

VOLUME 4

MARINE CORPS AVIATION SAFETY

SUMMARY OF VOLUME 4 CHANGES

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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

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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

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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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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.

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).

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SCHOOL OF AVIATION SAFETY

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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.

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AVIATION SAFETY AWARENESS PROGRAM (ASAP)

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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>.

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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.

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MISHAP REPORTING

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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).

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AVIATION SAFETY REQUIREMENTS

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

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*.

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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Safety Requirements Matrix				
Status Elements	Requirement	Reference	Background	Notes
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	