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From: Commandant of the Marine Corps
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Subj: POLICIES AND PROCEDURES FOR RANGE AND TRAINING AREA MANAGEMENT

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(b) MCO 5100.29B
(c) MCO 3570.1C
(d) MCO 3550.9
(e) MCO 3550.12
(f) Marine Corps Airspace Management ORB and Airspace WIPT MOU, March 18, 2015
(g) DoD Directive 7730.65, "Department of Defense Readiness Reporting System (DRRS)," May 11, 2015
(h) MCO P11000.14 w/CH 1
(i) DoD 7000.14-R, "Department of Defense Financial Management Regulation (DoD FMR)," current edition
(j) MCO 11000.5
(k) DoD "Information Enterprise Architecture (IEA); Core Data Center Reference Architecture (CDC RA v1.0/Final)," September 18, 2012
(l) OPNAVINST 3770.2L
(m) MCO 3500.27C
(n) MCO P5090.2A w/CH 3
(o) MCO 11011.23
(p) 14 CFR Part 73.19 "Using Agency Report"
(q) DoD Instruction 8500.2, "Information Assurance (IA) Implementation," February 6, 2003
(r) 5 U.S.C. 552a
(s) SECNAVISNT 5211.5E
(t) SECNAV M-5210.1

Encl: (1)

1. Situation. Marine Corps ranges and training areas (RTA), and associated airspace, are institutional training assets that enable individual Marines and units from fire teams through the most complex Marine Air-Ground Task Force (MAGTF) to achieve, sustain and enhance combat readiness. The management of Marine Corps RTAs provides for a portfolio of capabilities and capacities that fully support required training tasks, events, and exercises across the training continuum in both live-fire and non-live fire environments, utilizing all weapons, platforms and systems in the Marine Corps inventory. In addition to impacting the training of all elements of the MAGTF, the management of

RTAs often requires engagement with interservice and interagency partners, state/local governments, and international allies.

a. In 2001, Commanding General (CG), Marine Corps Combat Development Command (MCCDC) activated a Range and Training Area Management Office (C465) within Training and Education Command (TECOM) to serve as the Executive Agent for Range Management and act as the lead agency for range programs and policies. Since that time, the Marine Corps has invested heavily in the promulgation of RTA management policy and procedures, the development and fielding of modern live training systems, and the sustainment and modernization of RTAs. This centralized management approach resulted in significant enhancements to the capabilities and capacities of Marine Corps RTAs, and ensured the adequacy and effective allocation of resources necessary to modernize, sustain, manage, and control RTAs in a manner that fully supports Marine Corps training and readiness requirements.

b. In general, Deputy Commandant, Combat Development and Integration (DC CD&I)/CG MCCDC is responsible for matters related to Service level RTA doctrine, policy, standardization, range safety, range certification, range clearance, and range system modernization, recapitalization, and sustainment. Deputy Commandant, Installations and Logistics (DC I&L)/Commander, Marine Corps Installations Command (COMMCICOM) in accordance with established policy exercises command and control over installation operations and RTA functions, and is generally responsible for matters related to day-to-day RTA scheduling, access, safety, and the maintenance and sustainment (Military Construction [MILCON]/Facilities, Sustainment, Restoration, Modernization [FSRM]/Base Operating Support [BOS]/Environmental) of RTA facilities. However, the overall success of the Marine Corps RTA Management Program relies upon a strong partnership between CG MCCDC/CG TECOM and DC I&L/COMMCICOM in support of operating forces, formal schools and all other RTA customers. All significant RTA activities and initiatives will be fully coordinated and synchronized between them. This Order provides guidance to ensure that Marine Corps RTAs continue to be managed and developed as institutional training assets.

2. Cancellation. MCO P3550.10.

3. Mission

a. This Order establishes responsibilities, and prescribes policies and procedures concerning RTA management to include; the development of policy and standards, program management and resourcing, modernization and sustainment, and the operation and safety of Marine Corps RTAs. This Order is not applicable to deployed units in expeditionary environments; however, it may be used as a reference by deployed operational commanders in the establishment and use of temporary ranges.

b. As used in this Order, the terms range and RTA are defined to mean any designated land or water area that is set aside, managed and

used for range activities of the Department of Defense (DoD), and includes associated airspace areas designated for military use by the Administrator of the Federal Aviation Administration (FAA) (see Title 10, U.S. Code). Range activities include research, development, testing, and evaluation of military munitions, other ordnance, weapon systems, and the training of members of the armed forces in areas designated as RTAs.

c. As used in the Order, the term RTA Management Program is used to mean the entire scope of activities and associated programs executed on Marine Corps installations that enable RTAs to be planned for, resourced, and safely operated in support of Marine Corps training requirements.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. The purpose of the RTA Management Program is to plan, program for, and provide the required policies and resources to ensure that Marine Corps RTAs have the capacity and capability to support the training requirements of the operating forces and formal schools. Marine Corps RTAs are institutional assets which the Marine Corps will manage in a manner, and with a level of institutional priority, that ensures RTAs are fully capable of supporting Marine Corps training. The Marine Corps will ensure that it sustains its current RTA capabilities, and will prioritize range modernization efforts to achieve and maintain RTA capabilities that support current, evolving, and future validated training requirements while meeting established safety, training, and environmental standards.

(2) Concept of Operations

(a) The CG MCCDC (C465) is the service lead and sponsor for the Marine Corps RTA Management Program. Roles and responsibilities for execution, support, and coordination of the RTA Management Program are set forth in Chapter 1.

(b) The installation commander establishes a range safety program that meets Marine Corps range safety requirements and executes the following functions at the installation level:

1. Range Management Policies, Standards, and Program Management. The development and promulgation of policies and standards for RTAs and their management is critical to ensuring safe realistic operations, consistent requirements identification, and an equitable and effective distribution of resources.

2. Range Inspection, Safety and Certification. The range inspection, safety, and certification functions focus on developing and implementing Marine Corps policies and procedures for

the safe operation of RTAs, inspection of RTAs, and certifying or re-certifying RTAs. In accordance with reference (b), CG MCCDC (C465) administers and directs the Marine Corps Range Safety Program in support of the Marine Corps RTA Management Program. Accordingly, directives governing the execution of other Marine Corps safety programs apply to range safety policy only to the extent such directives are consistent with reference (b). CG MCCDC (C465) is responsible for service level range policy. In no case will range safety policy matters be administered or directed by a command or agency other than CG MCCDC (C465).

3. Range Operations

a. Range Control. Range control encompasses processes and procedures for the control, regulation, and safe and effective utilization of RTAs. Range control functions include RTA scheduling, fire desk operations, RTA airspace management, communications, and range inspections.

b. Range and Training Areas (RTA) Airspace Coordination. The airspace coordination function focuses on: (1) coordination among headquarters agencies, and regional and installation airspace managers regarding airspace management as it pertains to RTAs; and (2) RTA planning and development functions pertaining to airspace components of RTAs.

4. Range and Training Areas (RTA) Modernization, Recapitalization, and Sustainment. The RTA modernization, recapitalization, and sustainment process consists of: (1) determining RTA requirements based on current, emerging, and future training missions and requirements; (2) planning and executing projects to upgrade and modernize existing ranges, and to establish new ranges or range areas; (3) range maintenance planning and execution; and (4) identify encroachment factors affecting RTAs and establish program goals to ensure the long term sustainability of RTAs. Successful execution requires coordination of fiscal processes and procedures among CG MCCDC, DC I&L/COMMCICOM, and other offices and agencies that provide resources in support of the RTA Management Program.

b. Coordinating Instructions

(1) Marine Forces (MARFOR) Commanders on behalf of the operating forces and CG TECOM on behalf of formal schools define, assess, and prioritize training requirements to be supported by RTAs in coordination with CG MCCDC (C465) and COMMCICOM.

(2) The COMMCICOM supports the RTA Management Program as the sponsor for RTA-related funding in those functional areas for which MCICOM is responsible. MCICOM provides oversight, direction, and coordination of installation services, via regional commanders, to those installations over which it exercises command and control, and provides installation support to installations under the command and

control of the CG TECOM. MCICOM provides critical support to RTAs, including funding for range infrastructure, sustainment and maintenance (MILCON/FSRM/BOS/Environmental) of RTA facilities. MCICOM will coordinate with CG MCCDC (C465) regarding prioritization and funding of MILCON, facilities construction, repair, and maintenance projects affecting RTAs.

5. Administration and Logistics

a. The DC CD&I/CG MCCDC will administer the requirements and ensure the accuracy, modification as necessary, and distribution of this Order.

b. Requests for deviation from any of the provisions of this Order must be submitted via the chain of command to the CG MCCDC (C465), 3300 Russell Road, Quantico, Virginia 22134-5001.

c. Privacy Act. Any misuse or unauthorized disclosure of Personally Identifiable Information (PII) may result in both civil and criminal penalties. The 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 will be balanced against the individuals' right to be protected against unwarranted invasion of privacy. All collection, use, maintenance, or dissemination of PII will be in accordance with the Privacy Act of 1974, as amended (reference (r)) and implemented per reference (s).

d. Records Management. Records created as a result of this Order shall be managed according to National Archives and Records Administration approved dispositions per reference (t) to ensure proper maintenance, use, accessibility and preservation, regardless of format or medium.

6. Command and Signal

a. Command. This Order is applicable to the Marine Corps Total Force.

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

Robert S. Walsh

R. S. WALSH
Deputy Commandant for
Combat Development and Integration

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TABLE OF CONTENTS

Chapter 1

Range and Training Areas (RTA) ROLES AND RESPONSIBILITIES

1. Information. This chapter provides information and guidance on command relationships, roles, and responsibilities for RTA management in the Marine Corps.

2. Purpose. The purpose of this chapter is to delineate responsibilities and authorities pertaining to RTA management.

3. Deputy Commandant, Combat Development and Integration/Commanding General, marine Corps Combat Development Command. DC CD&I/CG MCCDC provides a single integrated Service-level RTA Management Program that includes, but is not limited to the following;

a. Serve as the proponent for all matters pertaining to the oversight, coordination, and execution of the Marine Corps RTA Management Program, including program advocacy and dissemination of policy and guidance as the lead for RTA issues within the Marine Corps.

b. Serve as the Marine Corps' single point of contact (POC) for engagement with the DoD and its agencies, other U.S. Services' headquarters, and foreign military services for all matters pertaining to RTA safety, management, sustainment and utilization.

c. Provide development, staffing, and implementation of orders and directives necessary for the effective execution of the Marine Corps RTA Management Program.

d. Determine and publish RTA standards, requirements and objectives to be supported by the Marine Corps RTA Management Program, including, but not limited to: Marine Corps Reference Publications (MCRP), Range Complex Management Plans (RCMP), a Service-level Range Campaign Plan, documentation under the Joint Capabilities Integration Development System (JCIDS), and other training system requirements to ensure mission capable RTAs.

e. Provide the sponsorship, planning, programming for RTA modernization, recapitalization, and sustainment initiatives focused on: (1) investments in new RTAs that leverage advanced range instrumentation, targets, and RTA systems; (2) recapitalization to upgrade or replace existing RTA resources; and (3) sustainment of RTAs to maintain capabilities and capacities and protect range investments.

f. Provide the integrated Marine Corps RTA Management Program for Program Objective Memorandum (POM) consideration.

(1) Provide the sponsorship, planning, programming for, and promulgation of RTA operations and designated range control services,

based on validated personnel and equipment requirements for Installation-level and Regional RTA operations and range control functions.

(2) Provide the planning and programming for the Marine Corps Range Safety Program and the Range Certification and Re-certification Program as set forth in references (c) and (d).

(3) Provide the planning and programming for the Marine Corps Operational Range Clearance Program relating to unexploded ordnance (UXO) and munitions constituent matters as set forth in reference (e).

(4) Provide the programming and funding for the acquisition and sustainment of RTA operations and control equipment, systems, and information systems.

(5) Provide the programming, funding, policy, requirements, and life-cycle support for training and range control systems and equipment.

(6) Provide for the development, implementation, and maintenance of range information and decision support systems supporting the Marine Corps RTA Management Program across all Marine Corps installations, including the functions of range control, range scheduling, operations, data collection and management, readiness reporting, RTA support, and safety.

(7) Maintain the official inventories of RTAs, including land areas, airspace, and sea space comprising RTAs, and facilities, RTA systems, and ancillary infrastructure and equipment located within RTAs.

(8) Provide the review, validation, prioritization, and advocacy requests for RTA project resourcing (Ground Range Sustainment Program [GRSP]/Operational Range Clearance [ORC]/Range Training Systems Projects [RTSP]/Range Training System Support[RTSS]) during Program Review, Mid-year Review, Unfunded Program List (UPL) development, and Supplemental Appropriation Request submissions.

(9) Provide the review and validation of proposed supplemental appropriations that pertain to the RTA Management Program to ensure they contribute to established goals. The RTA Management Program provides for the planning, support, and sustainment of these projects.

g. Coordinate with MCICOM on the validation, priority and funding for projects using MILCON; Major Repair (M2) and Minor Construction (R2) for projects supporting the RTA Management Program.

h. Coordinate with MCICOM and installations regarding funding requirements to comply with the National Environmental Policy Act (NEPA) and encroachment as they affect RTAs.

i. Coordinate with MCICOM on review and approval of technical specifications, for training and range control systems.

j. Provide direct liaison to the Program Manager, Training Systems (PMTRASYS), and MCICOM to facilitate the planning and execution of acquisition and fielding of RTA systems.

k. Coordinate on RTA airspace management issues with the Deputy Commandant, Aviation (DC AVN) and DC I&L.

l. Serve as or designate a Marine Corps Airspace Management Operational Review Board (ORB) flag level member per reference (f).

