected.
3. The certification process has not been completed to the point of documentation with dual signatures.
4. The certification document must provide the following information:
  - a. Type of explosive hazard or contamination.
  - b. Presence of un-vented cavities.
  - c. Estimated NEW.

d. MDEH certifications shall include the following statement:

"This certifies that the material potentially presenting an explosive hazard listed has been 100 percent properly inspected and to the best of my knowledge and belief presents an explosive hazard". The MDEH certification statement may be modified or augmented as required.

e. Each signatory must ensure that the chain of custody was maintained before signing the certification documentation.

f. If the required documentation is incomplete or lost or if the chain of custody is compromised, this material is no longer considered MDEH and reverts back to MPPEH.

#### 0609 DOCUMENTATION RETENTION

A. Legible copies of documents identifying the explosives safety status of the material will be retained for a minimum of three years from the date of certification.

B. Documentation of the material's explosives safety status must accompany release from Marine Corps control.

#### 0610 CONTAINERS AND MARKINGS

A. Empty ammunition containers will have all markings covered or obliterated to indicate they no longer contain explosive material. Empty containers that remain in an inventory-controlled facility, or its immediate external storage area, that are to be re-used for their intended purpose do not require obliteration;

1. These empty containers shall be segregated so as not to be confused with loaded containers.

2. Exception only applies to containers intended to be reused after completion of weapons/container maintenance, containers retained for re-containerization of captive carry items, containers to support ship offloads, gun downloads, range turn-ins (on the range), or similar applications.

3. Empty containers which remain after asset expenditure or containers held pending disposition are not exempted from the empty container marking requirement.

B. Locations used to store screened small arms ammunition must be covered to prevent water spreading contamination from the expended brass.

C. Containers storing material that has a documented explosives safety status will have material and status information in permanent marking/labeling on the outside of the container. These containers must either be locked, secured with container seals identified on the supporting documentation, or sealed with type I/II traceable seals. If used, type I/II traceable seals shall follow procedures similar to those for ordnance container traceable seals.

0611 STORAGE OF DOCUMENTED ITEMS

A. Documented procedures will be developed by the unit/organization storing munitions. Procedures will identify measures that prevent the commingling of certified and uncertified material. Additionally, procedures to recertify the material if commingling does occur will be developed.

B. If commingling of certified and uncertified material occurs, the items must immediately be rescreened. If commingled items are not immediately rescreened, they will be considered MPPEH and must be handled and stored in an explosively sited location.

C. MDAS documentation will be kept for every certified item. Multiple items may be listed on the same document. A single area may contain multiple groups of MDAS certifications as long as the items are segregated (i.e., separate banded pallets, marked off locations). If commingling occurs, the entire area will be considered unscreened and will require immediate recertification/rescreening.

D. MDAS certified expended small arms cartridge casings may be consolidated in single containers. MDAS certification must account for all items placed in the container.

E. Screening documentation must be maintained on-site.

0612 MOVEMENT AND/OR TRANSPORTATION

Prior to on-site movement, MPPEH must be evaluated and determined to be safe to move as follows:

A. Movement. Movement on a munitions response site will be based on the potential explosive hazard. MPPEH must be evaluated by one of the following, as authorized by the commanding officer.

1. Explosive Ordnance Disposal (EOD)
2. UXO-qualified personnel
3. Technically qualified and authorized personnel

B. Transportation

1. MDAS may be shipped over public traffic routes as inert material. Documentation of its explosives safety status must accompany the shipment.

2. MDEH shall not be transported over public traffic routes unless determined safe for transport by qualified and authorized personnel. A signed "safe to transport" certification must accompany the shipment.

**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM**

3. Hazard classification assignments are required to accompany shipments of MDEH material when identified in Table 6-1 below. Table 6-1 also provides guidance on transportation certifiers. Interim hazard classification (IHC) may be obtained from NOSSA.

Table 6-1: Interim Hazard Classification

Recovered Item	Certifier	C/D	Vehicle Type	IHC Required
UXO	EOD Only	1.1	Military	No
UXO	EOD only	1.1	Commercial	Yes
UXO	EOD only	Other than 1.1	Commercial	Yes
DMM/MC	EOD or UXO Tech III (or higher)*	1.1	Military	No
DMM/MC	EOD or UXO Tech III (or higher)*	1.1	Commercial	Yes
DMM/MC	EOD or UXO Tech III (or higher)*	Other than 1.1	Military	Yes
DMM/MC	EOD or UXO Tech III (or higher)*	Other than 1.1	Commercial	Yes
Other MDEH	EOD or UXO Tech III (or higher) or other designated technically qualified personnel	1.1	Military	No
Other MDEH	EOD or UXO Tech III (or higher) or other designated technically qualified personnel	Other than 1.1	Military	Yes
Other MDEH	EOD or UXO Tech III (or higher) or other designated technically qualified personnel	1.1	Commercial	Yes
Other MDEH	EOD or UXO Tech III (or higher) or other designated technically qualified personnel	Other than 1.1	Commercial	Yes

\*UXO Technician standards are defined in DDESB TP 18

**0613 SPECIAL CONSIDERATIONS**

**A. Expended Small Arms Cartridge Casings**

1. Expended small arms ammunition cartridge cases may be processed as a non-explosive operation prior to being assessed as MDAS, provided they are screened before processing. Screening is intended to ensure only .50-caliber and smaller expended cartridge cases are present, and to remove live rounds.

2. Screening will be done by locally determined methods developed in approved written operating procedures.

3. After expended small arms cartridge cases have been screened, they must be segregated from MDAS and unscreened small arms cartridges and kept in a controlled location, but they do not need to comply with storage or siting requirements.

4. Expended small arms cartridge cases not screened or documented as safe prior to transport or storage are subject to the transportation, storage, and siting requirements of reference (f).

5. Personnel screening small arms cartridge casings do not require participation in the qualification/certification program outlined in reference (c).

B. Expended Shotgun Shells. Expended shotgun shells that do not exhibit hazardous waste characteristics may be disposed of as general trash provided they are 100 percent visually screened for the presence of unfired rounds.

C. Cardboard, Plastic, and Plywood Containers and Packaging Material. These items may be discarded as general trash provided the following procedures are followed:

1. The items are 100% visually screened for the presence of munitions by two different individuals.

2. All previous ammunition and explosives markings are removed or obliterated.

3. The items are broken down or otherwise deformed so that they may not be used for their original purpose.

4. There are no environmental regulations precluding such disposal.

5. The items are certified as MDAS on a DD Form 1348-1A or a local form as authorized by the commanding officer and:

6. A chain of custody is maintained until the MDAS leaves the restricted area (i.e, areas where munitions operations or MPPEH generation is occurring) and enters the facility's solid waste stream.

D. Empty Container Repurposing. Containers that previously held ammunition and/or explosives may be repurposed to another use supporting operational needs if:

1. The containers are 100% visually screened for the presence of munitions.

2. All markings associated with the original contents are obliterated.

#### 0614 QUALIFIED RECYCLING PROGRAM

A. Material that can be recycled through a QRP includes:

1. Expended small arm cartridge casings (up to and including .50 caliber) and mixed metals made no longer recognizable as having been munitions or munitions debris (e.g., crushed, shredded, smelted).



2. Unserviceable ammunition cans that cannot be reused.

B. Material that cannot be recycled through a QRP

1. Items that must be demilitarized at any time during its life cycle, except for expended small arms cartridge casings and mixed metals as noted above.

2. Munitions List Items.

3. Cans, if they can be reused by the government as ammunition cans.

4. All other scrap metals from MPPEH even if certified safe, must be sold through the DLA.

C. QRP Guidelines. Prior to accepting MDAS, a QRP must:

1. Have the CO designate a QRP manager in writing.

2. A written explosive Mishap Risk Assessment (MRA) will be developed or RM assessment in accordance with reference (k) will be performed before any QRP may receive MDAS. The results of the MRA or RM assessment will be used to develop approved written procedures for processing MDAS prior to transfer to the QRP. The MRA or RM assessment will identify:

- a. The nomenclature and description of the MDAS that can be accepted.

- b. The potential explosive hazard associated with any MDAS that has been incorrectly certified.

- c. The adequacy of the QRP training, oversight, record keeping, processing methods, equipment, and storage facilities.

- d. The MRA or RM assessment will be reviewed by the installation ESO for approval at the command level.

3. Develop an SOP or written procedures that:

- a. Identifies the types of MDAS that is acceptable for transfer to the QRP.

- b. Outlines procedures for verifying the MDAS being turned in has been certified in writing, either by DD 1348 or local form, and that the item was inspected and contains no explosives hazard.

- c. Outline immediate action procedures if MPPEH is found in the QRP.

- d. Outlines specific procedures for accepting permitted material.

e. Details the mechanism for tracking and maintaining records of the types and amounts of material handled.

f. Identifies the requirement to crush, shred, or otherwise mutilate all expended small arms cartridge casings prior to sale.

g. Identify handling procedures that facilitate maintaining chain of custody until final disposition.

h. Specifies incident reporting procedures in the event of an unintended explosives hazard incident.

4. QRP personnel who receive expended small arms ammunition cartridge cases or mixed metals gleaned from range clearance must be trained at a minimum to do the following:

a. Recognize QRP eligible material.

b. Verify signatures on all turn-in documents, such as Disposal Turn-in Document DD Form 1348-1A, against the current list of personnel authorized to certify as safe.

c. Visually inspect certified QRP eligible material, and recognize potential explosives safety hazards.

d. Respond properly if an unsafe condition is identified.

5. Verify letter of personnel who are qualified and authorized to document MDAS in accordance with paragraph 0606C.

**0615 DEFENSE LOGISTICS AGENCY (DLA)**

A. DLA can only accept MPPEH that has been certified as MDAS in accordance with reference (o).

B. DLA will maintain a list of personnel authorized to turn in MDAS material.

C. DLA will implement controls to prevent the comingling of uncertified munitions with MDAS certified items.

**VOLUME 8: CHAPTER 7**

**MUNITIONS RESPONSE**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

The original publication date of this Marine Corps Order (MCO) Volume (right header) will not change unless/until a full revision of the MCO has been conducted.

All Volume changes denoted in **blue font** will reset to black font upon a full revision of this Volume.

<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>

**CHAPTER 7**

**MUNITIONS RESPONSE**

**0701 BACKGROUND**

A munitions response is conducted at Munitions Response Sites (MRS) to address explosives safety, human health, or environmental risks posed by munitions and explosives of concern (MEC).

**0702 SCOPE**

A. Establishes criteria to protect people and real property from explosive hazards associated with real property known or suspected to contain MEC or MPPEH.

B. This chapter focuses on explosives safety and environmental requirements of a munitions response.

C. This chapter does not address munitions responses involving Chemical Agents (CA) or military munitions containing CA. Contact COMMARCORSYSCOM, Program Manager for Ammunition (PM AMMO), for specific guidance regarding these items and associated munitions responses.

**0703 MUNITIONS RESPONSE APPLICABILITY**

A. A munitions response is required for:

1. Real property known or suspected to contain MEC and/or MPPEH prior to its transfer from DoD control.

2. Change of land use to an activity that is incompatible with the presence of MEC and/or MPPEH.

3. Former Marine Corps sites that are no longer under the control of the DoD and are known or suspected to contain MEC and/or MPPEH, but have been determined not to be eligible for the Army's Formerly Used Defense Sites (FUDS) program.

4. Areas where combat operations or acts of war occurred when current or future land uses are incompatible with the presence of MEC and/or MPPEH.

5. Areas on operational ranges where military munitions burial sites are located.

6. Other MEC and/or MPPEH locations not on an operational range.

7. Construction on an operational range which includes ground intrusive activities not associated with operational range maintenance or clearance as defined in reference (p).

B. A munitions response is not required for:

1. Maintenance or clearance of operational ranges per reference (p).
2. Explosives or munitions emergency responses.

#### 0704 REAL PROPERTY

Real property consists of land, buildings, and installed equipment. Real property may contain MEC and/or MPPEH as the result of research, development, testing, evaluation, storing, handling, training, treatment, disposal (including burial), loss, abandonment, or waste collection.

A. Real Property Known To Contain MEC and/or MPPEH. MEC and/or MPPEH have actually been found on the property and there is reason to believe that additional MEC and/or MPPEH are present beyond that found.

B. Real Property Suspected To Contain MEC and/or MPPEH. MEC and/or MPPEH have not been found, but other evidence indicates with a high degree of certainty that MEC and/or MPPEH exists on the property.

#### 0705 MATERIAL POTENTIALLY PRESENTING AN EXPLOSIVES HAZARD

During munitions responses, MPPEH is frequently encountered on-site. Although MPPEH is not known with certainty to present an explosion hazard, MPPEH must be managed as presenting an explosive hazard until it is visually inspected and/or processed and documented as safe.

#### 0706 DISPOSAL

The disposal, such as burying or dumping, of military munitions on land or in the water, except when specifically authorized by the Secretary of the Navy and in compliance with applicable regulatory requirements, is prohibited. However, this prohibition does not preclude:

A. The covering of munitions with earth to control fragments and noise during authorized destruction by detonation.

B. The use of in-situ capping of MEC and/or MPPEH when implemented as an engineered remedy under an authorized response action.

#### 0707 RECORD KEEPING

A. Installations will identify all ammunition and explosives storage and operating locations and all areas known or suspected to contain MEC and/or MPPEH on installation master plans and maps.

B. Installations must maintain permanent records concerning known or suspected MEC/MPPEH locations. These records must include:

1. Former munitions-related activities at the site including, but not limited to, EOD incident reports, range firing records and manuals, Open Burn/Open Detonation (OB/OD) treatment records, and other records involving ammunition and explosives.

2. Site characterization activities such as record searches, geophysical investigations, and intrusive investigations.

3. Munitions responses, including:

a. Site investigations.

b. No DoD Action Indicated (NDAI).

c. Construction support.

#### 0708 ACCESS TO REAL PROPERTY

Limit access to real property containing MEC and/or MPPEH by:

A. Risk-based actions to prohibit and prevent unauthorized access to real property containing MEC and/or MPPEH. These actions can include posting warning signs, establishing access controls such as fences, entry/exit points, or roving security patrols, and public education.

B. Allowing personnel to enter property known to contain MEC and/or MPPEH only after full consideration of the type, amount, and location of MEC and/or MPPEH present and the activities for which entry will be authorized. As necessary, provide safety briefings prior to entry and escorts who are trained in identifying and handling MEC and/or MPPEH.

#### 0709 RESIDUAL RISK

A. Due to technology limitations and site conditions, it is not possible to certify that MEC and/or MPPEH has been removed with 100% certainty. Although residual risk can be managed by land use controls, munitions response sites will assume to pose some degree of residual risk after the response has been completed.

B. The extent to which MEC and/or MPPEH removal is undertaken depends largely on the current, determined or reasonably anticipated future land use. When MEC and/or MPPEH cannot be removed to the degree necessary to safely allow the current, determined or anticipated future land use, the land use must be changed or restricted accordingly.

C. When the Marine Corps does not control the land and the imposition of an LUC is not possible (such as transferred, non-FUDS sites), the property owner and any tenants

shall be provided written notification of the potential residual explosive hazards and the risks inherent in any use of the property inconsistent with the potential hazards.

#### 0710 EXCLUSION ZONES (EZ)

Munitions responses often involve the storage, handling, processing, and excavation of MEC and/or MPPEH. All munitions response-related operations and storage locations must be shown on ESQD maps. The ESQD arc, established around a processing, handling, or intrusive MEC and/or MPPEH work area is called an exclusion zone (EZ). Unlike a standard site approval that is associated with a fixed process or structure and remains in effect indefinitely, a MEC EZ is created by a response operation that may move within defined boundaries, can be suspended, and will be cancelled upon project completion. For example, the EZ that results from an excavation process moves with the excavation equipment as it operates on the site. If excavation operations are not occurring, the excavation EZ is not in effect. All EZs must be cancelled via an AAR when the project is completed.

#### 0711 STORAGE

The storage of donor explosives, recovered MEC, and MPPEH must comply with applicable explosives safety requirements for the storage of ammunition and explosives.

#### 0712 HANDLING

The handling of MEC and/or MPPEH produces an EZ based on the munition with the greatest fragmentation distance (MGFD) or the maximum credible event (MCE), as appropriate.

#### 0713 PROCESSING

The applicable EZ's for MEC and/or MPPEH processing is based on whether the operation is mechanized or not. Mechanized operations are divided into high-input or low-input activities.

A. High-Input. High-Input processing operations (e.g., shredding or crushing) are intended to physically deform material, including any MEC or MPPEH being processed, and certain excavations or dredging operations depending upon the risk assessment.

B. Low-Input. Low-Input processing operations (e.g., on-site transport, dumping, screening, raking, spreading, sifting, or magnetically separating) are not intended to intentionally deform material, including any MEC or MPPEH being processed, and certain excavations or dredging operations depending upon the risk assessment.

#### 0714 EXCAVATION

Due to the unique nature of excavation operations, the application of EZs to these operations differs from other operations. Excavation operations generally fall into two categories, manual or mechanical. The use of mechanical excavation is not necessarily considered a mechanized MEC process.

0715 ACCESS

In general, access to EZ's is limited to personnel essential to the operation being conducted. However, under specific conditions and on a case-by-case basis, authorized visitors may be granted access to the EZ when operations are being conducted. In addition to general munitions response site access requirements, formal written procedures addressing EZ access, including authorized visitor access, must be developed in support of response actions involving MEC and/or MPPEH and must address the following requirements:

A. The Unexploded Ordnance Safety Officer (UXOSO) may grant EZ access to authorized visitors with concurrence from the responsible project manager. Access to the site will be based upon the operational risk analysis of the scheduled MEC and/or MPPEH operations and availability of escorts, as well as a demonstrated visitor need and subsequent completion of visitor safety briefings. Access to an EZ while munitions response operations are occurring is limited to essential personnel and authorized visitors.

B. The UXOSO is responsible for conducting a risk management assessment prior to initiating response actions involving MEC and/or MPPEH. In addition, the UXOSO must determine the maximum number of persons (essential personnel and authorized visitors) that can be in the EZ at one time. The ratio of UXO-qualified escorts to visitors will be determined by the UXOSO based on this site-specific operational risk analysis.

C. Based on the risk management assessment, the UXOSO may determine that access to the EZ is unsafe for visitors. However, reasonable efforts should be made to accommodate authorized visitors.

D. Persons requiring access to the EZ must demonstrate a legitimate need for access and obtain authorization from the responsible project manager and UXOSO. At a minimum, the request for authorization will include names of the individual requesting access, the identification of emergency contacts for these individuals, purpose of visit, task(s) to be performed, and rationale to support EZ access. Persons requesting access must submit their request to the responsible project manager and UXOSO prior to the proposed date of the site visit. This advance notice will allow time for the UXOSO to support the visit request by assigning a qualified escort, conducting an operational risk analysis on the operations planned for the date of the site visit, and preparing a visitor site-specific safety briefing for the planned operations.

E. Prior to entry, all authorized visitors must receive a site-specific safety briefing describing the specific hazards and safety procedures to be followed within the EZ for operations underway that work day. Each authorized visitor must acknowledge receipt of this briefing in writing.

F. Authorized visitors to the EZ must be escorted at all times by a UXO-qualified person assigned to the project.



G. Any authorized visitor that violates the established safety procedures will be immediately escorted out of the EZ and/or site for their own protection and to protect essential personnel working at the site.

0716 TRANSPORTATION

A. Destruction-in-place is considered the safest approach to MEC.

B. Based on site-specific conditions, a response action may include on-site movement or off-site transportation of recovered MEC or MPPEH. MEC or MPPEH transported off-site for any purpose other than recycling must follow applicable environmental regulations.

C. On-Site Movement of MEC AND/OR MPPEH. Prior to on-site movement, MEC and/or MPPEH must be evaluated and determined to be safe to move as follows:

1. For MEC, including suspect munitions items, items must be certified by one of the following:

a. EOD

b. Qualified and authorized UXO contractor personnel serving as the Senior Unexploded Ordnance Supervisor (SUXOS) and UXOSO must determine that the risk associated with movement is acceptable and that the movement is necessary for the efficiency of the activities being conducted or the protection of people, property or critical assets. In such cases, the responsible SUXOS and UXOSO must agree with the risk determination and document this decision prior to movement of the MEC or munitions item.

2. For all other MPPEH, items can be certified by one of the following:

a. EOD

b. UXO-qualified personnel.

c. Technically qualified and authorized personnel.

D. The non-emergency transportation of recovered MEC or other MDEH over public traffic routes must comply with applicable guidelines as well as the following:

1. The transportation of MPPEH off-site is not authorized. All items must be certified and documented as either MDAS or MDEH prior to transportation.

2. As specified in Table 6-1, EOD, UXO contractor personnel, or designated technically qualified personnel must evaluate recovered MEC and/or MPPEH items, assess and document its explosive status, and determine if it is safe to transport. If the item is assessed and determined to pose an explosive hazard, it must be considered MDEH and managed accordingly. Prior to transport, EOD, specified UXO contractor personnel, or designated technically qualified personnel, as appropriate, must certify in writing that the item is safe for transport.

E. All recovered MEC items, with the exception of small arms ammunition, shall be transported and stored as hazard C/D 1.1 with appropriate Compatibility Group assigned by EOD or UXOSO for the project and will be stored separately from serviceable ammunition. If a reduced classification is warranted, contact MARCORSYSCOM for additional hazard classification guidance.

F. UXO contractor personnel who, by contract requirement, are tasked with the responsibility of transporting or preparing shipments of MEC or other MDEH for transport over public roads must meet all training requirements of 49 CFR Part 172 and applicable state requirements.

G. The packaging of MEC or other MDEH for transportation must meet Department of Transportation requirements. Contact MARCORSYSCOM for additional guidance required by Navy Packaging, Handling, Storage and Transportation (PHS&T) Center, Naval Surface Warfare Center, Indian Head Explosive Ordnance Disposal Technology Division (NSWCIEODTD), Detachment Picatinny, Picatinny Arsenal, NJ.

H. A manifest must be prepared in accordance with 49 CFR 172.205 and 40 CFR 262.20 when transporting MEC or other MDEH over public traffic routes in non-emergency situations, as appropriate.

I. Personnel who are tasked to sign shipping papers must be trained and be given signature authority by their command in accordance with the requirements of Defense Transportation Regulations 4500.9-R (series).

#### 0717 SELECTION AND DESIGN OF MUNITIONS RESPONSES

The selection and design of a munitions response may vary from site to site. The selected response must provide an adequate level of protection that is consistent with the current, determined, or reasonably anticipated future land use. The design of a response must also consider the following site-specific information.

A. Historical Information. Information gathered through records search and interviews. The following information is required:

1. Boundaries of the response area. For munitions responses, the Munitions Response Area (MRA) boundaries and, when appropriate, the boundaries of any Munitions Response Sites (MRS) within the MRA such as firing points, impact areas, and/or munitions burial sites are required. Boundaries can often be ill defined and should not be taken to represent the absolute limits of MEC or MPPEH contamination.

2. Type(s) of MEC and/or MPPEH known or suspected to be present based on the munitions-related operations, training, or testing previously performed in the MRA or MRS.

B. Land Use. Land use is the current, determined or reasonably anticipated future use of real property. Anticipated future land usage is a major factor in determining the

degree of munitions response to be implemented. Because portions of the response area (such as the MRA or MRS) might be used differently, different response actions (such as surface removal, subsurface removal, no removal, remedial response) may be appropriate within any given response area.

1. Where the land use is, or will be, limited only to surface activities, the munitions response may only involve removing MEC and/or MPPEH on the ground surface. This removal may include the use of geophysical instruments.

2. When the land use allows intrusive activities, the response will normally require a subsurface removal and may require follow-on construction support. Where the current, determined or reasonably anticipated land use is compatible with the explosive hazards present or suspected, a removal action may not be necessary.

3. Where a response would adversely impact natural or cultural resources, a removal action may not be practical.

C. Results of On-Site Investigation. The results of on-site investigations should be used to validate and augment information discovered during the historical review and to determine the boundaries of the response area.

D. Analysis. A detailed analysis of available records, technical data, and the results of on-site investigations shall evaluate, at a minimum:

1. The types of MEC and/or MPPEH, known or suspected to be present, including technical characteristics (e.g., filler, fuzing) and estimated distribution.

2. The potential explosive hazards present.

3. Physical site characteristics (e.g., flora, fauna, geological, topographical, hydrological).

4. Persons or property potentially endangered.

5. Information from previous or current responses.

E. Special Considerations

1. Explosives soil. Because of past munitions-related activities, such as the use of settling ponds or explosives sumps at munitions production or demilitarization facilities, concentrations of explosives in soil (such as sand, sludge, clay) can exist in high enough concentrations that the mixture itself presents an explosive hazard. Such mixtures are referred to as "explosive soil."

2. Land Transfer

a. Real property known or suspected to contain MEC and/or MPPEH will not normally be transferred or leased from Marine Corps control until a munitions response consistent with the determined or reasonably anticipated land use has been completed in accordance with a DDESB-approved Explosives Safety Submission (ESS).

b. Real property known to contain or suspected of containing explosive hazards may not be transferred out of DoD control (other than to the Coast Guard) until the DDESB has approved measures to ensure the recipient of the property is fully informed of the hazards relating to the presence or possible presence of explosives and restrictions or conditions placed upon the use of the property.

3. Construction Support. Construction support may, based on site-specific data, be required during:

a. Intrusive activities (such as building construction, laying utilities, road improvements) on property known or suspected to contain MEC, MPPEH, or residual explosives hazards.

b. The removal or remediation of debris or soil in areas where there is a probability of encountering MEC and/or MPPEH.

c. Low Probability of MEC/MPPEH. When a determination is made that the probability of encountering MEC and/or MPPEH is low, “on-call” construction support must be provided by EOD or UXO-qualified personnel. A low determination may only be assigned to those areas for which a search of available historical records and Archive Search Reports and/or on-site investigation data indicates that the likelihood of encountering MEC and/or MPPEH is low. Locations where MEC or UXO have been discovered will not be classified as low probability prior to the completion of a munitions response. Munitions-related activities that may merit a low determination include, but are not limited to, the following former uses:

1) Small arms ranges used exclusively for testing or training with small arms ammunition.

2) Maneuver training, to include maneuver training involving the use of smokes, pyrotechnics, and simulators.

3) Firing points.

4) Munitions inspection, handling, storage or transfers, including inert storage yards.

5) Areas where previous munitions responses have been completed.

6) The discovery of MEC and/or MPPEH on low probability sites requires an immediate reassessment of the level of construction support required.

d. Moderate to High Probability of MEC/MPPEH. When a determination is made that the probability of encountering MEC and/or MPPEH is moderate to high (that is, the likelihood of encountering MEC and/or MPPEH is considered probable), on-site construction support must be provided by EOD or UXO-qualified personnel. EOD or UXO-qualified personnel must remove explosive hazards in the construction footprint, in accordance with a DDESB-approved ESS, before intrusive construction or other intrusive activities occur. A moderate to high determination may be assigned to those areas for which a search of available historical records and/or on-site investigation data indicates that, given the military or munitions-related activities that occurred at the site, there is more than a low probability that MEC and/or MPPEH are present. Munitions-related activities that may merit a moderate to high determination include, but are not limited to, the former uses:

- 1) Ranges where live-fire training or testing was conducted using munitions other than small arms ammunition.
- 2) Operational training range high hazard impact areas.
- 3) Munitions OB/OD sites.
- 4) Munitions burial sites.

#### 0718 ANOMALY AVOIDANCE

Anomaly avoidance techniques shall be employed at locations known or suspected to contain MEC and/or MPPEH to allow the activities listed below while avoiding surface MEC and/or MPPEH and, when necessary, subsurface anomalies. Anomaly avoidance is used when:

- A. Collecting environmental samples, conducting cultural resource studies, or performing other activities that require access to the site.
- B. Conducting intrusive work such as drilling environmental monitoring wells, installing fences, etc.
- C. During anomaly avoidance:
  1. Escort support must be provided by EOD or UXO-qualified personnel.
  2. Discovered surface MEC and/or MPPEH must be avoided and the location noted and reported to appropriate authorities.
  3. Detected subsurface anomalies must not be investigated, but shall be marked, when appropriate, and avoided.

0719 NATURAL PHENOMENA

Naturally occurring phenomena can cause MEC and/or MPPEH to move and should be considered.

A. Frost heave occurs when three conditions are met: freezing temperatures are present in the soil column; the soil is frost susceptible; and there is sufficient moisture present in the soil to cause soil movement upon ice crystal formation. These three factors will be evaluated to assess the likelihood of frost heave moving residual MEC and/or MPPEH upward through the soil column. Where frost heave may have such an effect, procedures must be implemented to monitor the effectiveness of response actions for the affected area.

B. Other naturally occurring phenomena such as earthquakes, erosion, or tidal changes could necessitate similar monitoring.

0720 EXPLOSIVES SAFETY SUBMISSION (ESS)

A. ESS Required. An ESS is required for:

1. Placement of explosives on a site.
2. Intentional physical contact with MEC and/or MPPEH.
3. Ground-disturbing or other intrusive activities in areas known or suspected to contain MEC and/or MPPEH when anomaly avoidance techniques are not employed.
4. Change of land use to one incompatible with the presence of MPPEH.
5. Transfer of land, known or suspected to contain MPPEH, from DoD control.
6. Finding that no further action (NFA) is required for munitions response activities.

B. ESS Not Required. An ESS is not required for:

1. Explosives or munitions emergency responses.
2. Maintenance and clearance activities on operational ranges that do not address identified munitions burial pits. See paragraph 0703A.7. of this chapter for when an ESS is required on an operational range.
3. Construction or non-munitions response activities in an area not known or suspected to contain MEC and/or MPPEH.
4. Demolition of magazines where there is no evidence of residual MEC contamination or a historical record of explosives spills.

5. Operation, maintenance, or cleanup of ammunition and explosives operating buildings in an active, standby, or layaway status.

C. An ESS may not be required for operations taking place in areas known or suspected to contain MEC and/or MPPEH when the likelihood of encountering them is low. Operations in these areas may only proceed with COMMARCORSYSCOM approval of an ESS Determination Request (ESSDR). Examples of such operations include:

1. On-call construction support or on-site construction support when included as a conservative measure.

2. Ground disturbing activities on former ranges used exclusively for testing or training with small arms ammunition.

3. Anomaly avoidance techniques employed during vegetation reduction, cultural/natural resources survey, Preliminary Assessment (PA) Site Investigation (SI), sign or fence installation, or similar activities not involving intentional physical contact with MEC and/or MPPEH.

4. Demolition of magazines where there is evidence or a historical record of a spill or other residual MEC, but where the spill or contamination was removed.

#### 0721 EXPLOSIVES SAFETY SUBMISSION DETERMINATION REPORT

A. Project managers will submit an ESSDR to COMMARCORSYSCOM for action through the EES web portal. The ESSDR will contain the following information:

1. Site name/number: Name of Activity, City and State.

2. Date submitted.

3. Project Manager and ESO: Name and contact information.

4. Project description and scope of work.

5. Site history: Describe past MEC and/or MPPEH use at the site.

6. MEC and/or MPPEH known or suspected to be present. Identify quantity, type/ nomenclature, and condition.

7. Identify any encumbering explosives arcs and how they will be mitigated.

8. Provide justification of low likelihood of encountering MEC and/or MPPEH.

B. COMMARCORSYSCOM will provide the project manager a written response within two weeks of receiving the ESSDR.

C. ESSDR responses do not expire and remain in effect as long as conditions have not changed under which the determination was made.

D. A Small Arms Range No Further Action (NFA) ESSDR may be prepared for former ranges where only small arms ammunition were used.

1. To qualify for a Small Arms Range NFA ESSDR, the former range must have been used exclusively for training with small arms ammunition and have received regulatory NFA concurrence. In addition, the site must not have had previous munitions response actions executed on it under an approved ESS.

2. All submittal, review, and response details described under an ESSDR apply to a Small Arms Range NFA ESSDR.

#### 0722 SITE IDENTIFICATION AND NOTIFICATION

A. When MEC and/or MPPEH are first encountered at a site where its presence was previously unsuspected, the on-site supervisor shall immediately suspend all operations and notify the project manager.

1. The project manager shall contact the installation EOD unit, who will mitigate the immediate explosives hazards.

2. The installation/project manager shall submit an ESSDR to COMMARCORSYSCOM for determination of future actions.

B. If MEC or MPPEH is discovered at locations where its presence was previously unsuspected, the munitions coordinator will submit either an “emergency response incident report” or pertinent information to COMMARCORSYSCOM via the installation’s ESO.

C. COMMARCORSYSCOM will maintain submitted reports concerning found MEC or MPPEH.

#### 0723 ESS DEVELOPMENT AND SUBMISSION

##### A. General

1. An ESS details how explosives safety and environmental requirements will be applied to a specific munitions response. An approved ESS is required before munitions response actions may begin.

2. The project manager may submit one or more ESSs for each munitions response site.

3. A Project Plan, Work Plan, Standard Operating Procedure (SOP), Quality Control Plan (QCP), Quality Assurance Project Plan (QAPP), may not be submitted in lieu of an ESS. Conversely, the ESS shall not be used in the field as a substitute for these documents. The



Project Plan, Work Plan, SOPs, QCP, QAPP, etc., shall not contain less stringent requirements than those prescribed in the ESS.

4. An ESS expires three years from the date of the latest approval. A project manager may request to extend the three-year period by submitting an extension request and an analysis of the ESS against current explosives safety and environmental criteria. If the project scope and applicable criteria have not changed the ESS can be extended for three years. The extension does not require DDESB approval.

B. ESS Types

1. MRS investigation/characterization.
2. NFA. An NFA ESS may be used to change the status of a site in the MRS site inventory.
3. Time-Critical Removal Action.
4. On-site construction support where the likelihood of encountering MEC and/or MPPEH is determined to be moderate or high.
5. Selected munitions response.

C. ESS

1. Format

- a. The project manager shall prepare an ESS in accordance with Appendix C, "Guide for Preparing an Explosives Safety Submission."
- b. An ESS should be submitted a minimum of 60 days prior to the anticipated project start date.

2. Processing

- a. The ESS shall be submitted via the EES Web Portal with a formal cover letter to the DDESB. This letter should be from the installation CO, or if not on an active installation, from the project manager.
- b. While awaiting DDESB approval, COMMARCORSYSCOM is authorized by reference (a) to provide written interim approval when circumstances warrant and are requested by the installation or the project manager. A request for interim approval must be made via formal letter to COMMARCORSYSCOM. Although interim ESS approval authorizes the project manager to proceed, the project manager is accepting the risk that the DDESB may impose different or additional conditions.

D. ESS Changes and Corrections. With the exception of corrections; once an ESS is approved, no changes can be made to any part of the munitions response.

1. Changes/Amendments to an Existing ESS

a. A new ESS shall be prepared when proposed changes would increase explosives safety hazards/risks, identify additional or increased explosives safety controls, or ESQD arcs are enlarged. All munitions response activities will be halted until the new ESS has been approved.

b. The new ESS will be submitted under the same EES portal number as the original submission.

2. Corrections

a. An ESS can be corrected when a proposed change does not increase explosives safety hazards/risks, identify requirements for additional or increased explosives safety controls, or enlarge an approved ESQD arc. Munitions response activities are not required to be halted for corrections to the ESS.

b. ESS corrections shall be submitted to COMMARCORSYSCOM.

0724 OVERSIGHT

COMMARCORSYSCOM provides project execution oversight through MRS audits, Explosives Safety Inspections-Compliance Reviews, and TAV programs.

A. Audits. COMMARCORSYSCOM shall audit selected MRSs to assess the extent to which the project complies with applicable environmental, safety, and occupational health requirements related to the management of MEC and/or MPPEH. Per reference (m), an audit of active MRS projects will be conducted during the ESI-CR. The project manager may also request an MRS audit in order to satisfy a specific project goal.

1. Notification. Normally at least 30 days in advance of an MRS audit, COMMARCORSYSCOM will provide the project manager, and the applicable installation, notification of the upcoming MRS audit. Included in this notification will be specific areas of interest and topics to be reviewed. Once notified, the project managers shall coordinate the MRS audit with the UXO contractor or other munitions response personnel.

2. Scope

a. Audits will review the following, as applicable: ESS; Project Plan; Work Plan; SOPs; QCP; QAPP; etc.; site-specific health and safety plan; environmental protection plan; and UXO worker qualification and certification documents.

b. Audits will observe the following operations and procedures, as applicable: general explosives safety practices; explosives transportation and storage;

occupational safety and health practices; quality control (QC) and quality assurance (QA) programs; exclusion zone (EZ) management; environmental compliance; geophysical instrument checkout and use; anomaly detection and identification; manual/ mechanized MEC and/or MPPEH removal; MEC treatment/disposal; MPPEH management; and data management.

3. Report

a. Within 30 days of the MRS audit, an audit report will be provided to the project manager.

b. The MRS audit report will document each finding and rate the project as SATISFACTORY or UNSATISFACTORY. Each finding will be analyzed using Risk Management (RM) concepts per Volume 2 of this Order. A risk assessment code (RAC), based on the potential explosives safety hazard severity and explosives mishap probability, will be assigned to each finding. The resulting RAC code will assist the audit team in determining the overall severity of the finding and will be considered during the rating criteria process.

c. The Audit Report is considered a document internal to the Marine Corps. Distribution is limited to protect UXO contractor business-sensitive information (including proprietary data, documents, and personnel records) from unauthorized disclosure.

4. Audit Response. Within 30 days of receipt of the MRS audit report, the project manager shall submit a written response to COMMARCORSYSCOM. The response shall address each discrepancy, including corrective actions taken. Failure to address the MRS audit will result in COMMARCORSYSCOM taking appropriate actions ranging from halting the munitions response to not providing munitions response verification.

B. MRS TAVs. The project manager may request an MRS TAV to assess the level of project compliance. MRS TAVs are most beneficial when conducted early in the project.

C. Formal Verification. A formal verification of the munitions response may be requested from the installation or project manager. The formal verification is a written acknowledgment that the munitions response was conducted in accordance with the approved ESS. This verification is based upon, but not limited to, a review of the approved ESSs and AARs, QC and QA reports, MRS audit and or MRS TAV reports (including responses to MRS audit findings), Record of Decision or similar decision document, Remedial Action Completion Report, Finding of Suitability of Transfer, and proposed deed language addressing any remaining MEC and/or MPPEH contamination. The formal verification does not provide a guarantee that no residual hazards remain.

0725 AFTER ACTION REPORT (AAR)

An AAR for completed munitions responses is required per reference (a) and shall be submitted within six months of completion. The purpose of the AAR is to document that explosives safety aspects of the selected response have been completed per the approved ESS. It allows

cancellation of all ESQD arcs and permits the DDESB to close out their site file. AARs must provide the following information as shown in the following sample AAR format.

1. A brief description of the site to include:
  - a. Identification of the site (e.g., name, unique identifier).
  - b. Site location.
2. A request to cancel any EZ or site approval established in the ESS.
3. A summary of the MEC and/or MPPEH found.
4. A description of the relative effectiveness and any limitations of the technologies used during the munitions response and the effects on residual risk relative to that originally projected.
5. A summary of the QC and QA reports for the response.
6. Maps that include:
  - a. Areas from which MEC and/or MPPEH was removed.
  - b. Areas within the site where response actions were not performed and the rationale for not addressing those areas.
  - c. The known or reasonably anticipated end use of each area.
7. A summary of the land use controls that were implemented, if any, and the areas to which they apply.
8. A summary of provisions for long-term management.
9. If applicable, a copy of either the NDAI or NFA decision document, or a brief synopsis of the rationale for the NDAI or NFA determination (an electronic link to the decision document is acceptable).
10. An AAR shall be submitted using the same procedures and guidelines as those previously identified for an ESS.
11. The AAR will be submitted via the Environmental and Explosives Safety web portal.

**0726 TRANSFER OF REAL PROPERTY**

A. Real property known or suspected of containing explosive hazards may not be transferred out of DoD control (other than to the U.S. Coast Guard) until:

1. COMMARCORSYSCOM has formally verified that the final munitions response was completed in accordance with the approved explosives safety documentation.

2. DDESB has approved the munitions response portions of the Finding of Suitability for Transfer.

3. The recipient of the property is fully informed of both the actual and potential hazards relating to the presence or possible presence of explosives, and restrictions or conditions placed on the use of the property to avoid harm to users due to the presence of explosives.

B. Formal verification of the munitions response is based upon, but not limited to, a review of the approved ESSs and AARs, QC and QA reports, MRS audit and or MRS TAV reports (including responses to MRS audit findings), Record of Decision or similar decision document, Remedial Action Completion Report, Finding of Suitability of Transfer, and proposed deed language addressing any remaining MEC and/or MPPEH contamination. The project manager shall submit these documents as part of the land transfer request.

**0727 TECHNICAL RESOURCES**

COMMARCORSYSCOM will maintain all munitions response related correspondence and documents. This repository is not intended to be a substitute for other required document repositories, (e.g., the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) administrative record).

**0728 EMERGENCY RESPONSE**

Both expected munitions and specific site conditions are usually known prior to implementing a munitions response. However, there may be exceptions, (e.g., an encounter with a munition with an unknown liquid fill, an encounter with an unexpected munition, an unexpected encounter during munitions response actions where intrusive or ground disturbing activities were not planned, or an encounter with a munition that cannot be safely addressed at the MRS), that will require an explosives or munitions emergency response.

A. As part of a munitions response, potential emergency responses will be addressed in the ESS, and the work plan or site safety and health plan and coordinated with EOD, environmental regulators, and safety officials.

B. If an explosives or munitions emergency occurs during a munitions response at an MRS, the munitions response manager will implement the procedures outlined in the work plan or site safety and health plan.

**VOLUME 8: CHAPTER 8**

**EXPLOSIVES SAFETY TRAINING AND CERTIFICATION REQUIREMENTS**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

The original publication date of this Marine Corps Order (MCO) Volume (right header) will not change unless/until a full revision of the MCO has been conducted.

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<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>

## **CHAPTER 8**

### **EXPLOSIVES SAFETY TRAINING AND CERTIFICATION REQUIREMENTS**

#### **0801 BACKGROUND**

An effective ESMP is dependent upon explosives safety personnel who fully understand all aspects of explosives safety. Formal training/experience in a variety of disciplines is necessary to achieve this understanding. Marine Corps Explosives Safety Professionals (ESPs) should also be familiar with DoD explosives safety requirements/policies, Service specific requirements, and when deployed, North American Treaty Organization (NATO) regulations.

#### **0802 SCOPE**

Competency in the 0017 career field requires extensive training and work experience in explosives safety. The Department of the Navy Explosives Safety Career Management Plan and the contents of this chapter provide ESOs with a roadmap for career development. This information provides a framework for developing competencies required of personnel in the 0017 job series from entry to senior level positions and to support career path progression in support of workforce accession, sustainment, and succession. Installations hiring for a 0017 job series position must incorporate explosives safety skills and competencies in recruitment and retention tools contained in the Explosives Safety Career Management Plan and this chapter as a baseline standard for assessment of explosives safety candidates. The DON Explosives Safety Career Management Plan can be accessed from the Environmental and Explosives Safety SharePoint site <https://mcscviper.usmc.mil/sites/pmammo/ees/SitePages/Home.aspx>.

#### **0803 EXPLOSIVES SAFETY TRAINING**

A fully trained ESO is a skilled military or civilian professional that has been trained to understand and implement explosives safety regulations and, if necessary, evaluate the risks and hazards associated with conventional A&E.

A. A variety of training is available, including on-the-job training (OJT), formal classroom instruction, and seminars. Acquiring learning credits through additional instruction can greatly supplement work experience. Industry training seminars and certification preparation are available through programs accredited by the International Society of Explosives Engineers, such as the Explosives Academy. Reference (t) contains a list of available industry programs.

B. Training Requirements. Training requirements for ESOs are outlined below. Specific courses and periodicities are contained in this chapter. Completion of the explosives safety courses and continuing professional training is required to ensure the requisite level of knowledge is maintained at all levels.

1. Installation ESOs, regional explosives safety program managers, and explosives safety compliance inspectors will meet all training requirements contained in this chapter and those required by reference (f).

2. Supervisors of explosives safety personnel are encouraged to complete the training contained within this chapter.

3. Tactical safety specialists (TSS) are highly encouraged to complete the training contained in this chapter. A TSS who will be assessing explosives operations must meet all ESO training requirements.

C. Deployment Training. The following courses should be completed prior to deployment by personnel who will be assigned explosives safety responsibilities.

1. AMMO-69 Shipboard Explosives Safety. The applicable module must be selected based on the ship platform.

2. AMMO-105-DL Explosives Safety Awareness in Multi-national Operations for Technical Staff.

3. AMMO-107, Introduction to Explosives Safety management for Safety professionals.

4. Tactical Explosives Safety Workshop. This workshop is provided by COMMARCORSYSCOM as required.

D. Supplemental Training. Additional training requirements, for other than ESO certification, are contained in reference (f).

E. Conferences and Seminars. All ESOs should actively participate in DoD, DON, and Marine Corps explosives safety seminars and workshops. Attendance at a seminar/workshop will count as continuing training.

#### 0804 MARINE CORPS ESO CERTIFICATION

The goal of the Marine Corps ESO certification program is to develop personnel trained to serve as explosives safety subject matter experts. Certification will be provided from COMMARCORSYSCOM only to those personnel designated in writing as an ESO. TSSs may receive certification when they meet the requirements of Chapter 11, paragraph 1118 of this Volume. The certification program incorporates formal training, OJT, developmental assignments, and self-development activities. Certification will only be granted when both course work, and OJT, if required, has been satisfactorily completed. All recommendations for ESO certification will be uploaded into the Environmental and Explosives Safety web portal. The recommendation letter must be signed by the installation Safety Director or immediate supervisor. ESO Certification will remain valid for 5 years.

A. Personnel Requirements. A combination of experience and training must be met prior to certification. This combination of training and experience is required due to the unique hazards associated with explosives and the multiple disciplines of an ESMP. Personnel



assigned explosives safety responsibilities are required to perform various duties and functions and should have at a minimum, experience in the following areas:

1. Developing, implementing, and managing an ESMP to reduce risks and mitigate the potential consequences of an intentional or unintentional detonation of A&E.
2. Identifying and eliminating hazardous conditions arising from the loading, handling, assembly, transportation, and shipment of A&E.
3. Ensuring ESQD, lightning protection, grounding, and bonding standards are in compliance.
4. Preparing facilities explosives site approval documents and requests for deviations from established explosives safety standards.
5. Ensuring compliance with applicable explosives safety policies and regulations throughout those aspects of the A&E life cycle addressed by the installation or activity ESMP to protect human health, property, and the environment.
6. Developing correspondence and administrative skills: experience with Naval correspondence; proficiency with basic computer programs; and ability to prepare and present informational briefs.

**B. Personnel Without Experience.** Personnel selected as an ESO and not possessing the requisite background and experience in explosives safety management identified in paragraph 0804A of this chapter should be required to gain this experience under the direct supervision of a certified ESO.

1. The length of this apprenticeship will be, at minimum, of sufficient duration to encompass one ESSA and one ESI-CR.
2. Performance of duties, as outlined in this Order during the period of apprenticeship will be assessed by the supervising ESO as “Satisfactory” or “Unsatisfactory.” The apprenticeship may be extended until such time as a demonstrated satisfactory rating is attained for all assigned duties/responsibilities.
3. The supervising ESO will notify the trained ESO’s immediate supervisor in writing when satisfactory performance is attained. This assessment must be submitted with the ESO request for certification.

**C. Required ESO Training.** The following paragraphs outline the training required for an ESO to attain certification. Upon completion of both the mandatory training courses and OJT (if required), COMMARCORSYSCOM will issue a Letter of Certification stating that the individual has met all basic experience and training requirements for certification as a Marine Corps ESO.

D. Training Extensions. In special circumstances, requests for extension may be granted. Requests for extension must contain justification and be forwarded to COMMARCORSYSCOM for approval prior to the scheduled certification award date.

E. Training Requirements. Within 24 months of designation, an ESO will meet the minimum level of training required to be certified. Course and registration information for web-based training/computer-based training (WBT/CBT) or instructor-led training and current year training schedule can be found on the NOSSA Restricted Web-Site: <https://nossa.dc3n.navy.mil/nrws3/> > Login > Programs > Explosives Safety Operations > Training.

F. COMMARCORSYSCOM will regularly review the training requirements to ensure they meet current and future requirements.

1. Initial Training. The following courses must be completed within 24 months of appointment to ESO:

- a. AMMO-36, Explosives Safety for Naval Facility Planning (initial course, instructor led).
- b. AMMO-45, Introduction to Ammunition (WBT).\*\*
- c. AMMO-76, Identification of Ammunition (WBT).\*\*
- d. AMMO-49, Naval Explosives Safety Managers/ Supervisors Orientation (WBT).
- e. AMMO-67, HAZMAT Familiarization and Safety in Transportation (WBT).
- f. AMMO-68, Military Munitions Rule (WBT).
- g. AMMO-74, Explosives Safety Officer Orientation Course (instructor led). All of the above courses must be completed prior to registering for AMMO-74.

\*\* Not required for personnel having completed the Ground Ammunition Managers Course, Aviation Ordnance Officer Career Progression Level I or equivalent, or the basic EOD course.

2. Follow-on Training. The following courses must be completed within 48 months of appointment to ESO:

- a. AMMO-29, Electrical Explosives Safety for Naval Facilities (initial course, instructor led if conducting the actual test, or WBT if overseeing the program).
- b. AMMO-43, Intermodal Dry Cargo Container/CSC Re-inspection.\*

c. AMMO-51, Naval Motor Vehicle and Railcar Inspection (initial course, instructor led).

\* Only required for personnel who have a responsibility to inspect Intermodal containers.

### 3. Refresher Training

a. Unless otherwise directed in this Volume, all explosives safety courses that have a recertification requirement per reference (f) must be completed at the specified periodicity to maintain an ESO certification. ESOs not completing refresher training will not be recertified until refresher training has been completed.

b. AMMO-29 refresher training is mandatory for all personnel conducting electrical testing of ammunition facilities. WBT may be utilized for refresher training.

4. Continuing Training. Explosives safety personnel who have received certification will complete at least one additional explosives safety or professional development course per year. This course is separate from any course that requires periodic recertification. The Defense Ammunition Center Course Catalog and reference (t) contain multiple courses that will benefit career progression and professional development. Additionally, the DON Explosives Safety Officer Community Management Plan (CMP) identifies courses and educational requirements for progression within the 0017 community. The DON CMP can be located at <https://mcscviper.usmc.mil/sites/pmammo/ees/SitePages/Home.aspx>.

G. Certification Documentation. All documents associated with ESO certification must be loaded into the EES Web Portal under the ESO Overview section. All appointment letters, recommendation letters, and training certificates will be uploaded into the portal. Contact COMMARCORSYSCOM for courses currently not contained within the portal for inclusion.

H. Recertification. Prior to the certification expiration date, ESOs will request recertification through their Safety Director or immediate supervisor. All recommendations for ESO recertification will be uploaded into the EES web portal. The recommendation letter must be signed by the installation Safety Director or immediate supervisor. ESO recertification will remain valid for 5 years.

I. Decertification. ESOs may be decertified by COMMARCORSYSCOM for:

1. Failure to complete mandatory continuing and refresher training without COMMARCORSYSCOM concurrence.

2. Failing to adequately manage the installation's explosives safety program.

J. Revocation. Revocation is an action taken to permanently remove an individual as a certified ESO. In the event of a revocation, administrative action must be taken to ensure the individual is not certified as a Marine Corps ESO per this chapter. ESO

certification will be revoked for failure to satisfactorily perform the duties and responsibilities of an ESO and whenever such action is determined to be in the best interest of safety. Revocation of certification is mandatory in the event an explosive mishap is caused by gross deliberate acts of negligence, flagrant disregard of procedural and/or safety precautions, or other behavior indicating incompetence or unreliability. In this regard, it should be recognized that incidents and mishaps can and do happen through inadvertent acts, carelessness, and minor rule infractions. Revocation may be made by COMMARCORSYSCOM in consultation with the installation commander and the ESO's immediate supervisor.

**0805 ASSISTANT ESO**

In the event that the size of the installation, diversity of mission, operational tempo, or other circumstances require more than one ESO, all training and certification requirements apply. ESOs are responsible for establishing and carrying out the installation explosives safety program in accordance with provisions of this chapter and reference (f), and for providing supervision, direction, and guidance to subordinate personnel.

**0806 UNIT/TENANT EXPLOSIVE SAFETY REPRESENTATIVE (ESR)**

Unit/Tenant commanders (Battalion/Squadron or higher) having an explosives mission will appoint an ESR. When appointed, the ESR will conduct all applicable aspects of the unit explosives safety program and serve as liaison between the unit/tenant and the installation ESO. The installation ESO will advise and monitor these representatives on their conduct of, and compliance with, the explosives safety program. ESRs will require a level of training to competently assist the installation ESO in implementing the installations explosives safety program. ESRs, not having previous explosives safety training (i.e., 2300 or 6500 MOS granting school) and experience, must complete AMMO-18 (Basics of Naval Explosives Hazard Control), AMMO-45 (Introduction to Ammunition), and AMMO-76 (Identification of Ammunition). ESRs will not receive an ESO certification letter.

**0807 COMMARCORSYSCOM RESPONSIBILITIES**

A. Establish training/certification requirements for personnel involved in the implementation, oversight, management, or compliance of an ESMP.

B. Maintain the training application in the EES web portal.

C. Review and update, as required, all training curriculum listed in this chapter, and associated ESO training.

D. Issue a Letter of Certification to Marine Corps ESOs upon completion of the mandatory ESO requirements outlined in this chapter.

E. Issue Letters of Recertification for ESOs who maintain their refresher and continuing training requirements.

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F. Issue a Letter of Decertification to Marine Corps ESOs who fail to maintain currency in training requirements without cause.

G. Revocation of certifications for ESOs who fail to satisfactorily perform the duties and responsibilities of an ESO, as defined in this chapter.

Table 8-1: Training Requirements

	On the Job Training (Note 1)	Initial Training (Note 2)	Follow on Training	Refresher Training (Note 3)	Continuing Training
ESO	At a minimum participate in one ESSA and one ESI.	AMMO-36 AMMO-45 AMMO-76 AMMO-49 AMMO-67 AMMO-74 AMMO-68	AMMO-29 AMMO-43 AMMO-51 AMMO-69 AMMO-105-DL*	AMMO-29 AMMO-36 AMMO-43 AMMO-51	A minimum of one course per year related to professional development.
ESR	N/A	AMMO-18 AMMO-45 AMMO-76	N/A	N/A	N/A
TSS	N/A	AMMO-69 AMMO-105 AMMO-107 TESO Workshop*	N/A	N/A	N/A

Note 1. OJT is only required for personnel not having the basic qualifications and experience identified in Chapter 8, paragraph 4 of this Order.

Note 2. All courses should be completed prior to registering for AMMO-74.

Note 3. Refresher training will be completed at intervals specified in Appendix D of reference (f).

\* Contact COMMARCORSYSCOM for availability. Requirement will be put in abeyance until available.

**VOLUME 8: CHAPTER 9**

**INSTALLATION EXPLOSIVES SAFETY PROGRAM**

**SUMMARY OF SUBSTANTIVE CHANGES**

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**CHAPTER 9**

**INSTALLATION EXPLOSIVES SAFETY PROGRAM**

**0901 BACKGROUND**

An effective ESMP ensures the Marine Corps is capable of meeting its warfighting requirements, while protecting personnel and facilities from potentially unsafe operations.

**0902 INSPECTION PROGRAM**

Both periodic and random inspections will be conducted and documented to assess the effectiveness of the ESMP. Inspections are primarily performed and documented by unit personnel. ESOs are responsible for reviewing the inspection process and conducting independent inspections as required. All inspections will be performed utilizing an approved or locally developed guide. The current ESI evaluation guide can be found on the Marine Ammunition Knowledge Enterprise (MAKE) library located at <https://make.nswc.navy.mil>. Inspection results and corrective actions must be documented and incorporated into the ESO's ESSA.

A. Magazine, Magazine Area, and Storage Inspection. All facilities and locations used for storage or handling of ammunition and explosives will be inspected per reference (f).

1. Contingent upon available manpower, munitions storage and handling locations with high rates of activity and those remote from the main ammunition storage area should be inspected on a more frequent basis, as identified in reference (f). Unit personnel may perform these inspections utilizing the required inspection SOP and checklist. The ESO will review unit inspections and document the review as part of the ESSA.

2. Unsafe conditions will be identified, tracked, and mitigated and work orders/repairs submitted to correct the unsafe condition.

a. Record of work orders will be maintained and tracked by the responsible unit.

b. After 90 days, a report of uncompleted work orders, not involving major construction/renovation, will be submitted to the ESO.

c. Results will be documented and a summary report generated for inclusion in the installation commander's ESSA report via the chain of command.

3. Records of all inspections and actions taken to correct any identified deficiencies must be maintained in the installation Explosives Safety Office.

B. Physical/Visual Inspection of Lightning Protection and Electrical Bonding/Grounding Systems. All facilities, locations, and equipment used to store, maintain,

handle, or transport munitions will require an inspection of all lightning protection and electrical bonding/grounding systems per reference (f).

C. Fire Safety Inspections.

1. All locations/facilities involved in the storage, issue/receipt, transport, maintenance, and handling of munitions will conduct regularly scheduled inspections for compliance with fire safety and fire protection equipment requirements. Guidance and inspection criteria may be found in Chapter 4 of reference (f). ESOs will monitor units and fire departments to ensure regular inspections are conducted.

2. This monitoring may be performed in conjunction with other inspections. Failure of units or fire departments to conduct regular inspections will be reported by the ESO, in writing, to the installation commander with copies furnished to the unit commander and to the organization responsible for performing the inspection. ESOs will maintain a file copy of these reports in accordance with Record Schedule 8000-14.

D. Review of Qualification/Certification Program. ESOs will monitor A&E Qualification/Certification (Qual/Cert) Programs for compliance with reference (c).

E. Conduct Annual Explosives Training. ESOs will ensure annual explosives safety training has been provided to all personnel involved in the storage, receipt/issue, transport, handling, or maintenance of munitions. ESOs are not required to provide this training.

1. Training will be documented via entries in individual training or equivalent records.

2. The following topics are recommended, but are not all inclusive, for incorporation into training:

- a. Statement/explanation of the explosives safety program goals.
- b. Explanation of Hazard Class/Division.
- c. Review of Storage Compatibility Groups.
- d. Review of fire/chemical hazard symbols, firefighting procedures, and evacuation distances.
- e. Review of storage, handling, and transportation requirements.
- f. Review of sources of information on explosives safety and requirements.
- g. Discussion of SOPs relative to safety warnings, cautions, and equipment.
- h. Discussion of Qual/Cert Program.



i. Discussion of procedures for handling MPPEH or other munitions found on the installation.

F. ESSA. ESOs will conduct a complete ESSA on an annual basis. The ESSA is a formal program for installations to conduct appraisals of ongoing munitions operations to determine the effectiveness of their explosives safety program. ESSAs emphasize the importance of a proactive approach to explosives safety issues. ESSAs will be performed in accordance with reference (m).

#### 0903 FILES, RECORDS, AND REPORTS

A. Records Management. Records contribute to the strength and success of program management. They provide documentation to support trend analysis, training requirements, justification for fiscal and manpower requirements, and tracking corrective action processes. Some records are mandatory, as they directly relate to ESI or other regulatory requirements. Others, although not mandatory, provide significant assistance in program management. It is the ESO's responsibility to establish how the documentation is to be maintained. Unless otherwise regulated, either paper or electronic copy is authorized. Electronic copies must have the appropriate electronic signature if one is required. Regardless of how the records are maintained, they must be readily accessible to the ESO.

B. Records Retention. Copies of mandatory records and reports must be retained in accordance with reference (u).

C. Mandatory Documentation. At a minimum, the following reports/records must be maintained, or be accessible, by all ESOs. Some records/reports may be maintained by individual units and reviewed by the ESO as part of normally conducted inspections as determined by local conditions or requirements, and be subjected to review during explosives safety inspections-compliance reviews.

1. Annual Magazine/Storage Facility Inspection Reports. These reports are required for ESI review and contain elements to support other areas, such as SOPs, site plans, and accountability. Maintain these records in accordance with Record Schedule 8000-14.

2. Visual Inspections/Tests of Lightning Protection and Electrical Grounding Systems. Visual inspection data shall be stored in a data file for retrieval for use as required for trend analysis or for use during compliance evaluations and inspections. These records will be maintained per reference (f).

3. Site Inspections. These inspections contain elements for review during compliance evaluations/inspections, such as storage authorization letters, Qual/Cert review, and SOP review. Maintain these records in accordance with Record Schedule 8000-14.

4. Fire Safety Inspection Reports. All locations/facilities involved in the storage, issue/receipt, transport, maintenance, and handling of munitions will conduct regularly scheduled inspections for compliance with fire safety and fire protection equipment

requirements. ESOs will monitor units and fire departments to ensure regular inspections are conducted. Maintain these records in accordance with Record Schedule 8000-14.

5. Hazards of Electromagnetic Radiation to Ordnance. Ensure the communications organization responsible for radiation emitting devices maintain the surveys and emissions control bills.

6. Log of Inert Training/Display Munitions. Inert training/display munitions log must be maintained per Chapter 2 of this Volume.

7. ESI-CR Reports and Corrective Action Plans. Maintain reports and plans in an approved electronic database.

8. ESSA Inspections. Maintain ESSA reports for three years from date of inspection.

9. Explosives Safety Site Approvals. Site approvals will be maintained for each facility, as required by reference (f), for as long as the facility is used for storage, handling, manufacture, maintenance, or modification of munitions. Should the facility be removed from service as a munitions site, a site approval request to remove the ESQD arcs must be submitted. This final site approval will be archived, not destroyed.

10. Comprehensive Installation Maps. Comprehensive installation maps or sets of maps will be developed using GeoFidelis GIS/enterprise mapping system.

a. Maps must show locations and ESQD arcs, storage/operating facilities and locations, explosives vehicle traffic routes, any easements and environmentally sensitive areas, and emergency evacuation routes.

b. Maps will be reviewed annually for correctness and the review documented by a Memorandum for the Record (MFR). Maintain these records in accordance with Record Schedule 8000-14.

11. Annual encroachment review of ESQD arcs by non-ammunition related activities. Annual encroachment reviews may be documented via the same MFR prepared for the map review.

12. PES/(PES/ES). All PESs and ESs within explosives arcs will be maintained in the EES web portal.

D. The following reports/records must be uploaded, routed and archived via the EES Web portal:

1. DDESB Evaluation Reports and Corrective Action Plans.

2. Explosives Safety Submissions, ESSDR, and AARs.

3. Explosives Safety Event Waivers.
4. Non-DoD Ammunition Storage Requests.
5. Roll-on/Roll-off (RO/RO) Site Approval Requests.
6. Installation Facility Data.
7. Installation Commander Storage Authorization Letters.
8. Explosives Safety Inspection - Compliance Reports and CAPS.
9. Explosives Safety Training Certifications.

**0904 PUBLICATIONS AND REFERENCES**

Installation ESOs must have access to current reference documents required to support explosives safety. ESOs are encouraged to use electronic web sites to ensure only the latest version of the publication is being referenced. If hard copy publications are being maintained:

- A. Publications will include the latest changes/revisions.
- B. Reviews will be conducted semi-annually to ensure latest changes/revisions have been incorporated.

**VOLUME 8: CHAPTER 10**

**STANDARD OPERATING PROCEDURES**

**SUMMARY OF SUBSTANTIVE CHANGES**

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**CHAPTER 10**

**STANDARD OPERATING PROCEDURES**

**1001 BACKGROUND**

SOPs are procedural documents used to ensure compliance with technical, explosives safety, personal protective equipment, federal, state and local environmental protection, and physical security requirements during explosives operations.

**1002 SOP APPLICABILITY**

A. SOPs are required for A&E handling, storage, and transportation operations not conducted in accordance with technical directives, approved checklists, or Field Manuals (FMs). This requirement includes DoD and non-DoD tenants, as well as contractors when in support of Marine Corps operations and should not be confused with SOPs/desktop procedures for non-explosives operations.

B. SOPs, along with applicable reference publications, shall be kept in the work area with the procedures readily available for use when performing the operation.

C. SOPs are not required for units who solely transport, store, and handle limited quantities of HC/D 1.4S.

**1003 APPROVAL AUTHORITY**

The process owner's CO (battalion/squadron level) is responsible for approving all A&E SOPs for processes under their cognizance. SOPs may be approved and signed by individuals in an "Acting" capacity or those with "By Direction" authority or a designated representative.

**1004 ROLES AND RESPONSIBILITIES**

A. The Process Supervisor is responsible for:

1. Ensuring everyone assigned to a process has read and understands the requirements of the SOP.
2. Stopping a process if unexpected safety, health, or environmental hazards are found, or if significant deviations from the SOP are necessary in order to conduct the process.
3. Continuously reviewing SOPs during recurring processes to ensure that they are changed as necessary to reflect current procedures, and changes to reference documents.

B. The SOP user (worker/operator) is responsible for reading, understanding, and following the SOP. If the user identifies a hazard or operation, not addressed in the SOP, or does not understand an operation, the user will stop the process and notify the supervisor of the problem.

C. Contractors are responsible for the development, review, validation, approval, and use of SOPs for A&E operations wholly under their control. Marine Corps personnel shall provide appropriate oversight as specified in contractual requirements.

## 1005 SOP DEVELOPMENT

A&E SOPs shall be developed and formatted as follows.

A. Title Page. Page at the beginning of the SOP that identifies the SOP title and includes a unique copy control number for SOP tracking and version control (e.g., (1 of 4)).

B. Record of Changes. Page documenting the SOP change number, change date, and brief description of the change.

### C. SOP Review and Validation Process Documentation

#### 1. SOP Review

a. The following personnel will review SOPs prior to initial use at Marine Corps activities/tenant commands:

1) Personnel responsible for the technical requirements and execution of the process (e.g., the process supervisors).

2) Personnel responsible for support of the process in accordance with sections of the SOP, including mishap responses.

3) Occupational safety and health, medical (e.g., industrial hygiene), and environmental personnel if the process involves or may potentially involve any applicable procedures.

4) ESO.

b. For contractor operations, the equivalent levels of review would be, for example, Site Health and Safety Supervisor or Senior Unexploded Ordnance Supervisor and Site Superintendent of the contractor.

#### 2. SOP Validation

a. Prior to approval, the SOP shall be validated and signed by the person or persons responsible for the execution of the process.

b. Validation is accomplished by executing the process in accordance with the SOP, verifying the diagrams, ensuring equipment lists are accurate and items are available, verifying emergency response procedures are correct and executable, and all hazards are identified. The supervisor will oversee the performance of SOP validations with the necessary

workers/operators and other personnel to ensure complete understanding at all levels. The supervisor should request assistance from other authorities when needed.

c. Validation will be documented, signed, and dated by the person that performed the validation.

d. Whenever a new supervisor is assigned to a process covered by an existing SOP, the new supervisor shall review and validate the SOP by conducting a dry run of the process and signing the Supervisor's Statement.

3. SOP Approval. After the SOP has been reviewed and validated by the required personnel, the SOP shall be approved and signed by the CO or designated representative.

4. Continuous Review. SOPs shall be continuously reviewed and changed as necessary, but at a minimum, a review of the SOP will be documented annually. The person responsible and/or supervisor of the process must document the date of annual review in the annual review section of the SOP.

5. Change Review. All changes must be documented in the record of change and SOP subjected to review, validation, and approval if significant changes to the procedures are made. Strictly administrative changes do not require review, validation, and approval.

6. Baseline Review. SOPs expire four years from the date of approval. SOPs must be updated and reviewed, validated, and reapproved four years from the date of the current approval signature.

D. Table of contents. A concise list of elements within the SOP.

E. Statements

1. Supervisor's Statement. This statement provides a record of the signature and date of the supervisor(s) responsible for managing the operation. These supervisors are responsible for making sure that the SOP is up-to-date. This record maintains the list of qualified people with up-to-date training. A suggested supervisor's statement follows:

“I have read and understand this SOP. To the best of my knowledge, the processing described within this SOP can be done in a safe, healthful and environmentally sound manner. I have made sure all persons assigned to this process are qualified, have read and understand the requirements of this SOP, and have signed the worker's/operator's statement for this process. I will ensure the SOP has current procedures. If a major change to the SOP is necessary, I will ensure that the process is stopped until the SOP is revised and approved. If unexpected safety, health, or environmental hazards are found, I will make sure the process is stopped until the hazards have been eliminated.”

\_\_\_\_\_  
Supervisor's Name                  Signature                  Date

2. Worker's/Operator's Statement. This statement indicates that the worker/operator clearly understands his/her duties regarding the operations in the SOP. The worker/operator and supervisor must review the SOP and sign and date the statement to be authorized to work under the SOP. A suggested Worker's/Operator's Statement follows:

“I have read this SOP and I have received adequate training to perform the process according to the SOP. I will follow the SOP unless I identify a hazard not addressed in it, or encounter an operation I cannot perform according to the SOP. If that occurs, I will stop the process and notify my immediate supervisor of the problem.”

\_\_\_\_\_  
Worker/Operator's Name                  Signature                  Date

\_\_\_\_\_  
Supervisor's Name                  Signature                  Date

F. References. A complete listing of current and applicable references.

G. Risk Management (RM). As part of SOP development, the RM process shall be conducted in accordance with reference (k), and the resulting hazard analysis and risk assessment shall be used as a basis for developing the SOP and the SOP Hazard Control Brief. The RM process analysis developed for the SOP must be included as an element of the SOP.

H. Hazard Control Briefing

1. A hazard control briefing will be prepared for the operations covered by the SOP, taking into account the results of the hazard analysis and RM assessment. The briefing will be given to all employees using the SOP prior to initial use of the SOP. The briefing may be repeated as often as necessary based on the work supervisor's analysis of its effectiveness. The current briefing will be a permanent part of the SOP. The Hazard Control Brief must be up-to-date and be derived from the hazard analysis results. The hazard control briefing will also be given to all visitors and other transients/observers to the A&E, MPPEH, and/or MEC operations. Records documenting recipients of the hazard control briefings shall be maintained in accordance with Record Schedule 8000-14.



2. At a minimum, hazard control briefings will address the following:
  - a. Hazardous materials used, consumed, or produced in the process.
  - b. The ways in which exposure to hazards and hazardous materials are avoided or minimized, including the use of personal protective equipment.
  - c. Signs of unacceptable exposure to the worker/operator/visitor, or damage to the equipment, from the hazardous materials being processed.
  - d. First aid or other actions to be taken immediately should exposure to an unacceptable hazard or hazardous materials occur.
  - e. SOP hazard analysis results.

I. Procedures. This is the most important section of the SOP. The procedures should be written so that a person unfamiliar with the operation could perform a validation of the process.

1. Provide the worker/operator with clear and concise instructions for performing the process.
2. Do not include instructions for operations not relevant to the SOP.
3. The worker/operator must not be required to leave the work area to locate other references nor jump from section to section in the SOP to perform the process safely and correctly. The entire process will proceed logically and sequentially, with all required references on-hand or written into the process.
4. Use of technical manuals as part of the procedures is encouraged.
5. Always use warnings, cautions, and notes at the first occurrence of critical steps. The word "WARNING" shall be used in cases of potential personnel death or injury. The word "CAUTION" shall be used in cases of potential equipment or facility damage. The word "NOTE" shall be used in cases that affect product or process quality.
6. Applicable compensatory measures contained in site approvals that affect the operation or operating/storage locations involved with the process must be included in the SOP.
7. If applicable, include procedures for routine decontamination and restoration of equipment and facilities to a safe working condition should the process have been stopped due to an unacceptable hazard or other unforeseen event.
8. Include procedures for disposition and management of any scrap or wastes, including waste military munitions, which may be generated by the operation.

J. Diagrams

1. Building or Site Diagram

a. A diagram of the building or site showing the location of operation related items is to be included in the SOP (see next paragraph for exception). The diagram shall include location of safety related items, such as fire extinguishers, fire suppression systems, eye wash stations, emergency showers, first aid kits, spill cleanup kits, ventilation systems or stations, and emergency breathing devices. The diagram must illustrate explosive and personnel limits, evacuation routes, and emergency exits.

b. Building diagrams are optional for inclusion in the SOP if a diagram approved by the process supervisor is posted at the facility.

c. Site diagrams must be included in the SOP for temporary and/or field operations to include explosives routes if applicable.

2. Processing Diagrams. This includes any information needed to clarify or amplify the information provided in the procedures. Often this will take the form of diagrams to indicate steps in the operation. Illustrations showing details of processing, material handling, excavating, and other equipment, block diagrams of processing and workflow and other illustrative graphic materials are appropriate.

K. Equipment Lists

1. Equipment and Supplies List (if applicable). Provide a list of all the special and/or critical tools, equipment, and supplies used in the process.

2. Safety Equipment List. Provide a list of all the special or mandatory safety equipment (including personal protective equipment) and systems, which must be in place and working properly in order to protect the safety of personnel, equipment, facilities, and the environment during the processing.

L. Emergency Procedures. The required hazard analysis of a process will identify any potential fire, spill, explosion, runaway reaction, release of hazardous vapors, mechanical failure, injury, etc., that could occur during processing and which would require immediate action to control. Procedures for responding to these emergency events will be provided as procedures, and used for rehearsal of emergency response. The emergency response procedures (which may be incorporated as part of the instructions for the process) include:

1. A single point of contact to notify in case of an incident.
2. Initial and follow-up actions that the worker/operator must take in case of an incident.

**VOLUME 8: CHAPTER 11**

**OPERATIONAL EXPLOSIVES SAFETY**

**SUMMARY OF SUBSTANTIVE CHANGES**

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**CHAPTER 11**

**OPERATIONAL EXPLOSIVES SAFETY**

**1101 BACKGROUND**

The Marine Corps continuously trains and deploys with A&E. The hazards associated with the storage, handling, transportation, and employment of A&E are compounded in an operational environment. This chapter provides explosives safety information to support the operational plans of commanders. The information in this chapter is intended to:

- A. Assist commanders and personnel in making the best possible and logical use of the limited facilities available for the safe storage and handling of A&E.
- B. Enhance the survivability and dependability of A&E.
- C. Reduce the hazards involved in handling and storing A&E.
- D. Provide explosives safety personnel the tools to identify, communicate, and mitigate risk.
- E. Identify at what level risk can be accepted.

**1102 APPLICATION OF EXPLOSIVES SAFETY REQUIREMENTS**

The following identifies the explosives safety criteria that must be applied, depending on the type of operation, participating members, and location:

- A. When OCONUS; comply with host nation, Multi-National (MN), or U.S. explosives safety standards, whichever is more stringent, unless standards applicability is mandated in an International Agreement.
- B. Within the U.S., comply with the requirements contained in reference (f) and this Volume.
- C. Reference (v) advises commanders of US forces operating as part of a MN (alliance or coalition) military command that they should follow MN doctrine and procedures ratified by the U.S. For doctrine and procedures not ratified by the U.S., commanders should evaluate and follow the MN command's doctrine and procedures, where applicable and consistent with U.S. law, regulations, and doctrine.
- D. U.S. Forces participating in NATO operations should use the explosives safety guidelines found in references (w) and (x) to develop mutually agreeable standards for application of explosives safety regulations.
- E. Reference (y) may be mandated for use in an IA or as part of a MN operation.

1103 APPLICABILITY

Reference (a) provides the minimum criteria for explosives safety and munitions risk management in operational planning, training, and execution.

1104 EXPLOSIVES SAFETY MUNITIONS RISK MANAGEMENT (ESMRMA)

ESMRMA must be integrated into the planning and execution process as required by reference (j). Integrating ESMRMA into combined, joint, coalition, and partner nation plans, exercises and missions is required unless the GCC determines strategic or compelling operational needs mandate otherwise.

1105 ASSET PROTECTION

The protection of assets in an operational environment is paramount and can be the difference between mission success and failure. Depending on the operational value of the assets, greater protection may be warranted than required by explosives safety criteria. The placement of mission critical assets near A&E storage/operating areas should be avoided whenever possible. Two levels of asset preservation are defined below and should be applied dependent on the nature of the assets.

A. Minimum Separation Distance. Minimum separation distance is the required explosives safety distance contained in the applicable tables of reference (f). At this distance from the PES, mission capability will likely be impaired or delayed in the event of an explosives incident. This distance should prevent prompt propagation; however, delayed propagation between PESs is possible.

B. Asset Preservation. Asset preservation is a distance greater than the minimum separation distance contained in reference (f). At this distance from a PES, assets are expected to be usable and mission capable following an explosives incident. Asset preservation distance, normally Public Transportation Route (PTR) distance, should prevent propagation between PESs.

1106 EXPLOSIVES SAFETY SITE PLANS

All locations where military munitions are present, or forecasted to be present, shall have an approved explosives safety site plan. Areas that cannot meet ESQD criteria must have an approved deviation per Chapter 3 of this Volume.

A. Examples of locations that must be considered for explosives safety site plan approval are contained in reference (a) and (j).

B. For Combat Operating Bases (COBs) and Combat Out-Posts (COPs), the GCC must provide specific guidance on risk and consequence management from military munitions at these locations and determine site approval requirements.

1107 MILCON APPROVAL PROCESS

For consequence acceptance decisions that require MILCON projects that cannot meet explosives safety requirements of reference (a), the GCC must provide an endorsement to the appropriate Military Service Secretary for MILCON funding and project approval, prior to construction start. The endorsement and submission package must contain the information contained in Chapter 3 of this Volume for a Secretarial Certification.

#### 1108 DEVIATIONS

For locations that cannot meet explosives safety siting requirements, a deviation must be developed and submitted to the appropriate approval authority.

A. Deviations for installation directed training on Marine Corps CONUS and OCONUS installations will be submitted per Chapter 3 and Appendix D of this Volume.

B. Deviations for A&E operations conducted at another service's installation or joint installation will be submitted to the owning/responsible service for approval. The submission process will be governed by the owning/responsible service's process. If required, the operational necessity statement will be provided by the submitter's higher command.

C. Deviations from explosives safety criteria when directed by the SCC or GCC at OCONUS locations, will be developed and submitted in accordance with Chapter 3 and Appendix D of this Volume, and reference (j).

#### 1109 LIMITED QUANTITIES OF HC/D 1.2.2, HC/D 1.3, OR HC/D 1.4

For reasons of operational necessity, limited quantities not to exceed 50 lbs. NEW of a combination of HC/D 1.2.2, HC/D 1.3, or HC/D 1.4 may be stored and used in operations, to include armored vehicles located outside a Basic Load Ammunition Holding Area or an Ammunition Holding Area, without regard to QD and DoD explosives safety site approval. The amount of HC/D 1.4S is not included in the limits identified above, however no more than 3,000 lbs. NEW of HC/D 1.4S can be stored. These areas must be approved in writing by the installation commander or operational commander at host nation locations and meet all fire, security, and lightning protection system requirements of references (f) and (i).

#### 1110 FIELD STORAGE

Field storage is primarily intended for situations that require limited amounts of A&E munitions to be stored away from the standard storage environment to support specific training or for small units operating in austere environments during combat missions. The following guidelines will govern temporary storage at these facilities/sites:

A. Field storage is authorized for up to 90 days on certified Marine Corps operational ranges and host nation ranges approved for Marine Corps use to meet training requirements. The explosives arcs from the field storage site must be contained within the parameters of the established range. Explosives arcs that exceed range parameters will require an event waiver from COMMARCORSYSCOM or GCC delegated risk decision authority in

accordance with Chapter 3 of this Volume. Field storage on operational training ranges of another service will be conducted in compliance with that service's requirements.

B. Storage at COBs and COPs. The GCC shall provide specific guidance on risk and consequence management from military munitions at these locations.

C. Storage sites for training operations not located on Marine Corps certified ranges/training areas or approved host nation range/training areas shall be formally sited or have an approved MRMA or event waiver prior to any explosives operation per Chapter 3 of this Volume.

#### 1111 FORWARD ARMING AND REFUELING POINT (FARP) OPERATIONS

All FARPs, in which explosives operations are conducted, must be approved at the appropriate level of command, as outlined below prior to conducting operations.

A. Training evolutions involving FARP operations, conducted on U.S. controlled operational training areas/ranges, to include host nation training areas, approved for the type munitions being used may be approved by the installation/operational commander. When a FARP operation is established at locations other than on approved operational training areas/ranges, formal DDESB site approval or an MRMA is required prior to the conduct of operations. All FARP training operations shall be established in accordance with the separation distances specified in Table 11-1. Units conducting FARP operations shall conduct all operations per current Naval Air Training and Operating Procedures, manuals, and weapons/stores loading checklists.

##### B. FARP Operations

1. Permanent FARP sites that are used for contingency operations must be sited per reference (f). FARP sites that are established in situations where advance notice is not possible shall be approved by the GCC or designated SCC.

2. Contingency FARP sites shall be established in accordance with the separation distances specified in Table 11-2. The separation distances shown are the minimum required to prevent prompt propagation of explosive sites. However, subsequent reactions resulting in death of exposed personnel and substantial damage to assets are possible and expected. Aircraft and equipment will not be usable following such an incident. In order to prevent propagation or reaction between explosives sites, greater separation (asset preservation) distances should be provided. PTR separation distances should afford this level of protection.

**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM**

Table 11-1: Training Forward Arming and Refueling Point Operation Separation Distances

To:	From:	Armament Pad	Ordnance Staging Area	Ordnance Buildup Area	Ordnance Storage Area	Red Label Area	Sling Out Area
Armament Pad (Note 4)		IMD	IMD	ILD	2	IMD	2
Ordnance Staging Area		IMD	IMD	IMD	IMD	IMD	2
Ordnance Buildup Area		ILD	IMD	ILD	ILD	ILD	2
Ordnance Storage Area		IMD	IMD	IMD	IMD	IMD	2
Red Label Area		IMD	IMD	IMD	IMD	IMD	2
Sling Out Area		IMD	IMD	ILD	IMD	IMD	2
Refueling Point (5K gal or Less)		100'	IMD 100' MIN	ILD	ILD	ILD	2
Bulk Fuel Storage (>5k gal)		IBD	IBD	IBD	IBD	IBD	IBD
Billeting Bivouac Area		IBD	IBD	IBD	IBD	IBD	IBD
Runway/Taxiway (DoD use)		1	PTR	PTR	PTR	1	1
Runway/Taxiway (Joint use)		IBD	IBD	IBD	IBD	IBD	IBD
Inhabited Building		IBD	IBD	IBD	IBD	IBD	IBD
Public Trans Route		3	3	3	3	3	3

Notes:

1. No ESQD applies, however, applicable NAVAIR airfield safety criteria shall be met.
2. K30 used for HC/D 1.1 items only. Use applicable PTR distance for non-mass detonating explosives.
3. PTR distance based on traffic density (low, medium, high).
4. A&E to support the next A/C load may be staged at the armament pad.