(1) Designate a Marine Corps Airspace Management Working Integrated Process Team (WIPT) member who shall serve as WIPT Co-chair, coordinate WIPT meeting schedules with the membership and establish WIPT subgroups and designate subgroup chairpersons.

(2) Perform executive secretary duties for the Marine Corps Airspace Management WIPT (e.g., recording meetings, distributing materials, and maintaining attendance records).

m. Serve as the Marine Corps Training Airspace Coordinator (MCTAC). As such, ensure the necessary airspace for military operations is available for MAGTF training. Coordinate efforts with Headquarters Marine Corps, Aviation Command and Control Branch (APX) and regional commanders via MCICOM for effective scheduling, utilization, and protection of airspace for military operations. Review and approve all requests for designation, alteration, and revocation of special use airspace (SUA) for military operations. Review all letters of agreement/procedure (LOA/LOP) that concern or potentially impact airspace for military operations used for MAGTF training.

n. Serve as the decision authority for requests from other U.S. Services and external agencies that involve priority or dedicated use of existing Marine Corps RTAs.

o. Provide review and comment on all proposals to change the status or use of any existing or potential Marine Corps RTAs.

p. Provide an annual RTA Management Program Review.

q. Designate the co-chair for the Mission Capable Ranges Working Group (MCRWG).

r. Serve as the Marine Corps lead for development and input into the Secretary of Defense’s Annual Sustainable Ranges Report (SRR) to Congress.

4. Deputy Commandant, Aviation

a. Provide to CG MCCDC (C465), via requirements process described in Chapter 3, pertinent range requirements information for future aviation systems or modifications to existing systems or programs that require RTA capabilities.

b. Participate as a member of the MCRWG.

c. Serve as or designate a Marine Corps Airspace Management ORB flag level member per reference (f).

(1) Designate a Marine Corps Airspace Management WIPT member who shall serve as WIPT Co-chair, coordinate WIPT meeting schedules with the membership and establish WIPT subgroups and designate subgroup chairpersons.

(2) Serve as the Marine Corps representative to Chief of Naval Operations (CNO) N98OA representing the Marine Corps ORB/WIPT determinations and positions on airspace matters.

5. Deputy Commandant, Plans, Policies, and Operations

a. Coordinate with CG MCCDC (C465) on matters pertaining to RTAs.

b. Participate as a member of the MCRWG.

c. Participate as a member of the Marine Corps Airspace Management WIPT per reference (f).

6. Deputy Commandant, Programs and Resources

a. Coordinate, assist, and advise with CG MCCDC (C465) regarding POM submissions and other fiscal or funding matters affecting the RTA Management Program or RTA-related components of programs.

b. Participate as a member of the MCRWG.

7. Commanders, Marine Corps Forces Command and Marine Corps Forces Pacific Command

a. Define, assess, and prioritize training requirements to be supported by RTAs.

b. Assist the CG MCCDC (C465) to determine and prioritize RTA requirements necessary to support validated training requirements.

c. Participate as a member of the MCRWG.

d. Participate as a member of the Marine Corps Airspace Management WIPT per reference (f).

8. Commander, Marine Corps Installations Command. MCICOM advocates, prioritizes, resources, and provides oversight of installation range management in coordination with CG MCCDC (C465) and MARFORs through Marine Corps Installations regional commands as follows.

a. Provide prioritization, programming, and funding for RTA-related projects requiring MILCON, M2/R2, or environmental/encroachment funding. Coordinate project prioritization with CG MCCDC (C465) to ensure complementary training system programming.

b. Resource RTA facility maintenance through the Facilities Sustainment, Restoration, and Modernization (FSRM) program.

c. Resource local RTA grounds and other real property upkeep through the BOS accounts.

d. Review, validate and provide installation range control facilities with the required range communications network that establishes communications between the Range Control Facility (RCF), emergency services, supporting establishments, and users within the installation training complex.

e. Provide the review, validation, prioritization, and advocacy requests for RTA project resourcing (MILCON/FSRM/BOS/Environmental) during Program Review, Mid-year Review, UPL development, and Supplemental Appropriation Request submissions.

f. Coordinate with CG MCCDC (C465) on all matters that convert or restrict range or training area lands or airspace from training use including any proposed closures. Coordinate with CG MCCDC (C465) regarding MCICOM execution of environmental policies, plans, and programs pertaining to modernization, sustainment, or expansion of RTAs.

g. Coordinate with CG MCCDC (C465) on MILCON initiatives that create new RTAs or impact existing RTAs.

h. Coordinate with CG MCCDC (C465) to maintain accurate inventories of real property, facilities, and ancillary infrastructure located within RTAs.

i. Publish policy and procedures that formalize and specifically address proper designation of real estate and real property classes and assets within RTAs in order to generate sustainment funding.

j. Participate in the ORC requirements process in accordance with reference (e).

k. Participate in the development of the Marine Corps' input to the Secretary of Defense's Annual SRR to Congress.

l. Designate the co-chair for the MCRWG.

m. Serve as or designate a Marine Corps Airspace Management ORB flag level member per reference (f).

(1) Designate a Marine Corps Airspace Management WIPT member who shall serve as WIPT Co-chair, coordinate WIPT meeting schedules with the membership and establish WIPT subgroups and designate subgroup chairpersons.

(2) Provide WIPT meeting location capable of video telephone conference.

n. Ensure regional airspace coordinators and command airspace liaison officers submit all LOA/LOP involving or impacting Special Activity Airspace (SAA) for Marine Corps Airspace Management WIPT review and approval prior to final approval by Marine Corps agreement signatory(ies).

9. Commanders, Marine Corps Systems Command

a. Develop technical specifications for acquisition of RTA systems, meeting the requirements identified and validated by the RTA Management Program.

b. Support the RTA Management Program in the programming for and execution of funding for the acquisition, fielding, and lifecycle support of training/range systems that are installed within or are planned for incorporation within RTAs.

c. Support the RTA Management Program in the POM requirements process for acquisition of RTA control systems.

d. Acquire, deliver, install, and provide lifecycle support for RTA training/range control and communications systems in support of the RTA Management Program and MCICOM.

e. Support the RTA Management Program with the development and maintenance of an inventory of RTA training/range systems.

f. Support the RTA Management Program and MCICOM in the processes of RTA design, pre-construction planning, acceptance and operational testing of training/range systems.

g. Provide CG MCCDC (C465) hazard assessments and recommendations regarding ammunition and explosives to be used on operational ranges in accordance with reference (c).

h. Provide technical information to CG MCCDC (C465) per reference (c) regarding the procurement and storage of ammunition, use of non-DoD ammunition and explosives safety matters as they pertain to RTAs.

i. Provide the Primary Contracting Officer (PCO) and appropriate contractual vehicles for meeting RTA services and sustainment requirements.

j. Participate in the annual RTA Management Program Review.

k. Reconcile quarterly with CG MCCDC (C465) regarding the funding and execution status of Range Training System (RTS) and GRSP projects and the plan for the upcoming quarter's execution.

l. Participate as an ex-officio member of the MCRWG.

CHAPTER 2

Range and Training Areas (RTA) PLANS, POLICIES, AND STANDARDS

1. Purpose. This chapter provides information on the development and promulgation of the policies, standards, and planning processes that will guide the development, management, and operation of Marine Corps RTAs.

2. Information. As institutional training assets, RTAs require a uniform set of policies that provide processes, guidance, standards, and governance to ensure safe operation, environmental and legal compliance, and defendable and equitable resource allocation.

3. Policies and Orders. CG MCCDC (C465) provides Service-level policy and guidance for the RTA Management Program including, but not limited to, the following:

a. Range Management and Operations. A capstone Marine Corps order on RTA management and operations that will address policy, standards, resource management, training airspace management, range information systems, range control standards, and assign the appropriate roles and responsibilities for all stakeholder organizations.

b. Range Safety. In accordance with reference (b), CG MCCDC (C465) will provide Marine Corps orders, bulletins, and Safety of Use Memorandum (SOUM) as necessary on all issues pertaining to range safety to ensure the safe operation and effective daily management of RTAs.

(1) Range Safety Program. Reference (c) is produced jointly with the U.S. Army and covers all common weapons systems and safety practices for the two Services. Reference (c) will provide comprehensive safety guidance for RTA managers, RTA controls, and operating forces, formal schools, and other U.S. Service or agency RTA aviation and ground users.

(2) Operational Range Clearance Program. Reference (e) provides safety and sustainability along with standards, policies, and procedures to perform ORC programs that ensure safe access to Marine Corps RTAs.

(3) Range Certification/Re-certification Program. Reference (g) establishes the standards and processes by which RTAs are certified for use, assuring that all RTAs meet established criteria for: (1) the training requirements for which they were designed; (2) the design and construction standards appropriate to their purpose; and (3) the environmental compliance standards established for their geographic location.

d. Safety of Use Memorandum. A SOUM is required to address the safety standards appropriate to those weapon systems and/or training practices that are not addressed in the Marine Corps order(s) on range safety.

4. Range Planning and Standards. CG MCCDC (C465) provides documented processes, standards, and metrics that assist RTA managers and operators at every level in the planning for, and assessment of, RTAs. At a minimum, this Service-level documentation will include;

a. The MCRP 8-10B.1, *Operational Training Ranges Required Capabilities* as the primary source document for managers and operators of Marine Corps RTAs. MCRP 8-10B.1;

(1) Defines required capabilities for range infrastructure with multiple geographical locations possessing a wide array of capabilities in an unconstrained environment.

(2) Maps range requirements to training requirements at each of the several levels of the Marine Corps training continuum. By linking range requirements to training requirements, MCRP 8-10B.1 supports range investment as a defensible priority.

(3) Provides threshold and objective levels of RTA capabilities to be achieved based on the installation or regional training mission and the type of training supported. It is a tool for RTA managers to utilize in defining RTA requirements and shortfalls for individual installations, regionally, and for the Marine Corps. The MCRP 8-10B.1 is not specific to any installation or range complex.

b. Range Complex Management Plans

(1) CG MCCDC (C465) sponsors and provides oversight to the preparation of and development of installation, regional, and Service-level RCMPs.

(2) Each installation will prepare and maintain a RCMP. The RCMP is intended to serve as a master planning document for RTAs, providing a consistent Marine Corps-wide framework for defining RTA modernization and management objectives, and integrating into RTA planning efforts. RCMPs will be updated every five years or as required.

(3) CG MCCDC (C465) will fund regional RCMPs addressing RTA capabilities, shortfalls, and management matters focused on requirements supported by or issues affecting multiple installations. Regional RCMPs will address requirements for access for training to other U.S. Services, departments and private land areas, sea space, and airspace that are not within a Marine Corps installation.

(4) An RCMP should include the following components:

(a) The installation/regional commander's intent and planning guidance for modernization, recapitalization, and sustainment of RTAs.

(b) A capability assessment of current, emerging, and anticipated future training requirements to be supported by the RTAs.

(c) An inventory of RTAs at or managed by the Installation.

1. Each Marine Corps installation will prepare and maintain inventories of all RTAs located on the installation. Inventories shall include: (1) a description of real property, airspace and sea space designated for training use; (2) an itemization of facilities located within RTAs appropriately coded for inclusion in Marine Corps facilities or real property accounting records and management systems (e.g., Standard Accounting Budgeting and Reporting System [SABRS] and the Internet Navy Facilities Data Asset Store [iNFADS]); (3) an itemization of RTA systems; and (4) ancillary RTA equipment and infrastructure.

2. Each Marine Corps installation will prepare and maintain inventories of Range Condition Assessments (RCA) describing the physical condition of range infrastructure.

3. Installations will forward, annually or as changes occur, via the chain of command, all RCA and RTA inventory data to the RTA Management Program for inclusion in the Marine Corps Range and Training Area Management System (MCRTAMS) to CG MCCDC (C465).

4. RCMPs and facility master plans, RTA inventories, and RCAs when revised will incorporate data developed in the preparation of RCMPs.

5. RCMPs, RCAs, and RTA inventories serve to identify and document RTA capability, capacity, and shortfalls, and are intended to provide timely and relevant input to the RTA Management Program and MCICOM to support planning and programming for RTA modernization, recapitalization, sustainment, and management. In order to ensure that the RTA Management Program and supporting programs are as responsive as possible to the needs of the operating forces and formal schools, commanders may supplement RCMPs, RCAs, and RTA inventories with analysis and interim assessments identifying capability and capacity shortfalls on an ongoing basis.

6. Installation range managers and facility managers will reconcile range inventories annually to ensure accurate reporting and accountability of new ranges or capital improvements to existing ranges.

(d) An assessment of the capability of the installation to support training requirements, and of shortfalls between current RTA capabilities and required RTA capabilities (gap analysis).

(e) An investment strategy (including any major project descriptions and associated documentation) for modernizing, recapitalization, and sustaining RTAs.

(f) An RTA maintenance and sustainment plan, to include funding requirements for RTA maintenance.

(g) An analysis of factors and trends affecting RTA capabilities, usage, availability, or development, and description of programs supporting RTAs.

(h) An analysis of factors affecting RTA usage, availability, or development, and description of encroachment control plans and initiatives.

(i) Evaluation of non-DoD land and airspace use requirements.

(j) Range Condition Assessments.

(k) Operational Range Clearance Program.

(l) Evaluation of Marine Corps use of other U.S. Service ranges.