**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM**

Table 11-2: Contingency Forward Arming and Refueling Point Operation Separation Distances

To:	From:	Armament Pad	Ordnance Staging Area	Ordnance Buildup Area	Ordnance Storage Area	Red Label Area	Sling Out Area
Armament Pad (note 3)		IMD	IMD	ILD	IMD	IMD	IMD
Ordnance Staging Area		IMD	IMD	IMD	IMD	IMD	IMD
Ordnance Buildup Area		IMD	IMD	ILD	ILD	ILD	ILD
Ordnance Storage Area		IMD	IMD	IMD	IMD	IMD	IMD
Red Label Area		IMD	IMD	IMD	IMD	IMD	IMD
Sling Out Area		IMD	IMD	ILD	IMD	IMD	IMD
Refueling Point (5K gal or Less)		100'	100'	100'	100'	100'	100'
Bulk Fuel Storage (>5k gal)		IBD	IBD	IBD	IBD	IBD	IBD
Billeting Bivouac Area		IBD	IBD	IBD	IBD	IBD	IBD
Runway/Taxiway (DoD use)		K4.5	K4.5	K4.5	K4.5	K4.5	K4.5
Runway/Taxiway (Joint use)		IBD	IBD	IBD	IBD	IBD	IBD
Inhabited Building		IBD	IBD	IBD	IBD	IBD	IBD
Public Trans Route		2	2	2	2	2	2

Notes:

1. Where asset preservation is a primary concern, use K24/30 separation for HC/D 1.1, and PTR separation distance for HC/D 1.2, 1.3, or 1.4. Applies wherever IBD is not specified.
2. PTR distance based on traffic density (low, medium, high). Refer to reference (f), Chapter 7.
3. A&E to support the next A/C load may be staged at the armament pad.

1112 CAPTURED ENEMY AMMUNITION (CEA)

A. The purpose of this paragraph is to provide basic guidance for commanders involved in CEA handling, transportation, and storage operations. The major cause of CEA accidents involves untrained personnel handling foreign ordnance. Contact the nearest EOD unit for additional information on the identification, reporting, and disposition of discovered CEA. Careful planning, risk management, and the use of trained personnel will help mitigate the hazards of CEA operations.

B. CEA operations pose a significant threat to operating forces. There are many unknowns associated with CEA, such as net explosives weight (NEW), fuzing mechanisms, markings, and fillers. CEA operations are inherently dangerous; thus, the storage, handling, transportation, and destruction of CEA present a challenge. Operations involving CEA will be assessed using the five-step risk management process to provide maximum protection to personnel and property from an unintentional detonation. CEA operations should ensure that only the minimum numbers of personnel are exposed to the minimum quantity of CEA for the minimum amount of time.

C. Retrograde Operations. A cache of CEA retrograded to an ammunition supply point/munitions storage area (ASP/MSA) should be inspected by qualified EOD personnel to ensure the CEA is safe to handle and transport prior to movement and storage. CEA must be stored in a designated secure area within the ASP/MSA, but at a minimum PTR distance from any areas containing U.S. munitions. Regardless of its condition, CEA shall not be intermingled with U.S. munitions stocks. When PTR distance cannot be met, at a minimum, CEA must be placed at inter-magazine separation distance from DoD stocks and the risk accepted in accordance with reference (j).

D. Receipt, Storage, Segregation, and Issue of Captured Enemy Ammunition

1. Receipt of Captured Enemy Ammunition. CEA arriving at an ASP/MSA that has not been inspected by EOD must be inspected as soon as possible after receipt to determine its explosives safety condition, type, and caliber. Only trained and certified EOD personnel shall perform the inspection of all CEA stocks prior to storage. If EOD personnel are unavailable, UXO-qualified/certified civilian personnel meeting the requirements listed in reference (z) may perform the inspection. However, ASP/MSA personnel will identify these stocks as requiring inspection by EOD personnel. Ammunition Technicians should not perform inspections on CEA, as they are not trained in the characteristics of foreign munitions. The inspection of CEA shall take place only at designated sites that meet a minimum of PTR distance from all other areas within the storage area. No CEA will be placed into storage without a safety assessment.

2. Storage of Captured Enemy Ammunition. CEA will be stored in a separate area within the ASP/MSA from serviceable and unserviceable DoD munitions. When CEA is placed in storage, protective measures should be taken (e.g., separation distances, use of barricades, fire breaks) to protect DoD serviceable assets. CEA will be stored at PTR distance from DoD munitions. When PTR cannot be met, CEA will be stored no closer than IMD.

Serviceable and unserviceable CEA should be separated from each other in storage. When space permits, CEA should be stored in multiple small stack quantities. This type of storage is preferred over larger, more volatile stacks.

E. Captured Enemy Ammunition Storage Compatibility Group. Prior to placing in storage and if possible, CEA should be assessed to determine its Storage Compatibility Group (SCG). Qualified explosives personnel (i.e., EOD, UXO-qualified civilian personnel) will assess the CEA and determine the SCG. Factors used in determining the CEA SCG are caliber or size, filler, fuzing mechanisms, and NEW. Once the SCG has been determined, stocks of CEA will be segregated according to the SCG chart located in reference (f). In the event no SCG can be determined, the CEA must be assigned to SCG "L."

F. Determining the Net Explosive Weight of Captured Enemy Ammunition. The NEW of CEA will be calculated using a service publication on foreign munitions or by using the NEW of a similar type and caliber munitions in the DoD inventory. A source for foreign ordnance NEW can be obtained from the Naval EOD Technology Division, Indian Head, MD.

G. Fire Prevention. The same method used to prevent fires for DoD stocks will be employed in preventing fires for CEA stocks. However, due to the unknown hazard factors associated with CEA, storage areas containing CEA stocks should additionally identify the location of CEA on their fire plan.

H. Serviceable Captured Enemy Ammunition. Serviceable CEA will be retained for security, intelligence, research, development, test and evaluation, training, demilitarization or other purposes when authorized by the headquarters exercising operational control of the discovering unit's operation. CEA used for any of the above operations shall be clearly marked as "Serviceable."

I. Unserviceable Captured Enemy Ammunition. Unserviceable CEA stored in the same storage magazine, pad, or container as serviceable CEA will be clearly marked as unserviceable and separated (i.e., sandbagged or placed in other barricaded area). Serviceable and unserviceable CEA will be separated from DoD munitions by PTR distance.

J. Handling. Trained munitions personnel will supervise the handling of all CEA. No CEA will be handled without certification from EOD that the CEA is safe for movement.

K. Captured Enemy Ammunition Accountability. CEA will be accounted for as follows:

1. CEA that has been inspected, certified, or cleared by EOD or qualified UXO civilian explosives safety inspectors must be receipted, inspected, and accounted for in the same way as DoD munitions. Once CEA is identified, it is inventoried for accountability and control. Local stock numbers will be assigned to CEA. Assignment of local stock numbers and accurate accountability should be done as soon as possible after receipt. Reporting and disposition instructions for CEA are the same as for DoD munitions.

2. CEA shall be accounted for using a method that ensures accountability. A preferred method is using Ordnance Information System (OIS), or NAVMC 10774 cards; however, spreadsheets, log books, or any means of tracking is acceptable. The preferred method of accounting for CEA is by the piece; however, accounting for CEA by gross weight is also an acceptable method.

L. Transportation. The following requirements pertain to the transportation of CEA:

1. Transporting Captured Enemy Ammunition. CEA should not be transported with DoD ammunition. When possible, CEA should be placed in an unoccupied trailer, and not in the bed of the conveyance. When an armored vehicle is available, it should be used to tow a trailer loaded with CEA to provide additional protection to personnel.

2. Inspections of Loaded Conveyance

a. Inspection at Origin. Before moving or loading CEA into any conveyance, an EOD or Technical Escort Unit (TEU) team must certify that it is safe to handle and transport. When possible, an ammunition shipping inspector should be consulted about safe loading and tie-down procedures. The EOD or TEU team should provide the driver with any firefighting instructions.

b. Inspection at Destination. Vehicles loaded with CEA should not be taken directly into the ASP. Vehicles arriving with CEA should be directed to a holding area for inspection by EOD or TEU personnel. Following the transport of CEA, any change noted in the condition of the CEA (e.g., the discovery of a missing safety pin, explosives filler exudation, or other unusual conditions) will be reported to EOD personnel for a new assessment prior to removal from the transport vehicle.

c. Blocking and Bracing. Due to the unknown factors associated with CEA, protection against unintentional detonation associated with the stress of movement is critical. CEA loaded into a conveyance must be secured to prevent movement and its impact with other CEA during transport. Packaged CEA should be secured using cargo straps to prevent movement. Tie down procedures will be followed. Unpackaged CEA should be placed into wooden boxes and then secured to the vehicle. When packaging is not available, the bed of the conveyance can be covered with sand to prevent movement. When using this technique the load should be constantly checked to verify the amount of sand is sufficient to prevent movement and contact with the conveyance. During loading, consideration must be given to protecting exposed fuzes, primers, initiators, and safety devices.

M. Security. CEA will be controlled and safeguarded in the same manner as that prescribed for DoD munitions of similar hazard classification, SCG, Security Risk Code (SRC), and caliber and type (e.g., SRC Category (CAT) 1-like CEA will be handled as CAT 1 DoD munitions).

N. Demilitarization and Disposal. Only EOD or UXO-qualified personnel are authorized to dispose of CEA in non-emergency situations. CEA disposal operations conducted by untrained personnel have the potential to cause unnecessary battlefield contamination, personnel injury, collateral damage, and destruction of items required for intelligence.

### 1113 MULTINATIONAL (MN) A&E

MN ammunition may be stored with DoD A&E only if it has been hazard classified in a manner equivalent to DoD explosives hazard classification procedures as outlined in reference (a).

A. MN A&E with a DoD-equivalent hazard classification that is stored with DoD A&E:

1. May be stored in the same storage structure or on the same storage pad, but must be separated from DoD A&E.

2. May be stored in the same storage structure or on the same storage pad together with DoD A&E provided the risk is accepted by the appropriate authority. The acceptance of risk must be documented per applicable GCC instructions and must consider the surveillance, propellant stability controls, packaging, transportation, handling, and operational practices of such A&E.

B. MN A&E, either without a DoD-equivalent hazard classification or when the equivalency of the hazard classification procedures is uncertain, will be separated from DoD A&E by intermagazine distances (IMD).

C. A&E Operations. The explosives safety separations between an A&E operation and a storage site depends on several factors including the hazard class present, the net explosives weight present, and the level of protection required. The following are the minimum required levels of protection when A&E operations are involved.

1. Concurrent DoD and MN A&E operations (e.g., ammunition issues, returns, inspections) will be separated by a minimum of intraline distance (ILD).

2. Non-concurrent DoD and multinational A&E operations may be performed on the same pad, site, or facility provided the A&E of the first party is removed prior to the second party beginning A&E operations.

D. A&E operations (US or MN) at risk from A&E storage sites (US or MN) will be given ILD level of protection from that storage site.

E. A&E storage sites (US or MN) at risk from A&E operations (US or MN) will be given IMD level of protection from that A&E operation.

F. MN A&E storage or operations will be separated by IBD and/or PTR distance from non-A&E facilities or locations.

G. Where mission necessity or operational constraints will not allow minimum separation distances to be maintained, a deviation from the appropriate command level, or when required, from the GCC, is required. During MN operations, if foreign A&E encumbers DoD personnel or resources, the deviation will be coordinated with the MN units involved. Mitigating measures may include a MOA to allow the affected Commander to inspect MN A&E sites for compliance with safe storage and operating practices. Such agreements will be coordinated in accordance with GCC policies and instructions.

#### 1114 PROTECTIVE CONSTRUCTION DESIGNS

Protective construction designs have been proven, through testing, to prevent prompt propagation at reduced separation distances. These designs are very specific regarding the conditions, limitations, and construction requirements which must be followed to achieve a reduced maximum credible event (MCE). Reference (aa) contains approved protective construction designs which will assist operational field storage personnel in mitigating or eliminating hazards from A&E based on their unique situations.

#### 1115 FUEL STORAGE

Fuel storage criteria is contained in reference (a).

#### 1116 RISK ASSESSMENT TOOLS

Several tools are available to assist explosives safety personnel in assessing hazards associated with ESQD non-compliance. These tools are available at the DDESB web site or by contacting COMMARCORSYSCOM.

A. Automated Safety Assessment Protocol Explosives (ASAP-X). ASAP-X is a Microsoft Excel spreadsheet designed to assess hazards associated with ESQD non-compliance. Directions for use of ASAP-X can be found in reference (ab). ASAP-X is required for use to support deviations involving ESQD-related risk.

B. Safety Assessment for Explosives Risk (SAFER). This software is used to perform risk-based explosives safety site planning in accordance with reference (ac). Contact COMMARCORSYSCOM to obtain assistance using this program.

#### 1117 TACTICAL SAFETY SPECIALIST (TSS)

A TSS is available to provide commanders with tools to compliment force preservation efforts and ensure safety in the operational environment. The TSS supports commanders in protecting forces and assets from potential incidents that could adversely affect current and future missions and/or operations within their areas of responsibility. A TSS, when trained in explosives safety, can provide explosives safety expertise in theater, which is generally not available to GCCs during combat and contingency operations. Paragraph 0803 of this Volume outlines the requisite courses for TSSs that are assigned duties to assess operations involving A&E.

**1118 TSS CERTIFICATION**

TSSs requiring ESO certification will follow the certification process for ESOs contained in Chapter 8 of this Volume. Upon completion of the required initial courses and OJT (if required), a TSS will have their immediate supervisor submit a request for ESO certification to COMMARCORSYSCOM. The request will contain all certificates of completion of the required courses and a signed letter stating the TSS has participated in an ESSA and an ESI-CR. The request will be forwarded to COMMARCORSYSCOM with a recommendation for certification as an ESO. Requests not containing the above elements will be returned without certification. Once certified, the TSS must continue to complete all mandatory refresher training and continual training to maintain certification. The certified TSS will be entered into the ESO Training Database and all training tracked. Any TSS who fails to complete mandatory refresher or continual training will be decertified.

**1119 TACTICAL ASSISTANCE VISIT**

Tactical explosives safety support is available from COMMARCORSYSCOM during all contingency and training evolutions as well as all MRMA assessments. Requests for explosives safety TAVs should be submitted to COMMARCORSYSCOM at least 60 days prior to a CONUS operation and 90 days for an OCONUS operation. Requests should identify the length of time the support is required and the type of support required (e.g., site plans, evaluations, waivers, etc.).

**1120 TACTICAL EXPLOSIVES SAFETY WORKSHOP**

Due to the unique situations that are encountered in an operational environment, COMMARCORSYSCOM has developed a tactical explosives safety workshop. This workshop provides personnel with explosives safety responsibilities and the tools to assist Commanders in identifying risks and mitigating efforts associated with the storage, handling, and transportation of A&E. This workshop can be requested through COMMARCORSYSCOM.

**VOLUME 8: CHAPTER 12**

**WEAPON SYSTEMS EXPLOSIVES SAFETY REVIEW BOARD (WSESRB)**

**SUMMARY OF SUBSTANTIVE CHANGES**

Hyperlinks are denoted by ***bold, italic, blue and underlined font.***

The original publication date of this Marine Corps Order (MCO) Volume (right header) will not change unless/until a full revision of the MCO has been conducted.

All Volume changes denoted in **blue font** will reset to black font upon a full revision of this Volume.

<b>CHAPTER VERSION</b>	<b>PAGE PARAGRAPH</b>	<b>SUMMARY OF SUBSTANTIVE CHANGES</b>	<b>DATE OF CHANGE</b>



**Chapter 12**

**WEAPON SYSTEMS EXPLOSIVES SAFETY REVIEW BOARD (WSESRB)**

1201 PURPOSE

To define the responsibilities of the DON WSESRB with respect to the introduction of new or modified weapon/weapon systems into service, as directed by references (ad) through (ag).

1202 BACKGROUND

Following several aircraft carrier mishaps, the CNO established the WSESRB to serve as independent oversight of a weapon program's safety effort, ensuring that required explosives safety criteria and weapons-related environmental considerations are incorporated in the design of the weapon or explosives system.

1203 POLICY

A. The WSESRB shall serve as the DON designated independent authority on weapon system safety. The NOSSA shall provide the Chairperson and the permanent Secretariat. Other members of the WSESRB board include OPNAV (N411), DON Systems Commands, and the Fleet. OPNAV and COMARCORSYSCOM may provide other ex-officio members as desired. Procedures for conducting a WSESRB review shall be developed and issued by COMNAVSEASYSCOM in reference (ag).

B. The WSESRB safety oversight responsibility includes energetic systems, weapons, to include user aspects of non-lethal weapons, Directed Energy Weapons, weapon devices, and those systems (software, firmware, or hardware) that manage and control weapons used, handled, stored or tested on or by a Naval Unit, regardless of origin of the item.

C. All Program Executive Officers (PEO), Program Managers (PM), weapon system designers, producers, processors, packaging designers, or users of A&E or weapon system shall be accountable and responsible for explosives safety as directed in reference (ag). All weapon system programs, regardless of Acquisition Category (ACAT) status or source, shall obtain an appropriate WSESRB review before proceeding to low rate initial production and/or Deployment/Fielding. WSESRB approval is required for any shipboard testing of developmental weapons or weapon systems.

D. Changes, alterations, product improvement programs, engineering change proposals, ordnance alterations or ship change documents to previously approved weapon systems, including software or firmware, that can affect the safety of the platform, A&E, weapon or combat system, or other related systems shall obtain WSESRB review. This requirement includes non-developmental/non-ACAT programs.

E. The milestone decision authority, PEO, and PM shall consider WSESRB concurrence with the system safety plan development and its implementation as one of the exit

criteria for a program completing each acquisition phase and advancing to the next acquisition phase or cycle.

F. All non-developmental or commercially available ordnance items, weapons, or control systems, including foreign weapons, shall satisfy the same weapon system safety and weapon-related environmental requirements as developmental items. This includes all interface elements required to adapt the items for DON use.

**1204 JOINT SERVICE WEAPONS SAFETY REVIEW (JSWSR)**

A. Any weapon, weapon system or munition that obtains a JSWSR and concurrence, in accordance with references (ad) and (ag) shall have met the requirements of obtaining a WSESRB review/concurrence, reference (b), noting any restrictions imposed by the Navy as part of that review/concurrence.

B. Criteria for determining whether a weapon, weapons system or munition should obtain a JSWSR in lieu of a WSESRB review are provided below:

1. All weapon and laser systems development, acquisition, and test and evaluation programs when two or more DoD Components will be using the weapon or laser system.

2. Fielded legacy systems (weapon, laser, or other appropriate system) that were not originally joint service systems, but which have become joint through multi-DoD Component use.

3. Design changes or modifications to legacy weapons that have an effect on the safety of the warhead, propulsion system, and related fuzing and ignition systems.

**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM**

**APPENDIX A: REFERENCE DOCUMENTS**

AASTP - 1	NATO Guidelines for the Storage of Ammunition and Explosives
AASTP - 5	NATO Guidelines for the Storage, maintenance and Transportation of Ammunition and Explosives on Deployed Missions or Operations
CJCSI 4360.01	Explosives Safety and Munitions Risk Management for Joint Operations Planning, Training, and Execution
DDESB TP - 15	Approved Protective Construction
DDESB TP – 16	Methodologies for Calculating Primary Fragment Characteristics
DDESB TP – 18	Minimum Qualification for Unexploded Ordnance (UXO) Technicians and Personnel
DESR 6055.09	Defense Explosives Safety Regulation Edition 1
DoDI 4140.62	Material Potentially Presenting an Explosives Hazard
DoDI 6055.16	Explosives Safety Management Program
DoDM 4145.26-M	DoD Contractors’ Safety Manual for Ammunition and Explosives
DoDM 4160.21-M	Defense Materiel Disposition Manual
DoDM 4160.28-M	Defense Demilitarization Manual
DoDM 4715.26-M	DoDM Military Munitions Rule Implementation Policy
DESR 6055.09	DoD Ammunition and Explosives Safety Standards
Deputy Secretary of Defense	Deputy Secretary of Defense, “DoD Enduring Location Master List (S)”
MCO 3571.2	Explosive Ordnance Disposal (EOD) Program
MCO P4030.19	Preparing Hazardous Materials for Military Air Shipments
MCO P4400.151	Intermediate-Level Supply Management Policy Manual
MCO P5102.1	Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
MCO 8010.13	Class V(W) Administration and Management Program
MCO 8011.5A	Class V(W) Ammunition Policies, Procedures and Information for Training, Programmed Testing, and Security
MCO 8015.3A	Marine Corps Class V(W) Physical Inventory Control Program (PICP)
MCO 8025.1E	Malfunction Investigation and Reporting
MCO 8020.1	Handling, Transportation, Storage, Reclassification and Disposal of Class (V) (W) Materiel
MCO 8023.3	Personnel Qualification and Certification Program for Class V Ammunition and Explosives
MCO 11240.66	Standard Licensing Policy for Operators of Military Motor Vehicles

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MIL-STD 1320	Truck Loading of Ammunition and Explosives
MIL-STD 1322	Unit Loads of Ammunition and Explosives for Domestic and Overseas Shipments
MIL-STD 1324	Palletizing Amphibious Loads
MIL-STD 1325	Railcar Loading of Hazardous Materials
MIL-STD 1386	Loading Hazardous Materials I MILVAN Containers
NAVFAC P-80	Facility Planning Criteria
NAVFAC P-307	Maintenance and Certification Management of Weight Handling Equipment
NAVSUP P-724	Conventional Ordnance Management Policy and Procedures (Volume I, Ashore and Volume II, Afloat)
NAVSUP P-801	Ammunition Unserviceable, Suspended and Limited Use
NAVSUP P-804	Stock List of Navy Ammunition Data Supplement
NAVSUP P-805	Receipt, Segregation, Storage, Issue, and Fleet Sentencing
NAVSEA OP 4	Ammunition and Explosives Safety Afloat
NAVSEA OP 5 Volume 1	Ammunition and Explosives Safety Ashore
NAVSEA OP 5 Volume 3	Ammunition and Explosives Safety Ashore For Contingencies, Combat Operations, Military Operations Other than War, and Associated Training
NAVSEA OP 2173 Vols 1 and 2	Approved Handling Equipment for Weapons and Explosives
NAVSEA OP 3565 Vols 1 and 2	Electromagnetic Radiation Hazards
NOSSAINST 8020.22	Explosives Safety Site Approval Documentation Requirements: Submittal, Review, Approval, and Oversight
SW020-AC-SAF-010	Transportation and Storage Data for Ammunition, Explosives, and Related Hazardous Materials
SW020-AD-SAF-010	Explosives Safety Accidents and Lessons Learned
SW020-AG-SAF-010	Navy Transportation Safety Manual for Ammunition, Explosives, and Related Hazardous Materials
SW023-AG-WHM-010	On-Station Movement of Ammunition and Explosives by Motor Vehicle
DTR 4500.9-R	Defense Transportation Regulations
NFPA 780	Installation of Lightning Protection Systems
29 CFR 1910	Occupational Safety and Health Standards
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities

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49 CFR	Shippers – General Requirements for Shipments and Packaging
10 USC 2710	Inventory of Unexploded Ordnance, Discarded Military Munitions and Munitions Constituents at Defense Sites (other than Operational Ranges)

**MARINE CORPS EXPLOSIVES SAFETY MANAGEMENT PROGRAM****Volume 8 Appendix B****MCO 5100.29C****5 AUG 2021****APPENDIX B: ABBREVIATIONS, ACRONYMS, AND DEFINITIONS****ABBREVIATIONS AND ACRONYMS**

AA&E	Arms Ammunition and Explosives
AAR	After Action Report
AEDA	Ammunition, Explosives, and Dangerous Articles
ASAP-X	Automated Safety Assessment Protocol Explosives
ASU	Ammunition Storage Unit
AWG	American Wire Gage
BATF	Bureau of Alcohol Tobacco and Firearms
BOS-I	Base Operating Support Integrator
BUMED	Bureau of Medicine and Surgery
C&RI	Consequence and Risk Identification
CA	Chemical Agent
CAD	Cartridge Activated Device
CALA	Combat Aircraft Loading Area
CATM	Captive Air Training Missile
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CETASM	Canine Explosive Training Aid Storage Magazine
CFR	Code of Federal Regulations
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
COMLANTFLT	Commander, US Atlantic Fleet Command
COMMARCORSYSCOM	Commander, Marine Corps Systems Command
COMPACFLT	Commander, US Pacific Fleet Command
COMUSNAVCENT	Commander, US Naval Forces Central Command
COMUSNAVEUR	Commander, US Naval Forces Europe Command
CONUS	Continental United States (United States territory, including the adjacent territorial waters, located within North America between Canada and Mexico.)
CWA	Construction Worker Authorization
DASN	Deputy Assistant Secretary of the Navy
DDA	Designated Disposition Authority
DDESB	Department of Defense Explosives Safety Board
DERP	Department of Defense Environmental Restoration Program
DLA	Defense Logistics Agency
DMM	Discarded Military Munitions
EMCON	Emissions Control
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ES	Exposed Site
ESD	Electrostatic Discharge

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ESI	Explosives Safety Inspection
ESMP	Explosives Safety Management
ESO	Explosives Safety Officer
ESQD	Explosives Safety Quantity-Distance
ESS	Explosives Safety Submission
ESSA	Explosives Safety Self-Assessment
ESSDR	Explosives Safety Submission Determination Request
ESSOLANT	Explosives Safety Support Office Atlantic
ESSOPAC	Explosives Safety Support Office Pacific
FUDS	Formerly Used Defense Site
GCC	Geographic Combatant Commander
GIS	Geographic Information System
GSE	Ground Support Equipment
HERO	Hazards of Electromagnetic Radiation to Ordnance
HFD	Hazardous Fragment Distance
I&L	Installation and Logistics
IA	International Agreement
IBD	Inhabited Building Distance
IDS	Intrusion Detection System
IL	Intraline Distance
IMD	Intermagazine Distance
ISSA	Inter-Service Support Agreement
JHCS	Joint Hazard Classification System
LPS	Lightning Protection System
LUC	Land Use Controls
MARCORSYSCOM	Marine Corps Systems Command
MC	Munitions Constituents
MCE	Maximum Credible Event
MDAS	Material Documented as Safe
MDEH	Material Documented as an Explosives Hazard
MEC	Munitions and Explosives of Concern
MEQ	Mission Essential Quantity
MGFD	Munitions with the Greatest Fragmentation Distance
MHE	Material handling Equipment
MHz	Megahertz
MILCON	Military Construction
MILVAN	Containerized Cargo Van
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPF	Maritime Prepositioning Force Ships
MPPEH	Material Potentially Presenting an Explosives Hazard

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MR	Munitions Rule
MRA	Mishap Risk Assessment or Munitions Response Area
MRIP	Munitions Rule Implementation Policy
MRMA	Munitions Risk Management Assessments
MRS	Munitions Response Site
MSC	Military Sealift Command
MSD	Minimum Separation Distance
MN	Multi-National
MWD	Military Working Dogs
NAR	Notice of Ammunition Reclassification
NATO	North American Treaty Organization
NATOPS	Naval Air Training and Operating Procedures Standardization
NAVAIRSYSCOM	Naval Air Systems Command
NAVFAC	Naval Facilities Engineering Command
NAVSEASYSYSCOM	Naval Sea Systems Command
NDAI	No DoD Action Indicated
NEQ	Net Explosive Quantity (in kilograms)
NEW	Net Explosives Weight (in pounds)
NEWQD	Net Explosives Weight for Quantity-Distance
NFA	No Further Action
NFESC	Naval Facilities Engineering Services Center
NFPA	National Fire Protection Association
NOSSA	Naval Safety and Security Activity
NSWC	Naval Surface Warfare Center
NSWCIHEODTD	Naval Surface Warfare Center Indian Head Explosives Ordnance Disposal Technology Division
NWP	Naval Warfare Publication
OBA	Oxygen Breathing Apparatus
OB/OD	Open Burn/Open Detonation
OCONUS	Outside Continental United States (includes Alaska and Hawaii)
OHE	Ordnance Handling Equipment
OIS	Ordnance Information System
OPM	Office of Personnel Management
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Office of the Chief of Naval Operations Instruction
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PAD	Propellant Actuated Device
PES	Potential Explosives Site
PHS&T	Packaging, Handling, Storage, and Transportation
POL	Petroleum, Oils, and Lubricants
PPE	Personal Protective Equipment
PTR	Public Traffic Route



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QA	Quality Assurance
QC	Quality Control
QRP	Qualified Recycling Program
RAC	Risk Assessment Code
RCRA	Resource Conservation and Recovery Act
RDT&E	Research, Development, Test and Evaluation
RI/FS	Remedial Investigation/Feasibility Study
RM	Risk Management
RORO	Roll on-Roll Off
RP	Red Phosphorous
RSS&I	Receipt, Storage, Segregation, and Inspection
RSL	Ready Service Locker
RSP	Render Safe Procedure
RUC	Routing Unit Identification Code
SAFER	Safety Assessment for Explosives Risk
SAR	Site Approval Request
SCBA	Self-Contained Breathing Apparatus
SCC	Service Component Commander
SCG	Storage Compatibility Group
SDR	Supply Discrepancy Report
SOFA	Status of Forces Agreement
SOLAS	Safety of Life at Sea
SOP	Standard Operating Procedures
SPAWARSSYSCOM	Space and Naval Warfare Systems Command
SRC	Security Risk Code
SUXOS	Senior Unexploded Ordnance Supervisor
SWL	Safe Working Load
SWOP	Special Weapons Ordnance Publication
T&E	Test and Evaluation
TAV	Technical Assist Visit
TCRA	Time Critical Removal Action
TEU	Technical Escort Unit
TSD	Team Separation Distance
UIC	Unit Identification Code
USNS	United States Navy Ship (civilian manned)
UXO	Unexploded Ordnance
UXOSO	Unexploded Ordnance Safety Officer
WMM	Waste Military Munitions
WSESRB	Weapon System Explosives Safety Review Board

**DEFINITIONS**

Aboveground Magazine - Any open area or any structure not meeting the requirements of an ECM that is used for explosives storage.

Aboveground Storage - Storage in magazines with or without earth cover or in open stacks at surface level.

Accident - Any unplanned act or event which results in damage to property, material, equipment or cargo, or personnel injury or death when not the result of enemy action.

Administration Area - The area in which administrative buildings functioning for the installation as a whole are located. This excludes those offices located near and directly serving components of explosives storage and operating areas.

Ammunition Lot - A quantity of ammunition which has been assembled from uniform components under similar conditions and which is expected to function in a uniform manner. Each ammunition lot is assigned a number.

Ammunition Storage Unit - All types of explosives storage magazines including outdoor, indoor, open storage areas, sheds, bunkers, and earth-covered and aboveground magazines.

Anomaly Avoidance - Techniques employed by EOD or UXO-qualified personnel at sites known or suspected to contain MEC in order to avoid contact with potential surface or subsurface explosive hazards.

Auxiliary Building - Any building accessory to or maintained and operated to serve an operating building, line, plant, or pier area. Explosive materials are not present in an auxiliary building. Examples: power plants and change houses, paint and solvent lockers, and similar facilities.

Barricade - An intervening barrier, natural or artificial, of type, size, and construction intended to limit the effect of an explosion on nearby buildings or exposures.

Blast Impulse - The product of the overpressure from the blast wave of an explosion and the time during which it acts at a given point (that is, the area under the positive phase of the overpressure versus time curve).

Blast Overpressure - The pressure, exceeding the ambient pressure, manifested in the shock wave of an explosion.

Bravo Flag - A red flag that flies at a facility when explosives and personnel are present.

Cargo Ammunition Ships - The following vessels, when carrying ammunition and explosives as cargo, are cargo ammunition ships:

- a. Fleet cargo ammunition ships (T-AOE, T-AKE, and AS class and maritime prepositioned ships).

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- b. Tenders (AD and AS classes).
- c. Military Sealift Command chartered ships.
- d. Any ship entering a DON controlled port.
- e. Any DON controlled ship regardless of location.
- f. Lighters and barges.

Cartridge Actuated Devices - This term collectively represents and is synonymous with cartridges, cartridge actuated devices (old meaning), aircraft detonating cords and cartridge associated hardware.

Chain of Custody - The activities and procedures taken throughout the inspection, re-inspection and documentation process to maintain positive control of MPPEH to ensure the veracity of the process used to determine the status of material as to its explosive hazard. This includes all such activities from the time of collection through final disposition.

Combat Aircraft Loading/Parking Area - Any area specifically designated for:

- a. Aircraft loading or unloading of combat configured munitions.
- b. Parking aircraft loaded with combat configured munitions.

Combatants - All DON controlled ships not classified as explosives support ships.

Commanding Officer or Officer-in-Charge - The senior officer who has overall responsibility for operations. For purposes of this manual, Commanding Generals, Installation Commanders, Officers-in-Charge, and Activity Commanders are synonymous with commanding officer. Unit commanders of battalion/squadron level or above.

Compatibility - Ammunition or explosives are considered compatible if they may be stored or transported together without significantly increasing either the probability of an accident or, for a given quantity, the magnitude of the effects of such an accident.

Conditional Exemption - An exemption from the regulatory definition of hazardous waste (and therefore from compliance with specific environmental requirements pertaining to the storage of hazardous waste) conditioned on compliance with certain criteria requirements as set forth in 40 CFR 266.205.

Construction Support - Assistance provided by EOD or UXO-qualified personnel during intrusive construction activities on real property known or suspected to contain MEC to ensure the safety of personnel or resources from any potential explosive hazards. The two categories of construction support are on-call and on-site.

Container - A general term that encompasses boxes; cartridge or powder tanks, cartons, drums, barrels, cylinders or cans; containers for long ordnance items; and cargo containers (Dromedaries, etc.) for shipments of sizeable quantities of hazardous materials. A pallet is not considered to be a container.

Deflagration - A rapid chemical reaction in which the output of heat is sufficient to enable the reaction to proceed and be accelerated without input of heat from another source. The effect of a true deflagration under confinement is an explosion.

Designated Aircraft Parking Area - An aircraft parking area that meets airfield parking criteria.

Detonation - A violent chemical reaction within a chemical compound or mechanical mixture evolving heat and pressure. A detonation is a reaction which proceeds through the reacted material toward the unreacted material at a supersonic velocity.

Deviation - For explosives safety applications, a deviation authorized by the COMMARCORSYSCOM is considered to be a departure from DON/DoD criteria, but under strictly controlled and regulated conditions based upon compelling operational need. Deviations which may be authorized by appropriate authority within the naval service are event waivers, waivers, and exemptions.

Discarded Military Munitions - Military munitions that have been abandoned without proper authority or approval. Does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of, consistent with applicable environmental laws and regulations.

Dividing Wall - A wall designed to prevent, control or delay propagation of an explosion between quantities of explosives on opposite sides of the wall.

Earth-Covered Magazine - Any earth-covered structure that meets soil cover depth and slope requirements of reference (f). ECMs have three possible structural strength designations (7-Bar, 3-Bar, or undefined). The strength of an ECMs headwall and door(s) determines its designation.

Enduring Locations - Locations listed in DoD Enduring Location Master List (S), where military munitions are present or forecasted to be present.

Engineering Controls –

- a. Regulation of facility operations through the use of prudent engineering principles; e.g., facility design, operational sequencing, equipment selection, and process limitations.
- b. The use of protective measures to reduce the minimum separation distance; e.g., sandbag, buried explosion module, during a munitions response.

Essential Personnel - Personnel whose duties require them to remain within an ESQD arc for one or more of the following reasons:

- a. Direct involvement in an ammunition and explosives operation.
- b. Normal import ship keeping duties by assigned personnel.
- c. Provision of mission-required in-port services.
- d. Provision of mission-related repairs and/or tests to in-port ships.
- e. Safe and efficient completion of the munitions response action.

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Essential personnel do not include vendors, commercial delivery vehicles (unless carrying mission-related materials), dependents, or non-DoD personnel except as categorized above.

Established Explosives Safety Program - An explosives safety program at an activity, command, or location responsible for implementing explosives safety requirements.

Event Waiver - A deviation approved on a case by case basis for a particular evolution, issued for a limited period to meet a specific readiness or operational requirement which cannot otherwise be satisfied.

Exclusion Zone - An ESQD arc established around a munitions response work area where MEC procedures are being conducted. An EZ is created by a response operation that may move within defined boundaries, can be suspended, and will be cancelled upon project completion.

Exemption - A deviation from mandatory explosives safety requirements approved for the purpose of long-term satisfaction of recurring readiness or operational requirements. Except in certain cases where authorization to purchase real estate for sufficient ESQD clearances has not been granted, where it is in the best interest of the U.S. to grant agricultural leases of encumbered land, or where a significant impairment of the defense posture of the U.S. would result, a positive program for eventual correction of the deficiency must be planned and in the process of being carried out. Exemptions are generally issued for a maximum of 5 years, but will not be granted for a period in excess of that estimated for correction of the deficiency.

Explosion Proof - When used in connection with electrical equipment, indicates that such equipment is enclosed in a case which is capable of withstanding an internal burning or explosion of elements contained inside the case and preventing ignition by spark, flash, or explosion of any outside gas or vapor surrounding the enclosure.

Explosive Equivalent - Usually expressed as a percentage of the total net weight of all reactive materials contained in the item or system compared to the same weight in TNT.

Explosive Limit - The maximum quantity of explosives or ammunition permitted at a specified site. Explosive limits are based on quantity-distance damage considerations and are expressed in net pounds of explosive, number of rounds or units, or other measuring units.

Explosive Event - Any event involving conventional ordnance, ammunition, explosives, explosive systems and devices resulting in an unintentional detonation, firing, deflagration, burning, launching of ordnance material (including all ordnance impacting off-range), leaking or spilled propellant fuels and oxidizers (less OTTO fuel II), or chemical agent release. Explosive events will be reported in an explosive event report (EER) in accordance with reference (aj), even if an ordnance system works as designed, and human error contributed to an event. This pertains to all events that do not meet the severity classification of class A, B, or C.

- a. Detonation, Deflagration, Burning, or Firing. It is an unintentional or inadvertent initiation, explosion or reaction of explosive material, component or system.

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Example: unintentional discharges of all guns, including small arms (this includes discharge of weapon in government quarters or unintentional discharges and ricochets during training on ranges), aircrew escape propulsion systems, marine location markers, flares, etc.).

- b. Inadvertent Launch. Is an unintentional launch of a weapon.
- c. Chemical Agent Release. Any unintentional or uncontrolled release of a chemical agent when:
  - 1. Damage occurs to property from contamination, or costs are incurred for decontamination.
  - 2. Individuals exhibit physiological symptoms of agent exposure.
  - 3. The quantity released to the atmosphere creates a serious potential for exposure.
- d. Propellant and Oxidizers. Is a leaking or spilled propellants (both solid and liquid), propellant fuels and oxidizers (less OTTO fuel II).

Explosive Mishap - An accident or incident involving conventional ordnance, ammunition, explosives, explosive systems and devices resulting in an unintentional detonation, firing, deflagration, burning, launching of ordnance material (including all ordnance impacting off-range), leaking or spilled propellant fuels and oxidizers (less OTTO fuel II), or chemical agent release. Accidents and incidents defined as explosive mishaps and meeting a severity classification of class A, B or C., will be reported as explosive mishap report (EMR) using the Risk Management Information (RMI) system, even if an ordnance system works as designed, and human error contributed to an incident or accident. All explosive mishaps require an immediate notification to the Naval Safety Center within 8 hours via telephonic report (757) 444-2929 or the electronic mishap reporting system (RMI). Any explosive event not meeting one of these severity classifications will be reported as an explosive event report (EER) per reference (aj).

- a. Detonation, Deflagration, Burning, or Firing. It is an unintentional or inadvertent initiation, explosion or reaction of explosive material, component or system.

Example: Accidental discharges of all guns, including small arms (this includes discharge of weapon in government quarters or accidental discharges and ricochets during training on ranges), aircrew escape propulsion systems, marine location markers, flares, etc).

- b. Inadvertent Launch. An unintentional launch of a weapon.
- c. Chemical Agent Release. Any unintentional or uncontrolled release of a chemical agent when:
  - 1. Damage occurs to property from contamination, or costs are incurred for decontamination.
  - 2. Individuals exhibit physiological symptoms of agent exposure.
  - 3. The quantity released to the atmosphere creates a serious potential for exposure.
- d. Propellant and Oxidizers. Is a leaking or spilled propellants (both solid and liquid), propellant fuels and oxidizers (less OTTO fuel II).

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- e. All Ordnance Impacting Off-Range. This includes all small arm ranges where ricochets cause bullets to impact outside surface danger zones.

Explosives Safety Distance - The prescribed minimum distance between the hazard class divisions and quantities (net weight) of explosives, and between such explosives and specified exposures (inhabited buildings, public highways, public railways, petroleum tanks, aircraft, etc.) affording an acceptable degree of protection and safety.

Explosives (or Munitions) Emergency Response - An immediate response by explosives and munitions emergency response personnel to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency.

Explosives Safety Quantity Distance Arcs - The prescribed minimum distance between sites storing or handling Hazard Class 1 explosive material and specified exposures (i.e., inhabited buildings, public highways, public railways, other storage or handling facilities, ships, aircraft, etc.) to afford an acceptable degree of protection and safety to the specified exposure. The size of the ESQD arc is proportional to the NEW present.

Explosives Safety Site Approval - Authorization obtained prior to beginning new construction, modifying existing structures, or conducting munitions response actions that create new or impact existing ESQD arcs at DON shore activities where ammunition and explosives are handled, processed, stored, treated, or on a defense site that is known or suspected to contain MEC.

Exposed Site - A location exposed to the potentially hazardous effect (blast, fragments, debris, and heat flux) from an explosion at a potential explosion site (PES). The distance to a PES and the level of protection required for an ES determine the quantity of ammunition/explosives permitted in a PES.

Field Office - An office in which local administrative functions are performed for one area or line as contrasted with the main administrative buildings.

Hazardous Fragment - A hazardous fragment is one having an impact energy of 58 ft/lb or greater.

Hazardous Fragment Density - A density of hazardous fragments exceeding one per 600 square feet.

Holding Yard - A location for groups of railcars, trucks or trailers used to hold ammunition, explosives and other hazardous materials for interim periods prior to storage or shipment.

Host Activity - For the purposes of explosives safety, the host activity is the activity that is the property holder of a Navy or Marine Corps activity whose mission directly involves or supports ammunition and/or explosives operations.

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Inert Ammunition - Ammunition and components that contain no explosive material. Inert ammunition and components include:

- a. Ammunition and components with all explosive material removed and replaced with inert material.
- b. Empty ammunition or components.
- c. Ammunition or components that were manufactured with inert material in place of all explosive material.

Inhabited Building(s) - A building or structure, other than an operating building, occupied in whole or part as a habitation for human beings, or a building or structure where people are accustomed to assemble.

Inhabited Building Distance - The minimum distance permitted between an inhabited building and an ammunition or explosives location for the protection of administration, quarters, industrial and other similar areas within a naval shore establishment. Inhabited building distances shall be provided between ammunition or explosives locations and the boundary of a shore establishment of the nearest point beyond the boundary where such inhabited structures could be erected.

Inspection Station - A designated location at which trucks and railcars containing ammunition and explosives are inspected.

Interchange Yard - An area set aside for the exchange of railcars or vehicles between the carrier and establishment.

Intraline Distance - The distance to be maintained between any two operating buildings and sites within an operating line, at least one of which contains or is designed to contain explosives, except that the distance from a service magazine for the line to the nearest operating building shall be not less than the intraline distance required for the quantity of explosives contained in the service magazine.

K-Factor - The factor in the formulas  $D=KW$  (English units) or  $D=KQ$  (metric units) which is used in quantity-distance determinations. The K-factor is a constant and represents the degree of damage that is acceptable. Typical constants used in English units are 1.25, 4.5, 9, 11, 18, 24, 30, 40, and 50; the lower figures indicating the acceptance of a greater amount of damage. The value of K in English units is approximately 2.5 times its value in metric units.

Land Use Control - A physical, legal, or administrative mechanism that restricts the use of, or limits access to, real property, to manage risks to human health and the environment.

Loading Docks - Facilities, structures or paved areas designed and installed for transferring ammunition and explosives between any two modes of transportation.

Magazine - Any building or structure, except an operating building, used for the storage of ammunition and explosives.



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Magazine Distance - The minimum distance permitted between any two magazines depending on the type of magazine and the Class/Division and quantity of explosives and ammunition involved.

Mass-Detonating Explosives - High explosives, black powder, certain propellants, certain pyrotechnics, and other similar explosives which can be expected to explode virtually instantaneously when a small portion detonates.

Material Documented as an Explosive Hazard - MPPEH that cannot be documented as MDAS, that has been assessed and documented as to the maximum explosive hazards the material is known or suspected to present, and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH.

Material Documented as Safe - MPPEH that has been assessed and documented as not presenting an explosive hazard and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH.

Material Potentially Presenting an Explosive Hazard - Material owned or controlled by the Department of Defense that, prior to determination of its explosives safety status, potentially contains explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris) or potentially contains a high enough concentration of explosives that the material presents an explosive hazard.

Maximum Credible Event - The maximum credible event from a hypothesized accidental explosion, fire, or toxic chemical agent release (with explosives contribution) is the worst single event that is likely to occur from a given quantity and disposition of ammunition and explosives.

Maximum Fragment Distance - The measured or calculated maximum distance to which any fragment from the cylindrical portion of an ammunition and explosives case is expected to be thrown by the design mode detonation of a single ammunition and explosives item. This distance does not address fragments produced by sections of nose plugs, base plates, boattails, and/or lugs.

Military Munitions – An environmental term that includes all ammunition products and components produced or used by or for the DoD for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy, and National Guard personnel. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program, after all required sanitizing operations under the Atomic Energy Act of 1954, as amended, have been completed. See 40 CFR 260.10.

Military Munitions Burial Site - A site, regardless of location, where military munitions were intentionally buried, with the intent to abandon or discard. This term includes burial sites used to dispose of military munitions in a manner consistent with applicable environmental laws and

regulations or the national practice at the time of burial. It does not include sites where munitions were intentionally covered with earth during authorized destruction by detonation, or where in-situ capping is implemented as an engineered remedy under an authorized response action.

Mission Essential Quantities - The amount of explosive material needed to meet mission requirements, when not limited by net explosive weight.

Munition with the Greatest Fragmentation Distance - The munition with the greatest fragment distance that is reasonably expected (based on research or characterization) to be encountered in any particular area.

Munitions and Explosives of Concern - Distinguishes specific categories of military munitions that may pose unique explosives safety hazard/risks and means UXO, DMM or MC's present in high enough concentrations to pose an explosive hazard.

Munitions Constituents - Any materials originating from UXO, DMM, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

Munitions Debris - Remnants of munitions (such as fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Munitions Response - Response actions, including investigation, removal actions and remedial actions to address the explosives safety hazards and human health or environmental risks presented by UXO, DMM, or MC.

Munitions Response Area - Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. A munitions response area is comprised of one or more munitions response sites.

Munitions Response Site - A discrete location within a MRA that is known to require a munitions response.

Non-Enduring Locations - Overseas locations, other than enduring locations listed in DoD Enduring Location Master List (S).

On-Call Construction Support - Construction support provided by EOD or UXO-qualified personnel who are called to the site on an as-needed basis. On-call construction support is appropriate only where the probability of encountering MEC has been determined to be low using risk/hazard assessment methodology.

On-Site Construction Support - Construction support provided by personnel who are continuously present at the site during intrusive activities. On-site construction support is appropriate where the probability of encountering MEC has been determined to be moderate to high using risk/hazard assessment methodology.

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Open Burn - An open-air combustion process by which munitions are destroyed to eliminate their inherent explosive hazards.

Open Detonation - An open-air process used for the destruction of munitions.

Operating Building - Any site, facility, or structure, except a magazine, in which operations associated with ammunition and explosives are conducted.

Operating Line - A group of buildings, facilities, or related work stations so arranged as to permit performance of the consecutive steps in the manufacture of an explosive; or in the loading, assembly, modification and maintenance of ammunition.

Operational Necessity - A situation of such compelling urgency that failure to grant a deviation from established explosives safety criteria will have a harmful impact on mission readiness.

Operational Range - A range that is under the jurisdiction, custody, or control of the Secretary of Defense and is used for range activities; or although not currently being used for range activities, that is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities. The term "range" when used in the geographical sense, means a designated land or water area that is set aside, managed and used for range activities of the Department of Defense. This term includes the following: firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas; and airspace areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the Federal Aviation Administration.

Ordnance Handling Equipment - Specially designed mechanical equipment used for assembling, disassembling, handling, transporting, lifting, positioning, rotating, or containing conventional weapons, ammunition, explosives, and related components.

Pier - A landing place or platform built into the water, perpendicular or oblique to the shore, for the berthing of vessels.

Portable Magazine - Commercially built, pre-engineered magazines frequently used as ready service lockers.

Potential Explosion Site - The location of a quantity of explosives that will create a blast, fragment, thermal, and/or debris hazard in event of an accidental explosion of its contents.

Production Building - Any building or structure, except a magazine, in which ammunition and explosives are manufactured, renovated, reconditioned, reclaimed or demilitarized.

Prohibited Area - A specifically designated area at airfields or heliports in which all ammunition and explosives facilities are prohibited.

Public Highway - Any street, road or highway not under DoD custody used by the general public for any type of vehicular traffic.

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Public Highway Distance - The minimum distance permitted between a public highway and a site where ammunition and explosives are located.

Public Traffic Route - Any public street, road, highway, navigable stream, or passenger railroad (includes roads on a military reservation that are used routinely by the general public for through traffic).

Qualified Receiver of MDEH - DoD and commercial entities (i.e., activities, units, businesses) that have personnel who are trained and experienced in the safe handling of the MDEH they are authorized, licensed or otherwise permitted to receive, manage, and conduct disposition and are capable of attaining a DoD-approved site plan.

Qualified Recycling Program - Organized operations that require concerted efforts to divert or recover scrap or waste, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials in order to maintain or enhance their marketability.

Quality Assurance - An integrated system of management activities involving planning, implementing, assessing, reporting, and quality improvement to ensure a process, item, or service is of the type and quality needed to meet project requirements.

Quality Control - The overall system of technical activities that measures the attributes and performance of a process, item, or service against defined standards to verify that they meet the stated requirements.

Quantity-Distance - The quantity of explosives material and distance separation relationships which provide defined types of protection. These relationships are based on levels of risk considered acceptable for the stipulated exposures and are tabulated in the appropriate quantity-distance tables. Separation distances are not absolute safe distances but are relative protective or safe distances. Distances greater than those shown in the table should be used wherever practicable.

Range Activities - Research, development, testing, and evaluation of military munitions, other ordnance, and weapons systems; and the training of members of the armed forces in the use and handling of military munitions, other ordnance, and weapons systems.

Range Debris - Debris, other than munitions debris, collected from operational ranges or from former ranges (such as, targets).

Ready Service Locker - A locker used for the storage of small quantities of certain pyrotechnics, small arms ammunition, and minor hazard items of ammunition.

Ready Service Magazine - A magazine located in the magazine area (or near the weapon or area to be served aboard ship) and used for the temporary storage of restricted amounts of ammunition for emergency use; or in an operating line for limited amounts of explosives or components used in the production of ammunition.

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Real Property - Land and/or facilities (including installed equipment) owned by or under the control of the DON or land where the DON is primarily responsible for conducting response actions.

Remediation - The removal of pollutants or contaminants from environmental media such as soil, sediments, or water.

Roll-on/Roll-off - The transfer of ammunition and explosives on wheeled conveyance into or from a waterborne conveyance (e.g., barge, boat), such that the conveyance remains in a transportation mode through a transshipment point, with no lifting of the ammunition or conveyance.

Safe Haven - An area or location specifically approved by the CO for emergency parking of commercial vehicles carrying military and military-sponsored shipments of explosives, hazardous materials, or other sensitive items endangered by civil disturbance or natural disaster.

Safe Working Load - The maximum static load (in pounds or kilograms) which can be lifted or handled by a piece of handling equipment such as slings, forklift trucks, beams, and similar handling equipment.

Scuttling Site - An area of water specifically designated for positioning a ship for flooding or sinking under emergency situations.

Secretarial Certification - Issued at the Secretary of the Navy level when a construction project cannot meet explosives safety criteria but must be constructed due to operational necessity. This form of certification is issued in lieu of a conventional site approval.

Secure Explosives Holding Area - An area designated for the temporary parking of commercial carriers' motor vehicles transporting DoD-owned AA&E.

Segregation Facility - A building or series of buildings where fleet return material is screened and grouped by type and physical condition.

Sensitivity Group - A category used to describe the susceptibility of Hazard Class/Division 1.1 and 1.2 military munitions to sympathetic detonation for the purpose of storage within a high performance magazine, or where ARMCO, Inc. revetments or substantial dividing walls are used to reduce the maximum credible event.

Service Magazine - A building of an operating line used for the intermediate storage of ammunition and explosives.

Small Arms Ammunition - Ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, or for shotguns.

Stability - The ability of any ammunition or explosive to withstand adverse conditions and deterioration while in storage or use.

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Standard Operating Procedure - A document which outlines step-by-step procedures and the associated hazards for every explosives operation not exempted.

Storage Compatibility Group - The compatibility group for ammunition, explosives and/or other hazardous materials which can be stored together without significantly increasing the probability of accident or, for a given quantity, the magnitude of the effects of such an accident.

Storehouses - Buildings assigned for the storage of inert ammunition components or ammunition details such as empty (unprimed) cartridge cases, empty (inert) projectiles, tanks, ammunition boxes, wads, plugs, raw silk, bomb fins, and other nonhazardous supplies and equipment.

Substantial Dividing Wall - An interior wall designed to prevent simultaneous detonation of explosives on opposite sides of the wall. However, such walls may not prevent propagation (depending on quantities and types of explosives involved).

Surveillance - An activity process to assure that ammunition, explosives, and energetic material received, stored, shipped or manufactured are safe, controlled, and disposed of when unsafe.

Suspect Cargo Site - A designated location for placing trucks and railcars containing ammunition or explosives that are suspected of being in a hazardous condition.

Team Separation Distance - The distance that munitions response teams must be separated from each other during intrusive operations.

Time Critical Removal Action - Removal actions where a removal is appropriate, and that less than six months exists before on-site removal activity must begin.

TNT Equivalent - Considering the peak overpressure produced by detonation of a given weight of TNT as 100 percent, the TNT equivalency of an explosive is the amount of overpressure produced by detonation of an identical quantity of propellant under comparable conditions, expressed as a percentage.

Toxicity - The property possessed by a material which enables it to injure the physiological mechanism of an organism by chemical means, with the maximum effect being death.

Transfer Depot - A permanent facility used to transfer ammunition and explosive between automotive vehicles and railcars for further shipment, or for delivery to a storage magazine or loading building.

Truck Holding Yard - A location where trucks containing ammunition or explosives are held for interim periods of time prior to storage or shipment.

Unbarricaded - No effective barricade between magazines, operating buildings, stacks, or other buildings opposed one to another.

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Underground Storage - Storage in a cavern or chamber storage site provided that, in case of an accidental explosion in the storage site, the overhead cover does not fail and all exterior hazardous effects are limited to blast and debris from the entrance.

Unexploded Ordnance - Military munitions that (a) have been primed, fused, armed, or otherwise prepared for action; (b) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or materiel; and (c) remain unexploded either by malfunction, design, or any other cause.

Unserviceable Ammunition - Ammunition reclassified to unserviceable because of a change in expected service or shelf life, or due to deterioration or damage.

UXO-Qualified Personnel - Personnel who have performed successfully in military EOD positions, or are qualified to perform in the following Department of Labor, Service Contract Act, Directory of Occupations, contractor positions: UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, or Senior UXO Supervisor.

UXO Technicians - Personnel who are qualified for and filling Department of Labor, Service Contract Act, Directory of Occupations, contractor positions of UXO Technician I, UXO Technician II, and UXO Technician III.

Waiver - Written authority which provides a temporary exception and permits deviation from a mandatory requirement of this manual. It is generally granted for short periods of time pending cancellation as a result of termination of scheduled work commitments or correction of the waived conditions.

Waste Military Munition - a military munition is a “waste” if it is either a solid or hazardous waste under regulations or defined as a waste under the Navy or Marine Corps activity’s formal policies and procedures.

**APPENDIX C**

**EXPLOSIVE SAFETY SUBMISSION (ESS) REVIEW GUIDE**

The guide reflects the required ESS format.

1. Background. This appendix provides the required format and serves as a guide in the development of an ESS.

1.1. Project Manager.

Provide the name and contact information of the project manager.

1.2. Site Identifier and Description.

Provide the current and/or former name(s) or other unique identifier(s) for the site. Identify the size (in acres) of each site.

If the site is divided into areas of concern or parcels, identify those as well.

Indicate the status of the affected MRS, e.g., active installation, transferring or transferred under BRAC.

1.3. Regional Map(s).

Include a regional map or maps depicting the location of the planned munitions response relative to the activity or installation and region.

Map scale is not critical.

Do not include this map in Appendix C, of the submission, which is reserved for ESQD maps.

1.4. Scope of Munitions Response.

1.4.1. Summarize the overall scope of the proposed actions, including intermediate and future goals or project objectives. Do not include a description of actions which will be described later in Sections 5 or 6 of the submission.

1.4.2. Identify the current, determined, or reasonably anticipated future land use of the site. If multiple proposed actions or land uses will be occurring within the site, identify significant differences and respective timeframes.

1.4.3. Include a brief description of any construction or other activities taking place on the site concurrent with the proposed munitions response.



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1.5. History of Munitions Use. Summarize the site history and/or background concerning munitions use, explaining why MEC and/or MPPEH are known or suspected to be present in the site. Identify the source documents.

1.6. Previous Studies of Extent of MEC/MPPEH Contamination. Summarize the conclusions drawn from previous reports of studies, investigations, characterizations, and/or surveys of MEC and/or MPPEH contamination.

1.7. Justification for No Further Department of Defense Action Indicated/No Further Action Decision. Provide a thorough justification supporting the NFA decision. Include excerpts from documents showing regulatory concurrence with NFA decision.

2. Project Dates. Provide the date on which munitions response activities are scheduled to begin. Indicate the potential consequence, if any, should DDESB approval not be obtained by the anticipated start date. Provide an estimated project completion date.

3. Types of MEC and/or MPPEH

3.1. Types and Quantities of MEC and/or MPPEH. Identify the types and quantities of MEC and/or MPPEH known or suspected to be present.

3.2. Munition with the Greatest Fragmentation Distance (MGFD).

3.2.1. Select from among the known or suspected MEC and/or MPPEH known, the munition which has the greatest fragmentation distance. This will be the primary MGFD(s) for the site. If one known munition item has a larger hazardous fragment distance, while another munition item has a larger maximum fragment distance, both must be identified as primary MGFDs (Primary-1 and Primary-2).

3.2.2. A minimum of one contingency MGFD can also be identified to reduce the potential for work stoppage. Selection of the contingency MGFD may be based on anecdotal evidence suggesting that a MEC and/or MPPEH item with a larger MGFD may be present at the site.

Greatest fragmentation distance sources of information for both the primary and contingency MGFDs, in order of preference, are: (1) the latest DDESB Technical Paper (TP) 16 Fragmentation Data Review Form; or (2) DDESB TP-16 Primary Fragment Range Generic Equations Calculator (GEQ).

Fragmentation Data Review Forms and GEQ printouts for MEC and/or MPPEH listed in Table 3-1, MGFD and Contingency MGFD (EXAMPLE), shall be included in Appendix B of the submission.

Identify the primary and contingency MGFDs in a table, an example of which is shown in Table 3-1.

Ensure that each MGFD identified in this table is included in Table 6-1, Exclusion Zones for Munitions Response Sites. Identify source documents in table notes.

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When the ESS covers multiple MRSs, create separate primary and contingency MGFD tables for each site.

Table 3-1: MGFD and Contingency MGFD (EXAMPLE)

MGFD type	Munition item	HFD (ft)	MFD-H (ft)
Primary-1	20-mm Mk I HEI projectile (a)	73(c)	645 (c)
Primary-2	20-mm M97 HEI projectile (a)	66 (c)	651 (c)
Contingency-1	37-mm M63 HE projectile (b)	118 (c)	1,044 (c)
Contingency-2	3-in/50 Mk 27 projectile (b)	180 (c)	1,823 (c)

Table notes:

- a. The RI Report could not positively identify the specific 20-mm projectiles found (ABC, 2010). Therefore, two common 20-mm projectiles are identified as Primary MGFDs.
- b. From interviews included in PA Report (XYZ, 2004).
- c. From Fragmentation Data Review Form (DDESB, 2012).

If while executing a munitions response, a MEC item is discovered which has a greater MFDH, HFD, or K328 distance than the ESS-approved MGFD, all operations will be halted and the project manager will notify COMMARCORSYSCOM for guidance.

If the approved ESS included:

Only a Primary MGFD; operations will resume only after the amended ESS is approved and all safeguards associated with the newly selected MGFD are in place. The change in MGFD will be documented in the AAR.

Both a Primary MGFD and one or more contingency MGFDs; for a munition falling between the primary and contingency MGFD, the project manager will notify COMMARCORSYSCOM of the new MGFD and verify that explosives safety protections required by the munition item found, (the first contingency, or next contingency MGFD) have been implemented.

Any munition resulting in greater fragmentation hazards than the contingency MGFD will result in all munitions response activities being halted until an ESS Amendment can be approved.

3.3. Maximum Credible Event (MCE). At a site where only bulk explosives or non-munition items are known or suspected to be present, the MCE will determine the appropriate ESQD arcs and EZs. The MCE is determined by using the maximum amount of explosives allowed to be present.

4. MEC and/or MPPEH Migration. Describe naturally occurring phenomena (e.g., drought, flooding, erosion, frost heave, wave action) that could cause the migration or exposure of MEC and/or MPPEH, and all procedures for monitoring and managing such. Identify the frost line depth. Describe controls which will be in place for MEC and/or MPPEH left above the frost line, but below the proposed removal depth.

5. Detection and Positioning Technologies. Since the detection and positioning technologies to be employed directly impact the overall effectiveness of the response actions and the residual explosives safety hazards, describe each.

5.1. Detection Equipment, Method, and Standards.

Summarize the techniques and equipment which will be used to detect subsurface MEC and/or MPPEH.

When describing the detection methods, include the rationale used to select them.

Address limitations and mitigating actions, if any, e.g., equipment, terrain, and soil type. Identify the performance standards.

Include any contractual or regulatory standards that are being imposed.

5.1.1. Summarize methods used to establish or validate the performance standards, e.g., use of industry standard objects (ISOs) emplaced in an instrument verification strip (IVS).

If an IVS is used, specify what ISOs were buried and at what depths.

If ISOs were used in an IVS, there must be a corresponding discussion in Section 7.1, which addresses the use of ISOs as blind seeds used as part of the Geophysical System Verification (GSV) program.

5.1.2. If advanced anomaly classification technologies are to be used, explain what methods will be used to establish or validate their expected performance.

Affirm that the same detection technologies are being used to acquire and reacquire anomalies.

5.1.3. To assure compliance with the NAVSEA Hazards of Electromagnetic Radiation to Ordnance (HERO) program, identify the extent to which radio frequency emissions from the detectors will affect known or suspected MEC items which have electromagnetically-susceptible initiators or fuzes. Note: since magnetometers and gradiometers are passive devices, they do not transmit an energy field and need not be HERO certified.

5.1.4. Identify the positioning system to be used and the methods by which it will be employed. Include any contractual or regulatory positioning system standards that are being imposed. This information is not required for construction support unless the project calls for reacquisition of anomalies.

5.2. Equipment Checkout. Describe daily checkout procedures for each critical piece of equipment, e.g., detectors or navigational equipment.

5.3. Data Collection and Storage. Summarize the various processes (e.g., hardware, software, and storage media) which will be employed to collect, process, and archive data amassed during the response action. This information is not required for construction support unless the project calls for reacquisition of anomalies.

## 6. Response Actions

### 6.1. Response Technique.

Identify the overall munitions response techniques being proposed (e.g., surface removal, excavation, LUCs). If multiple techniques will be employed, describe each in terms of who is doing it, and how and when it is to be done.

Provide details regarding vegetation reduction, if being performed. Describe the equipment and processes to be employed. Identify the measures which will be taken to protect vegetation reduction operators from the explosive and non-explosive hazards associated with the operation.

6.1.1. If a mechanized MEC processing operation is being proposed, describe the equipment and operation.

6.1.1.1. If low input mechanized operations are being proposed provide justification for the low-input categorization.

6.1.1.2. Describe the types of protections, including engineering controls, which will be employed to defeat hazardous fragments and protect essential personnel.

6.1.1.3. Shield thickness and barricade design shall be based on the MGF and approved on a case-by-case basis.

6.1.1.4. Describe the types of blast overpressure protections, including personnel protective measures and engineering controls, which will be employed to reduce arcs or reduce minimum separation distances. Include the requirement for double hearing protection if the operator distance is K18 or less.

6.1.2. Describe the processes by which UXO technicians intrusively investigate and recover MEC and/or MPPEH.

Describe how recovered MEC and/or MPPEH will be hazard classified in accordance with reference (f).

#### 6.1.3. MPPEH Collection Points

Collection Point explosive arcs within the boundary of the site and separated from other collection points by ILD do not require specific siting.

Collection Points where the explosive arcs cross over the MRS boundary require specific site approval.

Collection Points will be separated from intentional detonation locations by the HFD of the MGFD in order to prevent propagation. If engineering controls are used, the HFD will be the expected sandbag throw distance.

6.1.4. Discuss use of munitions handling equipment and how compliance with either OP 5 Volume 1, or the contractor's safety standard, is to be met.

#### 6.2. Exclusion Zones

Identify EZs for the primary and contingency MGFDs as shown in example Table 6-1.

Include a separate EZ table (6-1.1, 6-1.2, etc.) for each site.

Calculate blast overpressure for non-fragmenting items using the appropriate K-factor.

EZs will be shown graphically on maps in Appendix C of the submission.

Identify source documents in table notes using an abbreviated citation such as "(DDESB, 2012)", with complete citations included in Section 13.

Fragmentation Data Review Forms and GEQ printouts for MEC and/or MPPEH listed in Table 6-1 shall be included in Appendix B of the submission.

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Table 6-1: EZs for MRS

Item		Fragmentation		Blast			
MGFD	NEW	HFD	MGD	K328	K40	K24	K18
20-mm MK I HEI Projectile	0.27 (b)	73 (b)	645 (b)	98 (b)	12 (b)	7 (b)	5 (b)
20-mm M97 I HEI Projectile (a)	0.18 (b)	66 (b)	651 (b)	86 (b)	11 (b)	6 (b)	5 (b)
37-mm M63 HE Projectile (b)	0.085	118 (b)	1,044 (b)	144 (b)	18 (b)	11 (b)	8 (b)

Table notes:

- a. TNT equivalent weight.
- b. From Fragmentation Data Review Form (DDESB, 2012).

6.2.1. Identify by site the operation(s) to be conducted.

Characterize each operation as having the potential for either an unintentional or intentional detonation, including the collection point (CP).

Identify all exposed sites.

Identify the basis and size of the ESQD arcs. ESQD arcs shall be shown on ESQD maps in Appendix C of the submission. Place all of this information in a Controlling EZ table such as example Table 6-2, Controlling EZs for MRS.

Include a separate controlling EZ table for each site.

Only identify in table notes those data sources which were not previously identified in Table 6-1.

Affirm in the Section 6.2 narrative that the selected K18 distances are used only when essential personnel wear hearing protection which provides  $\geq 9$  decibel attenuation.

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Table 6-2: Controlling EZs for MRS

Operation	Sited AS	ES	Basis	Notes
Manual Operations	Unintentional Detonation	UXO teams	K40 of MGFD	Excavating with hand tools
Manual Operations	Unintentional Detonation	Public and non-essential personnel	HFD of the MGFD	
Mechanized (low input operations)	Unintentional Detonation	Essential Personnel	K24 of the MGFD	Excavating with an excavator and mechanically screening the soil
Mechanized (low input operations)	Unintentional Detonation	Public and non-essential personnel	HFD or K40 of the MGFD	
Collection Point	Unintentional Detonation	Explosive Operations	HFD of the MGFD	Maximum NEW where K40 does not exceed HFD of the MGFD
Collection Point	Unintentional Detonation	Other Collection Points	K11 of other collection points	
Collection Point	Unintentional Detonation	Intrusive Operations	IMD of the MGFD	IMD from intrusive operation to collection point
Detonation	Intentional Detonation	Public and all personnel	MFD of the MGFD	
Portable Magazine	Above Ground Magazine	Non-essential personnel in structures	IBD	OP 5 Table 7-9
Portable Magazine	Above Ground Magazine	Non-essential personnel in the open	PTR	OP 5 Table 7-9

6.2.2. Potential Explosion Sites (PESs).

Table 6-3 is used to identify any magazines or explosives operating buildings that encumber any part of the site.

If the project contains multiple sites and multiple PES encumbrances, then add a column identifying which sites are encumbered by which PESs. Alternately, include a separate table (6-3.1, 6-3.2, etc.) for each site.

Use the same source document citation protocol described in paragraphs 6.2.1 and 6.2.2.

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Table 6-3: Potential Explosion Sites

PES Bldg/ Area	PES Type/ Operation	Closest Distance to Site (ft)	IL/K18 From PES (ft)	PES explosives limits by class/division (c/d) (lbs)					
				1.1	1.2.1 (MCE)	1.2.2	1.2.3 (MCE)	1.3	1.4

6.2.3. Exclusion Zone Control.

Describe what will be used as entry control points (ECP), e.g., barricade, and where they will set up.

Identify the contact information to be included on each ECP.

Note that all ECPs must be depicted on the ESQD maps.

If a waterway is encumbered by an ESQD arc, identify how and where spotters will be used to ensure operations stop if the EZ is compromised.

6.2.4. Exclusion Zone Access Protocols.

Access to EZs is limited to personnel essential to the operation being conducted.

Under specific conditions, with the concurrence of the project manager, authorized visitors may be granted access to the EZ when operations are being conducted.

In addition to general MRS access requirements, formal written procedures addressing EZ access must be developed as part of the ESS.

The UXOSO is responsible for conducting a risk management (RM) assessment in accordance with reference (k) prior to allowing authorized visitors access to the EZ during munitions response operations.

The UXOSO must determine the maximum number of personnel (essential personnel and authorized visitors) that can be in the EZ at one time.

The ratio of UXO-qualified escorts to visitors will be determined by the UXOSO based on this site-specific operational risk analysis.

Based on the risk posed by the munitions response operation underway, the UXOSO may determine that access to the EZ is unsafe for visitors. However, every effort should be made to accommodate the authorized visitor's needs.



A request for authorization will be provided that includes:

Names of the individual requesting access.

Emergency contact information.

Purpose of visit.

Task(s) to be performed.

Rationale for EZ access.

Personnel requesting access must submit their request to the project manager and UXOSO at least ten working days prior to the proposed date of the site visit.

Prior to entry, all authorized visitors must receive a site-specific safety briefing describing the specific hazards and safety procedures to be followed within the EZ for operations underway that work day.

Each authorized visitor must acknowledge receipt of this briefing in writing.

Authorized visitors must be escorted at all times by a UXO-qualified person assigned to the project.

Any authorized visitor that violates the established safety procedures will be immediately escorted out of the EZ and/or site.

Other requirements, such as Occupational Safety and Health Administration (OSHA), may also apply.

6.3. MEC and/or MPPEH hazard classification, movement, transportation, and storage. Describe separately how MEC and/or MPPEH items will be moved, transported, and stored.

6.3.1. Hazard Classification. Affirm that all recovered MEC and/or MPPEH will be managed as C/D 1.1 unless otherwise classified by NOSSA (N85).

6.3.2. Movement

Describe the decision tree used by the SUXOS and the UXOSO to determine whether MEC and/or MPPEH are unsafe or safe to move to the designated collection point or storage location.

State that MEC safe-to-move decisions must be documented in writing prior to movement.

6.3.3. Transportation.

Describe how recovered MEC and/or MPPEH items will be transported, both on and off site.

Any MEC and/or MPPEH believed to pose an explosive hazard must be certified as material documented as an explosive hazard (MDEH) prior to transport.

For MDEH to be transported off-site for storage or treatment, affirm that an EOD technician from the responding EOD unit, a UXO contractor, UXO Technician III (or higher), or other designated technically qualified and certified person will certify the items as safe to transport prior to being offered for shipment per reference (f), Table 14-1.

When regulations conflict, DOT regulations shall apply and the originator of the conflicting regulation should be notified immediately.

#### 6.3.4. Storage

Describe how and where recovered MEC and/or MPPEH items will be held and/or stored.

Describe how and where donor charges will be stored.

Describe how just-in-time or on-demand donor charges will be delivered to the site in lieu of storage.

#### 6.4. MEC and/or MPPEH Disposition Processes

Process used to assess and document MPPEH as either Material Documented as Safe (MDAS) or MDEH.

MPPEH that cannot be certified as MDAS must be certified as MDEH prior to leaving the site.

Address the processes by which the material's explosives safety status is assessed and documented and its chain of custody is maintained.

For MDAS, identify how the MDAS will be demilitarized and recycled and affirm that the recycler will provide the UXO contractor with a certificate of destruction.

For MEC, describe the use of a planned or established on-site open burn/open detonation (OB/OD) area to treat MEC recovered during a munitions response.

If MEC or MDEH is being shipped off site, identify the location (military or civilian) to which the material is to be transported and affirm that it is DDESB site-approved.

The explosives status of any MEC leaving the site must be properly assessed and documented.

All items leaving the munitions response site are considered solid waste and must comply with applicable laws and regulations governing solid waste.

6.4.1. Non-Munitions Debris. Describe the processes and procedures which will be implemented to prevent it from being commingled with MPPEH, MDAS, and MDEH.

6.4.2. Explosively-Contaminated Soil.

For soil contaminated with MC above explosive thresholds, address methods used to reduce explosives concentrations to a non-reactive level or to reduce explosive hazards.

For screened soil once contaminated with MEC and/or MPPEH (including small arms ammunition) being shipped off site, describe the clean-soil certification process and associated documentation.

6.4.3. Contaminated Buildings. Identify and describe processes being proposed to disassemble and/or demolish explosively-contaminated buildings and installed equipment.

6.4.4. Risk Management (RM). All operations undertaken by or for the Marine Corps must incorporate RM principles into all phases of planning, operations, and training. Since munitions response actions involve inherent risks, the project manager shall evaluate those risks using facts, prudence, experience, judgment, and situational awareness using Table 6-4 as an example.

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Table 6-4: Hazard Analysis

Process Step	Hazard	Triggering Event	Initial Risk Index	Hazard Mitigation	Final Risk Index
1.	Manual MEC removal operations	MEC reacts to impact or movement during soil removal	C/II/H	Initial mechanized excavation beside anomaly; final excavation with hand tools	D/IV/L
2.	Mechanized MEC screening operations	MEC reacts to high-energy, uncontrolled mechanical forces	C/II/H	Use of blast shields (fragment protection) and K24 distance (blast overpressure protection)	C/IV/L

6.4.5. Contingencies. Describe alternative actions that may be implemented should site conditions prevent the primary approach from working efficiently or effectively. As an example, if the proposed operation involves mechanically screening soil using a 1-inch screen, but soil consistency prevents it from passing through the screen. Contingency MGFs shall not be identified here, but in Section 3.b.

7. Quality Control (QC) and Quality Assurance (QA). Each munitions response project shall have a QC program administered by the UXO contractor and a QA program administered by an independent, third-party source. The complexity of the QC and QA programs is dependent on the nature of the project. Both the UXO Quality Control Specialist (UXOQCS) and the UXO Quality Assurance Manager (UXOQAM) must meet the minimum qualification standards identified by DDESB TP-18 for the UXOQCS. If diving is required for the execution of underwater QC/QA tasks, the UXOQCS/UXOQAM diver must meet the applicable diving standards identified in paragraph 8.2 below.

7.1. QC Implementation. Describe the QC program by summarizing the QC processes to be employed and the standards against which the UXOQCS will be evaluating project quality (e.g., project quality objectives or contractual and/or regulatory requirements). Identify the pass/fail criteria for each criterion and the corrective action processes which will be employed should the UXOQCS identify a failure. Table 7-1 is provided as an example:

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Table 7-1: QC Methods

Operation	Inspection	Audit	Pass/Fail Criteria
Site Preparation: establish site boundaries; Identify MPPEH/MDEH holding area; Erect soil erosion controls, barricades, and entry control points	Conforms to Project Plan, Work Plan, SOPs, QCP, QAPP, etc.	Location of Site boundaries, MPPEH/MDEH holding area, erosion control efforts, barricades and entry control points.	IAW Work Plan criteria and the ESS site plan.
Instrument validation, grid placement and equipment acceptance	Conforms to Project Plan, Work Plan, SOPs, QCP, QAPP, etc.	Checkout and operation of geophysical instruments (including documentation).	100% detection and selection of MEC, MPPEH, and other metal items with one dimension > 3 inches.
Boundary survey (e.g., GPS)	Conforms to Project Plan, Work Plan, SOPs, QCP, QAPP, etc.	Professional license verification, equipment checkout against known control monument for vertical and horizontal accuracy.	Site boundaries achieve centimeter tolerance for traverse closure.
Vegetation reduction	Conforms to Project Plan, Work Plan, SOPs, QCP, QAPP, etc.	Anomaly avoidance provided by UXO Techs. Personal protective equipment worn IAW the Health and Safety Plan.	Brush cut to no more than 6 inches above surface.

7.2. QA Implementation. Identify the independent, third-party source that will execute the project UXO QA program on behalf of the project manager. Identify tasks assigned to the Unexploded Ordnance Quality Control Manager (UXOQCM) which should include, but is not limited to, oversight of the following:

UXO contractor quality compliance with contract plans and specifications as defined in the Project.

Plan, Work Plan, SOPs, QCP, QAPP, etc.

Inspection/evaluation/audit processes.

Blind seeding program. Note: The UXOQAM has the authority to install blind seeds as part of the UXO QA program.

The UXOQCM also has authority to stop work if operations are found to be out of compliance with contract requirements and/or specifications.

**8. Technical Support**

8.1. EOD. Identify the military EOD unit that may be supporting this project, and reference the memorandum of agreement or other document which shows the mutually agreed upon support.

8.2. UXO Contractor. Affirm that all UXO personnel performing UXO duties meet or exceed the requirements of DDESB TP-18 for their respective jobs. Contractors involved in the storage and handling of ammunition and explosives must be qualified and certified in accordance with reference (c). Affirm that all geophysical team members are trained for their respective jobs. If operations include diving, affirm that all divers meet applicable standards of OSHA 29 CFR 1910, applicable State Department of Labor requirements; and EM 385-1-1, Safety and Health requirements. All contractor employees performing munitions response duties shall have received the required 40-hour hazardous waste operations and emergency response (HAZWOPER) training (including HAZWOPER refresher training, if appropriate). Additionally, the SUXOS shall have received OSHA-mandated supervisory training. The UXOQCS and the UXOSO shall have received specialized training in quality and safety, respectively. Although the size and scope of MR projects may vary, each project is required to have a SUXOS, a UXOQCS, and a UXOSO. For smaller projects, the UXOQCS and UXOSO may be the same person. Under no circumstances shall the SUXOS also serve as either the UXOQCS or UXOSO.

8.3. Physical Security. Identify the extent to which Arms, Ammunition and Explosives physical security, private security forces, and/or protective barriers are required while munitions response actions are underway. This includes security of munitions storage facilities, open excavations, EZs, and the job site after operating hours. Include entry control points (ECPs) and waterway spotter locations on maps and describe how the ECPs will be controlled.

**9. Environmental, Ecological, Cultural, and/or other Considerations**

9.1. Regulatory Statute, Phase, and Oversight. Identify any regulatory statutes that may govern the proposed munitions response action. Identify the regulatory agency or agencies providing oversight and any legally binding dates for actions to occur.

9.2. Environmental, Ecological, Cultural, and/or other Considerations. Address any additional environmental, ecological, cultural, or other considerations that may impact the proposed munitions response actions.

9.3. Non-Explosive Soil. Describe the management of soil (or other media) contaminated with explosives at concentrations that do not present an explosive hazard.

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10. Residual Risk Management. Identify the specifics of how the residual risk will be both identified and managed.
  - 10.1. Land Use Controls (LUCs). Summarize all LUCs, both institutional controls (e.g., state, county, city ordinances, deed restrictions, signage) and engineering controls (e.g., fencing, capping) that are to be placed on the real property.
  - 10.2. Long-Term Management. Describe site management, including maintenance, monitoring, record-keeping, 5-year reviews, etc. that are initiated to manage potential residual risks after response objectives have been met.
11. Safety Education Program. Address methods to be used to educate the public or receiving entity on the hazards/risks associated with MEC and/or MPPEH that may remain following the proposed munitions response action.
12. Stakeholder Involvement. Describe the extent to which stakeholders are involved and summarize how their concerns, if any, regarding the explosives safety and the environmental aspects of the munitions response are being addressed.
13. References. This section may be used to list documents referenced in the ESS.
14. Appendices

**APPENDIX D**

**PROCEDURES FOR REQUESTING AND MAINTAINING DEVIATIONS FROM  
EXPLOSIVES SAFETY CRITERIA**

1. General. Deviations (Waivers and Exemptions) will be submitted in accordance with the procedures provided in this appendix. Submission requirements for Secretarial Certifications are contained in Chapter 3 of this Volume.
  - A. Required information must be provided. Incomplete submittals may be returned.
  - B. External organizations or non-Marine Corps activities impacted by the deviation must be briefed and provide a written statement of concurrence to be included in the submittal package.
  - C. Local Coast Guard concurrence must be obtained for deviations involving the berthing of ammunition vessels at non-DoD locations.
  - D. Deviations can be issued when submitted as part of a hybrid explosives safety site plan.
  
2. Deviation
  - A. Submission Procedures. Deviation requests shall only be submitted for operational requests. Commands reviewed during the ESI-CR who require an extension of an existing deviation or a new deviation will prepare a briefing to the ESI-CR Team.
  - B. Deviation requests will be submitted to COMMARCORSYSCOM for approval.
    1. A certification of operational necessity is required as part of the submission package and must be endorsed as follows:
      - a. Within the Naval operating forces, including ships, squadrons, and shore establishments which support these forces, the appropriate operational commander will provide the operational necessity certification. For deployed units, or units engaged in Fleet exercises, the operational necessity certification may be delegated to the Task Force Commander.
      - b. For Marine Corps Reserve Commands, the Commander, Marine Forces Reserve, will provide the operational necessity certification. No additional concurrence is required.
      - c. For Marine Corps installation activities, requests will be submitted through the chain of command to Marine Corps Installations (East/West/Pacific/National Capital Region), for certification of operational necessity.



- d. For activities not listed above, the first senior command in the operational chain will provide the operational necessity certification with endorsements via the submittal chain.
- C. Other Service Tenant Commands. Requests for deviations from tenant commands belonging to another service that is located on a Marine Corps activity will be processed in the following manner:
1. The deviation request will be prepared by the tenant activity, in the format contained in this appendix unless an MOA requires the submission in accordance with the tenant activity directives.
  2. The request will be forwarded to the host command for a statement of concurrence.
  3. The request must then be forwarded, via the tenant command's service, for certification of operational necessity.
  4. The complete deviation request (statement of concurrence, operational necessity, and the appropriate endorsements) will be forwarded to COMMARCORSYSCOM for approval.
- D. Submission Requirements. The following are required when submitting a deviation request, other formats (e.g. DARAD) are authorized with approval from COMMARCORSYSCOM.
1. General statement of waiver or exemption requirements.
  2. Specific document(s) or table(s) that contain the explosives safety standard(s) to be waived.
  3. Specific description of the conditions creating the need for the waiver or exemption.
  4. Statement specifying reason(s) why compliance with explosives safety standards cannot be achieved.
  5. Alternatives examined. Include all possible practical alternatives to solve problem(s), without continuance or issuance of a waiver/exemption, with rationale for each.
  6. Mission effect of a maximum credible explosives accident.
  7. RM assessment per reference (k).
  8. Additional or compensatory safety precautions to be enforced during the period of the deviation.

9. Resources necessary to eliminate the waiver or exemption. Identify MILCON Project or special project numbers. Actions initiated, or to be initiated, for eliminating the waiver or exemption, and the estimated time to completion, must be included. At a minimum, a plan of action and milestones must be provided for elimination or incremental correction of all waivers.
10. The background/supplemental information for the Explosives Safety Deviation (figure D-1). For installations with access to the Explosives Safety Siting (ESS) tool, the PES/ES form generated by current version of ESS for all PESs/ESs covered by the request can be submitted in lieu of figure D-1. Additionally, the outputs from the ASAP-X tool can be submitted in lieu of figure D-1. Figure D-1, PES/ES form from ESS, or ASAP-X output is not required if the criteria deviation is a facility deficiency (e.g., lack of lightning protection, overnight storage without a sprinkler system).
11. For deviations with a QD violation the output from ASAP-X or other COMMARCORSYSCOM approved risk analysis tools will be provided with the deviation request. Additionally, use of the SAFER model, could be used in one of two ways: (1) to validate an acceptable level of exposure, thereby eliminating the need for the waiver, since site approval should be attainable; or (2) to evaluate the severity of risk associated with a significant deviation from criteria to determine if a waiver should be recommended. Final acceptance of any analysis using the SAFER model will be made by COMMARCORSYSCOM.

E. Deviation Numbers

1. The initiating command will assign a tentative deviation number. The number will be used to identify the deviation pending COMMARCORSYSCOM final approval.
2. Deviations will be identified by the name or short title of the activity, the calendar year of issuance, and the serial number indicating the sequence in which the deviation was issued in that particular year.
  - a. Exemptions will be identified with an “E” prior to the number.
  - b. Waivers will be identified with a “W” prior to the number.
3. Modifications will be indicated by an alphabetical designator following the serial number of the deviation. Examples follow:
  - a. The first waiver approved for MCAS Cherry Point in calendar year 2017 would be designated as follows: CMC Waiver MCAS Cherry Point W1-17. The second waiver approved for this activity, in the same calendar year, would be designated as CMC Waiver MCAS Cherry Point W2-17, etc.

- b. The first modification to CMC Waiver MCAS Cherry Point W1-17 would be indicated as CMC Waiver MCAS Cherry Point W1A-17, regardless of the year in which it was initially issued. This modification would automatically cancel CMC Waiver MCAS Cherry Point W1-17. The second modification to this waiver would be CMC Waiver W1B-17, etc.
  4. Waiver or exemption number which has been cancelled will be reused.
  5. Waivers changed to exemptions, or exemptions to waivers, will retain the original year number to convey the longevity of the deviation.
- F. Renewal of Existing Deviations. Deviations are normally renewed as a result of an ESI-CR identifying the requirement to extend an existing deviation or the need to renew an existing deviation.
1. ESI-CR
    - a. Commands receiving an ESI-CR will prepare a brief/presentation to the ESI-CR team outlining the renewal proposal.
    - b. Within 30 days of the ESI-CR, commands are required to provide a status update of the deviation renewal.
  2. Expiring Deviations
    - a. Renewal request will be submitted so that COMMARCORSYSCOM has a minimum of 90 days to conduct the final review prior to the original expiration date.
    - b. COMMARCORSYSCOM will send a notification letter to the activity 90 days prior to expiration if the renewal request has not been received.
  3. Submission Requirements
    - a. Renewals require all information required in the original submittal request contained in paragraph 2.d above.
    - b. Copy of the letter that authorizes the current deviation.
    - c. Include a plan of action and milestones for incremental correction or elimination of the waiver.
- G. Modifications to Deviations
1. Requests for modifications to existing waivers or exemptions will be made using the guidance provided in the above paragraph.

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2. The modification request must be approved before the modifications can be implemented.
  3. Modification requests will be submitted so the original deviation does not expire before the modification has been approved.
- H. Cancellation. Should an existing waiver or exemption (other than an event waiver) no longer be required, the command assigned the deviation must submit a request for its cancellation.
1. Cancellation of a waiver or exemption can be accomplished by one of the following methods:
    - a. A request during the ESI-CR.
    - b. Request submitted to COMMARCORSYSCOM.
  2. A cancellation request will identify:
    - a. Deviation requirement no longer exists.
    - b. Criteria that was waived or exempted, what operations were permitted by the deviation.
    - c. Reasons the deviation is no longer required.
    - d. Copies of pertinent correspondence documenting the change (site approval, mission change, and base closure actions).
- I. Expiration. Deviations approved by COMMARCORSYSCOM will be canceled on the expiration date, unless a complete continuation request package, with all necessary endorsements, is received at COMMARCORSYSCOM prior to the expiration date.
3. Event Waivers
- A. Requests for event waivers will be submitted to COMMARCORSYSCOM via the installations chain of command for approval for all munitions related activities requiring such deviations aboard Marine Corps installations CONUS/OCONUS.
  - B. Certification of operational necessity for Marine Corps activities, will either be provided by the first flag level command or the appropriate region.
  - C. Service Component Commanders (MARFORCOM, MARFORPAC, MARFOREUR/AF, MARCENT), when delegated risk acceptance authority per reference (j), can approve event waivers to meet operational requirements for all munitions related activities requiring such deviations on or off Marine Corps installations OCONUS. All event waivers approved by the Service Component

Commander that will be in excess of one year or will be a reoccurring event will be immediately followed up with an ESMRMA per reference (j).

D. Event waiver requests should be submitted as far in advance as possible but a minimum of 10 days before the scheduled operation. In time critical situations verbal or electronic approval from COMMARCORSYSCOM or the SCC may be provided until formal approval is obtained.

E. For event waiver situations involving multi-service, or specific overseas locations the following procedures will apply:

1. Non-DoD Installations. The lead service component conducting ordnance operations shall have the responsibility of submitting the event waiver request. Subordinate U.S. components shall provide all information regarding deviations from explosives safety criteria to the lead service component. The event waiver will be issued by the command delegated the authority for the service submitting the request.

2. DoD Installations. The service with the operational necessity shall have the responsibility of submitting the event waiver request and their higher headquarters will provide the operational necessity statement. The service responsible for the installation will issue the event waiver, following concurrence endorsements by the installation and all in their chain-of-command.

3. Overseas Locations Where ESQD Arcs Extend Beyond Station Boundary. These event waiver requests must include an endorsement from the appropriate shore activity, or U.S. Defense Attaché Office, and provide information on the approximate number of buildings, public traffic routes, and people inside the proposed off-base ESQD arcs. The event waiver will be issued by the command delegated risk acceptance authority.

F. Event Waiver Submission Requirements. The event waiver request letter will contain the following information:

1. General statement event waiver requirements. Include the dates for which the event waiver will be required.

2. Specific document(s) or table(s) that contain the explosives safety standard(s) to be waived.

3. Specific description of the conditions creating the need for the event waiver.

4. Statement specifying reason(s) why compliance with explosives safety standards cannot be effected.

5. Alternatives examined. Include all possible practical alternatives to solve problem(s), without continuance or issuance of a waiver/exemption, with rationale for each.

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6. Mission effect of a maximum credible explosives accident.
  7. Additional or compensatory safety precautions to be enforced during the period of the deviation.
  8. Applicable information from figure D-1 or for installations with access to the ESS tool, the PES/ES form generated by current version of ESS for all PESs/ESs covered by the request.
  9. ASAP-X Worksheet or other COMMARCORSYSCOM approved hazard assessment tool for QD violations.
  10. Necessary maps of sufficient scale and detail.
  11. Any ESI-CR recommendation.
  12. RM assessment per reference (k).
- G. Modification Request. Requests for modifications to event waivers will be submitted in the same manner as the original request.
- H. Cancellation. Event waivers are considered to be cancelled when the short-term evolution for which they were issued is completed or upon the approval expiration date.

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Figure D-1

Background/Supplemental Information for Explosives Safety Deviation							
Deviation Number Assigned (To be completed by COMMARCORSYSCOM)							
1. Potential Explosion Site(s) (PES) – Locations where the explosives will be present which require the issuance of this deviation.							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
a. Building Number							
b. Description/use							
c. New (lbs) 1.1							
1.2.1							
MCE							
1.2.2							
1.3							
1.4							
(Attach continuation Sheet for additional PESs)							
2. On-Station Exposed Site(s) (ES) – Location(s) on-base which will be within the ESQD arc(s) from a PES:							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
a. Building No.							
b. Description/use							
c. Closest PES (No)							
d. Distance from PES							
e. Estimated Value of ES							
f. Average Number of Personnel							
3. Off-Station ES's – For off-base locations within the ESQD arc(s) from a PES							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
a. Building No.							
b. Description/use							
c. Closest PES (No)							
d. Distance from PES							
e. Estimated Value of ES							
f. Average Number of Personnel							
(Attach continuation Sheet for additional ESs)							
4. Planned action/resources required to correct situation and eliminate need for deviation.							
a. MILCON or special project number (if assigned).							
b. Estimated cost to repair.							
c. Brief description of corrective action.							
d. Expected date of completion.							

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# **NAVY AND MARINE CORPS SAFETY INVESTIGATION AND REPORTING MANUAL**



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TABLE OF ISSUANCES, REVISIONS AND CHANGES

<b>OPNAV Manual</b>	<b>Basic Issuance Date</b>
5102.1	27 Sep 2021

<b>Marine Corps Order</b>	<b>Basic Issuance Date</b>
5100.29C, Volume 9	27 Sep 2021

<b>Change and Revision History</b>	<b>Date Published</b>

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## FOREWORD

This manual implements the policy set forth in the Office of Chief of Naval Operations Instruction (OPNAVINST) 5102.1E for the U.S. Navy. This Marine Corps Order (MCO) is also a policy manual for the U.S. Marine Corps. The manual provides more detail for mishap, hazard (including near miss) and incident notification, investigation, reporting and record keeping by all Navy and Marine Corps commands, activities, units, installations and facilities, except for mishaps, hazards (including near misses) and safety incidents that involve a defined naval aircraft.

The Department of Defense Instruction (DoDI) 6055.07 of 6 June 2011 and the Secretary of the Navy Instruction (SECNAVINST) 5100.10L, direct the Department of the Navy (DON) to establish policies and procedures for mishap investigations and record keeping.

This manual implements the DON policies as directed by both Department of Defense (DoD) and Secretary of the Navy (SECNAV) policies. The techniques, procedures and best practices (i.e., the how) for safety investigations and reporting on procedures for implementing the policies contained in this manual will be published in a guide that will be managed separately by the Commander, Naval Safety Center (COMNAVSAFECEN). The title of the guide is “The Navy and Marine Corps Safety Investigations and Reporting Guide.” COMNAVSAFECEN will announce the availability of the guide and future revisions of the guide by ALSAFE message.

This manual is its first issuance and therefore should be reviewed in its entirety.

This manual was developed to be the primary safety investigation and reporting policy for all Navy and Marine Corps activities, commands, personnel and contractors (i.e., the latter only when under the direct supervision of U.S. Government personnel). Due to the many unique and specific situations associated with aviation-related events (i.e., excluding aviation ordnance), these particular events will be handled under OPNAVINST 3750.6S and OPNAVINST 4790.2J.

The Risk Management Information (RMI) program of record database application is required for reporting, recording and analyzing all mishaps, hazards (including near misses) and incidents. The RMI program of record database is DoD Common Access Card (CAC) enabled and is available on the Naval Safety Center (NAVSAFECEN) Web site.

This manual may be accessed via the DON Issuances Web site (<https://www.secnav.navy.mil/doni/opnav.aspx>) under the “Manuals” tab. It may also be accessed via the Marine Corps Publications Electronic Library (<http://www.marines.mil/News/Publications/ELECTRONICLIBRARY.aspx>). This manual is approved for authorized registered users and distribution is unlimited.

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Forward recommended changes to this manual to:

Commander, Naval Safety Center  
(Attn: Executive Director)  
375 A Street  
Norfolk, VA 23511

Or

Via e-mail to: [safe-admin@navy.mil](mailto:safe-admin@navy.mil)

F. R. LUCHTMAN  
Special Assistant for Safety Matters,  
Chief of Naval Operations



G. L. THOMAS  
Assistant Commandant of the  
Marine Corps

### SAFETY REPORTING RESOURCES

1. 29 CFR 1904 (Recording and Reporting Occupational Injuries and Illness) (NOTAL): <https://www.osha.gov/laws-regs/regulations/standardnumber/1904/>.
2. American National Standards Institute (ANSI) Z136 series standards (Lasers Safety Standards) (NOTAL): <https://webstore.ansi.org/>.
3. Defense Explosives Safety Regulation (DESR) 6055.09, Edition 1 of 13 January 2019: <https://www.denix.osd.mil/ddes/home/home-documents/desr-6055-09-edition-1/DESR%206055.09%20Edition1.pdf>.
4. DoDI 1400.25-V810 of 12 April 2005 (DoD Civilian Personnel Management System: Injury Compensation): <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/140025/1400.25-V810.pdf>.
5. DoDI 1438.06 of 16 January 2014 (DoD Workplace Violence Prevention and Response Policy): <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/143806p.pdf>.
6. DoDI 5200.48 of 6 March 2020 (Controlled Unclassified Information (CUI)): <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/520048p.PDF?ver=2020-03-06-100640-800>.
7. DoDI 6055.07 of 6 June 2011 (Mishap Notification, Investigation, Reporting and Record Keeping): <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/605507p.pdf?ver=2018-11-20-081332-067>.
8. DoDI 6055.12 of 14 August 2019 (Hearing Conservation Program (HCP)): <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/605512p.pdf?ver=2019-08-14-073309-537>.
9. DoDI 6495.02, Volume 1 of 28 March 2013 (Sexual Assault Prevention and Response: Program Procedures): [https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/649502\\_vol1.PDF?ver=v8IKfyy0wrK\\_EZ95gtv6Pw%3d%3d](https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/649502_vol1.PDF?ver=v8IKfyy0wrK_EZ95gtv6Pw%3d%3d).
10. DoDM 5200.01, Volume 2 of 24 February 2012 (DoD Information Security Program: Marking of Information): [https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/520001m\\_vol2.pdf](https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/520001m_vol2.pdf).
11. DoDM 5200.01, Volume 3 of 24 February 2012 (DoD Information Security Program: Protection of Classified Information):

[https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/520001\\_vol3.pdf](https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/520001_vol3.pdf).

12. DoDM 6025.18 of 13 March 2019 (Implementation of the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule in DoD Health Care Programs):  
<https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/602518m.pdf?ver=2019-03-13-123513-717>.

13. JAGINST 5800.7G (Manual of the Judge Advocate General):  
[https://www.jag.navy.mil/library/instructions/JAGINST\\_5800.7G.pdf](https://www.jag.navy.mil/library/instructions/JAGINST_5800.7G.pdf).

14. MCO P1070.12K (Marine Corps Individual Records Administration Manual (Short Title: IRAM)): <https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899281/mco-p107012k-wch-1/>.

15. MCO 1001.59A (Active Duty for Operational Support (ADOS) in Support of the Total Force (Short Title: ADOS)): <https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899416/mco-100159a/>.

16. MCO 1752.5C (Sexual Assault Prevention and Response (SAPR) Program):  
<https://www.marines.mil/portals/1/Publications/MCO%201752.5C.pdf?ver=2019-06-10-115714-627>.

17. MCO 3040.4 (Marine Corps Casualty Assistance Program (Short Title: MARCORCASASTPRO)):  
<https://www.marines.mil/portals/1/Publications/MCO%203040.4.pdf>.

18. MCO 3150.4A (Marine Corps Diving Policy and Program Administration):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/900512/mco-31504a/>.

19. MCO 3440.9 (Marine Corps Installation Emergency Management (IEM) Program):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899461/mco-34409-wadmin-ch/>.

20. MCO 3500.42C (Marine Corps Helicopter/Tiltrotor Rope Suspension Techniques (HRST) and Cast Operations Policy and Program Administration):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/900692/mco-350042c/>.

21. MCO 3504.1 (Marine Corps Lessons Learned Program (MCLLP) and The Marine Corps Center for Lessons Learned (MCCLL)):

<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/898975/mco-35041/>.

22. MCO 3504.2A (Operations Event/Incident Report (OPREP-3) Reporting):  
<https://www.marines.mil/portals/1/Publications/MCO%203504.2A.pdf>.

23. MCO 3570.1C (Range Safety):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/898977/mco-35701c/>.

24. MCO 5090.2 (Environmental Compliance and Protection Program):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/1552941/mco-50902/>.

25. MCO 5100.29C, Volume 1 (Marine Corps Safety Management System Overview):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899486/mco-510029c-wvol-1-5-cancels-mco-510029b/>.

26. MCO 5100.29C, Volume 2 (Risk Management):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899486/mco-510029c-wvol-1-5-cancels-mco-510029b/>.

27. MCO 5100.29C, Volume 3 (Marine Corps Traffic Safety Program):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899486/mco-510029c-wvol-1-5-cancels-mco-510029b/>.

28. MCO 5100.29C, Volume 5 (Marine Corps Recreation and Off-Duty Safety (RODS) Program): <https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899486/mco-510029c-wvol-1-5-cancels-mco-510029b/>.

29. MCO 5100.29C, Volume 6 (Marine Corps Occupational Safety and Health (OSH) Policy Order): <https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899486/mco-510029c-wvol-1-5-cancels-mco-510029b/>.

30. MCO 5104.1C (Navy Laser Hazards Control Program):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899092/mco-51041c/>.

31. MCO 8025.1E (Class V(W) Malfunction and Defect Reporting):  
<https://www.marines.mil/News/Publications/MCPEL/Electronic-Library-Display/Article/899234/mco-80251e/>.



32. Naval Vessel Register (NVR): <https://www.nvr.navy.mil/>.

33. NAVSEA Technical Publication S0570-AC-CCM-010/8010 of 6 February 2014 (Industrial Ship Safety Manual for Fire Prevention and Response):  
<https://nsdsa.dc3n.navy.mil/nsdsaHome.aspx>.

Note: This technical publication has the legacy classification of “For Official Use Only” and is not cleared for public release. Distribution is authorized to the DoD and U.S. DoD contractors only. Access requires an account to use the Web site. Account requests for account must be referred to Naval Sea Systems Command (SEA 04X6).

34. OPNAV M-5090.1 of 25 June 2021 (Environmental Readiness Program Manual):  
<https://www.secnav.navy.mil/doni/SECNAV%20Manuals1/5090.1.pdf>.

35. OPNAV M-5100.23 of 5 June 2020 (Navy Safety and Occupational Health Manual):  
<https://www.secnav.navy.mil/doni/SECNAV%20Manuals1/5100.23.pdf>.

36. OPNAV M-8000.16 of 15 May 2021 (The Naval Ordnance Management Policy (NOMP) Manual): <https://www.secnav.navy.mil/doni/SECNAV%20Manuals1/8000.16.pdf>.

37. OPNAVINST F3100.6K (Special Incident Reporting Procedures):

This instruction has the classification of “Controlled Unclassified Information (CUI) and is not cleared for public release. It is available electronically only via the OPNAV SharePoint Portal to users with common access card authorization:

<https://portal.secnav.navy.mil/orgs/OPNAV/DNS/DNS1/DNS15/FOUO%20Directives/Forms/AllItems.aspx>.

38. OPNAVINST 3150.27D (Navy Diving Policy and Joint Military Diving Technology and Training Program):  
<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-100%20Naval%20Operations%20Support/3150.27D.pdf>.

39. OPNAVINST 3440.17A (Navy Installation Emergency Management Program):  
<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-400%20Nuclear,%20Biological%20and%20Chemical%20Program%20Support/3440.17A.pdf>.

40. OPNAVINST 3500.37D (Navy Lessons Learned Program):  
<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-500%20Training%20and%20Readiness%20Services/3500.37D.PDF>.

41. OPNAVINST 3500.39D (Operational Risk Management):  
<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-500%20Training%20and%20Readiness%20Services/3500.39D.PDF>.

[ness/03-500%20Training%20and%20Readiness%20Services/3500.39D.pdf](https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-500%20Training%20and%20Readiness%20Services/3500.39D.pdf).

42. OPNAVINST 3500.43 (Navy Helicopter Rope Suspension Techniques and Helicopter Cast and Recovery Policy and Administration):

<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-500%20Training%20and%20Readiness%20Services/3500.43.pdf>.

43. OPNAVINST 3500.44 (Navy Culture Workshops):

<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-500%20Training%20and%20Readiness%20Services/3500.44.pdf>.

44. OPNAVINST 3750.16C (Participation in a Military or Civil Aircraft Accident Safety Investigation):

<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-700%20Flight%20and%20Air%20Space%20Support%20Services/3750.16C.pdf>.

45. OPNAVINST 3750.6S (Naval Aviation Safety Management System):

<https://www.secnav.navy.mil/doni/Directives/03000%20Naval%20Operations%20and%20Readiness/03-700%20Flight%20and%20Air%20Space%20Support%20Services/3750.6S.pdf>.

46. OPNAVINST 4790.2J (The Naval Aviation Maintenance Program (NAMP):

<https://www.secnav.navy.mil/doni/Directives/04000%20Logistical%20Support%20and%20Services/04-700%20General%20Maintenance%20and%20Construction%20Support/4790.2J.pdf>.

47. OPNAVINST 5090.1E (Environmental Readiness Program):

<https://www.secnav.navy.mil/doni/Directives/05000%20General%20Management%20Security%20and%20Safety%20Services/05-000%20General%20Admin%20and%20Management%20Support/5090.1E.pdf>.

48. OPNAVINST 5100.19F (Navy Safety and Occupational Health Program Manual for Forces Afloat):

<https://www.secnav.navy.mil/doni/Directives/05000%20General%20Management%20Security%20and%20Safety%20Services/05-100%20Safety%20and%20Occupational%20Health%20Services/5100.19F.pdf>.

49. OPNAVINST 5100.23H (Safety and Occupational Health Program):

<https://www.secnav.navy.mil/doni/Directives/05000%20General%20Management%20Security%20and%20Safety%20Services/05-100%20Safety%20and%20Occupational%20Health%20Services/5100.23H.pdf>.

50. OPNAVINST 5100.27B (Navy Laser Hazards Control Program):

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[20and%20Safety%20Services/05-100%20Safety%20and%20Occupational%20Health%20Services/5100.27B.pdf](#).

51. OPNAVINST 5102.1E (Navy Safety Investigation and Reporting Program):

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53. SECNAVINST 5100.10L (Department of the Navy Safety Program):

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CHAPTER 1  
INTRODUCTION AND RESPONSIBILITIES

101. Purpose. To provide a general introduction to safety reporting and state the various responsibilities for mishap, hazard (including near misses) and incident notification, investigation, reporting and record keeping for the Navy and Marine Corps.

102. General.

a. Mishaps result in damaged or destroyed equipment; injuries and fatalities to Sailors, Marines and civilians; and degraded Navy and Marine Corps warfighting potential. When mishaps or near misses occur, we must investigate them thoroughly in order to identify the factors and causes; then, devise sufficient controls to prevent their reoccurrence. Additionally, as stated in OPNAV M-5100.23 of 5 June 2020, section A, we must continuously assess our operating environment to identify hazardous conditions and risks so that we can take proactive measures to reduce risk before mishaps occur. Finally, we must carefully monitor the risk controls already implemented in order to validate their effectiveness. When risks remain too high, new controls must be designed and implemented. This manual explains the responsibilities, requirements, policies and procedures to accomplish all of this effectively. This guidance forms a critical part of the mishap prevention program of the Naval Enterprise.

b. The Naval Enterprise is a complex organization with diverse operations, processes and activities. The procedures to notify, investigate and report mishaps will vary based on these circumstances. For example, Occupational Safety and Health Administration (OSHA) notification, reporting and record keeping requirements are unique when a work-related injury, illness or fatality involves one or more Department of Defense (DoD) civilian personnel or a contractor employee. The OSHA recordkeeping requirements do not apply to active duty military personnel. This manual is organized in a way to help users understand these differences and more importantly, to help them find the correct procedures to follow depending on the specific circumstances of the event.

103. Policy.

a. All Navy and Marine Corps commands and activities must protect DoD property from damage caused by Navy and Marine Corps operations; military personnel from accidental death, injury or work-related illness; and DoD civilian personnel from work-related death, injury or illness.

b. All Navy and Marine Corps commands and activities must protect the public from risk of death, injury, illness or property damage because of Navy and Marine Corps operations.

c. All Navy and Marine Corps commands and activities must notify, investigate, report and maintain records of all mishaps, hazards (including near misses) and incidents as required by this

manual. Compliance is essential so that the cumulative impact of mishaps and near misses can be understood, trends can be analyzed and effective controls can be developed and implemented.

Note: This manual does not apply to the reporting of mishaps involving a defined naval aircraft. Instead, refer to OPNAVINST 3750.6S. The reporting of mishaps involving aircraft used in the Naval Introductory Flight Evaluation (NIFE) Program and used by military flying clubs are covered in this manual because these aircraft are not defined naval aircraft.

d. All Navy and Marine Corps commands and activities must also take effective corrective actions in order to prevent future mishaps.

e. All Navy and Marine Corps commands must protect personnel from coercion, discrimination or reprisal for reporting mishaps and hazards (including near misses).

#### 104. Definition of Terms.

a. This manual uses the words “will,” “must,” “should,” “may” and “can” throughout. “Will” and “must” are directive in nature and require mandatory compliance. “Should” is a strong recommendation, but does not require compliance. “May” or “can” are optional in nature and do not require compliance.

b. Mishap notification, investigation, reporting and record keeping language can sometimes be complicated by the fact that important terms are used differently by agencies external to the Department of the Navy (DON). To the maximum extent possible, terms in this manual have been clearly defined using authoritative sources. These definitions are sometimes further amplified or qualified to explain exactly how the term will be used for the purposes of Navy and Marine Corps mishap notification, investigation, reporting and record keeping purposes. While a detailed glossary of terms is provided in appendix A and a list of abbreviations and acronyms is provided in appendix B, some of the more important terms are discussed again in subparagraphs 104b(1) through 104b(15) to establish a good foundation for better understanding of this manual.

(1) Event. A broad term used to describe an occurrence or series of occurrences. For DON safety reporting purposes, an event can be a mishap, hazard (including near misses) or an incident.

(2) Mishap. A mishap is an unplanned or unexpected event or series of events, that results in damage to DoD property; work-related illness to DoD personnel; injury to on- or off-duty DoD military personnel; injury to on-duty DoD civilian personnel; or damage to non-DoD property or injury or illness to non-DoD personnel, caused by DoD activities. For purposes of DON safety reporting, events that meet the above criteria must also meet the minimum damage and injury or illness thresholds of a Class D mishap to be considered a mishap.

Note: Class E mishap reporting is only a DON requirement under certain specific circumstances that are explained in this manual or when a controlling command directs its subordinates to report Class E mishaps. Controlling commands must put such a requirement in writing.

(3) Hazard. Any real or potential condition that can cause injury, illness or death to personnel or damage to or loss of equipment or property or mission degradation. Hazards are divided into the two categories listed in subparagraphs 104b(3)(a) and 104b(3)(b).

(a) An act or event (i.e., near miss) that may have resulted in a mishap where the fatality, injury, illness, property damage or loss of an asset was avoided merely by chance, the actions of an individual or individuals, a small measure of distance or a few moments in time.

(b) A workplace condition that might result in injury, health impairment, illness, disease or fatality to any person who is exposed to the condition or which might result in damage to or loss of property or equipment.

(4) Incident. A planned or unplanned occurrence or series of occurrences resulting in injury or damage that does not meet mishap reporting criteria or is exempt from safety reporting.

(5) Safety Reporting. A general term that encompasses all aspects of the process to notify, report and keep records of mishaps, hazards (including near misses) and incidents required by this manual.

(6) Hazard Reporting. The process of reporting a real or potentially hazardous event (i.e., near miss) or workplace condition that could cause injury, illness or death to personnel or damage to or loss of equipment or property or mission degradation to the Naval Enterprise. Hazard reporting is a subset of safety reporting. See paragraph 417 for more detailed information on hazard reporting.

(7) Reportable Mishap. An event that meets or exceeds mishap damage thresholds or mishap injury or illness thresholds of civilian, contractor and military personnel and must be investigated and reported.

Note: OSHA uses this term to characterize serious occurrences involving work-related injury or illness of civilian and contractor employees that require the OSHA to be notified.

(8) Recordable Mishap. An occurrence involving a civilian or contractor employee that requires the creation of a record due to a work-related injury or illness that met specified criteria established by the OSHA per part 1904 of Title 29, Code of Federal Regulations (CFR). For the purposes of Navy and Marine Corps safety reporting, the term's use will be limited to events involving Government civilian and contractor work-related injury and illness reporting to the



OSHA. Contractors must meet the subpart 1904.31 applicability and be supervised by Government personnel on a day-to-day basis. Day-to-day supervision includes supervising not only the output, product or result to be accomplished by the person's work, but also the details, means, methods and processes by which the work objective is accomplished.

(9) Reporting Custodian. Commanding officers and, in some cases, officers-in-charge (OIC) of detachment operations of Navy and Marine Corps organizations who are responsible for or otherwise provide information about, assigned assets and personnel.

(10) Accounting Organization. The reporting custodian that experienced the loss of or damage to an owned asset; or the fatality, injury or work-related illness of an assigned person or persons in a mishap; and is responsible for or is assigned responsibility for, safety reporting, regardless of any determination as to the responsibility for the event's occurrence. There is one accounting organization for each mishap.

Note: See subparagraph 403a for the policy to determine the accounting organization when multiple commands are involved in a mishap. The accounting organization assignment is not affected when a convening authority appoints a safety investigation board to investigate the mishap or the accounting organization relies on its higher headquarters to submit a safety investigation report (SIREP) into the RMI on the command's behalf.

(11) Notification. To give notice or to inform. For DON safety reporting purposes, notification means an event has occurred which is expected to meet defined thresholds and that certain individuals, commands or activities must be informed of the event. The method of notification (e.g., telephonic, naval message) and the timeliness of notification will often be prescribed.

(12) Safety Investigation. A general term that refers to the investigation of mishaps, hazards (including near misses) and incidents by either a single investigating officer (SIO) or a safety investigation board (SIB). The purpose of a safety investigation is to prevent mishaps. A safety investigation is not a Judge Advocate General Manual (JAGMAN) or command investigation used to assign personnel accountability and must not be used to place blame or punish those involved.

(13) SIO. An individual who has been directed to perform a safety investigation by a convening authority. The individual is solely responsible for completing the safety investigation and drafting and submitting required report(s) and records. The SIO may receive assistance from subject matter experts (SME) in the performance of their duties. An SIO is often an individual assigned to a safety billet (e.g., safety officer or safety manager), but that is not always a requirement.

(14) SIB. A group of individuals who have been appointed to complete a safety investigation by a convening authority. Individuals are assigned to the SIB because either they

are an SME or they have specific expertise necessary to the investigation. Members of an SIB must be designated in writing for each specific safety investigation. One member of the SIB must be designated the senior member.

(15) Risk Management Information (RMI) Program of Record (POR). The sole official DON web-based database application for safety reporting. The shortened acronym RMI is synonymous with the RMI POR.

Note: Navy and Marine Corps personnel must use the RMI to report mishaps, hazards (including near misses) and incidents required by this manual.

105. Types of Safety Investigations. There are two different means to conduct safety investigations: Investigations conducted by an SIO and those conducted by an SIB.

a. SIB Investigations. Some events require an investigation by an SIB. The specific criteria for making that determination can be found in chapter 4. Convening Authorities may also direct that an SIB conduct a safety investigation even though it is not required. Safety investigations that are not conducted by an SIB are to be conducted by an SIO.

b. SIO Investigations. For events in which a safety investigation by an SIB is not required or directed, an SIO conducts the safety investigation. To the maximum extent possible, these SIO investigations should be assigned to a trained safety and occupational health professional or safety officer (primary or collateral duty) per the training requirements in either OPNAV M-5100.23 of 5 June 2020, paragraph B0607 (i.e., Navy) or MCO 5100.29C volumes 1 and 9 (i.e., Marine Corps).

c. Both types of safety investigations must focus on determining what happened, why it happened and what risk controls are necessary to prevent reoccurrence as further explained in this manual.

Note: The Chief of Naval Operations Special Assistant for Safety Matters (CNO N09F) or the Director, Commandant of the Marine Corps, Safety Division (CMC (SD)) may direct an independent safety investigation of any event. These independent safety investigations do not relieve commanders of their responsibilities for safety investigations and reporting as required by this manual.

106. Deviations and Variances. Only CNO N09F or the Director, CMC (SD) (as appropriate) may authorize any deviation or variance from the policies and procedures contained in this manual. Requests for deviation or variance to policies specified in this manual must be thoroughly justified and submitted via official correspondence (i.e., naval message or naval letter).

107. Responsibilities.

a. CNO N09F and Director, CMC (SD), will:

(1) Serve as the naval authority for mishap and hazard notifications, investigations, reporting and record keeping.

(2) Develop, issue and maintain safety investigation and reporting policy on behalf of the Chief of Naval Operations (CNO) and Commandant of the Marine Corps (CMC).

(3) Ensure safety investigation and reporting policy remains in compliance with DoD and DON policies and guidance and with applicable laws and regulations.

(4) Develop and issue standards and procedures for safety investigations.

(5) Provide investigative and human factors classification subject matter expertise for safety investigations for all on-duty Class A and selected Class B mishaps. Coordinate with the appropriate convening authority to provide assistance and to confirm investigation requirements.

(6) Initiate an independent safety investigation on behalf of CNO or CMC, when warranted.

(7) Provide final endorsement and close out on safety investigations per subparagraph 512c.

Note: CNO N09F (i.e., for Navy investigations) and Director, CMC SD (i.e., for Marine Corps investigations) have the authority to be the final endorser for any safety investigation. When exercising this prerogative, they will coordinate with the convening authority.

(8) Be the arbiter and make the final decision when there are disagreements among controlling commands over accounting organization assignment.

(9) Terminate a safety investigation, when warranted.

(10) Waive or change safety investigation or safety reporting requirements of this instruction, if warranted by exceptional circumstances.

(11) Act as the final authority for determining mishaps, mishap classifications and mishap exceptions.

(12) Track all mishap recommendations (MISREC) and hazard recommendations (HAZREC).

(13) Make final determination on behalf of CNO and CMC for any situations concerning Navy and Marine Corps safety reporting not specifically covered in this instruction.

(14) Provide voting membership to the RMI Change Control Board (CCB) per the RMI Change Control Board Charter of 12 May 2020.

(15) Provide or coordinate adequate training for various functional roles in the RMI.

b. CNO N09F (COMNAVSAFECEN), will:

(1) Act as the Navy and Marine Corps authority for protecting privileged safety information (PSI), per Department of Defense Instruction (DoDI) 6055.07 of 6 June 2011.

(2) Act as the Freedom of Information Act (FOIA) coordinator for DON SIREP and associated documents.

(3) Establish appropriate safeguards to protect safety databases and safety information.

(4) Promote widest possible distribution of PSI and other safety information to authorized users as permitted by DoD policies and guidelines.

(5) Provide legal consultation and guidance on the use of safety investigation-related information.

(6) Make non-privileged information available, upon request, to individuals conducting concurrent investigations under proper regulatory authority of any agency or department of the United States or by attorneys representing the interests of the United States in any litigation related to the incident, which is the subject of a safety investigation.

(7) Make available, upon request, privileged and non-privileged evidence from a SIREP or hazard report (HAZREP) to required endorsers.

(8) Perform quality assurance and quality control processes to ensure safety information accuracy and completeness.

(9) Collaborate with systems commands (SYSCOM), program executive offices (PEO) and program managers to support integration of responsible technical authorities into evaluation of Class A and B mishaps.

(10) Maintain and oversee the RMI as the single naval authoritative source and repository for DON safety information and parachuting and diving reports and logs.

- (11) Represent Navy and Marine Corps interests on the DoD Safety Information Management Working Group.
- (12) Manage the RMI data set. Make necessary changes to the RMI data set based on Office of the Secretary of Defense guidance, per DoDI 6055.07 of 6 June 2011.
- (13) Establish and chair a Navy and Marine Corps RMI CCB process to improve the functionality and effectiveness of the RMI for mishap prevention.
- (14) Develop and maintain user guides to aide Navy and Marine Corps users conducting safety investigations and safety reporting using the RMI application.
- (15) Participate in safety investigations involving multiple DoD components, when applicable.
- (16) Participate in safety investigations involving foreign nations, when applicable.
- (17) Provide oversight of the Naval Enterprise process to track and complete MISRECs and HAZRECs. Correct process deficiencies as they are discovered.
- (18) Verify that specified actions required by MISRECs and HAZRECs have been completed by action agencies.
- (19) Act as the sole final authority to edit, call complete or otherwise close out languishing and obsolete MISRECs and HAZRECs after coordination with the applicable action agency.
- (20) Fulfill the responsibilities as the sole authorized DON command to generate non-privileged, sanitized SIREPs in order to support wider dissemination of critical safety and hazard information, per DoDI 6055.07 of 6 June 2011.
- (21) Identify mishap trends, compute mishap rates and prepare analysis reports for dissemination across the DON.
- (22) Develop and distribute a variety of safety lessons learned products.

Note: Within 45 days of the closeout of an on-duty Class A mishap, NAVSAFECEN will produce and disseminate to applicable safety communities, an executive summary of the SIREP and a training presentation with important lessons learned from the mishap for use by stakeholders and training commands. Training products containing PSI will be clearly marked and handled in strict compliance with chapter 8 of this manual.

(23) Provide electronic mishap and hazard data to the Defense Explosives Safety Mishap Analysis Module and Joint Service Monthly Airdrop Summary Reporting System.

(24) Coordinate with CMC (SD) regarding the investigation of mishaps or near misses involving embarked Marines and Marine Corps equipment aboard U.S. Navy vessels.

(25) Coordinate with the appropriate convening authority, Naval Ordnance Safety and Security Activity (NOSSA) (i.e., Navy) or Marine Corps Systems Command (MARCORSYSCOM) (i.e., Marine Corps) for hazards to determine or confirm whether an investigation conducted by an SIB is required and what command will provide oversight.

(26) Make required notifications of mishaps and fatalities to higher headquarters, per chapter 3.

(27) Transmit mishap data to Under Secretary of Defense for Personnel and Readiness within established timelines, per DoDI 6055.07 of 6 June 2011.

(28) Provide required reports to the OSHA, per chapter 7.

c. Naval Inspector General (NAVINSGEN) and Inspector General of the Marine Corps (IGMC) will evaluate compliance with safety investigation and safety reporting requirements during command inspections and area visits of Navy and Marine Corps commands and activities, respectively.

d. The President, Board of Inspection and Survey (PRESINSURV), will evaluate compliance with safety investigation and safety reporting requirements during oversight inspections for Navy afloat activities.

e. Commander, U.S. Fleet Forces Command (COMUSFLTFORCOM) and Commander, U.S. Pacific Fleet (COMPACFLT), will:

(1) Assist COMNAVSAFECEN in efforts to collect safety information, per the Memorandum of Understanding between COMUSFLTFORCOM, COMPACFLT and COMNAVSAFECEN of 5 August 2016.

(2) In coordination with COMNAVSAFECEN, track and implement MISRECs and HAZRECs assigned to fleet action agencies, per the memorandum of understanding between COMUSFLTFORCOM, COMPACFLT and COMNAVSAFECEN of 5 August 2016.

f. Chief, Bureau of Medicine and Surgery, will:

(1) Advise and assist in support of medical investigations into naval mishaps or hazards (including near misses).

(2) Provide pathology services to process tissue from naval mishaps as directed by this manual and BUMEDINST 6510.2F.

g. Commander, Naval Education and Training Command, will appoint a suitably qualified technical person, as designated by the National Transportation Safety Board investigator in charge, to assist in any investigation involving NIFE Program aviation mishaps, per OPNAVINST 3750.16C.

h. SYSCOMs

(1) The Navy and Marine Corps SYSCOMs are listed in subparagraphs 107h(1)(a) through (g).

(a) Commander, Naval Facility Engineering Systems Command (COMNAVFACENGSYSCOM)

(b) Commander, U.S. Marine Corps Systems Command (COMMARCORSSYSCOM)

(c) Program Executive Office for Land Systems (PEO (LS))

(d) Commander, Naval Air Systems Command (COMNAVAIRSYSCOM)

(e) Commander, Naval Sea Systems Command (COMNAVSEASYSCOM)

(f) Commander, Naval Information Warfare Systems Command (COMNAVWARSSYSCOM)

(g) Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM)

(2) The SYSCOMs, will:

(a) Support system-related Class A and B safety investigations and hazard investigations, per DoDI 6055.07 of 6 June 2011.

(b) Provide analyses of systems-related hazards (including near misses) that contributed to the mishap and recommendations for materiel risk mitigation measures, especially those that minimize human errors, per DoDI 6055.07 of 6 June 2011.

(c) For Marine Corps mishaps or hazards (including near misses), a technical advisor from PEO (LS) and COMMARCORSYSCOM will provide assistance.

i. Controlling Commands. Controlling commands provide safety oversight of subordinate units and enforcement of the policies, procedures and requirements of this manual for safety investigation and safety reporting.

- (1) Navy controlling commands are listed in subparagraphs 107i(1)(a) through 107i(am).
  - (a) Chief of Naval Operations Special Assistant for Safety Matters (CNO N09F).
  - (b) Commander, U.S. Fleet Forces Command (COMUSFLTFORCOM).
  - (c) Commander, U.S. Pacific Fleet (COMPACFLT).
  - (d) Commander, U.S. Naval Forces Europe and Africa (COMUSNAVEUR, COMUSNAVAF).
  - (e) Commander, U.S. Naval Forces Central Command (COMUSNAVCENT).
  - (f) Commander, U.S. Naval Forces Southern Command (COMNAVSO).
  - (g) Commander, U.S. Fleet Cyber Command (COMUSFLTTCYBERCOM).
  - (h) Commander, Operational Test and Evaluation Force.
  - (i) Commander, Naval Reserve Forces (COMNAVRESFOR).
  - (j) Commander, Naval Special Warfare Command (COMNAVSPECWARCOM).
  - (k) Superintendent, United States Naval Academy.
  - (l) Commander, Naval Air Systems Command (COMNAVAIRSYSCOM).
  - (m) Commander, Naval Education and Training Command (NETC).
  - (n) Commander, Naval Facility Engineering Systems Command (COMNAVFACENGSYSCOM).
  - (o) Director, Field Support Activity.
  - (p) Director, Naval History and Heritage Command.
  - (q) Commander, Navy Installations Command (CNIC).



Note: Commander, Navy Installations Command may delegate controlling command responsibilities to CNIC regional commanders. Delegation must be in writing and a copy of the delegation letter provided to CNO N09F.

- (r) Director, Naval Intelligence Activity.
- (s) Commander, Naval Legal Service Command.
- (t) Chief, Bureau of Medicine and Surgery (BUMED).
- (u) Chief, Bureau of Naval Personnel (BUPERS).
- (v) President, Naval Postgraduate School.
- (w) Commander, Naval Sea Systems Command (COMNAVSEASYSKOM).
- (x) Commander, Naval Information Warfare Systems Command (COMNAVWARSSYSKOM).
- (y) Director, Strategic Systems Programs (SSP).
- (z) Commander, Naval Supply Systems Command (COMNAVSSUPSSYSKOM).
- (aa) President, Naval War College (NAVWARCOL).
- (ab) Commanding Officer, U.S. Navy Band.
- (ac) Commanding Officer, Naval Research Laboratory (NRL).
- (ad) Commander, Military Sealift Command (COMSC).
- (ae) Commander, Naval Air Force, Atlantic (COMNAVAILANT).
- (af) Commander, Naval Air Force, U.S. Pacific Fleet (COMNAVAILPAC).
- (ag) Commander, Naval Expeditionary Combat Command (COMNECC).
- (ah) Commander, Submarine Force, Atlantic (COMSUBLANT).
- (ai) Commander, Submarine Force, U.S. Pacific Fleet (COMSUBPAC).
- (aj) Commander, Naval Surface Force, Atlantic (COMNAVSSURFLANT).

- (ak) Commander, Naval Surface Force, U.S. Pacific Fleet (COMNAVSURFPAC).
- (al) Commander, Naval Information Forces (NIF).
- (am) Chief of Naval Air Training (CNATRA).

(2) Marine Corps controlling commands are listed in subparagraphs 107i(2)(a) through 107i(2)(l).

- (a) Commandant of the Marine Corps (Safety Division).
- (b) Commanding General, Training and Education Command.
- (c) Commander, Fleet Marine Force, Atlantic (FMFL), U.S. Marine Corps Forces Command (MARFORCOM).
- (d) Commander, Marine Forces Pacific.
- (e) Commander, Marine Forces Reserves.
- (f) Commander, Marine Forces Central Command.
- (g) Commander, Marine Forces Cyber.
- (h) Commander, Marine Forces Special Operations Command.
- (i) Commander, Marine Corps Installations Command.
- (j) Commanding General, Marine Corps Logistics Command.
- (k) Commanding General, Marine Corps Recruiting Command.
- (l) Commander, Marine Corps Systems Command.

(3) Controlling commands, will:

- (a) Confirm the accounting organization for all mishaps within their command.

Note: Chapter 4 provides guidance on determining the accounting organization for multiple unit mishaps.

(b) Act as convening authority for all mishap and hazard investigations or delegate those responsibilities to subordinate commanders. Delegation of convening authority responsibilities for Class A and B mishaps must not go below the flag and general officer level.

Note: Controlling commands may choose to delegate convening authority responsibilities in real time as events occur or in advance of events by establishing a delegation policy in writing. Controlling commands always have the authority to retain convening authority responsibilities for selected events even if a convening authority delegation policy has been issued.

(c) When there are indications of significantly elevated risk or circumstances in which a more rigorous safety investigation would provide vital safety and risk information, direct an SIB to investigate hazards (including near misses), even though an investigation by an SIB is not required.

(d) Coordinate with COMNAVSAFECEN, echelon 2 commands and technical agencies, if required.

(e) When the requirement for an investigation by an SIB is unclear, contact OPNAV N09F for Navy events or CMC (SD) for Marine Corps events, within 24 hours of becoming aware of the event, so that a final determination can be made.

(f) Ensure subordinate commands submit a SIREP in the RMI for all mishaps meeting safety reporting thresholds, within 30 calendar days of the mishap, as outlined in chapters 2 and 4.

(g) Establish a hazard review board as outlined in chapter 6.

(h) Monitor the status of all outstanding corrective actions for assigned MISRECs and HAZRECs and those assigned to subordinate units.

(i) Ensure that notifications are made for all fatalities, regardless of circumstances (i.e., suicide, homicide, murder, medical, etc.), per chapter 3.

(j) Establish policy that prohibits acts of coercion, discrimination or reprisal against personnel who report mishaps and hazards (including near misses).

j. Convening authorities, will:

(1) Direct an SIB to investigate mishaps and hazards (including near misses), per guidelines provided in chapter 4.

(2) Appoint all SIB members in writing by either naval message or naval letter.

Note: No person directly involved in a mishap or hazard (including a near miss) or having a personal interest that might pose a real or perceived conflict of interest, will serve as a member of the SIB for that mishap or near miss. Contractors will not serve as a member of the SIB, but may provide the SIB with technical expertise. For the Marine Corps, the first general officer in the accounting organization's chain of command is responsible for appointing all SIB members in writing on behalf of the convening authority.

(3) When there are indications of significantly elevated risk or circumstances in which a more rigorous safety investigation would provide vital safety and risk information, direct an SIB to investigate hazards (including near misses), even though an investigation by an SIB is not required.

(4) Define the specific required endorsers for all SIREPs and HAZREPs requiring endorsement.

Note: Convening authorities must list the specific commands and activities that are the required endorsers in the RMI "comments box" during the convening authority administrative review before the endorsement process begins.

(5) Adhere to and enforce SIREP and HAZREP submission deadlines.

(6) Contact NAVSAFECEN (Code 90) for on-site investigative assistance, when required.

k. Commanders, commanding officers, masters and officers-in-charge, will:

(1) Ensure that notification, investigation, reporting and record keeping are completed for all mishaps, hazards (including near misses) and incidents involving your command, unit or activity, as required by this manual.

(2) Ensure that the RMI is used for all safety reporting.

(3) Include plain language address (PLA) "COMNAVSAFECEN NORFOLK VA" as an information addressee on operational reports (OPREP-3), personnel casualty reports and serious incident reports (SIR) that involve mishaps and other events per chapter 3. Also, include PLA "CMC WASHINGTON DC SD" as an information addressee when Marine Corps personnel are involved.

(4) Maintain and train unit personnel on a pre-mishap plan that describes the steps to be taken when a mishap occurs.

Note: A sample pre-mishap plan is provided in the Navy and Marine Corps Safety Investigations and Reporting Guide.

(5) Request assistance from the higher headquarters when the command or activity cannot fulfill the safety reporting responsibilities prescribed in this manual.

(6) Ensure that personnel assigned as an SIO or designated an SIB member, are not assigned to a JAGMAN investigation of the same event.

(7) Direct a competent medical authority assigned to their command to collect any time-sensitive medical evidence, such as blood and urine samples pertinent to the safety investigation.

(8) Provide administrative and logistic support to SIOs and SIBs.

(9) When applicable, provide force protection measures and physical security of personnel involved in the safety investigation commensurate with the threat level and security concerns. Provide such protective and other equipment necessary for the security and self-defense of these personnel.

(10) Appoint a unit-level RMI User Administrator (UA) in writing or coordinate with higher headquarters to fulfill UA responsibilities on behalf of your command.

(11) Certify, sign, date and post an OSHA 300A Summary Work-Related Injuries and Illnesses or equivalent form for each establishment assigned to your command, unit or activity within 60 calendar days following the end of each calendar year. This requirement is applicable only to Navy and Marine Corps commands, units and activities employing DON civilian personnel. See chapter 7, paragraph 707 for additional details.

(12) Direct subordinate safety personnel (i.e., safety officers, safety directors, safety managers, safety specialists) to take the actions in subparagraphs 107k(12)(a) through 107k(12)(g):

(a) Investigate and report mishaps, hazards (including near misses) and incidents, per this manual.

(b) Begin necessary investigative steps following a serious on-duty mishap (i.e., loss of life, significant injuries or significant equipment damage) and secure the mishap site until the SIB arrives.

(c) Conduct command-wide dissemination of sanitized safety information and lessons learned resulting from safety investigations.

(d) Protect PSI from unauthorized disclosure, per chapter 8.

(e) When applicable, coordinate with safety officers from embarked units and detachments on safety reporting and the correction of the causes of mishaps.

(f) Once notified by a supervisor that a work-related injury or illness has occurred and that preliminary event information has been added to the RMI, initiate a safety investigation.

(g) For collateral duty safety officers on CNIC installations, contact the Base Operating Support safety services provider if assistance is needed to complete a safety investigation or SIREP.

1. The commander of the Navy or Marine Corps installation nearest a mishap, will:

Note: This includes Navy or Marine Corps-led joint bases.

(1) Respond to a mishap involving DoD assets in accordance with OPNAVINST 3440.17A (Navy Installation Emergency Management Program) for Navy or MCO 3440.9 (Marine Corps Installation Emergency Management (IEM) Program) for Marine Corps, as applicable.

(2) Assist any assigned interim SIB or SIO to preserve evidence and gather factual data related to the mishap until the appointed SIB or SIO can conduct the investigation.

(3) Provide logistical and investigative support as required by the SIB or SIO.

m. Supervisors, will:

(1) Require subordinate personnel to immediately report all work-related injuries or illnesses and property damage that they observe.

(2) Require subordinate military personnel to report off-duty traffic-related mishaps to you as soon as reasonably possible.

(3) Require subordinate military personnel to report recreation and off-duty injuries to you as soon as reasonably possible.

(4) Require subordinate personnel to immediately report all hazards (including near misses) to you.

(5) Keep the unit safety manager or safety officer (primary or collateral duty) informed in a timely fashion of all injuries, property damage and hazards that become known to you.

(6) Assist commands, units and activities with reviews of any event that involves the supervisor's subordinate personnel and requires the submission of a SIREP. The review should include the injured employee, if needed for amplifying information. Enter subordinate injury and work-related illness information into RMI as part of your normal duties, per unit level guidance and as required by this manual. See OPNAV M-5100.23 of 5 June 2020, chapter 14

(i.e., Navy) or MCO 5100.29C volume 1, chapter 2 (i.e., Marine Corps), for more information on mishap review and analysis.

n. RMI User Administrators (UA), will:

(1) Post your signed command UA designation letter and signed RMI User Agreement to your RMI profile.

(2) Familiarize yourself with RMI functional roles and associated permissions per chapter 9 of this manual.

(3) Review and approve requests for RMI account roles including account type, category, module access and job function, for DON uniformed and civilian personnel within your unit (assigned to your UIC). Approval of account roles must only be given to personnel when it is necessary for them to complete their assigned tasks. All approvals must be in strict compliance with policies delineated in chapter 9 of this manual and other official RMI policies and guidance.

Note: UAs are prohibited from granting RMI permissions to personnel from other DON organizations, Military Services, U.S. Government agencies, as well as contractors, foreign exchange or liaison personnel or any non-DON civilians, unless specifically authorized by COMNAVSAFECEN per paragraphs 813, 814 and 815 of this manual.

o. Safety investigation boards will investigate a specific mishap or hazard (including a near miss) and complete all required reports per this manual. An SIB is appointed by a convening authority. See paragraph 408 for the specific responsibilities of the SIB senior member.

## CHAPTER 2 MISHAP DETERMINATION, CATEGORIZATION AND CLASSIFICATION

201. Purpose. To provide an overview of the safety reporting process to assist users in determining whether an event meets the criteria as a reportable Department of Defense (DoD) mishap and the steps to follow to notify, investigate and report DoD mishaps. This chapter will also provide information about what constitutes OSHA recordable events applicable when injuries occur to Department of the Navy (DON) civilian personnel. Additional details and amplification on reporting DoD mishaps and Occupational Safety and Health Administration (OSHA) recordable events are provided in the chapters that follow.

202. Applicability. This chapter is applicable to all categories of mishaps except those that involve a defined naval aircraft. For mishaps involving a defined naval aircraft, see OPNAVINST 3750.6S.

Note: Aviation ordnance mishaps that do not involve a defined naval aircraft are considered weapons mishaps and the procedures in this manual are applicable.

203. Background.

a. Chapter 1 provided a working definition of a mishap: An unplanned event or series of events, that resulted in damage to DoD property; work-related illness to DoD personnel; injury to on- or off-duty DoD military personnel; injury to on-duty DoD civilian personnel; or damage to non-DoD property or injury or illness to non-DoD personnel, caused by DoD activities. The definition was further qualified by stating that events must also meet minimum damage and injury or illness thresholds to be considered a mishap for reporting purposes. Additionally, there are some events that meet the definition of a DoD reportable mishap, but are exempted from reporting, per DoDI 6055.07 of 6 June 2011.

b. Chapter 1 also provided a definition of a recordable event as an occurrence involving civilian personnel or contractor employees that requires the creation of a record due to a work-related injury or illness that met specified criteria established by the OSHA per the Code of Federal Regulations (CFR), part 29, section 1904. It is important to note that the terms recordable or OSHA recordable and the procedures that must be followed for such events, are only applicable to work-related illnesses and injuries to DON civilian personnel and, in some cases, civilian contractor employees. Those responsible for safety investigations and safety reporting need not concern themselves with OSHA recordable requirements when no work-related illnesses or injuries to DON civilian personnel or civilian contractors has occurred. If the contractor's employee is under the day-to-day supervision of the contractor, then the contractor is responsible for recording the work-related injury or illness. If the DON command supervises the contractor employee's work on a day-to-day basis, then it must be recorded by the DON command.



Note: Day-to-day supervision includes supervising not only the output, product or result to be accomplished by the person's work, but also the details, means, methods and processes by which the work objective is accomplished.

204. Policy.

a. All events that meet the definition of a reportable DoD mishap and are not exempted, must be investigated and reported per the guidelines established in this manual, with the exception of mishaps involving a defined naval aircraft. Safety investigation reports (SIREP) must be submitted in the Risk Management Information (RMI) within 30 calendar days of the mishap for SIO investigations or 30 calendar days of convening for SIB investigations.

b. Most events that result in damage and injury or illness that fall below the minimum reporting thresholds (i.e., below the Class D threshold for on-duty events and below the Class C threshold for off-duty events) or are specifically exempt from mishap reporting, do not require a safety investigation or report. However, some events trigger mandatory safety reporting requirements no matter the damage, injury or illness. These event types are clearly explained and must be reported per paragraph 218.

Note: Controlling commands are authorized to direct subordinate units to report events below the minimum thresholds set forth in this manual (e.g., some on duty Class E mishaps, off-duty injuries below the Class C level) if they believe that by doing so furthers their mishap prevention efforts. In those cases, an on duty Class E event can be reported as a Class E mishap in RMI and off-duty injuries below the Class C level must be reported as “incidents” in RMI. If done, the controlling command must state the requirement in writing.

c. Each mishap must be assigned at least one mishap category. When more than one mishap category has been assigned to a mishap, one must clearly be identified as the principal category.

205. Mishap Notification, Investigation and Reporting Procedures. After an event has occurred that resulted in damage, injury or illness, follow the steps shown in table 2-1 to validate a reporting requirement and to determine the procedures to follow and actions to take. Amplification and additional information is provided later in this chapter and in other chapters in this manual, as indicated.

Step Number	Step Description	Step Procedure
1a	Determine if a mishap occurred.	Refer to paragraph 206.

Step Number	Step Description	Step Procedure
		Use figure 2-1 to make an initial determination if a mishap occurred. Then proceed to step 1b to reference more specific reportability criteria.
1b	Review reportability criteria to confirm mishap occurrence.	Refer to paragraph 207 and chapter appendices 2-A through 2-E.  Use this more detailed information to validate that a mishap has occurred. <ul style="list-style-type: none"> <li>• If yes, continue to step 2 in this table.</li> <li>• If no, go to step 11 to determine if another type of safety report is required.</li> </ul>
2	Determine if the mishap is exempt from reporting.	Refer to paragraph 208.  Use table 2-4 to determine if the mishap is exempt from DoD and DON mishap reporting. <ul style="list-style-type: none"> <li>• If not exempt, proceed to step 3 in this table.</li> <li>• If exempt, go to step 11 to determine if another type of report is required.</li> </ul>
3	Determine the mishap category and sub-category.	Refer to paragraph 209.  Use tables 2-5 through 2-8 to determine the mishap category and sub-categories. If the mishap has more than one category, identify the principal category.  Once complete, go to step 4a and 4b in this table.
4a	Determine the estimated mishap costs.	Refer to paragraph 210.  Use table 2-9 and the information in the paragraph to compute an estimated mishap cost. This estimate is needed to complete step 5.
4b	Determine the estimated personnel illness or injury category.	Refer to paragraph 211.  Use the information in the paragraph to compute an estimated illness or injury category. This estimate is needed to complete step 5.
5	Determine a DON mishap class.	Refer to paragraph 212.  Use figure 2-2 to determine a DON mishap class. If insufficient information exists immediately following a mishap to accurately determine the mishap class, then

Step Number	Step Description	Step Procedure
		<p>choose the highest mishap class based on the available information.</p> <p>Once complete, go to step 6 in this table.</p>
6	<p>Determine whether the mishap is in a DoD special reporting group.</p> <p>Note: DoD special reporting groups are important in determining some notification requirements.</p>	<p>Refer to paragraph 213.</p> <p>Use table 2-10 to determine whether the mishap is in a DoD special reporting group.</p> <p>Once complete, go to step 7 in this table.</p>
7	<p>Notify appropriate officials based on mishap class, category, DoD special reporting group and amplifying instructions.</p>	<p>Using the information from step 6, follow the notification procedures provided in chapter 3.</p> <p>Once complete, go to step 8 in this table.</p>
8	<p>Investigate the mishap.</p>	<p>Investigate the mishap using the guidelines provided in chapter 4.</p> <p>Once complete, go to step 9 in this table.</p>
9	<p>Report the mishap.</p>	<p>Prepare and submit the SIREP using the guidelines provided in chapter 4. SIREPs must be submitted in the RMI within 30 calendar days of the mishap for SIO investigations or 30 calendar days of convening for SIB investigations.</p> <p>If DON civilian personnel suffered work-related illnesses or injuries, go to step 10 in this table.</p>
10	<p>Enter required information into the RMI for Occupational Safety and Health Administration (OSHA) recordable</p>	<p>Refer to paragraph 217.</p> <p>Enter required information into the RMI for OSHA recordable events involving civilian personnel.</p>

Step Number	Step Description	Step Procedure
	events involving civilian personnel.  Note: OSHA reporting applies only to DON civilian work-related illnesses or injuries. OSHA reporting does not apply to injuries or illnesses of military personnel.	
11	Determine if the event that is not a DoD mishap still requires a mandatory safety report.	Refer to paragraph 218 and chapter appendices 2-A through 2-E to determine whether the event still requires a mandatory safety report.

Table 2-1. Procedures for the Notification, Investigation and Reporting of DoD and DON Mishaps

206. Step 1a. Determine if a Mishap Occurred. Use figure 2-1 to make an initial determination if a mishap occurred.

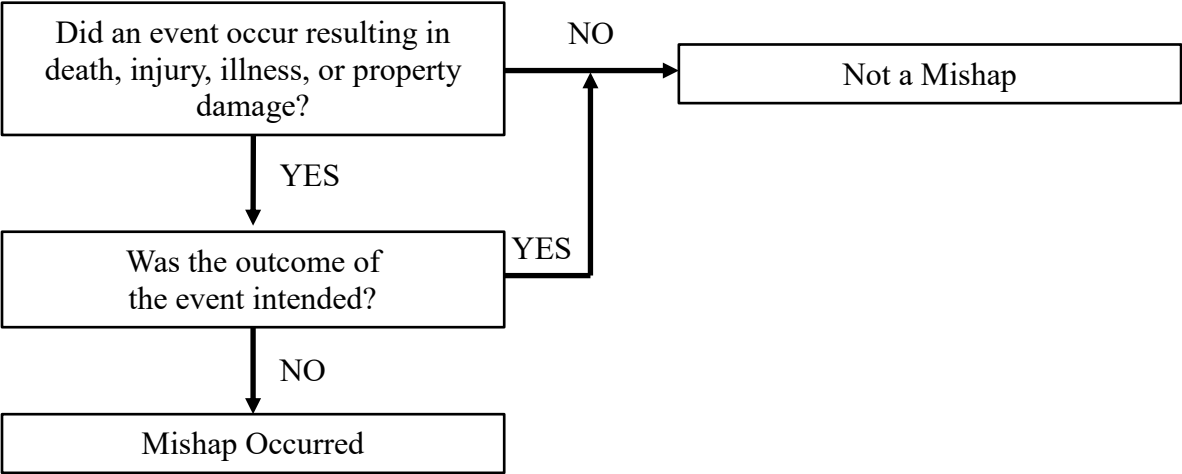


Figure 2-1. Confirming Occurrence of a Mishap

207. Step 1b. Review Reportability Criteria to Confirm Mishap Occurrence. Use the criteria in paragraphs 207a through 207i to confirm which events are considered reportable by DoD and DON. Broad guidance on reportability is provided here. Additionally, this chapter has separate chapter appendices for reportable and recordable event criteria involving Military Personnel (Appendix 2-A), Civilian Personnel (Appendix 2-B), Contractors (Appendix 2-C), Non-Department of the Navy Civilians (Appendix 2-D) and Materiel and Property Damage (Appendix 2-E). These chapter appendices provide a ready reference that augment the information provided in this chapter. Users should consult each of the various chapter 2 appendices on reportable and recordable criteria for other possible event types that may be applicable.

Note: See chapter 7 for the requirements for maintaining written or electronic records of reportable events.

a. Events may involve more than one type of mishap. If more than one type applies, then use the most severe one for classification purposes. Be sure to consult each of the various paragraphs and chapter 2 appendices for the criteria and all event types that may be applicable.

b. Whether a case involves a work-related injury or illness is determined by the nature of the original incident or exposure which caused the case, not by the resulting condition of the affected employee.

(1) In general, injuries are caused by instantaneous events in the work environment. Examples of exceptions to this general rule are a physical training injury over time such as knee damage, carpal tunnel syndrome, cumulative trauma disorder, repetitive strain injury, etc. Therefore, in general, cases resulting from anything other than instantaneous events are considered illnesses. This concept of illnesses includes acute illnesses which result from exposures of relatively short duration.

(2) For on-duty civilian personnel and contractor employees, the OSHA has several exceptions to the general rule of instantaneous events for work-related injuries. Examples of these general rule exceptions by the OSHA are a fatality, loss of an eye, amputation, loss of consciousness and in-patient hospitalization. These OSHA exceptions are briefly described in subparagraphs 207b(2)(a) through 207b(2)(e) and in chapter appendices 2-B and 2-C.

(a) Fatality. On-duty work-related injury or illness that resulted in a fatality occurring within 30 days of that work-related injury or illness. A work-related fatality caused by a heart attack must be reported to the OSHA. The local OSHA Area Office director will decide whether to investigate the event, depending on the circumstances of the heart attack.

(b) Loss of an Eye. On-duty loss of an eye, that occurred within 24 hours of a work-related injury or illness.

(c) Amputation. On-duty traumatic loss of a limb or other external body part, that occurred within 24 hours of a work-related injury or illness.

(d) Loss of Consciousness. On-duty work-related injury or illness that resulted in a loss of consciousness, regardless of the length of time unconscious.

(e) In-Patient Hospitalization. On-duty work-related injury or illness that resulted in the in-patient hospitalization (i.e., beyond observation, diagnostic testing, administrative reasons or counseling) of one or more employees, occurring within 24 hours of that work-related injury or illness). An in-patient hospitalization caused by a heart attack must be reported to the OSHA. The local OSHA Area Office director will decide whether to investigate the event, depending on the circumstances of the heart attack.

c. Some conditions may be classified as either an injury or an illness (but not both), depending upon the nature of the event that produced the condition. For example, a loss of hearing resulting from an explosion (i.e., an instantaneous event) is classified as a work-related injury; the same condition arising from exposure to industrial noise over a period of time would be classified as a work-related illness.

d. On and off-duty determination.

(1) Use tables 2-2 and 2-3 to make military personnel or DoD civilian personnel on- and off-duty determinations, respectively, for safety reporting purposes.

Note: The “on-duty” definition is for safety reporting purposes only and bears no relationship to compensation determinations.

Line Number	Duty Description	Duty Status	
		On-Duty	Off-Duty
1	When not on liberty, not on leave or not an unauthorized absentee.	X	
2	Physically present at any location to perform their officially assigned work.	X	
3	Physically aboard a public vessel.  Notes: Public vessels include any vessel owned, bareboat chartered or operated using appropriated funds by the DoD or any other U.S. Government agency (e.g., includes the U.S. Coast Guard and the National Oceanic and Atmospheric Administration), except when that vessel is engaged in commerce. Included, are pre-commissioned vessels after delivery to a DoD or other U.S. Government agency.	X	

Line Number	Duty Description	Duty Status	
		On-Duty	Off-Duty
	Not included, are non-appropriated fund government vessels such as Morale, Welfare and Recreation (MWR) rental boats.		
4	Being transported anytime by a government conveyance or common carrier for the purpose of performing officially assigned work.  Notes: Sailors and Marines aboard a government-leased or chartered water taxi traveling to or from a public vessel are on duty, regardless if that water taxi is paid for with appropriated or non-appropriated funds.	X	
5	Travel in a private motor vehicle (PMV) or commercial conveyance while performing official duty, but not routine travel (i.e., commuting) to and from home and work or duty station.	X	
6	In a travel status for official travel (i.e., under a travel authorization or travel order) and not engaged in any personal activities.	X	
7	Travel for personal convenience, leave or administrative absence while performing travel away from the permanent duty station on public business under competent travel orders.		X
8	Participating in physical training activities while on station or at any other place, while under orders.	X	
9	Participating during non-working hours in base or installation team sports and events sponsored by the command in which participation is voluntary.		X
10	Midshipmen of the U.S. Naval Academy participating in academy-sanctioned intercollegiate, intramural sports and club activities.	X	
11	Participating in command-directed events that they are permitted to attend, regardless of location.	X	
12	On funded temporary additional duty (TAD), funded temporary duty (TDY) or permissive TDY (i.e., unfunded orders) away from their regular place of duty, while performing travel or work-related activities that are essential or incidental to the temporary assignment.	X	
13	On funded TAD, funded TDY or permissive TDY (i.e., unfunded orders) away from their regular place of duty, while deviating from normal activities of the trip and becoming involved in personal activities not reasonable or incidental to the assignment.		X
<b>RESERVISTS</b>			
14	When at their designated drill sites performing inactive duty training (IDT), annual training (AT), active duty training (ADT) or active duty for operational support (ADOS).	X	

Line Number	Duty Description	Duty Status	
		On-Duty	Off-Duty
15	When in a travel status (i.e., under a travel authorization or travel order) for performing AT, ADT or ADOS. and not engaged in personal activities.	X	
16	When in a travel status (i.e., under a travel authorization or travel order) for performing AT, ADT or ADOS and engaged in personal activities.		X
17	<p>When traveling under travel orders to perform IDT.</p> <p>Notes: For the purposes of safety reporting, Reservists are considered off duty from the time they depart their home or office until they reach their appointed site for inactive duty training (i.e., drill) and, from the time they depart the drill site until they reach domicile or Government-provided billeting at the conclusion of the scheduled drill or drill periods.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• A reservist departs his domicile for the drill site for a drill weekend or scheduled make-up drill. En route, he is involved in a PMV mishap. Report as an off-duty motor-vehicle mishap.</li> <li>• A reservist completed her drills for Saturday and is scheduled to return the following morning. During the evening, she is involved in a mishap. Report the mishap as required as an off-duty motor-vehicle mishap.</li> <li>• A reservist completes his final drill on a Sunday afternoon and is driving home when he is involved in a mishap. Report the mishap as required as an off-duty motor-vehicle mishap.</li> </ul>		X

Table 2-2. Military Personnel Duty Determinations for Safety Reporting Purposes

Line Number	Duty Description	Duty Status	
		On-Duty	Off-Duty
1	When activities are work related.*	X	
2	Physically present at any location to perform their officially assigned work.	X	
3	Commuting to or from home and work prior to or after, their duty day or shift.		X



Line Number	Duty Description	Duty Status	
		On-Duty	Off-Duty
4	Travel in a PMV or commercial conveyance while performing official duty, but not routine travel (i.e., commuting) to and from home and work.	X	
5	Traveling during their workday to or from work sites other than their permanent duty station and not engaged in any personal activities.	X	
6	During the workday (i.e., even though on Federal property) when they are engaged in personal activities unrelated to employment such as eating, physical training, resting, shopping, running errands, etc.		X
7	Physically aboard a public vessel.  Notes: Public vessels include any vessel owned, bareboat chartered or operated using appropriated funds by the DoD or any other U.S. Government agency (e.g., includes the U.S. Coast Guard and the National Oceanic and Atmospheric Administration), except when that vessel is engaged in commerce. Included, are pre-commissioned vessels after delivery to a DoD or other U.S. Government agency. Not included, are non-appropriated fund government vessels such as MWR rental boats.	X	
8	Being transported anytime by a government conveyance or common carrier for the purpose of performing officially assigned work.	X	
9	In a travel status for official travel (i.e., under a travel authorization or travel order) and not engaged in any personal activities.	X	
10	Traveling for personal convenience, leave or administrative leave while performing travel away from the permanent duty station on public business under competent travel orders.		X
11	Participating during working hours in command-sponsored events that they are permitted to attend, regardless of location.	X	
12	Participating during non-working hours in base or installation team sports and events sponsored by the command in which participation is voluntary.		X
13	On funded TAD, funded TDY or permissive TDY (i.e., unfunded orders) away from their regular place of duty, while performing travel or work-related activities that are essential or incidental to the temporary assignment.	X	
14	On funded TAD, funded TDY or permissive TDY (i.e., unfunded orders) away from their regular place of duty, while deviating from		X

Line Number	Duty Description	Duty Status	
		On-Duty	Off-Duty
	normal activities of the trip and becoming involved in personal activities not reasonable or incidental to the assignment.		

\*Work-relatedness is described in subparagraphs 207d(2)(a) and 207d(2)(b).

Table 2-3. DoD Civilian Personnel Duty Determinations for Safety Reporting Purposes

(2) Work Relatedness for DoD Civilian Personnel. For civilian personnel, work-relatedness is also used to make an on- or off-duty determinations. Work-relatedness is described in subparagraphs 207d(2)(a) and 207d(2)(b).

(a) Civilian personnel are considered on-duty when an injury or illness occurs while an employee is working at home, including work in a home office, the injury or illness occurs while the employee is performing work for pay or compensation in the home and the injury or illness is directly related to the performance of work rather than to the general home environment or setting. For example (per 29 CFR 1904.5(b)(7), with DON duty determinations added), if an employee drops a box of work documents and injures his or her foot, the case is considered work-related and the employee is considered on-duty. If an employee's fingernail is punctured by a needle from a sewing machine used to perform garment work at home, becomes infected and requires medical treatment, the injury is considered work-related and the employee is considered on-duty. If an employee is injured because he or she trips on the family dog while rushing to answer a work phone call, the case is not considered work-related and the employee is not considered on-duty. If an employee working at home is electrocuted because of faulty home wiring, the injury is not considered work-related and the employee is not considered on-duty.

(b) Work-relatedness (i.e., being on-duty) is presumed for injuries and illnesses resulting from events or exposures occurring in the work environment, unless one of the exceptions in subparagraphs 207d(2)(b)1 through 207d(2)(b)10 specifically applies. If an exception applies, the event or exposure is not considered on-duty:

1. At the time of the injury or illness, the civilian employee was present in the work environment as a member of the general public rather than as an employee.

2. The injury or illness involves signs or symptoms that surface at work but result solely from a non-work-related event or exposure that occurs outside the work environment.

3. The injury or illness results solely from voluntary participation in a wellness program or in a medical, fitness or recreational activity, such as blood donation, physical examination, flu shot, exercise class, racquetball or baseball.

4. The injury or illness is solely the result of a civilian employee eating, drinking or preparing food or drink for personal consumption (i.e., whether bought on the premises or brought in). For example, if the civilian employee is injured by choking on a sandwich while in the workplace, the case would not be considered work-related.

Note: If the civilian employee is made ill by ingesting food contaminated by workplace contaminants (such as lead) or gets food poisoning from food supplied by the organization, the case would be considered work-related.

5. The injury or illness is solely the result of a civilian employee doing personal tasks that are unrelated to their employment in the workplace outside of the employee's assigned working hours.

6. The injury or illness is solely the result of personal grooming or self-medication for a nonwork-related condition.

7. The injury or illness is intentionally self-inflicted.

8. The injury or illness is caused by a motor vehicle accident and occurs on a company parking lot or company access road while the employee is commuting to or from work. Driving to and from lunch is not considered on-duty.

9. The illness is the common cold or flu.

Note: Contagious diseases such as tuberculosis, brucellosis, hepatitis A, plague and Coronavirus Disease 2019 (COVID-19) are considered work-related if the civilian employee is infected at work.

10. The illness is a mental illness. Mental illness will not be considered work-related unless the civilian employee voluntarily provides his or her supervisor with an opinion from a physician or other licensed health care professional with appropriate training and experience (e.g., psychiatrist, psychologist, psychiatric nurse practitioner, etc.) stating that the employee has a mental illness that is work-related.

e. Defining military personnel involvement for reportability purposes. All of the personnel in subparagraphs 207e(1) through 207e(5) are considered military personnel, where at least one of the personnel (i.e., military or civilian) involved in an event is assigned to the Navy or Marine Corps.

(1) Personnel on active duty, active duty for training or inactive duty for training in the U.S. Army, U.S. Marine Corps, U.S. Navy, U.S. Air Force, U.S. Space Force and U.S. Coast Guard;

(2) Personnel on active duty, active duty for training or inactive duty for training in the National Guard of the United States under the provisions of either Title 10, U.S. Code (i.e., Federally funded, command and control with the President of the United States through combatant commanders) or Title 32, U.S. Code (i.e., Federally funded, command and control with the State Governor through the Adjutant General);

(3) Personnel on active duty in a Naval Militia under the provisions of Title 10, U.S. Code;

(4) Cadets of the U.S. Military Academy; midshipmen of the U.S. Naval Academy; cadets of the U.S. Air Force Academy; cadets of the U.S. Coast Guard Academy; and midshipmen of the U.S. Merchant Marine Academy when engaged in directed training activities with a DoD component or the U.S. Coast Guard;

(5) Reserve Officer Training Corps (ROTC) cadets or midshipmen when engaged in directed training activities; officer accession program students when engaged in directed training activities; and foreign national military personnel assigned to a DoD component or the U.S. Coast Guard.

f. Defining civilian personnel involvement for reportability purposes. All of the personnel in subparagraphs 207f(1) through 207f(3) are civilian personnel, when on duty, where at least one of the personnel (i.e., military or civilian) involved in an event is assigned to the Navy or Marine Corps.

(1) Federal Civilian Personnel. All career, career conditional and temporary (full-time, part-time, intermittent) personnel, who are subject to civil service regulations, paid from appropriated Federal funds and covered by the Federal Employees' Compensation Act. This excludes civilians paid by appropriated funds on a contract or fee basis.

(2) Non-Appropriated Fund Civilian Personnel. All civilian personnel whose employment by the U.S. Government is paid by non-appropriated funds and are covered by the Longshore and Harbor Workers Compensation Act. This excludes civilians paid by non-appropriated funds on a contract or fee basis.

(3) Foreign National Civilian Personnel. Includes foreign nationals employed by the U.S. Government in direct (i.e., appropriated or non-appropriated funds) or indirect hire (i.e., contract or fee basis) status when the U.S. Government has supervisory control. It excludes those paid by contract or fee basis when the host government has supervisory control. Navy and Marine Corps commands and installations must review and determine if the host nation injury and illness reporting and compensation systems supersede DoD requirements per the status of forces' agreement.

g. Reportability Criteria for Contractor Personnel Involvement. Contractor personnel are non-federal employees performing under a DoD contract, whether as prime contractor or subcontractor.

h. Reportability Criteria for Non-Department of the Navy (Non-DON) Civilians.

(1) Persons listed in subparagraphs 207h(1)(a) and 207h(1)(b) are considered Non-DON civilians.

(a) Personnel employed by other Federal or DoD agencies not assigned to the Navy or Marine Corps.

(b) All other civilians and foreign nationals not employed by the Navy or Marine Corps (e.g., civilian guest, patron, military family member, etc.).

Note: For purposes of this manual, these groups will be collectively referred to as Non-DON Civilians.

(2) A Navy or Marine Corps caused non-DON civilian fatality, injury or illness is reportable when the non-DON civilian fatality, injury or illness was caused wholly or in part, by a Navy or Marine Corps operation, activity or evolution.

Notes: Examples include family fun day; “A Day in Their Boots”; “Jane Wayne Day”; Tiger Cruise; command-sponsored retirement ceremony; tent sale; military ball; static display; demonstration of operational capability; Morale, Welfare and Recreation event; Marine Corps Community Services event; etc. The Navy or Marine Corps command or activity responsible for the operation, activity or evolution that caused the fatality, injury or illness of affected non-DON civilians will record the mishap.

i. Fatality, Injury or Illness of a Health Care Provider Engaged in Patient Care.

(1) Navy or Marine Corps Civilian Health Care Provider Mishap. A health care provider mishap that occurs to a Navy or Marine Corps civilian health care provider engaged in patient care (i.e., medical, dental or pharmaceutical) for a Navy or Marine Corps unit, is a work-related mishap and both an OSHA recordable event and a DON reportable mishap.

(2) Military Health Care Provider Mishap. A health care provider mishap that occurs to a military health care provider engaged in patient care (i.e., medical, dental or pharmaceutical) for a Navy or Marine Corps unit is a work-related mishap and only a DON reportable mishap.

208. Step 2. Determine if the Mishap is Exempt from Reporting. If a mishap occurred, use table 2-4 to determine if the mishap is exempt from DoD and DON mishap reporting.

Note: Events that are exempt for DoD and DON mishap reporting are not necessarily exempt from reporting to the OSHA. All work-related illnesses and injuries to DON civilian personnel are still considered an OSHA recordable event per Title 29, Code of Federal Regulations, part 1904, subparts C, D, E and G. For these cases, follow the steps in paragraph 217.