5. Service-Level Reports and Metrics

a. The Congress of the United States, the Government Accountability Office (GAO), and the Office of the Secretary of Defense (OSD) have all required annual submissions from the Services on the viability and capability of RTAs. In close coordination with COMMCICOM, CG MCCDC (C465) will prepare and present the appropriate submissions on the capacities, capabilities, limitations, and environmental/encroachment challenges of Marine Corps RTAs.

b. The OSD has established, with the concurrence of the Services, contained within the SRR, a family of common metrics that will be used to portray and summarize the capabilities, capacities, and encroachment factors that impact the health and readiness of all Departmental RTAs. To ensure consistency in reporting, these metrics will, to the extent possible, be the primary metrics utilized in any assessments of Marine Corps RTAs.

c. The OSD also mandates the inclusion of RTA readiness reporting in the Defense Readiness Reporting System (DRRS) per reference (h). RTAs are assessed as part of the Installations Readiness section of DRRS. COMMCICOM will ensure that DRRS reporting on RTA readiness is

coordinated with CG MCCDC (C465) to ensure consistency in the various Service-level reports.

6. Range and Training Areas (RTA) Availability, Scheduling, and Utilization

a. The Marine Corps standard for range availability is 242 days per calendar year. This number is determined by subtracting all weekends (104 days) and Federal holidays (10 days) and includes an additional 9 days (10 days during leap years) for range maintenance or inclement weather.

b. The Marine Corps' annual goal is to utilize each range for at least 70 percent of the available days per year or 169 days if range is available the entire 242 days. At a minimum, range reservations canceled within 24 hours prior to the planned event will be charged as a no-show on range utilization reports. Throughput and capacity requirements are informed by range utilization and will be used by range managers and planners for resources allocation.

c. Range and Training Areas (RTA) Use Priority

(1) Regional and service level training installation commanders will establish range use priorities for their ranges/airspace in accordance with the following general service level training priorities:

(a) CMC-directed major training programs/exercises.

(b) Marine Corps Formal Schools (Entry Level, Secondary MOS, WTI, TACP, etc.).

(c) Command exercises (Group, Regiment, MEU, MLG, Wing, Div, MEF).

(d) Marine Corps Operating Forces (including U.S. Marine Corps Forces Reserve).

(e) Other Marine Corps organizations, DoD Services, Reserves, National Guard.

(f) Foreign Military Sales.

(g) Civilian Law Enforcement.

(h) Recreation, hobbyists.

(2) Range use priorities should be time sensitive; higher priorities should have windows of opportunity to schedule prior to lower priority events.

(3) Installation range control officers will use these priorities to "deconflict" and shape training in order to accommodate to the maximum extent possible all requested training.

7. Range Control Manning. As evidenced by the exemption of fire desk operators (FDO)/range controllers from furloughs and hiring freezes, the critical nature of range controllers' duties in support of a safe, realistic combat readiness training environment serving all aspects of the training continuum has been validated by institutional-level personnel management decisions. Current range controller/operator manning levels at Marine Corps range complexes were developed and implemented in partnership and via shared funding by both TECOM and MCICOM. Existing RCF manning levels at each Marine Corps RCF represent the minimum manning and compilation of skill sets necessary to operate range control and safety equipment essential to safe execution of daily training event schedules. Failure to maintain range controller manning levels impacts installation range safety and operational capability and capacity. Therefore, a proposed reduction of range controller billet fills by an installation must be vetted to all stakeholders before a billet reduction(s) can be finalized. Installation, regional and service level initiatives to reduce range control personnel manning levels must be endorsed by the range complex's primary training customers, validated by CG MCCDC (C465), and be approved by COMMCICOM before reduction initiatives can be executed.

8. Supporting Boards, Groups, and Process Teams

a. Mission Capable Ranges Working Group

(1) The MCRWG serves in an operational advisory group capacity to identify range requirements and facilitate their integration into a comprehensive range program. The MCRWG is an O-6/GS-15 level group assembled to ensure that Marine Corps programs that support ranges through the provision of resources or policy are fully integrated across the advocacies of the MAGTF. To ensure that the spirit and intent of guidance issued by the Commandant and the Marine Requirements Oversight Council (MROC) are met and to enable all levels and types of training required in Expeditionary Force 21, and other key Marine Corps strategic planning documents the MCRWG will provide a collaborative forum of key stakeholders to ensure coordination and integration of programs, provide consultation and advice to program managers, and provide advocacy to resourcing boards and resource decision makers. MCRWG members will also serve as the prioritization board for RTS and GRSP projects.

(2) MCRWG membership includes O-6/GS-15 level representation from:

(a) DC CD&I/CG MCCDC (C465), Co-Chair.

(b) DC I&L/COMMCICOM (AC/S, G3/5/7), Co-Chair.

(c) Deputy Commandant, Plans, Policies, and Operations (DC PP&O).

(d) DC AVN.

(e) Deputy Commandant, Programs and Resources (DC P&R).

(f) Commander, Marine Corps Forces Command (MARFORCOM).

(g) Commander, Marine Forces Pacific (MARFORPAC).

(f) Commander, Marine Corps Systems Command (MCSC) (ex officio).

(g) Office of Counsel for the Commandant (ex officio).

(h) Commander, Marine Force Reserve.

(i) DC CD&I/CG MCCDC (C476) Weapons Field Training Battalion, Quantico (ex officio).

(3) MCRWG meetings will be scheduled quarterly including one in conjunction with the annual Program Review for Ranges and one prior to the annual POM briefs to the Training and Installations Program Evaluation Boards (PEBs). CG MCCDC (C465) will be responsible for arranging and publishing dates and meeting agenda. Co-chairs will alternate hosting meetings. Additional meetings may be scheduled at the request of any member should issues arise that require the working group's consultation immediately.

b. Marine Corps Airspace Management Operational Review Board (ORB)/Working Integrated Process Team (WIPT)

(1) The Marine Corps Airspace Management ORB and WIPT are tasked with the implementation of a service level "MAGTF" approach to the management of airspace for military operations. The Airspace Management ORB/WIPT is charged with ensuring the preservation, enhancement and expansion of airspace for military operations in order to support near term and future operational and service unique training airspace requirements. Airspace is a critical component of the Marine Corps' training capability. As the volume of air traffic in the National Airspace System (NAS) increases, pressure to increase the availability of airspace used for military operations to civil and commercial users continues to grow. The preservation of existing military use airspace, as well as its enhancement to support future tactics and weapons development are vital to the support of safe, realistic combat readiness training of our operating forces. In order to preserve and enhance this invaluable training resource, the Marine

Corps must speak with a single coordinated voice, which includes all stakeholders' perspectives on airspace related matters.

(2) The mission of the Airspace Management ORB/WIPT is to act as the Marine Corps' coordinating body responsible for oversight, development, and coordination of comprehensive Marine Corps policy, direction and guidance relating to all airspace issues in order to support near term and future operational and service unique training airspace requirements. The Airspace Management ORB/WIPT framework facilitates service level coordination and communication throughout the Marine Corps on actions involving the preservation, sustainment, enhancement and expansion of airspace for military operations.

(3) Airspace Management ORB/WIPT structure includes:

(a) Operational Review Board (ORB). The ORB is comprised of general officer or senior executive service members representing DC AVN, DC I&L, and DC CD&I. The ORB will review, arbitrate, assess, and direct efforts to address airspace management issues to ensure long-term sustainability. As required, the ORB will provide recommendations to the DC AVN, DC I&L, and DC CD&I on policy, projects, and programs impacting the preservation, sustainment, enhancement and expansion of airspace supporting military operations.

(b) Working Integrated Product Team (WIPT). The WIPT is the staff-level working body that supports the ORB by coordinating and communicating ongoing airspace management issues. The WIPT coordinates with all stakeholders at all levels to facilitate Marine Corps airspace management strategies to identify encroachment issues, develop comprehensive strategies and plans, and provide technical, analytical, and administrative support on airspace management issues to the ORB. In addition, the WIPT formulates and manages a disciplined, multi-tiered outreach effort that supports airspace sustainability objectives. The WIPT reports as required to the ORB membership on its efforts to plan and implement a comprehensive Marine Corps airspace management strategy. The members of the Airspace Management WIPT are O-6/GS-15 (or their designated representatives) from the following organizations:

1. APX [Co-chair].

2. MCICOM (G-3/5/7) [Co-chair].

3. TECOM (TECD/RTAM) [Co-chair].

4. DC PP&O (Operations Group).

5. MARFORCOM (G-3/5/7).

6. MARFORPAC (G-3).

7. Marine Corps Installations East (MCIEast) (G-3).

8. Marine Corps Installations Pacific (MCIPAC) (G-3).

9. Marine Corps Installations West (MCIWest) (G-3/5).

10. Non-voting, Ad Hoc members as identified by ORB/WIPT members.

(4) The ORB/WIPT will engage in those issues that have service, or DoD-wide, implications. The Commanding Generals, MCIEast, MCIWest, and MCIPAC will continue to manage routine, day-to-day regional airspace issues that do not have impacts external to the region.

(5) Conflict Resolution. The ORB/WIPT will ensure that the equities of all Marine Corps stakeholders are considered and consensus achieved among all parties prior to presenting the Marine Corps position to external agencies. For those issues which the WIPT cannot achieve consensus, a decision paper will be prepared that includes all perspectives for a final determination by the ORB. If consensus cannot be achieved at the ORB level, the issue will be forwarded to the appropriate Deputy Commandant for decision.

c. Department of Defense (DoD) Sustainable Ranges Integrated Process Team (Department of Defense (DoD) Sustainable Ranges Integrated Process Team(IPT)).

(1) The mission of the Sustainable Ranges IPT is to act as the DoD coordinating body responsible for oversight, development, and coordination of a comprehensive DoD response to encroachment pressures that adversely affect operational ranges, operating areas, and other locations where DoD trains or tests and evaluates new weapons systems and sensors. It provides a framework for coordination and communication on Departmental actions involving DoD's Range Sustainment Initiative, including legislation and regulation, outreach, leadership and organization, policy, and programming.

(2) The Sustainable Ranges IPT consists of an Overarching IPT (OIPT) and a WIPT. The OIPT is chartered to direct the Department's efforts to address encroachment to ensure the long-term sustainability of operational ranges and other DoD assets required to maintain force readiness. The OIPT identifies encroachment issues, develops comprehensive strategies and plans, and provides technical, analytical, and administrative support on operational range encroachment and sustainment issues to the Under Secretary of Defense for P&R, the Director, Operational Test and Evaluation, the Senior Readiness Oversight Council, and the Deputy, Secretary of Defense. The WIPT is the staff-level working body that supports the OIPT by coordinating and communicating ongoing range sustainment activities.

The WIPT coordinates with DoD components and other federal agencies, and promotes communications with local, regional, tribal, and state governments and with non-governmental organizations at all levels to facilitate the Department's sustainable range process and encroachment control strategies.

(3) The Sustainable Ranges Integrated Process Team (IPT) Membership. Each OIPT member designates one representative as that organization's official WIPT member. As the Marine Corps' representatives to the DoD Sustainable Range OIPT, CG TECOM and COMMCICOM serve as the action proponents for the annual DoD SRR to Congress.

d. CG MCCDC (C465) also represents the Marine Corps and/or Department of Defense at a number of OSD and international level groups including:

(1) The Technical Cooperation Program. The aim of the Technical Cooperation Program is to foster cooperation between member nations in science and technology, encompassing basic research, exploratory development and demonstrations of advanced technology development, needed for conventional (i.e., non-atomic) national defense. The purpose is to enhance the national defense of member nations at a reduced cost.

(2) North Atlantic Treaty Organization Range Safety Working Group (NRSWG). The North Atlantic Treaty Organization (NATO) Range Safety Working Group (NRSWG) is a formal body established to contribute to the effectiveness of NATO forces through standardization in the military range safety field and to improve NATO interoperability. The Working Group primarily focuses on conventional range safety as it affects all Services, the detailed method of construction and computation of hazard zones and the safety precautions relevant to each type of weapon.

(3) International Range Safety Advisory Group. The International Range Safety Advisory Group (IRSAG) falls under the NRSWG in order to facilitate the discussion and decisions of the NRSWG. While the NRSWG meets formally on the last day of the conference, IRSAG members meet less formally in order to discuss, debate, and propose for discussion/decision on common range issues in the days prior to the convening and in support of the NRSWG.

(4) Laser System Safety Working Group. Provides laser safety and health technical advice (i.e., acting as a technical liaison body to interact with international, Federal, and state regulatory and advisory agencies) on issues related to occupational and environmental exposure to lasers, coordinating with NATO Standardization Agencies involved in laser safety and health issues, evaluating laser systems when an evaluation may be used by more than one DoD Component, etc. to

the Assistant Deputy Under Secretary of Defense for Environment, Safety, and Occupational Health.

(5) Defense Policy Review Initiative. Defense Policy Review Initiative provides strategic guidance and direction for the planning and execution of military build-out actions across the Pacific Region to sustain war-fighting capabilities and to achieve force posture realignments, including necessary training range development, the identification of unit and installation facility requirements, programming and budgeting, and supporting establishment requirements for all impacted Marines, Sailors and family members.

CHAPTER 3

Range Requirements Process; Range and Training Areas (RTA) Projects Planning and Execution

1. Information. This chapter describes the requirements process for the RTS and range facilities and provides guidance on processes and procedures for planning and executing RTA projects.

2. Purpose. The RTA requirements process requires the close coordination of key stakeholders including the operating forces, the installations and their chains of command, and CG MCCDC (C465). Thoroughly vetted and approved RTA projects enable training range capability to support current and future training requirements, consistent with current doctrine and future concepts, threat analysis, and force structure; and ensuring that Marine Corps RTAs support the fielding of new weapons and ammunition while meeting established range safety, training, and environmental standards.

3. Overview. The Marine Corps RTA Management Program encompasses two programs of record identified by Marine Corps Program Codes (MCPC) and utilizes supplemental funds as appropriate. Programs of record and any supplemental funding within the Marine Corps RTA Management Program support the procurement, acquisition, fielding and maintenance of training systems for the modernization, recapitalization, and sustainment of RTAs, and the provision of RTA management, control, and training support. In this chapter, information will be provided on key definitions, RTA projects classification, the RTA facilities projects cycle, the RTS projects cycle, and RTA sustainment.