Exemption Number	Exemption Condition Description
1	Mishaps involving destruction of or serious damage to nuclear weapons, nuclear weapons systems or nuclear weapons components, resulting in an actual or potential threat to national security or life and property.
2	<p>Damage or injury by direct action of an enemy to include maneuvering conducted relative to hostile fire or a perceived hostile threat or hostile force, not including suspected cases of friendly fire.</p> <p>Amplification: An injury or fatality that occurred in a combat zone and was the result of an actual or suspected case of “friendly fire” is not exempt.</p>
3	Injuries associated with non-occupational diseases, when the disease, not the injury, is the proximate cause of the lost time, such as diabetes and its resultant complications like loss of vision; but, not including complications of the injury (such as the infection of a cut aggravated by a work-related activity) that result in lost time.
4	<p>Injuries resulting from altercations, attack or assault, unless injuries of this type were incurred in the performance of official duties.</p> <p>Amplification: Violence or the threat of violence, against on-duty personnel (workplace violence) is not exempt. Examples of workplace violence include on-duty cases of injury or illness resulting from sexual assault, being assaulted while standing duty or conducting an inspection, civil disorders, riots, sabotage, terrorist activities and arson.</p> <p>Note: Sexual assault is a “Privacy Concern Case.”</p>
5	Injuries sustained before entry into Military Service or employment by the U.S. Government, unless the injuries were specifically aggravated or accelerated by current tenure of service.
6	Injuries resulting from pre-existing musculoskeletal disorders, unless the injuries were specifically aggravated or accelerated by current tenure of service.
7	Intentional, controlled jettison or release, during flight, of canopies, cargo, doors, drag chutes, hatches, life rafts, auxiliary fuel tanks, missiles, drones, rockets, non-nuclear munitions and externally carried equipment not essential to flight when there is no injury, no reportable damage to the aircraft or other property and, in the case of missiles, drones or non-nuclear munitions, when the reason for jettison is not malfunction.

Exemption Number	Exemption Condition Description
8	<p>Replacement of component parts due to normal wear and tear, which is beyond the scope or definition of the affected time between overhaul of component and when any associated damage is confined to the component part.</p> <p>Notes: This exemption only applies to items that are normally used until they fail or until predetermined wear limits are reached. The need for replacement may not be evident until malfunction or failure of the part. Resultant damage to other components is reportable.</p>
9	<p>Attempted or consummated suicide, murder or intentionally self-inflicted injuries.</p>
10	<p>Inpatient hospitalization for treatment where the patient is retained beyond the day of admission solely for administrative reasons unless other reporting criteria are met (e.g., medical treatment beyond first aid).</p>
11	<p>Inpatient hospitalization solely for observation, counseling or diagnostic testing or for administrative reasons not related to the immediate injury or occupational illness, unless other reporting criteria are met (e.g., medical treatment beyond first aid).</p>
12	<p>Injuries resulting from minimum stress and strain (simple, natural and nonviolent body positions or actions, as in dressing, sleeping, coughing or sneezing). Those are injuries unrelated to mishap-producing agents or environments normally associated with active participation in daily work or recreation.</p> <p>Amplification: Significant injury or illness (e.g., cancer, chronic irreversible diseases, fractured or cracked bones) that was diagnosed by a physician or other licensed health care professional as work-related, even if the injury or illness did not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid or loss of consciousness is not exempt.</p>
13	<p>Injuries or fatalities to persons in the act of escaping from or eluding military or civilian custody or arrest.</p>
14	<p>Death due to natural causes unrelated to strenuous acts performed at work or to physical training associated with the requirement to pass physical standards.</p>
15	<p>Intentional, expected or anticipated damage to DoD equipment or property incurred during authorized research, development, testing and evaluation or combat training, including missile and ordnance firing or functioning.</p>
16	<p>Foreign object damage to aircraft, air-breathing missiles or drone engines discovered during scheduled engine disassembly.</p>
17	<p>Property damage, death or injury as a result of vandalism, riots, civil disorders, sabotage, terrorist activities or criminal acts, such as arson.</p>

Exemption Number	Exemption Condition Description
	Amplification: This exemption applies to off-duty deaths or injuries.
18	Adverse bodily reactions resulting directly from the use of drugs under the direction of competent medical authority.
19	Death or injury resulting directly from the illegal use of drugs or other substance abuse.  Amplification: Exemption does not apply to fatalities or injuries due to alcohol use or prescription drug use. An event involving an on- or off-duty fatality (excluding suicide) or injury (excluding attempted suicide), that resulted from the use of alcohol, prescription drug or other substance being suspected as the sole contributing factor is not exempt. Additionally, unintentional alcohol or prescription drug overdose, etc., regardless of age or potential disciplinary actions is also not exempt.
20	Normal residual damage as a result of a missile launch.
21	Contractor mishaps in which the contractor employee is not under the direct supervision of DoD personnel.
22	Fatality, injury or illness of a military animal.  Notes: A military animal is an animal owned by the DoD <u>for use in support of military operations</u> . Examples include military working dogs, horses, bottlenose dolphins and sea lions. It does not include service animals used for medical-related activities. SECNAVINST 3900.41H, OPNAVINST 5585.3B / MCO 5585.6 and other DoD Component directives cover military animal related mishaps.

Table 2-4. DoD and DON Mishap Reporting Exemptions

209. Step 3. Determine the Mishap Category and Subcategory. Use tables 2-5 through 2-8 to determine the mishap category and sub-categories. If the mishap has more than one category, identify the principal category.

a. Weapons Mishap Category and Subcategories.

Weapons Mishaps Involving Explosives, Small Arms, Guided Missiles or Directed Energy	
Subcategory	Subcategory Characteristics
Explosives	A mishap resulting in damage or injury from an explosion or functioning of explosive materials or devices (except as a result of enemy action); inadvertent actuation, jettisoning and releasing or launching of explosive devices; and impacts of ordnance off-range.



Weapons Mishaps Involving Explosives, Small Arms, Guided Missiles or Directed Energy	
Subcategory	Subcategory Characteristics
	<p>Note: Includes mishaps where the ordnance system worked as designed and human error contributed to the mishap.</p> <p>A mishap in which explosives are present, even if there is no explosion.</p> <p>Note: Explosives present at the site of a mishap must have had direct involvement with the occurrence for this characteristic to be relevant; the proximity of explosives at a mishap site, by itself, does not qualify as a characteristic for this subcategory.</p>
Small Arms	<p>A mishap resulting from the use of small arms.</p> <p>Note: Includes mishaps involving negligent discharges and off-range ordnance impacts at small arm ranges where ricochets cause bullets to impact outside surface danger zones.</p>
Guided Missiles	<p>A mishap that:</p> <ul style="list-style-type: none"> <li>•Involves guided missiles or missile support equipment or</li> <li>•Includes missiles that are damaged or destroyed after launch from an aircraft where there is no aircraft damage.</li> </ul>
Directed Energy	<p>A mishap involving directed energy:</p> <ul style="list-style-type: none"> <li>•Applying directed energy primarily as a weapon to damage, disrupt, disable or destroy enemy resources. Directed energy weapons include, but are not limited to high-power lasers and microwave systems and sonic and ultrasonic beam weapon systems.</li> <li>•Applying electromagnetic radiation primarily for purposes other than as a weapon.</li> </ul>

Table 2-5. Weapons Mishaps Involving Explosives, Small Arms, Guided Missiles or Directed Energy

b. Space Mishap Category and Subcategories. Space mishap categories and subcategories are defined in DoDI 6055.07 of 6 June 2011, but omitted from this manual.

c. Motor Vehicle Mishap Category and Subcategories.

Motor Vehicle Mishaps Involving the Operations of a Motor Vehicle	
Subcategory	Subcategory Characteristics
Government Motor Vehicle (GMV)	<p>A mishap involving a motor vehicle that is:</p> <ul style="list-style-type: none"> <li>•Owned, leased or rented by a DoD Component (not individuals).</li> <li>•Primarily designed for over-the-road operations.</li> <li>•For the general purpose of the transportation of cargo or personnel.</li> </ul>

Motor Vehicle Mishaps Involving the Operations of a Motor Vehicle	
Subcategory	Subcategory Characteristics
	Notes: Examples of GMVs are passenger cars, station wagons, vans, ambulances, buses, motorcycles, trucks and tractor-trailer trucks. Vehicles on receipt to and operated by, non-DoD persons or agencies and activities such as the U.S. Postal Service or the American Red Cross are not GMVs.
Government Vehicle, Other (GVO)	A mishap involving a vehicle that is owned, leased or rented by a DoD Component (not individuals) designed primarily for off-the-highway operation such as: <ul style="list-style-type: none"> <li>•Construction tracked vehicles.</li> <li>•Powered industrial trucks (e.g., fork lifts).</li> <li>•Road graders.</li> <li>•Agricultural-type wheeled tractors.</li> <li>•Aircraft tugs.</li> <li>•All-terrain vehicles, utility terrain vehicles, <u>dune buggies, off-road motorcycles, golf carts and snowmobiles.</u></li> <li>•Military combat and tactical vehicles (e.g., tanks, self-propelled weapons, armored personnel carriers, amphibious vehicles ashore and high-mobility multipurpose wheeled vehicles).</li> </ul>
Private Motor Vehicle (PMV)	A motor vehicle mishap, regardless of the identity of the operator that does not involve a GMV or GVO.

Table 2-6. Motor Vehicle Mishaps Involving the Operations of a Motor Vehicle

d. Ground Mishap Category and Subcategories.

Ground Mishaps Occurring on Land and Involving Department of Defense Operations*	
Subcategory	Subcategory Characteristics
Industrial and Occupational	A ground mishap involving operations similar to those performed in private industry. Includes, but is not limited to, equipment maintenance, facility construction and maintenance, health care provision, laboratory research and administrative and clerical tasks.
Sports, Recreation, and Individual Fitness	A mishap associated with an activity that: <ul style="list-style-type: none"> <li>•Requires physical exertion and skill that is governed by a set of rules or customs and is often undertaken competitively.</li> <li>•Refreshes one’s mind or body through activity that amuses or stimulates.</li> <li>•Involves the activity of exerting muscles in various ways to keep fit through the performance of exercise. This includes all fitness activities that do not meet the criteria for command-directed or organized fitness programs.</li> </ul>

Ground Mishaps Occurring on Land and Involving Department of Defense Operations*	
Subcategory	Subcategory Characteristics
Combat Support and Training	A mishap associated with a non-combat military exercise or training activity designed to develop a military member's physical ability, maintain or increase individual or collective combat and peacekeeping skills and is due to either a mishap or the result of natural causes when the medical event occurs during or within one hour after any training activity where the exercise or activity could be a contributing factor. This includes all training activities that do not meet the definition or are not included as values in sports, recreation and individual fitness.
Miscellaneous	A ground mishap not assigned to another subcategory.
*See Glossary for detailed definition of ground mishaps.	

Table 2-7. Ground Mishaps Occurring on Land and Involving DoD Operations

e. Afloat Mishap Category and Subcategories.

Afloat Mishaps Resulting from or During the Operation of a DoD Vessel, Including DoD Diving or Swimmer Operations*	
Subcategory	Subcategory Characteristics
Industrial and Occupational	<p>A mishap occurring:</p> <ul style="list-style-type: none"> <li>•Aboard a vessel involving operations similar to those performed in private industry (e.g., boiler maintenance).</li> <li>• Includes, but is not limited to, equipment maintenance, facility construction and maintenance, health care provision, laboratory research and administrative and clerical tasks.</li> </ul> <p>Note: A mishap occurring aboard a vessel that results from shipyard, repair facility or private contractor operations is a ground (i.e., industrial) mishap.</p>
Sports, Recreation and Individual Fitness	<p>A mishap associated with an activity that:</p> <ul style="list-style-type: none"> <li>•Requires physical exertion and skill that is governed by a set of rules or customs and is often undertaken competitively.</li> <li>•Refreshes one's mind or body through activity that amuses or stimulates.</li> <li>•Involves the activity of exerting muscles in various ways to keep fit through the performance of exercise. This includes all fitness activities that do not meet the criteria for command-directed or organized fitness programs.</li> </ul>
Combat Support and Training	A mishap associated with a non-combat military exercise or training activity designed to develop a military member's physical ability, maintain or increase individual or collective combat and peacekeeping skills and is due to either a mishap or the result of natural causes when the medical event occurs during or within 1 hour after any training activity where the exercise or activity could be a contributing factor. This includes all training activities that do not meet

Afloat Mishaps Resulting from or During the Operation of a DoD Vessel, Including DoD Diving or Swimmer Operations*	
Subcategory	Subcategory Characteristics
	the definition or are not included as values in sports, recreation and individual fitness.
Miscellaneous	An afloat mishap not assigned to another subcategory.
*See Glossary for detailed definition of afloat mishaps.	

Table 2-8. Afloat Mishaps Resulting from or During the Operation of a DoD Vessel, Including DoD Diving or Swimmer Operations

f. Exposure to Chemical Agents. Military munitions containing chemical agents are not in the U.S. Navy and U.S. Marine Corps inventory; however, personnel could be injured if exposed to old chemical agents accidentally during either recovery or clean-up operations. In the unlikely event that this occurs, refer to DoDI 6055.07 of 6 June 2011 to determine the correct mishap category, DoD special reporting requirements and notification requirements.

210. Step 4a. Determine the Estimated Mishap Cost.

Note: The process outlined here will be used both to determine initial estimated costs and to finalize mishaps costs during the mishap investigation process.

a. The total cost of an event is determined by adding all actual or estimated costs. For initial estimates, include costs that are both known and reasonably available. Actual costs are preferred, if known. When determining final mishap costs, use actual costs.

b. Calculated personnel costs resulting from fatalities, injuries and illnesses (i.e., to include disabilities) must not be used to determine a mishap class. However, unplanned military and civilian labor costs will be used to determine a mishap class.

Note: Calculated personnel costs resulting from fatalities, injuries and illnesses will be collected when applicable but will only be used for internal DoD analysis, not for mishap class determination.

c. Cost estimates are prepared solely for safety purposes. They are not intended to reflect, in any way, the extent of any party's damages or liability for purposes of administrative claims or litigation. Therefore, when prepared in written form, all cost estimates must conspicuously state: "This estimate is prepared solely for safety purposes. It is not intended to reflect, in any way, the extent of any party's damages or liability for purposes of administrative claims or litigation."

d. When damage occurs to Navy or Marine Corps property as a result of non-U.S. Government (i.e., contractor or private citizen) activities, any damage to non-U.S. Government property is not considered in determining costs. For example, a parked Navy van is damaged, while off base, by a light pole knocked over by a private vehicle. Only the Navy van damage costs would be considered.

e. Property damage cost information, including estimates, will be provided by the activity experiencing the loss.

f. Use table 2-9 to determine mishap costs. Additional amplification on determining mishap property costs is provided subparagraph 210g and in The Navy and Marine Corps Safety Investigations and Reporting Guide.

Cost Category	Cost Subcategory
Personnel	<p>Labor</p> <p>Notes: Includes any unplanned labor costs (military or civilian personnel) incurred due to a non-personnel mishap. It <u>does not include</u> the labor cost of the resulting personnel fatality, injury or illness. Includes the cost of man-hours spent to remove undamaged parts to gain access to those that are damaged. Does not include the man-hours spent removing or disassembling undamaged parts to gain access to areas where damage is suspected unless damage is found. Includes man-hours spent in anticorrosive work following salt water immersion, as the result of the mishap. Does not include those man-hours spent setting up or staging support equipment in preparation for the repair effort.</p>
Property (DoD and non-DoD)	<p>Repair (when property is damaged due to a mishap, <u>to the extent that it must be repaired</u>).</p> <p>Notes: Includes components <u>damaged to the extent they must be returned to a repair facility</u>. Does not include the costs to rent commercial equipment or space to perform repair work.</p>
	<p>Replacement (when property is lost or destroyed due to a mishap <u>and will be replaced</u>).</p> <p>Note: Includes components (including engines or engine modules) <u>damaged beyond economical repair</u>.</p>
	<p>Acquisition (when property is lost or destroyed due to a mishap <u>and will not be replaced</u>)</p>

Cost Category	Cost Subcategory
	<p><b>Parts Cannibalization</b></p> <p>Note: Only include costs associated with the removal of a part from an asset due to a mishap, which is then installed into another asset and the losing asset then has to replace that same part.</p> <hr/> <p><b>Fuel Consumption or Loss</b></p> <p>Notes: Includes fuel consumed or lost by vessels, vehicles or aircraft due to a mishap (e.g., search and rescue operations, recovery operations, salvage operations, construction, demolition, remediation, spills, leaks, etc.). Does not include intentionally jettisoned fuel or further DoD fuel loss resulting from rescue or salvage.</p> <hr/> <p><b>Cargo, Stores or Materiel Loss</b></p> <p>Notes: Includes unintentional loss of cargo, stores and materiel due to a mishap. Does not include intentionally jettisoned items or further DoD property damage resulting from rescue or salvage.</p> <hr/> <p><b>Decontamination</b></p> <p>Note: Includes consumable materials used for decontamination (e.g., absorbents, filters, cleansers, etc.) of property due to a mishap.</p> <hr/> <p><b>Environmental Remediation</b></p> <p>Note: Includes the removal of pollution or contaminants from environmental media (i.e., soil, ground water, sediment or surface water) due to a mishap.</p>
Miscellaneous	<p><b>Production Loss</b></p> <p>Note: Includes any unplanned production downtime due to a mishap.</p> <hr/> <p><b>Compensation for Damage or Loss</b></p> <p>Note: Includes a monetary or non-monetary payment made to a claimant or giving something of equivalent value, in order to compensate that claimant for damages or loss due to a mishap.</p> <hr/> <p><b>Restitution</b></p>

Cost Category	Cost Subcategory
	Notes: Includes restoring something to its former or original state or returning something to its lawful owner due to a mishap. Restitution does not focus on a claimant's losses.

Table 2-9. Mishap Cost Determination

g. Mishap property cost determination. Use the guidance in subparagraphs 210g(1) through 210g(10) to determine the total costs of damage to DoD property and non-DoD property as a result of a mishap.

(1) Calculate the total property cost of a mishap by adding all of the costs associated with one or more relevant cost subcategories listed in table 2-9.

(2) Do not include the costs in subparagraphs 210g(2)(a) or 210g(2)(b) when calculating the cost of a mishap:

- (a) Any further DoD property damage or fuel loss resulting from rescue or salvage.
- (b) The cost of intentionally jettisoned items.

(3) Computing the direct cost of damage to DoD or non-DoD property. Use the actual cost of repair or replacement (including work hours for repair) or the best official estimate available. When multiple plausible total cost estimates are available, use the estimate most likely to represent the actual mishap cost to the government.

(4) When components are damaged to the extent they must be sent to a repair facility, the cost of damage must be reported as the actual cost for repairs, if such figures are available.

(5) If actual repair costs cannot be determined:

- (a) Use the established standard repair costs of the repair facility, if available or
- (b) Use the standard repair costs disseminated by NAVSAFECEN, if available or
- (c) If neither of the repair costs figures in subparagraphs 210g(5)(a) and 210g(5)(b) are available, the reported cost for repair will be computed at 15 percent of the initial unit cost.

(6) For components, including engines or engine modules that are damaged beyond economical repair use the replacement cost, not the initial cost. The man-hours required to remove and replace the engines or engine modules must also be included.

(7) Include in the cost the man-hours spent to remove undamaged parts to gain access to those that are damaged. Do not include man-hours spent removing or disassembling undamaged parts to gain access to areas where damage is suspected unless damage is found.

(8) Include man-hours spent in anticorrosive work following salt water immersion, as the result of the mishap.

(9) Do not include those man-hours spent setting up or staging support equipment in preparation for the repair effort.

(10) Do not include the costs to rent commercial equipment or space to perform repair work.

211. Step 4b. Determine the Estimated Personnel Illness or Injury Category. The definitions in subparagraphs 211a through 211k, available both here and in the glossary, will assist in making an estimated personnel illness or injury determination that may be needed in Step 5.

a. Fatality. A death resulting from a mishap or work-related injury or illness.

b. First Aid. First aid means doing any of the actions in subparagraphs 211b(1) through 211b(14).

(1) Using a non-prescription medication at nonprescription strength (for medications available in both prescription and non-prescription form, a recommendation by a physician or other licensed health care professional to use a non-prescription medication at prescription strength is considered medical treatment for record keeping purposes);

(2) Administering tetanus immunizations (other immunizations, such as hepatitis B vaccine or rabies vaccine, are considered medical treatment);

(3) Cleaning, flushing or soaking wounds on the surface of the skin;

(4) Using wound coverings, such as bandages, Band-Aids™, gauze pads, etc.; or using butterfly bandages or Steri-Strips™ (other wound closing devices such as sutures, staples, etc., are considered medical treatment);

(5) Using hot or cold therapy;

(6) Using any non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. (devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for record keeping purposes);



- (7) Using temporary immobilization devices while transporting an accident victim (e.g., splints, slings, neck collars, back boards, etc.);
- (8) Drilling of a fingernail or toenail to relieve pressure or draining fluid from a blister;
- (9) Using eye patches;
- (10) Removing foreign bodies from the eye using only irrigation or a cotton swab;
- (11) Removing splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means;
- (12) Using finger guards;
- (13) Using massages (physical therapy or chiropractic treatment are considered medical treatment for record keeping purposes); or
- (14) Drinking fluids for relief of heat stress.

c. Hospitalization. The admission of personnel to a hospital or shipboard medical facility on an in-patient basis.

d. Illness and Disease. A non-traumatic physiological harm or loss of capacity produced by systemic; continued or repeated stress or strain; exposure to hazardous noise, toxins, poisons, fumes, etc. or other continued and repeated exposures to conditions of the environment over a long period of time. For practical purposes, an occupational (i.e., work-related) illness or disease are any reported condition that does not meet the definition of injury. Illness includes both acute (i.e., extremely severe, short-term and dangerous) and chronic illnesses (i.e., present over a long period of time, recurring, cumulative effects or habitual), such as, but not limited to, noise-induced hearing loss, a skin disease or disorder, respiratory conditions or poisoning. Illnesses include:

(1) Skin Diseases or Disorders. Illnesses involving a worker's skin that are caused by work exposure to chemicals, plants or other substances. Examples: Contact dermatitis, eczema or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; and inflammation of the skin.

(2) Respiratory Conditions. Illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors or fumes at work. Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer's lung, beryllium disease, tuberculosis, occupational (i.e., work-related) asthma, reactive airways dysfunction syndrome, chronic obstructive pulmonary disease, hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis and other pneumoconioses.

(3) **Poisoning.** Disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids or the breath that are caused by the ingestion or absorption of toxic substances into the body. Examples: Poisoning by lead, mercury, cadmium, arsenic or other metals; chemical asphyxiation by carbon monoxide, hydrogen sulfide or other gases; poisoning by benzene, benzol, carbon tetrachloride or other organic solvents; poisoning by insecticide sprays, such as parathion or lead arsenate; and poisoning by other chemicals, such as formaldehyde.

(4) **Noise-Induced Hearing Loss.** A change in hearing threshold relative to the baseline audiogram of an average of 10 decibels (dB) or more in either ear at 2000, 3000 and 4000 hertz (Hz) and the employee's total hearing level is 25 dB or more above audiometric zero (also averaged at 2000, 3000 and 4000 Hz) in the same ear(s).

Note: Hearing losses from either a punctured eardrum or an acoustic trauma from a one-time blast or over-pressure are injuries, not illnesses.

(5) **All Other Occupational Illnesses.** All other occupational (i.e., work-related) illnesses. Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (e.g., isotopes, X-rays, radium); effects of nonionizing radiation (e.g., welding flash, ultraviolet rays, lasers); anthrax; bloodborne pathogenic diseases, such as acquired immune deficiency syndrome (AIDS), human immunodeficiency virus (HIV), hepatitis B or C; brucellosis; malignant or benign tumors; histoplasmosis; and coccidioidomycosis.

e. **Injury.** A traumatic wound or other condition of the body caused by external force or deprivation (e.g., fractures, lacerations, sprains, dislocations, concussions, compressions, drowning, suffocation, simple asphyxiation, punctured eardrum and acoustic trauma from a one-time blast or over-pressure), including stress or strain, which results from an unplanned event. The injury is identifiable as to the time and place of occurrence and member or function of the body affected and is caused by a specific event or series of events in a single day or work shift.

f. **Light Duty.** Applicable only to military personnel. The civilian equivalent of light duty is restricted work activity or job transfer. A duty status recommended after treatment of an injury that stipulates exactly the limitations on a military member during the recommended period, equivalent to placing a civilian in a restricted work status. When an injury or work-related illness results in light-duty days, assigned light duty days are not counted as lost workdays. On light duty, the military member normally remains at their original duty station but is gainfully employed even though not performing their normal duties.

g. **Limited Duty.** Applicable only to military personnel. The civilian equivalent of limited duty is restricted work activity or job transfer. A military duty status formally assigned as a result of a medical board. Time spent on limited duty is not chargeable as lost time regardless of

the cause for assignment to limited duty. Under limited duty, the military member may be reassigned from their permanent duty station to a temporary duty station until the medical issue is resolved.

h. **Medical Treatment.** The management and care of a patient to combat disease or disorder. For the purposes of this manual, medical treatment does not include the actions in subparagraphs 211h(1) through 211h(3).

(1) Visits to a physician, other licensed health care professional or an independent duty corpsman solely for observation or counseling;

(2) The conduct of diagnostic procedures, such as X-rays and blood tests, including the administration of prescription medications used solely for diagnostic purposes (e.g., eye drops to dilate pupils); or

(3) Administering “first aid,” as defined in this glossary. Medical treatment does not include first aid treatment even though provided by a physician or other licensed health care professional.

i. **Permanent Partial Disability.** An injury or work-related illness that does not result in death or permanent total disability, but, in the opinion of competent medical authority, results in permanent impairment through loss of the use of any part of the body with the following exceptions: teeth, fingernails, toe nails, tips of fingers or tips of toes without bone involvement, repairable hernia, disfigurement or sprains or strains that do not cause permanent loss of motion.

Note: OSHA’s definition of “amputation” for civilian personnel includes fingertip amputations with or without bone loss, medical amputations resulting from irreparable damage and amputations of body parts that have since been reattached.

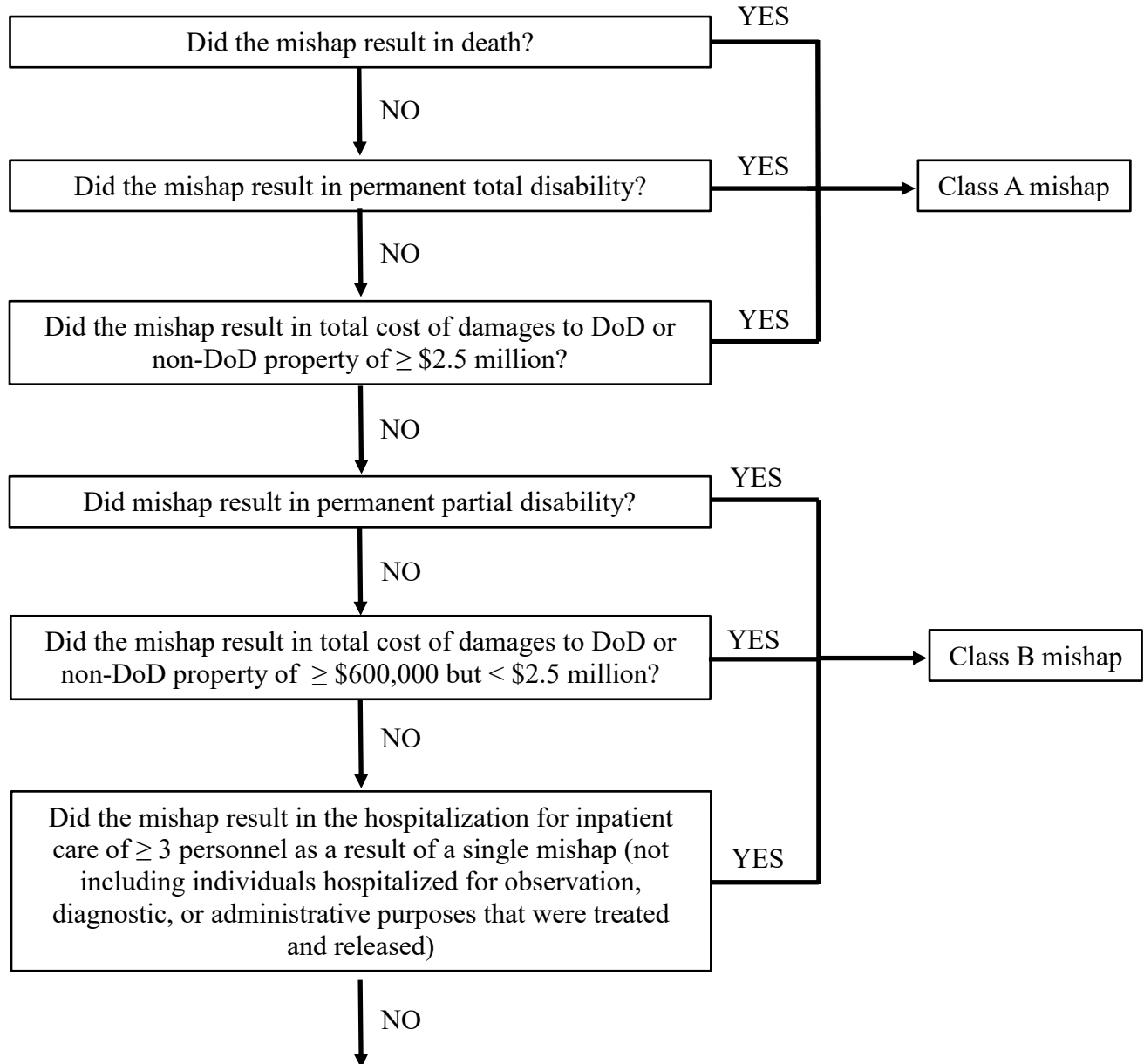
j. **Permanent Total Disability.** A non-fatal injury or work-related illness, in the opinion of competent medical authority, permanently and totally incapacitates a person to the extent that he or she cannot follow any gainful occupation.

Note: The loss or loss of use, of both hands, both feet, both eyes or a combination of any of these parts of the body as a result of a single mishap, must be considered as a permanent total disability.

k. **Restricted Work Activity or Job Transfer.** Applicable only to civilian personnel. Restricted work activity or temporary transfer from that work occurs when, as a result of a work-related injury or illness, a supervisor or health care professional keeps or recommends keeping, a civilian employee from doing the routine functions of his or her job or from working the full work day or full work shift that the employee would have been scheduled to work before the

injury or illness occurred. The employee has not lost work time, but is restricted from routine functions. The military equivalent of restricted work is either light duty or limited duty.

212. Step 5. Determine a DON Mishap Class. Use figure 2-2 to assign a DON mishap class.



(Figure 2-2 continued on the next page)

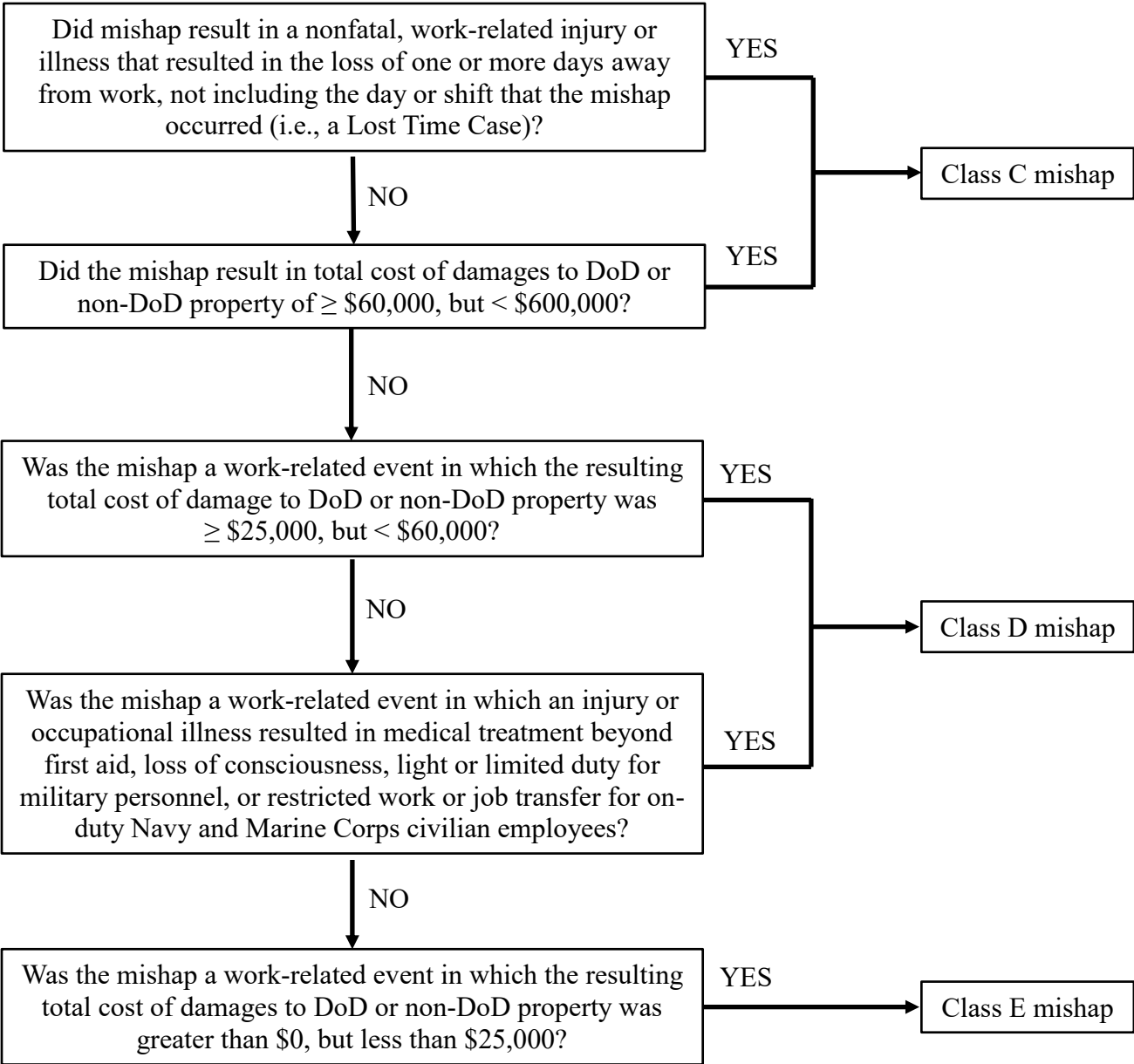


Figure 2-2. Assigning a DON Mishap Class

Notes: Class E mishap reporting is only a DON requirement under certain specific circumstances that are explained in this manual or when a controlling command directs its subordinates to report Class E mishaps. Controlling commands must put such a requirement in writing.

213. Step 6. Determine Whether the Mishap is in a DoD Special Reporting Group. Use table 2-10 to determine if the mishap falls into a DoD special reporting group. DoD special reporting groups will help you determine who must be notified. Notification requirements are in chapter 3.

DoD Special Reporting Group*	Characteristics of DoD Special Reporting Group
Serious	A Class A mishap; OR A Class B mishap resulting in inpatient hospitalization of three or more personnel.
Civilian Catastrophic	A mishap involving a civilian fatality; OR A mishap resulting in inpatient hospitalization of three or more personnel where at least one is a civilian.
Mishap with Fatality	A mishap associated with death.
Explosives	A Class A, B, C or D mishap resulting in damage or injury from: <ul style="list-style-type: none"> <li>•An explosion or functioning of explosive materials or devices (except as a result of enemy action);</li> <li>•Inadvertent actuation, jettisoning and releasing or launching explosive devices;</li> </ul> or <ul style="list-style-type: none"> <li>•Impacts of ordnance off-range.</li> </ul> OR A mishap in which explosives are present, even if there is no explosion.  Note: Explosives present at the site of a mishap must have had direct involvement with the occurrence for this characteristic to be relevant; the proximity of explosives at a mishap site, by itself, does not qualify as a characteristic for this subcategory.
Serious Explosives	A serious mishap AND an explosives mishap. OR An explosives mishap including: <ul style="list-style-type: none"> <li>•DoD military, civilian or contractor fatality;</li> <li>•Greater than \$600,000 property damage;</li> <li>•Greater than 72 hours lost production;</li> <li>•Major weapons system loss (tank, aircraft, ship or large missile); or</li> <li>•Probable high public interest.</li> </ul>
Friendly Fire	Friendly fire incidents

DoD Special Reporting Group*	Characteristics of DoD Special Reporting Group
*A mishap may be included in more than one DoD Special Reporting Group.	

Table 2-10. DoD Special Reporting Groups

214. Step 7. Notify Appropriate Officials Based on Mishap Class, Category, DoD Special Reporting Group and Amplifying Instructions. Using the information from step 6, follow the notification requirements provided in chapter 3.

215. Step 8. Investigate the Mishap. Investigate the mishap using the guidelines provided in chapter 4.

216. Step 9. Report the Mishap. Prepare and submit the SIREP using the guidelines provided in chapter 4. SIREPs must be submitted in the RMI within 30 calendar days of the mishap for SIO investigations or 30 calendar days of convening for SIB investigations.

217. Step 10. Enter Required Information into the RMI for OSHA Recordable Events Involving Civilian Personnel.

a. The OSHA is only concerned with events involving work-related fatalities, injuries or illnesses of on-duty Navy or Marine Corps civilian personnel. All work-related fatalities, injuries or illnesses of military personnel, regardless if they are on- or off-duty, are not OSHA recordable. Lastly, the OSHA is not concerned with events involving only property damage.

b. Enter the required information in RMI for each OSHA recordable event so that an OSHA 301 Injury and Illness Incident Report and OSHA 300 can be generated. If the user cannot access RMI, manually fill out OSHA 300 and OSHA 301 or an equivalent form as a temporary measure until RMI access is reestablished. See Appendix D for details about obtaining copies of the OSHA forms. Paragraphs 217b(1) and 217b(2) provide a brief description of each form.

(1) OSHA 300 is a tabulation of work-related injuries and illnesses for civilians assigned to that establishment. See paragraph 705 for additional details.

(2) OSHA 301 is used to document the details of each recordable event. See paragraph 706 for additional details.

c. Paragraphs 217b(1) through 217b(15) list all fifteen of the OSHA’s record keeping requirements for recordable events involving new cases (i.e., not a reoccurrence of an existing one) of work-related civilian personnel fatalities, injuries or illnesses:

- (1) Death;
  - (2) Loss of consciousness;
  - (3) Days away from work;
  - (4) Restricted work activity;
  - (5) Job transfer;
  - (6) Medical treatment beyond first aid;
  - (7) Significant injury or illness that was diagnosed by a physician or other licensed health care professional;
  - (8) Cancer;
  - (9) Chronic irreversible disease;
  - (10) Fractured or cracked bone;
  - (11) Punctured eardrum;
  - (12) Needlestick injury or cut from sharp objects that are contaminated with another person's blood or other potentially infectious material;
- Note: "Sharps" refers to medical sharps such as scalpels, blades, disposable scissors, suture equipment, stylets and trocars, broken test tubes and glass.
- (13) Any case requiring an employee to be medically removed under the requirements of an OSHA health standard (e.g., asbestos, beryllium, bloodborne pathogens, chromium (VI), formaldehyde, ionizing radiation, lead, etc.);
  - (14) Tuberculosis infection as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional after exposure to a known case of active tuberculosis; or
  - (15) An employee's hearing test (i.e., audiogram) reveals that the employee has experienced a standard threshold shift (STS) in hearing in one or both ears (i.e., averaged at 2000, 3000 and 4000 hertz); and the employee's total hearing level is 25 dB or more above audiometric zero (i.e., also averaged at 2000, 3000 and 4000 hertz) in the same ear(s) as the STS.



218.Step 11. Determine if an Event Not Classified as a Mishap Still Requires a Mandatory Safety Report. Some events may not meet Class A through D mishap investigation and reporting thresholds, but require a mandatory safety report. The events in subparagraphs 218a through 218l are typically investigated and reported as either Class E mishaps, HAZREPs, incidents or reported by OPREP-3 message. These events are also included in the tables in chapter appendices 2-A through 2-E.

a. Afloat Cases of Groundings, Collisions and Allisions Not Meeting Class A through D Mishap Criteria. These must be investigated and reported. Investigate and report as a Class E mishap. See definitions of “collision” and “allision” in the glossary.

b. Afloat Cases of Flooding Not Meeting Class A through D Mishap Criteria. Flooding is defined as the intrusion of any fluid (e.g., water, fuel or sewage) into a compartment caused by a misalignment, negligence, failure to follow operating procedures, component failure or overflow caused by an unplanned event that causes the implementation of emergency flooding action. Investigate and report as a Class E mishap.

c. Diving Hazard, Including Near Miss Not Meeting Class A through D Mishap Criteria. These include, but are not limited to execution of emergency plan (e.g., unplanned shifting to secondary air, aborted dive due to unexpected issue or event, fouling and lost diver); exceeding any prescribed limits regardless of the consequences (e.g., unplanned exceptional exposure dives, maximum depth, bottom time, omitted decompression and oxygen exposures above allowed pulmonary oxygen limits); any out-of-specification condition discovered after equipment and systems are prepared for use (e.g., carbon dioxide (CO<sub>2</sub>) canister installed or filled improperly, CO<sub>2</sub> canister not installed, exhaust valves installed improperly and system aligned improperly); and any external systems, equipment and conditions that may adversely affect or impair diver safety (e.g., ship's equipment operated or tags cleared without proper authorization before, during or after divers enter the water; unauthorized cranes operated overhead of divers; small boat operations conducted over or in the vicinity of divers; and unauthorized discharges while divers are in the water). Investigate and report as either a Class E mishap or HAZREP, as appropriate.

d. Electrical Shock (i.e., with no reportable injury). Investigate and report as a HAZREP.

e. Fall from Height (i.e., with no reportable injury). Any on-duty ashore fall from height of four feet or greater, any on-duty afloat or shipyard operations fall from height of five feet or greater, any on-duty vessel long shoring (i.e., cargo operations) fall from height of eight feet or greater, any impact or activation of fall arrest equipment or any failure of in-use fall protection equipment. Investigate and report as a HAZREP.

f. Fires Not Meeting Class A through D Mishap Criteria (i.e., but do meet the criteria in subparagraphs 218f(1) and 218f(2)). Investigate and report as either a Class E mishap or HAZREP, as appropriate. See definition of “Fire, Reportable” in the glossary.

(1) Reportable fires are any unintentional fires occurring on any naval installation (i.e., includes shipyards and industrial operations), ship or submarine to include small fires in which no personnel were injured and the material property damage was limited to the originally ignited materiel and not propagated to other materials. Evidence of previously unreported combustion or explosion must also be reported upon discovery. Reports solely based on acrid odor (i.e., no evidence of combustion upon inspection) are not required.

(2) Materiel damage of mechanical or structural systems. Fiscal thresholds for reporting based on replacement or repair costs that is caused solely by an overheat condition (e.g., materiel warping, discoloration, etc.) must be reported as a materiel failure mishap. Overheat conditions are where materiel destruction is solely due to high temperature and there is no evidence of self-sustained combustion. Electrical or electronic overheat conditions where there is evidence of combustion must be reported as a fire.

g. Helicopter Rope Suspension Technique (HRST), Air-Cargo Drop and Parachuting (i.e., with no reportable injury). Incidents, malfunctions and cut-aways, regardless of extent of injuries. Include any action or event preventing an airdrop item from functioning as it was intended or designed; any malfunctions where the failure of an airdrop item to function as it was intended or designed. Investigate and report as a Class E mishap if there was any injury or damage below the Class D mishap threshold or a HAZREP if there was no injury or damage.

h. Man Overboard (recovered). On-duty man overboard events. Investigate and report as either a Class E mishap or HAZREP, as appropriate.

i. Negligent Discharge of Weapon (i.e., with no reportable injury). On-duty or off-duty unintentional firing of a weapon for any reason, including mechanical failure, equipment malfunction or human error. Marine Corps commands must report as a Class E mishap. If the event does not meet mishap reporting thresholds, Navy commands must report by OPREP-3 message.

j. Tactical vehicle roll overs without injury when vehicle was being driven within the scope of normal operation. Investigate and report as a HAZREP.

k. Workplace Violence. See chapter appendices 2-A and 2-B for more information. If the event is below Class D mishap thresholds, report as an incident.

l. Explosive mishaps. Investigate and report explosive mishaps without injury as a Class E mishap. An explosion or functioning of explosive materials or devices (except as a result of enemy action); inadvertent actuation, jettisoning and release or launching explosive devices; or impacts of ordnance off-range.

Note: Includes mishaps where the ordnance system worked as designed and human error contributed to the mishap; live fire; inadvertent launch of a weapon; negligent discharges of all

guns, including small arms, marine location markers, flares, et cetera; and off-range ordnance impacts including all small arm ranges where ricochets cause bullets to impact outside surface danger zones.

Note: Hazard investigation and reporting, including investigation and reporting of near misses, is an essential component of a comprehensive mishap prevention program. The list of events in subparagraphs 218a through 218l that requires a mandatory safety report must not be construed as the exhaustive list of events that should be investigated and reported as a HAZREP.

APPENDIX 2-A  
MILITARY PERSONNEL  
EVENT REPORTABILITY AND RECORDABILITY CRITERIA

1. Applicability. Events where at least one of the involved personnel is a military member assigned to the U.S. Navy or U.S. Marine Corps.

Note: The definition of military personnel is provided in both chapter 2, subparagraph 207e and the glossary.

2. Special Instructions. Events may involve more than one type of mishap. If more than one type applies, then use the most severe one for classification purposes. Be sure to consult each of the applicable chapter 2 appendices for the criteria for all event types that may be applicable.

a. This chapter has separate appendices for reportable and recordable event criteria involving Military Personnel (Appendix 2-A), Civilian Personnel (Appendix 2-B), Contractors (Appendix 2-C), Non-Department of the Navy (DON) Civilians (Appendix 2-D) and Materiel and Property Damage (Appendix 2-E). As such, users should consult each of the various chapter 2 appendices on reportable and recordable criteria for other possible event types that may be applicable.

b. If an event occurs and that same event involves either on-duty civilian personnel and off-duty military personnel or on- and off-duty military personnel, then that event will be categorized as being on-duty.

c. If an event type or event circumstance is not listed in the table, refer to the detailed guidance provided in chapter 2.

3. How to Determine if an Event is Reportable or Recordable. Enter table 2-A-1 based upon the one or more applicable event type(s) involving military personnel. The notes in some event descriptions provide examples, important clarifications, exceptions, etc. The columns indicate whether the event is DON reportable and whether it is Occupational Safety and Health Administration (OSHA) recordable.

Note: Only events that involve a civilian on-duty injury or illness are OSHA recordable.

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Act of God (i.e., Natural Phenomenon) Injury	<p>On- or off-duty injury that resulted from an act of God (i.e., natural phenomenon) <u>and</u> adequate preparation, forecasting or communication actions <u>were not</u> taken.</p> <p>Notes: Examples include earthquakes, tornadoes, hurricanes, violent winds, extraordinarily high tides, mud slides, floods, etc.</p> <p>In order to determine if adequate actions <u>were not</u> taken, an investigation must be initiated.</p>	Yes	No
	<p>On- or off-duty injury that resulted from an act of God (i.e., natural phenomenon) <u>and</u> adequate preparation, forecasting or communication actions <u>were</u> taken.</p> <p>Notes: Examples include earthquakes, tornadoes, hurricanes, violent winds, extraordinarily high tides, mud slides, floods, etc.</p> <p>In order to determine if adequate actions <u>were</u> taken, an investigation must be initiated.</p>	No	No
Alcohol or Prescription Drug Use Fatality or Injury	<p>On- or off-duty fatality (<u>excluding suicide</u>) or injury (<u>excluding attempted suicide</u>), where a safety investigation determined that the use of alcohol, prescription drug or other substance was suspected as the <u>sole</u> contributing factor.</p> <p>Note: Includes unintentional alcohol or prescription drug overdose, etc., <u>regardless of age or potential disciplinary actions.</u></p>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Bloodborne Pathogenic Disease	Work-related* illness that involved a bloodborne pathogenic disease.  Notes: A “Privacy Concern Case.” Includes AIDS, HIV, hepatitis B or hepatitis C.	Yes	No
Chemical Agent Fatality, Injury or Illness	Class A, B, C or D fatality, injury or illness that involved any <u>unintentional or uncontrolled release</u> of a chemical agent where: individuals exhibit physiological symptoms of agent exposure; or the agent quantity released to the atmosphere was such that a serious potential for exposure was created by exceeding the applicable maximum allowable concentration-time levels for exposure of unprotected workers or the general population or property.	Yes	No
Cold Illness	On-duty low temperature exposure illness that required medical treatment beyond first-aid.  Note: Includes hypothermia, frostbite, chilblain and cold water immersion foot.	Yes	No
Combat Zone Injury	Injury that occurred in a combat zone <u>and</u> was the result of <u>actual or suspected case of “friendly fire.”</u>	Yes	No
	Injury that occurred in a combat zone <u>and</u> was the result of the following: <u>Direct enemy action; or, a maneuver conducted relative to hostile fire, a perceived hostile threat or a perceived hostile force.</u>	No	No
Criminal Act Fatality or Injury	Off-duty fatality, injury or illness as a result of sexual assault**, vandalism, riots, civil disorders, sabotage, terrorist activities, arson or other criminal acts.	No	No
Diving Fatality, Injury,	On-duty diving operation that resulted in a fatality; hyperbaric/ recompression	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Near Miss or Hazard	<p>treatment (i.e., for any reason); loss of consciousness; or placing military personnel in a limited duty, non-dive duty (i.e., not physically qualified) or light duty status, <u>regardless of the amount of time lost</u>, with the exception of non-repetitive diving restrictions.</p> <p>Notes: Causes of diving mishaps include, but are not limited to, thermal exposure, dehydration, altitude sickness, excessive fatigue and breath-hold diving.</p> <p>For further guidance on diving mishaps, consult OPNAVINST 3150.27C.</p>		
	<p>On-duty diving operation that resulted in a near miss or hazard.</p> <p>Notes: Includes, but not limited to execution of emergency plan (e.g., unplanned shifting to secondary air, aborted dive due to unexpected issue or event, fouling and lost diver); exceeding any prescribed limits regardless of the consequences (e.g., maximum depth, bottom time, omitted decompression and oxygen exposures above allowed pulmonary oxygen limits); any out-of-specification condition discovered after equipment and systems are prepared for use (e.g., carbon dioxide (CO2) canister installed or filled improperly, CO2 canister not installed, exhaust valves installed improperly and system aligned improperly); and any external systems, equipment and conditions that may adversely affect or impair diver safety (e.g., ship's equipment operated or tags cleared without proper authorization before, during</p>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>or after divers enter the water; unauthorized cranes operated overhead of divers; small boat operations conducted over or in the vicinity of divers; and unauthorized discharges while divers are in the water).</p> <p>For further guidance on diving near misses and hazards (including near misses), consult OPNAVINST 3150.27D.</p>		
Drug Reaction	Death or injury that resulted directly from the <u>illegal</u> use of drugs or <u>other substance abuse</u> .	No	No
Electrical Shock	<p>On-duty electrical shock from electrical or electronic equipment, regardless of voltage or current source, regardless of intensity and regardless of whether intentional or unintentional.</p> <p>Note: Does not include a shock from static electricity.</p>	Yes	No
Electronic Cigarette Injury	On- or off-duty injury that resulted from use of an electronic cigarette (i.e., e-cigarette, personal vaporizer or electronic nicotine delivery system).	Yes	No
Escaping from or Eluding Custody or Arrest Fatality or Injury	Fatality or injury in the act of escaping from or eluding military or civilian custody or arrest.	No	No
Explosives Fatality, Injury or Illness	<p>Class A, B, C or D fatality, injury or illness that resulted from: an explosion or functioning of explosive materials or devices (except as a result of enemy action); inadvertent actuation, jettisoning and release or launching explosive devices; or impacts of ordnance off-range.</p> <p>Note: Includes mishaps where the ordnance system worked as designed and</p>	Yes (Weapons Mishap)	No



Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	human error contributed to the mishap; live fire; inadvertent launch of a weapon; negligent discharges of all guns, including small arms (this includes discharge of weapon in government quarters or negligent discharges and ricochets during training on ranges), marine location markers, flares, et cetera; and off-range ordnance impacts including all small arm ranges where ricochets cause bullets to impact outside surface danger zones.		
Fall from Height	<p>On-duty <u>ashore</u> fall from height of <u>four feet or greater</u>, any deployment of fall arrest equipment or any failure of in-use fall protection equipment.</p> <p>Notes: At construction sites, workers (contractors only) must adhere to the threshold height no greater than six feet, per U.S. Army Corps of Engineers, Safety and Health Requirements Manual EM 385-1-1 and 29 CFR 1926.500, subpart M, Fall Protection in Construction Industry. When Navy and Marine Corps personnel visit construction sites to inspect contractor's work, they may comply with the six-foot threshold height because it would be infeasible to install guardrails at four foot height just for Navy and Marine Corps Personnel, when the OSHA Standards require a six-foot threshold height for construction workers.</p>	Yes	No
	On-duty <u>afloat</u> or <u>shipyard operations</u> fall from height of <u>five feet or greater</u> , any deployment of fall arrest equipment or any failure of in-use fall protection equipment.	Yes	No
	On-duty vessel <u>long shoring</u> (i.e., cargo operations) fall from height of <u>eight feet or</u>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<u>greater</u> , any deployment of fall arrest equipment or any failure of in-use fall protection equipment.		
Fatality or Permanent Total Disability	On- or off-duty injury or work-related* illness that resulted in a fatality or permanent total disability. In the case of a permanent total disability, in the opinion of a competent medical authority, the injury or work-related illness results in the permanent and total incapacitation of a person to the extent that he or she cannot follow any gainful occupation.  Note: The loss or loss of use, of both hands, both feet, both eyes or a combination of any of these parts of the body as a result of a single mishap, must be considered as a permanent total disability.	Yes	No
	On-duty fatality or permanent total disability that, in the opinion of a competent medical authority, was associated with a medical event (e.g., chest pain, heart attack, coma, etc.) that commenced <u>during or after</u> a command-sponsored physical training (PT), physical readiness test (PRT), physical fitness test (PFT) or physical fitness assessment (PFA), <u>regardless of any pre-existing medical condition</u> .	Yes	No
Government Motor Vehicle (GMV) or Government Vehicle Other (GVO) Fatality or Injury	An incident or accident where a DoD government motor vehicle (GMV) or a DoD government vehicle other (GVO) was the cause and the incident or accident resulted in a fatality or injury of DoD personnel.	Yes	No
Hearing Loss	Work-related* hearing loss <u>illness</u> that resulted in either a permanent threshold shift (PTS) or significant threshold shift	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>(STS).</p> <p>Note: If an event or exposure in the work environment either caused or contributed to the hearing loss or significantly aggravated a pre-existing hearing loss, it is work-related.</p>		
	Work-related* hearing loss <u>injury</u> that resulted from a punctured eardrum.	Yes	No
	Work-related* hearing loss <u>injury</u> that resulted from an instantaneous event (e.g., acoustic trauma from a one-time blast or over-pressure).	Yes	No
Heat Illness	<p>On- or off-duty heat-related illness that required medical treatment beyond first-aid.</p> <p>Note: Includes the entire heat-related illness spectrum of conditions from heat rash, heat cramps, heat syncope (i.e., fainting), heat exhaustion, to heat stroke.</p>	Yes	No
Helicopter Rope Suspension Technique (HRST), Air-Cargo Drop or Parachuting Injury	<p>On-duty injury or illness that involved a HRST), air-cargo drop or parachuting (to include incidents, malfunctions and cut-aways) regardless of extent of injuries.</p> <p>Notes: An <u>incident</u> is defined as “any action or event preventing an airdrop item from functioning as it was intended or designed.” Some examples of incidents include, but are not limited to: Improperly setting the automatic opening device (AOD) that resulted in a dual canopy deployment; inadvertent or premature activations; entanglements resulting in reserve parachute deployment; high flair of the canopy resulting in jumper injury; parachutist loss of consciousness during</p>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>jump sequence; failure to hook up static line to anchor line cable for container delivery system (CDS); improper rigging procedures before, during or after the airdrop equipment was loaded in the aircraft; Joint Precision Aerial Delivery System (JPADS) with improperly loaded data; misrouted static lines that resulted in a towed jumper (cutaway or retrieved); and improper lock setting resulting in a loose platform or no-drop of equipment.</p> <p>A <u>malfunction</u> is defined as “the failure of an airdrop item to function as it was intended or designed.” Some examples of malfunctions include, but are not limited to: Failure of a main canopy to properly deploy, static line breaking, parachute panel or gore blowout, cargo parachute release failure and a JPADS that lands off the drop zone for reasons other than improperly loaded data.</p>		
Formal School Training (CIN Courses) Loss, Rollback or Disenrollment	Formal school training related injury, illness or other non-administrative occurrence that resulted in the loss of one or more training days, a rollback in training or disenrollment from a course.	Yes	No
Laser or Other Non-Ionizing Radiation Exposure, Suspected or Observed	<p>On-duty illness that resulted from either suspected or observed exposure to laser, radiofrequency (RF), ultra-violet rays or broadband sources, regardless of intensity or duration.</p> <p>Notes: Laser exposures include those resulting in temporarily blindness, flash blindness or disorientation. Other non-ionizing radiation exposures include welding flash.</p>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Light Duty or Limited Duty	<p>Work-related* injury or illness that resulted in light duty or limited duty.</p> <p>Notes:  -<u>Light duty</u> is a status recommended after treatment of an injury that stipulates exactly the limitations on a military member during the recommended period, equivalent to placing a civilian in a restricted work status. When an injury or work-related illness results in light-duty days, assigned light duty days are not counted as lost workdays. On light duty, the military member normally remains at their original duty station, but is gainfully employed even though not performing their normal duties.</p> - <u>Limited duty</u> is a status formally assigned as a result of a medical board. Time spent on limited duty is not chargeable as lost time regardless of the cause for assignment to limited duty. Under limited duty, the military member may be reassigned from their permanent duty station to a temporary duty station until the medical issue is resolved.	Yes	No
Loss of Consciousness	On-duty loss of consciousness, <u>regardless of the length of time unconscious.</u>	Yes	No
Man Overboard	On-duty man overboard (including suicide) incidents.	Yes	No
Medical Removal per Occupational Health Standard	Member medically removed from work by a physician or other licensed health care professional***, <u>under the requirements of an occupational health standard.</u>	Yes	No
Medical Treatment Beyond First Aid	Work-related* injury or illness, that resulted in <u>medical treatment beyond first aid.</u>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>Note: The injury may not have resulted in light duty, limited duty, sick in quarters, etc., but injured person received medical treatment.</p>		
Medically Diagnosed Significant Injury or Illness	<p>Significant injury or illness that was <u>diagnosed by a physician or other licensed health care professional*** as work-related*</u>, even if the injury or illness did not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid or loss of consciousness.</p> <p>Note: Examples of significant injury or illness include cancer, chronic irreversible diseases and fractured or cracked bones.</p>	Yes	No
Minimum Stress or Strain Injury	<p>Injury that resulted from <u>minimum stress or strain</u> that was <u>unrelated to mishap-producing agents or environments</u> normally associated with active participation in daily work or recreation.</p> <p>Note: Includes simple, natural and nonviolent body positions or actions, as in dressing, sleeping, coughing or sneezing.</p>	No	No
Murder	Attempted or consummated murder.	No	No
Natural Cause Death	Death due to natural causes <u>unrelated</u> to strenuous acts performed at work or to physical training associated with the requirement to pass physical standards.	No	No
Needlestick and Sharps Injury or Illness	<p>Work-related* needlestick or cut from sharp objects that were <u>contaminated</u> with another person’s blood or other potentially infectious material.</p> <p>Notes: “Sharps” refers to medical sharps</p>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>such as scalpels, blades, disposable scissors, suture equipment, stylets and trocars, broken test tubes and glass.</p> <p>A “Privacy Concern Case.” If the contaminated blood or other potentially infectious material is diagnosed as being infectious, then reclassify the injury as an illness.</p>		
Negligent Discharge of Weapon	<p>On- or off-duty unintentional firing of a weapon for any reason, including mechanical failure, equipment malfunction or human error.</p> <p>Note: A grenade “milking” is a negligent discharge of a weapon.</p>	Yes (Weapons Mishap)	No
Nuclear Propulsion Plant Fatality, Injury or Illness	Fatality, injury or work-related* illness associated with <u>non-nuclear-related machinery or components</u> on the <u>secondary side</u> of a naval nuclear propulsion plant.	Yes	No
	Fatality, injury or work-related* illness associated with the <u>primary side</u> of a naval nuclear propulsion plant.	Yes (Only by CNO N00N)	No
Nuclear Weapon, System or Component Fatality or Injury	Fatality or work-related* injury involving the handling of nuclear weapons, nuclear weapon systems or nuclear weapon components.	No	No
One or More Days Away from Work (i.e., lost time case)	<p>On- or off-duty injury or work-related* illness that resulted in one or more <u>full calendar days, weekends included</u>, that a person was unable to work, excluding the day of the mishap and the day returned to duty or work.</p> <p>Notes: Includes periods of time for sick in quarters, inpatient hospitalization,</p>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>convalescent leave and command-directed removal from duties. <u>If the Service Member is out for an extended period of time, use an estimate of the days that they will be away and update the day count when the actual number of days is known. You may "cap" the total days away at 180 calendar days. Include the number of calendar days away recommended by a physician or other licensed health care professional***. However, the days away must be recorded whether the injured or ill Service Member follows a physician or licensed health care professional's recommendation or not. End the count of days away from work on the date the physician or other licensed health care professional recommends that the Service Member return to work.</u></p> <p>Also includes Navy and Marine Corps reserve personnel, in a not physically qualified status sustained as a result of an injury at any time en route to, during or returning from drill or during annual training.</p>		
Permanent Partial Disability	<p>On- or off-duty injury or work-related* illness that resulted in permanent impairment or loss of any part of the body.</p> <p>Note: Exceptions include loss of teeth, loss of tips of fingers/toes <u>without bone loss</u>, repairable hernia, disfigurement and sprains or strains that do not cause permanent limitation of motion.</p>	Yes	No
Pre-Existing Condition	<p>An injury sustained before entry into Military Service, <u>unless the injury was specifically aggravated or accelerated by current tenure of service.</u></p>	No	No



Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	An injury that resulted from a pre-existing musculoskeletal disorder, <u>unless the injury was specifically aggravated or accelerated by current tenure of service.</u>	No	No
	An injury or illness that was a pre-existing condition and resulted <u>solely</u> from a non-work-related event or exposure that occurred outside the work environment.	No	No
Private Motor Vehicle (PMV) Fatality or Injury	On- or off-duty fatality or injury of active duty military personnel as either a vehicle operator or passenger in a PMV accident.  Note: Reservist military personnel under orders for annual training (AT), active duty training (ADT) or active duty for operational support (ADOS) are “active duty” for safety reporting purposes.	Yes	No
	On- or off-duty fatality or injury of reservist military personnel under inactive duty training (IDT) orders, as either a vehicle operator or passenger in a PMV accident.	Yes	No
	Fatality or injury of reservist military personnel <u>not under orders</u> , as either a vehicle operator or passenger in a PMV accident.	No	No
Self-Inflicted Injury	<u>Intentionally</u> self-inflicted injury.	No	No
Suicide	Attempted or consummated suicide.		
	Note: Except for man overboard. See on-duty “Man Overboard” Event Type or Event Circumstances.	No	No
Three or More Personnel Hospitalized for Inpatient Care	On- or off-duty injury or work-related* illness where three or more personnel were hospitalized for inpatient care (i.e., beyond observation, diagnostic testing,	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	administrative reasons or counseling) <u>as a result of a single mishap.</u>		
Tuberculosis Infection	Work-related* Tuberculosis (Tb) infection, as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional***, <u>after exposure to a known case of active tuberculosis.</u>  Note: A “Privacy Concern Case.”	Yes	No
Workplace Violence**** Injury or Illness	An injury or illness resulting from violence or the threat of violence, against <u>on-duty</u> personnel.  Notes: Examples of workplace violence include <u>on-duty</u> cases of injury or illness resulting from <u>sexual assault**</u> , being assaulted while standing duty or conducting an inspection, civil disorders, riots, sabotage, terrorist activities and arson.  Sexual assault is a “Privacy Concern Case.”	Yes	No

Notes:

\*All military personnel fatalities or injuries occurring aboard a public vessel are considered “work-related,” regardless if the affected person was on- or off-duty. An injury or illness is considered work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the work environment, unless an exception specifically applies. These exceptions are listed in this table.

\*\*See DoDI 6495.02, Volume 1 of 28 March 2013 (Sexual Assault Prevention and Response Program Procedures), OPNAVINST 1752.1C (Navy Sexual Assault Prevention and Response Program) (i.e., for Navy) and MCO 1752.5C (Sexual Assault Prevention and Response (SAPR) Program) (i.e., for Marine Corps) for program and reporting requirements for sexual assaults.

\*\*\*A physician or other licensed health care professional is an individual whose legally permitted scope of practice (i.e., license, registration or certification) allows him or her to

independently perform or be delegated the responsibility to perform, the activities described by this manual. For purposes of this manual, Navy Independent Duty Corpsmen in operational environments without a licensed health care professional present, are considered to meet the criteria of a licensed health care professional.

\*\*\*\*See DoDI 1438.06 of 16 January 2014 (DoD Workplace Violence Prevention and Response Policy).

Table 2-A-1. Military Personnel Event Reportability and Recordability Criteria

APPENDIX 2-B  
CIVILIAN PERSONNEL  
EVENT REPORTABILITY AND RECORDABILITY CRITERIA

1. Applicability. All of the civilian personnel in subparagraphs 1a through 1c, when on duty, where at least one of the personnel (i.e., military or civilian) involved in an event is assigned to the Navy or Marine Corps.
  - a. Federal Civilian Personnel. All career, career conditional and temporary (full-time, part-time, intermittent) personnel, who are subject to civil service regulations, paid from appropriated Federal funds and covered by the Federal Employees' Compensation Act. This excludes civilians paid by appropriated funds on a contract or fee basis.
  - b. Non-Appropriated Fund Civilian Personnel. All civilian personnel whose employment by the U.S. Government is paid by non-appropriated funds and are covered by the Longshore and Harbor Workers Compensation Act. This excludes civilians paid by non-appropriated funds on a contract or fee basis.
  - c. Foreign National Civilian Personnel. Includes foreign nationals employed by the U.S. Government in direct (appropriated or non-appropriated funds) or indirect hire (contract or fee basis) status when the U.S. Government has supervisory control. It excludes those paid by contract or fee basis when the host government has supervisory control. Navy and Marine Corps commands and installations must review and determine if the host nation injury and illness reporting and compensation systems supersede Department of Defense (DoD) requirements per the status of forces' agreement.
2. Special Instructions. Events may involve more than one type of mishap. If more than one type applies, then use the most severe one for classification purposes. Be sure to consult each of the applicable chapter 2 appendices for the criteria for all event types that may be applicable.
  - a. This chapter has separate appendices for reportable and recordable event criteria involving Military Personnel (Appendix 2-A), Civilian Personnel (Appendix 2-B), Contractors (Appendix 2-C), Non-Department of the Navy (DON) Civilians (Appendix 2-D) and Materiel and Property Damage (Appendix 2-E). As such, users should consult each of the various chapter 2 appendices on reportable and recordable criteria for other possible event types that may be applicable.
  - b. If an event occurs and that same event involves either on-duty civilian personnel and off-duty military personnel or on- and off-duty military personnel, then that event will be categorized as being on-duty.

c. If an event type or event circumstance is not listed in the table, refer to the detailed guidance provided in chapter 2.

3. How to Determine if an Event is Reportable or Recordable. Enter table 2-B-1 based upon the one or more applicable event type(s) involving civilian personnel. The notes in some event descriptions provide examples, important clarifications, exceptions, etc. The columns indicate whether the event is DON reportable and whether it is (Occupational Safety and Health Administration) OSHA recordable.

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Act of God (i.e., Natural Phenomenon) Injury	On-duty injury that resulted from an act of God (i.e., natural phenomenon) <u>and</u> adequate preparation, forecasting or communication actions <u>were not</u> taken.  Notes: Examples include earthquakes, tornadoes, hurricanes, violent winds, extraordinarily high tides, mud slides, floods, etc.  In order to determine if adequate actions <u>were not</u> taken, an investigation must be initiated.	Yes	Yes
	On-duty injury that resulted from an act of God (i.e., natural phenomenon) <u>and</u> adequate preparation, forecasting or communication actions <u>were</u> taken.  Notes: Examples include earthquakes, tornadoes, hurricanes, violent winds, extraordinarily high tides, mud slides, floods, etc.  In order to determine if adequate actions <u>were</u> taken, an investigation must be initiated.	Yes	Yes
Alcohol or Prescription Drug Use Fatality or Injury	On-duty fatality ( <u>excluding suicide</u> ) or injury ( <u>excluding attempted suicide</u> ), where a safety investigation determined that the <u>legal use</u> of alcohol, a prescription drug or	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>other substance was suspected as the <u>sole</u> contributing factor.</p> <p>Note: Includes unintentional alcohol or drug overdose, etc.</p>		
<p>Amputation (OSHA term)</p>	<p>On-duty traumatic loss of a limb or other external body part, that <u>occurred within 24 hours of a work-related* injury or illness</u>. Amputations include a part, such as a limb or appendage that has been severed, cut off, amputated (either completely or partially); fingertip amputations <u>with or without bone loss</u>; medical amputations resulting from irreparable damage; and amputations of body parts that have since been reattached.</p> <p>Note: Amputations do not include avulsions, enucleations, degloving, scalpings, severed ears or broken or chipped teeth.</p>	<p>(see Permanent Total Disability and Permanent Partial Disability)</p>	<p>Yes</p>
<p>Bloodborne Pathogenic Disease</p>	<p>Work-related* illness that involved a bloodborne pathogenic disease.</p> <p>Notes: A “Privacy Concern Case.” Includes AIDS, HIV, hepatitis B or hepatitis C.</p>	<p>Yes</p>	<p>Yes</p>
<p>Chemical Agent Fatality, Injury or Illness</p>	<p>Class A, B, C or D fatality, injury or illness that involved any <u>unintentional or uncontrolled release</u> of a chemical agent where: individuals exhibit physiological symptoms of agent exposure; or the agent quantity released to the atmosphere was such that a serious potential for exposure was created by exceeding the applicable maximum allowable concentration-time levels for exposure of unprotected workers or the general population or property.</p>	<p>Yes</p>	<p>Yes</p>

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Cold Illness	On-duty work-related* low temperature exposure illness that required medical treatment beyond first-aid.  Note: Includes hypothermia, frostbite, chilblain and cold water immersion foot.	Yes	Yes
Combat Zone Injury	Injury that occurred in a combat zone <u>and</u> was the result of <u>actual or suspected case of “friendly fire.”</u>	Yes	No**
	Injury that occurred in a combat zone <u>and</u> was the result of the following: <u>Direct enemy action; or, a maneuver conducted relative to hostile fire, a perceived hostile threat or a perceived hostile force.</u>	No	No**
Common Cold	Illness was the common cold.	No	No
Commuting to/from Work on U.S. Government Property Injury or Illness	Injury or illness was caused by a motor vehicle accident and occurred on a U.S. Government parking lot or U.S. Government access road <u>while the employee was commuting</u> between their home and main or regular place of work.	No	No
Criminal Act Fatality, Injury or Illness	Off-duty fatality, injury or illness as a result of sexual assault***, vandalism, riots, civil disorders, sabotage, terrorist activities, arson or other criminal acts.	No	No
Diving Fatality, Injury, Near Miss or Hazard	On-duty diving operation that resulted in a fatality; hyperbaric or recompression treatment (i.e., for any reason); loss of consciousness; or placing civilian personnel in a restricted work or non-dive duty (i.e., not physically qualified), regardless of the amount of time lost, with the exception of non-repetitive diving restrictions.  Notes: Causes of diving mishaps include, but are not limited to, thermal exposure,	Yes	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>dehydration, altitude sickness, excessive fatigue and breath-hold diving.</p> <p>For further guidance on diving mishaps, consult OPNAVINST 3150.27D.</p>		
	<p>On-duty diving operation that resulted in a near miss or hazard.</p> <p>Notes: Includes, but not limited to execution of emergency plan (e.g., unplanned shifting to secondary air, aborted dive due to unexpected issue or event, fouling and lost diver); exceeding any prescribed limits regardless of the consequences (e.g., maximum depth, bottom time, omitted decompression and oxygen exposures above allowed pulmonary oxygen limits); any out-of-specification condition discovered after equipment and systems are prepared for use (e.g., carbon dioxide (CO2) canister installed or filled improperly, CO2 canister not installed, exhaust valves installed improperly and system aligned improperly); and any external systems, equipment and conditions that may adversely affect or impair diver safety (e.g., ship's equipment operated or tags cleared without proper authorization before, during or after divers enter the water; unauthorized cranes operated overhead of divers; small boat operations conducted over or in the vicinity of divers; and unauthorized discharges while divers are in the water).</p> <p>For further guidance on diving near misses and hazards (including near misses), consult OPNAVINST 3150.27C.</p>	Yes	No



Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Drug Reaction	<p>On-duty unexpected adverse bodily reaction that resulted directly from the use of <u>legally prescribed medicines taken as a condition of employment</u>, that occurred <u>outside of a medical facility</u>.</p> <p>Note: Includes drug-drug interactions, drug-food interactions, drug-beverage interactions and drug-disease interactions.</p>	Yes	No**
	<p>Death or injury that resulted directly from the <u>illegal</u> use of drugs or <u>other substance abuse</u>.</p>	No	No
Electrical Shock	<p>On-duty electrical shock from electrical or electronic equipment, regardless of voltage or current source, regardless of intensity and regardless of whether intentional or unintentional.</p> <p>Note: Does not include a shock from static electricity.</p>	Yes	No**
Escaping from or Eluding Custody or Arrest Fatality or Injury	<p>Fatality or injury in the act of escaping from or eluding military or civilian custody or arrest.</p>	No	No
Explosives Fatality, Injury or Illness	<p>On-duty Class A, B, C or D fatality, injury or illness that resulted from: an explosion or functioning of explosive materials or devices (except as a result of enemy action); inadvertent actuation, jettisoning and release or launching explosive devices; or impacts of ordnance off-range.</p> <p>Note: Includes live fire, inadvertent launch of a weapon; negligent discharges of all guns, including small arms (this includes discharge of weapon in government quarters or negligent discharges and ricochets during training on ranges), marine location markers, flares, et cetera; and off-</p>	Yes (Weapons Mishap)	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	range ordnance impacts including all small arm ranges where ricochets cause bullets to impact outside surface danger zones.		
Fall from Height	<p>On-duty <u>ashore</u> fall from height of <u>four feet or greater</u>, any deployment of fall arrest equipment or any failure of in-use fall protection equipment.</p> <p>Notes: At construction sites, workers (contractors only) must adhere to the threshold height no greater than six feet, per U.S. Army Corps of Engineers, Safety and Health Requirements Manual EM 385-1-1 and 29 CFR 1926.500, subpart M, Fall Protection in Construction Industry. When Navy and Marine Corps personnel visit construction sites to inspect contractor’s work, they may comply with the six-foot threshold height because it would be infeasible to install guardrails at four foot height just for Navy and Marine Corps Personnel, when the OSHA Standards require a six-foot threshold height for construction workers.</p>	Yes	No**
	On-duty <u>afloat</u> or shipyard operations fall from height of <u>five feet or greater</u> , any deployment of fall arrest equipment or any failure of in-use fall protection equipment.	Yes	No**
	On-duty vessel <u>long shoring</u> (i.e., cargo operations) fall from height of <u>eight feet or greater</u> , any deployment of fall arrest equipment or any failure of in-use fall protection equipment.	Yes	No**
Fatality	<p>On-duty work-related* injury or illness that resulted in a fatality <u>occurring within 30 days of that work-related injury or illness.</u></p> <p>Note: Includes heart attacks.</p>	Yes	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Flu	Illness was the flu (i.e., influenza virus).	No	No
Food or Beverage Consumption Injury or Illness	Illness that resulted from ingesting a food or beverage contaminated by workplace contaminants (e.g., lead) or resulted in food poisoning from a food or beverage <u>supplied by the employer</u> .	Yes	Yes
	Injury or illness was <u>solely</u> the result of an employee eating, drinking or preparing food or drink for <u>personal consumption</u> (whether bought on the employer’s premises or brought in).	No	No
	Note: Includes if the employee was injured by choking on food while in the employer’s establishment.		
Government Motor Vehicle (GMV) or Government Vehicle Other (GVO) Fatality or Injury	An incident or accident where a DoD government motor vehicle (GMV) or a DoD government vehicle other (GVO) was the cause and the incident or accident resulted in a fatality or injury of DoD personnel.	Yes	Yes or No**
Hearing Loss	Work-related* hearing loss <u>illness</u> that resulted in either a permanent threshold shift (PTS) or significant threshold shift (STS).  Notes: If an event or exposure in the work environment either caused or contributed to the hearing loss or significantly aggravated a pre-existing hearing loss, it is work-related.	Yes	Yes (OSHA uses the term “Standard Threshold Shift (STS)”)
	Work-related* hearing loss <u>injury</u> that resulted from a punctured eardrum.	Yes	Yes
	Work-related* hearing loss <u>injury</u> that resulted from an instantaneous event (e.g., acoustic trauma from a one-time blast or over-pressure).	Yes	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Heat Illness	<p>On-duty work-related* heat-related illness that required medical treatment beyond first-aid.</p> <p>Note: Includes the entire heat-related illness spectrum of conditions from heat rash, heat cramps, heat syncope (i.e., fainting), heat exhaustion, to heat stroke.</p>	Yes	Yes
Helicopter Rope Suspension Technique (HRST), Air-Cargo Drop or Parachuting Injury	<p>On-duty injury or illness that involved a helicopter rope suspension technique (HRST), air-cargo drop or parachuting (to include incidents, malfunctions and cut-aways) regardless of extent of injuries.</p> <p>Notes: An <u>incident</u> is defined as “any action or event preventing an airdrop item from functioning as it was intended or designed.” Some examples of incidents include, but are not limited to: Improperly setting the automatic opening device (AOD) that resulted in a dual canopy deployment; inadvertent or premature activations; entanglements resulting in reserve parachute deployment; high flair of the canopy resulting in jumper injury; parachutist loss of consciousness during jump sequence; failure to hook up static line to anchor line cable for container delivery system (CDS); improper rigging procedures before, during or after the airdrop equipment was loaded in the aircraft; Joint Precision Aerial Delivery System (JPADS) with improperly loaded data; misrouted static lines that resulted in a towed jumper (cutaway or retrieved); and improper lock setting resulting in a loose platform or no-drop of equipment.</p> <p>A <u>malfunction</u> is defined as “the failure of</p>	Yes	No**

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>an airdrop item to function as it was intended or designed.” Some examples of malfunctions include, but are not limited to: Failure of a main canopy to properly deploy, static line breaking, parachute panel or gore blowout, cargo parachute release failure and a JPADS that lands off the drop zone for reasons other than improperly loaded data</p>		
<p>High-Risk or Moderate-Risk Formal School Training Loss, Rollback or Disenrollment</p>	<p>On-duty high-risk or moderate-risk formal school training-related injury or illness that resulted in the loss of one or more training days, a rollback in training or a disenrollment of the student from a course.</p>	<p>Yes</p>	<p>No**</p>
<p>In-Patient Hospitalization</p>	<p>On-duty work-related* injury or illness that resulted in the in-patient hospitalization (i.e., beyond observation, diagnostic testing, administrative reasons or counseling) of one or more employees, <u>occurring within 24 hours of that work-related injury or illness.</u></p> <p>Note: See also “One or More Days Away from Work (i.e., lost time)” consequence type.</p>	<p>Yes</p>	<p>Yes</p>
<p>Job Transfer</p>	<p>On-duty work-related* injury or illness that resulted in a job transfer.</p> <p>Note: Does not include a transfer made <u>only</u> for the day on which the injury occurred or the illness began.</p>	<p>Yes</p>	<p>Yes</p>
<p>Laser or Other Non-Ionizing Radiation Exposure, Suspected or Observed</p>	<p>On-duty work-related* illness that resulted from either suspected or observed exposure to laser, radiofrequency (RF), ultra-violet rays or broadband sources, regardless of intensity or duration.</p> <p>Notes: Laser exposures include those</p>	<p>Yes</p>	<p>Yes</p>

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	resulting in temporarily blindness, flash blindness or disorientation. Other non-ionizing radiation exposures include welding flash.		
Loss of An Eye	On-duty loss of an eye, that <u>occurred within 24 hours of a work-related* injury or illness.</u>	Yes	Yes
Loss of Consciousness	On-duty work-related* injury or illness that resulted in a loss of consciousness, <u>regardless of the length of time unconscious.</u>	Yes	Yes
Man Overboard	On-duty man overboard (including suicide) incidents.	Yes	No**
Medical Removal per Occupational Health Standard	Member medically removed from work by a physician or other licensed health care professional****, <u>under the requirements of an occupational health standard.</u>	Yes	Yes
Medical Treatment Beyond First Aid	On-duty work-related* injury or illness that resulted in <u>medical treatment beyond first aid.</u>	Yes	Yes
Medically Diagnosed Significant Injury or Illness	Significant injury or illness that was <u>diagnosed by a physician or other licensed health care professional**** as work-related*</u> , even if the injury or illness did not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid or loss of consciousness.  Notes: Examples of significant injury or illness include cancer, chronic irreversible diseases and fractured or cracked bones. When an employee reports symptoms that have appeared gradually and the medical determination is that the injury or illness is a result of chronic work-related exposure, the date of the first medical visit and	Yes	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	diagnosis becomes the respective “date of injury” or “date of illness.”		
Mental Illness	<p>Illness was a mental illness.</p> <p>Notes: A “Privacy Concern Case” only if work-related. Mental illness will not be considered work-related* unless the employee voluntarily provides the employer with an opinion from a physician or other licensed health care professional**** with appropriate training and experience (e.g., psychiatrist, psychologist, psychiatric nurse practitioner, etc.) stating that the employee has a mental illness that is work-related.</p>	No	No
Minimum Stress or Strain Injury	<p>Injury that resulted from <u>minimum stress or strain</u> that was <u>unrelated to mishap-producing agents or environments</u> normally associated with active participation in daily work or recreation.</p> <p>Note: Includes simple, natural and nonviolent body positions or actions, as in dressing, sleeping, coughing or sneezing.</p>	No	No
Murder	Attempted or consummated murder.	No	No
Natural Cause Death	Death due to natural causes <u>unrelated</u> to strenuous acts performed at work or to physical training associated with the requirement to pass physical standards.	No	No
Needlestick and Sharps Injury or Illness	<p>Work-related* needlestick or cut from sharp objects that were <u>contaminated</u> with another person’s blood or other potentially infectious material.</p> <p>Notes: “Sharps” refers to medical sharps such as scalpels, blades, disposable scissors, suture equipment, stylets and</p>	Yes	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	trocars, broken test tubes and glass.  A “Privacy Concern Case.” If the contaminated blood or other potentially infectious material is diagnosed as being infectious, then reclassify the injury as an illness.		
Negligent Discharge of Weapon	On-duty unintentional firing of a weapon for any reason, including mechanical failure, equipment malfunction or human error.  Note: A grenade “milking” is a negligent discharge of a weapon.	Yes (Weapons Mishap)	No**
Non-Work-Related Event or Exposure	An injury or illness that involved signs or symptoms that surface at work, but resulted <u>solely from a non-work-related event or exposure that occurs outside the work environment.</u>	No	No
Nuclear Propulsion Plant Fatality, Injury or Illness	On-duty fatality or work-related* injury associated with <u>non-nuclear-related machinery or components on the secondary side</u> of a naval nuclear propulsion plant.	Yes	Yes
	On-duty fatality or work-related* injury or illness associated with the <u>primary side</u> of a naval nuclear propulsion plant.	Yes (Only by CNO N00N)	Yes (Only by CNO N00N)
Nuclear Weapon, System or Component Fatality, Injury or Illness	On-duty fatality or work-related* injury involving the <u>handling</u> of nuclear weapons, nuclear weapon systems or nuclear weapon components.	Yes	Yes
One or More Days Away from Work (i.e., lost-time case)	On-duty work-related* injury or illness that resulted in one or more <u>full calendar days, weekends included</u> or a <u>full work shift</u> , that a person was unable to work, excluding the day of the mishap and the day returned to duty or work.	Yes	Yes



Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>Notes: Includes periods of time for inpatient hospitalization and any leave associated with the mishap (e.g., annual leave, sick leave, continuation of pay leave, leave without pay granted, etc.). <u>If the employee is out for an extended period of time, use an estimate of the days that the employee will be away and update the day count when the actual number of days is known. You may "cap" the total days away at 180 calendar days.</u> Include the number of calendar days away recommended by a physician or other licensed health care professional****. However, the days away must be recorded whether the injured or ill employee follows a physician or licensed health care professional's recommendation or not. <u>End the count of days away from work on the date the physician or other licensed health care professional recommends that the employee return to work.</u></p>		
<p>Permanent Partial Disability (DoD term)</p>	<p>On-duty work-related* injury or illness that resulted in permanent impairment or loss of any part of the body.</p> <p>Notes: For civilian personnel, see also "Amputation" consequence type. Exceptions include loss of teeth, loss of tips of fingers/toes <u>without bone loss</u>, repairable hernia, disfigurement and sprains or strains that do not cause permanent limitation of motion.</p>	<p>Yes</p>	<p>(see Amputation)</p>
<p>Permanent Total Disability (DoD term)</p>	<p>On-duty work-related* injury or illness, in the opinion of competent medical authority, that resulted in the permanent and total incapacitation of a person to the extent that he or she cannot follow any gainful</p>	<p>Yes</p>	<p>(see Amputation)</p>

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>occupation.</p> <p>Note: The loss or loss of use, of both hands, both feet, both eyes or a combination of any of these parts of the body as a result of a single mishap, must be considered as a permanent total disability.</p>		
Personal Grooming Injury or Illness	Injury or illness was <u>solely</u> the result of personal grooming.	No	No
Pre-Existing Condition	An injury sustained before entry into employment by the U.S. Government, <u>unless the injury was specifically aggravated or accelerated by current tenure of service.</u>	No	No
	An injury that resulted from a pre-existing musculoskeletal disorder, <u>unless the injury was specifically aggravated or accelerated by current tenure of service.</u>	No	No
	An injury or illness that was a pre-existing condition and resulted <u>solely</u> from a non-work-related event or exposure that occurred outside the work environment.	No	No
Restricted Work Activity	<p>On-duty work-related* injury or illness that resulted in one or more <u>full calendar days</u> or <u>full work shifts</u> of restricted work activity <u>beyond the day or shift on which the injury occurred or the illness began.</u></p> <p>Notes: Restricted work activity occurs when, as the result of a work-related injury or illness, a supervisor or health care professional keeps or recommends keeping, a civilian employee from doing all of the routine functions of his or her job or from working the full workday or <u>full work shift</u> that the employee would have been</p>	Yes	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p>scheduled to work before the injury or illness occurred.</p> <p><u>Routine functions</u> are those <u>work activities</u> the employee regularly performs at least once per week.</p>		
Self-Inflicted Injury	<u>Intentionally</u> self-inflicted injury.	No	No
Self-Medication Injury or Illness	Injury or illness was <u>solely</u> the result of self-medication for a <u>non-work-related condition</u> .	No	No
Suicide	<p>Attempted or consummated suicide.</p> <p>Note: Except for man overboard. See on-duty “Man Overboard” Event Type or Event Circumstances.</p>	No	No
Travel Status Injury or Illness	<p>Injury or illness that occurred <u>while an employee was on travel status</u>, if at the time of the injury or illness, <u>the employee was engaged in work activities “in the interest of the employer.”</u></p> <p>Note: Includes activities such as travel to and from customer contacts, conducting job tasks and entertaining or being entertained to transact, discuss or promote business (work-related* entertainment includes only entertainment activities being engaged in at the direction of the employer).</p>	Yes	Yes
	Injury or illness that occurred <u>while an employee was on travel status</u> and was on a <u>personal detour from a reasonably direct route of travel</u> (e.g., has taken a side trip for personal reasons).	No	No
	Injury or illness that occurred <u>while an employee was on travel status</u> and was <u>checked into a hotel, motel or other temporary residence</u> [funded in whole or in	No	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p><u>part, by the employer]; whereby, establishing a “home away from home.”</u></p> <p>Note: When the employee begins work each day, they re-enter the work environment. <u>An exception would be if the employee was engaged in work activities “in the interest of the employer” even while inside the hotel, motel or other temporary residence [funded in whole or in part, by the employer].</u></p>		
Tuberculosis Infection	<p>Work-related* Tuberculosis (Tb) infection, as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional****, <u>after exposure to a known case of active tuberculosis.</u></p> <p>Note: A “Privacy Concern Case.”</p>	Yes	Yes
Voluntary Participation Activities Injury or Illness	<p>The injury or illness resulted <u>solely</u> from <u>voluntary participation</u> in a wellness program or in a medical, fitness or recreational activity such as blood donation, physical examination, flu shot, exercise class, racquetball or baseball.</p>	No	No
Work Outside Assigned Work Hours Injury or Illness	<p>Injury or illness was <u>solely</u> the result of an employee doing <u>personal tasks</u> (i.e., unrelated to their employment) at their work establishment <u>outside of the employee’s assigned working hours.</u></p>	No	No
Workplace Violence***** Injury or Illness	<p>An injury or illness resulting from violence or the threat of violence, against <u>on-duty</u> civilian personnel.</p> <p>Notes: Examples of workplace violence include <u>on-duty</u> cases of injury or illness resulting from <u>sexual assault***</u>, being assaulted while standing duty or conducting</p>	Yes	Yes

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	an inspection, civil disorders, riots, sabotage, terrorist activities and arson.  Sexual assault is a “Privacy Concern Case.”		