4. Key Definitions. For the purposes of this Order, the following key terms are defined as follows:

a. Range Facilities. Range facilities are programmed, acquired, and sustained by the MILCON and FSRM programs managed by the DC I&L (LF) and provide the real property components and infrastructure of Marine Corps RTAs.

b. Range Training Systems. RTS are programmed, acquired, and sustained by CG MCCDC (C465) to provide live and non-live fire range training capability and capacity in support of the training activities of the operating forces. RTS are expeditionary, modular, relocatable, reconfigurable systems that provide representations of contemporary operating environments. Examples are urban training systems, shoot houses, electro-mechanical targets, battlefield effects, range instrumentation and atmospherics. RTS must be relocatable, leaving nothing on the original site except what was provided by a MILCON or minor MILCON project. Additionally, in the process of moving an RTS, structural materials will be reused, not destroyed or discarded. Due to their singular purpose of supporting combat training, RTS require the capability to be maintained, refurbished, and reconfigured in ways

that are inconsistent with the standards applied to permanent infrastructure. RTS consisting of simulated buildings are differentiated from actual buildings in that they cannot be used for habitation or routine administrative uses, e.g. office space or billeting. RTS are managed to meet training capability requirements and maintained through funding appropriate for training. RTS are repaired/replaced/maintained/relocated on a schedule that meets training requirements, while accommodating changes in training technology.

c. Range Modernization. Investments that provide new range capabilities to address emerging operational training requirements.

d. Range Recapitalization. Projects that upgrade or replace existing range capabilities that are destroyed, damaged or worn out (and can no longer be repaired).

e. Range Sustainment. Projects or investments that provide operations and maintenance of existing range capabilities/systems (Capability), and/or that provide range safety and range operations services (Capacity).

5. Range and Training Areas (RTA) Projects Classification. In accordance with funding categorization/constraints, RTA projects are sub-classified as follows:

a. Range Facilities Projects. These are RTA modernization and recapitalization projects that are funded via the MILCON and/or FSRM processes pursuant to reference (i).

b. Range Training System Projects. These are RTS modernization and recapitalization projects that are funded using training appropriations.

6. Range and Training areas (RTA) Facilities Projects Cycle

a. MCICOM assisted by CG MCCDC (C465), will support the operating forces in determining RTA facilities requirements.

b. Commanders, MARFORCOM/MARFORPAC will provide representation during the programming process of RTA support facilities.

c. CG MCCDC (C465) supports and coordinates with DC I&L/MCICOM to identify requirements for funding and obtain and execute funds to support RTA sustainment in the categories of local construction, minor repairs, routine maintenance, and NEPA planning for RTAs.

d. MCICOM validates and submits MILCON projects and documentation for inclusion in the Department of the Navy's (DON) budget proposal for Congressional approval.

e. CG MCCDC (C465) will provide, with DC P&R assistance, RTA systems funding in support of MILCON projects.

f. MILCON, minor construction, and major repair projects to develop or modernize RTAs in support of validated training requirements are proposed by Installation RTA managers via the facilities staff in accordance with Installation orders and directives. *Note: Reference (i) provides detailed definitions to include funding thresholds for MILCON, major repair, and minor construction projects.*

g. Installation commanders review and adjudicate proposed RTA Facilities projects in accordance with local directives and submit approved proposals to the next commander in the chain of command for review. Regional commanders (for installations under MCICOM command) or CG TECOM (for installations under TECOM command) will review and adjudicate installation-level MILCON, minor construction, and major repair project proposals in accordance with local directives, and submit approved proposals to MCICOM for review. Upon receipt, MCICOM will provide proposed RTA-related MILCON, minor construction, or major repair project information to CG MCCDC (C465) for review, validation, recommendations regarding approval, and prioritization of approved projects.

h. RTA Facilities projects that include a MILCON or minor construction component and a component requiring procurement, acquisition, or installation of RTA systems (such as targets, modular structures etc.) utilize funding from both the MILCON or FSRM program and CG MCCDC (C465). Installation commanders who submit RTA Facilities projects will ensure that all real property and collateral equipment is listed on the DD 1391 in accordance with references (i) and (j). Coordination of such initiatives at the earliest practicable time is required. Installation commanders will therefore inform MCICOM and CG MCCDC (C465), via the chain of command, of any such project proposal prior to installation-level adjudication.

i. In advance of the annual installation PEB, CG MCCDC (C465) will, for each RTA-related MILCON project proposal, advise MCICOM; (1) whether the project is supportive of validated RTA requirements and (2) the recommended priority of each proposed project validated by the RTA Management Program.

j. CG MCCDC (C465) coordinates with MCICOM to advocate for allocation of funds to approved RTA Facilities Projects that are within those functional areas for which MCICOM is responsible, including primarily projects in the categories of MILCON, minor construction, and major repairs.

k. In the review and validation stage, for proposed RTA projects with a construction or facilities component, CG MCCDC (C465) will confer with MCICOM regarding prioritization and coordination of

planning. Figures 3-1 and 3-2 graphically depict coordination supporting major and minor military construction supporting RTAs.

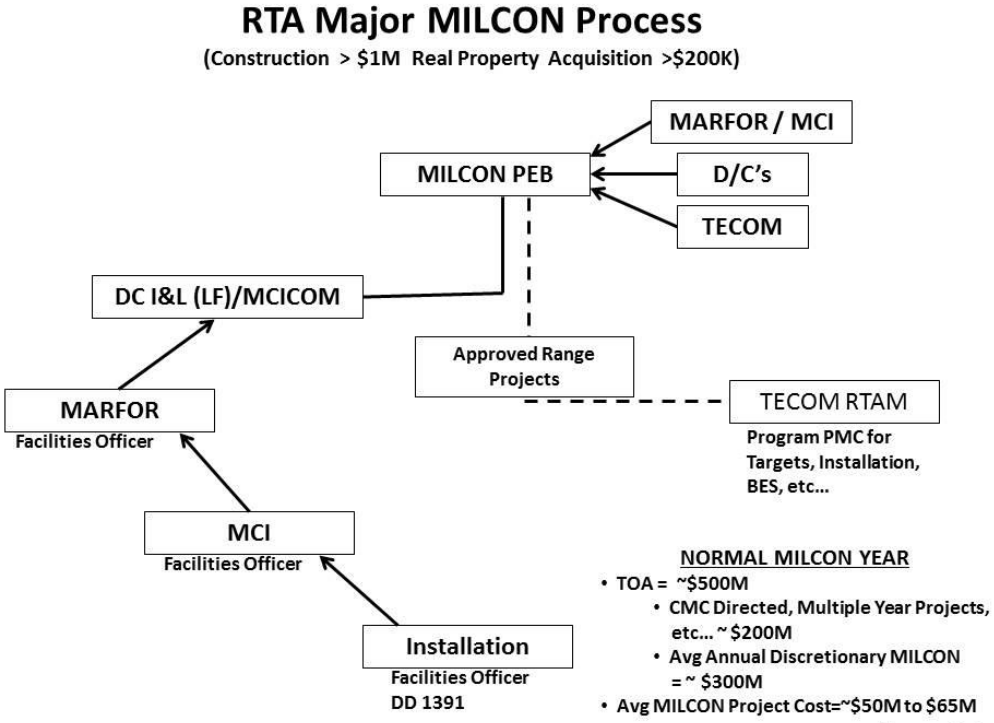

Figure 3-1

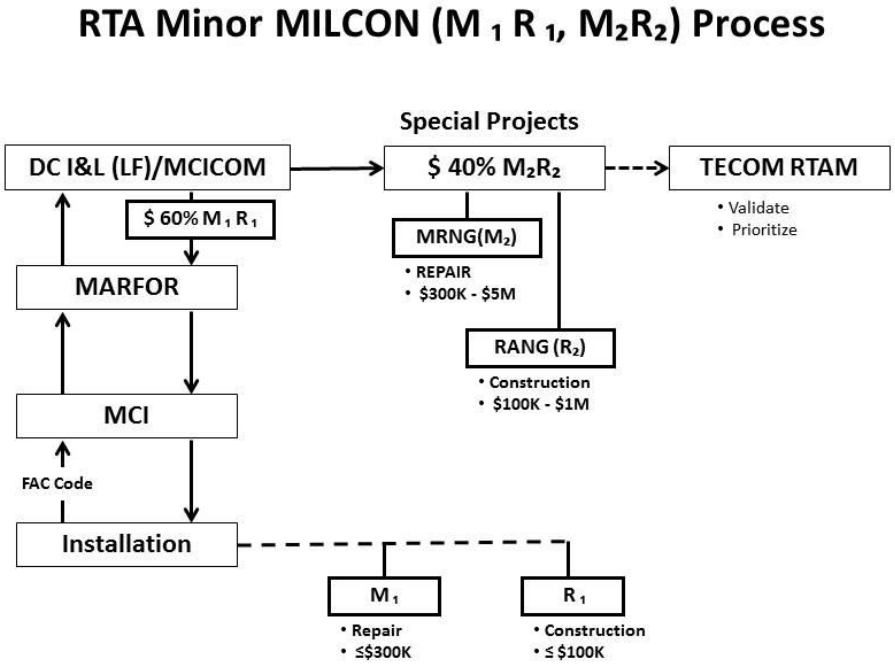

Figure 3-2

l. CG MCCDC (C465) and MCICOM may enter into memorandums of agreement that are consistent with this Order.

7. Range Training System Projects

a. These non-MILCON projects focus on the modernization and recapitalization of RTS. They may be funded using training Procurement, Marine Corps and/or Operations & Maintenance, Marine Corps (O&MMC) funds. Major RTS modernization/recapitalization projects over $250K are covered under the RTS Program (RTSP). Minor RTS recapitalization/sustainment projects under $250K are covered under the GRSP, which will be addressed in the Sustainment section of this chapter. While there is no upper limit on the cost of RTS projects, associated site preparation costs cannot exceed $1M O&MMC per reference (j).

b. CG MCCDC (C465) is the lead advocate for RTS projects. CG MCCDC (C465) will prioritize associated requirements, program funding, submit validated projects for funding through the POM process, and monitor execution of projects. As funded projects are completed, installations will update range inventories and RCMPs.

c. RTA Project submissions are based on assessment of the capability of the installation to support training requirements, and of shortfalls between current RTA capabilities and required RTA capabilities (gap analysis) as defined in installation and regional RCMPs.

8. Range Training Systems Program Cycle. This cycle is aligned with the POM process which covers the 5-year Future Years Defense Program (FYDP). Installation RTA managers will prepare RTSP projects to fulfill validated requirements in accordance with established processes and submit via the RTS portal of MCRTAMS.

a. Range Training System (RTS) Program Project Submissions

(1) RTSP project submissions need to reflect requirements for the upcoming year as well as the following 5 years, with projects being defined in greater detail closer to the year of execution.

(2) CG MCCDC (C465) determines whether projects which are within scope of the RTA Management Programs are to be funded, based on assessment of priorities and available resources.

(3) CG MCCDC (C465), as the Marine Corps technical lead for matters of range design, will provide qualified technical assistance to installation commanders and staffs to support the preparation of RTA project documentation. Technical assistance will include range design, range safety planning, (danger zones), ammunition storage requirements, and training systems planning. Installation commanders

are encouraged to request technical assistance early in the range design process.

(4) Project submissions including projects that are CMC-directed and/or associated with a Universal Needs Statement will: (1) identify the installation and point of contact (2) describe the project in detail; (3) identify the training requirement supported by the project including the Joint Capability Area or gap from the Marine Corps Gap List being addressed if applicable, identify the source of the training requirement, and provide references to authoritative training requirements documentation; (4) estimate the cost of the project; (5) indicate the priority of the project among all project submissions provided by the same commander; and (6) provide additional detail such as technical specifications and other information that will facilitate validation and effective advocacy.

(5) Project proposals must state whether or not the project is related to or dependent on development of facilities or infrastructure using funding for which MCICOM is the sponsor (i.e., RTA MILCON projects).

(6) In the review and validation stage, for proposed projects with a construction or facilities component, CG MCCDC (C465) will confer with MCICOM regarding prioritization and coordination of planning.

(7) CG MCCDC (C465) will coordinate with Commander, MCSC and other relevant agencies as necessary to assess the feasibility of proposed project solutions.

(8) In advance of the annual RTSP Prioritization Board, installation commanders must submit RTSP projects submissions for the next 6 years (to correspond to the FYDP) into the RTS portal of MCRTAMS by 31 January each year.

b. Range Training Systems Projects (RTSP) Projects Review/Approval

(1) After projects are validated, all submissions will be thoroughly reviewed and associated costs determined based on project data collected.

(2) Annually after all RTSP projects have been submitted and surveyed, a RTSP Prioritization Board will be held. This board will be chaired by CG MCCDC (C465) and will include the members of the MCRWG as assigned in Chapter 1.

(3) The purpose of the board will be to review, validate, and prioritize RTSP submissions across the FYDP.

(4) Upon completion of the board, the list of prioritized

FYDP projects will inform the RTA Management Program POM development. The near-term RTSP projects will enter the acquisition cycle for execution.

c. Range Training System Projects (RTSP) Project Execution/Acquisition

(1) CG MCCDC (C465) will direct the execution of funding provided through the POM/Budget process for RTSP projects. The RTSP requirements process model is found in Figure 3-3.

(2) Installation commanders and program managers will inform CG MCCDC (C465) and COMMCICOM of schedules for design review conferences, pre-construction conferences, site interface inspections, and project acceptance processes regarding RTA-related projects, and will provide any documentation (such as minutes of decision memorandum) resulting from such events.

(3) MCSC is the primary material developer and contracting authority for acquisition and fielding of RTS projects. Other acquisition agencies may be utilized as well.