Notes:

\*All civilian personnel fatalities or injuries occurring aboard a public vessel are considered “work-related,” regardless if the affected person was on- or off-duty. An injury or illness is considered work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the work environment, unless an exception specifically applies. These exceptions are listed in this table.

**\*\*Unless work-related\* and also resulted in at least one of the following: Fatality, cancer, chronic irreversible disease, fractured or cracked bone, punctured eardrum, significant work-related\* injury or illness that is diagnosed by a physician or other licensed health care professional\*\*\*, medical removal under the requirements of an OSHA health standard, loss of consciousness, days away from work, restricted work activity or job transfer or medical treatment beyond first aid.**

**\*\*\*See DoDI 6495.02, Volume 1 of 28 March 2013 (Sexual Assault Prevention and Response Program Procedures), OPNAVINST 1752.1C (Navy Sexual Assault Prevention and Response Program) (i.e., for Navy) and MCO 1752.5C (Sexual Assault Prevention and Response (SAPR) Program) (i.e., for Marine Corps) for program and reporting requirements for sexual assaults.**

**\*\*\*\*A physician or other licensed health care professional is an individual whose legally permitted scope of practice (i.e., license, registration or certification) allows him or her to independently perform or be delegated the responsibility to perform, the activities described by this manual. For purposes of this manual, Navy Independent Duty Corpsmen in operational environments without a licensed health care professional present, are considered to meet the criteria of a licensed health care professional.**

**\*\*\*\*\*See DoDI 1438.06 of 16 January 2014 (DoD Workplace Violence Prevention and Response Policy).**

Table 2-B-1. Civilian Personnel Event Reportability and Recordability Criteria

APPENDIX 2-C  
CONTRACTOR-INVOLVED  
EVENT REPORTABILITY AND RECORDABILITY CRITERIA

1. Applicability. All personnel, facilities, equipment, property or materiel associated with a Navy or Marine Corps contract.

2. Special Instructions. Events may involve more than one type of mishap. If more than one type applies, then use the most severe one for classification purposes. Be sure to consult each of the applicable chapter 2 appendices for the criteria for all event types that may be applicable.

a. This chapter has separate appendices for reportable and recordable event criteria involving Military Personnel (Appendix 2-A), Civilian Personnel (Appendix 2-B), Contractors (Appendix 2-C), Non-Department of the Navy (DON) Civilians (Appendix 2-D) and Materiel and Property Damage (Appendix 2-E). As such, users should consult each of the various chapter 2 appendices on reportable and recordable criteria for other possible event types that may be applicable.

b. If an event type or event circumstance is not listed in the table, refer to the detailed guidance provided in chapter 2.

3. How to Determine if an Event is Reportable or Recordable. Enter table 2-C-1 based upon the one or more applicable event type(s) that involved contractors. The notes in some event descriptions provide examples, important clarifications, exceptions, etc. The columns indicate whether the event is DON reportable and whether it is Occupational Safety and Health Administration (OSHA) recordable.

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Combat Zone Fatality or Injury	On-duty contractor employee fatality or work-related* injury that occurred in a combat zone <u>and</u> was the result of <u>actual or suspected case of "friendly fire."</u>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	On-duty contractor employee fatality or injury that occurred in a combat zone <u>and</u> was the result of the following: <u>Direct enemy action; or, a maneuver conducted relative to hostile fire, a perceived hostile threat or a perceived hostile force.</u>	No	No
Contractor Caused Damage	Public or private property damage <u>caused</u> by a Navy or Marine Corps <u>contractor</u> operation, activity or employee that was <u>under the direct supervision of DON personnel**</u> and the Navy or Marine Corps <u>had the means</u> to correct, control, eliminate or prevent the damage.  Note: Mishaps that occur aboard a DON vessel that resulted from private contractor operations are ground (industrial) mishaps, not afloat mishaps. The contracting Navy or Marine Corps command, unit or activity will record the mishap within the DON.	Yes	No
	Public or private property damage <u>caused</u> by a Navy or Marine Corps <u>contractor</u> operation, activity or employee that was <u>under the direct supervision of DON personnel**</u> and the Navy or Marine Corps <u>did not have the means</u> to correct, control, eliminate or prevent the damage.	No	No
	Public or private property damage <u>caused</u> by a Navy or Marine Corps <u>contractor</u> operation, activity or employee that was <u>not under the direct supervision of DON personnel**</u> .	No	No
	Public or private property damage <u>caused</u> by a Navy or Marine Corps <u>contractor</u> operation, activity or employee and the <u>damage was fully restored by the contractor</u> at the contractor's <u>sole</u> expense.	No	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Contractor Caused Fatality, Injury or Illness	<p>Any fatality, injury or illness <u>caused</u> by a Navy or Marine Corps <u>contractor</u> operation, activity or employee that was <u>under the day-to-day supervision of DON personnel**</u> and the Navy or Marine Corps <u>had the means</u> to change the work environment or correct, control, eliminate or prevent the workplace hazard or mishap.</p> <p>Notes: Mishaps that occur aboard a DON vessel that resulted from private contractor operations are ground (industrial) mishaps, not afloat mishaps. The contracting Navy or Marine Corps command, unit or activity will record the mishap within the DON.</p>	Yes	No
	<p>Any fatality, injury or illness <u>caused</u> by a Navy or Marine Corps <u>contractor</u> operation, activity or employee that was <u>under the day-to-day supervision of DON personnel**</u> and the Navy or Marine Corps <u>did not have the means</u> to change the work environment or correct, control, eliminate or prevent the workplace hazard or mishap.</p> <p>Note: The contractor is responsible for OSHA notification and reports.</p>	No	No
	<p>Any fatality, injury or illness <u>caused</u> by a Navy or Marine Corps <u>contractor</u> operation, activity or employee that was <u>not under the day-to-day supervision of DON personnel**</u>.</p> <p>Note: The contractor is responsible for OSHA notification and reports.</p>	No	No



Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Navy or Marine Corps Caused Contractor Fatality, Injury or Illness	<p>On-duty contractor employee fatality or work-related* injury or illness <u>caused wholly or in part</u>, by a Navy or Marine Corps operation, activity or evolution.</p> <p>Notes: The Navy or Marine Corps command, unit or activity responsible for the operation, activity or evolution that <u>caused</u> the fatality, injury or work-related illness of an affected contractor employee will record the mishap within the DON.</p>	Yes	No***
Navy or Marine Corps Supervised Contractor Fatality, Injury or Illness	<p>On-duty contractor employee fatality or work-related* injury or illness; whereby, the contractor employee was <u>under the day-to-day supervision of DON personnel**</u> and the Navy or Marine Corps <u>had the means</u> to change the work environment or correct, control, eliminate or prevent the workplace hazard or mishap.</p> <p>Notes: The Navy or Marine Corps command, unit or activity that <u>provided the day-to-day supervision</u> of the affected contractor employee will record the mishap within the DON and is responsible for OSHA notification and reports.</p>	Yes	Yes (29 CFR 1904.31(b)(3))
Navy or Marine Corps Supervised Contractor Fatality, Injury or Illness	<p>On-duty contractor employee fatality or work-related* injury or illness; whereby, the contractor employee was <u>under the day-to-day supervision of DON personnel**</u> and the Navy or Marine Corps <u>did not have the means</u> to change the work environment or correct, control, eliminate or prevent the workplace hazard or mishap.</p> <p>Note: The Navy or Marine Corps command, unit or activity that <u>provided the day-to-day supervision</u> of the affected contractor employee is responsible for OSHA notification and reports.</p>	No	Yes (29 CFR 1904.31(b)(3))
Navy or Marine Corps	On-duty contractor employee fatality or work-related* injury or illness; whereby, the contractor	No	No (29 CFR

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Unsupervised Contractor Fatality, Injury or Illness	<p>employee was <u>not under the day-to-day supervision of DON personnel</u>**.</p> <p>Note: The contractor is responsible for OSHA notification and reports.</p>		1904.31(b)(3)

Notes:

\*An injury or illness is considered work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the work environment, unless an exception specifically applies. These exceptions are listed in this table.

\*\*Department of the Navy (DON) personnel includes all personnel assigned to Navy or Marine Corps commands, units or activities, as follows:

- U.S. military personnel on active duty (including U.S. Coast Guard), reserve or National Guard personnel on active duty or in a drill status, Service academy cadets or midshipmen, Reserve Officer Training Corps (ROTC) cadets or midshipmen when engaged in directed training activities, officer accession program students when engaged in directed training activities and foreign national military personnel assigned to Department of Defense (DoD) components.
- DoD civil service employees (including National Guard and Reserve technicians, unless in military duty status), Non-Appropriated Fund (NAF) employees (excluding part-time military), Corps of Engineers civil works employees, Youth or Student Assistance Program employees, foreign nationals employed by DoD components and Army-Air Force Exchange Service (AAFES) employees.

\*\*\*See also “Navy or Marine Corps Supervised Contractor Fatality, Injury or Illness” in this table.

Table 2-C-1. Contractor-Involved Event Reportability and Recordability Criteria

APPENDIX 2-D  
NON-DEPARTMENT OF THE NAVY CIVILIAN  
EVENT REPORTABILITY AND RECORDABILITY CRITERIA

1. Applicability. Off-duty Department of Defense (DoD) civilian personnel, off-duty DON civilian personnel, personnel employed by other Federal or Department of Defense agencies not assigned to the Navy or Marine Corps and all other civilians and foreign nationals not employed by the Navy or Marine Corps (e.g., civilian guest, patron, military family member, etc.). For purposes of this manual, these groups will be collectively referred to as Non-DON Civilians.
2. Special Instructions. Events may involve more than one type of mishap. If more than one type applies, then use the most severe one for classification purposes. Be sure to consult each of the applicable chapter 2 appendices for the criteria for all event types that may be applicable.
  - a. This chapter has separate appendices for reportable and recordable event criteria involving Military Personnel (Appendix 2-A), Civilian Personnel (Appendix 2-B), Contractors (Appendix 2-C), Non-DON Civilians (Appendix 2-D) and Materiel and Property Damage (Appendix 2-E). As such, users should consult each of the various chapter 2 appendices on reportable and recordable criteria for other possible event types that may be applicable.
  - b. If an event type or event circumstance is not listed in the table, refer to the detailed guidance provided in chapter 2.
3. How to Determine if an Event is Reportable or Recordable. Enter table 2-D-1 based upon the one or more applicable event type(s) that involved non-Department of the Navy civilians. The notes in some event descriptions provide examples, important clarifications, exceptions, etc. The columns indicate whether the event is DON reportable and whether it is Occupational Safety and Health Administration (OSHA) recordable.

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
<p>Navy or Marine Corps Caused Non-DON Civilian Fatality, Injury or Illness</p>	<p>A non-DON civilian fatality, injury or illness caused <u>wholly or in part</u>, by a Navy or Marine Corps operation, activity or evolution.</p> <p>Notes: Examples include family fun day; “Day in Their Boots Day”; “Jane Wayne Day”; Tiger Cruise; command-sponsored retirement ceremony; tent sale; military ball; static display; demonstration of operational capability; Morale, Welfare and Recreation event; Marine Corps Community Services event; etc.</p> <p>The Navy or Marine Corps command or activity responsible for the operation, activity or evolution that caused the fatality, injury or illness of affected non-DON civilians will record the mishap.</p>	<p>Yes</p>	<p>No</p>

Table 2-D-1. Non-Department of Navy Civilian Event Reportability and Recordability Criteria

APPENDIX 2-E  
MATERIEL AND PROPERTY DAMAGE  
EVENT REPORTABILITY AND RECORDABILITY CRITERIA

1. Applicability. All public or private facilities, equipment, property or materiel.
  
2. Special Instructions. Events may involve more than one type of mishap. If more than one type applies, then use the most severe one for classification purposes. Be sure to consult each of the applicable chapter 2 appendices for the criteria for all event types that may be applicable.
  - a. This chapter has separate appendices for reportable and recordable event criteria involving Military Personnel (Appendix 2-A), Civilian Personnel (Appendix 2-B), Contractors (Appendix 2-C), Non-Department of the Navy (DON) Civilians (Appendix 2-D) and Materiel and Property Damage (Appendix 2-E). As such, users should consult each of the various chapter 2 appendices on reportable and recordable criteria for other possible event types that may be applicable.
  
  - b. If an event type or event circumstance is not listed in the table, refer to the detailed guidance provided in chapter 2.
  
3. How to Determine if an Event is Reportable or Recordable. Enter table 2-E-1 based upon the one or more applicable event type(s) that involved any combination of materiel damage, public property damage or private property damage. The notes in some event descriptions provide examples, important clarifications, exceptions, etc. The columns indicate whether the event is DON reportable and whether it is Occupational Safety and Health Administration (OSHA) recordable.

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Allision (Vessels)	The <u>unintentional</u> striking or collision of a moving vessel against a stationary object; of which, either the vessel or the object or both, are DON property.  Notes: Examples of stationary objects include a vessel made fast to a pier, a vessel at anchor (i.e., not dragging anchor), a moored buoy (i.e., not dragging anchor), a bridge, a pier, etc. A vessel or buoy dragging anchor is a moving vessel or buoy, respectively. <u>The important distinction between an allision and a collision, is that a moving vessel can play an active role in avoiding collision; whereas, a</u>	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<p><u>stationary object cannot.</u></p> <p>If the moving vessel is DON property, then that command or activity will be responsible for recording the mishap.</p>		
Chemical Agent Damage	<p>Class A, B, C or D public or private property damage that involved any <u>unintentional or uncontrolled release</u> of a chemical agent where <u>recordable damage occurred</u> to property from contamination or costs were incurred for decontamination.</p>	Yes	No
Collision (Vessels)	<p>The <u>unintentional</u> striking together of two or more moving vessels; of which, at least one of those vessels is a DON vessel.</p> <p>Notes: See also “Allision” consequence type for collisions between moving vessels and stationary objects.</p> <p>The mishap convening authority will determine which one of the vessels involved in a collision will be responsible for recording the mishap. A safety reporting exception to the “moving vessel” requirement: A collision also includes the case of two anchored vessels, neither dragging anchor nor veering or surging additional rode, that strike each other. In this particular case, the last vessel to anchor that was involved in the collision, if a DON vessel, will be responsible for recording the mishap.</p>	Yes	No
Combat Zone Damage	<p>Any public or private property damage that occurs in a combat zone and is the result of <u>actual or suspected friendly fire.</u></p>	Yes	No
	<p>Any public or private property damage that occurs in a combat zone and is the result of the following: <u>direct enemy action; or, a maneuver conducted</u></p>	No	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	<u>relative to hostile fire, a perceived hostile threat or a perceived hostile force.</u>		
Component Part Normal Wear and Tear	Damage to a component part that <u>resulted from damage associated to the normal wear and tear of another component part.</u>	Yes	No
	Replacement of component parts <u>due to normal wear and tear</u> , which is beyond the scope or definition of the affected time between overhaul of component and when <u>any associated damage is confined to the component part.</u>	No	No
	Note: This exemption only applies to items that are normally used until they fail or until predetermined wear limits are reached. The need for replacement may not be evident until malfunction or failure of the part.		
Criminal Act Damage	Public or private property damage as a result of vandalism, riots, civil disorders, sabotage, terrorist activities, arson or other criminal acts.	No	No
Environmental Spill, Release or Discharge	Unintentional spill, discharge or release of an oil, hazardous substance, sewage or solid waste into the environment that <u>met or exceeded reportable quantities</u> as specified by Federal or State law or regulation or in foreign nations with Final Governing Standards.	Yes (OPNAV M-5090.1 of 25 June 2021, appendix C)	No
	Environmental damage to public or private property due to a spill, discharge or release of an oil or hazardous substance, with a total cost of \$25,000 or more and was <u>caused by a Navy or Marine Corps operation, activity, evolution, vessel or vehicle.</u> Note: Includes cost for decontamination, environmental restoration and restitution.	Yes	No
Electronic Cigarette Damage	Public property damage that results from use of an electronic cigarette (i.e., e-cigarette, personal vaporizer or electronic nicotine delivery system).	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Explosives Damage	<p>Class A, B, C or D public or private property damage that resulted from: an explosion or functioning of explosive materials or devices (except as a result of enemy action); inadvertent actuation, jettisoning and release or launching explosive devices; or impacts of ordnance off-range.</p> <p>Note: Includes mishaps where the ordnance system worked as designed and human error contributed to the mishap; live fire; inadvertent launch of a weapon; negligent discharges of all guns, including small arms (this includes discharge of weapon in government quarters or negligent discharges and ricochets during training on ranges), marine location markers, flares, et cetera; and off-range ordnance impacts including all small arm ranges where ricochets cause bullets to impact outside surface danger zones.</p>	Yes (Weapons Mishap)	No
Fire	<p>Any <u>unintentional</u> fire that involved Navy or Marine Corps property.</p> <p>Note: Includes small fires in which the material property damage was limited to the originally ignited material and did not propagate to other materials; and evidence of a previously unreported combustion or explosion.</p>	Yes	No
	<p>Electrical or electronic overheat conditions <u>where there is evidence of combustion</u>.</p> <p>Note: See also “Overheat Condition” consequence type for electrical or electronic overheat conditions where there is <u>no</u> evidence of self-sustained combustion.</p>	Yes	No
	<p>Reports of fire <u>solely based on acrid odor</u> (i.e., no evidence of combustion upon inspection).</p>	No	No
Flooding	<p>All cases of DON vessel flooding that involved the <u>intrusion of any fluid</u> (e.g., water, fuel, lube oil,</p>	Yes	No



Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
(Vessel)	sewage, etc.) into a compartment caused by misalignment, negligence or <u>failure to follow operating procedures</u> (e.g., engineering operational sequencing system, engineering operating procedure, valve line-ups, etc.) or <u>component failure</u> (e.g., valve, O-ring, etc.) or overflow caused by an <u>unplanned event that caused the implementation of emergency flooding action</u> .		
Foreign Object Damage	Foreign object damage to air-breathing missiles or drone engines discovered during scheduled engine disassembly.	No	No
Government Motor Vehicle (GMV) or Government Vehicle Other (GVO) Damage	An incident or accident where a Department of Defense (DoD) government motor vehicle (GMV) or a DoD government vehicle other (GVO) was involved and the incident or accident resulted in \$5,000 or more in total public and private property damage.  Note: Public property includes a DoD GMV or GOV. Private property includes a private vehicle.	Yes	No
Grounding (Vessel)	<u>Unintentional</u> contact of a DON vessel hull or hull appendages, with the bottom of a body of water.  Notes: Includes soft or hard grounding (i.e., stranding). Does not include dry docking, beaching or careening (i.e., heaving down).	Yes	No
Military Animal Death, Substantial Injury or Illness or Unrelieved Pain or Distress	An incident that leads to unintended and substantial injury or illness, unrelieved pain or distress or death of a military animal.  Note: For safety reporting purposes, a military animal is an animal owned by the DoD <u>for use in support of military operations</u> . Examples include military working dogs, horses, bottlenose dolphins and sea lions. It does not include service animals used for medical-related activities. DoDI 3216.01 of 20 March 2019, SECNAVINST 3900.41H,	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
	OPNAVINST 5585.3B / MCO 5585.6 and other DoD Component directives cover military animal related mishaps and consultations with DoD Component oversight offices.		
Missile Launch Damage	<u>Normal residual</u> damage as a result of a missile launch.	No	No
Navy or Marine Corps Operation, Activity, Evolution, Vessel or Vehicle Caused Damage	Mishap that resulted in damaged, lost or destroyed public or private property with a total cost of damages of \$25,000 or more and was <u>caused by a Navy or Marine Corps operation, activity, evolution, vessel or vehicle.</u>  Note: Includes cost for repair, replacement and acquisition.	Yes	No
Nuclear Propulsion Plant Damage	Public property damage of <u>non-nuclear-related machinery or components on the secondary side</u> of a naval nuclear propulsion plant.	Yes	No
	Public or private property damage associated with the <u>primary side</u> of a naval nuclear propulsion plant.	Yes (Only by CNO N00N)	No
Nuclear Weapon, System or Component Damage	<u>Unintentional destruction</u> or <u>serious damage</u> to nuclear weapons, nuclear weapon systems or nuclear weapon components, resulting in actual or potential threat to national security or life and property.	No	No
Overheat Condition  (Materiel Failure Mishap, DoD Vessel)	Materiel damage of mechanical or structural systems aboard a DON vessel with a total <u>replacement or repair cost of \$25,000 or more</u> , the damage was caused <u>solely</u> by an <u>overheat condition</u> (e.g., materiel warping, discoloration, etc.) and there was <u>no</u> evidence of self-sustained combustion.  Note: See also “Fire” consequence type for electrical or electronic overheat conditions.	Yes	No

Event Type or Event Circumstances	Description	DON Reportable	OSHA Recordable
Testing or Training Damage	<u>Intentional or expected</u> damage to DoD equipment or property incurred during <u>authorized</u> testing or combat training, including missile and ordnance firing.	No	No

Table 2-E-1. Materiel and Property Damage Event Reportability and Recordability Criteria

CHAPTER 3  
NOTIFICATIONS

301. Purpose. To explain when mishap and event notifications are required, who must be notified, the methods to complete notification and the timeliness of notifications for selected Navy and Marine Corps mishaps and events.

302. General. For certain categories and types of mishaps and events, timely notification is required. Notifications are necessary to inform leaders of important events and serve as a trigger for activities that need to begin immediately after a mishap or event has occurred such as environmental response operations, public affair preparations and safety investigations. Notifications also ensure experts from certain specialties become involved very quickly, to minimize damage (e.g., laser events, explosive mishaps, mishaps with environmental impact) or to ensure essential actions are taken quickly following a mishap.

303. Notification Requirements. Some notification requirements are set in Federal law or regulation (e.g., Occupational Safety and Health Act), others are established in Department of Defense (DoD), Department of the Navy (DON) or Service policy (e.g., Navy policy or Marine Corps policy). Policies establishing notification requirements can be grouped into three broad categories:

- a. Official DoD, Navy and Marine Corps notification requirements using the OPREP-3 reporting system found in DoDI 6055.07 of 6 June 2011, OPNAVINST F3100.6J of 22 December 2009, MCO 3504.2A of 7 August 2013 and this manual.
- b. Special reporting group notification requirements found in DoDI 6055.07 of 6 June 2011 and other DON directives.
- c. Occupational Safety and Health Administration (OSHA) notification requirements applicable only for work-related illness and injuries to Navy and Marine Corps civilian personnel found in 29 CFR 1904.

Note: OSHA notification requirements are also reiterated in OPNAV M-5100.23 of 5 June 2020.

304. Notification Methods. There are four methods used to complete notification: voice, naval message, electronic mail and the Risk Management Information (RMI).

305. Initial Notification Considerations.

- a. For some mishaps, it may be unclear initially the extent of the damages and injuries and the classification of the mishap, raising questions whether notifications are required. In these instances, if the mishap has the potential to cross the threshold, complete the notifications.

b. Since complete information is often not available immediately after a mishap, commands must strive to meet the notification timeline even if all of the details are not known. Additional information may be provided later as it becomes known.

c. Follow-up notifications should be used, as necessary, to report essential information.

306. Official Notifications. Official notifications for mishaps and other selected safety events use the Operational Report-3 (OPREP-3) Reporting System. Voice reports are also required.

a. OPREP-3 reporting guidance is not explained in detail in this manual. Instead, commands must consult the authoritative Service instruction to ensure full compliance with OPREP-3 reporting. See the Safety Reporting Resources section in this manual for on-line availability of these policy directives. This manual reiterates when OPREP-3 notification is required for mishaps and selected safety-related events and explains who must be notified.

(1) The Navy policy directive governing the OPREP-3 reporting system is OPNAVINST F3100.6K (Special Incident Reporting Procedures).

(2) The Marine Corps policy directive governing the OPREP-3 reporting system is MCO 3504.2A (Operations Event/Incident Report (OPREP-3) Reporting).

b. Commands must ensure that the plain language address designator COMNAVSAFECEN NORFOLK VA is an INFO addressee on any naval message notifications when COMNAVSAFECEN notification is required.

c. Commands must ensure that NAVSAFECEN\_SDO@navy.mil (i.e., COMNAVSAFECEN) is a copy addressee on any electronic mail notifications when COMNAVSAFECEN notification is required.

d. Prior to submitting the “last report this incident,” units should check with their operational chain of command to ensure there are no other requests for information by higher authority.

e. Review the mishap reporting guidance to determine if the event meets safety reporting requirements. On the final record message report, include a mandatory “RMKS” set, which must include one of the statements in subparagraphs 306e(1) through 306e(3), as appropriate.

(1) “MISHAP REPORT NOT REQUIRED”

(2) “MISHAP REPORT TO FOLLOW”

(3) “MISHAP REPORT SUBMITTED”

Note: While the OPREP-3 reporting system is used to make official notification of mishaps and other safety-related events, OPREP-3 reporting does not relieve commands of the requirement to investigate and submit SIREPs per this manual.

307. Special Reporting Group Notifications. Some safety-related events are not specifically addressed in the OPREP-3 reporting system but notifications are required to ensure specific commands and activities receive notice in a timely manner.

308. OSHA Notifications.

a. Navy and Marine Corps Civilian Personnel. OSHA notification requirements are specified in OPNAV M-5100.23 of 5 June 2020 and in this chapter. OSHA notifications are in addition to official notifications and special reporting group notifications and apply only to work-related injuries and illnesses to Navy and Marine Corps civilian personnel.

b. Contractor Employees. Contractors are responsible for making notifications to the OSHA for their employees. If the contractor's employee is under the day-to-day supervision of the contractor, then the contractor is responsible for recording the injury or illness. If the DON command supervises the contractor employee's work on a day-to-day basis, then it must be recorded by the DON command. Day-to-day supervision includes supervising not only the output, product or result to be accomplished by the person's work, but also the details, means, methods and processes by which the work objective is accomplished.

309. Notifications. Use the information in chapter appendix 3-A to complete required notifications. Eventually, the content of notifications must be entered into the RMI for proper event record keeping. However, until RMI entries are completed, any notifications made outside of the RMI must reference the date-time-group of the initial notification and any previous follow-up notifications. This requirement ensures an accurate account of all notifications made.

Note: Some mishap and event types may meet multiple notification requirements.

APPENDIX 3-A  
NOTIFICATION REQUIREMENTS  
FOR MISHAPS, EVENTS AND DOD SPECIAL REPORTING GROUPS

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
<p>Civilian Personnel Fatality  (on-duty)</p>	<p>Occurring within 30 days of work-related event (includes a work-related fatality caused by a heart attack).  (only within the United States or U.S. territories)</p>	<p>Occupational Safety and Health Administration (OSHA)</p>	<ul style="list-style-type: none"> <li>• Voice by telephone or in person to OSHA Area Office nearest to site of mishap;</li> <li>or</li> <li>• Voice by telephone to OSHA toll-free 24-hour hotline at (800) 321-6742 (OSHA);</li> <li>or</li> <li>• Online reporting application at <a href="http://www.osha.gov">www.osha.gov</a></li> </ul>	<p>Within 8 hours of knowledge of occurrence</p>	<ul style="list-style-type: none"> <li>• Command name.</li> <li>• Location of work-related mishap.</li> <li>• Time and date of the work-related mishap.</li> <li>• Type of reportable event (e.g., fatality).</li> <li>• Number of employees affected.</li> <li>• Names of employees affected.</li> <li>• Point of contact name and phone number.</li> <li>• Circumstances or brief description of the work-related mishap.</li> </ul>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
Civilian Personnel In-Patient Hospitalization <sup>[2]</sup> , Amputation <sup>[3]</sup> or Loss of an Eye (on-duty)	<p>One or more civilian personnel in-patient hospitalization; an amputation; or, the loss of an eye.</p> <p>Occurring within 24 hours of work-related event (includes an in-patient hospitalization caused by a heart attack).</p> <p>(only within the United States or U.S. territories)</p>	OSHA	(See this column for Civilian Personnel Fatality)	Within 24 hours of knowledge of occurrence	<ul style="list-style-type: none"> <li>• Command name.</li> <li>• Location of work-related mishap.</li> <li>• Time and date of the work-related mishap.</li> <li>• Type of reportable event (e.g., in-patient hospitalization, amputation or loss of an eye).</li> <li>• Number of employees affected.</li> <li>• Names of employees affected.</li> <li>• Point of contact name and phone number.</li> <li>• Circumstances or brief description of the work-related mishap.</li> </ul>
Civilian Traffic Accident Death or Serious Personal Injury	Death or serious personal injury of a civilian, including civilian traffic	See OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	<ul style="list-style-type: none"> <li>• Per OPREP-3 Service guidance.<sup>[4,5]</sup></li> </ul>



Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification	
Caused by Military Personnel	accident deaths, caused by military personnel.	Include COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages <sup>[3]</sup>				
Class A Mishap	(See Class A mishap definition)	COMNAVSAFECEN	Voice by telephone to (757) 444-3520, ext. 7017	Within 1 hour of knowledge of occurrence	<ul style="list-style-type: none"> <li>• Unit(s) involved.</li> <li>• Location of mishap.</li> <li>• Date and time of mishap.</li> <li>• Brief description.</li> <li>• Command POC.</li> <li>• Contact information.</li> </ul>	
		See OPREP-3 Service guidance <sup>[4,5]</sup>	Include COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance. <sup>[4,5]</sup>	Per OPREP-3 Service guidance. <sup>[4,5]</sup>
		<u>For Fatalities:</u> Military Service Casualty Headquarters Office	<u>Navy:</u> Voice or electronic mail (800) 368-3202 or	On initiation of investigation and at a 30-day	At a minimum, provide: <ul style="list-style-type: none"> <li>•Name of the organization conducting the investigation.</li> <li>•Type of investigation being conducted.</li> </ul>	

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
			MILL_SPT-LOD@navy.mil  <u>Marine Corp:</u> Voice (800) 847-1597	frequency until investigation is completed.	<ul style="list-style-type: none"> <li>• Existence of any reports by the investigating organization that have been or will be issued as a result of the investigation.</li> <li>• Investigating organization's Point(s) of Contact that can provide information on the status of the completion of any investigative reports.</li> <li>• Procedures for family members to obtain a copy of the completed report(s) and to obtain assistance in obtaining a copy of the completed report(s).</li> <li>• The procedures for family members to obtain answers to their questions on the completed investigation from a fully qualified representative.</li> </ul>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
		<p><u>COMNAVSAFECEN</u>  <u>Makes Report to:</u>  Office of the Deputy Under Secretary of Defense (Personnel &amp; Readiness) through Director (Environmental Readiness &amp; Safety)</p>	Voice	Within 45 days of occurrence.	<ul style="list-style-type: none"> <li>• Date and time of mishap.</li> <li>• DoD Component, unit and OSHA establishment name.</li> <li>• Location of the mishap.</li> <li>• Number and employment category of fatalities and hospitalized personnel.</li> <li>• Description of operation.</li> <li>• Description of mishap.</li> <li>• Causal factors.</li> <li>• Applicable OSHA standards and their effectiveness.</li> <li>• Corrective actions.</li> </ul>
Class B Mishap resulting in inpatient hospitalization <sup>[2]</sup> of three or more personnel	At least one of the personnel (i.e., military or civilian) involved in the mishap is assigned to the Navy or Marine Corps.	<p>See OPREP-3 Service guidance<sup>[4,5]</sup></p> <p>Include COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages<sup>[3]</sup></p>	Per OPREP-3 Service guidance. <sup>[4,5]</sup>	Per OPREP-3 Service guidance. <sup>[4,5]</sup>	Per OPREP-3 Service guidance. <sup>[4,5]</sup>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
		<p><u>COMNAVSAFECEN</u>  <u>Makes Report to:</u>  Office of the Deputy Under Secretary of Defense (Personnel &amp; Readiness) through Director (Environmental Readiness &amp; Safety)</p>	Voice	Within 45 days of occurrence	<ul style="list-style-type: none"> <li>• Date and time of mishap.</li> <li>• DoD Component, unit and OSHA establishment name.</li> <li>• Location of the mishap.</li> <li>• Number and employment category of fatalities and hospitalized personnel.</li> <li>• Description of operation.</li> <li>• Description of mishap.</li> <li>• Causal factors.</li> <li>• Applicable OSHA standards and their effectiveness.</li> <li>• Corrective actions.</li> </ul>
Environmental Spills, Releases or Discharges	DON vessels and shore facilities worldwide with expected resultant costs (e.g., fuel and lubricant loss, property damage, decontamination,	Notifications made per response plan or spill contingency plan, as applicable  and	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Within 8 hours of knowledge of occurrence	Per OPREP-3 Service guidance <sup>[4,5]</sup>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
	environmental restoration or restitution) of \$25,000 or more.	COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages <sup>[3]</sup>			
Explosives Mishap	A Class A mishap or a Class B mishap resulting in inpatient hospitalization <sup>[2]</sup> of three or more personnel;  and  An explosives mishap.	<u>Navy:</u> <ul style="list-style-type: none"> <li>• Chain of Command;</li> <li>• Department of Defense Explosives Safety Board (DDESB);</li> <li>• Naval Ordnance Safety and Security Activity (Code 00);</li> <li>• OPNAV (N411);</li> </ul> and <ul style="list-style-type: none"> <li>• COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages<sup>[3]</sup></li> </ul> <u>Marine Corps:</u> <ul style="list-style-type: none"> <li>• Chain of Command;</li> <li>• DDESB;</li> <li>• MARCOR-SYSCOM (PM-AMMO);</li> </ul>	Per OPREP-3 Service guidance <sup>[4,5]</sup>  (See also Defense Explosives Safety Regulation (DESR) 6055.09 Edition 1 of 13 January 2019)	Within 24 hours of occurrence or as soon as practical	<ul style="list-style-type: none"> <li>• Name and location of the reporting activity.</li> <li>• Location of accident (i.e., activity, city, installation, building number or designation, road names or similar information).</li> <li>• Item nomenclature or description (e.g., mark, model, Federal supply class, national identification number, DoD identification code, Navy ammunition logistic code, ammonium nitrate and fuel oil).</li> <li>• Quantity involved (number of items and net explosive weight for quantity-distance).</li> </ul>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
		and <ul style="list-style-type: none"> <li>• COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages<sup>[3]</sup></li> </ul>			<ul style="list-style-type: none"> <li>• Day, date and local time of initial significant event and when discovered.</li> <li>• Narrative of the event (include type of operation involved).</li> <li>• Number of fatalities (i.e., military, DoD civilian or other civilian).</li> <li>• Number of persons injured (military, DoD civilian or other civilian).</li> <li>• Description of material damage (i.e., government or non-government).</li> <li>• Immediate action taken or planned (i.e., corrective, investigative or explosive ordnance disposal assistance).</li> <li>• Description of news media attention.</li> </ul>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
		<u>COMNAVSAFECEN</u> <u>Makes Report to:</u> <ul style="list-style-type: none"> <li>• Office of the Deputy Under Secretary of Defense (Personnel &amp; Readiness) through Director (Environmental Readiness &amp; Safety)</li> </ul>	Voice	Within 45 days of occurrence	<ul style="list-style-type: none"> <li>• Date and time of mishap.</li> <li>• DoD Component, unit and OSHA establishment name.</li> <li>• Location of the mishap.</li> <li>• Number and employment category of fatalities and hospitalized personnel.</li> <li>• Description of operation.</li> <li>• Description of mishap.</li> <li>• Causal factors.</li> <li>• Applicable OSHA standards and their effectiveness.</li> <li>• Corrective actions</li> </ul>
	An explosives mishap including: <ul style="list-style-type: none"> <li>• DoD military, civilian or contractor fatality;</li> <li>• Greater than \$600,000 property damage;</li> </ul>	(See top of this column for Explosives Mishap)	(See top of this column for Explosives Mishap)	Within 24 hours of occurrence or as soon as practical	(See top of this column for Explosives Mishap)

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
	<ul style="list-style-type: none"> <li>• Greater than 72 hours lost production;</li> <li>• Major weapons system loss (e.g., tank, aircraft, ship or large missile); or</li> <li>• Probable high public interest.</li> </ul>				
	<p>A Class A, B, C or D mishap resulting in damage or injury from:</p> <ul style="list-style-type: none"> <li>• An explosion or functioning of explosive materials or devices (except as a result of enemy action);</li> <li>• Inadvertent actuation, jettisoning and releasing or</li> </ul>	(See top of this column for Explosives Mishap)	(See top of this column for Explosives Mishap)	As soon as practical	(See top of this column for Explosives Mishap)



Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
	launching explosive devices; or <ul style="list-style-type: none"> <li>Impacts of ordnance off-range.</li> </ul>				
Firearm Incident	Any incident involving a firearm, regardless if the firearm was discharged.	See OPREP-3 Service guidance <sup>[4,5]</sup>  Include COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages <sup>[3]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>
Friendly Fire	Friendly fire incidents.	Joint Staff (J-6), Joint Fires Integration Division, Friendly Fire Reporting and Investigation Process (FFRIP) Action Officer (757) 203-8603, DSN 668-8603  <u>Non-Classified Internet Protocol Router Network (NIPRNet):</u>	Voice or electronic mail	Within 48 hours of occurrence	<ul style="list-style-type: none"> <li>Date and time of mishap.</li> <li>DoD Component and unit.</li> <li>Location of the mishap.</li> <li>Number and employment category of fatalities and hospitalized personnel.</li> <li>Description of operation.</li> <li>Description of mishap.</li> <li>Causal factors.</li> </ul>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
		js.norfolk.j6.list.dd-c5i-jf-div-ffrip@mail.mil  <u>Secret Internet Protocol Router Network (SIPRNet):</u> js.norfolk.j6.list.dd-c5i-jf-div-ffrip@mail.smil.mil			
Laser Exposure (Suspected or Observed)	Laser exposure events.	Tri-Service Laser Safety Hotline	Voice by telephone to toll-free 24-hour hotline at (800) 473-3549	As soon as possible	<ul style="list-style-type: none"> <li>• Names of personnel affected.</li> <li>• Estimation of laser exposure received to the eyes or skin as related to the applicable maximum permissible exposure (MPE) per ANSI Z136.1.</li> <li>• Details of the laser exposure incident, if known. Include the laser's parameters as applicable: wavelength, power or energy, pulse repetition</li> </ul>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
					frequency, pulse length, beam size and divergence. <ul style="list-style-type: none"> <li>• Details of safety procedures and personal protective equipment used at the time of the laser exposure incident.</li> </ul>
Motor Vehicle Accidents	Motor vehicle accidents related to the use of alcohol or illegal substances.	See OPREP-3 Service guidance <sup>[4,5]</sup>  Include COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages <sup>[3]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	<ul style="list-style-type: none"> <li>• Per OPREP-3 Service guidance<sup>[4,5]</sup></li> </ul>
	Class A and B motorcycle mishaps	See OPREP-3 Service guidance <sup>[4,5]</sup>  Include COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages <sup>[3]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	<ul style="list-style-type: none"> <li>• Per OPREP-3 Service guidance<sup>[4,5]</sup></li> </ul>

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
Multiple DoD Component Event	Navy or Marine Corps and one or more other DoD Components (i.e., Army, Air Force or Space Force).	<u>Commands Make Reports to:</u> <ul style="list-style-type: none"> <li>Chain of Command; and</li> <li>COMNAVSAFECEN</li> </ul>	Voice	Within 20 minutes of knowledge of occurrence	<ul style="list-style-type: none"> <li>What happened?</li> <li>Who is or was involved?</li> <li>Where did it happen?</li> <li>When did it happen?</li> <li>Why did it happen?</li> <li>What action is ongoing?</li> <li>What future action is contemplated?</li> <li>What is the impact on the command's mission capability?</li> <li>Is any assistance required?</li> <li>Is media attention anticipated?</li> </ul>
		<u>COMNAVSAFECEN Makes Report to:</u> <ul style="list-style-type: none"> <li>Other involved DoD Component safety center(s)</li> </ul>	Voice	As soon as possible after knowledge of occurrence	
Operational Incident	The loss at sea of any Navy vessel, rigid hull inflatable boat or other small craft.	See OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>	Per OPREP-3 Service guidance <sup>[2]</sup>	Per OPREP-3 Service guidance <sup>[4,5]</sup>
	An incident involving damage to Navy or MSC vessels that results	Include COMNAVSAFECEN NORFOLK VA as an INFO addressee on naval messages <sup>[3]</sup>			

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
	in loss or degradation in the ability of a command to perform its mission, as determined by the commanding officer.				
	Fires, flooding, explosions, collisions, allisions, groundings or other major incidents to Navy ships, submarines or MSC vessels resulting in major damage to spaces, equipment, injury or death to personnel.				
	Unintentional launch of a missile, torpedo other live ordnance.				

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
	<p>Any discharge of a government weapon that causes a fatality or injury to personnel.</p> <p>Near or actual collisions or allisions of minor significance involving Navy vessels. Devices attached to, deployed from or towed by a vessel, are to be considered an extension of the reporting unit. Such devices include, but are not limited to, communication buoys, towed arrays, Nixie, dipping sonar, magnetic anomaly</p>				

Mishap Class, Event Type or DoD Special Reporting Group <sup>[1]</sup>	Characteristics	Who to Notify	How to Notify	When to notify	Contents of Initial Notification
	detectors and objects or vessels under tow.				

Notes:

[1] More than one mishap class, event type or DoD Special Reporting Group may apply.

[2] In-patient hospitalization is the formal admission to the in-patient service of a hospital or clinic for care or treatment. For safety reporting purposes only, inpatient hospitalization does not include observation or diagnostic testing.

[3] Amputation is the traumatic loss of a limb or other external body part. Amputations include a part, such as a limb or appendage that has been severed, cut off, amputated (either completely or partially); fingertip amputations with or without bone loss; medical amputations resulting from irreparable damage; amputations of body parts that have since been reattached. Amputations do not include avulsions, enucleations, degloving, scalpings, severed ears or broken or chipped teeth.

[4] OPNAVINST F3100.6K, “Special Incident Reporting Procedures.” This directive has the classification of “Controlled Unclassified Information” and is not cleared for public release. See Safety Reporting Resources section for availability.

[5] MCO 3504.2A, “Operations Event/Incident Report (OPREP-3) Reporting.” See Safety Reporting Resources section for availability.

Table 3-A-1. Notification Requirements for Mishaps, Events and DoD Special Reporting Groups

CHAPTER 4  
SAFETY INVESTIGATION REQUIREMENTS

401. Purpose. To provide guidance on when and by whom, a safety investigation board (SIB) is appointed or a single investigating officer (SIO) is directed, identifying the members of the board and their responsibilities and discussing the purpose of assistants. The chapter also includes the requirement to establish standing SIBs; the process for determining the controlling command and accounting organization for mishaps, including mishaps that involved multiple units; and provisions for joint SIBs.

402. General. An SIB or SIO is established to determine causal factors and make recommendations to prevent reoccurrence of reportable mishaps or to investigate the presence of hazards that could lead to mishaps. At the discretion of a convening authority, an SIB may also be appointed to determine causal factors and make recommendations to prevent reoccurrence of serious near misses (i.e., hazards) that had the potential of being serious recordable mishaps. The COMNAVSAFECEN and Director, CMC (SD) are the final authorities for determining deviations for any of the requirements in this chapter. Further guidance on SIBs or SIOs will be in The Navy and Marine Corps Safety Investigations and Reporting Guide.

403. Determining Responsibility for Oversight and Investigation.

a. Determining the Accounting Organization.

(1) The accounting organization is the reporting custodian that experienced the loss of or damage to, an owned asset; or the fatality, injury or work-related illness of an assigned person or persons in a mishap; and is responsible for or is assigned responsibility for, safety reporting, regardless of any determination as to the responsibility for the event's occurrence. There is one accounting organization for each mishap.

(2) When multiple Navy and Marine Corps commands are involved in a mishap, the accounting organization will normally be the command sustaining the highest level of loss in the event. The cognizant controlling command or controlling commands may determine other compelling reasons that exist for assigning investigative responsibility differently. If agreement cannot be reached, CNO N09F will make the determination.

b. Determining the Controlling Command. Controlling command determination is typically based upon the administrative control chain of command of the accounting organization. The controlling command will act as the convening authority, unless that responsibility has been delegated per subparagraph 107i(3). Use table 4-1 for additional guidance in making controlling command determinations.



Rule Number	If a mishap involves...	Then, the controlling command...
1	the armed forces of friendly nations <u>and</u> Navy or Marine Corps units and the <u>only forces lost or injured were by the armed forces of friendly nations,</u>	will be determined by the combatant commander.
2	the armed forces of friendly nations <u>and</u> Navy or Marine Corps units and the <u>forces lost or injured were by both the armed forces of friendly nations and Navy or Marine Corps units,</u>	will be determined by chief of naval operations (CNO) N09F, after consulting with the Assistant Secretary of Defense for Readiness (ASD (Readiness)) and the combatant commander as to what role the other involved nations will play in the investigation.
3	a friendly fire incident while Navy or Marine Corps units were under the operational control of a combatant command,	is Marine Corps or Navy controlling command whose forces suffered the preponderance of loss or injury.  Note: Unless otherwise agreed or as the combatant commander may direct.
4	both Navy <u>and</u> Marine Corps units,	is the controlling command whose subordinate unit in the administrative control (ADCON) chain of command suffered the preponderance of loss or injury.
5	only a Marine Corps unit,	is the Marine Corps controlling command in the operational control (OPCON) chain of command of the subordinate unit involved.
6	only a shore Navy unit,	is the controlling command in the ADCON chain of command of the subordinate unit involved.
7	only afloat Navy units under a single type commander (TYCOM),	is normally the TYCOM of the subordinate unit(s) involved.
8	only afloat Military Sealift Command units,	is COMSC (PM1) for Naval Fleet Auxiliary Force civilian mariner manned vessels.
		is COMSC (PM2) for special mission civilian mariner manned vessels.
		is COMSC (PM3) for USNS Kaiser.
9	only afloat Navy units under multiple TYCOMs, but the same fleet commander,	will be determined by that fleet commander.

Rule Number	If a mishap involves...	Then, the controlling command...
10	Navy units under different echelon 2 commanders,	is the controlling command whose subordinate unit in the ADCON chain of command suffered the preponderance of loss or injury.
11	only afloat Navy units under different fleet commanders,	will be determined by CNO N09F after consultation with the fleet commanders.
12	a ship during a defined CNO Maintenance Availability Period and Naval Sea Systems Command is the contracting authority for the work related to the mishap,  Note: Outside of this occurrence, the guidelines in subparagraphs 403a(1) and 403b apply.	is Naval Sea Systems Command.  Note: A mishap occurring aboard a DoD vessel that resulted from shipyard, vessel repair facility or private contractor operations is a ground (industrial) mishap, not an afloat mishap.

Note: In the event of disagreement over controlling command assignment, CNO N09F has the authority to make the final determination for mishaps involving only Navy units and for mishaps involving both Navy and Marine Corps units. Director, CMC (SD) has the authority to make the final determination for mishaps involving only Marine Corps units.

Table 4-1. Controlling Command Determination

c. Use table 4-2 as additional guidance for the assignment of accounting organizations for mishaps involving military personnel.

Rule Number	If a military personnel mishap occurs...	Then, the accounting organization...
1	at a DoD or DON command, unit, activity or establishment.	will be that DoD or DON command, unit, activity or establishment.
2	on official travel between the affected person's parent command (i.e., per permanent duty station orders) and another DoD or DON command, unit, activity or establishment; and the affected person is in an on-duty status.	will be the affected person's parent command.
3	on official travel between the affected person's additional duty (ADDU) command (i.e., per permanent duty station orders) and	will be the affected person's ADDU command.

Rule Number	If a military personnel mishap occurs...	Then, the accounting organization...
	another DoD or DON command, unit, activity or establishment; and the affected person is in an on-duty status.	
4	to an affected person and that affected person was subsequently either transferred or temporarily assigned to either a medical hold unit or to a transient personnel unit.	will be the command where the affected person was originally injured.
5		will be the command where the affected person was originally injured for any follow-on reports.
6	to an affected person and that affected person was subsequently permanently transferred from the command where the original injury occurred.	will be the command where the affected person was originally injured.
7		will be the affected person's gaining command for any follow-on reports.
8	in an area that is not remote and the affected person is in an off-duty status.	will be the affected person's parent command.
9	in a remote area; the affected person is assigned to a DON permanent duty station; and the affected person is in an off-duty status.	will be the commander of the nearest Navy or Marine Corps activity, when requested by the affected person's permanent duty station.
10	while the affected person is en route to a new duty station under permanent change of station orders.	will be the affected person's gaining command.
<b>RESIDENT STUDENTS</b>		
11	while the affected person is an on-duty resident student, under official orders assigned to a DON-operated post-secondary education institution and away from that institution on non-DoD or non-DON property.  Note: Examples of DON-operated post-secondary education institutions include Service colleges (e.g., Naval Postgraduate School, U.S. Naval War College and Marine Corps University), U.S. Naval Academy, Naval Academy Preparatory School, etc.	will be that DON-operated post-secondary education institution.

Rule Number	If a military personnel mishap occurs...	Then, the accounting organization...
12	<p>while the affected person is a Navy or Marine Corps on-duty resident student, under official orders assigned to a DoD-operated (i.e., non-DON) post-secondary education institution and away from that institution on non-DoD or non-DON property.</p> <p>Note: Examples of DoD-operated (i.e., non-DON) post-secondary education institutions include Service colleges (e.g., Joint Forces Staff College, National Defense University, U.S. Army War College, Air War College and Uniformed Services University of Health Sciences), U.S. Military Academy, U.S. Air Force Academy, etc.</p>	will be that DoD-operated (i.e., non-DON) post-secondary education institution.
13	while the affected person is a Navy or Marine Corps on-duty resident student, under official orders assigned to a non-DoD or non-DON operated post-secondary education institution and on non-DoD or non-DON property.	will be the naval activity already assigned by Commander, Naval Personnel Command (PERS-44) to provide administrative support for that resident student.

Table 4-2. Accounting Organization Determination for Mishaps Involving Military Personnel

404. Required Safety Investigation Board. The mishaps or hazards listed in table 4-3 require an SIB investigation.

Line Number	Navy or Marine Corps Mishap or Hazard (Including Near Miss) Requiring a Safety Investigation Board
1	<p>All on-duty Class A personnel mishaps occurring on a U.S. Government installation.</p> <p>Note: Includes an on-duty injury where death or permanent total disability is likely to occur.</p>

Line Number	Navy or Marine Corps Mishap or Hazard (Including Near Miss) Requiring a Safety Investigation Board
2	All on-duty Class A personnel mishaps occurring off a U.S. Government installation, while performing official duties.  Note: Includes an on-duty injury where death or permanent total disability is likely to occur.
3	All on- or off-duty Class A personnel mishaps occurring aboard a public vessel.  Note: Includes an injury where death or permanent total disability is likely to occur.
4	Military personnel fatality or permanent total disability that, in the opinion of a competent medical authority, was associated with a medical event (e.g., chest pain, heart attack, coma, etc.) that commenced <u>during or after</u> any on-duty physical training (PT), remedial physical training (PT), physical readiness test (PRT), physical fitness testing (PFT), physical fitness assessment (PFA) or command-sponsored physical activity (e.g., conditioning hikes, screening, etc.), <u>regardless of any pre-existing medical condition.</u>
5	Training-related fatality.
6	Public and private property damage estimates meet or exceed or may be expected to meet or exceed, two and a half million dollars.
7	All afloat Class A mishaps involving allision, collision, fire, flooding or grounding.
8	All Class A explosives mishaps.
9	All Class A chemical agent mishaps.
10	All live fire mishaps resulting in an injury.
11	Any mishap or hazard (including near miss) that a controlling command; the Commander, Naval Safety Center (COMNAVSAFECEN); or the Commandant of the Marine Corps (safety division) (CMC (SD)) determines that the mishap or hazard (including near miss) requires a more thorough investigation and report, beyond that provided by a single investigating officer.
12	Special circumstances, as determined by either COMNAVSAFECEN or Director, CMC (SD), where an independent NAVSAFECEN or CMC (SD) safety investigation board is established on behalf of the CNO or the CMC.

Table 4-3. Navy or Marine Corps Mishaps or Hazards (Including Near Misses) Requiring a Safety Investigation Board

405. Appointment of a Safety Investigation Board.

a. Convening authorities (discussed in chapter 1) are responsible for directing an SIB to investigate any of the mishaps or hazards (including near misses), under their cognizance.

b. Required Use of Event Numbers. The RMI POR database mandated by this manual automatically generates an event number that is unique to each particular mishap or hazard. All naval messages, reports and correspondence related to a particular mishap or hazard will include use of this event number. This requirement must be followed from initial notification through the final endorsement (i.e., to include record keeping and disposition).

Note: For situations in which the safety officer or safety manager does not have access to the RMI to submit the initial RMI entry, OPREP-3 notifications can be released without the event number.

c. Assigning the SIB and Initial Endorsing Chain. The convening authority will use the RMI to direct a mishap investigation that requires an SIB and to assign the initial recommended endorsing chain.

d. Appointment Letters. Members of SIBs should be appointed in writing by the convening authority within 24 to 48 hours, but not to exceed 96 hours of the convening authority's knowledge of the mishap or hazard. Guidance on the appointment letter format is in The Navy and Marine Corps Safety Investigations and Reporting Guide.

e. Restrictions.

(1) Activities of the SIB become the primary duty of all appointed members until the completion and release of the SIREP, by the senior member, via the RMI POR database mandated by this manual.

(2) Personnel appointed to an SIB or acting as a consultant SME to an SIB, may not be appointed to, nor serve on, any other investigative board associated with the same mishap or hazard.

(3) Personnel appointed to an SIB or acting as a consultant SME to an SIB, may not participate in drafting any endorsement related to the mishap or hazard that the SIB is investigating.

406. Standing Mishap Investigation Boards.

a. Controlling commands will establish and maintain at least one standing board to enable rapid investigative response to mishaps within their command that require a safety investigation by an SIB.

b. A standing board consists of a minimum of two personnel, a senior member and a safety representative, who are assigned to the standing board in writing.

c. Standing board members must meet the training requirements in subparagraphs 406c(1) and 406c(2):

(1) Complete either the Ground Mishap Investigation Course (CIN: A-493-0078 equivalent), Mishap Investigation Course (CIN: A-493-0078) or an equivalent course approved by either the NAVSAFECEN or CMC (SD).

(2) Be familiar with the requirements of this manual.

d. A standing board must be deployed to a mishap location within 72 hours of their knowledge of that mishap in order to begin the safety investigation process. The standing board will continue the investigation until properly relieved by the SIB appointed to investigate that specific mishap.

Note: Convening authorities may choose to use standing board members on the appointed SIB.

407. Composition of a Safety Investigation Board.

a. The convening authority or the Marine Corps general officer delegated responsibility for appointing SIB members and the senior member of an SIB, may confer and agree on board appointees based on the type and severity of the consequence of the mishap or hazard. Table 4-4 lists the minimum composition requirements for an SIB.

Minimum Composition	Mishap or Hazard Type		
	Marine Corps Only	Navy or Military Sealift Command Afloat	Navy Shore
One senior member	-If a <u>military</u> senior member, then must be equal to or senior in grade to the commander,	-Not be a superior to the commander, commanding officer or officer-in-charge of the mishap or	-If a military senior member, must be equal to or senior in grade to the commander,

Mishap or Hazard Type			
Minimum Composition	Marine Corps Only	Navy or Military Sealift Command Afloat	Navy Shore
	<p>commanding officer or officer-in-charge of the mishap or hazard unit; <u>and</u></p> <p>-Not be a superior to the commander, commanding officer or officer-in-charge of the mishap or hazard unit; <u>and</u></p> <p>-Not be from the mishap or hazard unit; <u>and</u></p> <p>-Be either a Marine Corps officer (O-5 or above) or senior Marine Corps civilian personnel (GS-13 or higher).</p>	<p>hazard unit; <u>and</u></p> <p>-Not be from the mishap or hazard unit; <u>and</u></p> <p>-Be a <u>current or post-command at sea Navy line officer senior to the commanding officer of the unit(s) involved or a senior Navy civilian (GS-15).</u></p>	<p>commanding officer or officer-in-charge of the mishap or hazard unit; <u>and</u></p> <p>-Not be a superior to the commander, commanding officer or officer-in-charge of the mishap or hazard unit; <u>and</u></p> <p>-Not be from the mishap or hazard unit; <u>and</u></p> <p>-Be either a commissioned officer (O-5 or above) or senior Navy civilian personnel (GS-13 or higher).</p>
Two other members	<p>-One subject matter expert (SME) on equipment, systems or procedures; <u>and</u></p> <p>-One safety and occupational health professional (commissioned officer or GS-11 or above) who has completed either the Ground Mishap Investigation Course (CIN: A-493-0078),</p>	<p>-One SME (<u>E-7 through O-10</u>) on equipment, systems or procedures; <u>and</u></p> <p>-One safety representative (commissioned officer or GS-12 or above) who has completed either the Ground Mishap Investigation Course (CIN: A-493-0078), Mishap Investigation</p>	<p>-One SME on equipment, systems or procedures; <u>and</u></p> <p>-One safety and occupational health professional (commissioned officer or GS-12 or above) who has completed either the Ground Mishap Investigation Course (CIN: A-493-0078), Mishap Investigation</p>



Minimum Composition	Mishap or Hazard Type		
	Marine Corps Only	Navy or Military Sealift Command Afloat	Navy Shore
	Mishap Investigation Course (CIN: A-493-0078) or an equivalent course approved by either the Naval Safety Center or CMC (SD).	Course (CIN: A-493-0078) or an equivalent course approved by either the Naval Safety Center or CMC (SD).	Course (CIN: A-493-0078) or an equivalent course approved by either the Naval Safety Center or CMC (SD).

Table 4-4. Minimum Composition Requirements for a Safety Investigation Board

b. As required, a competent medical authority may provide valuable information, assist the board in collecting and coordinating the analysis of medical evidence, address medical issues on the specifics of the injuries or occupational (i.e., work-related) illnesses, advise board members on the use of medical evidence and help identify human factors. The concern of the medical expert is medical, physiological, psychological, social and behavioral factors that may reveal human causal factors of the mishap.

408. Safety Investigation Board Member Responsibilities. Activities of the SIB become the primary duty of all members until completion and release of the SIREP via the RMI by the senior member. Personnel appointed to an SIB may not be appointed to, nor serve on, any other investigative board associated with the same mishap. Members of the SIB should not participate in drafting any endorsement related to that mishap. Detailed SIB responsibilities are provided in subparagraphs 408a through 408m:

a. Conduct a thorough and impartial investigation by visiting the mishap site immediately upon appointment and actively participate in the safety investigation.

b. Request technical assistance for the safety investigation from the convening authority, when required.

c. SIB members must not consult with the commander of the mishap command, mishap command’s chain of command or the SIB member’s chain of command regarding the content of a SIREP prior to its release. This does not prevent the senior member or other board member from interviewing the commander as a witness to the mishap.

Note: The exercise of command influence to edit, modify or in any way censor the content of a SIREP prepared by an SIB is contrary to the direction of this manual and is prohibited.

d. Extend to the NAVSAFECEN mishap advisor unrestricted access to all evidence, summaries of witness' statements and proceedings (including access to all witness interviews). Allow the advisor to keep either COMNAVSAFECEN or Director, CMC (SD), as appropriate, apprised of the status of the safety investigation.

e. Board members must not discuss privileged information in the presence of non-board members and must properly safeguard all PSI in their possession.

f. Determine, which witnesses will be offered a promise of confidentiality in strict compliance with guidelines found in paragraph 804.

g. Interview all witnesses. Ensure that all witnesses understand and sign either JNAVMAR 5102/1 Advice to Witness or JNAVMAR 5102/2 Advice to Witness (Promise of Confidentiality, if a written statement is provided).

Note: Individual interviews provide the best environment to ensure candid and forthright statements from witnesses or persons involved. Group interviews are not recommended because of the possible negative effect this technique might have on the willingness of some witnesses to speak openly and honestly. A witness that has been offered a promise of confidentiality must always be interviewed individually. See the Navy and Marine Corps Safety Investigations and Reporting Guide, which contains more information on interview techniques and best practices.

h. Members must not share any information with any other investigating team (e.g., Judge Advocate General, Naval Criminal Investigative Service, command, local authorities, etc.) without first discussing it with the appointed NAVSAFECEN mishap advisor.

i. Prepare and release a HAZREP for any hazard discovered during the course of the investigation that has the potential for widespread applicability. This requirement is separate from the release of the SIREP.

j. If, during the investigation, one of the non-reportable provisions of paragraph 208 appears to apply, then contact the convening authority and COMNAVSAFECEN to request permission to terminate the safety investigation.

k. If criminal conduct that is causal to the mishap is discovered in the course of conducting the safety investigation, the SIB must suspend the investigation, preserve the evidence and immediately notify the convening authority and COMNAVSAFECEN. Naval Criminal Investigative Service or Federal or local law enforcement, should also be notified, depending on jurisdiction at the location of the mishap and the mishap circumstances. The convening authority will review the pertinent circumstances and consult with COMNAVSAFECEN and the appropriate naval legal authority to determine whether the mishap investigation will proceed.

Note: The convening authority should consider various factors in making this decision, including the seriousness of the mishap, the seriousness of the alleged misconduct, the potential for litigation or prosecution and the potential adverse impact on the safety privilege. If the mishap investigation is terminated, the convening authority may determine that due to the unique circumstances of the event or the event's aftermath, a hazard investigation is warranted and direct the SIB to conduct this investigation.

l. Direct the preparation and release of the SIREP within 30 calendar days of convening the board. SIREPs must not refer to disciplinary or administrative action in connection with the mishap. If necessary, request an extension from the convening authority with the reasons.

m. Transfer custody of all relevant documentary evidence, board members' personal notes original copies of summaries of all statements, photographs, negatives and tape recordings to NAVSAFECEN. No copy must remain with the unit or in the possession of board members.

Note: The SIO or SIB should upload all pertinent explanatory figures, photos, tables, and other supporting documents in the exhibits section of RMI.

n. Development of a power point out-brief for use by the convening authority is recommended. The out-brief should be uploaded as an RMI investigation exhibit for preservation purposes.

409. Safety Investigation Board Assistants. To ensure a thorough safety investigation, the SIB may require assistance from personnel not officially appointed as a member of the SIB. The individuals requested by the board will proceed to the mishap site or other location as determined by the senior member.

a. Trained Safety Investigation Advisor. The COMNAVSAFECEN will appoint a trained safety investigation advisor for all Class A mishaps and all live fire mishaps resulting in an injury and may provide an advisor for other mishaps or hazards (including near misses) when it would be beneficial to the investigation. The advisor will meet the minimum training specified in table 4-4 and should be present at the convening of the board, when logistically feasible. The safety investigation advisor normally will not be a member of the SIB, but will serve to assist and advise the board in the safety investigation process (e.g., witness interviewing techniques, cause factor analysis, cause mapping and human factors analysis). The advisor may depart before the completion of the investigation if both the senior member and COMNAVSAFECEN agree. When agreed to by COMNAVSAFECEN and the convening authority, the COMNAVSAFECEN advisor may be appointed as a member of the SIB.

Note: NAVSAFECEN investigators are subject matter experts in the mishap investigation deliberative process and investigative techniques. While they are not members of the SIB, their full participation in all SIB activities and deliberations is required in order to facilitate

standardization of the investigative process; conduct of detailed causal factor analysis; development of sound mishap recommendations; and to protect PSI.

b. Consultant Subject Matter Expert. The consultant subject matter expert (SME) should be involved at a mishap site as early as possible for preliminary inspection of the wreckage or to inspect other end items, systems or processes where there may not be associated wreckage (e.g., small arms, shipboard systems) and for discussion with any personnel involved in the mishap or recovery operation. All non-Navy and non-Marine Corps personnel that are consultant SMEs will be asked to provide a written report to the board on their findings. All Navy and Marine Corps consultant SMEs will also provide a written report to the board on their findings. These reports may be added to the privileged evidence section of the SIREP. All non-Navy and non-Marine Corps personnel consultant SMEs will be asked to sign a non-disclosure agreement (NDA) to protect mishap information discussed during consultation.

Note: Consultant SMEs are permitted to provide information and reports to other concurrent investigators (e.g., from the legal investigation) provided PSI and discussions with the SIB are not part of the information provided.

c. Consultant Competent Medical Authority. All non-Navy and non-Marine Corps personnel that are consultant competent medical authority (CMA) SMEs will be asked to provide a written report to the board on their findings. All Navy and Marine Corps personnel consultant CMA SMEs will also provide a written report to the board on their findings. These reports may be added to the privilege evidence section of the SIREP. All non-Navy and non-Marine Corps personnel consultant CMA SMEs will be asked to sign an NDA to protect mishap information discussed during consultation.

#### 410. Joint Safety Investigation Boards.

a. Mishaps involving two or more Service components are covered by a Memorandum of Understanding (MOU) between the U.S. Army Combat Readiness Center; Air Force and Naval Safety Centers; Commandant of the Marine Corps (Safety Division); and the U.S. Coast Guard Health, Safety and Work-Life Directorate per appendix C.

b. For maritime events involving units or personnel of two or more North Atlantic Treaty Organization (NATO) nations, the provisions of NATO Standardization Agreement (STANAG) 1179, Combined Investigation of Maritime Incidents, become effective.

411. National Transportation Safety Board Investigations. The National Transportation Safety Board (NTSB) will investigate Naval Introductory Flight Evaluation (NIFE) Program student and military flying club mishaps.

a. Naval participation is as a party, appointed by the NTSB, as arranged by the Commander, Naval Education and Training Command (NETC) for NIFE mishaps per OPNAVINST 3750.16C (Participation in a Military or Civil Aircraft Accident Safety Investigation). The CNO N09F will arrange naval participation as a party-in-agreement with NTSB for military flying club mishaps. The naval party will not serve on any other concurrent safety board while appointed to the NTSB accident investigation. This does not preclude a separate and concurrent safety investigation from being conducted by COMNAVSAFECEN, as directed by CNO N09F or Director, CMC (SD), as long as it does not interfere with the NTSB accident investigation. NETC will conduct SIO investigations or establish an SIB to conduct a parallel but separate investigation, if military students or staff are involved.

b. A separate safety investigation may be conducted for military flying club mishaps. The sponsoring flying club facility's aviation safety officer (ASO) or the ground safety officer (GSO), if no ASO is available, will conduct the separate safety investigation and then complete a SIREP through the RMI POR database mandated by this manual.

412. Single Investigating Officer Investigations. These are investigations where an SIO has been directed to perform a DON safety investigation by a convening authority. The individual is solely responsible for completing the safety investigation and drafting and submitting required reports and records. Essentially, an SIO investigates any mishap, near miss or hazard not investigated by an SIB. The SIO may receive assistance from subject matter experts (SME) in the performance of their duties. An SIO is often an individual assigned to a safety billet (e.g., safety officer or safety manager), but that is not always a requirement.

413. Safety Investigation Timeline. The safety investigation should be completed within 30 days of the mishap. The investigation should place a greater priority on a thorough, complete and accurate SIREP than on trying to finish in the 30-day timeline. If the investigation cannot be completed within the required time period, the SIB or SIO must request an extension from the convening authority in the RMI. The SIB should remain convened until all aspects of the investigation are completed. See figure 5-1 for a depiction of a nominal SIREP endorsement timeline.

414. Unclassified Information Collected During Safety Investigations. SIBs and SIOs must ensure that all unclassified information, privileged or not, collected by safety investigators, is not released outside safety channels except when expressly permitted in this manual. See chapter 8 for protection of PSI.

a. SIB senior members and SIOs will ensure that everyone working on the safety investigation is briefed on these restrictions.

b. The SIB or SIO is not prohibited from sharing information with technical experts who, although not members of the board, can analyze information or wreckage (e.g., small arms,

shipboard systems), on behalf of safety investigators. Non-DON personnel must have the applicable NDA in place with NAVSAFECEN prior to receiving access to privileged materials.

415. Classified Information Collected During Safety Investigations. SIBs and SIOs must ensure that all classified information, privileged or not, collected by safety investigators, is handled per its required security classification level and is not released outside safety channels except when expressly permitted in this manual. See chapter 8 for protection of classified information that includes PSI.

a. SIB senior members and SIOs will ensure that everyone working on the safety investigation is briefed on these restrictions.

b. The SIB or SIO is not prohibited from sharing information with technical experts who, although not members of the board, have the proper security clearance and need-to-know and can analyze information or wreckage or other end items, systems or processes where there may not be associated wreckage (e.g., small arms, shipboard systems), on behalf of safety investigators. Non-DON personnel must have the applicable NDAs in place with NAVSAFECEN prior to receiving access to privileged materials.

c. The SIB or SIO must omit any portion of a report that warrants security classification and substitute the word “CLASSIFIED” in its place and submit a classified supplement. In the unlikely event that a meaningful unclassified report cannot be produced, submit a classified report.

416. Safety Investigation Process. This paragraph provides an overview of the safety investigation process. Safety investigators should reference The Navy and Marine Corps Safety Investigations and Reporting Guide developed by NAVSAFECEN for a detailed explanation of this process.

a. Determining and Documenting Factors. The narrative of a SIREP is comprised of factors that collectively answer the “why” an event occurred. Factors are based on the weight of evidence, professional knowledge and good judgment of the investigators. The analysis contained in factors lead to the findings and recommendations. Factors that directly led to injury, damage or a hazardous event are considered causal and result in causal findings. All Class A and B mishaps must contain at least one causal factor.

(1) Factors. A factor is any action or condition, discovered in the course of an investigation, which in the investigator’s opinion, contributed to the eventual outcome. Determining factors (i.e. and eliminating non-factors) enables investigators to focus the investigation from all the issues under examination to those specific areas that are significant in the event sequence. Factors explain why causes, such as human error, supervision or equipment failure, occurred. Factors are not mutually exclusive, but are often interrelated; and in some

cases, influence each other. Factors are the basis for primary findings and recommendations. Most events involve multiple factors. When applicable, include a discussion of related human factors using the DoD Human Factors Analysis and Classification System (DoD HFACS).

(2) Non-Factors Worthy of Discussion. Non-factors worthy of discussion typically fall into one of three categories: areas uncovered during the investigation that did not cause the event or influence the outcome but should be fixed due to the potential to be a factor in a future event (e.g., incorrect information in a maintenance technical order), areas that were thoroughly investigated and subsequently ruled out as factors (i.e., in order to provide context to the audience on why these areas are not factors) and areas that may be considered an interest item to the convening authority (e.g., risk management and crew resource management). Non-factors worthy of discussion are the source for other findings and recommendations of significance. Not all non-factors worthy of discussion result in other findings and recommendations of significance; but, all other findings and recommendations of significance must have a corresponding non-factor worthy of discussion.

b. Determining and Documenting Causes. A cause is a condition, which, if corrected, eliminated or avoided, would likely have prevented or mitigated the event damage or injury. In most instances, a causal condition or factor is correctable by commanders, supervisors or individuals.

(1) Cause does not imply blame, it highlights that if the factor was corrected, eliminated or avoided, the mishap or hazard or incident would not have happened.

(2) Risk management is a persistent process that must be conducted in all organizations. Improper risk management at any level of command can be causal in an event. In cases where an event has identified hazards, there is a responsibility to assess the associated risks, evaluate risk mitigation options, implement risk management measures, evaluate the residual risks, document approval at the appropriate level to accept the expected residual risks in terms of consequences and probability of occurrence and monitor the effectiveness of the risk control measures implemented. Each recurrence of an event requires a reassessment of the prior risk management decisions. Do not cite risk acceptance as causal when all risk management functions were properly accomplished and a quantified level-of-risk was accepted at the appropriate level.

(3) Not every factor is causal. Some are effects or the expected result of a previously identified cause even though their inclusion only sustains the sequence leading to the event.

(4) Environmental conditions such as lightning, high wind, solar wind, meteorites or flooding may be causal only if all reasonable avoidance and damage and injury mitigation actions were taken.

(5) For human factors, the action that could have prevented a failure resides within the human realm and not on an object or publication. Publications or objects should almost never be found causal. Rather, the party responsible for ensuring the publications are correct or the party responsible for ensuring an object does not fail with catastrophic consequences, is causal. In such cases, there may be process or organizational failures and appropriate parties must be identified as responsible for these failures.

(6) Failure to provide a system or procedure may only be causal if a party should reasonably have been expected to know the omission was deficient prior to the mishap.

(7) Occasionally, an investigator may not be able to conclusively determine a specific causal action. In these special cases, the investigator may choose to list two or three of the most probable causes for each option. In rare instances, the causal event may be unknown.

c. Determining and Documenting Findings. Findings establish lines of evidence. Findings are used to establish factors. All Class A through Class E SIREPs must have findings.

(1) Each finding is a single event, condition or data point, which is important in the mishap or hazard. Each finding is an essential step in describing the complete event sequence; however, not every finding is causal. Findings must be concise (i.e., one sentence) and will not include any more information than is necessary to explain the event, condition or data point. Sequence-sustaining findings may be included and do not need to be linked to a factor.

(2) Each finding must have a logical connection to preceding findings. If no logical relationship exists, the sequence of the event has not been correctly described.

(3) Ensure that critical events required to sustain the event sequence have not been omitted. Conversely, do not include events interesting to the reader, but not necessary to sustain the event sequence.

(4) Ensure that the sequence starts when the initial action(s) occurred, which may be prior to the day of the mishap (e.g., design problems, improperly written directives, an inadequate training program).

(5) Ensure that the event sequence continues to the point where all damage or injury has occurred and the initial rescue or recovery actions have been accomplished.

Note: Do not include actions that follow rescue or recovery actions unless they specifically led to further damage or injury.

(6) Include injuries occurring during the event at the appropriate chronological point in the event sequence.



(7) Findings are arranged in chronological order and numbered consecutively.

(8) Write each finding as a full sentence, not a bullet or bullets. Use active voice where the subject accomplishes the action. Use past tense since the events occurred in the past. State the source of the findings at the end of each finding statement.

(9) Do not include people's names, call signs, DoD HFACS codes, gender pronouns or names of military bases or installations in the findings. Instead, use terms such as "the mishap vehicle," "the mishap vehicle operator," etc.

(10) After developing the findings, apply the "Findings Test" for validation as listed in subparagraphs 416c(10)(a) through 416c(10)(e).

(a) Is the Finding necessary to sustain the event sequence?

(b) Is the Finding a single event or condition?

(c) Is the Finding specific enough?

(d) Is the Finding relevant or simply interesting to the reader?

(e) Does the Finding logically connect to the preceding finding? Read the last finding. Ask "why?" Then, read the preceding finding. Does it answer the "why?" Continue for each finding.

d. Causal Findings. Identify causal findings by selecting the "Causal" button when entering findings in the RMI. Do not list causes under a separate heading. Word a causal finding as a clear and simple statement of a single condition or action. Causal findings must have a supporting causal factor detailed in the analysis and formal report.

(1) Causal findings will always be worded in an active voice and in past tense. A causal finding will identify the causal agent (i.e., who), the action taken (i.e., what) and the reason for the deficiency (i.e., why). Why the action or lack of action occurred should be fully explained in the narrative and may be included in the causal finding.

(2) After determining the causal findings, apply the "Cause Test" for validation as listed in subparagraphs 416d(2)(a) through 416d(2)(d).

(a) Is the causal finding correctable by commanders, supervisors or individuals?

(b) Is the causal finding a clear and simple statement of a single condition or event?

(c) Is the causal finding in the active voice and past tense and does it follow the format of who did what to whom or what and why?

(d) Is the causal finding an effect or an expected result of a previously identified cause, even though its inclusion sustains the event sequence? If so, it is not causal.

e. **Determining and Documenting Recommendations.** Recommendations are feasible and effective solutions to eliminate identified hazards; or, if the hazard cannot be eliminated, to mitigate the hazard's potential consequences. If no recommendations are made in an on-duty Class A or B investigation, then investigators will explain their rationale in the report narrative. Ensure that the investigation supports the recommendations. Do not make recommendations for the sole purpose of having recommendations. Recommendations require the assignment of a risk assessment code (RAC).

(1) Developing feasible and effective recommendations is a methodical process, which seeks to identify risk mitigation alternatives. It is essential to know precisely what deficiency or identified hazard, is being addressed; and, to stay focused on it.

(2) All recommendations should target one or more of the hazards identified and documented during the investigation. It is also sometimes prudent to make two or more recommendations against one hazard. Developing sound recommendations also requires recognition of the system safety hierarchy of controls (i.e., "order of precedence") concept (i.e., design changes, safety devices, warning devices or training and procedures) which recognizes that not all risk mitigation alternatives are equal. Figure 4-1 depicts a hierarchy of controls representation from the National Institute for Occupational Safety and Health Web site. Design fixes are among the most preferable solutions because they can often completely eliminate the hazard; however, these types of fixes often have the highest upfront costs. In all cases, use a hierarchy of controls to develop risk mitigation alternatives.

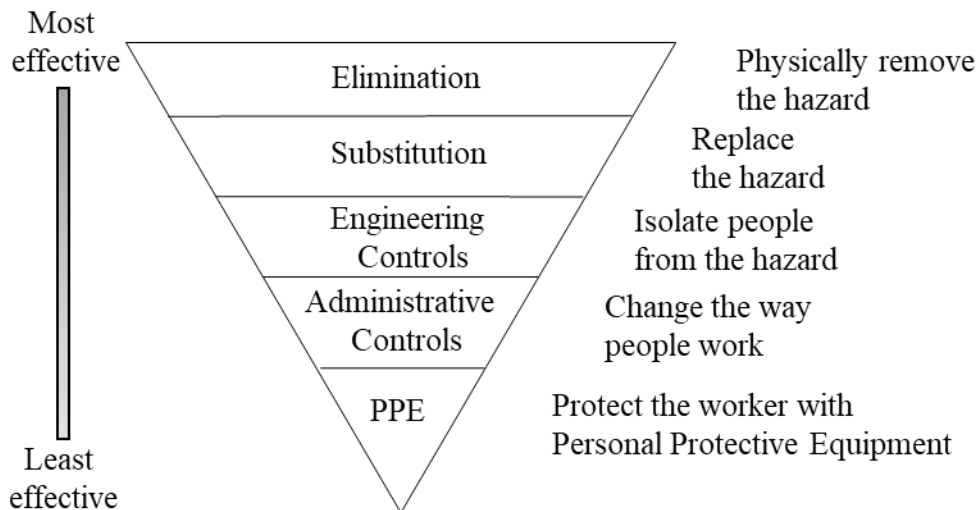


Figure 4-1. Hierarchy of Controls

(3) Based upon the specific information discovered during the investigation, selected alternatives should be formulated into feasible and effective recommendations and other alternatives discarded. The purpose of using the hierarchy of controls is to ensure investigators consider the entire range of available options and not just the cheap and easy ones...which, usually have the least mishap prevention value.

(4) A great deal of debate usually surrounds what is feasible and effective. Sometimes, a risk mitigation alternative is technically feasible and effective, but it is clearly not economically feasible or it has unacceptable mission consequences. In this case, discard the alternative. In other cases, it may not be clear that an alternative is either technically feasible or economically feasible. In these cases, include a recommendation for formal evaluation.

(5) Most recommendations will be associated with causal findings, but not all causal findings will have recommendations. For example, a causal finding may not have a recommendation if the deficiency is already prohibited in policy (i.e., instruction, technical order, etc.). Likewise, findings that are not causal may also have recommendations written against them.

(6) Recommendations may vary in scope. Some actions can be taken at unit level. Other recommendations require a TYCOM, SYSCOM or other agency actions.

(7) If a recommendation depends on tests or analyses that are incomplete when the report is transmitted, explain this and provide a reference to the tests or analyses (e.g., deficiency report, study or contract number).

(8) Recommendations should require the action agency to correct a deficiency rather than to implement a particular solution. The action agency normally has greater expertise than the investigators and should be given the opportunity to develop the optimal solution for a problem.

(9) Avoid recommendations that only require a study or evaluation. Action should be required based upon results of a recommended study. In most cases, it is not necessary to recommend a study or evaluation since studies or evaluations are implicit in the process. The recommendation can simply require corrective action.

(10) General, vague, sweeping or open-ended recommendations that cannot be closed by the action agency are not appropriate. Write recommendations that have a definitive closing action.

(11) Do not recommend briefing personnel on the event. Such a briefing is a basic commander responsibility and a normal function of safety offices at all levels of command.

(12) Do not recommend reminding personnel of the importance of simply doing their jobs properly. However, recommendations to place CAUTIONS and WARNINGS in technical order guidance relating to the adverse consequences of not doing one's job properly, may be appropriate. Recommendations for a specific action such as refresher training, implementing in-process inspections, etc., to ensure job duties are being properly performed, may also be appropriate since they are specific and can be closed.

(13) Include only one action for each recommendation. Rather than sub-grouping recommendations (e.g., 1a, 1b, 1c, etc.), use a new recommendation number. Do not create a recommendation in the RMI to state that there are no recommendations.

(14) Since recommendations are stand-alone items, when writing them, follow the guidance in subparagraphs 416e(14)(a) through 416e(14)(d).

(a) Spell out acronyms in each recommendation.

(b) Include the item to which the recommendation applies.

(c) Do not write "Recommend..." at the beginning of the recommendation.

(d) Do not write "NAVSEA should..." in the recommendation; just start with the required action. The action agencies are the office of primary responsibility (OPR) and office of collateral responsibilities (OCR).

(15) Determining the appropriate action agencies for each recommendation. Assign action agencies for all recommendations. An OPR is required for every recommendation. Although an OCR is not required, they are appropriate for many recommendations. List only

one OPR per recommendation. More than one OCR may be listed for an individual recommendation. OPRs and OCRs will be assigned by name and UIC for a given recommendation. OPRs will have the authority to update and recommend the recommendation for closure.

f. **Other Findings of Significance and Other Recommendations of Significance.** Guidance for developing and documenting primary findings and recommendations applies similarly to every Other Finding of Significance and Other Recommendation of Significance. Spell out acronyms in each Other Finding of Significance and Other Recommendation of Significance.

(1) Other Findings of Significance are findings that the safety investigators believe could contribute to future mishaps, but were not part of the event sequence. Other Findings of Significance are derived from Non-Factors Worthy of Discussion.

(2) Other Recommendations of Significance are recommendations resulting from Other Findings of Significance. Each Other Finding of Significance will be followed by one or more corresponding Other Recommendation of Significance. Assign an OPR and office of collateral responsibility (as required) to each Other Recommendation of Significance.

#### 417. Hazard Reporting.

a. **General.** Hazard reporting provides a means for units to report a real or potential hazardous condition that could cause injury, illness or death to personnel or damage to or loss of equipment or property or mission degradation to the Naval Enterprise. Hazard reporting is an important part of the DON mishap prevention program because hazard reporting alerts NAVSAFECEN, CMC (SD) and safety officers and managers of hazardous conditions where risk is elevated so that risk controls can be devised and implemented before a mishap occurs. This approach to managing safety and risk aligns with an important goal of the Navy Safety Management System to transition from reactive safety and risk management to proactive safety and risk management. Hazard reporting also facilitates tracking, trending and widespread dissemination of hazard information to alert naval communities. Communication of hazards to Navy and Marine Corps systems command(s) and acquisition program manager(s) provides important information to systems safety processes so that newly developed and procured systems are designed with safety features already incorporated.

b. **Hazard Categories.** Hazards are divided into the two categories listed in subparagraphs 417b(1) and 417b(2):

(1) An act or event (i.e., near miss) that may have resulted in a mishap where the fatality, injury, illness, property damage or loss of an asset was avoided merely by chance, the actions of an individual or individuals, a small measure of distance or a few moments in time.

(2) A workplace condition that might result in injury, health impairment, illness, disease or fatality to any person who is exposed to the condition or which might result in damage to or loss of property or equipment.

c. Importance of Hazard Reporting. It is essential that commanding officers encourage and command safety programs foster, hazard reporting. Hazards that affect organizations outside the command or activity must be reported to higher authority. HAZREPs may include descriptions of corrective action (risk controls) undertaken by the command, which would benefit other commands facing similar problems. Local hazard reporting programs are not a substitute for reports outlined in this manual.

Note: HAZREPs do not replace hazard abatement program requirements found in either OPNAV M-5100.23 of 5 June 2020 or MCO 5100.29C, volume 6.

d. Purposes of Hazard Reports. Hazard reporting is used for five broad purposes listed in subparagraphs 417d(1) through 417d(5):

(1) To report a hazardous condition and the mitigating action taken, so that others may take similar action.

(2) To report a hazardous condition and recommend corrective action to others.

(3) To report a hazard condition so that another organization may determine and take appropriate corrective action.

(4) To document a continuing hazardous condition in order to establish risk severity and exposure for trending purposes.

(5) To report a hazardous act or event (i.e., near miss) that may have resulted in a mishap where the fatality, injury, illness, property damage or loss of asset was avoided merely by chance, the actions of a single person, a small measure of distance or a few moments in time. Recommended corrective actions should also be provided.

e. Hazard Identification. Individuals or commands with direct, first-hand knowledge of the circumstances surrounding a hazard are the most effective at identifying and reporting hazards and suggesting possible mitigating strategies. Some methods used in anticipating or identifying hazards before a mishap occurs include: Analysis of mishap data; observation and investigation of near misses; reports of unsafe acts or hazards by personnel; safety inspections; industrial hygiene surveys; safety assessments; job hazard analyses; and the review of policies, procedures, instructions and operations. Risk management, applied in the planning stages of an operation, will identify hazards at the earliest possible opportunity. An essential element of an effective command safety program, risk management includes a review of operating procedures, analysis

of equipment failures, etc., for hazard detection and assessment. Additional information on hazard identification is provided in OPNAV M-5100.23 of 5 June 2020, chapter B5.

f. Hazard Assessment. Two vital parts of hazard assessment are classifying the hazard according to the severity of the expected damage and determining the probability or likelihood that the identified hazard will occur. This assessment results in the assignment of a RAC. A RAC of 1 or 2 is considered a severe hazard while a RAC of 3, 4 or 5 is considered routine. Severe hazards should receive priority when allocating resources for corrective actions. For U.S. Navy, see OPNAVINST 3500.39D, enclosure (1), for detailed methods of determining severity and probability and a risk assessment matrix that is used to determine a RAC. For U.S. Marine Corps, see MCO 5100.29C, volume 2.

g. Hazard Investigations.

(1) The quality of a HAZREP depends directly on the quality of the investigation into its attendant circumstances. Typically, hazards are investigated by an SIO. However, for some hazardous conditions and events (e.g., near misses) potential severity of the condition or event may warrant more investigative rigor than what is typically provided by an SIO. In these circumstances, convening authorities are encouraged to consider appointing an SIB to conduct the investigation.

(2) HAZREPs are not privileged. Promises of confidentiality are prohibited for hazard investigations. See paragraph 804 of this manual for further guidance on promises of confidentiality.

(3) The contents of HAZREPs may be divulged to outside agencies in response to FOIA request. Therefore, when submitting a HAZREP, do not include information such as names, dates, locations or any other details that could be traced to a specific mishap. Do not include any PSI in HAZREPs. Do not provide any personally identifiable information in HAZREPs.

(4) Near miss events should be treated as a rare gift by commanders and safety professionals because they afford us the opportunity to examine both latent conditions and active failures that could have caused a mishap, but the event did not result in loss of life, injury or significant property damage. Near miss events should be investigated and reported whenever discovered.

h. HAZREP Submission Criteria. A HAZREP is intended to be submitted when the elimination and control of a given hazard has a command-wide or community-wide implication in reducing mishaps. Subparagraphs 417h(1) through 417h(9) provide specific submission criteria:

(1) All identified hazards and near misses where information is considered valuable if shared with other commands or communities or the Naval Enterprise.

(2) A previously unrecognized hazard so that another agency may determine appropriate corrective action to eliminate the hazard.

(3) Any other unusual hazard discovered during maintenance, repair, inspections or evolutions where notifying other activities may prevent similar mishaps. The intent is not to conflict with other regular maintenance reporting requirements or any portion of the activity's overall safety program, but to assist in coordination of the total safety effort.

(4) Events that are not a DoD mishap, but still require a safety report per paragraph 218 of this manual.

Note: Hazards that involve a defined naval aircraft are reported using the procedures in OPNAVINST 3750.6S.

(5) The RMI must be used to submit HAZREPs described in this manual. HAZREPs should include recommending corrective action to eliminate the identified hazards and must include recommended corrective actions when a severe hazard has been identified (i.e., RAC 1 or 2). HAZRECs with recommendation actions beyond the submitting command must be endorsed using the process described in chapter 6 of this manual.

(6) SIBs must give careful consideration to using the HAZREP to disseminate important hazard information discovered during the course of their investigation. While hazards that are found to be causal will eventually be identified and discussed and that information disseminated as part of a SIREP, the importance of the hazard information may warrant earlier dissemination in a HAZREP before a SIREP has been released. SIBs should err on the side of early dissemination of hazard information. Additionally, during the course of their investigations, SIBs many times discover hazards that are not found to be causal in the mishap under investigation. SIBs must use the HAZREP to disseminate this hazard information.

(7) Submit HAZREPs with a severe RAC (i.e., RAC 1 or 2) within 72 hours of detecting the hazard. Submit all other HAZREPs as soon as possible.

(8) HAZREPs are usually unclassified. Omit any portion of a HAZREP that warrants a security classification; substitute the word "CLASSIFIED" in its place and submit a separate classified supplement. In the unlikely event that a meaningful unclassified HAZREP cannot be produced unless classified information is used, submit a classified message report. Send classified supplements and classified HAZREPs to NAVSAFECEN at NAVSAFECEN\_CLASSIFIED\_MISHAP@navy.smil.mil.



(9) Individuals reluctant to identify themselves may enter and submit an anonymous report to COMNAVSAFECEN using the NAVSAFECEN ANYMOUSE program. This method is pertinent when unique situations or embarrassing circumstances exist. NAVSAFECEN protects the confidentiality of these anonymous reports and takes action or coordinates action with the appropriate action agency. If the circumstances warrant, NAVSAFECEN may also submit the ANYMOUSE as a HAZREP after removing identifying information. Information about the NAVSAFECEN ANYMOUSE program, including how to submit an ANYMOUSE, is available online at Web site: <https://navalsafetycenter.navy.mil/Contact-Us/Anymouse-Submission/>.

i. HAZREP Censorship. It is contrary to the spirit of the Navy and Marine Corps mishap prevention program for personnel in the chain of command to edit, change or censor the contents of a HAZREP. The HAZREP endorsement process provides senior commands with the only acceptable method to express disagreement with the contents of a HAZREP.

j. Hazard Recommendation (HAZREC) Management. Open HAZRECs will be managed in the RMI following the procedures explained in chapter 6 of this manual.

CHAPTER 5  
SAFETY INVESTIGATION ENDORSEMENT PROCESS

501. Purpose. To explain the process, roles, responsibilities and timelines to review, endorse, finalize and close out safety investigation reports Safety Investigation Reports (SIREP) and hazard reports (HAZREP), from the time the investigation is complete and the SIREP or HAZREP is released by the safety investigation board (SIB) or single investigating officer (SIO), until the release of the final endorsement to the SIREP or HAZREP.

502. Applicability. The endorsement process described in this chapter applies to all SIREPs and HAZREPs that require endorsement, whether the investigation was conducted by an SIB or by an SIO.

503. General.

a. The process described in this chapter to review, endorse and close out SIREPs represents a major break from the previous process. The previous endorsement process relied on a specifically defined endorsing chain that typically mirrored the operational chain of command, to conduct a formal and sequential review and endorsement of a SIREP, from an SIB investigation. Each command in the endorsing chain reviewed both the SIREP and the previous endorser(s) comments and recommendations, then added their own endorsement. This previous process was extremely lengthy, often requiring more than a year from mishap occurrence to final endorsement and closeout.

b. The new methodology described in this chapter adopts most of the U.S. Air Force's Memorandum of Final Evaluation (MOFE) process when SIREPs and HAZREPs require endorsement. The MOFE process relies on a concurrent 45-calendar day review and endorsement period (i.e., Concurrent Comment Period) for all endorsers and interested parties, except for the final endorser. While there remains a requirement for those identified as required endorsers to critically review the SIREP or HAZREP during the Concurrent Comment Period, there is no requirement for endorsers to provide comments if they concur with the entire SIREP or HAZREP as written by the SIB or SIO. The absence of a comment is considered tacit approval of the SIREP or HAZREP.

c. Once the Concurrent Comment Period ends, a second 45-calendar day review and endorsement period (i.e., Deliberation and Adjudication Period) begins for the final endorser. During this period, the final endorser will review and adjudicate all comments and recommendations that have been made by the endorsers, then complete and release the final endorsement. With the release of the final endorsement, the investigation is officially considered closed. The new endorsement process will dramatically shorten the timeline from the release of a SIREP or HAZREP, to the final endorsement and closeout.

d. The new, concurrent endorsement process does not minimize the importance of endorsers and is a critical final step to finalize a SIREP or HAZREP. For mishaps, endorsers must still carefully review and evaluate the SIREP and ensure that the SIB or SIO completed a sufficiently rigorous investigation that uncovered all of the root causes of the mishap. The same applies for hazard investigations requiring endorsement, except the endorsers should focus on the sufficiency of the investigation in describing the characteristics of the hazard and its underlying causes. Endorsers must also verify that the controls recommended by the SIB or SIO are sufficiently strong enough to mitigate the identified risks and are sufficiently practical and feasible to implement.

Note: The terms “review and endorsement process,” “endorsement process,” and “MOFE process” may be used interchangeably to describe the process explained in this chapter. The acronym “MOFE” and the term “final endorsement” may also be used interchangeably to describe the product released by the final endorser that finalizes the SIREP or HAZREP and officially closes the investigation.

504. Determination of the Requirement for Endorsement. All SIREPs and HAZREPs that contain recommendations or corrective actions must be endorsed.

505. SIREP Endorsement Process Steps and Timeline. This section describes each step in the endorsement (i.e., MOFE) process. Figure 5-1 illustrates a nominal endorsement timeline.

a. Step 1. Report Submission. The SIB or SIO completes the investigation and submits the SIREP or HAZREP into the RMI POR.

b. Step 2. Convening Authority Review. The convening authority safety officer or safety staff conducts an administrative review of the entire SIREP or HAZREP submitted by the SIB or SIO. This review must be completed within 10 business days. This review will:

(1) Ensure the investigative guidance and documentation standards established in this instruction have been met;

(2) Ensure adequate evidence and analysis is presented and sufficient to support the investigation’s findings, conclusions and accepted causal factors;

(3) Ensure Department of Defense (DoD) HFACS codes are assigned and sufficient;

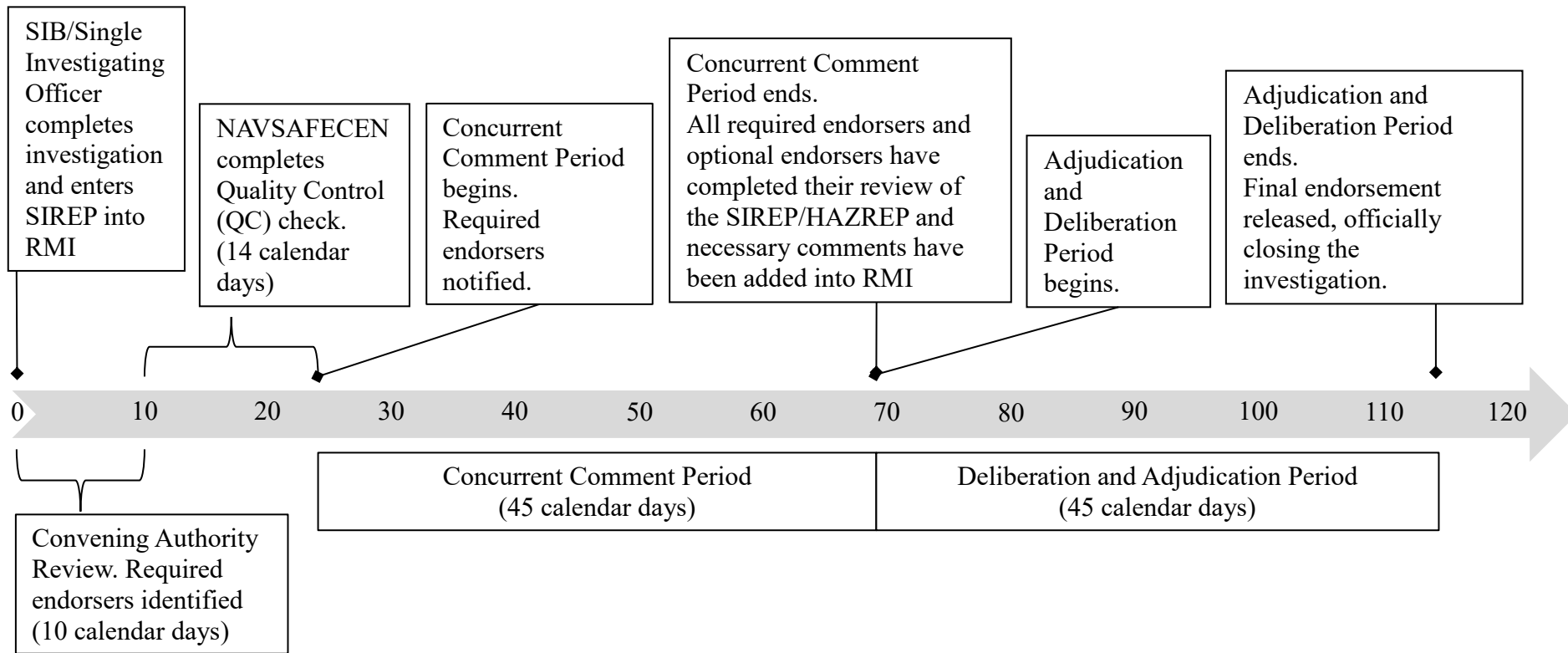


Figure 5-1. Nominal Endorsement Timeline

(4) Ensure recommendations and action agents are assigned for each accepted causal factor;

(5) Determine if the SIREP or HAZREP requires endorsement (i.e., requires entry into the MOFE process) per guidance in paragraph 504; and

(6) When an endorsement is required, identify the specific commands or activities that are required endorsers per paragraph 506 and enter the endorser information in the RMI.

Note: During Step 2, the convening authority identifies the specific commands or activities that are required endorsers and informally lists the commands or activities by name and UIC in the Comments for Approval Authority box.” The NAVSAFECEN will take the list provided by the convening authority and enter the list of commands and activities into the MOFE during its quality control review (Step 3).

c. Step 3. NAVSAFECEN Quality Control Review. The NAVSAFECEN conducts a quality control review of the SIREP or HAZREP. Omissions or deficiencies identified during this review are addressed with the SIB or SIO directly or through the convening authority safety officer or safety staff. This review must be completed within 14 business days. Once this review is complete, the SIREP or HAZREP will be released by the NAVSAFECEN and the report enters the concurrent comment period. The unendorsed SIREP or HAZREP is also available for viewing in the RMI database.

d. Step 4. Concurrent Comment Period. The 45-calendar day concurrent comment period begins when the NAVSAFECEN quality control checks are completed. During this period, all required endorsers must and other authorized individuals may, review the SIREP or HAZREP concurrently. Endorsers must assess the overall rigor and thoroughness of the safety investigation, evaluating the findings, causal factors, recommendations and DoD HFACS codes that were assigned by the SIB or SIO. Endorsers who have substantive comments must enter those comments into the RMI POR database within 45 calendar days. Endorsement comments should follow the format provided in chapter appendix 5-A. Required endorsers who concur with the findings, causal factors, recommendations and DoD HFACS codes in the SIREP or HAZREP and have no comments after completing their review, have no further required actions, with two exceptions as listed in subparagraphs 505d(1) and 505d(2).

(1) The convening authority must provide comments even if "concur as written" is the only applicable comment made.

Note: The RMI offers a free text box to enter comments during the concurrent comment period. Endorsers must first identify a reference point from the SIREP before entering comments. Typically, the reference point will be a finding, causal factor, DoD HFACS code or

recommendation. See chapter appendix 5-A for more information on organizing endorsement comments.

(2) Action agencies with OPRs that are assigned a recommendation or recommendations, must provide comments informing the convening authority on the feasibility of the recommendation, give advice to ensure the recommendation is properly worded or aligned and provide a status if available.

Note: The RMI can provide an e-mail notification when a SIREP or HAZREP has entered the concurrent comment period once the command or activity e-mails have been manually added into the RMI. UAs should refer to The Navy and Marine Corps Safety Investigations and Reporting Guide for details on establishing e-mail notifications.

e. Step 5. Deliberation and Adjudication Period. Once the 45-calendar day concurrent comment period concludes, the 45-calendar day deliberation and adjudication period begins. During this time, the final endorser will review and adjudicate all comments and complete the final endorsement. When complete, the final endorsement is released and entered into the RMI database. The MOFE represents the independent final evaluation and position on the causes, findings, recommendations and DoD HFACS codes of a safety or hazard investigation. Release of the final endorsement officially closes the investigation.

506. Determining SIREP and HAZREP Endorsers. The commands, activities and individuals listed in subparagraphs 506a(1) through 506a(12) and in subparagraphs 506b(1) through 506b(4), are either required or optional reviewers, as indicated, during the concurrent comment period for all SIREPS and HAZREPs that require endorsement.

a. Required Endorsers:

- (1) Convening authority.
- (2) Designated OPRs and OCRs assigned one or more corrective actions in the SIREP or HAZREP.
- (3) Type commander, for Class A and B mishaps that involved one of their assets or personnel.
- (4) Commanding officer(s) of the unit(s) involved in the mishap.
- (5) Masters for military sealift command vessels involved in the mishap.
- (6) Commanding officer(s) and commander(s) in the operational chain of command of the unit(s) involved in the mishap for Class A and B mishaps.

(7) Systems commanders, for Class A and B mishaps that required their expertise during the investigation (e.g., an engineering investigation).

(8) Lead research and development agency for a weapons system (e.g., a naval surface warfare center), when that weapons system was involved in a mishap for Class A and B mishaps.

(9) Commanders of combatant commands for Class A and Class B mishaps occurring in their commands.

(10) A vessel's commanding officer or master for military sealift command vessels and superiors in the chain of command, if a mishap involved a fatality, injury or property damage to embarked Marine units.

(11) Naval ordnance safety and security activity for mishaps involving a Navy unit or activity and ordnance or ammunition.

(12) Marine Corps Systems Command for mishaps involving a Marine Corps unit or activity and ordnance or ammunition.

b. Optional Endorsers:

(1) Fleet commander, for a mishap occurring in their respective area of responsibility.

(2) Component commanders of unified commands when the mishap occurred during contingency operations.

(3) Individual(s) found causal in the formal SIREP.

(4) DON agencies outside the investigating command, if their functions were involved in the mishap or hazard (optional).

Note: Unsolicited comments by other agencies and organizations reviewing the formal SIREP may comment on the findings, human factors and recommendations even though they are neither in the chain of command, nor a designated action command or agency.

507. Endorsement Prohibitions.

a. Endorsements or extracts from endorsements must not be appended to or included in, JAGMAN investigation reports, nor any other reports.

b. Endorsements must not include any reference to disciplinary action or any other administrative action in connection with the mishap being endorsed.

508. Extension of the Concurrent Comment Period.

a. Required endorsers may request an extension of the concurrent comment period. Requests must provide sufficient justification. Requests for an extension will be denied if requested after the 45-day concurrent comment period has concluded.

b. Only CNO N09F (i.e., for Navy investigations) and Director, CMC SD (i.e., for Marine Corps investigations) are authorized to grant extensions.

509. Reopening an Investigation.

a. The authority to reopen an investigation rests only with the convening authority and CNO N09F (i.e., for Navy investigations) or Director, CMC SD (i.e., for Marine Corps investigations).

b. If any endorser concludes that an investigation is incomplete or a SIREP or HAZREP is inadequate, they must recommend the reopening of the investigation by plainly stating this recommendation with specific justification when providing comments during the concurrent comment period.

Note: Disagreement with a particular factor or recommendation is insufficient grounds to reopen an investigation. Disagreements of this kind should be addressed in the endorser comments during the concurrent comment period.

c. When an investigation is reopened, the convening authority or higher authority who has directed the reopening, must clearly specify the areas of concern or deficiencies to the SIB or SIO.

d. Reopened investigations will be completed within 30 days unless an extension is requested by the SIB and approved by the convening authority.

510. Introduction of New Information. If, during the deliberation and adjudication period, CNO N09F (i.e., for Navy investigations) or Director, CMC SD (i.e., for Marine Corps investigations), learns facts that were not available to safety investigators or that shed new light on the published findings, causes and recommendations, they must take one of the actions in subparagraphs 510a or 510b.

a. Reopen the investigation.

b. Include the new facts as a "Comments for MOFE" by selecting the "Provide Comments for MOFE" link.



511. Submission of Comments after the Concurrent Comment Period. Comments cannot be entered into the RMI once the concurrent comment period has closed. Comments may be submitted via e-mail to the NAVSAFECEN, but are considered unofficial comments and might not be used during the MOFE deliberation. Subparagraphs 511a through 511d list the NAVSAFECEN e-mail addresses by directorate.

- a. Aviation Safety Programs Directorate (Code 10):  
NAVSAFECEN\_CODE10\_AVIATION@navy.mil.
- b. Shore Safety Directorate (Code 20): NAVSAFECEN\_CODE20\_ASHORE@navy.mil.
- c. Afloat Safety Directorate (Code 30): NAVSAFECEN\_CODE30\_AFLOAT@navy.mil.
- d. Operational Risk Management/Expeditionary Warfare Directorate (Code 40):  
NAVSAFECEN\_CODE40\_EXW\_ORM@navy.mil.
- e. Commandant of the Marine Corps (Safety Division) Ground:  
HQMC\_SAFETY\_DIVISION@usmc.mil.

512. Final Endorsement. The final endorsement (i.e. MOFE) will address factors, recommendations, other recommendations of significance, designated action agency responsibilities and DoD HFACS coding. The final endorsement is used to:

- a. Provide comments about factors to address procedural errors, changes to causal or not causal, additions or deletions or to add information not available to the SIB. Provide specific information to support the requested changes.

- b. Provide comments about recommendations to address procedural errors, changes to designated action agencies or to make additions or deletions.

- (1) If changes to designated action agencies are required, provide contact information for the newly-designated action agency, to include the name, rank or GS grade, office symbol, DSN or commercial phone number and Government e-mail address. Additionally, comments may address the recommendation narrative to clarify intent or correct errors.

- (2) If a recommendation has already been completed and the action agency has provided sufficient documentation of actions taken, the final endorser may close the recommendation in the MOFE.

- c. The final endorser will be:

(1) CNO N09F (i.e., for Navy investigations) and Director, CMC SD (i.e., for Marine Corps investigations) for all Class A mishaps and all explosive mishaps;

(2) CNO N09F (i.e., for Navy investigations) and Director, CMC SD (i.e., for Marine Corps investigations) for all safety investigations they directed; or

(3) The convening authority for all other class mishaps and hazard investigations that require endorsement.

Note: CNO N09F (i.e., for Navy investigations) and Director, CMC SD (i.e., for Marine Corps investigations) have the authority to be the final endorser for any safety investigation. When exercising this prerogative, they will coordinate with the convening authority.

513. Significant Changes to Findings. If the final endorser adds a person to a causal finding or significantly changes an individual's role in the findings, the final endorser will notify the individual through his or her command safety representative and afford the individual an opportunity to submit comments. Comments are not required.

- a. The individual will be provided with pertinent sections of the draft final endorsement to review.
- b. No others may provide further comment (i.e., the individual's command).
- c. The individual has 15 calendar days to provide comments.
- d. The individual may request an extension with justification to the final endorser who may grant an extension.
- e. The MOFE must not be released until after the individual has had an opportunity to respond.

APPENDIX 5-A  
MOFE ENDORSEMENT TEMPLATES

Templates are provided in paragraphs 1 through 4 of this appendix to organize the Memorandum of Final Endorsement (MOFE) comments.

1. General Endorsement Guidelines.

a. The convening authority (CA) must provide comments even if "Concur as Written" is the only applicable comment made.

b. The absence of comments by endorsers other than the CA is considered tacit approval of the SIREP or HAZREP and will be considered equivalent to commenting "Concur as Written."

2. MOFE Endorsers Other Than the CA.

a. Concur with Report as Written: (No entry required).

b. Concur with Report, with Additional Comments or Recommendations: "[Unit] concurs as written, with the following additional recommendation(s)/comments:"

Recommendation #X [Justification].

Additional comments (optional).

c. Non-Concur with Sections of Report: "[Unit] concurs as written with the following exceptions:"

Section number [X.X.X] Title: [Non-concur Justification].

Section number [X.X.X] Title: [Non-concur Justification].

(Repeat as required).

Additional comments (optional).

3. CA Comments.

a. CA Concurs with Report and MOFE Comments (CA Only): "[CA unit] concurs as written."

Additional CA Comments (optional).

b. CA Non-Concurs with Report, Non-Concurs with MOFE Comments or both (CA Only):  
“[CA unit] concurs with report as written with the following exceptions:”

Section number [X.X.X] Title: [Non-concur Justification].

Section number [X.X.X] Title: [Non-concur Justification].

(Repeat as required).

“[CA unit] does not concur with [unit 1]'s comments for MOFE.” [Justification].

“[CA unit] does not concur with [unit 2]'s comments for MOFE.” [Justification].

(Repeat as required).

Additional CA Comments (optional).

4. Commanding Officer Comments on HAZREPs and Class E SIREPs Not Requiring Endorsement.

Note: Enter comments in “Investigation Conclusions” block.

a. CO Concurs with Report and Comments: “[CO unit] concurs as written.”

Additional CO Comments (optional).

b. CO Non-Concurs with Report or Comments: “[CO unit] concurs with report as written with the following exceptions:”

Section number [X.X.X] Title: [Non-concur Justification]

Section number [X.X.X] Title: [Non-concur Justification]

(Repeat as required)

Additional CO Comments (optional).

CHAPTER 6  
MANAGING MISHAP AND HAZARD RECOMMENDATIONS

601. Purpose. To provide procedures and guidelines for managing open mishap recommendations (MISREC) and hazard recommendations (HAZREC) and for determining, managing and accepting the risks associated with those MISRECs and HAZRECs. Authorities and procedures to modify, cancel and close open MISRECs and HAZRECs are also explained.

602. General. Safety investigations result in MISRECs and HAZRECs developed by the Single Investigating Officer (SIO) or Safety Investigation Board (SIB) designed specifically to address hazards identified during the investigation. MISRECs and HAZRECs are scrutinized during the endorsement process and approved by the final endorser as discussed in chapter 5. Some MISRECs and HAZRECs are completed and closed out quickly while others take considerable time to complete, primarily due to the complexity of the required actions. These open MISRECs and HAZRECs increase the risk to naval operations and activities; therefore, a systematic process is required to assess the increased risk and present this information to naval leaders so that the elevated risk is understood and accepted at the right level. Effective management of MISRECs and HAZRECs forms an essential component of the Department of the Navy's (DON) mishap prevention efforts. See OPNAV M-5100.23 of 5 June 2020 for more information on risk management and hazard identification, reporting, prevention, control and abatement within the Navy safety management system. See also MCO 5100.29C, volume 1 (Marine Corps Safety Management System Overview) and MCO 5100.29C, volume 2 (Risk Management).

603. Policy.

- a. The Risk Management Information (RMI) must be used to manage the life cycle of MISRECs and HAZRECs from their approval by the final endorser to final disposition and closeout.
- b. Offices of Primary Responsibility (OPR) of open MISRECs and HAZRECs must provide an update at least every six months until the MISREC or HAZREC is closed.
- c. Hazard Review Boards (HRB) must be established at the controlling command level to manage open MISRECs and HAZRECs and the risk assessment process per the requirements defined in this chapter. See paragraph 608 for more information on HRBs.
- d. A formal risk assessment is required for all open MISRECs and HAZRECs and the risk assessment must be approved and signed at the appropriate level.

(1) For MISRECs from Class A and B mishaps and all risk assessment code (RAC) 1 and 2 HAZREPs, the OPR's controlling command must approve and sign the risk assessment.

(2) For MISRECs from Class C, D and E mishaps and all RACs 3 and 4 HAZREPs, the OPR's commander or commanding officer must approve and sign the risk assessment.

e. The approval authority to close out MISRECs and HAZRECs when the actions taken are different than the proposed actions or where no action has been taken or will be taken, is CNO N09F for the Navy or Director, CMC (SD) for the Marine Corps. See paragraph 605 for MISREC and HAZREC closeout procedures and paragraph 606 for assignment of approval authority.

#### 604. Managing Open MISRECs and HAZRECs.

a. Use of the RMI is required to manage updates and final disposition of MISRECs and HAZRECs.

b. The OPR must provide MISREC and HAZREC updates in the RMI every six months until the MISREC or HAZREC is closed. In cases where the OPR does not have sufficient RMI privileges to submit the update, the OPR must work with the RMI user administrator (UA) of their assigned command to post updates to the RMI. MISREC and HAZREC updates will include the items in subparagraphs 604b(1) through 604b(8):

- (1) Actions taken and actions planned.
- (2) Results of development and testing.
- (3) Significant problems encountered.
- (4) Delays and delay causes.
- (5) Rationale and any supporting risk assessment to justify decisions made.
- (6) Concurrence or non-concurrence by other affected commands or activities.
- (7) Percent of equipment modified, if applicable.
- (8) Justification for any risk that was transferred to a lower echelon.

#### 605. Closing Out MISRECs and HAZRECs.

a. The OPR must request closure in the RMI of every MISREC and HAZREC from the appropriate authority who determines if the closing action is acceptable.

b. A risk assessment must accompany all requests for MISREC or HAZREC closeouts when the actions taken are different from the proposed actions or where no action is taken. See subparagraph 603d for details on risk assessments.

c. The OPR must upload supporting documentation with requests for closeout (e.g., technical publication pages, risk assessment, training plans or HRB results).

d. Acceptable MISREC and HAZREC closeout actions are provided in subparagraphs 605d(1) through 605d(4):

(1) Recommended changes have been completed to all applicable publications and those publications have been issued. Include supporting details such as publication name and number, date of publication and the affected page numbers in the publication.

(2) Recommended modifications to all applicable equipment, systems or items have been completed. Development and approval of the technical change or changes is insufficient grounds for requesting a MISREC or HAZREC closeout since the elevated risk remains. MISREC or HAZREC closeout must not be requested until modifications or design changes have been implemented on all applicable equipment, systems or items.

(3) Recommended studies or evaluations have been completed, conclusions were validated and actions on all validated requirements were completed. In these cases, the OPR must include detailed rationale, to include a risk assessment, to support their conclusions.

(4) Recommended changes to training have been completed. If the training changes were incorporated into a publication, see paragraph 605d(1). Otherwise, corrective action annotations must include, as a minimum, the implementation method of the new training, the date implemented and the currency requirement for the training.

e. The approval authority will approve closeout only after all actions have been completed and properly annotated.

f. For MISRECs and HAZRECs closed without action taken (i.e., to include no action taken), document the risk assessment and approved closeout in the RMI.

g. For MISRECs and HAZRECs that were not implemented because of the planned retirement of a system, piece of equipment or item, the retirement date must be annotated. If the system, piece of equipment or item has not yet been completely removed from service at the time that the MISREC or HAZREC closeout is requested, an approved and signed risk assessment must be submitted. See subparagraph 603d. for details on approving risk assessments.

606. Reassignment of OPR Responsibilities. Action agencies have the authority to reassign OPR responsibilities to other individuals within their command.

607. Assignment of Approval Authority.

a. The approval authority to close out MISRECs and HAZRECs when the actions taken are different than the proposed actions or where no action has been taken or will be taken, is CNO N09F for the Navy or Director, CMC (SD) for the Marine Corps.

b. Use table 6-1 to determine the approval authority to close out MISRECs and HAZRECs when the actions taken are the same as the proposed actions.

Rule	If the MISREC or HAZREC action agency is...	And the MISREC or HAZREC involves a...	Then authority to close the MISREC or HAZREC is...
1	an O-5 level command (e.g., battalion, ship, squadron, submarine),	Class A mishap,	CNO N09F for the Navy, Director, CMC (SD) for the Marine Corps.
2		Class B or C mishap,	controlling command of the action agency.
3		Class D or E mishap,	the immediate superior in command of the O-5 command.
4		RAC 1 or 2 hazard,	CNO N09F for the Navy, Director, CMC (SD) for the Marine Corps.
5		RAC 3 or 4 hazard,	the immediate superior in command of the O-5 command.
6	an O-6 level command (e.g., base, battalion, Marine amphibious group, ship, submarine, type wing),	Class A mishap,	CNO N09F for the Navy, Director, CMC (SD) for the Marine Corps.
7		Class B, C, D or E mishap,	controlling command of the action agency.
8		RAC 1 or 2 hazard,	CNO N09F for the Navy, Director, CMC (SD) for the Marine Corps.



Rule	If the MISREC or HAZREC action agency is...	And the MISREC or HAZREC involves a...	Then authority to close the MISREC or HAZREC is...
9		RAC 3 or 4 hazard,	controlling command of the action agency.
10	a systems command or a controlling command,		CNO N09F for the Navy, Director, CMC (SD) for the Marine Corps.
11	the Naval Safety Center or CMC (SD),		CNO N09F for the Navy, Director, CMC (SD) for the Marine Corps.

Table 6-1. Determination of MISREC and HAZREC Approval Authority

608. Hazard Review Boards.

a. Each controlling command will either establish an HRB or incorporate the requirements of this paragraph into the charter or operating instructions of an existing council or committee formed per OPNAV M-5100.23 of 5 June 2020, chapter B4 (i.e., Navy controlling commands) or MCO 5100.29C, volume 1, chapter 6 (i.e., Marine Corps controlling commands).

(1) The HRB will meet at least semiannually. A memorandum for the record must be created for each HRB meeting and retained at the controlling command for three calendar years beyond the current calendar year.

(2) The HRB should be chaired by the controlling command’s safety officer or safety manager. Collective bargaining agreements may require an employee representative to be a member of entities affecting employee health or safety, such as an HRB. Additional representation is left to the discretion of the controlling command.

b. The broad purpose of an HRB is to evaluate hazards that exist within the operating environment of a command and its subordinate commands to better understand the risks associated with those hazards, determine whether stronger risk controls are needed and keep the commander informed of those risks. At a minimum, HRBs will:

(1) Manage all open MISRECs from Class A and B mishaps and all open RACs 1 and 2 HAZRECs assigned to OPRs within the command including subordinate commands.

(2) Periodically reevaluate the effectiveness of risk controls that were put in place when MISRECs and HAZRECs were implemented in order to determine if these controls are having

the desired effect. In cases of elevated risk, make a recommendation to the convening authority to convene a hazard investigation by an SIO or SIB.

(3) Evaluate risk assessments prepared by OPRs for sufficiency. Submit risk assessments to the commander for review and signature.

(4) Review and approve updates from OPRs for open MISRECs and HAZRECs. Upload all approved updates into the RMI.

(5) Provide a brief or written report to the commander at least semiannually. At a minimum, the brief or report must include the information in subparagraphs 608b(5)(a) through 608b(5)(e):

(a) Total number of open MISRECs from Class A and B mishaps and RACs 1 and 2 HAZRECs held by OPRs within the command, including subordinate commands.

(b) The status of all open MISRECs from Class A and B mishaps and RACs 1 and 2 HAZRECs held by OPRs within the command, including subordinate commands and identification of those that have been open for more than two calendar years.

(c) Number of MISRECs and HAZRECs that have been closed since the last brief or report.

(d) A review of all previously approved risk assessments still in effect.

(e) Areas of elevated risk that warrant increased attention or investigation.

c. Echelons of command below the controlling command are encouraged, but not required, to establish a similar HRB process to manage MISRECs from Class C through E mishaps and RACs 3 through 5 HAZREPs.

Note: While an HRB is not required below the controlling command level, all open MISRECs and HAZRECs must be tracked by the action agency and command responsible for signing off the completed MISRECs and HAZRECs per table 6-1.

#### 609. Managing the MISREC and HAZREC Process at the Service Level.

a. OPNAV N09F for the Navy and CMC (SD) for the Marine Corps are responsible for managing the overall MISREC and HAZREC process. Specific responsibilities include those listed in subparagraphs 609a(1) through 609a(5):

(1) Track open MISRECs and HAZRECs.

(2) Create and manage an independent, standardized process to evaluate the risks associated with open MISRECs and HAZRECs.

(3) Create and keep current a prioritized list of open MISRECs and HAZRECs.

(4) Periodically communicate prioritized risks from this evaluation to controlling commands and other senior Navy and Marine Corps leaders in order to remove barriers that are preventing the completion of necessary actions to close MISRECs and HAZRECs.

(5) Work closely with and provide assistance to the HRBs for controlling commands in the execution of their responsibilities.

b. CNO N09F is solely responsible for the requirements in subparagraphs 609b(1) and 609b(2):

(1) Verifying that specified actions required by MISRECs and HAZRECs have been completed by the appropriate action agencies.

(2) Editing, calling complete or otherwise closing out languishing and obsolete MISRECs and HAZRECs.

CHAPTER 7  
RECORD KEEPING

701. Purpose. To provide the record keeping requirements for Navy and Marine Corps events (i.e., mishaps, hazards (including near misses) and incidents), except those events involving a defined naval aircraft. For events involving defined naval aircraft, refer to OPNAVINST 3750.6S.

702. General. Record keeping of events is vital to provide safety information to the Occupational Safety and Health Administration (OSHA), Department of Defense (DoD) and Department of the Navy (DON). These records are required by Federal law and provide information to identify unsafe acts and conditions and to supply corrective measures. Therefore, all OSHA recordable and DON reportable events are to be reported electronically, as required by this manual, to Commander, Naval Safety Center (COMNAVSAFECEN).

703. Electronic Record Keeping. The DON established a new unclassified system of records entitled, "Risk Management Information System (RMI)." RMI is a DON program of record and replaced the DON's legacy unclassified system of records entitled, Web-Enabled Safety System. RMI collects information from active duty Service members, reservist Service members, DOD civilians and members of the public on fatalities, injuries, work-related illnesses and pertinent information for property damage incurred during DON operations, required of Federal Government agencies by the OSHA. The data maintained in this system will be used for analytical purposes to improve the DON's mishap prevention policies, procedures, standards and operations, as well as to ensure internal data quality assurance.

a. RMI Information Sharing. RMI collects personally identifiable information (PII) from the following existing DoD information systems: Joint Deficiency Reporting System (JDRS); Marine Sierra Hotel Aviation Readiness Program (M-SHARP); Defense Civilian Personnel Data System (DCPDS); Defense Manpower Data Center Reporting System (DMDCRS); Navy and Marine Corps Medical Readiness Reporting System (MRRS); Aeromedical Services Information Management System (ASIMS); Medical Protection System (MEDPROS); Corporate Enterprise Training Activity Resource Systems (CeTARS); Naval Aviation Logistics Command Management Information System (NALCOMIS); Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE); Defense Civilian Payroll System (DCPS); Global Combat Support Systems- Marine Corps (GCSS-MC); Injury Verification Feed (IVF); Marine Corps Total Force System (MCTFS); Total Force Structure Management System (TFSMS); Enterprise Safety Applications Management System (ESAMS) - Injury/Illness Reporting and Tracking System (IIRTS); Force Risk Reduction (FR2); Joint Deficiency Reporting System (JDRS); Person-Event Data Environment (PDE); Medical Mishap and Compensation Systems (MMAC); PNS Occupational Accident and Injury Reporting System (POAIRS); Defense Injury and Unemployment Compensation System (DIUCS); Enterprise Resource Planning (ERP); Graduate Training Integration Management System (GTIMS); Marine

Corps Training Information Management System (MCTIMS); Defense Finance and Accounting Service (DFAS); and Division of Longshore and Harbor Workers' Compensation (DLHWC).

b. RMI Categories of Records.

(1) RMI includes, but is not limited to, the following categories of records: Last name, first name and middle initial; military component; gender; date of birth; age; job title; marital status and number of dependents; rank, rate, grade; SSN (stored for historical purposes but no longer collected); DoD identification number; mailing address and home address; home, work, mobile telephone; personal or work email address; civilian, military, foreign national, contractor indicator; event reference number, case or file number; unit identification code (UIC), activity name; major command code; type; department; date, time and general location of mishap or illness; estimated cost of government or private property damage or destruction; lost workday count; injury or illness type; OSHA injury code(s); identification and location of body injury; source of bodily injury; process control number (associated with job or activity at time of mishap); chemical involved; formal training involved; occupational medical stressors; date of last physical and non-diagnostic information concerning health readiness or restrictive duty; respirator usage and fit test results; environmental exposures; work-related injuries or illnesses; case type (i.e., fatality, lost-time, no lost-time, first aid); mishap classification; date of death; short narrative; and claims information.

(2) RMI also contains mishap causal factors, a 72-hour profile for all involved personnel, involved chemical; involved sharp items; drug and alcohol factors; licenses and certifications; test scores; safety course; personal protective equipment; dive log; dive saturation; dive treatment; parachute jump; vehicle; aircraft; and insertion or extraction or scaling technique information as is applicable to the type of mishap the individual is involved in.

c. RMI Measures and Safeguards to Address Privacy Risks. RMI includes, but is not limited to, the privacy risk measures and safeguards listed in subparagraphs 703c(1) through 703c(6).

(1) Access controls. Access controls limit access to the application or specific functional areas therein. These controls consist of workflows, privileges and user roles and DoD public key infrastructure (PKI) certificates and CAC-based log on. User roles are granted only to a level that is required for their job.

(2) Confidentiality. Data is not made available or disclosed to unauthorized individuals, entities or processes.

(3) Integrity. Data is reviewed to ensure that it has not been altered or destroyed in an unauthorized manner.

(4) Audits. Audit logs are kept and reviewed regularly by NAVSAFECEN staff to assess the adequacy of maintaining, managing and controlling events that may degrade the security posture of the application. Audit logs track events including security audit startup and shutdown, changes in access control, successful and unsuccessful identification, authentication and authorization events.

(5) Training. Security training is provided on a continuous basis to keep users alert to the security requirements. Visual effects are used as constant reminders to ensure users always remain aware of their responsibilities.

(6) Physical Security. Consists of placing servers in a secure and protected location, limited access to individuals who have a need to access them. Access to each application is limited to authorized and appropriately cleared personnel as determined by the system manager. Physical entry is restricted by use of locks, guards and is accessible only to authorized, cleared personnel. The Navy RMI program will be hosted in the Air Force safety center's (AFSEC) site. The AFSEC site is based on Amazon GovCloud architecture.

#### 704. Civilian Privacy Concern Cases.

a. Privacy concern cases are cases that include sensitive PII which may require additional access restrictions and handling procedures. Privacy concern cases involve the types of on-duty civilian personnel work-related injuries or illnesses listed in subparagraphs 704a(1) through 704a(6) per 29 CFR 1904.29(b)(7):

(1) An injury or illness to an intimate body part or to the reproductive system;

(2) An injury or illness resulting from a sexual assault;

(3) Mental illnesses;

(4) HIV infection, hepatitis or tuberculosis;

(5) Needlestick injuries and cuts from sharp objects that are contaminated with another person's blood or other potentially infectious material; and

Note: "Sharps" refers to medical sharps such as scalpels, blades, disposable scissors, suture equipment, stylets and trocars, broken test tubes and glass."

(6) Other illnesses, if the employee independently and voluntarily requests that his or her name not be entered into the RMI.

b. Privacy concern cases may not have the employee's name and other PII searchable or visible to every user in the RMI. Instead, in the RMI, the word "privacy case" will be displayed in the space normally used for the employee's name. This will protect the privacy of the injured or ill employee when another employee, a former employee or an authorized employee representative is provided access to the RMI.

Note: If a person entering the injury or illness in the RMI has a reasonable basis to believe that information describing the privacy concern case may be personally identifiable even though the employee's name has been omitted in the RMI, that person may use discretion in describing the injury or illness in the RMI. The person must enter enough information to identify the cause of the event and the general severity of the injury or illness, but need not include details of an intimate or private nature. For example, a sexual assault case could be described as "injury from assault," or an injury to a reproductive organ could be described as "lower abdominal injury."

c. RMI will keep a separate, protected list of the case numbers and employee names for privacy concern cases. Per 29 CFR 1904.29(b)(10), privacy concern cases and their associated PII may only be disclosed in the limited situations listed in subparagraphs 704c(1) through 704c(3):

(1) To an auditor or consultant hired by the employer to evaluate the safety and health program;

(2) To the extent necessary for processing a claim for workers' compensation or other insurance benefits; or

(3) To a public health authority or law enforcement agency for uses and disclosures for which consent, an authorization or opportunity to agree or object is not required under Department of Health and Human Services Standards for Privacy of Individually Identifiable Health Information, 45 CFR 164.512.

Note: Examples of public health authorities: Defense Health Agency, Bureau of Medicine and Surgery, NAVSAFECEN, CMC (SD), military treatment facilities, fleet surgeons, force surgeons, health care providers, safety investigators, etc.

d. Procedures for handling and documenting privacy concern cases are in The Navy and Marine Corps Safety Investigations and Reporting Guide.

705. Log of Work-Related Injuries and Illnesses. 29 CFR 1904.29, DoDI 6055.07 of 6 June 2011, MCO 5100.8, MCO 8025.1E and OPNAV M-5100.23 of 5 June 2020, require that a log (i.e., automated or manual) be maintained for on-duty civilian personnel of all work-related illnesses and injuries beyond first aid treatment. The log must contain all of the fields found in OSHA Form 300. Chapter 2 lists DON reportable and OSHA recordable injuries and illnesses.

DoD and DON policy mandates that a similar log be maintained for on- and off-duty military personnel. OPNAVINST 5100.19F requires a similar log for military personnel afloat, regardless of duty status.

a. All required information will be reported via the RMI, if feasible, so that an OSHA Form 300 can be downloaded, accessed and maintained electronically as the log of work-related injuries and illnesses for the command, unit or activity.

b. RMI entries serve as the activity work-related illness and injury log (OSHA Form 300) to meet OSHA, DoD and DON record keeping requirements.

c. The report function in the RMI allows the required separate civilian on-duty, military on-duty and military off-duty log of work-related injuries and illnesses (OSHA Form 300) to be downloaded or printed off by the activity, as needed. The injury log entry may also be printed off in PDF from the RMI.

d. Ensure that civilian and military entries, on the log of work-related injuries and illnesses, are maintained as separate logs when downloading or printing from the RMI.

e. The injury log entry feature in the RMI may be used to replace the afloat injury report discussed in OPNAVINST 5100.19F. RMI allows printing or electronic routing of data entered as an injury log to notify the commanding officer and the safety officer of the mishap and for entry into a deck log.

f. 29 CFR 29(b)(3) requires OSHA recordable civilian personnel injuries or illnesses to be recorded on the OSHA 300 and OSHA 301 within seven calendar days of receiving information that a recordable injury or illness has occurred. Entry into the RMI fulfills the OSHA requirement.

g. If the RMI is not available to maintain an electronic log of work-related injuries and illnesses, then commands, units and activities must create a temporary log using the minimum required information in the OSHA 300 or download the OSHA 300 and maintain the log manually. See Appendix D. This temporary log must be maintained until such time that the information can be entered into the RMI.

**706. Injury and Illness Incident Report.** Entering the required injury and illness information in RMI fulfills the requirement to complete the OSHA 301, Injury and Illness Incident Report.

**707. Summary of Work-Related Injuries and Illnesses.** All Navy and Marine Corps commands, units and activities employing civilian personnel must generate an OSHA 300A for each establishment annually for the preceding calendar year. Paragraphs 707a through 707f provides amplification of this requirement.



- a. The commander, commanding officer or officer-in-charge must certify that he or she has examined the log of work-related injuries and illnesses and reasonably believes, based on his or her knowledge of the process by which the information was recorded, that the annual summary is correct and complete.
- b. The commander, commanding officer or officer-in-charge must sign and date each OSHA300A before posting.
- c. OSHA 300A must be posted in a conspicuous location no later than the first day of February each calendar year and remain in place until the thirtieth day of April. When posted, ensure the summary is not altered, defaced or covered by other material.
- d. Commands, units and activities must confirm successful submission of all DON reportable and OSHA recordable mishap data to the RMI database within 60 days of the end of the calendar year so that OSHA 300A is accurate through the end of the calendar year. In case of discrepancies, contact the NAVSAFECEN RMI help desk for assistance.
- e. Summaries for military personnel are optional; however, if posted, they must be separate from civilian personnel summaries.
- f. These summaries may be printed from the pre-formatted reports section of the RMI.

708. Annual Report of Civilian Work-Related Injuries, Illnesses and Fatalities to the U.S. Bureau of Labor Statistics.

- a. In January of each calendar year, CNO N09F will use the RMI to provide each echelon 2 command a count of employees by UIC, as well as civilian OSHA 300 Log of Work-Related Injuries and Illnesses, for each subordinate command. While all commands are required to review any local mishap logs to ensure that the RMI information is accurate, the RMI information provided will be dated due to latency issues with the RMI processing, as well as preparation time. Special attention will be needed during the review for a period of approximately 60 days prior to the date of the NAVSAFECEN-provided log. The BLS requires that all injuries and illnesses during the calendar year be recorded. Other information technology system-generated lists of injuries and illnesses are not acceptable formats because these other systems do not include all of the required fields. However, these other systems may be used to assist in data gathering.
- b. Additional guidance on this annual report will be issued by NAVSAFECEN (Navy) and CMC (SD) (Marine Corps) that will precede a DON TRACKER tasker.

709. Record Retention and Disposition.

a. All SIREPs, work-related illness and injury logs and event and hazard records must be retained for at least five years following the end of the calendar year in which they occurred. These records may be retained in electronic or hard copy format. For records readily available through the RMI, local electronic or hard copy records retention is optional or as directed by local instruction or order.

b. Whenever possible, such parts of a mishap report held by NAVSAFECEN, available in hard-copy format only, should be converted to electronic format before destruction of the hard copies. The entire electronic file must be maintained by NAVSAFECEN for at least 30 years or until the end of the life cycle of the system involved in the mishap. At that time, the entire file may be transferred to the Naval Historical Center.

c. Upon completion of the SIREP by an SIB or SIO, members must not retain any notes pertaining to the investigation. All statements, diagrams, photographs, notes, etc., acquired or created during the investigation, must be forwarded to and retained by NAVSAFECEN.

d. Upon completion of any safety investigation, activities and commands must destroy any privileged materials gathered during that investigation.

e. Service and health records must be handled per MILPERSMAN 6150-010 (Transfer of Outpatient and Dental Treatment Records, Officer and Enlisted) and MCO P1070.12K (Marine Corps Individual Records Administration Manual (Short Title: IRAM)). See Safety Reporting Resources section for online availability of these policies.

CHAPTER 8  
PROTECTION OF PRIVILEGED SAFETY INFORMATION

801. Purpose. To explain the concept of safety privilege and why it exists; to describe the special handling, use and release requirements for privileged safety information (PSI); and to assign authorities and responsibilities for the protection of PSI.

802. Background.

a. Safety privilege is based on a national defense need for rapid and accurate assessment of the causes of mishaps to prevent a reoccurrence and maintain mission readiness. The Navy and Marine Corps protect PSI to ensure commanders quickly obtain accurate mishap information so that effective risk controls can be implemented as soon as possible. This privilege creates restrictions on handling and releasing information in safety investigation reports.

b. The ability of safety investigators to obtain critical safety information during an investigation is dependent upon the trust that has been developed by protecting safety information, especially PSI, from misuse and unauthorized disclosure. Safety information must be used only for safety purposes.

c. While protection of PSI from unauthorized disclosure is essential for the long term viability of the Department of the Navy's (DON) safety program, unnecessary impediments to the free flow of safety information to those with a need-to-know are a risk to mission readiness. Achieving the balance between the protection of PSI and the timely dissemination of safety information, to those with a need-to-know, can be accomplished if policies are written clearly and personnel know and understand those policies.

803. PSI. Information that is reflective of a deliberative process in the safety investigation or given to a safety investigator pursuant to a promise of confidentiality, which the safety privilege protects from being released outside safety channels or from being used for any purpose except mishap prevention. It includes products such as draft and final findings, evaluations, opinions, preliminary discussions, conclusions, mishap causes, recommendations, analyses and other material that would reveal the deliberations of safety investigators, including reviews and endorsements. It also includes information given to a safety investigator pursuant to a promise of confidentiality and any information derived from that information or direct or indirect references to that information.

Note: Information in a statement given under a promise of confidentiality that is also available in a source that is not privileged, may be releasable, but that determination can only be made by Commander, Naval Safety Center (COMNAVSAFECEN).

804. Concept of Safety Privilege. Case law and statutory authority grant protection to certain information generated during safety investigations. This safety information is protected from public release and non-safety uses under executive privilege. The concept of privilege is important to the safety investigation process because it:

- a. Encourages safety investigators and the endorsers of Safety Investigation Reports (SIREP) to provide complete, candid and forthright information, opinions, conclusions and recommendations concerning a mishap; and
- b. Helps to overcome the reluctance of a witness to reveal complete and candid information to a safety investigator about the events surrounding a mishap. Witnesses may believe that the information could be embarrassing or detrimental to themselves, fellow Service members, their command, employer or others. A promise of confidentiality gives safety investigators a means by which to assure hesitant witnesses that they may voluntarily reveal information to the safety investigator without incurring personal jeopardy or causing harm to others in the process. A promise of confidentiality ensures that the statement will not be released under any circumstances. Separate and apart from offering a promise of confidentiality, a witness may also elect to withhold information by exercising their constitutional right to avoid self-incrimination.

Note: Safety investigators must not compel witnesses to provide a statement, nor will they administer an oath to witnesses prior to taking statements.

805. Promise of Confidentiality. In certain safety investigations and under specific circumstances as described in this paragraph, safety investigators can give a promise of confidentiality to any witness who provides evidence for the investigation to encourage frank or open communications. Use form JNAVMAR 5102/2 for this purpose. For safety investigations not requiring a promise of confidentiality to a witness, use form JNAVMAR 5102/1. Both forms are available from the Defense Logistics Agency Web site at <https://forms.documentservices.dla.mil/order>. Subparagraphs 805a through 805i provide promises of confidentiality requirements:

- a. Must be explicit and cannot be implied from the investigator's status or function.
- b. Must be documented in all instances in which a witness provides information pursuant to a promise of confidentiality. Witnesses are not sworn. Requiring them to take an oath prior to making a statement is prohibited.
- c. May be given only as needed to ensure forthright cooperation of the witness concerned and must not be given on a blanket basis to all witnesses.
- d. Must be limited to the information given to a safety investigator pursuant to a promise of confidentiality. However, witnesses need not limit their statements to matters to which they

could testify in court. Invite witnesses to express opinions and speculate on possible causes of the mishap.

e. Must advise the witness in writing as to why they are providing their statement and of the limitations placed on the release of the statement they are providing.

f. Must inform the witness that the promise of confidentiality applies only to information given to the safety investigator and not to the same information if given to others. If the witness provides similar or identical information to another investigative body, that information, as a part of a non-safety investigation, is not protected from release by the safety privilege.

g. May be given by safety investigators in all investigations of friendly fire mishaps and mishaps involving complex systems and military-unique items, operations or exercises.

(1) Examples of mishaps that meet this requirement include those involving U.S. warships, weapons systems, military combat and tactical vehicles and ordnance and explosives.

(2) Examples of mishaps that do not meet this requirement include those involving GMVs, falls from buildings, fires in facilities and work-related illnesses not involving complex systems or military-unique items and unrelated to military operations or exercises.

h. Must not be used in any off-duty mishap investigation.

i. May be authorized for other mishap categories or in individual cases only by the Secretary of the Navy (SECNAV) when SECNAV determines the authorization is in the interest of national security.

(1) Single Investigating Officers (SIO) and senior members of Safety Investigation Boards (SIB) who believe a promise of confidentiality is needed for mishap categories other than those listed in subparagraph 804(g) must submit a formal request with justification to COMNAVSAFECEN through the convening authority.

(2) COMNAVSAFECEN may request additional supporting information to make a decision, disapprove the request and return to the SIO or SIB senior member or favorably endorse the request and submit to the SECNAV via the assistant secretary of the Navy (installations, energy and environment) and deputy assistant secretary of the Navy for safety (DASN(S)) for final decision.

Note: SECNAV may choose to delegate this decision authority in whole or in part to COMNAVSAFECEN.

806. Protection of Safety Information, Including PSI. COMNAVSAFECEN is DON's custodian of safety information, including PSI and safety data and is responsible for establishing the appropriate policies, procedures and safeguards necessary to protect this information as required by DoDI 6055.7 of 6 June 2011.

807. Privileged Safety Information. PSI includes the types of information described in subparagraphs 807a through 807c:

a. Information given to a safety investigator pursuant to a promise of confidentiality and any information derived from that information or direct or indirect references to that information.

Note: SIOs and SIBs may share their list of witnesses with other non-safety investigations, if requested; however, information from interviews and witness statements to an SIO or SIB, whether or not they are given under a promise of confidentiality, must not be shared with other non-safety investigative bodies.

b. Products of deliberative processes of safety investigators, including those products listed in subparagraphs 807b(1) through 807b(7):

(1) Draft and final findings, evaluations, opinions, preliminary discussions, conclusions, mishap causes, recommendations, analyses and other material that would reveal the deliberations of safety investigators.

(2) Draft and final diagrams and exhibits if they contain information that depicts the analysis of safety investigators.

(3) Animations that incorporate privileged safety information. Un-interpreted animations made exclusively from flight recorder raw data, including military flight operations quality assurance data, are not protected by the safety privilege and are generally releasable. However, prior to release, especially in cases where the product is derived from aggregate data, such animations must be reviewed for sensitive national security content. Animations found to include information that could compromise national security to any degree must be handled appropriately.

(4) Photographs, films and videotapes that are staged, reconstructed or simulated reenactments of possible or probable scenarios developed by or for the analysis of the safety investigator. However, photographs depicting a measuring device or object contrasted against mishap evidence for the sole purpose of demonstrating the size or scale of the evidence are not considered privileged safety information and may be released.

(5) Life sciences material that contains analysis by a safety investigator.

(6) Notes taken by safety investigators in the course of their investigation, whether or not they are incorporated, either directly or by reference, in the final safety investigation report.

(7) Reviews and endorsements of safety investigation reports.

c. Portions of SIREPs. The preparation of a SIREP requires the SIO or SIB, to analyze the information gathered and to develop the findings, analysis, conclusions, causal factors and recommendations. Therefore, those parts of the SIREP are privileged.

Note: During the safety investigation process, the ideas and opinions of SIOs and SIB members are protected from disclosure. No individual or entity outside of the investigative process may compel SIOs and SIB members to divulge their ideas or opinions developed or offered during the safety investigation process.

808. Unauthorized Uses of PSI. PSI must not be:

- a. Used, shared or released except as provided in this manual;
- b. Used to support disciplinary or adverse administrative action, to determine the misconduct or line-of-duty status of any personnel or used as evidence before any evaluation board;
- c. Used to determine liability in administrative claims or litigation, whether for or against the U.S. Government; or
- d. Released in response to requests for information pursuant to section 552 of Title 5, U.S. Code (Freedom of Information Act), as amended by Public Law 114-185 (Freedom of Information Act Improvement Act of 2016) and SECNAVINST 5720.42G (Department of the Navy Freedom of Information Act Program) or in response to discovery requests, subpoenas, court orders or other legal process, except as specifically provided in this manual.

809. Unauthorized Dissemination or Disclosure of PSI.

- a. Navy and Marine Corps personnel having personal knowledge of the contents of a SIREP must not release this information to others, except as permitted by this manual.
- b. Navy and Marine Corps personnel must not provide PSI to persons and activities outside DON. Forward any requests for safety information, including PSI by personnel outside DON to COMNAVSAFECEN. See paragraph 811 for additional details.
- c. Navy and Marine Corps personnel must not provide PSI to contractors, even those under contract with the DON unless a non-disclosure agreement (NDA) has been established. Only

COMNAVSAFECEN is authorized to approve NDAs for contractor personnel. When an NDA is in place, contractor personnel are authorized access to safety information, including PSI, in strict compliance with the terms of the NDA.

d. A compromise of PSI occurs when unauthorized personnel are knowingly, willfully or negligently given access to PSI. Unauthorized personnel include those who do not have a safety need-to-know, even personnel within DON. Personnel who learn of an unauthorized release of PSI must immediately report it to their chain of command.

e. Suspected instances of unauthorized public disclosure of PSI must be reported promptly and investigated by the appropriate commander to determine the nature and circumstances of the unauthorized disclosure, the extent of the disclosure, any ramifications on protecting it from further release and the corrective and disciplinary action to be taken.

f. Commanders will notify COMNAVSAFECEN of all instances of unauthorized disclosure of PSI.

g. The unauthorized dissemination or disclosure of PSI by military personnel is a criminal offense punishable under Article 92, Uniform Code of Military Justice. The unauthorized dissemination or disclosure of PSI by civilian personnel may subject them to disciplinary action per the DON Civilian Human Resources Manual (DON CHRM).

810. Importance of Safety Information for Mishap Prevention. The timely sharing of safety information, including PSI to others within the DoD is a critical component of Navy and Marine Corps mishap prevention efforts. Safety information is an invaluable tool to raise awareness and to educate personnel at all levels from senior leaders to junior petty officers and noncommissioned officers about hazards that exist in their operating environment. Armed with this information, risks can be mitigated and mishaps prevented. Safety information is also critical to the development of effective risk controls that help lower the risk of operations and activities across the department. The necessary balance that must be achieved is the widest possible dissemination of safety information, including PSI, to those who need this information to manage risk while carefully protecting PSI through implementation of proper safeguards to prevent unauthorized disclosure. Good judgment is critical in determining effective handling actions and preserving this delicate balance.

811. Guidelines for the Proper Use, Access, Dissemination, Disclosure and Protection of PSI and Safety Information within the DON. Navy and Marine Corps personnel must abide by the guidelines provided in subparagraphs 811a through 811d for the use, access, dissemination, disclosure and protection of PSI and safety information.

a. PSI must be used for safety purposes only, specifically, preventing mishaps and reducing injuries, work-related illnesses and property damage resulting from mishaps. Access to PSI for



safety purposes is authorized for the following Navy and Marine Corps military and civilian personnel under any one of the circumstances and restrictions in subparagraphs 811a(1) through 811a(6):

(1) Those in positions of leadership when the safety information containing PSI is applicable to their unit's or their unit's subordinate units', operating environment, operations and activities;

(2) Those assigned to safety positions when the safety information containing PSI is applicable to their unit's or their unit's subordinate units', operating environment, operations and activities;

(3) Those assigned to positions for which the safety information containing PSI is directly applicable to their work in devising risk controls for identified hazards or to correct deficiencies identified in mishap recommendations (MISREC) or hazard recommendations (HAZREC);

(4) Those in supervisory positions when the safety information containing PSI is applicable to their subordinates' operating or work environment, operations or activities;

(5) Those assigned to positions for which the safety information containing PSI is directly related to their specific individual operating or working environment, operations or activities and access to this information would raise awareness about hazards and risks they may face; or

Note: For those listed in subparagraphs 811a(1) through 811a(5), access is limited to safety information, including PSI, from SIREPs or portions thereof or training materials derived from SIREPs. Access to interviews and statements given under a promise of confidentiality and notes and materials generated by an SIO or SIB during investigations and deliberations apart from the actual SIREP is prohibited. Training materials created using safety information, including PSI, must never disclose the identities of personnel involved in the mishap.

(6) Those who are responsible for endorsing a SIREP and members of their staff in direct support of reviewing and endorsing a SIREP. Access is limited to the safety information from the investigation that resulted in the SIREP, including PSI and all privileged and non-privileged evidence.

b. Personnel entrusted with PSI, must understand the special handling requirements that are required and comply with those requirements as delineated in this manual.

c. Special Handling Requirements. Special handling is required for PSI. The term "special handling" means assurance that access to documents containing PSI and training products derived from PSI are protected from unauthorized disclosure.

(1) Marking PSI. Special handling includes properly marking PSI. Chapter appendices 8-A and 8-B provide dissemination control marking requirements for unclassified and classified documents and material, respectively, including information in electronic form that contain PSI. Use of these markings is mandatory for all PSI.

(2) Electronic transmission and storage of PSI. Distributing SIREPs and other PSI on local area networks, e-mail or electronic bulletin board systems is authorized, provided access is controlled and authorized by the commander, commanding officer, master (i.e., for military sealift command vessels), officer-in-charge or safety officer. Access to storage systems containing PSI must always be controlled to exclude those who do not have a need-to-know and are not authorized access to PSI. The electronic transmission of PSI must be encrypted and such information must only be transmitted through DoD electronic mail (e-mail) systems. Use of personal, corporate or commercial e-mail systems to send or receive PSI or PII is prohibited.

(3) Storage of PSI. PSI stored locally must be protected from unauthorized access by outside entities, contractors and Navy and Marine Corps personnel who do not have a need to know (e.g., they are not directly concerned with safety and mishap prevention).

(4) Sharing of PSI. Personnel granted access to safety information containing PSI are authorized to share this information with similarly situated DON personnel that fall within one of the categories listed in subparagraphs 811a(1) through 811a(6). (e.g., safety officers sharing safety information within the same warfare community or with members of safety committees; deckplate safety managers sharing safety information with supervisors and employees aboard a shipyard). Key factors to keep in mind are that the safety information must be shared for mishap prevention purposes and that special handling is required by all involved personnel to protect the PSI from unauthorized release.

(5) Uncontrolled distribution of PSI. Uncontrolled distribution of PSI (e.g., placing PSI in reading racks, on general access message boards or on bulletin boards) is prohibited. Route printed SIREPs or other PSI in file folders with proper markings. This helps ensure access is given only to those who need to know the content for safety and mishap prevention purposes. Accountability must be maintained throughout the handling process, to include returning the circulated SIREPs or other PSI, to a safety professional for proper filing, disposal or destruction.

(6) Distributing SIREPs and other PSI on local area networks, e-mail or electronic bulletin board systems is appropriate, provided access is controlled and authorized by the commander, commanding officer, master (i.e., for military sealift command vessels), officer-in-charge or safety officer. See chapter appendices 8-A and 8-B for marking requirements.

Wherever possible, e-mails containing such information must be digitally signed and encrypted for transmission.

d. National Transportation Safety Board (NTSB) Flow and Dissemination of Information. Navy and Marine Corps military and civilian personnel who are parties to an NTSB investigation may relay to their respective organizations any information necessary for purposes of mishap prevention or remedial action as soon as the NTSB has made an initial release of its investigation report. Information concerning the mishap or incident, must not be released to any person who is not a party representative to the investigation (i.e., including non-party representative employees of the party organization), before initial release of the investigative report by the NTSB, without prior consultation and approval of the NTSB investigator-in-charge per 49 CFR 831 (Investigation Procedures).

812. Sanitizing PSI. Sanitizing safety reports or extracts from safety reports requires completely obscuring the relationship between the identity of a mishap and the findings, conclusions, causes, recommendations, deliberative processes resulting from the investigation and statements made under a promise of confidentiality. After a safety report has been successfully sanitized, the report that remains is no longer privileged.

a. COMNAVSAFECEN is solely authorized within the DON to create sanitized safety reports that are no longer privileged.

b. Some mishaps, because of widespread publicity or unique circumstances, cannot be adequately sanitized. COMNAVSAFECEN is responsible for making this determination.

c. Sanitized safety reports are not necessarily releasable to the public since they may still contain personally identifiable information, contractor proprietary information or information protected by the Freedom of Information Act, Privacy Act, Arms Export Control Act or Export Administration Act.

d. NAVSAFECEN will develop detailed procedures and processes to produce and disseminate sanitized safety information as part of the DON's comprehensive mishap prevention program in strict compliance with the DoDI 6055.07 of 6 June 2011.

813. Requests for Safety Information.

a. COMNAVSAFECEN is the DON's sole authorized release authority for safety information, including PSI. COMNAVSAFECEN will only release safety information when warranted and only when sufficient safeguards are in place. Additional guidelines for COMNAVSAFECEN in making a release determination are found in paragraph 816.

b. It is forbidden for anyone with personal knowledge of the contents of a safety investigation or of any other PSI, to release or share this information, except as this manual permits.

c. Except for the authorized exchange of safety information stated in paragraph 810, Navy and Marine Corps commands and personnel receiving requests for safety information, including PSI, from persons, commands, activities and other entities both within DON and external to DON must forward those requests to the NAVSAFECEN. Use the amplifying guidance provided in subparagraphs 813c(1) through 813c(4) to forward the request to the appropriate NAVSAFECEN staff member or section.

(1) Freedom of Information Act (FOIA) and Privacy Act (PA) Requests. Commands or individuals receiving FOIA or PA requests for safety information must forward the requests to the NAVSAFECEN staff attorney at NAVSAFECEN\_CODE03\_LEGAL@navy.mil or (757) 444-3520, extension 6055 per section 552 of Title 5, U.S. Code (Freedom of Information Act), as amended by Public Law 114-185 (FOIA Improvement Act of 2016), SECNAVINST 5720.42G (Department of the Navy Freedom of Information Act Program) and SECNAVINST 5211.5F (Department of the Navy Privacy Program). Referral must be accomplished as soon as possible because such requests are time-critical.

(2) Mishap Victim and Mishap Next-of-Kin Requests. Commands and individuals must not provide copies of SIREPs, in whole or in part, to a mishap victim or the next-of-kin of a mishap victim. Such requests for PSI, including copies of SIREPs, in whole or in part, must be referred to the NAVSAFECEN staff attorney at NAVSAFECEN\_CODE03\_LEGAL@navy.mil or (757) 444-3520, extension 6055.

(3) News Media Requests. Commands or individuals receiving requests for safety information from members of the news media must forward the request to the NAVSAFECEN, public affairs officer at NAVSAFECEN\_CODE52\_SAFETY\_PROMOTIONS@navy.mil or (757) 444-3520, extension 7870.

(4) All Other Requests. For all other requests for safety information, Navy and Marine Corps Service members and civilians should forward the request to the NAVSAFECEN staff member or section indicated in table 8-1.

Requestor	NAVSAFECEN Contact, Contact E-mail Address, and Contact Phone Number
Congress and congressional committees and sub-committees	<u>Executive Director:</u> NAVSAFECEN_CODE02_ED@navy.mil
Government Accountability Office (GAO)	(757) 444-3520, extension 7005
Federal executive agencies <sup>[a]</sup>	

Requestor	NAVSAFECEN Contact, Contact E-mail Address, and Contact Phone Number
Office of the Secretary of Defense (OSD)	
North Atlantic Treaty Organization (NATO) nations	
Other allied nations	
Non-allied nations	
State and Local Governments	
Department of Justice (DOJ)	<u>Staff Attorney:</u> NAVSAFECEN_CODE03_LEGAL@navy.mil  (757) 444-3520, extension 6055
Office of the Judge Advocate General (OJAG)	
Courts (Federal and State) <sup>[b]</sup>	
Department of Defense (DoD) law enforcement agencies <sup>[c]</sup>	
Other DoD safety centers	<u>Knowledge Management and Safety Promotions Directorate:</u> safe-rfi@navy.mil  (757) 444-3520, extension 7851
All other requests	<u>Staff Attorney:</u> NAVSAFECEN_CODE03_LEGAL@navy.mil  (757) 444-3520, extension 6055

Notes:

<sup>[a]</sup>This includes executive agency safety organizations (e.g., U.S. Coast Guard, Department of Homeland Security; National Transportation Safety Board (NTSB); Maritime Administration (MARAD); Occupational Safety and Health Administration (OSHA)) and agency inspectors general.

<sup>[b]</sup>Includes court orders and subpoenas.

<sup>[c]</sup>Includes U.S. Defense Criminal Investigative Service, Naval Criminal Investigative Service, U.S. Air Force Office of Special Investigations (i.e., for both U.S. Air Force and U.S. Space Force) and U.S. Army Criminal Investigation Division.

Table 8-1. NAVSAFECEN Contact Information for Requests for Safety Information

814. Access to Privileged Safety Information by DoD Contractors. DoD contractors may be granted access to particular PSI in furtherance of an articulated safety purpose related to specific projects or contracts under the following conditions and guidelines.

a. COMNAVSAFECEN is solely responsible within DON for granting DoD contractor access to safety information, including PSI.

b. DoD contractors must not be granted access to information given to a safety investigator pursuant to a promise of confidentiality (e.g., witness statement) or to any direct references to that information or to any information that could be used to identify the source who provided the information.

c. Prior to granting a DoD contractor access to any privileged safety information, the contractor, in its corporate capacity, must execute an NDA. COMNAVSAFECEN is solely responsible within DON for the NDA development and approval process. The NDA must:

(1) Identify the PSI at issue.

(2) Articulate the reasons why the contractor needs access to the PSI and describes permitted uses.

(3) Articulate the specific rules with regard to making copies of or otherwise reproducing the PSI.

(4) Contain language that the contractor agrees:

(a) That it is familiar with the DoD-approved methods for the handling and storage of and the use requirements for PSI.

(b) To protect the PSI from unauthorized users or release, including in litigation.

(c) That access to the PSI will only be granted to those employees of the contractor with a need to know and to no others.

(d) That it is fully responsible for its employees' actions with regard to the PSI.

(e) To return or destroy and include evidence of destruction, all PSI when no longer required or when requested by COMNAVSAFECEN.

(f) That it understands violating the terms of the NDA may result in suspension of access to PSI and any other sanctions allowed under law or the contract.

- (g) To the rules with regard to making copies of or otherwise reproducing the PSI.
- (h) To store PSI in a manner to prevent unauthorized access.
- (i) That PSI will be used solely for meeting the requirements of its contract.
- (j) That it will forward to COMNAVSAFECEN any requests, including FOIA and media requests, for information made available under this NDA.
- (k) That prior to receiving the PSI, it must require all its employees who will have access to PSI sign a personal NDA that mirrors for the employee the provisions of the contractor NDA.