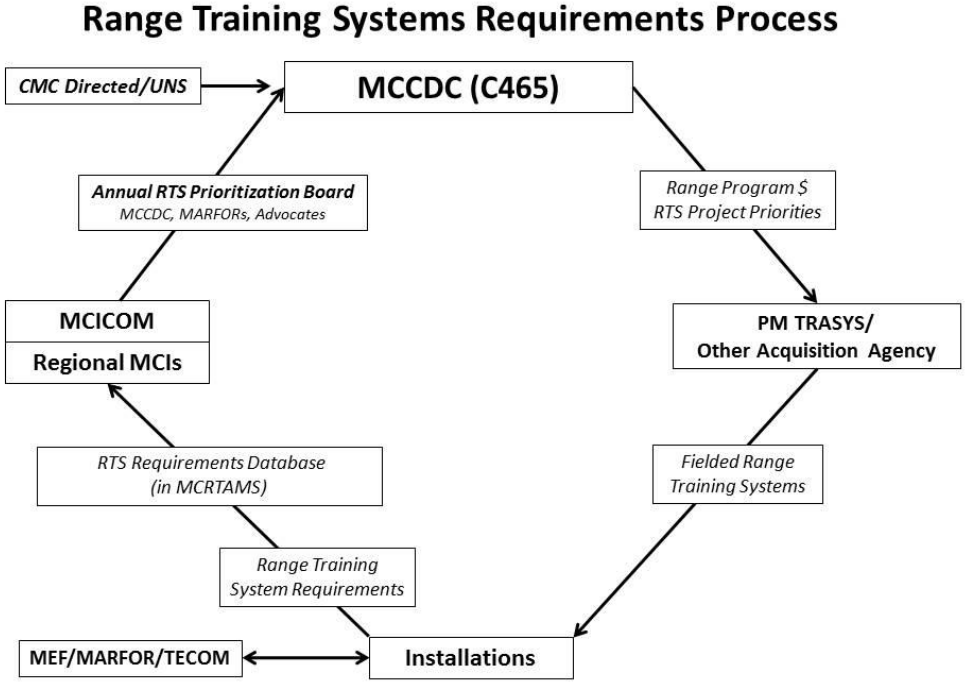

Figure 3-3

9. Range and Training Areas (RTA) Sustainment

a. In the management of RTA training support assets, the requirements, funding, and contracting of sustainment and services are the most complex. The enhancement and support of RTA live and non-

live fire training requires a wide array of services that are funded by multiple programs including: BOS, FSRM, and RTSS. To promote both effectiveness and efficiency, this section will provide guidance on the responsibilities and processes for acquiring and managing RTA training support sustainment and services.

b. CG MCCDC (C465) will support the operating forces, formal schools and installations in determining RTA Support requirements.

c. CG MCCDC (C465) will program for and fund those RTA support activities which support training across the enterprise including, but not limited to:

(1) Range Control Operations and systems support (Range Facility Management Support System [RFMSS], Integrated Range Status System [IRSS], Tactical Voice Conferencing System [TVCS-V], Distributed Tactical Communication System [DTCS], Range Position Location Information [R-PLI], etc.).

(2) Operations, warehousing, and maintenance of live fire and non-live fire range training systems.

(3) Operational Range Clearance Program.

d. Range and Training Areas (RTA) Support Services. To provide RTA support services, the CG MCCDC (C465) will perform the following functions;

(1) Plan, program for, and coordinate the maintenance of fielded RTA systems.

(2) Sponsor and manage the requirements process for all RTA Support Services.

(3) Include the operating forces in the prioritization of RTA support services via the programming process.

(4) Provide the PCO with definition, scope, and prioritization of all RTA services to be provided.

(5) Review with the PCO and validate any change in scope, capability definition, resources or requirements that occur during the services contractual process.

(6) Provide on every services contract, qualified Contracting Officer Representative (COR) nominations to the appropriate contracting officer for appointment. CORs will, upon appointment by the appropriate contracting officer, be responsible to CG MCCDC (C465) and appointed contracting officer for the effective and efficient execution of the contract. CORs will be guided in their duties by the Federal Acquisition Regulations and the DoD COR Handbook.

e. Provide on-site services to Marine Corps Bases to perform the following functions:

(1) Subject matter expertise on both live and non-live fire RTA systems.

(2) Administration and coordination of RTA systems contracts at the point of service, on behalf of the contracting officer to include but not limited to the following;

(a) Serve as the primary point of contact between the Government and the contractor regarding on-site execution of contracts, task orders, or work requests for the fielding and maintenance of RTA Management Program sponsor training systems.

(b) Maintain contract files and records, in coordination with the Program sponsor.

(c) Promptly refer to the PCO and Program Sponsor for action on any issues regarding performance or costs, and any requests for changes to, deviation from, or waiver of any contractual matters, whether generated by the Government or the contractor.

(d) Advise and make recommendations to the PCO concerning the technical issues regarding acceptance of services or deliverables.

10. Range and Training Areas (RTA) Facilities Sustainment

a. Base Operating Support. Installation management services provide a critical array of programs that provide support for the effective operation of RTAs. While not directly addressed in this Order, the provision of communications/data infrastructure, emergency and force protection services, and environmental protection/encroachment mitigation programs are vital to ensure the accessibility and safety of our ranges. BOS expenditures specific to ranges maintain training capability by ensuring ranges and range training systems are accessible, available, and configured/maintained to provide optimal training capability. Range related BOS requirements fall into three broad categories.

(1) Range Access. Provides access to training capability by authorized users and denies access to unauthorized personnel. Support would include provision, replacement, and repair of range access gates, range warning signs, flagpoles, and warning lights along with erosion control on ranges and grading of range access roads.

(2) Range Equipment Maintenance. Provides equipment maintenance for Military Operations in Urban Terrain (MOUT); facilities, outdoor classrooms, bleachers, range towers, and consumable targets and target material.

(3) Range Conditioning. Provides the conditions that allow Marines to train safely, effectively, and efficiently. Prevents vegetation encroachment on ranges for target visibility, and in training areas to ensure accessibility. Provides maintenance of structural berms, pest control and dust suppression on range training and access roads.

b. Facilities Sustainment Restoration and Modernization. As outlined in reference (k), the FSRM program is a two part program; a centrally managed program executed by DC I&L (LF) and a local program executed by installation commanders to sustain, restore, and modernize facilities. The following guidance applies to maintenance, repair and local construction projects for RTA facilities;

(1) Minor Construction projects for ranges with a funded cost of $100,000 or less (R-1) may be executed by the installation commander.

(2) Repair actions return a real property facility, system, or component to such a condition that it may effectively be used for its designated functional purpose. Repair of RTA facilities in a single undertaking with a funded cost of $300,000 (M-1) or less may be executed by the installation commander.

(3) Maintenance (M-1) refers to recurring, day-to-day, periodic, or scheduled work required to preserve an RTA and associated real property or facilities to such a condition that it may be used for its designated purpose. Maintenance includes work undertaken to prevent damage to a facility that otherwise would be more costly to repair. Recurring or specific maintenance of RTAs is the responsibility of the installation commander.

(4) M-1 and R-1 projects are executed by installation commanders utilizing local FSRM funds allocated by DC I&L (LF) via the MARFORs. Allocation of BOS funds at the installation level is critical to sustaining the capability of RTAs. Installation commanders will determine anticipated funding requirements for M-1 and R-1 projects supporting RTA modernization and sustainment, and specifically identify such requirements in installation-level funding requests submitted to annual and supplemental budget processes. Installation commanders will inform CG MCCDC (C465) and COMMCICOM of the level of funding anticipated for M-1 and R-1 projects in support of RTAs at the installation.

(5) M2 is repair work over $300,000 that requires DC I&L (LF) approval and prioritization. Projects approved under this category are funded with O&MMC appropriations centrally managed by DC I&L (LF).

(6) R2 is minor construction that costs between $100,000 and $1,000,000. These projects are also approved, prioritized and funded by DC I&L (LF).

11. Range Training System (RTS) Sustainment

a. Range Training System Support

(1) RTSS provides operation and maintenance support services to sustain operational readiness of training assets necessary to meet the ground and aviation combat training requirements of the operating forces. CG MCCDC (C465) plans, programs, budgets, and executes all funding for operation and maintenance of range training systems it has deployed through a Contracted Logistics Support approach. Contractors provide operation and maintenance services for range training systems across the spectrum of capabilities including; electro-mechanical targets, MOUT training systems, instrumentation assets, battlefield effects, and other training devices.

(2) Installation range managers will identify RTSS requirements early in the RTS projects development process. A fully developed RTSS request will include at a minimum:

(a) Full point of contact information for the RTS project.

(b) Brief description of the training system; major hardware items, type of ammunition used, safety equipment required, location of system, and location of training system.

(c) Level of required operator support with projected duration and number of training events per year and projected throughput.

(d) A brief description of the maintenance functions required, spare parts packages provided by the Government, and any maintenance space provided by the Government.

(e) Submit RTSS requirements via the guidance provided on the MCRTAMS website.

(3) CG MCCDC (C465) will work with available contracting agencies to establish the appropriate acquisition strategy. Every effort will be made to ensure that RTSS is aligned with the completion of the RTS project.

b. Ground Range Sustainment Program

(1) The GRSP provides recapitalization/sustainment of existing capabilities for continuity of Marine Corps training through the improvement or replacement of existing training devices such as lifters, worn targets, and range control equipment that cannot be accomplished within existing O&MMC budgets. Maintenance of state-of-the-art range control systems also supports current training requirements. The GRSP plays an important role in this process.

(2) Execution of minor RTS projects, using O&MMC funds managed at the institutional level, is the objective of the GRSP. The cost of materials and installation for GRSP projects will not normally exceed $250,000.

(3) Requirements authorized under the GRSP include:

(a) Expanding or altering the capabilities of existing systems.

(b) Upgrading existing system components.

(c) Simplifying operations and/or maintenance.

(d) Enhancement of personnel and operational safety, and security of installed range systems and equipment.

(e) Recapitalizing/sustaining RTA capabilities.

(4) The following are specifically excluded from GRSP O&MMC funding:

(a) Functions exclusively funded under the BOS appropriation.

(b) Building/facility construction projects exclusively funded under MILCON appropriation.

(c) Support equipment listed on an organization's table of equipment, or equipment on any comparable allowance list such as vehicles, boats, and lawn mowers.

(d) Consumable items such as; batteries, targets, etc.

(e) Spare or repair parts.

(f) Computer equipment for administrative functions.

(g) Installation of systems/equipment not procured with GRSP funds, and reinstallation/relocation of previously installed systems/equipment.

(5) Ground Range Sustainment Program (GRSP) Cycle. The GRSP is similar to the RTS projects cycle, but with a next-year focus.

(a) Ground Range Sustainment Program (GRSP) Project Submissions

1. Installation RTA managers will prepare GRSP projects to fulfill validated requirements in accordance with established processes.

2. The RTA Management Program determines whether approved projects which are within scope of the RTA Management Program are to be funded, based on assessment of priorities and available resources.

3. By 31 January, installation commanders must submit next-year projects into the GRSP portal of MCRTAMS.

(b) Ground Range Sustainment Program (GRSP) Projects Review/Approval

1. During the third quarter of the fiscal year, a range requirements/acquisition team from CG MCCDC (C465) and MCSC will visit installations to survey/validate GRSP project submissions.

2. After projects are validated, all submissions will be thoroughly reviewed and associated costs determined based on project data collected by the site visit team.

3. During the third quarter of the fiscal year after all projects have been submitted and surveyed, a GRSP Prioritization Board will be held. This board will be chaired by CG MCCDC (C465) and will include the members of the MCRWG.

(c) Ground Range Sustainment Program (GRSP) Project Execution/Acquisition. Although MCSC is the primary material developer and contracting authority for acquisition and fielding of GRSP projects, other acquisition strategies and execution methods (i.e., military labor, NAVFAC, DLA, and the Regional Contracting Office) play a significant role in the GRSP.

c. System Replacement and Modernization Program

(1) The System Replacement and Modernization Program (SRAM) program is an ongoing acquisition program designed to provide Navy and Marine Corps tactical training ranges with vital range instrumentation and support equipment closely linked to aviation and waterborne training/safety requirements. The SRAM Program is governed by the SRAM Program Guide, which can be found at URL: https://extranet.crna.nmci.navy.mil/sram/Public/Index.cfm?mainpnl=progplan.cfm. The SRAM program is sponsored by CNO and executed by the Naval Air Systems Command Naval Aviation Training Systems Program Office (PMA 205). It fills the acquisition gap between major POM projects and O&MMC expenditures.

(2) According to the program sponsor, "The goal of the SRAM program is to ensure that the current quality of tactical training support provided by range instrumentation is maintained during infrastructure downsizing actions and as next-generation range

instrumentation systems are developed." The SRAM program supports the goal by:

(a) Providing for the replacement and modernization of generally low cost tactical training instrumentation.

(b) Ensuring current Fleet training capabilities are not degraded for lack of minor equipment.

(c) Provides for the Fleet's immediate training needs.

(3) Commanders of installations with RTAs eligible for SRAM Program funding are encouraged to submit project proposals directly to the SRAM Program Manager at https://extranet.crna.nmci.navy.mil/sram/Public/Index.cfm. Commanders submitting SRAM projects for consideration are required to inform the RTA Management Program at the time of the submission.

CHAPTER 4

Range and Training Areas (RTA) Management Systems

1. Information. CG MCCDC (C465) has developed and fielded, operates, updates and maintains the RTA web-based MCRTAMS and other range operations and safety systems (https://rtam.tecom.usmc.mil) to assist installation commanders and range managers in execution of their on-site responsibilities for RTA execution.