815. Access to Privileged Safety Information by Foreign Civilians and Foreign Military Personnel Serving in U.S. Navy or U.S. Marine Corps (USN or USMC) Units. Foreign civilians and foreign military personnel serving in USN or USMC units may be granted access to PSI and assigned RMI account privileges under the conditions listed in subparagraphs 815a through 815d:

- a. COMNAVSAFECEN is solely responsible within DON for granting foreign civilians and foreign military personnel access to safety information, including PSI.
- b. The individual must be acting as a billeted safety professional in a USN or USMC unit while serving in the personnel exchange program or as a designated U.S. Government safety professional. The designation must be in writing and signed by the organization's leadership.
- c. The individual must have an NDA in place approved by COMNAVSAFECEN. The NDA will specify any limits to access to PSI based on the specific circumstances.
- d. The USN or USMC unit fulfilling supervisory responsibilities over the individual will ensure strict compliance with the NDA.

816. Access to Privileged Safety Information by Non-DoD Civilian Personnel Assigned to U.S. Navy or U.S. Marine Corps Units under an Interagency Program. Non-DoD civilian personnel serving in USN or USMC units under an interagency program and assigned safety duties, may be granted access to PSI and assigned RMI account privileges to fulfill those duties, under the conditions listed in subparagraphs 816a through 816e.

- a. COMNAVSAFECEN is solely responsible within DON for granting non-DoD civilian personnel access to safety information, including PSI.

b. The non-DoD civilian must be acting as a billeted safety professional with a position description that specifically assigns them safety duties.

c. A memorandum of understanding (MOU) between the interagency organization and the U.S. Navy or U.S. Marine Corps must be in place. COMNAVSAFECEN will sign all MOUs on behalf of the naval services.

d. The individual must have an NDA in place approved by COMNAVSAFECEN. The NDA will specify any limits to access to PSI based on the specific circumstances.

e. The USN or USMC unit fulfilling supervisory responsibilities over the non-DoD civilian will ensure strict compliance with the NDA.

817. Release of Historical Safety Information. Safety information, including SIREPs, that concerns mishaps occurring more than 30 years after the date of that mishap, is considered historical safety information. COMNAVSAFECEN is the sole authority within DON authorized to release historical safety information under all of the conditions in subparagraphs 817a through 817c.

a. COMNAVSAFECEN must determine the release will have no damaging effect on the national defense or the viability of the military safety privilege;

b. The release complies with DoD guidance contained in DoD 5400.11-R, Department of Defense Privacy Program, 14 May 2007; DoD Instruction 5400.11, DoD Privacy and Civil Liberties Programs, 29 Jan 2019; DoD Manual 5400.11, Volume 2, DoD Privacy and Civil Liberties Programs: Breach Preparedness and Response Plan, 6 May 21; DoD Manual 6025.18 Implementation of the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule in DoD Health Care Programs, 13 March 2019; DoD Manual 5400.07, DoD FOIA Program, 25 January 2017; and

c. The release must not include information given to a safety investigator pursuant to a promise of confidentiality and any information derived from that information or direct or indirect references to that information.

818. Additional Guidelines for the Release of Safety Information, Including PSI. This paragraph is applicable only to COMNAVSAFECEN.

a. Requests for PSI by Congress. The procedures for the release of PSI to Congress are guided by the 1989 Aspin-Rice Agreement and codified in DoDI 6055.07 of 6 June 2011.

(1) COMNAVSAFECEN is solely responsible within DON for releasing PSI to Congress.



(2) Such release will be in strict compliance with the procedures found in DoDI 6055.07 of 6 June 2011.

b. Release of Safety Information to the Naval Inspector General and Inspector General of the Marine Corps. Pursuant to SECNAVINST 5430.7R upon request of either the Naval Inspector General or Inspector General of the Marine Corps for PSI, NAVSAFECEN must provide an un-redacted copy of the full SIREP and enclosures. Prior to release, the PSI must be clearly labeled and marked “Privileged Safety Information – Not for further release without the written consent of SECNAV.”

c. Protection of PSI from Use in Court Proceedings. COMNAVSAFECEN must strictly comply with the procedures outlined in DoDI 6055.07 of 6 June 2011, enclosure 5, paragraph 10 concerning protection of PSI when parties to civil litigation or criminal trials attempt to compel its release.

d. Sharing PSI with Foreign Military Safety Agencies.

(1) COMNAVSAFECEN may share relevant PSI involving similar systems with military safety agencies of allied or partner nations for mishap prevention purposes when all of subparagraphs 818d(1)(a) through 818d(1)(c) apply.

(a) A reciprocal international agreement with the Foreign Defense Organization has been concluded per DoDI 5530.03, International Agreements, 4 December 2019, prior to sharing either PSI or sanitized information;

(b) Adequate protection of PSI exists and where the recipient agency agrees to provide similar safety information to the DoD; and

(c) There are signed NDAs approved by COMNAVSAFECEN.

(2) Whenever appropriate, COMNAVSAFECEN should share non-privileged safety information such as aggregate data or sanitized reports in lieu of privileged reports.

(3) Information (the witness statement) given to a safety investigator pursuant to a promise of confidentiality, any direct references to that information and any information that could be used to identify the source who provided the information, must not be shared.

(4) COMNAVSAFECEN must establish procedures for sharing safety information with foreign military safety agencies that comply with all of the requirements of DoDI 6055.07 of 6 June 2011.

e. Sharing Privileged Safety Information with Non-DoD U.S. Government agencies.

(1) COMNAVSAFECEN may establish reciprocal formal agreements for sharing relevant safety information with other Federal agencies regarding similar airframes or systems for mishap prevention purposes, but only where adequate protection of PSI exists to maintain the safety privilege and where the recipient agency agrees to provide similar safety information to the DON.

(2) Whenever appropriate, COMNAVSAFECEN should share non-privileged safety information such as aggregate data or sanitized reports in lieu of privileged reports.

(3) Information (the witness statement) given to a safety investigator pursuant to a promise of confidentiality, any direct references to that information and any information that could be used to identify the source who provided the information, must not be shared.

(4) COMNAVSAFECEN must establish procedures for sharing safety information with non-DoD U.S. Government agencies that comply with all of the requirements of DoDI 6055.07 of 6 June 2011.

APPENDIX 8-A  
DISSEMINATION CONTROL MARKINGS FOR  
UNCLASSIFIED DOCUMENTS AND MATERIAL  
CONTAINING PRIVILEGED SAFETY INFORMATION

1. Purpose. To provide dissemination control and caveat marking requirements for unclassified documents and material, including information in electronic form, that contain privileged safety information (PSI).
2. General. Privilege and PSI are discussed in chapter 8. The term “marking” includes certain concepts of identifying information safeguarding or dissemination controls. Markings must be conspicuous and immediately apparent. DoDI 5200.48 of 6 March 2020 provides guidance for the correct marking of Controlled Unclassified Information (CUI) that requires the application of access and distribution controls and protective measures. However, the DoDI 5200.48 does not address PSI. The CUI markings “For Official Use Only” and “FOUO” are now legacy markings per DoDI 5200.48 of 6 March 2020. It is important to note that legacy FOUO information is not automatically CUI. DoD material bearing legacy markings is not required to be redacted or re-marked while it remains under DoD control or is accessed online and downloaded for use within the DoD. However, any such document or new document created with information derived from legacy material, must be marked as CUI, if the information qualifies as CUI and the document is being shared outside the DoD. Optionally, when transmitting or transferring legacy information, the marking requirement can be satisfied by using SF 901 CUI Coversheet , as depicted in figure 8-A-1) or transmittal document or an indicator in an e-mail. DoD legacy marked information stored on a DoD access-controlled Web site or database does not need to be remarked as CUI, even if other agencies and contractors are granted access to such Web sites or databases. This chapter appendix provides specific Navy and Marine Corps guidance for unclassified documents and material containing PSI. Chapter appendix 8-B provides specific Navy and Marine Corps guidance for classified documents and material containing PSI.

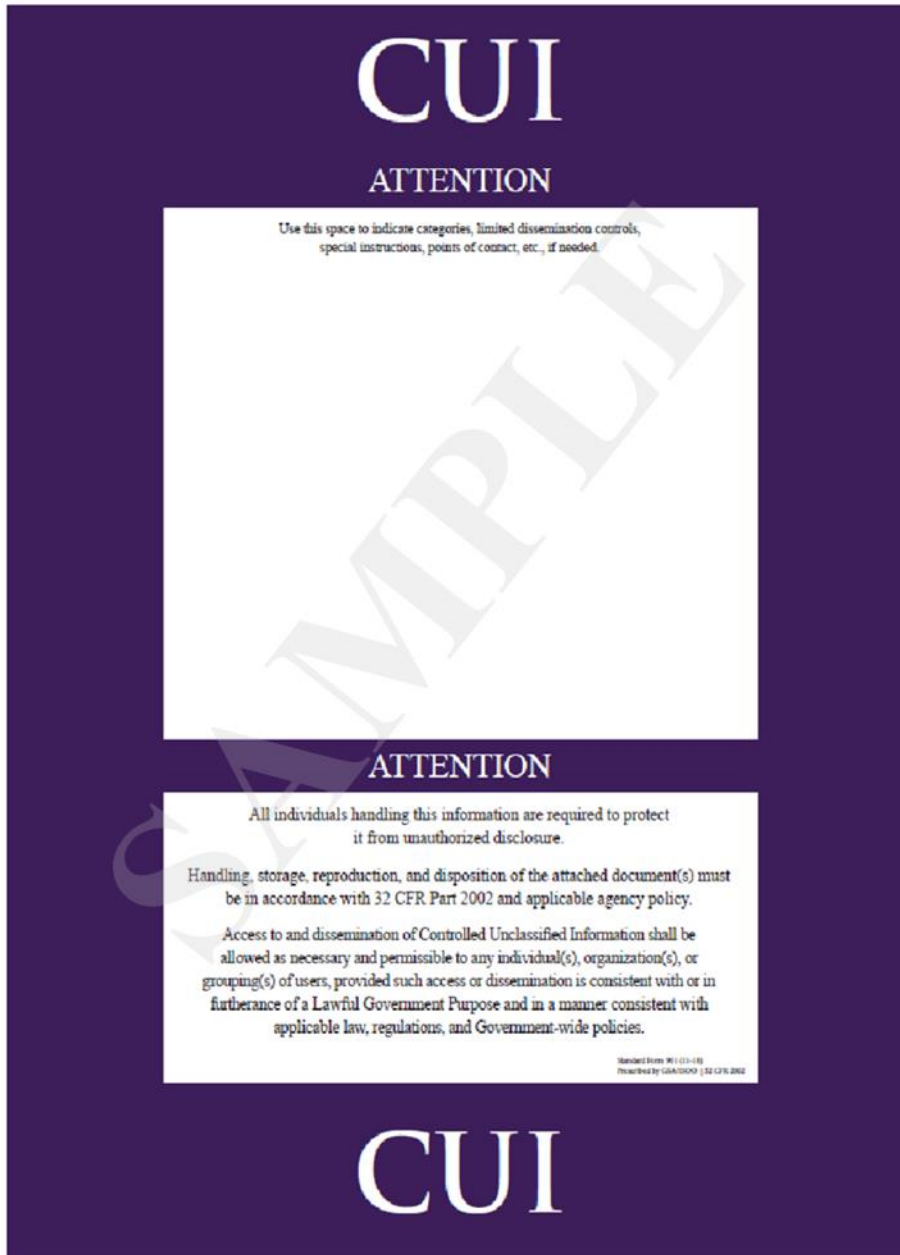


Figure 8-A-1. SF 901 CUI Coversheet

a. CUI Basic Control Markings. The CUI basic control marking is applied by the DoD to unclassified information when disclosure to the public of that particular record or portion thereof, would reasonably be expected to cause a foreseeable harm to an interest protected by one or more of FOIA exemptions (b)(2) through (b)(9). In the case of unclassified PSI, it is protected by courts from public release under executive privilege in the rules of evidence and by FOIA

exemption (b)(5) for “deliberative process privilege.” However, because access to basic CUI information is much broader than what is needed to protect PSI, specific dissemination controls are needed. These additional dissemination controls are imposed by the DoD through the use of CUI specified category markings.

b. CUI Specified Category Markings. The DON uses the CUI specified category marking “CUI//SP-PSI” to indicate additional dissemination control of PSI beyond that used for CUI basic information. Chapter 8 provides information on the concept of privilege pertaining to event safety information, the authority for the dissemination of event safety information in general and PSI in particular, the procedures for obtaining it and the special handling requirements for such material.

### 3. Dissemination Control Marking Requirements.

a. Markings General. In unclassified documents and material containing PSI, including printed information in electronic form (e.g., naval messages and e-mails) containing PSI, the CUI specified control marking “CUI//SP-PSI” must be included as a banner at the top of the outside of the front cover (if there is one), the title page, the first page and the outside of the back cover (if there is one). Each internal page containing PSI information must be marked with the banner “CUI//SP-PSI” at the top in bold text. It is optional, but a best practice, to include the same exact banner at the bottom. For consistency with classified systems, the document may be marked with the banner “UNCLASSIFIED//CUI//SP-PSI” in bold text; in such case, internal pages must be marked with this banner at both the top and bottom. Figure 7-7 of SECNAV M-5216.5 of June 2015 provides an illustration of legacy markings (e.g., “FOR OFFICIAL USE ONLY” and “FOUO”) on correspondence. Use “CUI//SP-PSI” in place of both legacy markings “FOR OFFICIAL USE ONLY” and “FOUO” as depicted in that illustration; however, at a minimum, the banner must be marked at the top of each page (i.e., a banner marking at the bottom of each page is optional but must be exactly like the top banner marking).

#### b. Correspondence Serial Numbers.

(1) SECNAV M-5216.5 of June 2015, subparagraph 3a(2)(c), specifies use of the legacy marking “FOUO” for serializing unclassified correspondence containing CUI. However, per DoDI 5200.48 of 6 March 2020, use of the CUI marking supersedes the use of the FOUO marking in any new documents. Therefore, new, unclassified documents containing CUI that are intended to be serialized (i.e., which is optional), must be serialized per subparagraph 3b(2).

(2) A serial number is not required on unclassified correspondence. However, if a serial number is used on unclassified correspondence containing PSI, the serial number must be immediately preceded with the dissemination control phrase “CUI,” as depicted in figure 8-A-2.

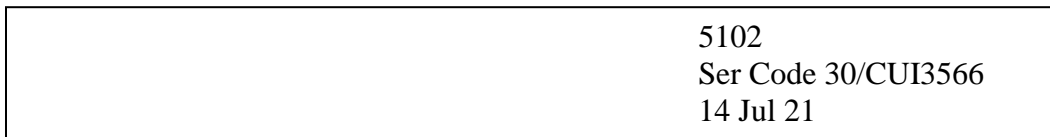


Figure 8-A-2. Sample Use of Dissemination Control Phrase CUI with Correspondence Serial Numbers

c. Privileged Safety Warning Statement. All unclassified documents containing PSI must be marked on the first page of multi-page documents with the warning statement shown in figure 8-A-3, until sanitized or redacted.

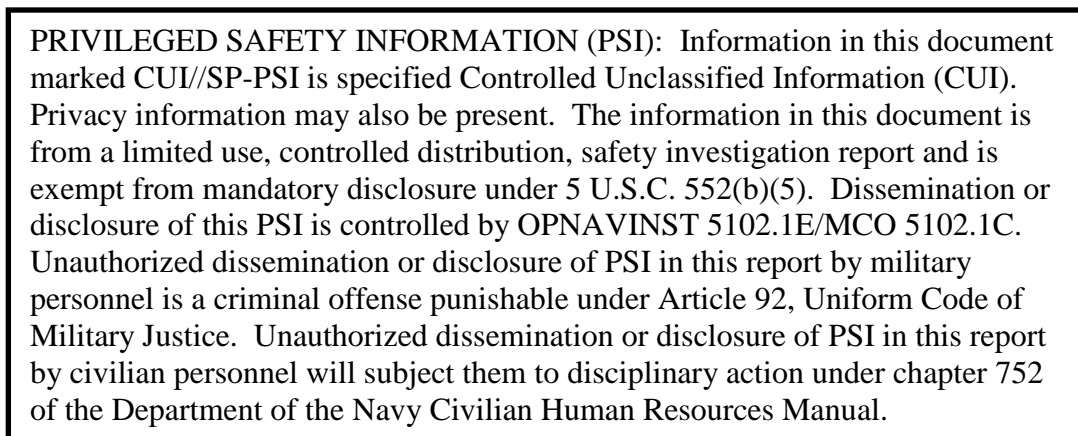


Figure 8-A-3. Privileged Safety Information Warning Statement for Unclassified Documents

d. Portion Markings. Subjects and titles, as well as individual sections, parts, paragraphs or similar portions of an unclassified PSI document must be marked to show that portion contains information requiring specific protection. Use of the unclassified marking “(U)” as a portion marking for unclassified information within CUI documents or materials is not required. Use either the parenthetical notation “(U//CUI//SP-PSI),” or “(CUI//SP-PSI)” to identify information as unclassified PSI for this purpose. Place this notation immediately before all text in that portion.

e. Naval Message and Electronic Mail (E-mail) Markings. Unclassified electronically transmitted naval messages and e-mail that contain PSI, must be marked with the specified dissemination control markings as required by this chapter appendix.

(1) Naval Messages.

(a) Printed Copies. See paragraph 3a of this chapter appendix.

(b) Portion Markings. Subjects, as well as individual sections, parts, paragraphs or similar portions of an unclassified naval message containing PSI must be marked to show that portion contains information requiring specific protection. Use the parenthetical notation “(U//CUI//SP-PSI)” to identify information as unclassified PSI for this purpose. Place this notation immediately before all text in that portion.

(c) Privileged Safety Information Warning Statement. In addition to the markings specified in paragraphs 3e(1)(a) and (b) of this chapter appendix, unclassified naval messages containing PSI must also include the figure 8-A-4 warning statement in an isolated block immediately following the narrative line (i.e., abbreviated in the naval message as “NARR”). This warning statement must remain on any naval message until it is either sanitized or redacted of any PSI.

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PRIVILEGED SAFETY INFORMATION (PSI): INFORMATION IN THIS DOCUMENT MARKED CUI//SP-PSI IS FOR SPECIFIED CONTROLLED UNCLASSIFIED INFORMATION (CUI). PRIVACY INFORMATION MAY ALSO BE PRESENT. THE INFORMATION IN THIS DOCUMENT IS FROM A LIMITED USE, CONTROLLED DISTRIBUTION, SAFETY INVESTIGATION REPORT AND IS EXEMPT FROM MANDATORY DISCLOSURE UNDER 5 U.S.C. 552(B)(5). DISSEMINATION OR DISCLOSURE OF THIS PSI IS CONTROLLED BY OPNAVINST 5102.1E/MCO 5102.1C. UNAUTHORIZED DISSEMINATION OR DISCLOSURE OF PSI IN THIS REPORT BY MILITARY PERSONNEL IS A CRIMINAL OFFENSE PUNISHABLE UNDER ARTICLE 92, UNIFORM CODE OF MILITARY JUSTICE. UNAUTHORIZED DISSEMINATION OR DISCLOSURE OF PSI IN THIS REPORT BY CIVILIAN PERSONNEL WILL SUBJECT THEM TO DISCIPLINARY ACTION UNDER CHAPTER 752 OF THE DEPARTMENT OF THE NAVY CIVILIAN HUMAN RESOURCES MANUAL.  
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Figure 8-A-4. Privileged Safety Information Warning Statement for Unclassified Naval Messages

(2) E-mail.

(a) Printed Copies. See paragraph 3a of this chapter appendix.

(b) Subject Line Indicator Marking. A subject line indicator marking is optional, but a best practice. If used, place the marking at the end of the subject. An example of a subject line indicator marking is “[Contains CUI//SP-PSI].”

(c) Banners. Unclassified e-mail bodies that contain PSI must be marked with the banner: “CUI//SP-PSI” at the top of the first page of the body, immediately before any e-mail body content is added.

1. This banner marking may be either left justified or centered and must have a single line space immediately following it.

2. This banner marking must be repeated at the top of every forwarded or reply e-mail to ensure that the marking remains conspicuous to e-mail recipients upon opening of the e-mail.

(d) Portion Markings. Individual sections, parts, paragraphs or similar portions of an e-mail containing unclassified PSI must be marked to show that portion contains information requiring specific protection. Use the parenthetical notation “(CUI//SP-PSI)” to identify information as unclassified PSI for this purpose. Place this notation immediately before all text in that portion.

f. Attachment Markings.

(1) Transmittal Documents. Transmittal documents are documents that have information enclosed with or attached to, them. An example is a letter, memo or staff summary sheet with unclassified enclosures. The transmittal document itself may or may not contain unclassified PSI.

(a) Transmittal documents that contain unclassified PSI must be marked per paragraphs 3a through 3d of this chapter appendix and must also include the following message that CUI//SP-PSI is present: “The attachment contains CUI//SP-PSI.”

(b) Transmittal documents that do not contain unclassified PSI, but have at least one enclosure or attachment containing unclassified PSI and have no classified material enclosures or attachments, must be marked with the following banner: “When enclosure is removed, this document is Uncontrolled Unclassified Information” or “When enclosure is removed, this document is CUI//SP-PSI; upon removal, this document does not contain CUI” in a conspicuous location on the first page of the transmittal document.

(2) E-mail.

(a) E-mail Bodies. E-mail bodies that do not contain unclassified PSI, but have at least one enclosure or attachment containing unclassified PSI, must be marked with the following statement beginning two spaces below the banner marking: “When attachment is removed, this e-mail is Uncontrolled Unclassified Information” at the top of the first page (i.e., immediately before any e-mail body content is added).



1. This statement may be either left justified or centered and must have a single line space immediately following it.

2. This statement must be repeated at the top of every forwarded or reply e-mail to ensure that the marking remains conspicuous to e-mail recipients upon opening of the e-mail.

(b) E-mail Attachment Indicator Marking. An e-mail attachment indicator marking is optional, but a best practice. If used, place the marking at the end of the e-mail filename, but before any filename extensions. An example of an e-mail attachment indicator marking is “[Contains CUI//SP-PSI].”

(3) Classified Enclosures or Attachments. Transmittal documents that have classified enclosures or attachments, along with PSI, must be marked per chapter appendix 8-B.

g. Specified Control Markings for Privileged Safety Information Contained in Media or Material (Including Hardware and Equipment). Examples of this media or material are computer files and other electronic media, audiovisual media, chart, maps, films, sound recordings, microfilm, microfiche, etc. Figures 8-A-5 and 8-A-6 are CUI media labels SF 902 Controlled Unclassified Information (CUI Label and SF 903 CUI Label – Thumb Drive, respectively. In case this manual was printed in black-and-white only, both of the media labels are purple colored with white text. See DoDI 5200.48 of 6 March 2020 and The Navy and Marine Corps Safety Investigations and Reporting Guide for guidance on how to mark this media or material. However, continue to use the specified control markings in a manner similar to that specified in this chapter appendix, as applicable. (See Appendix D on how to obtain forms)



Figure 8-A-5. SF 902 (11/2018 CUI label)



Figure 8-A-6. SF 903 (11/2018) CUI Label – Thumb Drive

APPENDIX 8-B  
DISSEMINATION CONTROL MARKINGS FOR  
CLASSIFIED DOCUMENTS AND MATERIAL  
CONTAINING PRIVILEGED SAFETY INFORMATION

1. Purpose. To provide dissemination control and caveat marking requirements for classified documents and material, including information in electronic form that contain either unclassified privileged safety information (PSI) classified PSI or both.

2. General. Privilege and PSI are discussed in chapter 8. The term “marking” includes certain concepts of identifying the classification of the information and identifying any information safeguarding or dissemination controls. Markings must be conspicuous and immediately apparent. DoDM 5200.01 Volume 2 of 24 February 2012 (Department of Defense (DoD) Information Security Program - Marking of Classified Information)) provides guidance for the correct marking of classified information. However, the DoDM 5200.01, Volume 2 of 24 February 2012 does not address PSI. This chapter appendix provides specific Navy and Marine Corps guidance for classified information that also contains PSI.

a. “CUI” Basic Control Markings. The Department of the Navy (DON) deems unclassified PSI to be in a Controlled Unclassified Information (CUI) specified category that requires the application of specific access and distribution controls and protective measures per DoDI 5200.48 of 6 March 2020 (CUI). Unclassified documents and materials containing PSI must use chapter appendix 8-A for dissemination control markings. The CUI basic control marking is applied by the DoD to unclassified information when disclosure to the public of that particular record or portion thereof, would reasonably be expected to cause a foreseeable harm to an interest protected by one or more of Freedom of Information Act (FOIA) exemptions (b)(2) through (b)(9). In the case of unclassified PSI, it is protected by courts from public release under executive privilege in the rules of evidence and by FOIA exemption (b)(5) for “deliberative process privilege.” However, because access to basic CUI information is much broader than what is needed to protect PSI, specific dissemination controls are needed. These additional dissemination controls are imposed by the DoD through the use of CUI specified category markings.

b. Classified Information Dissemination Control. Classified information requires the application of access and distribution controls and protective measures per DoDM 5200.01, Volume 2 of 24 February 2012. Giving a classification to PSI should be discouraged by originators to the greatest extent possible because of the increased handling burdens it places on the safety community in disseminating that information efficiently and in a timely fashion to prevent mishap or near miss reoccurrences. Not every person in every potential community of interest will have access to classified information. However, should the originator require that the PSI be classified, the classified PSI should be marked per the requirements in this chapter appendix. Marking classified PSI per this chapter appendix will ensure that any eventual

declassification of that PSI could change it to being CUI with a specified category of PSI (CUI//SP-PSI). Declassification requirements are discussed in paragraph 4 of this chapter appendix. Classified documents and materials containing either unclassified PSI, classified PSI or both, must use this chapter appendix for any dissemination control markings.

c. Controlled Unclassified Information Specified Category Markings. The DON uses the CUI specified category marking “CUI//SP-PSI” to indicate additional dissemination control of PSI beyond that used for CUI basic information. Chapter 8 provides information on the concept of privilege pertaining to mishap and near miss safety information, the authority for the dissemination of mishap and near miss safety information in general and PSI in particular, the procedures for obtaining it and the special handling requirements for such material.

### 3. Dissemination Control Marking Requirements.

a. Markings General. Pages of classified documents and material that do not contain any PSI, but do contain classified information, are marked as usual per DoDM 5200.01 Volume 2 of 24 February 2012. Figures 7-5 and 7-6 of SECNAV M-5216.5 of June 2015 (DON Correspondence Manual) provide illustrations of classification markings on classified correspondence.

b. Correspondence Serial Numbers. A serial number is required on all classified correspondence. SECNAV M-5216.5 of June 2015, subparagraph 7-2.3a(2)(c), provides format guidance on the use of classification letters (e.g., C, S or TS) with correspondence serial numbers.

Note: Other than for unclassified correspondence containing PSI, which only uses a CUI dissemination control marking for correspondence serial numbers, there is no special marking of serial numbers for classified correspondence to indicate the presence of PSI.

c. Privileged Safety Warning Statement. All classified documents containing PSI must be marked on the first page of multi-page documents with the warning statement shown in figure 8-B-1, until sanitized or redacted.

This content is classified at the [insert highest classification level of the source data] level and may contain elements of CUI, CUI specified category privileged safety information (CUI//SP-PSI) or information classified at a lower level than the overall classification displayed. This content must not be used as a source of derivative classification; refer instead to the applicable classification guide(s). It must be reviewed for Classified National Security Information (CNSI), CUI//SP-PSI and CUI per DoDI 5230.09 and OPNAVINST 5102.1E/MCO 5102.1C prior to public release.

The information in this document is from a limited use, controlled distribution, safety investigation report and is exempt from mandatory disclosure under 5 U.S.C. 552(b)(5). Dissemination or disclosure of this PSI is controlled by OPNAVINST 5102.1E/MCO 5102.1C. Unauthorized dissemination or disclosure of PSI in this report by military personnel is a criminal offense punishable under Article 92, Uniform Code of Military Justice. Unauthorized dissemination or disclosure of PSI in this report by civilian personnel will subject them to disciplinary action under chapter 752 of the DON Civilian Human Resources Manual.

Figure 8-B-1. Privileged Safety Information Warning Statement for Classified Documents

d. Pages Containing PSI and Classified Information. Classified documents and material containing PSI must be marked per DoDM 5200.01 Volume 2 of 24 February 2012 and DoDI 5200.48 of 6 March 2020, except that pages containing both PSI and classified information, must be marked with the classification and caveat banner “[CLASSIFICATION]//PSI” on the top and bottom.

Note: Brackets are not to be used in the actual document or material banner. They are used here before and after the classification only to indicate the relative placement location of a classification marking.

e. Pages Containing PSI, but No Classified Information. Classified documents and material containing PSI must be marked per DoDM 5200.01 Volume 2 of 24 February 2012 and DoDI 5200.48 of 6 March 2020, except that pages containing PSI, but no classified information, must be marked with the CUI specified control banner “CUI//SP-PSI” on the top and bottom.

f. Portion Markings. Subjects, titles and each section, part, paragraph or similar portion of a classified document containing PSI must be marked to show that portion contains information requiring specific protection. Do not commingle CUI specified category PSI, classified PSI or non-PSI containing classified information within the same portion. If the author wants to

annotate the classification of a reference, enclosure, tab or attachment that has an unclassified title, a parenthetical note may be included after that title (e.g., “(Document is classified Secret)”). Use table 8-B-1 to identify notations for portions of classified documents and material that contain PSI. Place these notations immediately before all text in that portion.

**UNCLASSIFIED – CLASSIFICATION MARKINGS FOR ILLUSTRATION PURPOSES ONLY**

Rule Number	If a portion of a classified document or material contains...	Then...
1	<ul style="list-style-type: none"> <li>Only non-privileged safety information (non-PSI) containing unclassified information,</li> </ul>	<p>no portion markings required. Optionally, may use “(U)”</p> <p>Note: If any portion not requiring dissemination control is marked “(U),” then all portions of the document must be marked.</p>
2	<ul style="list-style-type: none"> <li>Non-PSI containing unclassified information and</li> <li>CUI specified category PSI,</li> </ul>	mark that portion immediately before the text as “(U//CUI//SP-PSI)”.
3	<ul style="list-style-type: none"> <li>Non-PSI containing unclassified information and</li> <li>Non-PSI containing classified information,</li> </ul>	mark that portion immediately before the text as “(U),” “(C),” “(S),” or “(TS),” as required per classification level.
4	<ul style="list-style-type: none"> <li>Non-PSI containing unclassified information and</li> <li>Classified PSI,</li> </ul>	mark that portion immediately before the text as “(C//PSI),” “(S//PSI),” or “(TS//PSI),” as required per classification level.

Notes: Do not commingle CUI specified category PSI, classified PSI or non-PSI containing classified information within the same portion. If the author wants to annotate the classification of a reference, enclosure, tab or attachment that has an unclassified title, a parenthetical note may be included after that title (e.g., “(Document is classified Secret)”).

Table 8-B-1. Portion Markings for Classified Documents and Materials Containing Privileged Safety Information

g. Naval Message and Electronic Mail (E-mail) Markings. Classified electronically transmitted naval messages and e-mail, that contain PSI, must be marked with dissemination control phrases and handling caveats as required by this chapter appendix.

(1) Naval Messages.

(a) Printed Copies. See paragraphs 3a and 3c through 3e of this chapter appendix.

(b) Portion Markings. Subjects, as well as individual sections, parts, paragraphs or similar portions of a classified naval message containing PSI must be marked to show that portion contains information requiring specified protection. Do not commingle CUI specified category PSI, classified PSI or non-PSI containing classified information within the same portion. If the author wants to annotate the classification of a reference or attachment that has an unclassified title, a parenthetical note may be included after that title (e.g., “(Document is classified Secret)”). Use table 8-B-1 to identify notations for portions of classified naval messages that contain PSI. Place these notations immediately before all text in that portion.

(c) Privileged Safety Information Warning Statement. In addition to the markings specified in paragraphs 3g(1)(a) and (b) of this chapter appendix, classified naval messages containing PSI must also include the figure 8-B-2 warning statement in an isolated block immediately following the narrative line (i.e., abbreviated in the naval message as “NARR”). This warning statement must remain on any naval message until it is either sanitized or redacted of any PSI.

\*\*\*\*\*  
THIS CONTENT IS CLASSIFIED AT THE [INSERT HIGHEST CLASSIFICATION LEVEL OF SOURCE DATA] LEVEL AND MAY CONTAIN ELEMENTS OF CONTROLLED UNCLASSIFIED INFORMATION (CUI), CUI SPECIFIED CATEGORY PRIVILEGED SAFETY INFORMATION (CUI//SP-PSI) OR INFORMATION CLASSIFIED AT A LOWER LEVEL THAN THE OVERALL CLASSIFICATION DISPLAYED. THIS CONTENT MUST NOT BE USED AS A SOURCE OF DERIVATIVE CLASSIFICATION; REFER INSTEAD TO THE APPLICABLE CLASSIFICATION GUIDE(S). IT MUST BE REVIEWED FOR CLASSIFIED NATIONAL SECURITY INFORMATION (CNSI), CUI AND PSI PER DODI 5230.09 AND OPNAVINST 5102.1E/MCO 5102.1C PRIOR TO PUBLIC RELEASE.

THE INFORMATION IN THIS DOCUMENT IS FROM A LIMITED USE, CONTROLLED DISTRIBUTION, SAFETY INVESTIGATION REPORT AND IS EXEMPT FROM MANDATORY DISCLOSURE UNDER 5 U.S.C. 552(B)(5). DISSEMINATION OR DISCLOSURE OF PSI IS CONTROLLED BY OPNAVINST 5102.1E/MCO 5102.1C. UNAUTHORIZED DISSEMINATION OR DISCLOSURE OF PSI IN THIS REPORT BY MILITARY PERSONNEL IS A CRIMINAL OFFENSE PUNISHABLE UNDER ARTICLE 92, UNIFORM CODE OF MILITARY JUSTICE. UNAUTHORIZED DISSEMINATION OR DISCLOSURE OF PSI IN THIS REPORT BY CIVILIAN PERSONNEL WILL SUBJECT THEM TO DISCIPLINARY ACTION UNDER CHAPTER 752 OF THE DEPARTMENT OF THE NAVY CIVILIAN HUMAN RESOURCES MANUAL.

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Figure 8-B-2. Privileged Safety Information Warning Statement for Classified Naval Messages

(2) E-mail.

(a) Printed Copies. See paragraphs 3a and 3c through 3e of this chapter appendix.



(b) Banners. Classified e-mail bodies that contain PSI must be marked with the following banner or a similar one: “[CLASSIFICATION]//PSI” at the top of the first page of the body, immediately before any e-mail body content is added. The classification level in the banner marking reflects the overall classification of the e-mail (i.e., includes the subject line, text of the e-mail, any classified signature block, attachments, included messages and any other information conveyed in the body of the e-mail), not just the classification of the PSI. A similar banner marking must be at the end of the e-mail body, after the signature block.

Note: Brackets are not to be used in the actual e-mail banner. They are used here before and after the classification only to indicate the relative placement location of a classification marking.

1. This banner marking may be either left justified or centered and must have a single line space immediately following it.

2. This banner marking must be repeated at the top of every forwarded or reply e-mail to ensure the marking remains conspicuous to e-mail recipients upon opening of the e-mail.

(c) Automated Marking Tools. Some organizations use automated tools to mark electronic messages (e.g. organizational messages, e-mails and text or instant messages). It remains the individual’s responsibility to properly mark classified messages, including banner marking, portion markings and classification authority block when an automated tool is used.

(d) Portion Markings. Subjects, as well as individual sections, parts, paragraphs or similar portions of a classified e-mail containing PSI must be marked to show that portion contains information requiring specified protection. Do not commingle CUI specified category PSI, classified PSI or non-PSI containing classified information within the same portion. If the author wants to annotate the classification of a reference or attachment that has an unclassified title, a parenthetical note may be included after that title (e.g., “(Document is classified Secret)”). Use table 8-B-1 to identify notations for portions of classified e-mails that contain PSI. Place these notations immediately before all text in that portion.

h. Attachment Markings.

(1) Transmittal Documents. Transmittal documents are documents that have information enclosed with or attached to them. An example is a letter, memo or staff summary sheet with classified or PSI-containing enclosures. The transmittal document itself may or may not contain CUI//SP-PSI, non-PSI containing classified information or classified PSI. Paragraphs 3b, 3c and 3f of this chapter appendix provide requirements for correspondence serial numbers, a PSI warning statement and portion marking for the transmittal document itself.

(a) Unclassified Transmittal Document Banner Lines.

1. Unclassified Transmittal Document Contains PSI, Transmitted Information is Classified. Unclassified transmittal documents that contain PSI and transmits classified PSI or non-PSI containing classified information, must be marked with a banner line that has the highest classification level (and the PSI control marking, if applicable) of any information in the transmittal document or transmitted by it. Mark the transmittal document with an appropriate instruction, beneath the lower classification banner, indicating that it is CUI//SP-PSI when separated from the classified enclosures (e.g., “CUI//SP-PSI when separated from classified enclosures” or “CUI//SP-PSI when Attachment 2 is removed”).

2. Unclassified Transmittal Document Does Not Contain PSI, Transmitted Information is Classified. Unclassified transmittal documents that do not contain PSI, but transmit classified PSI or non-PSI containing classified information, must be marked with a banner line that has the highest classification level (and the PSI control marking, if applicable) of any information transmitted by it. Mark the transmittal document with an appropriate instruction, beneath the lower classification banner, indicating that it is unclassified when separated from the classified enclosures (e.g., “UNCLASSIFIED when separated from classified enclosures” or “UNCLASSIFIED when Attachment 2 is removed”).

(b) Classified Transmittal Document Banner Lines.

1. Classified Transmittal Document Contains PSI, Transmitted Information is Classified. Classified transmittal documents that contain PSI and transmit classified PSI or non-PSI containing classified information, must be marked with a banner line that has the highest classification level (and the PSI control marking, if applicable) of any information in the transmittal document or transmitted by it. Mark the transmittal document in the same manner as any other classified document containing PSI, to include banner, portion markings, classification authority block and any required warning or special notices.

2. Classified Transmittal Document Does Not Contain PSI, Transmitted Information is PSI. Classified transmittal documents that do not contain PSI, but do transmit classified or unclassified PSI, must be marked with a banner line that has the highest classification level (and the PSI control marking, if applicable) of any information in the transmittal document or transmitted by it. Mark the transmittal document with an appropriate instruction, beneath the lower classification banner, indicating that it remains classified when separated from the PSI-containing enclosures (e.g., “[CLASSIFICATION] when separated from PSI enclosures” or “[CLASSIFICATION] when Attachment 2 is removed”).

3. Classified Transmittal Document Does Not Contain PSI, Transmitted Information is Not PSI. Classified transmittal documents that do not contain PSI or transmit PSI, will be marked in the same manner as any other non-PSI containing classified document, to

include banner, portion markings, classification authority block and any required warning or special notices.

i. Specified Control Markings for Privileged Safety Information Contained in Media or Material (Including Hardware and Equipment). Examples of this media or material are computer files and other electronic media, audiovisual media, chart, maps, films, sound recordings, microfilm, microfiche, etc. See DoDM 5200.01 Volume 2 of 24 February 2012, enclosure (3) and The Navy and Marine Corps Safety Investigations and Reporting Guide, for guidance on how to mark this media or material. However, continue to use the specified control markings in a manner similar to that specified in this chapter appendix, as applicable.

4. Declassification. DoDM 5200.01 Volume 2 of 24 February 2012, enclosure (3), provides guidance on declassification markings for classified information. However, when a classified document or material that contains PSI will be declassified, the holder must, prior to declassification or removal of any classification markings, consult with the Staff Attorney at the NAVSAFECEN. The Staff Attorney at the NAVSAFECEN may direct the holder to change either some or all of the classified PSI markings to those markings specified in chapter appendix 8-A for controlled unclassified information (i.e., CUI//SP-PSI).

CHAPTER 9  
RMI ACCOUNT MANAGEMENT

901. Purpose. To explain the roles, permissions and terminology for Risk Management Information (RMI) account management.

902. Background. RMI roles, permissions and terminology are significantly different from that used for the legacy Web-enabled safety system (WESS) and apply to users irrespective of functional community. WESS used centralized account management; the RMI does not. WESS account roles and permissions are no longer applicable in the RMI.

903. Policy.

a. All Department of the Navy (DON) RMI users must have a U. S. Navy (USN) or U. S. Marine Corps (USMC) workplace assigned to use the RMI.

b. Only the RMI account roles applicable to Navy and Marine Corps RMI users can be assigned. See subparagraph 905.c for additional details.

c. Commands must have a User Administrator assigned or coordinate with higher headquarters to fulfill UA responsibilities on behalf of the command. See paragraph 906 for details.

904. Assignment of RMI Permissions. The RMI account type, category, module access and job functions are identified during the RMI account creation process and elevated and approved by User Administrators (UA) at or above the unit level.

905. User Account Types and Categories. There are two account types in the RMI, basic and elevated and two account categories, primary and secondary.

a. Account Types.

(1) Basic Account. A basic account permits access to common, open areas of the RMI, such as publications and references and file sharing. This type of account will have the basic account role and a workspace.

(2) Elevated Account. Elevated accounts have access to unprotected information and one or more types of protected information. Information may be protected by safety privilege, Privacy Act, Health Insurance Portability and Accountability Act (HIPAA) or another formal mechanism. Security roles are used to provide and control appropriate access. This account will have additional roles than those found in a basic account.

b. Account Categories.

(1) **Primary Category.** By default, every RMI user has a primary account. This account contains their demographic information (e.g., employment status, grade, name, assigned organization, assigned office symbol, email, etc.) and assigned RMI roles (permissions).

(2) **Secondary Category.** A secondary account is required when a user needs an account listing an organization different from the one on their primary account. Examples of when a secondary account is necessary include:

(a) An RMI user is assigned to two or more organizations with separate reporting hierarchies. For example, a user may work Monday through Friday as a civilian in a DON safety office and periodically works as a military member in a reserve organization's safety office.

(b) An RMI user is assigned to one organization and because of geographic proximity, is assigned to manage users at a geographically nearby organization with a separate reporting hierarchy.

c. RMI Account Roles. There are two broad kinds of RMI account roles, those roles that are applicable to Navy and Marine Corps RMI users and those that are listed in the RMI, but never assigned to Navy and Marine Corps users.

(1) Chapter appendix 9-A provides the list of RMI account roles that are applicable to Navy and Marine Corps RMI users and their definitions.

(2) Chapter appendix 9-B provides the list of RMI account roles that can be seen when using the RMI, but are never assigned to Navy and Marine Corps RMI users.

Notes: RMI was developed from and is closely associated with the U.S. Air Force's Air Force Safety Automated System (AFSAS). Some account roles that are visible in the RMI are never assigned to Navy and Marine Corps users. These roles are applicable to AFSAS users from other Services and defense activities. Some RMI account roles that are applicable to Navy and Marine Corps users may not yet be available until full RMI implementation is achieved. Until then, specific availability of account roles for Navy and Marine Corps users will be disseminated by Commander, Naval Safety Center (COMNAVSAFECEN) via All Safety messages.

906. UA. UAs perform an important role in RMI account management. Specific policies, requirements and responsibilities assigned to UAs are delineated in this paragraph.

a. UA Policies and Requirements.

(1) UAs fulfill an inherently governmental role, therefore, the UA role must only be assigned to DON uniformed Service members or U.S. Government civilians.

(2) Only two UAs are authorized per unit (e.g., Unit Identification Code) unless a waiver is granted.

Note: Units requesting more than two UAs, must submit a waiver request in writing to COMNAVSAFECEN (Attn: Executive Director) with sufficient justification.

(3) UAs must be designated in writing by the command or activity commander or commanding officer. A template for the designation letter is available in chapter appendix 9-D.

(4) UAs must sign an RMI User Agreement acknowledging their responsibilities and the limitations of their authority. A template for the user agreement is available in chapter appendix 9-E.

Note: Both the designation letter and the RMI User Agreement must be uploaded to the UA's profile in the RMI.

(5) COMNAVSAFECEN assigns the UA role to Navy echelon 2 and Marine Corps major command UAs. Navy echelon 2 UAs and Marine Corps major command UAs then assign the UA role to those in subordinate commands. In all cases, the UA designation letter and RMI User Agreement must have been uploaded to the UA's profile in the RMI, before the UA assignment can be made.

(6) UAs must be completely familiar with the special handling requirements of PSI per chapter 8 of this manual.

(7) UAs must administer the guidelines for special handling of PSI per chapter 8 of this manual within their unit.

Note: UAs who fail to protect PSI will have their UA and RMI account roles suspended or revoked.

(8) UAs are responsible for ensuring that roles are properly assigned and only given to those with a legitimate need. UAs are permitted to assign RMI roles per the guidelines in this chapter applying the specific restrictions explained in subparagraphs 906a(8)(a) through 906a(8)(c):

(a) RMI roles must only be assigned to DON uniformed and Government civilian personnel within their unit or subordinate units. For all other categories of personnel, UAs must forward RMI access requests to COMNAVSAFECEN for consideration.

(b) RMI roles must not be assigned to other personnel including those from other DON organizations, other Military Services, non-Department of Defense (DoD) U.S. Government agencies, contractors, foreign exchange personnel, liaison personnel or any other non-DON personnel unless a Non-Disclosure Agreement (NDA) has been approved by COMNAVSAFECEN. If COMNAVSAFECEN has approved an NDA, UAs are permitted to assign RMI roles in strict compliance with the NDA, but only for personnel from the above categories who are assigned within their unit or subordinate units. See paragraphs 815 and 816 for additional details and the criteria used by COMNAVSAFECEN for determining approval of NDAs.

(c) RMI roles must not be assigned to contractors, foreign exchange or liaison personnel or any non-DON civilians, unless an NDA has been approved by COMNAVSAFECEN. If an NDA has been approved, UAs are permitted to assign RMI roles in strict compliance with the NDA, but only for contractors, foreign exchange or liaison personnel or non-DON civilians within their unit or subordinate units.

b. UA Responsibilities.

(1) UAs assign RMI account roles for personnel in their organization and those personnel below their command or activity in the organizational hierarchy, including subordinate command UAs. Chapter appendix 9-C provides important information for making RMI account role determinations based on functional roles and billet types.

Note: In some cases, personnel will be assigned multiple RMI account roles simultaneously, while in other cases, a single RMI account role is all that is required.

(2) UAs must validate requester need before assigning RMI roles to personnel. RMI roles must only be assigned to personnel with a legitimate need. Additionally, only the account roles necessary to complete assigned tasks will be assigned to personnel.

(3) UAs manage RMI account roles for personnel in their organization and those personnel below their command or activity in the organizational hierarchy, including subordinate command UAs. This includes making RMI account changes and addressing issues with the RMI accounts they administer.

(4) UAs must ensure those assigned access to PSI, have read chapter 8 of this manual and understand all special handling requirements before RMI account roles are assigned.

APPENDIX 9-A  
RMI ACCOUNT ROLES APPLICABLE TO NAVY AND MARINE CORPS USERS

1. Risk Management Information (RMI) account roles, descriptions and amplification and role assignment authority applicable to Navy and Marine Corps RMI users are shown in table 9-A-1.
2. See the Risk Management Information Streamlined Incident Reporting (RMI-SIR) User Administrator’s Guide, dated August 2020 for more detailed information about RMI account roles.

Account Role	Description and Amplification	Role Assignment Authority
Dive-Jump Reporting System (DJRS): DJRS User	Gives the user access to the DJRS.  Applicable only to the dive and jump communities.	Local UA
Data extraction Access: Events	Gives the user access to retrieve event data using the AFSAS data extraction tool (AFSAS DET) or International Business Machines Corporation (IBM) Cognos business intelligence tool.	Local UA
Data Extraction Access: OSHA 300/300A	Allows the user to build Occupational Safety and Health Administration OSHA 300 and OSHA 300A forms in the AFSAS DET or IBM Cognos business intelligence tool.	Local UA
Data Extraction Access: Inspection	This role grants the user access to inspection data via the data extraction tool for the purpose of developing reports.	Local UA
Data extraction Access: Recommendations	Allows the user to retrieve recommendation data using the AFSAS DET or IBM Cognos business intelligence tool.	Local UA
Event Tabs: Access Approval (Convening Authority only)	Allows the user to approve safety investigation briefings by the convening authority within the exhibit section of the report.	Higher Organization UA
Event Tabs: View (org & time restricted)	Provides automatic exhibit access to any event whose convening authority is within your organizational hierarchy for two years after the release of the investigation.  After the two year time period and for events outside your unit hierarchy, you need to request exhibit access.	Local UA



Account Role	Description and Amplification	Role Assignment Authority
Event Tabs: Waiver Coordination (step 1)	Provides the user the ability to approve or disapprove Part One waiver requests for which the convening authority has oversight.	Higher Organization UA
Event: Data Viewer	Allows the user to view all event data entry fields except Department of Defense ID.	Local UA
Event: Investigator	<p>Grants users the ability to create investigations for any category or class, view their investigations, take action on investigations, granted access to, search investigations, set message rules, grant and request access to investigations and create hazard management events. Also, allows the user to create a preliminary message for review and approval by the designated convening authority.</p> <p>This role maintains all permissions previously assigned to “Event: Data Viewer” and “Event: Message (view only).”</p> <p>This role is required to enter memorandum of final evaluation (MOFE) comments.</p>	Local UA
Event: Message (view only)	Allows the user to only view released messages	Local UA
Event: Message Approval	<p>Allows the user to review and approve all messages for their organization and subordinate commands before quality control by the Naval Safety Center.</p> <p>This role cannot create event investigations or enter data for event investigations.</p>	Local UA
Event: Provider	Allows the user to enter event person physiological information.	Local UA
Event: Supervisor Investigator	Allows the user to enter data for any report for which the convening authority is below their organization and in their chain of command. User will also be able to view, search and comment on MOFEs. This role maintains all permissions previously assigned to "Event: investigator."	Local UA

Account Role	Description and Amplification	Role Assignment Authority
Inspections: Data Viewer	Allows the user the ability to view the read-only data presented in the safety inspection data viewer.	Local UA with same role
Inspections: Safety Inspector	Allows the user the ability to manage safety inspection investigations.	Local UA with same role
Inspections: Supervisor Inspector	Allows the user access and edit ability for any inspection identifying their organization or below as the inspecting organization.	Local UA
MUSTT: Motorcycle Safety Representative	Allows the user the ability to manage the tracking of motorcycle riders at their organization and below.	Local UA
OSHA: Event Investigator	Allows the user the ability to create, update, request closure, request deletion and request to open OSHA event visits at their assigned base. However, they can search and view ANY OSHA event report.	
OSHA: Event Supervisor	Allows the user to create, update, request and coordinate closure and request open and deletion at their organization and below. They can search and view ANY OSHA event report.	Higher Organization UA
Recommendation: Approval	Allows the user to approve closure of recommendations.  The recommendation must have the user's organization assigned as an approval authority.	Local UA
Recommendation: Coordination	Allows the user to coordinate recommendations.  The recommendation must have the user's organization assigned as a coordination authority.	Local UA
Recommendation: Office of Collateral Responsibility (OCR) Management	Allows access to update the OCR page and change the OCR within their chain of command. It cannot change the actions completed field if the recommendation is in work	Local UA
Recommendation: Supervisor (safety only)	Allows the user to manage recommendations. Supervisor access is granted where the supervisor is at or above the office of primary responsibility (OPR) organization hierarchy.	Local UA

Account Role	Description and Amplification	Role Assignment Authority
	This security permission grants access to specialized management functions, such as reopen a recommendation, change the recommendation narrative, etc. These special management functions are the special cases that arise from peculiar circumstances.	
Recommendation: Update (OPR or OCR)	Allows the user to edit and update open recommendations as an OPR or OCR.  The recommendation must have the user's organization and office assigned as either the OPR or OCR.  Safety offices or organizations higher in the organizational structure with this role may access a subordinate organization's recommendation.	Local UA
Recommendation: View only	Allows the user to only view any recommendation in the recommendations module.	Local UA
Training: Records Administrator	Allows the user the ability to manage training records for any person in their organization, a subordinate organization or assigned to their assigned base. They may view the Training Transcript for any person in their organization, a subordinate organization or assigned to their assigned base.	Local UA with same role
User Administrator	Allows the user to add, edit or remove users in your current or subordinate organizations.	Higher Organization UA
Workflow: Explosive Site Plan Administrator	Allows the user the ability to create an explosive site plan and be assigned as the explosive site plan workflow action officer.	Local UA
Workflow: Explosive Site Plan Coordinator	Allows the user the ability based on organization and office symbol to be assigned as an Explosive Site Plan Coordinator.	Local UA
Workflow: Tasker Initiator	Allows the user the ability to create a workflow tasker and be assigned as the workflow action officer.	Local UA
Workflow: Tasker POC	Allows users to be assigned as OCR or OPR of a workflow tasker.	Local UA

Account Role	Description and Amplification	Role Assignment Authority
Workspace: U.S. Navy and U.S. Marines	<p>This role provides access to the workspace containing U.S. Navy and U.S. Marine Corps records.</p> <p>Other roles control the actions a user may perform (e.g., create new investigations, read messages, retrieve data, etc.) in this workspace.</p> <p>All DON RMI users must have this role assigned.</p>	Local UA

Table 9-A-1. RMI Account Roles Applicable to Navy and Marine Corps Users

**APPENDIX 9-B**  
**RMI ACCOUNT ROLES NOT APPLICABLE TO NAVY AND MARINE CORPS USERS**

1. Account roles that exist in the Risk Management Information (RMI), but are not applicable to Navy and Marine Corps RMI users are shown in table 9-B-1.
2. The account roles in table 9-B-1 must never be requested by or assigned to, Navy and Marine Corps personnel.

Account Role	
Data Extraction Access: OCC Illness	Workspace: Defense Contract Management Agency
Event: ASAP Triage	Workspace: Defense Finance and Accounting Services
Event Tabs: View (JA time restricted)	Workspace: Defense Health Agency
OCC Illness: Bioenvironmental Engineer  Note: Bioenvironmental Engineers are U.S. Air Force military personnel that have similar roles and responsibilities to that of the combined U.S. Navy Industrial Hygiene Officer, Environmental Health Officer and Radiation Health Officer subspecialties.	Workspace: Defense Intelligence Agency
OCC Illness: Data Viewer	Workspace: Other Department of Defense Agency
OCC Illness: Message (view only)	Workspace: U.S. Air Force
OCC Illness: Provider	Workspace: U.A. Army
OCC Illness: Public Health	Workspace: U.S. Coast Guard
OCC Illness: Supervisor Investigator	Workspace: Unified Command
Workspace: Defense Commissary Agency	

Table 9-B-1. RMI Account Roles Not Applicable to Navy and Marine Corps Users

APPENDIX 9-C  
RECOMMENDED RMI ACCOUNT ROLES FOR NAVY AND MARINE CORPS RMI  
USERS BASED ON FUNCTIONAL ROLES AND BILLET TYPES

1. Recommended Risk Management Information (RMI) account roles for Navy and Marine Corps RMI users based on functional roles are provided in table 9-C-1. Recommended RMI account roles for Navy and Marine Corps RMI users based on billet type are provided in table 9-C-2. Use tables 9-C-1 and 9-C-2 as guides.
2. User Administrators (UA) must be familiar with this information to ensure they assign RMI account roles appropriately.

Functional Role	Recommended RMI Account Role(s)	Amplification
Department of the Navy (DON) RMI User	“Workspace: Navy and Marine Corps”	All DON personnel using the RMI must be assigned this account role in order to operate within the Navy and Marine Corps RMI domain.
UA	"User Administrator"	Applies to UAs at all levels of command.
Data Analyst	"Data Extraction Access: Events," "Data Extraction Access: OSHA 300/300A," and "Data Extraction Access: Recommendations"	Applies to personnel at all levels of command. Necessary to conduct data analysis.
Mishap or Hazard Investigator	"Event: Data Viewer," "Event: Investigator," "Event: Message (View Only)," "Recommendation: Coordination," and "Recommendation: View only"  Also, "Event: Provider" for medical personnel	Applies to personnel (normally assigned to reporting custodians and commands acting as the accounting organization) assigned to investigate a mishap or hazard either as a single investigating officer (SIO) or as a member of a safety investigation board (SIB).
Investigation Oversight	"Access Approval (Convening Authority only),"	Applies to safety managers and safety officers from echelons above

Functional Role	Recommended RMI Account Role(s)	Amplification
	"Event: Message Approval," and "Event: Supervisor Investigator"	the accounting organization who are responsible for investigation oversight.
Recommendation Management	"Recommendation: Approval," "Recommendation: Coordination," "Recommendation: OCR Management," "Recommendation: Update (OPR/OCR)," and "Recommendation: View Only"	Applies to all personnel responsible for recommendation management.
Message Approver	"Event: Message Approval"	This role grants the user the ability to review and approve all messages for their organization and subordinate commands.

Table 9-C-1. Recommended RMI Account Roles for Navy and Marine Corps RMI Users Based on Functional Roles

Billet Type	RMI Account Role(s)	Amplification
Dive and Jump Master or Community Manager	"DJRS: DJRS user"	Required.
Accounting Organization or Reporting Custodian Command Safety Manager or Safety Officer		See RMI account roles assigned to the following functional areas - UA, Data Analyst, Mishap or Hazard Investigator and Recommendation Management.
Accounting Organization or Reporting Custodian Command Commanding Officer	"Event: Message (View Only)"	Required to see messages.
	"Event: Investigator"	Required to enter the commanding officer's comments on non-endorsed reports and MOFE

Billet Type	RMI Account Role(s)	Amplification
		comments when endorsement is required.
Accounting Organization or Reporting Custodian Command Medical Officer, Representative	"Event: Provider"	Required to enter medical information into RMI.
Immediate Superior in Command (ISIC) or Chain of Command Safety Manager or Safety Officer		See functional roles for UA, Data Analyst, Investigation Oversight minus (Conv Auth Only) account role and Recommendation Management.
ISIC or Chain of Command Commanding Officer	"Event: Message (View Only)"	Required to see messages.
	"Event: Supervisor Investigator"	Required to enter MOFE comments.
Controlling Command Safety Manager or Safety Officer	"Event Tabs: View (Org & Time Restricted)"  "Recommendation: Supervisor (Safety Only)," and  "Event: Supervisor Investigator"	Also, see RMI account roles assigned to the following functional areas - UA, Data Analyst, Investigation Oversight (including "Access Approval (Conv Auth Only)," and Recommendation Management.
Controlling Command Commander	"Event: Message (View Only)"	Required to see messages.
	"Event: Supervisor Investigator"	Required to enter MOFE comments and to edit all reports submitted by UIC or subordinate UICs.

Table 9-C-2. Recommended RMI Account Roles for Navy and Marine Corps RMI Users Based on Billet Type



APPENDIX 9-D  
TEMPLATE FOR APPOINTMENT OF RMI SYSTEM USER ADMINISTRATOR



**[Command Letter Head]**

SSIC  
Code/Ser 001  
Date

From: Activity head, name of activity, location when needed  
To: Commander, Naval Safety Center

Subj: APPOINTMENT OF [persons rank or pay grade and full name] AS A RISK  
MANAGEMENT INFORMATION (RMI) SYSTEM USER ADMINISTRATOR

Ref: (a) COMNAVSAFECEN NORFOLK VA 272058Z Aug 20 (ALSAFE 017/20)  
(b) COMNAVSAFECEN NORFOLK VA 181825Z Nov 20 (ALSAFE 021/20)  
(c) OPNAVINST 3750.6S  
(d) OPNAV M-5102.1 / MCO 5100.29C volume 9

1. Reference (a) explained the process, roles, responsibilities and timelines to review, endorse, finalize and close out safety investigation reports and hazard reports upon the initial release of the Risk Management Information (RMI) program of record. Reference (b) then updated the roles and responsibilities using RMI. Per reference (b), the following individual is designated as the RMI User Administrator (UA) for the below listed unit identification code (UIC):

- a. Rank/Rate/Grade First Name Last Name:
- b. User Administrator's UIC:
- c. Official E-mail Address:
- d. Telephone Number:

Exhibit 9-D-1. Template for Appointment of RMI System User Administrator

APPENDIX 9-E  
TEMPLATE FOR RMI SYSTEM USER ADMINISTRATOR ACKNOWLEDGEMENT

**RISK MANAGEMENT INFORMATION (RMI) SYSTEM  
USER ADMINISTRATOR ACKNOWLEDGEMENT  
BY  
[Name] OF [Command]**

I, [NAME], have been assigned to serve as a User Administrator (UA) for [COMMAND]. I certify that I am familiar with the U.S. Department of Defense (DoD) approved methods for protecting, handling, storing, releasing, disposing and use of Privileged Safety Information (PSI) and Personally Identifiable Information (PII) as defined in DoD Instruction 6055.07 of 6 June 2011, OPNAVINST 5102.1D / MCO P5102.1B and OPNAVINST 3750.6S and that I will conform to the measures that the Naval Safety Center has implemented to safeguard PSI and PII in an appropriate manner to prevent any unauthorized access or disclosure.

In my role as UA, I understand that I am only authorized to grant and update RMI account permissions for Department of the Navy (DON) uniformed and DON Government civilian personnel in my organization and subordinate organizations to ensure accurate and thorough mishap reporting, investigation and analysis. I acknowledge that I am not authorized to grant permissions to personnel from other DON organizations, Military Services or U.S. Governmental agencies, nor am I authorized to grant RMI access to contractors, foreign exchange or liaison personnel or any non-DON civilians. All requests for RMI access by individuals other than DON uniformed and Government civilian personnel must be referred to the Naval Safety Center for action and approval by the Executive Director.

I understand that it is my responsibility to terminate RMI access for personnel who no longer are serving in safety billets or no longer need access. If, in the execution of my duties, I become aware of individuals from my organization with RMI access who improperly release PSI, I agree to terminate their access and advise the Naval Safety Center immediately. This also applies to non-DON personnel who have been given RMI accounts without written approval from the Naval Safety Center's Executive Director.

Exhibit 9-E-1. Template for RMI System User Administrator Acknowledgement

## APPENDIX A GLOSSARY

This compendium of terms and their definitions, listed in alphabetical order, will aid in interpreting this manual and in the continued administration of the Navy and Marine Corps safety investigation and reporting program. Most definitions are taken from authoritative sources as a starting point with specific amplification or qualification added, when necessary, to aid in understanding and standardization.

1. Accounting Organization. The reporting custodian that experienced the loss of or damage to, an owned asset; or the fatality, injury or work-related illness of an assigned person or persons in a mishap; and is responsible for or is assigned responsibility for, safety reporting, regardless of any determination as to the responsibility for the event's occurrence. There is one accounting organization for each mishap.

Note: See chapter 4, subparagraph 403a for the policy to determine the accounting organization when multiple commands are involved in a mishap. The accounting organization assignment is not affected when a convening authority appoints an SIB to investigate the mishap or the accounting organization relies on its higher headquarters to submit a SIREP into the RMI on the command's behalf.

2. Act of God. An event that directly and exclusively results from the occurrence of natural causes or phenomena that could not have been prevented by the exercise of foresight or caution; an inevitable accident.

3. Action Agency. A command or activity that has an office of primary responsibility (OPR) or office of collateral responsibility (OCR) assigned responsibility for the completion of a mishap recommendation (MISREC) or hazard recommendation (HAZREC). See also "Office of Primary Responsibility (OPR)" and "Office of Collateral Responsibility (OCR)."

4. Active Status. (Afloat only). Ships which are currently assigned for duty in the active fleet are in an active status.

5. Aerial Delivery Incident. Any action or event preventing an airdrop item from functioning as it was intended or designed.

Note: Some examples of incidents include, but are not limited to: Improperly setting the automatic opening device (AOD) that resulted in a dual canopy deployment; inadvertent or premature activations; entanglements resulting in reserve parachute deployment; high flair of the canopy resulting in jumper injury; parachutist loss of consciousness during jump sequence; failure to hook up static line to anchor line cable for container delivery system (CDS); improper rigging procedures before, during or after the airdrop equipment was loaded in the aircraft; Joint Precision Aerial Delivery System (JPADS) with improperly loaded data; misrouted static lines

that resulted in a towed jumper (cutaway or retrieved); and improper lock setting resulting in a loose platform or no-drop of equipment.

6. Aerial Delivery Malfunction. The failure of an airdrop item to function as it was intended or designed.

Note: Some examples of malfunctions include, but are not limited to: Failure of a main canopy to properly deploy, static line breaking, parachute panel or gore blowout, cargo parachute release failure and a JPADS that lands off the drop zone (DZ) for reasons other than improperly loaded data.

7. Aerial Delivery Malfunction Phase Categories. Airdrop load malfunctions categorized by the phase in which they occur:

a. Extraction Phase. The period of time that begins with the activation of the aerial delivery system and continues until the extraction force transfers to recovery parachute deployment.

b. Deployment Phase. The period of time that begins with the transfer of force from extraction to recovery parachute deployment and continues until load impact.

c. Release Phase. The period of time after load impact when the parachute release should occur.

Note: Investigations are restricted to factors that could have caused or contributed to a malfunction or incident to conserve time and effort. Observing the malfunction or incident can normally determine the phase of the occurrence.

8. Afloat Mishap. A mishap occurring aboard or resulting from or during the operation of a DoD or U.S. Coast Guard vessel, including mishaps during Navy or Marine Corps diving or swimmer operations; mishaps occurring while loading, off-loading or receiving services at dockside; and mishaps occurring up to the high water mark during amphibious or inshore warfare training operations. Includes mishaps involving unmanned surface vehicles (USV) and unmanned undersea vehicles (UUV). It applies to all injuries to DoD personnel occurring aboard, whether or not work-related. See also “DoD Vessel.”

Note: A mishap occurring aboard a DoD vessel that resulted from shipyard, vessel repair facility or private contractor operations is a ground (industrial) mishap, not an afloat mishap.

9. Allision. (Afloat only). The act of striking or collision of a moving vessel against a stationary object. Examples of stationary objects: Vessel made fast to a pier, vessel at anchor (i.e., not dragging anchor), moored buoy (i.e., not dragging anchor), bridge, dock, pier, wharf, jetty, quay, etc. A vessel or buoy dragging anchor is a moving vessel or buoy, respectively. An

exception, is a case when two anchored vessels strike each other and neither of them are dragging anchor nor have veered nor surged additional rode. This case would be a collision because the last vessel to anchor could have chosen a different location to anchor or used a different length of rode. The important distinction is that a moving vessel can play an active role in avoiding collision; whereas, a stationary object cannot. See also “Collision, Vessel.”

10. Ammunition. Ammunition is a device charged with explosives, propellants, pyrotechnics, initiating compositions or chemical material for use in connection with defense or offense but also includes demolitions, training, ceremonial or non-operational purposes.

11. Amputation. The traumatic loss of a limb or other external body part. Amputations include a part, such as a limb or appendage that has been severed, cut off, amputated (either completely or partially); fingertip amputations with or without bone loss; medical amputations resulting from irreparable damage; amputations of body parts that have since been reattached. Amputations do not include avulsions, enucleations, degloving, scalping, severed ears or broken or chipped teeth. Amputation is an OSHA term and is only applicable to civilian personnel. For military personnel, use “permanent partial disability.”

Note: DON’s definition of “Permanent Partial Disability” includes tips of fingers or tips of toes without bone involvement. See also “Permanent Partial Disability.”

12. Appointing Authority. [Term is no longer used] See “Convening Authority (CA).”

13. Area of Operations. An operational area defined by the joint force commander for land and naval forces. Areas of operation do not typically encompass the entire operational area of the joint force commander, but should be large enough for component commanders to accomplish their missions and protect their forces.

14. Area of Responsibility (AOR). The geographic area associated with a combatant command within which a combatant commander has authority to plan and conduct operations.

15. Aspin-Rice Agreement. An informal agreement between the DoD safety centers and the United States House of Representatives Armed Services Committee (HASC), signed by then-Chairman Honorable Les Aspin, dated 12 September 1989; wherein, the HASC agreed to protect safety privileged information. The specific details of the agreement are covered in chapter 8 and DoDI 6055.07 of 6 June 2011.

16. Aviation Mishap. A naval aviation mishap is an unplanned event or series of events, directly involving a defined naval aircraft or UAV, which results in injury or property damage. See also “Defined Naval Aircraft.”

17. Casualty. Any person who is a loss to the organization by being declared dead, duty status - whereabouts unknown, missing, ill or injured.

18. Casualty Category. A term used to specifically classify a casualty for reporting purposes based upon the casualty type and the casualty status. Casualty categories include: Killed in action (KIA), died of wounds received in action and wounded in action.

19. Casualty Status. A term used to classify a casualty for reporting purposes. There are seven casualty statuses: (1) deceased; (2) duty status – whereabouts unknown; (3) missing; (4) very seriously ill or injured; (5) seriously ill or injured; (6) incapacitating illness or injury; and (7) not seriously injured.

20. Casualty Type. A term used to identify a casualty for reporting purposes as either a hostile casualty or a non-hostile casualty. See also “Casualty,” “Casualty Category,” “Casualty Status,” or “Non-Hostile Casualty.”

21. Causal Factor. Factors which caused the mishap. If the factor was corrected, eliminated or avoided, the mishap, hazard or incident would not have happened.

22. Causal Finding. Findings that identify actions or inactions in the mishap sequence that resulted in damage or injury. They are identified with the word “Causal” at the start of the text of the finding and supported by causal factors within the report analysis.

23. Causal Primary Finding. A single event, condition or data point that is important in the mishap or hazard and is associated with a causal factor.

24. Chemical Agent. A chemical substance that is intended for use in military operations to kill, seriously injure or incapacitate mainly through its physiological effects.

25. Chemical Agent Release. Any unintentional or uncontrolled release of a chemical agent when:

- a. Damage occurs to property from contamination or costs are incurred for decontamination.
- b. Individuals exhibit physiological symptoms of agent exposure.
- c. The quantity released to the atmosphere creates a serious potential for exposure.

26. Civilian Personnel.

a. Federal Civilian Personnel. All on-duty career, career conditional and temporary (full-time, part-time, intermittent) personnel, who are subject to civil service regulations, paid from

appropriated Federal funds and covered by the Federal Employees Compensation Act. This excludes civilians paid by appropriated funds on a contract or fee basis.

b. **Non-Appropriated Fund Civilian Personnel.** All on-duty civilian personnel whose employment by the U.S. Government is paid by non-appropriated funds and are covered by the Longshore and Harbor Workers Compensation Act. This excludes civilians paid by non-appropriated funds on a contract or fee basis.

c. **Foreign National Civilian Personnel.** Includes on-duty foreign nationals employed by the U.S. Government in direct (appropriated or non-appropriated funds) or indirect hire (contract or fee basis) status when the U.S. Government has supervisory control. It excludes those paid by contract or fee basis when the host government has supervisory control. Navy and Marine Corps commands and installations must review and determine if the host nation injury and illness reporting and compensation systems supersede DoD requirements per the status of forces' agreement.

27. **Class A Mishap.** Fatality or permanent total disability that resulted from a reportable injury or illness; or, a total cost of damages for DoD or non-DoD property of \$2.5 million or more.

28. **Class B Mishap.** Permanent partial disability that resulted from a reportable injury or illness; hospitalization for inpatient care of three or more personnel as a result of a single mishap (i.e., for mishap reporting purposes only, inpatient care does not include individuals hospitalized for observation, diagnostic or administrative purposes that were treated and released); or, a total cost of damages for DoD or non-DoD property of \$600,000 or more, but less than \$2.5 million. See also "Personnel."

29. **Class C Mishap.** Nonfatal reportable injury or illness that resulted in the loss of one or more days away from work, not including the day or shift that the mishap occurred (i.e., a Lost-Time Case); or, a total cost of damages for DoD or non-DoD property of \$60,000 or more, but less than \$600,000.

Note: When determining if the event is a Lost-Time Case, count the number of calendar days the employee was unable to work as a result of the injury or illness, regardless of whether the person was scheduled to work on those days. Weekend days, holidays, vacation days or other days off are included in the total number of calendar days, if the employee would not have been able to work on those days. If the employee is out for an extended period of time, use an estimate of the days that the employee will be away and update the day count when the actual number of days is known. Also, include the number of calendar days away recommended by a physician or other licensed health care professional. However, the days away must be recorded whether the injured or ill employee follows a physician or licensed health care professional's recommendation or not. End the count of days away from work on the date the physician or other licensed health care professional recommends that the employee return to work.

30. Class D Mishap. A reportable event in which the resulting total cost of damage to DoD or non-DoD property is \$25,000 or more, but less than \$60,000; or, an on-duty injury or illness not otherwise classified as a Class A, B or C mishap (e.g., illness or injury that involves medical treatment beyond first aid, loss of consciousness, light or limited duty for military personnel or restricted work or job transfer for on-duty Navy and Marine Corps civilian employees).

31. Class E Mishap. A reportable event in which the resultant total cost of damages to DoD or non-DoD property is greater than \$0, but less than \$25,000. Class E mishap reporting is not a mandatory DON requirement, but may be required by specific communities.

32. Class V (AW). Supply classification V refers to all types of ammunition, including chemical, radiological and special weapons, bombs, explosives, mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants and other associated items. Sub-classification A is air ammunition. Subclassification W is ground (surface) ammunition. Class V (W) ground ammunition is under the management or cognizance of the Marine Corps Systems Command (MARCORSYSCOM) (AM).

33. Cold Illness. The adverse effect of low environmental temperatures on the human body resulting in hypothermia, frostbite, chilblain, cold water immersion foot or other injury or illness as a result of heat loss, reduced body temperature or tissue destruction due to cold exposure.

34. Collision, Vessel. For maritime-related mishap and near-miss cases, the striking together of two or more moving vessels. See also “Allision.”

35. Combat Area. A restricted area (air, land, sea or space) that is established to prevent or minimize mutual interference between friendly forces engaged in combat operations. See also “Combat Zone.”

36. Combat Zone. The area required by combat forces for the conduct of operations. A restricted area (air, land, sea or space) that is established to prevent or minimize mutual interference between friendly forces engaged in combat operations (combat area). See also “Combat Area” and “Communications Zone.”

37. Commuting. Travel of military or civilian personnel between their place of permanent or temporary residence and their permanent duty station or temporary job location.

Note: When personnel check into a temporary residence (i.e., a “home away from home”), they are considered to have left the work environment. An example of a temporary residence would be a hotel, motel, bed and breakfast or friend or relative’s home for one or more calendar days.

38. Competent Medical Authority (CMA). A physician or other licensed health care professional whose legally permitted scope of practice (i.e., license, registration or certification) allows him



or her to independently perform or be delegated the responsibility to perform, the activities described in this manual. For purposes of this manual, independent duty corpsmen in operational environments without a licensed health care professional present, are considered CMAs.

39. Competent Person. A person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them.

Note: By way of training or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation and has the authority to correct them. Some standards add additional specific requirements which must be met by the competent person: Asbestos [29 CFR 1926.1101(b)], Confined Spaces, Construction [29 CFR 1926.1202], Construction Industry [29 CFR 1926.32(f)], Cranes and Derricks [29 CFR 1926.1401], Excavations and Trenching [29 CFR 1926.650(b)], Fall Protection [29 CFR 1910.140(b)], Gear Certification, Vessel [29 CFR 1919.2(g) and 1919.37], Powered Platforms, Building Maintenance [29 CFR 1910.66(d)], Scaffolds [29 CFR 1926.450(b)], Shipyards [29 CFR 1915.4(o) and 1915.7] and Steel Erection [29 CFR 1926.751].

40. Component. Is the smallest, most specific part, assembly or system that can be identified as failed item.

41. Confidentiality, Promise of. The promise of confidentiality is used to encourage free and open disclosure of safety information during an investigation. Military and Federal courts recognize that the information given under the promise of confidentiality is protected from release. The SIB or command safety investigator must give the promise of confidentiality to witnesses to ensure that the information provided is used solely for safety purposes. The promise of confidentiality extends to the SIBs, SIOs, SIREP endorsers' and command safety investigator's analysis of the information gathered during a safety investigation or included in a SIREP which leads to the development of conclusions, causes and recommendations or in the SIREP endorsers analysis of the causes and recommendations in the SIREP.

Note: JNAV MAR 5102/2 is used for this purpose. Use JNAV MAR 5102/1 when a promise of confidentiality is not needed or required.

42. Confined Space. A space that: (1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and (2) has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults and pits are spaces that may have limited means of entry.); and (3) is not designed for continuous employee occupancy.

43. Consequence. A result or effect of an action or condition.

44. Contractor-Caused Mishaps. Injuries, work-related illnesses of DoD personnel or damage caused by contractor operations. The parent command of affected DoD personnel must report these mishaps. Mishaps involving civilian contractor personnel caused by contractor operations must be referred to COMNAVSAFECEN or CMC (SD) for guidance.

45. Control. An Action taken to eliminate or mitigate hazards or to reduce risk of death, injury, illness or loss of resources or mission capability.

46. Controlled Unclassified Information (CUI). Unclassified information that requires safeguarding or dissemination controls, pursuant to and consistent with applicable law, regulations and Government-wide policies. Use of “CUI” has replaced use of both legacy terms “FOR OFFICIAL USE ONLY” and “FOUO.” Additional guidance on CUI is available in DoDI 5200.48 of 6 March 2020.

47. Controlling Command. Navy echelon 2 commands and fleet type commands and Marine Corps major commands that provide oversight of subordinate units and enforcement of the policies, procedures and requirements of this manual for safety investigation and safety reporting. See chapter 1 for a list of the Navy and Marine Corps controlling commands.

48. Controlling Custodian. See “Controlling Command.”

49. Convening Authority (CA). (Formerly “Appointing Authority”). The organization who has the authority to appoint a safety investigation board (SIB) or single investigating officer (SIO) to conduct a safety investigation.

50. Cook Off. The accidental firing of ammunition or detonation of an explosive, due to excessive heat.

51. Days Away, Restricted and Transfer (DART) Incidence Rate. Sum of the total number of all recordable injuries and illnesses resulting in days away from work, restricted work activity or job transfer for a particular calendar year; multiplied by 200,000; then, divided by the total number of hours worked by all employees during that same calendar year. See also “Total Case Incidence Rate (TCIR).”

Note: The 200,000 figure in the formula represents the number of hours 100 employees working 40 hours per week, 50 weeks per year would work and provides the standard base for calculating incidence rates.

52. Decontamination. The process of making any person, object or area safe by destroying, neutralizing, making harmless or absorbing and removing chemical or biological agents or by removing radioactive material clinging to or around it.

53. Deficiency. A characteristic or condition that fails to meet a standard or is not in compliance with a requirement, specification, instruction or manual.
54. Defined Naval Aircraft. See OPNAVINST 3750.6S for the definition.
55. Deliberative Process. The investigator's analysis of the information gathered during a safety investigation, which leads to the development of subjective conclusions, causes and recommendations.
56. Direct Enemy Action (DEA). Any injury or death occurring within a combat zone as a result of direct action with an opposing or hostile force is considered DEA. All injury or death caused by “friendly fire” is considered a mishap.
57. Diving Mishap. Injury, recompression therapy or death resulting from an event occurring while breathing compressed gases (e.g., air, Heliox or oxygen) before, during or after entering or leaving the water.
58. DoD Contractor. A non-Federal employer performing under a DoD contract, whether as prime contractor or subcontractor.
59. DoD Human Factors Analysis and Classification System (DoD HFACS). The standardized taxonomy used throughout DoD for safety investigations to satisfy the requirement to collect, maintain, analyze and report human error, human factors and human performance data. DoD HFACS draws upon Reason’s (1990) and Wiegmann and Shappell’s (2003) concept of active and latent failures. DoD HFACS categorizes these data into four main tiers: (1) organizational influences, (2) supervision, (3) preconditions and (4) acts. Use of DoD HFACS fulfills the requirement of DoDI 6055.07 of 6 June 2011. Its use is mandatory.
60. DoD Law Enforcement Component. Defense Criminal Investigative Service, Army Central Investigative Division, Air Force Office of Special Investigations (i.e., for both U.S. Air Force and U.S. Space Force), Naval Criminal Investigative Service, Marine Corps Central Investigative Division, Coast Guard Investigative Service (includes the latter, although not part of DoD) or similar organizations whose primary mission is identification and prosecution of criminal offenders.
61. DoD Mishap. An unplanned event or series of events, that results in damage to DoD property; occupational (i.e., work-related) illness to DoD military or civilian personnel; injury to DoD military personnel on- or off-duty; injury to on-duty DoD civilian personnel; damage to public or private property or injury or illness to non-DoD personnel caused by DoD operations.
62. DoD Personnel.

a. **DoD Civilian Personnel.** On-duty, DoD civil service employees (including National Guard and Reserve technicians, unless in military duty status); non-appropriated fund employees (excluding part-time military); Corps of Engineers civil works employees; Youth or Student Assistance Program employees; foreign nationals employed by DoD components; and Army-Air Force Exchange Service (AAFES) employees.

b. **Military Personnel.** All DoD military personnel, including members of the Army, Marine Corps, Navy and Air Force Reserves, the Army National Guard of the United States and Air National Guard of the United States, on active duty or inactive duty for training under the provisions of Title 10, U.S.C. or Title 32, U.S.C.; cadets of the United States Military Academy; midshipmen of the United States Naval Academy; cadets of the United States Air Force Academy; midshipmen of the U.S. Merchant Marine Academy when engaged in directed training activities with a DoD component; Reserve Officer Training Corps (ROTC) cadets or midshipmen when engaged in directed training activities; Officer Candidate School students when engaged in directed training activities; and foreign national military personnel assigned to DoD components.

63. **DoD Vessel.** A vessel that is either owned, bareboat chartered or operated by a DoD Component using appropriated funds, except when that vessel is engaged in commerce.

64. **Echelon.** A subdivision of a military or naval force numbered from highest to lowest in ascending numerical order (e.g., echelon 1 is higher than echelon 2).

65. **Electric Shock.** The passage of direct or alternating electrical current through the body or a body part.

66. **Electronic Cigarette.** A battery-operated device that is typically designed to resemble a traditional cigarette and is used to inhale a usually nicotine-containing vapor. Also, referred to as an e-cigarette, personal vaporizer or electronic nicotine delivery system.

Note: Electronic cigarettes contain a liquid solution typically consisting of nicotine, various chemical substances (such as propylene glycol or glycerol) and often flavoring. The solution is heated by the battery producing the aerosol or vapor inhaled by the user.

67. **Event.** A broad term used to describe an occurrence or series of occurrences. For DON safety reporting purposes, an event can be a mishap, hazard (including near miss) or an incident.

68. **Exigent Circumstances.** Specific event where it is clearly evident that rapid intervention to prevent the immediate loss of life or property is required.