2. Purpose. The purpose of this chapter is to provide information about MCRTAMS and associated range systems in order to ensure standardized, effective procedures for RTA management.

3. Marine Corps Range and Training Area Management Systems (MCTRAMS) Overview. Marine Corps Range and Training Area Management Systems (MCRTAMS) contains the following data, information, and tools.

a. Orders and directives relating to RTA Management Program management, safety, and use.

b. Official guidance and planning publications relating to the RTA Management Program, including MCRP, RCMP, and Archive Search Reports (providing historical data about RTA utilization).

c. Range Safety Program information and directives, including all SOUM relating to ranges published by the Marine Corps RTA Management Program and the U.S. Army.

d. Other-service and DoD publications and reports of relevance to Marine Corps RTA Management Program management.

e. Official Inventories of Marine Corps RTAs, by installation.

f. Information about RTA Management Program resources and infrastructure contained within Marine Corps RTAs.

g. The institutional database of GIS data for all Marine Corps RTAs.

h. The Range Managers Tool Kit (RMTK).

i. The RFMSS publications.

j. Portals for the submission of GRSP and RTS projects, including ORC.

k. Individual Installation range regulations.

l. Immersive Pictures technology that allows the user to view geo-tagged 360° immersive photographs. This grants users virtual

ground-truth capability that can be combined with maps, aerials, and satellite imagery.

m. RTA encroachment/environment points of contact at Marine Corps installations and the issues that impact the training and readiness of our forces.

n. Marine Corps Airspace Management WIPT library.

o. Headquarters Marine Corps (HQMC) Inspector General Functional Area 3550 Range and Training Area Management Guidance/Checklist.

p. The MCRTAMS functionality is more fully described in Appendix B.

4. Range Facility Management Support System

a. CG MCCDC (C465) is the Marine Corps' RFMSS functional lead. The U.S. Army RFMSS Program Manager provides end-to-end program management support. RFMSS provides a standard, integrated, web-based program used to schedule RTAs, manage RTA resources and data. RFMSS is used by the Marine Corps, U.S. Army, Army National Guard, and the U.S. Navy.

b. RFMSS is the approved Marine Corps RTA scheduling system of record and will be implemented to assist Range Control with managing RTA operations by automating the scheduling process and facilitating fire desk operations at all Marine Corps installations. Range users are able to view RTA availability, submit range requests, view range control approval/disapproval actions and identify potential scheduling, safety and environmental conflicts.

c. The RFMSS system description is provided in Appendix C. Appendix C also provides guidance on RTA naming standards, and RTA utilization reporting requirements.

5. Inclusion of Locally-Developed Information Relating To Range and Training Areas (RTAs). Commanders or range managers shall advise the RTA Management Program via the chain of command concerning significant locally- or regionally-developed RTA planning and management information so that the RTA Management Program can determine whether it would be necessary or useful to make such information available on MCRTAMS. Proposed changes or additions to MCRTAMS will be forwarded to CG MCCDC (C465).

6. Range Safety Information

a. MCRTAMS will provide range design guidance and criteria and will also provide access to all of the RMTK outlined in Appendix B.

b. MCRTAMS will provide range certification information for all operational ranges located on Marine Corps installations.

c. MCRTAMS will maintain all Marine Corps and U.S. Army SOUM relating to range safety.

d. MCRTAMS will provide all current materials and information for the Range Operations Professional Development Program courses.

e. MCRTAMS will provide ORC policy and the portal to submit annual ORC projects in accordance with reference (e).

f. MCRTAMS will provide policy, guidance, and training for Range Laser Safety.

7. Special Purpose Processing Node

a. A Special Purpose Processing Node (SPPN) is a fixed data center of data servers in a fixed facility supporting special purposes functions that cannot or should not be supported by Core Data Center or Installation Processing Node due to its association with mission specific infrastructure of equipment (e.g., Meteorology, Medical, Modeling and Simulation, Test Ranges, Classrooms, Research Development Test and Evaluation, etc.) in accordance with reference (l).

b. The Marine Corps RCFs listed below are designated as SPPN in accordance with the National Defense Authorization Act Section 2867 on Data Servers and Centers and the DoD Information Enterprise Architecture for Core Data Center Reference Architecture.

DATA CENTER NAME	DOD UNIQUE ID
MCAGCC/MAGTFTC 29 Palms RCF (Bearmat)	17505
MCAS Cherry Point RCF (Big Rock)	17506
MCAS Yuma RCF (Leg Iron)	17507
Camp Pendleton RCF (Longrifle)	17508
MCB Quantico RCF	17509
Camp Hansen RCF	17510
Camp Lejeune RCF (Blackburn)	17511
MWTC Bridgeport RCF (White Peak)	17512
Townsend Bombing Range RCF	19346

8. Integrated Range Status System

a. The IRSS system provides Fire Desk Operators with an integrated air and ground activities display depicting range and training areas along with SUA. The system incorporates radar feeds, an air Position Location Information (PLI) (e.g., Multi-static Dependent Surveillance), and ground PLI.

b. IRSS displays real time range status through a system interface with RFMSS. IRSS also provides danger zone footprints and

other graphics and text-based information via a common display. IRSS was developed to enhance safety and capacity supporting combat readiness training within military RTAs.

c. CG MCCDC (C465) serves as the Marine Corps' proponent for the IRSS, the Chair and a principal (voting) member of the IRSS Configuration Management Working Group (CMWG). The RTAM Branch CMWG Chair shall provide programmatic information, Marine Corps requirements and priorities for IRSS to the IRSS Program Manager.

Chapter 5

Range and Training Area (RTA) Range Controls

1. Information. Sound RCF operations enhance safe, realistic training opportunities, and ensure viable and capable RTAs for future generations of Marines. A Range Control is described as a DoD non-air traffic control fixed ground facility which manages offshore and/or inland operating areas and ranges including restricted areas and other special use and assigned airspace on behalf of and as directed by a using agency. Range control capabilities vary from communications only to communications and multi-sensor facilities. It is important to note that the Range Control organization and description contained in this Order are based upon range safety, operations, control, planning and maintenance functions resourced by the RTA Management Program. Installation commanders organize to execute the installation range management program as they determine best to meet the installation mission. Specific installation range management organizations may differ from the organization described in this Order.

2. Purpose. This chapter standardizes Marine Corps RCF functions, procedures, and responsibilities.

3. Range Control Facility Organization

a. The safe, effective and efficient day-to-day operation of RTAs is the installation commander's responsibility. RCF personnel are an integral part of the installation staff. Staff functional areas impacting upon RTA operations demand strict coordination. Normally, the installation commander delegates responsibility for management of RTAs to the G-3/S-3 as appropriate. As a member of the G-3 department's staff, the installation Range Control Officer (RCO) serves as the commander's primary representative for RCF operations.

b. All agencies with responsibilities within RTAs must coordinate requirements with the installation RCO. All requests that involve dedicated use of existing RTAs or the building of new ranges and/or range-related facilities for other U.S. Services or external agencies must be coordinated with CG MCCDC (C465) via the appropriate chain of command.

c. Range control facilities provide safety, control, maintenance, and reporting functions for aviation, ground, and combined-arms training events within RTAs, to include both live-fire and non-live-fire events. The RCF executes the installation commander's RTA Management Program and the RCF manages assigned special use airspace on behalf of and as directed by the Using Agency. A Using Agency is defined in 14 Code of Federal Regulations (C.F.R.) Part 73 as: "the agency, organization, or military command whose activity within a restricted area necessitated the area being so designated."

Additionally 14 C.F.R. Part 73.15 notes that in exercising its authority, the Using Agency shall: "(1) schedule activities within the restricted area; (2) authorize transit through, or flight within, the restricted area as feasible; and (3) contain within the restricted area all activities conducted therein in accordance with the purpose for which it was designated."

d. RCFs may be supported by either co-located or remote DON ATC facilities providing ATC oversight as defined in reference (m). ATC oversight does not alter a using agency's authority or responsibility; each facility remains a separate and distinct organization, responsible for compliance with applicable regulations.

e. The RCO shall be appointed in writing by the base/station commander, and a copy of that appointment letter will be forwarded to COMMCICOM and CG MCCDC (C465). The RCO, at a minimum, must complete the inter-service Range Safety Course (Intermediate) (Course Identification Number M02KA7M) and the Marine Corps Range Airspace Management Course (Course Identification Number M02YVZM). The RCO's responsibilities are delineated in this Order and other applicable references and expanded upon in the following paragraphs.

4. Range Control Functions. Installation RCOs are responsible for the successful execution of the following functions and responsibilities.

a. Range Safety. RCOs establish and implement the installation commander's Range Safety Program as identified in reference (c) and provide safety oversight for all RTA activities via the following procedures:

(1) Coordinate Range and Training Area (RTA) Safety. RTA safety is of critical importance; therefore, the responsibility for RTA safety and the personnel charged with providing RTA safety oversight are inherently Governmental in nature (Government supervision is required). Safety regulations contained in references (b), (c), and local directives will be strictly enforced. Range safety personnel will be trained in accordance with applicable orders, publications and local directives; and assigned in writing prior to assuming RTA responsibilities.

(2) Coordinate Emergency Response. The RCO shall develop, publish, and coordinate procedures for RTA medical evacuation and response management. Range control must be notified immediately in the event of an aircraft mishap or medical emergency occurring within assigned RTAs regardless of severity per the local mishap plan.

(3) Coordinate Explosive Ordnance Disposal Response. The RCO coordinates procedures for routine as well as emergency Explosive Ordnance Disposal (EOD) requirements with EOD and other cognizant agencies.

(4) Conduct Training Mishap Investigations. The RCO will participate in the investigation of all training-related mishaps as the installation range safety subject matter expert. Guidance concerning investigations and reporting accidents and incidents is contained in references (b) and (c). The RCO will provide all requested mishap related records (range controller statements, voice recording transcripts, etc.) to mishap boards as required. The format for making voice recording copies and transcripts is provided in Appendix D.

(5) Provide and Conduct Training. As part of the overall installation range safety program, the RCO shall establish and provide a training and certification program for range Officers-in-Charge (OICs) and Range Safety Officers (RSOs) regarding the conduct of training and RTA procedures. The RCO may revoke or suspend the RTA complex privileges or range OIC/RSO certification of any person, organization, agency, or club that willfully violates established policy or whose conduct is incompatible with the safe use of installation training facilities.

(6) Provide Personnel Briefs. The RCO shall conduct briefs for RTA evolutions with range OICs, RSOs, tactical air control agencies, unit air officers and command representatives, as appropriate.

(7) Conduct Inspections. RCO will ensure the range safety specialists conduct random inspections of RTAs to confirm strict adherence to range safety regulations, ensure area policing is performed, and identify required maintenance. Range safety personnel will conduct evaluations of operational risk assessments to mitigate the risks associated with installation RTAs. Safety violations or other discrepancies will be reported to range control supervisory personnel for appropriate corrective action and coordination.

(8) Enforce Occupational Health and Industrial Hygiene Regulations. Occupational health and industrial hygiene regulations germane to installation RTAs must be implemented and enforced.

(9) Certify and Recertify Ranges. Reference (g) directs the certification and re-certification of Marine Corps ranges and range control facilities in order to establish and maintain standard range safety and operational procedures, and thereby enhance the RTA support to the operating forces and other using organizations. The installation commander is responsible for the certification and re-certification of the installation RTAs. The installation RCO will normally perform this function in accordance with reference (g).

(10) Develop and Publish Range and Training Area Regulations. RTA Regulations will be published to ensure the safe, efficient, and

effective operation of RTAs. RTA regulations will be developed using the CG MCCDC (C465) standard format per Appendix E.

(a) Procedures for the safe conduct of military training in the RTAs (e.g., control and coordination of training facilities, airspace management, environmental stewardship, communication requirements, accident reporting, firefighting, munitions handling, medical support, severe weather condition procedures, and maintenance responsibilities) in addition to any local considerations.

(b) RCF organization, mission, tasks, and billet descriptions.

(c) Procedures for equipment use, back-up equipment capability and operation, and procedures to identify and report equipment malfunctions.

(d) The qualifications and requirements for the installation OIC/RSO course. The OIC/RSO course must qualify personnel in range operations, safety, and local procedural requirements, to include emergency medical procedures, communication procedures, and environmental considerations.

(e) The responsibilities of range OICs, RSOs, and unit commanders with regard to RTA matters. These must be explicit and in accordance with reference (c).

(f) The minimum medical personnel supervisory requirements for RTA usage. For live fire training, a qualified medical person is a military graduate from the Medical Education and Training Campus at the DoD Healthcare Education Facility, Fort Sam Houston, Texas (e.g., Navy Corpsman or Army Medic), or a civilian possessing a current Emergency Medical Technician, or higher certification from an approved U.S. Department of Transportation National Emergency Medical Services Education Standards Curricula and recognized by and up-to-date in the resident State.

(g) Ammunition malfunction reporting and disposition procedures of all ordnance, both air and ground, specific to the target(s) engaged.

(h) The conduct of overhead, flanking, and close air support live-fire with troops.

(i) Special instructions for Marine Corps RTA usage by other U.S. Services and Federal, State, local agencies and foreign military units.

(j) Educational programs to ensure that military personnel, their family members, civilian employees, and the general

public are aware of potential hazards associated with RTAs such as UXO.

(k) Cyclical inspection and maintenance program for RTAs and associated facilities.

(l) Recreational shooting, hunting, fishing, forestry, and land rehabilitation guidelines. Recreational activities shall not take place in high hazard impact areas.

(m) RTA regulations will be reviewed annually. A copy of the current regulations will be forwarded to CG MCCDC (C465) and posted within MCRTAMS.

(11) Develop and Publish Range Control Facility Manual. The Range Control Facility Manual (FacMan) will be developed in accordance with Appendix F. The Range Control FacMan will be published to ensure safe and efficient business practice of the RCF.

(a) The Range Control FacMan will include policies and procedures for the day-to-day operations of the RCF (i.e., hours of operations, internal staffing requirements, emergency procedures, organization, qualification standards, personal conduct, proficiency training, etc.).

(b) The RCO will publish the Range Control FacMac and ensure it remains relevant and current. CG, MCCDC (C465) will provide technical assistance for initial development of the Range Control FacMan.

(12) Promote Environmental Sustainability. Per reference (n), coordinate with the installation environmental office. Range regulations must incorporate guidance regarding RTA environmental requirements, procedures, and considerations.

(13) Promote Encroachment Management. Per reference (o), coordinate with the installation Community Plans and Liaison Office to assist in the prevention and mitigation of factors that degrade or have the potential to degrade RTA mission capabilities and/or capacities.

b. Control. Range control personnel regulate RTA activities through the following procedures:

(1) Schedule. As discussed in Chapter 4, range operations personnel, using RFMSS, will receive, process, integrate, prioritize, coordinate, de-conflict, and approve RTA training requests from installation and tenant organizations, as well as those received from external military commands, and Federal, State, and local agencies. Approved training requests will be published in an installation range schedule.

(2) Publish Notices. The RCO shall publish timely notices to airmen, mariners, and the public as required to support safe RTA operations. Particular attention will be given to operations scheduled to occur outside the times of use published in aeronautical charts and implementing regulations. Advance coordination will be accomplished with the nearest military airfield operations flight planning office or FAA Flight Service Station, media outlet, and Coast Guard station as established for each area of responsibility.

(3) Operate the Fire Desk. The fire desk is the hub of range control operations. The fire desk coordinates the release, activation and deactivation of RTA airspace with the controlling agency and/or adjacent control facilities, admits scheduled units onto the appropriate ranges, authorizes personnel and aircraft movement within RTAs and provides real-time services to deconflict multiple, simultaneous training activities. The fire desk also coordinates RTA training operations status, tracks all RTA incidents, initiates and coordinates emergency response, records RTA usage in RFMSS, clears and monitors any down-range personnel, dispatches range safety personnel/inspectors as needed, and alerts range control supervisory personnel of emergency or other situations as determined by the RCO.

(4) Management of Airspace. Airspace is a critical component of Marine Corps RTAs. As the volume of air traffic in the NAS grows, pressure to increase the availability of airspace for military operations to civil and commercial users will grow. Through effective airspace management, applicable directives and appropriate federal regulations, Marine Corps bases/stations are able to retain, expand, and create training airspace vital for mission accomplishment.

(a) The FAA administers and designates airspace for military operations within the NAS to support MAGTF training. Airspace for military operations includes SAA, SUA, Air Traffic Control Assigned Airspace (ATCAA), Military Training Routes and Temporary Flight Restrictions.

1. SUA is airspace of defined dimensions wherein activities must be contained because of their nature, or wherein limitations may be imposed upon aircraft operations that are not a part of those activities.

2. ATCAAs have defined vertical/lateral limits established by ATC for the purpose of separating military training activities from other instrument flight rule traffic. ATCAA is designed and established in controlled airspace normally above 18,000 feet mean sea level to accommodate daily training missions and planned exercises.

3. Military Training Routes are aerial corridors across the United States in which military aircraft can operate below

10,000 feet faster than the maximum safe speed of 250 knots that all other aircraft are restricted to while operating below 10,000 feet

4. A Temporary Flight Restriction is a restriction to flight imposed in order to protect persons and property in the air or on the surface from an existing or imminent flight associated hazard; provide a safe environment for the operation of disaster relief aircraft; prevent an unsafe congestion of sightseeing aircraft above an incident; protect the President, Vice President, or other public figures; and, provide a safe environment for space agency operations.

(b) Airspace is a finite resource and, as such, must be managed in such a manner as to permit use by multiple agencies with minimal interference and maximum safety. Reference (m) provides technical information addressing DON airspace management processes and procedures. While OPNAVINSTs such as reference (m) that do not include a corresponding Marine Corps order designation are not binding on the Marine Corps, a strong partnership among U.S. Navy and Marine Corps airspace management stakeholders is essential to the preservation and enhancement of DON airspace for military operations. Implementation of those portions of reference (m) that ensure effective collaboration among all DON stakeholders on airspace matters is a key component of effective DON airspace management. Consequently, reference (m) shall be implemented by Marine Corps airspace managers based upon the following amplifying guidance.

1. The Commandant of the Marine Corps and the CNO are equal partners in all DON airspace matters. Portions of reference (m) may imply a hierarchy of CNO over CMC for all DON airspace matters; however, CMC is the final authority for Marine Corps airspace matters and CNO presides over U.S. Navy airspace matters. For DON airspace matters impacting the Marine Corps, CNO/N980A/Naval Airspace and Air Traffic Control Standards and Evaluation Agency (NAATSEA) serves as the DON "executive agent" defined as a position of coordination on DON airspace matters in support of the U.S. Navy and Marine Corps, to speak with one voice and advocate externally as a single DON voice when there is service agreement and promote discrete service positions when they differ.

2. If Regional Airspace Coordinators (RAC) and/or Command Airspace Liaison Officers (CALO) receive communications, information and/or tasking directly from NAATSEA related in any way to SAA, RACs/CALOs shall forward all NAATSEA communications to the Marine Corps Airspace Management WIPT for review and approval before taking any action.

3. RAC authority to task installation commands will be executed as defined by regional/service level training installations commanders.

4. Marine Corps range priorities are established in accordance with this Order and by local installation commanders.

5. Marine Corps CALOs will be designated by the installation commander with assigned/delegated special use airspace based upon the commander's assessment of the individual's suitability to perform CALO duties.

6. Coordination supporting the establishment, modification or revocation of Marine Corps SAA must be accomplished through the RAC supporting the Marine Corps base/air station that is affected, the appropriate Marine Force Command and the Marine Corps Airspace Management ORB/WIPT.

7. The Marine Corps Airspace Management ORB/WIPT serves as the airspace management policy and procedures exemption authority for all Marine Corps airspace matters and DON airspace matters impacting the Marine Corps.

8. Marine Corps execution requirements and responsibilities for participation in the FAA Obstruction Evaluation/Airport Airspace Analysis Program and DON encroachment management programs for the assessment of mission impacts associated with renewable energy development will be as prescribed in reference (o) and other applicable Marine Corps directives.

9. Marine Corps SUA annual utilization reports shall be prepared per in accordance with reference (p). The SUA annual utilization report Part B reporting requirements outlined in reference (m) do not apply to the Marine Corps.

(c) For conflicts between reference (m) and this Order or other Marine Corps orders and directives, Marine Corps orders and directives take precedence.

(d) The following are responsibilities for installation range complexes with airspace for military operations.

1. Execute the requirements of the using agency as described in applicable federal regulations. In addition, the RCO will also serve as the CALO unless the installation also has organic air traffic control assets. In that case, the installation commander will determine whether the Air Traffic Control Officer or the RCO will be designated as the CALO. The CALO will coordinate with appropriate airspace agencies to effect safe and efficient RTA operations. The RCO must carefully distinguish the responsibilities of the using agency (requirements identification, management, and operation/control) from that of the CALO (planning and administration) to ensure compliance with applicable directives.

2. Publish specific and comprehensive RTA information.

3. Establish, publish, and manage airspace control features such as holding areas, battle positions, landing zones, drop zones, and control points designed to safely integrate military operations and assist in the containment of aviation operations within SUA boundaries.

4. Ensure all aircrews, tactical controllers and UAS operators receive appropriate installation safety briefs prior to operating within assigned airspace.

5. Establish and publish no-fly areas for aircraft, minimum altitudes for flying over civilian residential areas, hazards to navigation, and other local airspace restrictions in coordination with the appropriate ATC facility, if required.

6. Establish and publish weather restrictions for air, ground and water operations within the RTA.

7. Develop and publish procedures and control measures to integrate close air and simulated close air support, aerial lasing, UAS, and forward arming and refueling point operations.

8. Develop and publish procedures and control measures to contain aviation ordnance operations within restricted area airspace. Provide a listing of authorized munitions for each RTA.

9. In addition to complying with procedures that are contained within SUA LOP/LOAs with Controlling Agencies, develop and publish procedures that capture violations of the SUA by non-participating aircraft and Unmanned Aircraft Systems (UAS).

(5) Control Movement and Access. Range Control will monitor and control access of personnel, vehicles, and aircraft activities within training areas. Unless otherwise specified in installation range regulations, no personnel or aircraft will enter a RTA without prior approval of range control; and all personnel traveling within a RTA will maintain communications with range control. Whenever unauthorized personnel or aircraft threaten to enter or are discovered within an active RTA complex, immediate action will be taken to halt fire and maneuver operations, coordinate with the controlling agency as required and restore operational safety.

(6) Provide and Enforce RTA Access. Range control measures and other RTA regulations are provided for the safety of personnel and protection of government property. Through regular vehicle, boat, and aerial patrols along with surface and aerial surveillance systems

range control personnel will ensure compliance with applicable measures and regulations.

(7) Coordinate Range and Training Area (RTA) Communications and Data Requirements

(a) RTA communication requires a common link for all training evolutions. RTA controllers must be able to establish and maintain communications between the RCF, emergency services, the appropriate SUA controlling agency, and using units.

(b) Training units must have positive two-way communication with range control at all times. Each training unit will establish and maintain a primary and alternate means of communication. Loss of communications with range control will result in an immediate cessation of range operations.

(c) Procedures will be established and published pertaining to the loss of communications between the RCF, ground units, aviation units and tactical control agencies within the installation's RTA. All range control IT equipment and systems (e.g., radio circuits, interphones, telephones, radar video, IRSS, RFMSS, and range communications equipment) shall have a continuous uninterrupted power supply coupled with emergency generators or other alternate power source. Per reference (q), failure to use automatic voltage control could result in damage to the equipment.

(d) The RCO will coordinate with the installation communications directorate, HQMC C5I, COMMCICOM and CG MCCDC (C465) to ensure the RCF/SPPN reporting requirements are met. Specific duties and responsibilities are contained in a series of HQMC C4 General Administration Messages DTG 091514ZSEP16 and 041332ZMAY16 that provide guidance on data center reporting procedures.

(8) Provide and Coordinate Radar Surveillance. Range control facilities with RTAs that include airspace for military operations will incorporate a radar surveillance capability displayed using the IRSS. IRSS provides radar and other sensor supported displays to monitor training airspace and permit a real-time tracking capability of aircraft operating within restricted airspace, to include authorized non-participating aircraft and unauthorized intruders. Range controllers using IRSS are authorized to provide containment and other safety advisories to aircraft via traffic and boundary alerts.

(9) Coordinate Research, Development, Test & Evaluation Evolutions. Research, Development, Test & Evaluation evolutions on RTAs will be conducted per established range safety regulations.

(10) Coordinate Special Events. Unit or command-sponsored RTA events that include civilian personnel must be approved and coordinated through the installation commander. The RCO will schedule

the approved event on an available RTA and ensure that unit representatives are aware of safety and OIC/RSO requirements. Police of the RTA is the responsibility of the using organization. Safety inspectors from range control may conduct inspections of special events to monitor the safe use, police, and maintenance of the RTAs.

c. Range Maintenance Coordination. The following additional maintenance functions and tasks are integral to an effective RTA management program that supports a safe training environment:

a. Coordinate Operational Range Clearance. Installations will submit prioritized ORC projects via the MCRTAMS portal in accordance with established processes for consolidation, validation, funding consideration and contracted operations. With accepted projects, Installation commanders will also establish procedures and a scheduled period for these contracted range clearance operations to permit the sustainable safe use of operational ranges for their intended purpose.

b. Coordinate Unexploded Ordnance (UXO) Clearance. All UXO must be reported to range control, with the exact location identified. Range control personnel will instruct individuals who find UXO to NOT DISTURB IT IN ANY MANNER. UXO clearance will then be coordinated with EOD personnel per procedures established in the RCF SOP and a permanent record established with range control in accordance with reference (e).

d. Coordinate National Environmental Policy Act (NEPA) Compliance and Encroachment Management. RCO will coordinate applicable installation Environmental Compliance Inspections or surveys in support of NEPA compliance per reference (n). The RCO also will promote installation encroachment management policies and procedures.

e. Coordinate Installation Input to the Range Requirements Process

(1) Per Chapter 3, installation range managers are an integral part of the range requirements process. Installation range managers should work closely with the operating forces and other key stakeholders to ensure that training devices and targetry on ranges will support training for both collective and individual training standards and are emplaced to provide the most realistic training possible. Targets and battlefield effects simulators should be operated and maintained as part of the plan for an aggressive, free-playing opposition force to simulate the battlefield (i.e., shoot-back capability, feedback of fires, threat emitters, and visual threats/effects). Installations will keep CG MCCDC (C465) and COMMCICOM apprised of new requirements for training systems identified by the operating forces.

(2) Installations are responsible for publishing guidance on range consumables to include plastic and paper targets that support range training.

f. Provide and Maintain Range Boundary Signs, Fences, Cameras, Gates, Etc. All training areas will be clearly marked, fenced, and gated in accordance with reference (c). Range signs, warnings, and markers will be provided on all ranges to indicate firing lines, lateral limits, and range characteristics. Additional signs, self-explanatory in nature, announcing specific instructions, or precautionary measures in the native language will be posted on certain ranges as deemed necessary by the RCO. Fences and gates will be placed to restrict down-range or lateral movement into danger areas; cameras may be used to monitor such movement. The RCO will inspect and ensure the above items are established and maintained.

g. Coordinate Range Maintenance. RCOs will identify maintenance requirements through an aggressive inspection process and coordinate the scheduling of cyclical RTA maintenance.

h. Ensure RTA airspace requirements are reflected in the annual Regional Airspace Plan. Coordinate with CG MCDCC (C465) and COMMCICOM prior to submission to ensure forecasted MAGTF training requirements are included.