69. **Explosion.** A violent chemical reaction within a chemical compound or mixture or mechanical mixture evolving heat and pressure. An explosion is a reaction that proceeds through

the reacted material toward the unreacted material at sonic velocity (by a shock wave process). The result of the chemical reaction is exertion of high pressure on the surrounding medium, forming a propagating shock wave. Ignition and rapid reaction of the confined energetic material builds up high local pressures leading to violent pressure rupturing of the confining structure. Metal cases are fragmented (brittle fracture) into large pieces that are often thrown long distances. Unreacted or burning energetic material is also thrown about. Fire and smoke hazards will exist. Air shocks are produced that can cause damage to nearby structures. The blast and high velocity fragments can cause minor ground craters and damage (e.g., breakup, tearing, gouging) to adjacent metal plates. Blast pressures are lower than for a detonation.

70. Explosive Event. Any event involving conventional ordnance, ammunition, explosives, explosive systems and devices resulting in an unintentional detonation, firing, deflagration, burning, launching of ordnance material (including all ordnance impacting off-range), leaking or spilled propellant fuels and oxidizers (less Otto fuel II). Explosive events will be reported in an explosive event report (EER) per OPNAVINST 8000.16E, even if an ordnance system works as designed and human error contributed to an event. This pertains to all events that do not meet the severity classification of Class A, B, C, D or E mishaps.

a. Detonation, Deflagration, Burning or Firing. An unintentional or inadvertent initiation, explosion or reaction of explosive material, component or system.

Example: Negligent discharges of all guns, including small arms (this includes discharge of a weapon inside government quarters or negligent discharges and ricochets during training on ranges), aircrew escape propulsion systems, marine location markers, flares, etc).

b. Inadvertent Launch. An unintentional launch of a weapon.

c. Propellant and Oxidizers. Leaking or spilled propellants (both solid and liquid), propellant fuels and oxidizers (less Otto fuel II).

71. Explosive Material. Any chemical material with hazard producing characteristics that is loaded into ammunition or ammunition components. This includes (but is not limited to) explosives, propellants, white phosphorous, incendiary mixtures, pyrotechnic mixtures, tracer mix, toxic materials and riot control agents.

72. Explosive System. A weapon, device or tool using explosive material.

73. Explosives Mishap. A mishap or event involving conventional ordnance, ammunition, explosives, explosive systems and devices resulting in an unintentional detonation, firing, deflagration, burning, launching of ordnance material (including all ordnance impacting off-range), leaking or spilled propellant fuels and oxidizers (less Otto fuel II). Events defined as

explosive mishaps and meeting a severity classification of Class A, B, C , or D will be reported as a weapons mishap via the Risk Management Information program of record, even if an ordnance system works as designed and human error contributed to the event. Any explosive event not meeting one of these severity classifications will be reported as an EER per OPNAVINST 8000.16E.

a. **Detonation, Deflagration, Burning or Firing.** It is an unintentional or inadvertent initiation, explosion or reaction of explosive material, component or system.

Example: Negligent discharges of all guns, including small arms (this includes discharge of a weapon inside government quarters or negligent discharges and ricochets during training on ranges), aircrew escape propulsion systems, marine location markers, flares, etc.).

b. **Inadvertent Launch.** An unintentional launch of a weapon.

c. **Propellant and Oxidizers.** Leaking or spilled propellants (both solid and liquid), propellant fuels and oxidizers (less Otto fuel II).

d. **All Ordnance Impacting Off-Range.** This includes all small arm ranges where ricochets cause bullets to impact outside surface danger zones.

74. **Factor.** Any deviation, out-of-the-ordinary or deficient action or condition discovered in the course of a safety investigation, which in the opinion of the SIB or SIO, contributed to the eventual outcome. Determining mishap factors (and eliminating non-factors) enables safety investigators to focus the investigation to those specific areas that are significant in the mishap.

Note: RMI has three options in the drop down menus: “Causal factors,” “factors (non-causal but contributing)” and “non-factors worthy of discussion. There is a fourth type of factor, the “non-factor,” but the non-factor is not available in the drop down and, instead would be listed in the narrative.

75. **Factors (Non-Causal But Contributing).** Factors which were present but not necessarily causal.

76. **Fatality.** A death resulting from a mishap or work-related injury or illness.

Note: A fatality includes a mishap or complications of a mishap that resulted in a death.

77. **Findings.** The conclusions of the safety investigator. They are statements, in chronological order, of each significant event, condition or data point sustaining the sequence leading to the event. Findings establish lines of evidence.

78. **Fire, Reportable.**

a. Any unintentional fire occurring on any naval installation (i.e., includes shipyards and industrial operations), ship, submarine or aircraft (to include a small fire in which no personnel were injured and the material property damage was limited to the originally ignited materiel and not propagated to other materials). Fire is an unintended state, process or instance of combustion in which fuel or other material is ignited and combined with oxygen, giving off smoke, sparks or flame. Smoke or sparks may or may not be present. However, if unexpected smoke or sparks exist, a fire should be assumed to exist (this is especially relevant to Class “C” fires when the smoke or sparks cease after power is secured). Evidence of previously unreported combustion or explosion must also be reported upon discovery. Reports solely based on acrid odor (no evidence of combustion upon inspection) are not required.

b. Materiel damage of mechanical and structural systems that meet mishap dollar cost thresholds. Dollar cost thresholds for reporting based on replacement or repair costs that are caused solely by an overheat condition (e.g., materiel warping, discoloration, etc.) must be reported as a mishap due to materiel failure. Overheat conditions are where materiel destruction is solely due to high temperature and there is no evidence of self-sustained combustion. Electrical or electronic overheat conditions where there is evidence of combustion must be reported as a fire.

79. First Aid. First aid, for purposes of this instruction and 29 CFR Part 1904, are not required to be recorded or reported, using the following definition of first aid:

a. Using a non-prescription medication at nonprescription strength (for medications available in both prescription and non-prescription form, a recommendation by a physician or other licensed health care professional to use a non-prescription medication at prescription strength is considered medical treatment for record keeping purposes);

b. Administering tetanus immunizations (other immunizations, such as hepatitis B vaccine or rabies vaccine, are considered medical treatment);

c. Cleaning, flushing or soaking wounds on the surface of the skin;

d. Using wound coverings, such as bandages, Band-Aids™, gauze pads, etc.; or using butterfly bandages or Steri-Strips™ (other wound closing devices such as sutures, staples, etc., are considered medical treatment);

e. Using hot or cold therapy;

f. Using any non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. (devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for record keeping purposes);

- g. Using temporary immobilization devices while transporting an accident victim (e.g., splints, slings, neck collars, back boards, etc.);
- h. Drilling of a fingernail or toenail to relieve pressure or draining fluid from a blister;
- i. Using eye patches;
- j. Removing foreign bodies from the eye using only irrigation or a cotton swab;
- k. Removing splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means;
- l. Using finger guards;
- m. Using massages (physical therapy or chiropractic treatment are considered medical treatment for record keeping purposes); or
- n. Drinking fluids for relief of heat stress.

80. Formal Training. Training conducted in a classroom, virtual classroom, laboratory or field exercise that has been developed and documented in a formal training plan or curricula.

81. Formal Training Mishap. A formal training mishap is any injury or illness that occurs during training conducted at a training command in a classroom, laboratory or field exercise for which a course identification number (CIN) is assigned.

82. Freedom of Information Act (FOIA) Request. A written request for records from the Navy or Marine Corps. Such requests may be from any member of the public (including persons employed by the government, but acting in their personal capacity), commercial entities, news media or State and local governments. FOIA requests cannot be made by any part of the United States Government, including the Federal courts.

83. Friendly Fire. A circumstance in which authorized members of U.S. or friendly military forces, U.S. or friendly official government employees, U.S. DoD or friendly nation contractor personnel and nongovernmental organizations or private volunteer organizations, who, while accompanying or operating with the U.S. Armed Forces, are mistakenly or accidentally killed or wounded in action by U.S. or friendly forces actively engaged with an enemy or who are directing fire at a hostile force or what is thought to be a hostile force. This also includes incidents that result in only damage or destruction of U.S. or friendly nation's military property mistakenly or accidentally damaged in action by U.S. or friendly forces actively engaged with an enemy or who are directing fire at a hostile force or what is thought to be a hostile force.



84. Fume. Very small particles (1 micrometer or less) formed by the condensation of volatilized solids, usually metals. Examples of processes that generate fumes are zinc socket pouring and welding. See also “Gas,” “Mist and Fog,” “Smoke” and “Vapor.”

85. Gas. A material that under normal conditions of temperature and pressure (20 degrees Celsius and 760 millimeters of Mercury (mmHg), respectively) tends to occupy an enclosed space uniformly. See also “Fume,” “Mist and Fog,” “Smoke” and “Vapor.”

86. Government Motor Vehicle (GMV). A motor vehicle that is owned, leased (includes General Services Administration vehicle under the control of a Navy activity) or rented by the government (includes a vehicle rented by government personnel when authorized on their official travel orders) primarily designed for over-the-road operations; and whose general purpose is the transportation of cargo or personnel. Examples of GMVs are: passenger cars, station wagons, vans, ambulances, buses, motorcycles, trucks and tractor-trailers. A trailer being towed by a GMV is considered part of the vehicle. Included in this definition are government-owned wheeled tactical and combat vehicles. Vehicles on receipt to and operated by, non-DoD persons or agencies and activities such as the U.S. Postal Service or the American Red Cross are not GMVs.

87. Government Vehicle Other (GVO). A motor vehicle that is owned, leased (includes General Services Administration vehicle under the control of a Navy activity) or rented by the government (includes a vehicle rented by government personnel when authorized on their official travel orders) primarily designed for off-the-highway operation, such as construction-tracked vehicles, forklifts, road graders, agricultural-type wheeled tractors, all-terrain vehicles, utility terrain vehicles, dune buggies, off-road motorcycles, golf carts, snowmobiles and aircraft tugs. Includes military combat and tactical vehicles (e.g., tanks, self-propelled weapons, armored personnel carriers, amphibious vehicles ashore and high-mobility multipurpose wheeled vehicles (HMMWV)).

88. Government Vehicle Mishap. A mishap involving a GMV or GVO being operated as such, which results in death, injury or property damage.

89. Ground Mishap. A DoD mishap that occurs on land, involves DoD activities and results in work-related illness to DoD personnel, injury to DoD military personnel on- or off-duty, injury to on-duty civilian personnel or DoD-supervised contractor employees, damage to DoD property and damage to private property or injury or illness to non-DoD personnel caused by DoD activities, but does not involve damages to DoD aircraft, missiles, explosives, chemical agents, motor vehicles, space systems and support equipment or nuclear weapons or reactors. Ground mishaps fall into one of the following mishap subcategories: Industrial and Occupation, Sports, Recreation and Fitness, Combat Support and Training and Miscellaneous.

90. Hazard. Any real or potential condition that can cause injury, illness or death to personnel or damage to or loss of equipment or property or mission degradation. Hazards are divided into two categories:

a. An act or event (i.e., near miss) that may have resulted in a mishap where the fatality, injury, illness, property damage or loss of an asset was avoided merely by chance, the actions of an individual or individuals, a small measure of distance or a few moments in time.

b. A workplace condition that might result in injury, health impairment, illness, disease or fatality to any person who is exposed to the condition or which might result in damage to or loss of property or equipment.

Note: Safety investigators use the term to explain causes of mishaps. Hazards are detected through safety investigations, inspections, industrial hygiene surveys, observations, safety program evaluations or from other activity reports.

91. Hazard Report (HAZREP). A report of a hazardous condition or near-miss that occurred.

92. Hazard Reporting. The process of reporting a real or potentially hazardous event (i.e., near miss) or workplace condition that could cause injury, illness or death to personnel or damage to or loss of equipment or property or mission degradation to the Naval Enterprise. Hazard reporting is a subset of safety reporting. See paragraph 417 for more detailed information on hazard reporting.

93. Hazard Review Board (HRB). An entity established to evaluate hazards that exist within the operating environment of a command and its subordinate commands, to better understand the risks associated with those hazards, determine whether stronger risk controls are needed and keep the commander informed of those risks. HRBs are required at the controlling command level and are encouraged at lower levels of command. See chapter 7 for details.

94. Hazard Severity. An assessment of the worst potential consequence is likely to occur as a result of deficiencies. Hazard severity categories are:

a. Category I - Catastrophic: the hazard may cause a fatality or loss of a facility.

b. Category II - Critical: may cause severe injury, severe occupational (i.e., work-related) illness or major materiel or property damage.

c. Category III - Marginal: may cause minor injury, minor occupational (i.e., work-related) illness or minor materiel or property damage.

d. Category IV - Negligible: probably would not affect personnel safety or health, but is nevertheless in violation of specific criteria.

95. Health Care Provider. A physician, family nurse practitioner, pharmacist, physician assistant, nurse, independent duty corpsman or other licensed or non-licensed health care professional.

96. Heat Strain. The body's physiological response to heat stress (e.g., sweating).

Note: The body's natural way to keep the core body temperature from rising to unhealthy levels is through an increase in heart rate and sweating. When these are not enough to keep the core body temperature from rising, the result is heat-related illness or death. Elevated core body temperatures may cause the following illnesses (listed from most severe to least severe): Heat stroke, heat exhaustion (i.e., includes both salt-depletion and water-deficient heat exhaustion), heat cramps, heat syncope (i.e., fainting), heat rash (i.e., miliaria rubra), “hot water bottle rash” (i.e., erythema ab igne) and exertional hyperthermia (i.e., rhabdomyolysis). The OSHA classifies heat stress as a heat-related illness; whereas, the Navy and Marine Corps Public Health Center classifies it as an injury. For safety reporting purposes, it is an illness. See NMCPHC TM-6260.6A (June 2007), “Prevention and Treatment of Heat and Cold Stress Injuries” for more information. Availability of this document is provided in the Safety Reporting Resources section.

97. Heat Stress. The net heat load to which a worker is exposed.

Note: Physical exertion, environmental factors and clothing worn all contribute to heat stress. The OSHA classifies heat stress as a heat-related illness; whereas, the Navy and Marine Corps Public Health Center classifies it as an injury. For safety reporting purposes, it is an illness. See NMCPHC TM-6260.6A (June 2007), “Prevention and Treatment of Heat and Cold Stress Injuries” for more information. Availability of this document is provided in the Safety Reporting Resources section.

98. High-Risk Training.

a. Marine Corps. Is in the formal school setting as: Basic or advanced individual or collective training, essential for preparing Marines and units for combat, that exposes students and instructors to the risk of death or permanent disability despite the presence of and adherence to proper safety controls. A list of courses considered high-risk training is provided in MCO 1553.2D.

b. Navy. Basic or advanced individual or collective training, that exposes students and instructors to the risk of death or permanent disability if safety precautions are not instituted and adhered to during execution. Formal traditional and non-traditional and unit level training will

be considered high risk when a deliberate or in-depth initial risk assessment has identified evolutions that have the potential to expose instructors or students to moderate risk assessment code 3 (RAC 3), serious (RAC 2) or critical (RAC 1) risks as defined in OPNAVINST 1500.75D or as designated by higher authority. Some examples of high-risk training are aviation, parachute, water survival, self-contained underwater breathing apparatus (“SCUBA,” for USMC “scuba”), underwater breathing device (UBD), rescue swimmer, blaster, diver, EOD, live combat arms, firefighting, mountaineering, helicopter rope suspension, confidence and Tarzan courses and sea-air-land training.

99. Hospitalization. The admission of personnel to a hospital or shipboard medical facility on an in-patient basis.

100. Human Error. Human performance that deviated from that required by the operational standards or situation.

101. Human Factors. Human, machine or environmental interactions in a sequence of events that were influenced by or the lack of human activity, which resulted or could result in a mishap.

102. Human Factors Analysis and Classification System (HFACS). See “DoD HFACS.”

103. Illness or Disease. A non-traumatic physiological harm or loss of capacity produced by systemic; continued or repeated stress or strain; exposure to hazardous noise, toxins, poisons, fumes, etc. or other continued and repeated exposures to conditions of the environment over a long period of time. For practical purposes, an occupational (i.e., work-related) illness or disease are any reported condition that does not meet the definition of injury. Illness includes both acute (i.e., extremely severe, short-term and dangerous) and chronic illnesses (i.e., present over a long period of time, recurring, cumulative effects or habitual), such as, but not limited to, noise-induced hearing loss, a skin disease or disorder, respiratory conditions or poisoning. Illnesses include:

a. Skin Diseases or Disorders. Illnesses involving a worker’s skin that are caused by work exposure to chemicals, plants or other substances. Examples: Contact dermatitis, eczema or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; and inflammation of the skin.

b. Respiratory Conditions. Illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors or fumes at work. Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer’s lung, beryllium disease, tuberculosis, occupational (i.e., work-related) asthma, RADS, chronic obstructive pulmonary disease (COPD), hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis and other pneumoconioses.

c. **Poisoning.** Disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids or the breath that are caused by the ingestion or absorption of toxic substances into the body. Examples: Poisoning by lead, mercury, cadmium, arsenic or other metals; chemical asphyxiation by carbon monoxide, hydrogen sulfide or other gases; poisoning by benzene, benzol, carbon tetrachloride or other organic solvents; poisoning by insecticide sprays, such as parathion or lead arsenate; and poisoning by other chemicals, such as formaldehyde.

d. **Noise-Induced Hearing Loss.** A change in hearing threshold relative to the baseline audiogram of an average of 10 decibels (dB) or more in either ear at 2000, 3000 and 4000 hertz (Hz) and the employee's total hearing level is 25 dB or more above audiometric zero (also averaged at 2000, 3000 and 4000 Hz) in the same ear(s).

Note: Hearing losses from either a punctured eardrum or an acoustic trauma from a one-time blast or over-pressure are injuries, not illnesses.

e. **All Other Occupational Illnesses.** All other occupational (i.e., work-related) illnesses. Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (e.g., isotopes, x-rays, radium); effects of nonionizing radiation (e.g., welding flash, ultraviolet rays, lasers); anthrax; bloodborne pathogenic diseases, such as acquired immune deficiency syndrome (AIDS), human immunodeficiency virus (HIV), hepatitis B or C; brucellosis; malignant or benign tumors; histoplasmosis; and coccidioidomycosis.

104. **In Service.** (Afloat only). Nuclear powered ships are assigned an active status of "in-service" approximately two to four weeks (two to four months for nuclear powered aircraft carriers) prior to the commencement of Sea Trials and maintain this status until commissioning. See also "Active Status" and "In Commission."

105. **Incidence Rate.** The number of recordable injuries and illnesses occurring among a given number of full-time workers (usually 100 full-time workers) over a given period of time (usually one year).

106. **Incident.** A planned or unplanned occurrence or series of occurrences resulting in injury or damage that does not meet mishap reporting criteria or is exempt from safety reporting.

107. **In Commission.** (Afloat only). Naval ships employed in active fleet assignments. When used alone, this term must be identified with "active status" only. See also "Active Status."

108. **Injury.** A traumatic wound or other condition of the body caused by external force or deprivation (e.g., fractures, lacerations, sprains, dislocations, concussions, compressions,

drowning, suffocation, simple asphyxiation, punctured eardrum and acoustic trauma from a one-time blast or over-pressure), including stress or strain, which results from an unplanned event. The injury is identifiable as to the time and place of occurrence and member or function of the body affected and is caused by a specific event or series of events in a single day or work shift.

109. Installation. Navy and Marine Corps bases, stations, centers, depots, facilities or other organizational properties owned by DON.

110. Jettison. Removal of goods, fuel or equipment from a ship or aircraft to make it lighter.

111. Joint Service Mishap. A single mishap involving two or more Services in which one or more Services experiences reportable injuries or damages.

112. Laser. An acronym for light amplification by stimulated emission of radiation. Any device that can be made to produce or amplify electromagnetic radiation in the X-ray, ultraviolet, visible and infrared or other portions of the spectrum by the process of stimulated emission of photons.

113. Laser Surface Danger Zone (LSDZ). The target area in addition to horizontal and vertical buffer zones. It reflects the minimum land and air requirement, to include terrain mitigation, needed to safely employ a given laser. The LSDZ accounts for direct hazards (i.e., main beam) and indirect hazards (i.e., reflections). The boundaries of the LSDZ depend on which of the two overlapping zones, direct or indirect, are larger. If there are no specular reflectors on the range and the laser does not present a diffuse reflection hazard, there will not be an indirect hazard zone. LSDZs must accommodate stationary firing points (i.e., fixed positions) as well as mobile firing positions, in addition to fixed and moving targets. See also “Surface Danger Zone” for ground-to-ground employment of ground weapons firing or demolition.

114. Life Sciences Material. For purposes of safety investigations, any evidence related to a branch or sub-discipline of biological science that involves the study of human life.

Note: Examples of life sciences relevant to safety investigations include, but are not limited to the following: Genetics (i.e., genes and heredity), bioinformatics (i.e., storing, retrieving organizing and analyzing biological data), microbiology (e.g., bacteria and viruses), toxicology (i.e., effects of chemicals on the body) and necropsy (i.e., autopsy to determine cause of death or the changes produced by disease).

115. Light Duty. A duty status recommended after treatment of an injury that stipulates exactly the limitations on a military member during the recommended period, equivalent to placing a civilian in a restricted work status. When an injury or work-related illness results in light-duty days, assigned light duty days are not counted as lost workdays. On light duty, the military member normally remains at their original duty station but is gainfully employed even though

not performing their normal duties. Applicable only to military personnel. The civilian equivalent of light duty is restricted work activity or job transfer.

116. Limited Duty. A military duty status formally assigned as a result of a medical board. Time spent on limited duty is not chargeable as lost time regardless of the cause for assignment to limited duty. Under limited duty, the military member may be reassigned from their permanent duty station to a temporary duty station until the medical issue is resolved. Applicable only to military personnel. The civilian equivalent of limited duty is restricted work activity or job transfer.

117. Lost-Time Case. A non-fatal traumatic injury that causes any loss of time from work after the day or shift on which it occurred; or non-fatal non-traumatic illness or disease that causes any loss of time from work.

Note: When determining if a mishap is a Lost-Time Case, you must count the number of calendar days the employee was unable to work as a result of the injury or illness, regardless of whether the person was scheduled to work on those days. Weekend days, holidays, vacation days or other days off are included in the total number of calendar days, if the employee would not have been able to work on those days. If the employee is out for an extended period of time, use an estimate of the days that the employee will be away and update the day count when the actual number of days is known. You may "cap" the total days away at 180 calendar days. Also, include the number of calendar days away recommended by a physician or other licensed health care professional. However, the days away must be recorded whether the injured or ill employee follows a physician or licensed health care professional's recommendation or not. End the count of days away from work on the date the physician or other licensed health care professional recommends that the employee return to work.

118. Lost Time Case Rate (LTCR). The number of Lost Time Cases multiplied by 100, then divided by the number of employees. See also "Total Case Rate (TCR)."

119. Lost Workdays or Days Away from Work. The total number of full calendar days, weekends included, that a person was unable to work as a result of a reportable injury or illness as recommended by a physician or licensed health care professional, excluding the day of the mishap and the day returned to duty or work.

a. For Navy and Marine Corps military personnel, these include days of sick in quarters, inpatient hospitalization, convalescent leave and command-directed removal from duties as a result of a reportable injury or illness.

b. Navy and Marine Corps reserve personnel, in a not physically qualified (NPQ) status sustained as a result of a reportable injury at any time en route to, during or returning from drill or during annual training, is considered lost time.

c. For Navy and Marine Corps civilian personnel, this includes continuation of pay (COP) leave, annual leave, sick leave, days hospitalized and leave without pay granted or a full work shift missed because of a work-related illness or injury.

Note: When determining lost workdays or days away from work, you must count the number of calendar days the employee was unable to work as a result of the injury or illness, regardless of whether the person was scheduled to work on those days. Weekend days, holidays, vacation days or other days off are included in the total number of calendar days, if the employee would not have been able to work on those days. If the employee is out for an extended period of time, use an estimate of the days that the employee will be away and update the day count when the actual number of days is known. You may "cap" the total days away at 180 calendar days. Also, include the number of calendar days away recommended by a physician or other licensed health care professional. However, the days away must be recorded whether the injured or ill employee follows a physician or licensed health care professional's recommendation or not. End the count of days away from work on the date the physician or other licensed health care professional recommends that the employee return to work.

120. Marine Corps and Navy Combat Craft. A Navy or Marine Corps public vessel craft that is operated by Navy or Marine Corps personnel while it is at sea or conducting waterborne operations. This includes mechanized amphibians, combat rubber reconnaissance craft, riverine assault craft, rigid hull craft, etc.

121. Materiel. All items necessary to equip, operate, maintain and support military activities without distinction as to its application for administrative or combat purposes.

122. Medical Attention. An injury or exposure requiring treatment by a physician or other licensed health care professional or independent duty corpsman and requiring a medical record entry.

123. Medical Evacuees. Personnel who are wounded, injured or ill and must be moved to or between medical facilities.

124. Medical Treatment. The management and care of a patient to combat disease or disorder. For the purposes of this manual, medical treatment does not include:

a. Visits to a physician, other licensed health care professional or an IDC solely for observation or counseling;

b. The conduct of diagnostic procedures, such as X-rays and blood tests, including the administration of prescription medications used solely for diagnostic purposes (e.g., eye drops to dilate pupils); or



c. “First aid” as defined in this glossary. Medical treatment does not include first aid treatment even though provided by a physician or other licensed health care professional. See “First Aid.”

125. Memorandum of Final Evaluation (MOFE) Message. The final endorser’s independent final evaluation and position on causes, findings, recommendations and DoD Human Factors Analysis and Classification System codes. It is published in the RMI along with other messages related to the mishap and does not replace the investigation’s final message or final supplemental message. The investigation’s final message (or final supplemental message) and all tabs remain available in the RMI database as part of the official record. The acronym “MOFE” and the term “final endorsement” may be used interchangeably.

126. Military Animal. An animal owned by the Department of Defense for use in support of military operations. Considered as materiel. Examples include military working dogs, horses, bottlenose dolphins and sea lions. It does not include service animals used for medical-related activities.

127. Military Personnel. Personnel on active duty, active duty for training or inactive duty for training in the U.S. Army, U.S. Marine Corps, U.S. Navy, U.S. Air Force, U.S. Space Force and U.S. Coast Guard; personnel on active duty, active duty for training or inactive duty for training in the National Guard of the United States under the provisions of either Title 10, U.S. Code (i.e., Federally funded, command and control with the President of the United States through combatant commanders) or Title 32, U.S. Code (i.e., Federally funded, command and control with the State Governor through the Adjutant General); personnel on active duty in a Naval Militia under the provisions of Title 10, U.S. Code; cadets of the U.S. Military Academy; midshipmen of the U.S. Naval Academy; cadets of the U.S. Air Force Academy; cadets of the U.S. Coast Guard Academy; midshipmen of the U.S. Merchant Marine Academy when engaged in directed training activities with a DoD component or the U.S. Coast Guard; Reserve Officer Training Corps (ROTC) cadets or midshipmen when engaged in directed training activities; officer accession program students when engaged in directed training activities; and foreign national military personnel assigned to a DoD component or the U.S. Coast Guard.

Note: Excluded are personnel on State active duty in the National Guard of the United States or in the Naval Militia.

128. Mishap. An unplanned or unexpected event or series of events, that results in damage to DoD property; work-related illness to DoD personnel; injury to on- or off-duty DoD military personnel; injury to on-duty DoD civilian personnel; or damage to non-DoD property or injury or illness to non-DoD personnel, caused by DoD activities. For purposes of DON safety reporting, events that meet the above criteria must also meet the minimum damage and injury or illness thresholds of a Class D mishap to be considered a mishap.

Note: If a mishap occurs and that same mishap involves either on-duty civilian personnel and off-duty military personnel or on- and off-duty military personnel, then that mishap will be categorized as being on-duty.

129. Mishap Categories. DoD mishaps are divided into the following categories: Aviation, weapons, space, motor vehicles, ground and afloat.

130. Mishap Causes. Conditions or events that explain why a mishap occurred. Events within a mishap may have multiple causes assigned. Causes are the genesis of the mishap, not the reason that damage or injury occurred. For example, a fire may have damaged a room, but the mishap was not caused by the fire - it was caused by “personnel error - failure to follow procedures” because someone stored a flammable near a heat source, resulting in a fire.

131. Mishap Costs. Includes the cost of all fatalities, injuries, illnesses, DoD property damage, non-DoD damage, compensation for damage or loss and restitution.

132. Mishap Probability. The likelihood that a hazard will result in a mishap or loss, based on an assessment of such factors as location, exposure (cycles or hours of operation), affected populations, experience or previously established statistical information. Mishap probability must be assigned an English alphabet symbol according to the criteria in subparagraphs 132a through 132d:

a. Category A. Likely to occur immediately or within a short period of time. Expected to occur frequently to an individual item or person or continuously to a fleet, inventory or group.

b. Category B. Probably will occur in time. Expected to occur several times to an individual item or person or frequently to a fleet, inventory or group.

c. Category C. May occur in time. Can reasonably be expected to occur at some time to an individual item or person or several times to a fleet, inventory or group.

d. Category D. Unlikely to occur.

133. Mishap Reporting. The process of reporting events that meet the definition and criteria of a mishap after an investigation by an SIO or an SIB. Mishap reporting is a subset of safety reporting. See chapters 2 and 4 for more detailed information on mishap reporting.

134. Mishap Safety Information. All mishap-related facts, witness statements, evidence, findings, analyses, conclusions, opinions, briefings, recommendations or endorsements; regardless if privileged, non-privileged, classified or unclassified. See also “Privileged Safety Information (PSI).”

135. Mishap Victim (MV). Someone or something that has been hurt, damaged or killed or has suffered, either because of the actions of someone or something else or because of illness or chance.

136. Mission Data Recorder (MDR). A combatant vessel tactical data recording and reconstruction system that supports post-event data analysis (i.e., a “black box”). See also “Voyage Data Recorder (VDR)” for commercial and non-combatant public vessels.

137. Mist and Fog. Finely divided liquid droplets suspended in air and generated by condensation or atomization. A fog is a mist of sufficient concentration to obscure vision. Examples of materials and processes that produce mists: Acid sprays used in metal treatment (e.g., electroplating) organic solvent sprays and spray painting. See also “Fume,” “Gas,” “Smoke” and “Vapor.”

138. Mitigate. To reduce the risk from a hazard.

139. Moored. Secured alongside a pier, wharf, quay or causeway; to a mooring buoy; or at anchor.

140. Motor Vehicle Mishap. A DoD mishap involving the operation of a motor vehicle by DoD personnel or the operation of a government-owned, -rented or -leased motorized land vehicle by non-DoD personnel while operationally controlled by a DoD Component. Motor vehicle mishaps include collisions with other vehicles, objects, terrain features, animals or pedestrians; personal injury or property damage due to cargo shifting in a moving vehicle; personal injury occurring within or by falling or jumping from a moving vehicle; and towing or pushing mishaps. Motor vehicle mishaps do not include ground and industrial mishaps, such as injuries occurring while loading, unloading, mounting or dismounting a nonmoving vehicle; cargo damaged by weather; damage to a parked GMV unless caused by an operating GMV; damage to a GMV caused by objects thrown or propelled into it by weather, natural phenomena or fire when no collision occurred; or damage to a GMV when it is being handled as a commodity or cargo and not operating under its own power.

141. Musculoskeletal Disorders. Injuries or disorders of the muscles, nerves, tendons, joints, cartilage and disorders of the nerves, tendons, muscles and supporting structures of the upper and lower limbs, neck and lower back that are caused, precipitated or exacerbated by sudden exertion or prolonged exposure to physical factors such as repetition, force, vibration or awkward posture. This definition specifically excludes those conditions such as fractures, contusions, abrasions and lacerations resulting from sudden physical contact of the body with external objects.

142. Naval Vessel Register. Contains information on ships and service craft that comprise the official inventory of the U.S. Navy from the time of vessel authorization through its life cycle and disposal. It also includes ships that have been stricken, but not disposed. Ships and service

craft disposed of prior to 1987 are currently not included; however, the data is gradually being added along with other updates. Available online at Web site: <https://www.nvr.navy.mil/>. See also “Active Status,” “In Service,” “Out of Commission, Special,” “Pre-commissioning Unit (PCU)” and “Ready Reserve Force (RRF).”

143. Near Mishap. See “Near Miss.”

144. Near Miss. An act or event that may have resulted in a mishap where the fatality, injury, illness, property damage or loss of asset was avoided merely by chance, the actions of a single person, a small measure of distance or a few moments in time. See also “Class H Event” and “Near Mishap.”

145. Negligent Discharge, Weapon. Unintentional firing of a weapon for any reason, including mechanical failure, equipment malfunction or human error. This is classified as a weapons mishap.

Note: Detonation of a grenade from “milking” is a negligent discharge of a weapon.

146. No Lost-Time Case. A non-fatal injury, illness or disease that does not meet the definition of a day away from work case or is considered a first aid case. Such cases may be recordable if they meet the criteria in chapter 4.

147. Non-Causal Primary Finding. A single event, condition or data point which is important in the mishap or hazard and is associated with a non-causal but contributory factor.

148. Non-Factors. A list of those areas and items the SIB (or SIO) considered, but determined not to be a factor in the mishap and not worthy of additional discussion. In the RMI, non-factors are listed at the bottom of the narrative. It is not an all-encompassing list; but rather, a list of areas and items that the SIB (or SIO) investigated and ruled out. Similar to the outdated term rejected causal factors, but without the need for justification.

149. Non-Factors Worthy of Discussion (NFWOD). Non-factors discovered during the course of a safety investigation and found not to be causal or contributory, but that have sufficient value to be stated and amplified. NFWODs are the source of other findings and recommendations of significance.

Example: Implementation of flight data recorders, not causal or contributory, but important for the organization’s safety posture. NFWODs typically falling into one of three categories:

a. Areas covered during the safety investigation that did not cause the mishap or influence the outcome, but should be fixed due to the potential to be a factor in a future mishap (e.g., incorrect information in a maintenance manual);

b. Areas that were thoroughly investigated and subsequently ruled out as factors that have value providing context to the audience on why these areas were not factors; or

c. Areas that may be considered an interest item to the convening authority (e.g., risk management, crew resource management).

150. Non-Hostile Casualty. A person who becomes a casualty due to the circumstances not directly attributable to hostile action or terrorist activity. Casualties due to the elements, self-inflicted wounds and combat fatigue are non-hostile casualties. See also “Casualty” or “Casualty Type.”

151. Non-Ionizing Radiation. Radiation that is not capable of stripping electrons from atoms in the media through which it passes. Examples include radio waves, microwaves, visible light and ultraviolet radiation.

152. Notification. To give notice or to inform. For DON safety reporting purposes, notification means an event has occurred which is expected to meet defined thresholds and that certain individuals, commands or activities must be informed of the event. The method of notification (e.g., telephonic, naval message) and the timeliness of notification will often be prescribed.

153. Observation or Diagnostic Care. Inpatient hospitalization or restriction from assigned work activities for observation or diagnosis provided no treatment or medication is given for the suspected injury or occupational (i.e., work-related) illness and a competent medical authority determines the individual could have returned to his or her normal job without impairment or disability or where an individual is temporarily restricted from regularly assigned duties to prevent exceeding time-weighted exposure limits. This care does not create a “lost-time case,” “no lost-time case” or “first-aid case.”

154. Occupational Illness. Also “Work-Related Illness.” A non-traumatic physiological harm or loss of capacity produced by: systemic infection; continued or repeated stress or strain; exposure to toxins, poisons, fumes, etc.; or other continued and repeated exposure to conditions of the work environment over a long period of time (greater than a single day or work shift). For practical purposes, an occupational illness or disease is any reported condition that does not meet the definition of an injury.

Note: Examples include: Dust diseases of the lung; respiratory conditions from toxic agents; noise induced hearing loss; poisoning by lead, mercury or other metals; work-related bloodborne pathogens exposures; cumulative trauma disorders; and work-related tuberculosis.

155. Off-Duty.

a. Military and civilian personnel are considered off-duty when they are not on-duty. Military personnel are considered off-duty while on liberty, on leave or in an unauthorized absentee status.

b. Military and civilian personnel commuting prior to or after their duty day or shift are considered off-duty for safety reporting purposes.

c. Reservists for the purposes of safety reporting, are considered off duty from the time they depart their home or office until they reach their appointed site for inactive duty training (i.e., drill) and, from the time they depart the drill site until they reach domicile or Government-provided billeting at the conclusion of the scheduled drill or drill periods.

Example: A reservist departs his domicile for the drill site for a drill weekend or scheduled make-up drill. En route, he is involved in a private motor vehicle (PMV) mishap. Report as an off-duty motor-vehicle mishap.

Example: A reservist completed her drills for Saturday and is scheduled to return the following morning. During the evening, she is involved in a mishap. Report the mishap as required as an off-duty motor-vehicle mishap.

Example: A reservist completes his final drill on a Sunday afternoon and is driving home when he is involved in a mishap. Report the mishap as required as an off-duty motor-vehicle mishap.

d. Military and civilian personnel are off-duty while participating during non-working hours in base or installation team sports and events sponsored by the command in which participation is voluntary.

e. Civilian personnel are off-duty during the workday (even though on Federal property) when they are engaged in personal activities unrelated to employment such as eating, physical training, resting, shopping, running errands, etc.

156. Office of Collateral Responsibility (OCR). The individual or individuals assigned by an action agency to assist the office of primary responsibility (OPR) in completing mishap recommendations (MISREC). Assignment of an OCR is not required. Action agencies may assign multiple OCRs to each MISREC.

157. Office of Primary Responsibility (OPR). The point of contact (POC) of an action agency assigned as the primary contact for a mishap recommendation (MISREC). The OPR is a specifically named individual; however, action agencies have the authority to assign a specific command job billet instead of a name to ensure better continuity for MISREC management. OPRs have the authority to update recommendations and recommend MISREC closure.

158. On-Duty.

- a. Military personnel, when not on liberty, not on leave or not an unauthorized absentee.

Note: The “on-duty” definition is for safety reporting purposes only and bears no relationship to line-of-duty determinations.

- b. Civilian personnel, when their activities are work-related.

Note: The “on-duty” definition is for safety reporting purposes only and bears no relationship to compensation determinations.

- c. Military and civilian personnel physically present at any location to perform their officially assigned work.

- d. Military and civilian personnel physically aboard a public vessel.

Note: Public vessels include any vessel owned, bareboat chartered or operated using appropriated funds by the DoD or any other U.S. Government agency (e.g., includes the U.S. Coast Guard and the National Oceanic and Atmospheric Administration), except when that vessel is engaged in commerce. Included, are pre-commissioned vessels after delivery to a DoD or other U.S. Government agency. Not included, are non-appropriated fund government vessels such as Morale, Welfare and Recreation (MWR) rental boats.

- e. Military and civilian personnel being transported anytime by a government conveyance or common carrier for the purpose of performing officially assigned work. This includes travel in a PMV or commercial conveyance while performing official duty, but not routine travel (i.e., commuting) to and from home and work or duty station. Sailors and Marines aboard a government-leased or chartered water taxi traveling to or from a public vessel are on duty, regardless if that water taxi is paid for with appropriated or non-appropriated funds.

- f. Civilian personnel, while traveling during their workday to or from work sites other than their permanent duty station and not engaged in any personal activities.

- g. Military and civilian personnel in a travel status for official travel (i.e., under a travel authorization or travel order) and not engaged in any personal activities.

Note: Travel status does not include travel taken for personal convenience, leave, civilian administrative leave or a military member’s administrative absence while performing travel away from the permanent duty station on public business under competent travel orders. Also, travel status does not include travel orders for reservists to perform inactive duty training.

h. Military personnel participating in physical training activities while on station or at any other place, while under orders.

i. Midshipmen of the U.S. Naval Academy participating in academy-sanctioned intercollegiate, intramural sports and club activities.

j. Civilian personnel participating in command-sponsored events that they are permitted to attend, regardless of location.

k. Military personnel participating in command-directed events that they are permitted to attend, regardless of location.

l. Reservists at their designated drill sites performing inactive duty training (IDT), annual training (AT), active duty training (ADT) or active duty for operational support (ADOS).

m. Reservists in a travel status (i.e., under a travel authorization or travel order) for performing AT, ADT or ADOS and not engaged in personal activities.

n. Military or civilian personnel on funded temporary additional duty (TAD), funded temporary duty (TDY) or permissive TDY (i.e., unfunded orders) for activities that are work-related and are away from their regular place of employment, are covered 24 hours a day during performance of duties and during travel for any injury that results from activities essential or incidental to the temporary assignment. However, when personnel deviate from the normal incidents of the trip and become involved in personal activities not reasonable or incidental to the assignment, the person ceases to be considered on duty for investigation and reporting purposes of work-related injuries or illnesses.

159. Operational Environment. A composite of the conditions, circumstances and influences that affect the employment of capabilities and bear on the decisions of the commander.

160. Ordnance. Military materiel such as combat weapons of all kinds with ammunition and equipment required for their use. Ordnance includes all the things that make up a ship or aircraft armament (e.g., guns, ammunition and all equipment needed to control, operate and support the weapons).

161. OSHA. Occupational Safety and Health Administration, U.S. Department of Labor.

162. Other Finding of Significance. A single event, condition or data point which is important in the mishap or hazard and is associated with a non-factors worthy of discussion (NFWOD).

163. Other Potentially Infectious Material. Means:



- a. The following human bodily fluids: Semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any bodily fluid that is visibly contaminated with blood and all bodily fluids in situations where it is difficult or impossible to differentiate between bodily fluids;
- b. Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
- c. Human immunodeficiency virus (HIV)-containing cell or tissue cultures or organ cultures and HIV- or hepatitis B virus (HBV)-containing culture medium or other solutions; and blood organs or other tissues from experimental animals infected with HIV or HBV.

164. Other Recommendations of Significance (ORS). A recommendation that addresses a factor or finding that safety investigators believe could contribute to future mishaps or warrant command attention, but were not part of the mishap. They are generated from non-factors worthy of discussion (NFWOD).

165. Out of Commission, Special. (Afloat only). Naval ships not employed in active fleet assignments. A status applied to ships undergoing extensive modernization conversion when so designated by the Chief of Naval Operations.

166. Particulate Matter. Any fine solid or liquid particles such as dust, fog, fumes, mist, smoke or spray. Particulate matter suspended in air is commonly known as an aerosol. See also “Fume,” “Mist or Fog” and “Smoke.”

167. Permanent Partial Disability. An injury or work-related illness that does not result in death or permanent total disability, but, in the opinion of competent medical authority (CMA), results in permanent impairment through loss of the use of any part of the body with the following exceptions: teeth, fingernails, toe nails, tips of fingers or tips of toes without bone involvement, repairable hernia, disfigurement or sprains or strains that do not cause permanent loss of motion.

Note: OSHA’s definition of “Amputation” for civilian personnel includes fingertip amputations with or without bone loss, medical amputations resulting from irreparable damage and amputations of body parts that have since been reattached. For civilian personnel, see also “Amputation.”

168. Permanent Threshold Shift (PTS). An average change of plus or minus 10 decibel (dB) at the frequencies 2000, 3000 and 4000 Hertz relative to the reference audiogram, in either ear, without age corrections and when the hearing thresholds for the current hearing test average 25 dB or greater at 2000, 3000 and 4000 Hertz from audiometric zero for the shifted ear. See also “Significant Threshold Shift (STS).”

169. Permanent Total Disability. A non-fatal injury or work-related illness, in the opinion of competent medical authority, permanently and totally incapacitates a person to the extent that he or she cannot follow any gainful occupation.

Note: The loss or loss of use, of both hands, both feet, both eyes or a combination of any of these parts of the body as a result of a single mishap, must be considered as a permanent total disability.

170. Personally Identifiable Information (PII). Information that can be used to distinguish or trace an individual's identity, either alone or when combined with other information that is linked or linkable to a specific individual such as, but not limited to: name, Social Security Number, DoD ID or other identification number, date and place of birth, mother's maiden name, photograph, biometric records, etc.

171. Physical Training. Development and care of the body using a wide variety of strength building, cardio training, endurance and flexibility activities.

172. Physician or Other Licensed Health Care Professional. A physician or other licensed health care professional is an individual whose legally permitted scope of practice (i.e., license, registration or certification) allows him or her to independently perform or be delegated the responsibility to perform, the activities described by this manual.

Note: For purposes of this manual, an IDC in operational environments without a licensed health care professional present, is considered to meet the criteria of a licensed health care professional.

173. Physiological Heat Exposure Limit (PHEL). A set of curves that compare the wet-bulb globe temperature (WBGT) index and the degree of effort or work rate to determine the maximum permissible exposure (MPE) to the heat stress environment. See also "Wet-Bulb Globe Temperature (WBGT) Index."

174. Pre-Commissioning Unit (PCU). (Afloat only). The nucleus crew of the ship's force which reports at the building yard. See also "Ship's Force."

175. Pre-Existing Injury or Illness. An injury or illness that resulted solely from a non-work-related event or exposure that occurred outside the work environment.

176. Primary Recommendation. A recommendation that fixes causal and non-causal factors.

177. Privacy Concern Case. Cases involving the types of injuries or illnesses stated in subparagraphs 176a through 176f:

- a. An injury or illness to an intimate body part or to the reproductive system;

- b. An injury or illness resulting from a sexual assault;
- c. A mental illness;
- d. A case of HIV infection, hepatitis or tuberculosis;
- e. A needlestick injury or cut from sharp objects that are contaminated with blood or other potentially infectious material; or

Note: “Sharps” refers to medical sharps such as scalpels, blades, disposable scissors, suture equipment, stylets and trocars, broken test tubes and glass.”

- f. Other illnesses, if the employee independently and voluntarily requests that his or her name not be entered on the log of work-related injuries and illnesses.

178. Private Motor Vehicle (PMV). A privately owned motor vehicle primarily designed for the transportation of people or cargo over public streets or highways. A PMV-2 is a two-wheeled private motor vehicle (e.g., motorcycle). A PMV-4 is a four-wheeled private motor vehicle.

179. Privilege. A common law doctrine or statutory rule of evidence that protects certain communications and products from being used as evidence in court or otherwise released.

180. Privileged Safety Information (PSI). Information that is reflective of a deliberative process in the safety investigation or given to a safety investigator pursuant to a promise of confidentiality, which the safety privilege protects from being released outside safety channels or from being used for any purpose except mishap prevention. It includes products such as draft and final findings, evaluations, opinions, preliminary discussions, conclusions, mishap causes, recommendations, analyses and other material that would reveal the deliberations of safety investigators, including reviews and endorsements. It also includes information given to a safety investigator pursuant to a promise of confidentiality and any information derived from that information or direct or indirect references to that information.

Note: Information in a statement given under a promise of confidentiality that is also available in a source that is not privileged, may be releasable, but that determination can only be made by COMNAVSAFECEN.

181. Probability. A measure of the likelihood that given exposure to a hazard, a potential consequence mishap will occur.

182. Property Damage. Damage or loss to a facility, equipment, property or materiel.

Note: The cost of environmental cleanup, restoration and restitution also must be included in property damage costs.

183. Protected Health Information (PHI). Any individually identifiable health information that is maintained or transmitted in any form or medium (e.g., paper, electronic, etc.), as specified in 45 CFR 160.103 and DoD 6025.18.

184. Public Health Authority. An agency or authority of the United States, a State, a territory, a political subdivision of a State or territory or an Indian tribe or a person or entity acting under a grant of authority from or contract with such public agency, including the employees or agents of such public agency or its contractors or persons or entities to whom it has granted authority, that is responsible for public health matters as part of its official mandate.

Note: Examples of public health authorities: Defense Health Agency, Bureau of Medicine and Surgery, COMNAVSAFECEN, CMC (SD), military treatment facilities, fleet surgeons, force surgeons, health care providers, safety investigators, etc.

185. Public Vessel. A vessel owned, bareboat chartered or operated using appropriated funds by the DoD or any other U.S. Government agency (e.g., includes the U.S. Coast Guard and the National Oceanic and Atmospheric Administration), except when that vessel is engaged in commerce. Included, are pre-commissioned vessels after delivery to a DoD or other U.S. Government agency. Not included, are non-appropriated fund government vessels such as MWR rental boats.

186. Qualified Person. One who, by possession of a recognized degree, certificate or professional standing or who by extensive knowledge, training and experience, has successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work or the project.

Note: Some standards add additional specific requirements which must be met by the qualified person: Confined Spaces, Construction [29 CFR 1926.1202], Construction Industry [29 CFR 1926.32(m)], Cranes and Derricks [29 CFR 1926.1401], Fall Protection [29 CFR 1910.140(b)], Scaffolds [29 CFR 1926.450(b)] and Steel Erection [29 CFR 1926.751].

187. Ready Reserve Force (RRF). (Afloat only). A subset of vessels within MARAD's National Defense Reserve Fleet ready to support the rapid worldwide deployment of U.S. military forces. As a key element of Department of Defense (DoD) strategic sealift, the RRF primarily supports transport of U.S. Army and U.S. Marine Corps unit equipment, combat support equipment and initial resupply during critical surge periods, the period of time before commercial ships can be secured for similar support. The RRF provides nearly 50 percent of government-owned surge sealift capability.

188. Reasonable Person. A standard hypothetical person that acts in a manner society might expect of a normal person under the same or similar circumstances.

189. Recommendations. Feasible and effective solutions to eliminate identified hazards or if the hazard cannot be eliminated, to mitigate the hazard's potential consequences. Actions taken to prevent a similar mishap or to reduce its effects. There are two types of recommendations: Primary recommendations and other recommendations of significance.

190. Recompression Therapy. Treatment to compress gas bubbles in the blood to a small volume to relieve local pressure and restart blood flow, allow sufficient time for gas bubble absorption and increase blood-oxygen content and improve oxygen delivery to injured tissues.

191. Recordable Mishap. An occurrence involving a civilian or contractor employee that requires the creation of a record due to a work-related injury or illness that met specified criteria established by the OSHA per part 1904 of Title 29, Code of Federal Regulations (CFR). For the purposes of Navy and Marine Corps safety reporting, the term's use will be limited to events involving Government civilian and contractor work-related injury and illness reporting to the OSHA. Contractors must meet the subpart 1904.31 applicability and be supervised by Government personnel on a day-to-day basis. Day-to-day supervision includes supervising not only the output, product or result to be accomplished by the person's work, but also the details, means, methods and processes by which the work objective is accomplished.

192. Reportable Mishap. An event that meets or exceeds mishap damage thresholds or mishap injury or illness thresholds of civilian, contractor and military personnel and must be investigated and reported.

193. Reporting Custodian. Commanding officers and, in some cases, officers-in-charge (OIC) of detachment operations of Navy and Marine Corps organizations who are responsible for or otherwise provide information about, assigned assets and personnel.

194. Restitution. Restoring something to its former or original state or returning something to its lawful owner due to a mishap. Restitution does not focus on a claimant's losses.

195. Restricted Work Activity or Job Transfer. Restricted work activity or temporary transfer from that work occurs when, as a result of a work-related injury or illness, a supervisor or health care professional keeps or recommends keeping, a civilian employee from doing the routine functions of his or her job or from working the full work day or full work shift that the employee would have been scheduled to work before the injury or illness occurred. The employee has not lost work time, but is restricted from routine functions. Restricted work activity or a job transfer made only for the day on which the injury occurred or the illness began is not counted. The military equivalent of restricted work is Light or Limited Duty. See also "Routine Functions"

196. Risk. Chance of adverse outcome or bad consequence, such as injury, illness or loss. Risk level is expressed in terms of hazard probability and severity.

197. Risk Assessment Code (RAC). An expression of the risk associated with a hazard that combines the hazard severity and mishap probability into a single Arabic numeral that is used for hazard assessments and to help determine hazard abatement priorities. See OPNAV M-5100.23 of 5 June 2020, section A, chapter 3.

198. Risk Management Information (RMI) Program of Record (POR). The sole official DON Web-based database application for safety reporting. The shortened acronym RMI is synonymous with the RMI POR.

Note: Navy and Marine Corps personnel must use the RMI to report mishaps, hazards (including near misses) and incidents required by this manual.

199. Routine Functions. For purposes of restricted work, a civilian employee's routine functions are those work activities the employee regularly performs at least once per week. See also "Restricted Work Activity or Job Transfer."

200. Safety Center.

- a. Within DoD or Department of Homeland Security: Army Combat Readiness Center, Air Force Safety Center, NAVSAFECEN, CMC (SD) or Coast Guard Health and Safety Directorate.
- b. Occupational Safety and Health Administration (OSHA).
- c. Others: Similar organizations whose primary mission is prevention of mishaps and who do not support law enforcement or discipline with the information they collect.

201. Safety Investigation. A general term that refers to the investigation of mishaps, hazards (including near misses) and incidents by either a single investigating officer (SIO) or a safety investigation board (SIB). The purpose of a safety investigation is to prevent mishaps. A safety investigation is not a legal investigation and must not be used to place blame or punish those involved.

202. Safety Investigation Board (SIB). A group of individuals who have been directed to complete a safety investigation by a convening authority. Individuals are assigned to the SIB because either they are a SME or they have specific expertise necessary to the investigation. Members of an SIB must be designated in writing for each specific safety investigation. One member of the SIB must be designated the senior member.

203. Safety Investigation Report (SIREP). A report generated by and SIB or SIO following a safety investigation into a mishap that provides factual and analytical information about the mishap including findings, causal factors and the recommended corrective actions to prevent similar mishaps or near mishaps.

204. Safety Investigator. A person assigned in writing by a convening authority or commanding officer to conduct a safety investigation.

205. Safety and Occupational Health (SOH) Professional. Civilian personnel who meet Office of Personnel Management (OPM) standards for Safety and Occupational Health Manager/Specialist General Schedule (GS)-0018, Safety Engineering Technician GS-0802, Safety Engineer GS-803, Safety Technician GS-0019, Aviation Safety Officer GS-1825, Air Safety Investigating Officer GS-1815, Fire Protection Engineer GS-0804, Fire Protection Specialist/Marshal GS-0081, Medical Officer GS-0602, Health Physicist GS-1306, Industrial Hygienist GS-0690, Occupational Health Nurse GS-0610, Environmental Health Technician GS-0699 and military personnel equally qualified when compared to the OPM standards.

206. Safety Officer (Safety Manager). A person who is trained as appropriate for the particular community to perform safety functions for their command and currently holds a safety duty assignment, either as a primary or collateral duty.

207. Safety Privilege. A DoD term used to describe privileges recognized by the courts that protect safety information from release. It is an executive privilege afforded a head of an agency to protect information from release that would hamper the efficient operation of an important government program and perhaps impair the national defense or security.

208. Safety Records. Includes SIREP, HAZREP, MISREC, HAZREC, mishap logs, files and summaries.

209. Safety Reporting. A general term that encompasses all aspects of the process to notify, report and keep records of mishaps, hazards (including near misses) and incidents required by this manual.

210. Sanitized Information. Safety investigation information in which certain identifying information has been removed to protect the disclosure of privileged safety information (PSI) and the identity of the specific mishap. Once PSI has been successfully sanitized, the findings, conclusions, causes, recommendations, opinions, analyses and other indications of the deliberative processes of safety investigators, safety investigation boards, endorsers and reviewers are no longer considered privileged. Within DON, only the NAVSAFECEN is authorized to sanitize safety investigation information and the procedures found in DoDI 6055.07 of 6 June 2011 must be followed.

211. Severity. This is an assessment of the potential consequence that can or could occur as a result of a hazard and is defined by the degree of injury, illness, property or environmental damage, loss of asset (e.g., time, money, personnel) or effect on the mission or task. When analyzing risk, it is based on the worst credible outcome.

212. Shipboard. On, inside or immediately adjacent to the ship.

213. Ship's Force. Members of ship's company. See also "Pre-Commissioning Unit (PCU)."

214. Shipyard. Private or public activity responsible for accomplishing work incident to construction, modernization, conversion, overhaul or other availability of ships.

215. Shore. For purposes of this manual, not afloat.

216. Significant Injury or Illness. Work related cases involving conditions such as a fractured or cracked bone, cancer, chronic irreversible disease or a punctured eardrum, among others. Severity is determined by a competent medical authority. These injuries or illnesses must be recorded at the initial diagnosis even if medical treatment or work restrictions are not recommended or are postponed, in a particular case.

217. Significant Threshold Shift (STS). A DoD term only, the OSHA uses the term "Standard Threshold Shift (STS)." An average change of plus or minus 10 decibel (dB) at the frequencies 2000, 3000 and 4000 Hertz relative to the reference audiogram, in either ear, without age corrections, per section 1910.95(g)(10)(i) of Title 29, CFR. See also "Permanent Threshold Shift (PTS)."

218. Single Investigating Officer (SIO). An individual who has been directed to perform a safety investigation by a convening authority. The individual is solely responsible for completing the safety investigation and drafting and submitting required report(s) and records. The SIO may receive assistance from subject matter experts (SME) in the performance of their duties. An SIO is often an individual assigned to a safety billet (e.g., safety officer or safety manager), but that is not always a requirement.

219. Smoke. An air suspension (aerosol) of particles originating from combustion or sublimation: Contains droplets as well as dry particles. Other examples would be paper, wood, tobacco, etc. See also "Fume," "Gas," "Mist and Fog" and "Vapor."

220. Special Handling. Assurance that access to documents containing privileged mishap safety information and training products derived from that privileged information, are strictly limited to those Navy and Marine Corps military and civilian personnel who are directly concerned with safety and the mitigation of identified hazards.



221. Staged Photographs. Staged photographs are those constructed to gain a better understanding of the sequence of events surrounding a mishap. Staged photographs may include but are not limited to photos of mishap sites with personnel pointing to various objects, a series of photographs showing similar personal actions which may have led to a mishap, equipment which is highlighted or specifically identified for mishap investigators, etc. Photographs of the actual mishap site, a broken piece of equipment, injured or deceased personnel are not considered staged photographs unless the photos have been marked by mishap investigation personnel.

222. Standard Threshold Shift. An OSHA term, DoD uses the term “Significant Threshold Shift.” See “Significant Threshold Shift (STS).”

223. Subject Matter Expert (SME). A person, whether military or civilian, who through knowledge, skill, experience, training or education, possesses scientific, technical or other specialized knowledge that may assist to understand or to determine a particular fact in issue. Such an expert may provide information by way of facts, opinions or otherwise.

224. Surface Danger Zone (SDZ). The ground and airspace designated within the training complex (to include associated safety areas) for vertical and lateral containment of projectiles, fragments, debris and components resulting from the firing, launching or detonation of weapon systems to include explosives and demolitions. See also “Laser Surface Danger Zone” for air-to-ground and ground-to-ground employment of a laser.

225. Survey of Damages. A formal procedure relevant to admiralty claims and litigation cases. Only the Judge Advocate General may accept survey invitations from potential claimants, extend survey invitations to persons responsible for damage to naval property or request representation of the United States by a marine surveyor. In no case must any person involved in mishap investigating or reporting accept or offer an invitation for a survey of damages on behalf of the United States. In any instance of receipt of invitation to a survey, refer to chapter XI of the Navy Judge Advocate Manual and notify the Office of the Judge Advocate General (JAG), Admiralty Division (Code 11).

226. Suspend. An action, which restricts an ordnance item from further issue and use pending analysis; when the true condition is in question; or maintenance, is required.

227. Systems Command (SYSCOM). A type of echelon 2 command responsible for designing, building, delivery and life cycle management of naval platforms (e.g., ships, submarines and aircraft) and associated systems using technical standards to ensure systems are engineered effectively and operate safely and reliably. Naval Sea Systems Command is the primary SYSCOM for forces afloat. Other SYSCOMs that also support the fleet are Naval Air Systems Command, Naval Facilities Engineering Systems Command, Naval Supply Systems Command and Space and Naval Warfare Systems Command.

228. Termination of Training. Any interruption or cessation of formal training, where at least one (1) day of training is lost or the student is rolled back or disenrolled from the course.

229. Total Case Rate (TCR). Total number of cases multiplied by 100, then divided by the number of employees. See also “Lost Time Case Rate (LTCR).”

230. TCIR. Total number of reportable injuries and illnesses for a particular number of years; divide by the total number of hours worked by employees during that same particular number of years; then, multiply by 200,000. See also “Days Away, Restricted, and Transfer (DART) Incidence Rate.”

231. Training-Related Death. A death:

a. Associated with a non-combat military exercise or training activity that is designed to develop a military member's ability or to maintain or increase individual or collective combat and peacekeeping skills and is

b. Due to either a mishap or the result of natural causes occurring during or within one hour after any training activity where the exercise or activity could be a contributing factor.

232. Travel Status. A Service member or civilian employee's status during official travel. A Service member or civilian employee is also in a travel status while awaiting transportation connections and during delays en route that are beyond the traveler's control. A Service member or civilian employee traveling for personal convenience, leave, civilian administrative leave or administrative absence is not in a travel status. When Service members or civilian employees are in a travel status, an injury or illness is considered work-related.

233. Type Command (TYCOM). A command in the Navy's operating forces organized by type of platform: Submarine Force, Atlantic; Submarine Force, Pacific; Naval Air Force, Pacific; Naval Air Force, Atlantic; Naval Surface Force, Pacific; Naval Surface Force, Atlantic; Military Sealift Command (i.e., an auxiliary and sealift force); Navy Expeditionary Combat Command (i.e., an expeditionary force); and Naval Information Forces (i.e., a cyberspace domain force)<sup>[1]</sup> and Chief of Naval Air Training<sup>[2]</sup>.

Note: <sup>[1]</sup>Does not man, train or equip any air, surface or undersea operating forces. <sup>[2]</sup>Does not man or equip air operating forces, but does train air operating forces.

234. Vapor. The gaseous state of a substance which is normally a liquid or solid at room temperature. The vapors can change back into a solid or liquid state by increasing the pressure or decreasing the temperature alone. Examples of substances that produce vapors: Degreasers, fuels, hydraulic fluids, paints and thinners and dry cleaning fluids. See also “Fume,” “Gas,” “Mist and Fog” and “Smoke.”

235. Voyage Data Recorder (VDR). A data recording system (i.e., a “black box”) designed for all commercial vessels required to comply with the International Maritime Organization’s (IMO) International Convention on Safety of Life at Sea Requirements (IMO Res.A.861(20)) in order to collect data from various sensors aboard the vessel. Although not required for non-combatant public vessels (e.g., military sealift command vessels), these vessels may be fitted with a VDR. The recorder digitizes, compresses and stores this information in an externally mounted protective storage unit. The protective storage unit is a tamper-proof unit designed to withstand the extreme shock, impact, pressure and heat, which could be associated with a marine incident (i.e., fire, explosion, collision, sinking, etc.). See also “Mission Data Recorder” for combatant vessels.

236. Weapons Mishap. For the purposes of this instruction, a mishap that falls into one of the following mishap categories: Nuclear, guided missile, explosives, small arms (on-duty only) and chemical agents or directed energy.

237. Wet-Bulb Globe Temperature (WBGT) Index. A measurement of environmental heat stress conditions. It consists of a weighted average of dry bulb (DB), wet bulb (WB) and globe temperature (GT). Expressed in the following equation:  $WBGT = (0.1 \times DB) + (0.7 \times WB) + (0.2 \times GT)$ . See also “Physiological Heat Exposure Limit (PHEL).”

238. Work Environment. The establishment and other locations where one or more employees are working or are present as a condition of their employment. The work environment includes not only physical locations, but also the equipment or materials used by the employee during the course of his or her work.

239. Work-Related. An injury or illness is considered work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the work environment, unless an exception in 29 CFR §1904.5(b)(2) specifically applies. All fatalities or injuries occurring aboard a public vessel are considered “work-related,” regardless if the affected person was on- or off-duty.

240. Workplace. A subordinate organization to an establishment performing processes and tasks under the direction of a supervisor at one or more locations. See also “Establishment.”

241. Workplace Violence. Any act or threat of physical violence, harassment, intimidation or other threatening disruptive behavior that occurs at the work site. It ranges from threats and verbal abuse to physical assaults and even homicide.

242. Written Request. A request for data or information received in paper or electronic form acceptable to the receiver. This usually entails letterhead paper requests or e-mail from a DoD e-mail address.

APPENDIX B  
ABBREVIATIONS AND ACRONYMS

AAFES	Army-Air Force Exchange Service
ADCON	Administrative Control
ADSW	Active Duty for Special Work
ADT	Active Duty Training
ANSI	American National Standards Institute
AOD	Automatic Opening Device
AOR	Area of Responsibility
ASD	Assistant Secretary of Defense
ASO	Aviation Safety Officer
ASSP	American Society of Safety Professionals
AT	Annual Training
ATV	All-Terrain Vehicle
BBP	Blood-Borne Pathogens
BLS	U.S. Bureau of Labor Statistics
C	Ceiling Limit
(C)	Confidential
CA	Convening Authority
CCB	Change Control Board
CDS	Container Delivery System
CFR	Code of Federal Regulations
CIN	Course Identification Number
CIVMAR	Civilian Mariner
CMA	Competent Medical Authority
CMC	Commandant of the Marine Corps
CMC (SD)	Commandant of the Marine Corps, Safety Division
CNO	Chief of Naval Operations
CNS	Central Nervous System
CO	Commanding Officer
COMNAVSAFECEN	Commander, Naval Safety Center
CONMAR	Contract Mariner
COMPACFLT	Commander, U.S. Pacific Fleet
CUI	Controlled Unclassified Information
CY	Calendar Year
CZ	Combat Zone
DART	Days Away, Restricted and Transfer
DASN(S)	Deputy Assistant Secretary of the Navy for Safety
dB	Decibel

DDESB	Department of Defense Explosives Safety Board
DEA	Direct Enemy Action
DESR	Defense Explosives Safety Regulation
DHA	Defense Health Agency
DHS	Department of Homeland Security
DoD	Department of Defense
DoD HFACS	Department of Defense Human Factors Analysis and Classification System
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DoDM	Department of Defense Manual
DON	Department of the Navy
DZ	Drop Zone
EER	Explosive Event Report
EI	Engineering Investigation
EMR	Explosive Mishap Report
EMS	Emergency Medical Services
EOD	Explosive Ordnance Disposal
FECA	Federal Employees Compensation Act
FOIA	Freedom of Information Act
FOUO	For Official Use Only
FY	Fiscal Year
GMV	Government Motor Vehicle
GOCO	Government-Owned, Contract-Operated
GOGO	Government-Owned, Government-Operated
GS	Government Series
GSO	Ground Safety Officer
GVO	Government Vehicle, Other
HASC	U.S. House of Representatives Armed Services Committee
HAZREC	Hazard Recommendation
HAZREP	Hazard Report
HERF	Hazards of Electromagnetic Radiation to Fuel
HERO	Hazards of Electromagnetic Radiation to Ordnance
HERP	Hazards of Electromagnetic Radiation to Personnel
HIPAA	Health Insurance Portability and Accountability Act of 1996
HMMWV	High Mobility Multipurpose Wheeled Vehicle
HQMC	Headquarters, U.S. Marine Corps
HRB	Hazard Review Board
HRST	Helicopter Rope Suspension Technique
Hz	Hertz

IDC	Independent Duty Corpsman
IDLH	Immediately Dangerous to Life or Health
IDT	Inactive Duty Training
IMO	International Maritime Organization
INSURV	Board of Inspection and Survey
ISIC	Immediate Superior in Command
JAGMAN	Judge Advocate General Manual
JNAVMAR	Joint Navy and Marine Corps [used for form ID only]
JPADS	Joint Precision Aerial Delivery System
KIA	Killed in Action
LSDZ	Laser Surface Danger Zone
LTCR	Lost Time Case Rate
MARAD	Maritime Administration
MCO	Marine Corps Order
MCX	Marine Corps Exchange
MDR	Mission Data Recorder
MISREC	Mishap Recommendation
MOA	Memorandum of Agreement
MOFE	Memorandum of Final Endorsement
MOS	Military Occupational Specialty
MOU	Memorandum of Understanding
MPE	Maximum Permissible Exposure
MPH	Miles per Hour
MSC	Military Sealift Command
MTF	Military Treatment Facility
MWR	Morale, Welfare and Recreation
N09F	Special Assistant for Safety Matters
NAF	Non-Appropriated Fund
NATO	North Atlantic Treaty Organization
NAVINGEN	Navy Inspector General
NAVMC DIR	Navy and Marine Corps Directive
NAVRULES	Navigation Rules
NBI	Non-Battle Injury
NCIS	Naval Criminal Investigative Service
NDA	Nondisclosure Agreement
NDRF	National Defense Reserve Fleet
NEC	Navy Enlisted Classification
NFAF	Naval Fleet Auxiliary Force

NFWOD	Non-Factors Worthy of Discussion
NIFE	Naval Introductory Flight Evaluation
NM	Nautical Mile
NOSSA	Naval Ordnance Safety and Security Activity
NPQ	Not Physically Qualified
NTSB	National Transportation Safety Board
OCR	Office of Collateral Responsibility
OEL	Occupational Exposure Limit
OIC	Officer in Charge
OJAG	Office of the Judge Advocate General
OPCON	Operational Control
OPIM	Other Potentially Infectious Material
OPNAV	Office of the Chief of Naval Operations
OPNAV M	Office of the Chief of Naval Operations Manual
OPNAVINST	Office of the Chief of Naval Operations Instruction
OPORD	Operational Order
OPR	Office of Primary Responsibility
OPREP-3	Operational Report-3
OPTEMPO	Operational Tempo
ORM	Operational Risk Management
ORS	Other Recommendations of Significance
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Administration, U.S. Department of Labor
PBXC	Plastic Bonded Explosive, China Lake
PBXN	Plastic Bonded Explosive, Navy
PCO	Prospective Commanding Officer
PCR	Personnel Casualty Report
PCS	Permanent Change of Station
PCU	Pre-Commissioning Unit
PEL	Permissible Exposure Limit
PEO	Program Executive Office
PETN	Pentaerythritol Tetranitrate
PFA	Physical Fitness Assessment
PFT	Physical Fitness Test
PHEL	Physiological Heat Exposure Limit
PHI	Protected Health Information
PII	Personally Identifiable Information
PMS	Planned Maintenance System
PMV	Private Motor Vehicle
PMV-2	Private Motor Vehicle, Two-Wheel
PMV-4	Private Motor Vehicle, Four-Wheel



POC	Point of Contact
POM	Program Objective Memorandum
POR	Program of Record
POV	Privately Owned Vehicle
PPD	Permanent Partial Disability
PRESINSURV	President, Board of Inspection and Survey
PRT	Physical Readiness Test
PSI	Privileged Safety Information
PT	Physical Test
PTD	Permanent Total Disability
PTS	Permanent Threshold Shift
RAC	Risk Assessment Code
RADHAZ	Radiation Hazard
RDX	Cyclotrimethylene Trinitramine [Royal Demolition Explosive]
REL	Recommended Exposure Limit
RF	Radiofrequency
RMI	Risk Management Information
ROTC	Reserve Officer Training Corps
RRF	Ready Reserve Force
SCBA	Self-Contained Breathing Apparatus
Scuba	Self-Contained Underwater Breathing Apparatus [USMC]
SCUBA	Self-Contained Underwater Breathing Apparatus [USN]
SD	Safety Division [USMC]
SDS	Safety Data Sheet
SDZ	Surface Danger Zone
SEAL	Sea-Air-Land
SECNAV	Secretary of the Navy
SECNAV M	Secretary of the Navy Manual
SECNAVINST	Secretary of the Navy Instruction
SHIPALT	Ship Alteration
SIB	Safety Investigation Board
SIO	Single Investigating Officer
SIQ	Sick in Quarters
SIR	Serious Incident Report
SIREP	Safety Investigation Report
SITREP	Situation Report
SJA	Staff Judge Advocate
SME	Subject Matter Expert
SOLAS	Safety of Life at Sea
STANAG	NATO Standardization Agreement
STEL	Short-Term Exposure Limit

STS	Significant Threshold Shift [DoD] and Standard Threshold Shift [OSHA]
SYSCOM	Systems Command
TAD	Temporary Additional Duty
Tb	Tuberculosis
TCIR	Total Case Incidence Rate
TCR	Total Case Rate
TDY	Temporary Duty
TLV	Threshold Limit Value
TLV-C	Threshold Limit Value Ceiling
TNT	Trinitrotoluene
TWA	Time-Weighted Average
TYCOM	Type Command
UA	Unauthorized Absence
UAS	Unmanned Aircraft System
UAV	Unmanned Aerial Vehicle
UBD	Underwater Breathing Device
UCMJ	Uniform Code of Military Justice
USA	United States Army
USAF	United States Air Force
USCG	United States Coast Guard
USD	Under Secretary of Defense
USFF	United States Fleet Forces
USMC	United States Marine Corps
USN	United States Navy
USSF	United States Space Force
U.S.	United States
U.S.C.	United States Code
USNS	United States Naval Ship
USS	United States Ship
USV	Unmanned Surface Vessel
UUV	Unmanned Undersea Vehicle
UV	Ultraviolet
VDR	Voyage Data Recorder
WBGT	Wet-Bulb Globe Temperature
WEEL	Workplace Environmental Exposure Limit

APPENDIX C  
MEMORANDUM OF UNDERSTANDING  
BETWEEN  
U.S. ARMY COMBAT READINESS CENTER  
AND  
AIR FORCE AND NAVAL SAFETY CENTERS  
AND  
COMMANDANT OF THE MARINE CORPS (SAFETY DIVISION)  
AND  
U.S. COAST GUARD HEALTH, SAFETY AND WORK-LIFE DIRECTORATE

SUBJECT: Safety Investigation and Reporting of Multiple Component Mishaps  
Memorandum of Understanding (MOU)

1. Situation. This memorandum of understanding (MOU), establishes the working relationship, responsibilities and understanding among U.S. Army, U.S. Air Force, U.S. Marine Corps, U.S. Navy and U.S. Coast Guard (hereafter known as the "[S]ervices") relative to a multiple component safety investigation and reporting of mishaps and incidents involving personnel, equipment and facilities. For the purposes of this MOU, the term "safety entities" includes the U.S. Army Combat Readiness Center, Air Force and Naval Safety Centers, Commandant of the Marine Corps (Safety Division) and the U.S. Coast Guard Health, Safety and Work-Life Directorate. This MOU replaces the MOU titled, Memorandum of Understanding Among The U.S. Army Combat Readiness Center, Air Force and Naval Safety Centers, Commandant of the Marine Corps (Safety Division) and The U.S. Coast Guard Health and Safety Directorate for Safety Investigation and Reporting of Multiple Component Mishaps, dated 10 April 2006.
2. Purpose. DoD Instruction 6055.07 [of 6 June 2011] directs the DoD Components to determine a lead DoD Component to investigate and report each multiple component mishap. The purpose of this document is to clarify responsibility for leading the safety investigation of a mishap when more than one [S]ervice's assets are involved and to provide guidance for the establishment of a single multiple-component investigative board and the selection of investigators from multiple agencies. Additionally, guidance is provided regarding preservation of physical evidence at a mishap site, statistically capturing losses, dissemination of reports, responsibility for recommendations, and the spirit of cooperation and professionalism expected.
3. Scope. This MOU serves to establish agreements, responsibilities, procedures, and funding requirements for multiple component safety investigations involving the [S]ervices. Authority for investigation of military mishaps is contained in DoD Instruction 6055.07 [of 6 June 2011], DoD [S]ervice directives and Coast Guard COMDTINST M5100.47 series.
4. Multiple DoD Component Mishap Definition. A Multiple DoD-Component Mishap is defined as a single mishap, involving two or more Components in autonomous operational or training roles, resulting in injuries or damage to any of the involved Components. The

provisions of this MOU are also applicable to mishaps involving the U.S. Coast Guard as well as joint agencies or joint programs where only one [S]ervice experiences a loss and two or more [S]ervices are or were involved in development and acquisition of a system.

5. Understandings, Agreements and Responsibilities.

a. The [S]ervice safety chiefs must determine which [S]ervice has primary responsibility for investigating and reporting each Class A, multiple component mishap. Only Class A mishaps will require direct coordination between the respective Component Safety Chiefs. Class B or lower mishaps can be coordinated, and investigative lead can be delegated, below the Component Chief level. Normally, the convening authority for the investigation is the [S]ervice experiencing the greater loss, although other factors such as operational roles must also be considered. The convening [S]ervice's safety investigation directives must be used in investigating and reporting the mishap. The [S]ervice safety chiefs have the authority to agree, on a case-by-case basis, to an alternate approach to a safety investigation, to include not participating in the lead [S]ervice's investigation.

b. The safety center which first becomes aware of a Class A, B, C, or D multiple component mishap must provide immediate telephonic or email notification to the other involved [S]ervices' safety centers. Each [S]ervice must make available operational and technical experts for the safety investigation board as required. The [S]ervice owning or controlling the facility where a mishap occurs or the [S]ervice that is geographically closest, will secure, protect, document and preserve the mishap site to prevent contamination or removal of evidence. The securing [S]ervice must make every effort to document the mishap site during and after search, recovery and criminal investigations and minimize disturbances to the mishap scene until released by the multiple component president or senior member.

c. Multiple component safety investigation boards must be comprised of the representatives listed in subparagraphs 5c(1) through 5c(4).

(1) Each involved [S]ervice safety chief may send safety investigators to participate in the board. These investigators will be voting (primary) board members, who are experts in the program, operation or utilization of the facilities, personnel or equipment involved in the mishap. Those investigators must be granted access to all relevant information, both privileged and non-privileged, and related board deliberations.

(2) Other board members, including members from joint or DoD agencies, may be required as determined by the involved safety centers.

(3) The board president or senior member must authorize all external communications. Voting (primary) board members, non-voting (non-primary) technical advisors and observers must not discuss privileged or non-privileged investigative proceedings with their parent [S]ervice without approval of the board president or senior member.

(4) Voting (primary) board members work solely for the safety investigation board president or senior member and will be released at the discretion of the safety investigation board president or senior member.

d. The multiple component safety investigation board president or senior member must allow legal investigation investigators access to the mishap site and non-privileged physical evidence per the controlling guidance of the [S]ervice leading the safety investigation.

e. The convening [S]ervice's safety center must promptly provide all involved [S]ervices safety centers a complete, un-redacted copy of all the joint safety investigation board's reports and subsequent endorsements. Supporting documents must be provided upon request. Safety centers may further distribute any reports within DoD and the U.S. Coast Guard for mishap prevention purposes. The [S]ervice producing the safety investigation report must respond to requests for copies of portions of the report, to include requests from other DoD or U.S. Coast Guard staff sections, organizations and commands.

f. The involved safety centers will negotiate and agree upon a review and comment process for the multiple component safety investigation board's report.

g. The [S]ervice preparing the report must clearly identify recommendations targeted toward other [S]ervices or agencies and forward the recommendations to the other [S]ervices' safety center or to joint, DoD, or U.S. Coast Guard agencies when appropriate. Each [S]ervice's safety center will, in turn, forward applicable recommendations to the appropriate agency, organization or elements in their [S]ervice. Each [S]ervice's safety center will track to completion the status of those recommendations and inform any other involved [S]ervice's safety entity of actions taken.

h. When there is a suspected material failure, the board president or senior member must submit the item(s) in question to the [S]ervice appropriate facility for analysis. The [S]ervice whose facility conducts the analysis must fund the analysis.

i. Each [S]ervice must provide funding for travel, per diem, rental car, and other expenses incurred by its representatives. The nearest military installation to the mishap site must provide administrative and host base support, including organic site security, while the board president or senior member is present. Other expenses (special equipment, consultants, experts, etc.) must be borne by the investigating [S]ervice. Each [S]ervice must provide funding for salvage and wreckage recovery of its own assets.

j. When briefings are requested, the [S]ervice safety chiefs must coordinate requirements.

k. The [S]ervice that is determined to have ownership of the mishap must account for all fatalities, injuries and property damage in that [S]ervice's mishap statistics. The [S]ervices recognize that this is not an obvious interpretation of DODI 6055.07 [of 6 June 2011] reporting

requirements, but have obtained DoD concurrence for this approach. Consistently reporting all losses in conjunction with a single event without regard to assignment of the assets assures proper prioritization of mishap prevention resources.

6. Effective Date, Periodic Review, Modification and Termination. This agreement is effective on the date of the last signature and will remain in effect until rescinded, revised, or superseded. This agreement may be cancelled at any time by mutual agreement or by any safety entity with at least 30 days advanced written notice. All safety centers must review this agreement every three years and it may be modified by mutual consent of the signatories. A written request for modification must be provided to the other safety entities at least 60 days prior to the proposed date of changed.

//s//  
THOMAS M. BEDELL  
Colonel, USMC  
Commandant of the Marine Corps  
Director, Safety Division

20 September 2019

//s//  
TIMOTHY J. DAUGHERTY  
Brigadier General, USA  
Commanding General  
U.S. Army Combat Readiness Center  
and Director of Army Safety

7 June 2019

//s//  
FREDRICK R. LUCHTMAN  
RADM, USN  
CNO Special Assistant for Safety Matters  
Commander, U.S. Naval Safety Center

12 August 2019

//s//  
DANA L. THOMAS  
RADM, M.D., USPHS  
Headquarters, U.S. Coast Guard  
Director of Health, Safety and Work-Life

14 November 2019

//s//  
JOHN T. RAUCH JR.  
Maj Gen, USAF  
Chief of Safety  
Commander, U.S. Air Force Safety

14 August 2019

## APPENDIX D FORMS

1. Forms mandated by this manual are listed in subparagraphs 1a and 1b. RMI will be able to generate the forms listed in subparagraphs 1a(1) through 1a(3) using data in the system. An equivalent form for those listed in subparagraphs 1a(1) through 1a(3) may also be used. However, to be considered an equivalent form, any substitute must contain all the information asked for on these respective forms.

a. The following forms are available for download from U.S. Department of Labor Web site at <https://www.osha.gov/recordkeeping/RKforms.html>.

- (1) OSHA 300 Log of Work-Related Injuries and Illnesses.
- (2) OSHA 300A Summary of Work-Related Injuries and Illnesses.
- (3) OSHA 301 Injury and Illness Incident Report.

b. The following forms are available for download from Navy Forms Online <https://forms.documentservices.dla.mil/order>.

- (1) NAVMAR 5102/1 Advice to Witness.
- (2) JNAVMAR 5102/2 Advice to Witness (Promise of Confidentiality).

c. SF 901 Controlled Unclassified Information (CUI) Coversheet is available for download from the GSA forms website <https://www.gsa.gov/reference/forms#SF/forms#SF>.

d. The following form are available for purchase from GSA Global Supply [www.gsaglobalsupply.gsa.gov](http://www.gsaglobalsupply.gsa.gov).

Note: Government Contractors will need to have their Government Department, Agency or Office sponsor their request before placing order.

- (1) SF 902 CUI Label S/N 7540-01-679-3318.
- (2) SF 903 CUI Label – Thumb Drive S/N 7540-01-679-3319.