5. Range Control Facility Personnel. RCF personnel have the critical responsibility of overseeing the safe integration/de-confliction of simultaneous aviation and ground live-fire and non-live-fire evolutions. Though contract support personnel may be utilized in some positions, the core of these duties are inherently governmental in nature and, as such, always require appropriate governmental supervision.

a. Range Control Manning. The following billets are appropriate for a RCF supporting a major range complex. The number of personnel and rank/grade required to fill these billets will be determined by the installation commander based on local/regional requirements, complexity of operations and training volume/throughput.

(1) Range Control Officer. The RCO, typically a civil servant grade GS13/14 or military equivalent, provides overall supervision of the range organization and is directly responsible for the safe operation of RTAs.

(2) Deputy Range Control Officer. The deputy RCO, typically a civil servant grade GS12/13 or military equivalent, assists the RCO in the performance of his/her daily duties and can assume the RCO billet in the case of that individual’s absence.

(3) Range Operations Officer. The range operations officer, typically a civil servant grade GS11/12 or military equivalent, is

responsible to the RCO for the daily plans, schedules, coordination and operation of installation RTAs.

(4) Range Safety Officer. The installation RSO, typically a civil servant grade GS11/12 or military equivalent, is responsible to the RCO for the installation range safety program.

(5) Range Safety Specialists/Inspectors. Range safety specialists/inspectors, typically civil servants grade GS07/09/11, military equivalent, or support contractor will assist the RSO in the execution of the range safety program.

(6) Senior Fire Desk Operator/Range Controller Supervisor. senior fire desk operator/range controller supervisors, typically civil servants grades GS11-12, military equivalent, who supervise fire desk operations, are qualified in all range control operating positions and are on duty at all times during range training activities.

(7) Fire Desk Operators/Range Controllers. FDOs, also known as range controllers, are typically civil servants grades GS09-11, military equivalent, or support contractor who perform the duties listed in paragraph 5003.2c.

(8) Range Facility Management Support System (RFMSS) Functional Administrator. The RFMSS functional administrator, typically a civil servant grade GS09-11, military equivalent, or support contractor who maintains the system network and ensures connectivity for the RCF and users.

(9) Schedulers. RTA schedulers, typically a civil servant grade GS07-09, military equivalent, or support contractor who performs the RTA scheduling functions.

b. Range Control Personnel Certification Requirements. Military and government/contracted civilian personnel performing duties as range controllers shall be certified as having completed applicable DoD and local training programs. Local certification standards establish the minimum knowledge and performance standards for each range control position. The RCO shall publish certification standards via the FacMan. Personnel should be evaluated at least annually on each operating position qualified to ensure they maintain the skills and competency to perform duties effectively and safely. Appendix G provides an example of local certification standards for range controllers/fire desk operators. In addition to range controllers/fire desk operators; the range operations officer, range safety officer, range safety specialists, and range schedulers shall complete applicable DoD and local training programs and be certified as demonstrating the minimum knowledge and performance standards required for each RCF position.

c. Training Jacket. A training jacket will be established and maintained for every individual providing range control services. Each jacket shall include the individual's training record, qualification level, written tests, certification letters, de-certification and re-certification letters, annual certification, medical and disciplinary actions if they impacted performance of duties, and any other items deemed appropriate by RTA managers. Training jackets will be kept on file at all times while the individual is assigned to the RCF, and retained for one year after his or her reassignment. Training jacket format is described in Appendix H.

d. Human Performance and Medical Qualifications. Operational readiness and safety are enhanced by ensuring that range control personnel achieve and maintain an optimal state of health. Medical conditions that reduce this state can decrease performance and increase mishap potential. RTA managers will ensure that personnel are fit to perform their responsibilities.

(1) Factors Affecting Personnel Readiness. Numerous factors affect the readiness of range control personnel; appropriate procedures must be established to ensure they do not reduce mission readiness. When, in the judgment of supervisory personnel, an individual's physical or mental health appears questionable, he or she shall be relieved of duties and referred to appropriate medical authority for evaluation. Personnel suspended or relieved from performing range control duties shall not control or supervise the control of range operations from any position in the facility until restored to full duty.

(2) Physical Qualification and Examination. Personnel performing duties as FDO/range controllers shall undergo annual medical examinations by completion of Office of Management and Budget Optional Form 178 or similar record by competent medical authority. Coordination for medical support to accomplish these physicals will be accomplished at the installation level. Installation commanders of these facilities may also deem it necessary that other range control personnel undergo annual medical examinations. Physical qualification and examinations should be arranged and conducted at the installation medical facility whenever possible. RTA managers shall suspend from range control duties any personnel whose physical impairment might impact their ability to perform satisfactorily.

(3) Use of Intoxicating Drugs and Beverages. Range control personnel shall not perform control functions or directly supervise personnel performing these functions within 12 hours after consuming intoxicating beverages. Any range control personnel suspected of using alcohol while in a duty status or reporting for duty under the influence of alcohol shall be suspended from duties and referred to competent military medical authority for evaluation. Range control personnel shall not perform duties while under the influence of any

drug and/or medication likely to affect the alertness, judgment, vision, equilibrium, or state of consciousness.

(4) Drug Abuse. Any range control personnel charged with violating Federal, State, or local statutes; U.S. Navy or Marine Corps regulations relating to the growing, processing, manufacture, sale, disposition, possession, use, transportation, or importation of narcotic drugs, marijuana, and depressant or stimulant drugs or substances shall be immediately suspended and reassigned to non-controller duties. This suspension shall remain in effect pending disposition of the charges. Any range control personnel identified as a drug abuser shall have their range control certifications permanently revoked. The disposition of any adverse employment action against a range control civilian employee identified as a drug abuser will be coordinated with counsel and managed in accordance with civil service guidelines.

(5) Reassignment of Personnel. Personnel charged with violating the law may be temporarily suspended from duties pending disposition of charges. The disposition of adverse employment actions against any range control civilian employee shall be managed in accordance with civil service guidelines. RTA managers will coordinate with installation commanders to request the reassignment of any Marine or civilian who, through misconduct, substance abuse, physical condition, or documented sub-standard performance, is unsuited for range control responsibilities as outlined in this Order. The reassignment of any range control civilian employee for misconduct must be coordinated with counsel.

e. Work Loads. RCF operational requirements will determine normal working periods and work schedules to ensure safe and efficient operations. In an emergency or contingency situation, normal working periods may be extended. Except in an emergency, personnel should be relieved of all duties for 24 consecutive hours at least once during each 7 consecutive days. Personnel serving in FDO/range controllers should not serve or be required to serve for more than 10 consecutive hours, or for more than 10 hours during a period of 24 consecutive hours, unless he or she has had a rest period of at least 8 hours at or before the end of the 10 hours of duty.

Appendix A

Glossary of Acronyms and Abbreviations

Abbreviation	Meaning
ACOR	Assistant Contracting Officers Representative
A-EMT	Emergency Medical Technician
AIRS	Automated Inspection Reporting System
CMC APC	CMC Acquisition Professional Community
HQMC APX	HQMC Aviation Command and Control Branch
ATC	Air Traffic Control
ATCAA	Air Traffic Control Assigned Airspace
BOS	Base Operating Support
CALO	Command Airspace Liaison Officer
CEHND	U.S. Army Corps of Engineers Huntsville Division
CG MCCDC (C465)	Range and Training Area Management
CG MCCDC	Commanding General, Marine Corps Combat Development Command
CG TECOM	Commanding General, Training and Education Command
CMWG	Configuration Management Working Group
CNO	Chief of Naval Operations
COMMCICOM	Commander, Marine Corps Installations Command
COR	Contracting Officers Representative
DC AVN	Deputy Commandant, Aviation
DC CD&I	Deputy Commandant, Combat Development and Integration
DC I&L	Deputy Commandant, Installations and Logistics
DC PP&O	Deputy Commandant, Plans, Policies and Operations
DC P&R	Deputy Commandant, Programs and Resources
DoD	Department of Defense
DoDI	Department of Defense Instruction
DON	Department of the Navy
DRRS	Defense Readiness Reporting System
ECE	Environmental Compliance Evaluation
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
FAA	Federal Aviation Administration
FACMAN	Facility Manual
FDO	Fire Desk Operator (FDO/Range Controller are one in the same and will be used interchangeably throughout this Order)
FSRM	Facilities Sustainment Restoration Modernization
FYDP	Future Years Defense Plan
GAO	Government Accountability Office
GIS	Geospatial Information System
GRSP	Ground Range Sustainment Program
HQMC	Headquarters Marine Corps
iNFADS	Internet Navy Facilities Data Asset Store
IRSAG	International Range Safety Advisory Group

IRSS	Integrated Range Status System
JCIDS	Joint Capabilities Integration Development System
LOA	Letter of Agreement
LOP	Letter of Procedure
LRMT	Laser Range Management Tool
M1	Repair up to $300,000
M2	Repair $300,000 to $5,000,000
MAGTF	Marine Air-Ground Task Force
MARFOR	Marine Forces
MARFORCOM	Marine Corps Forces Command
MARFORPAC	Marine Forces, Pacific
MCCDC	Marine Corps Combat Development Command
MCICOM	Marine Corps Installations Command
MCIEast	Marine Corps Installations East
MCIPAC	Marine Corps Installations Pacific
MCIWest	Marine Corps Installations West
MCPC	Marine Corps Program Code
MCRP	Marine Corps Reference Publication
MCRTAMS	Marine Corps Range and Training Area Management System
MCRWG	Mission Capable Ranges Working Group
MCSC	Marine Corps Systems Command
MCTAC	Marine Corps Training Airspace Coordinator
MIDAS	Munitions Items Disposition Action System
MILCON	Military Construction
MOUT	Military Operations on Urban Terrain
MROC	Marine Requirements Oversight Council
NAS	National Airspace System
NATO	North Atlantic Treaty Organization
NAVFACENGCOM	Naval Facilities Engineering Command
NEPA	National Environmental Policy Act
NOSSA	Naval Ordnance Safety and Security Activity
NRSWG	NATO Range Safety Working Group
OIC	Officer in Charge
OIPT	Overarching Integrated Process Team
O&MMC	Operations & Maintenance, Marine Corps
OPNAV	Office of the Chief of Naval Operations
ORAH	On-Range Ammunition Handling
ORB	Operational Review Board
ORC	Operational Range Clearance
OSD	Office of the Secretary of Defense
PCO	Primary Contracting Officer
PEB	Program Evaluation Board
PLI	Position Location Information
PMTRASYS	Program Manager, Training Systems
POM	Program Objective Memoranda
PSDZ	Probabilistic Surface Danger Zone
R1	Construction up to $100,000
R2	Construction $100,000 to $750,000

RCA	Range Condition Assessments
RCF	Range Control Facility
RCMP	Range Complex Management Plan
RCO	Range Control Officer
RCT	Operational Range Clearance Tool
RDT	Range Design Tool
RFMSS	Range Facility Management Scheduling System
RM/T	Range Modernization and Transformation Program
RMTK	Range Managers Tool Kit
ROS	Range Operating Support
RSO	Range Safety Officer
RTAs	Range and Training Areas
RTS	Range Training Systems
RTSP	RTS Program
RTSS	Range Training System Support
RTVS	RFMSS Training Visibility System
SAA	Special Activity Airspace
SABRS	Standard Accounting Budgeting and Reporting System
SACON	Shock Absorbing Concrete
SCR	System Change Request
SDZ	Surface Danger Zone
SOUM	Safety of Use Memorandum
SPPN	Special Purpose Processing Node
SRAM	System Replacement and Modernization Program
SRR	Sustainable Ranges Report
SUA	Special Use Airspace
TACP	Tactical Air Control Party
TECOM	Training and Education Command
TEPS	Training Events Planning System
TLO	Technical Liaison Officer
UAS	Unmanned Aircraft System
UPL	Unfunded Program List
UXO	Unexploded Ordnance
WDZ	Weapon Danger Zone
WIPT	Working Integrated Process Team
WTI	Weapons and Tactics Instructor

Appendix B

Marine Corps Range and Training Area Management System (MCRTAMS) Overview

MCRTAMS contains the following data, information, and tools:

1. Range Investment and Sustainment Project and Program Data

a. MCRTAMS provides a portal for submission by commanders and staffs of requests for RTA Management Program requirements. Commanders and their staffs are to submit requests for range requirements via MCRTAMS in accordance with the processes and procedures contained in Chapter 3 of this Order. The RTS portal is used for submission, prioritization, status tracking, and official documentation of Range Training Systems projects. The GRSP portal is used for submission, prioritization, status tracking, and official documentation of Ground Range Sustainment Program projects.

b. MCRTAMS contains information on the execution of MILCON projects in support of range development and sustainment, including a copy of the Military Construction Planning and Programming Guide. Requests for MILCON for range development and sustainment are to be made via MCICOM in accordance with applicable Orders and Directives. Commanders and their staffs must ensure that any requests for MILCON for range development and sustainment are coordinated with the RTA Management Program in accordance with this Order.

c. MCRTAMS will maintain and provide to authorized users programming information relating to the programs executed or managed by the RTA Management Program.

2. Unexploded Ordnance (UXO)/Munitions. MCRTAMS provides links to MARCORSYSCOM's Ground Ammunition Knowledge Management Portal and DoD UXO websites for pertinent information on ammunition and the latest UXO detection and clearance technologies.

3. Range Managers Toolkit (RMTK)

a. The RMTK is a framework of interrelated software or Web-based tools that interface with installation-level geospatial data managed under the GeoFidelis Program, to assist Range Managers, Range Control staff, Training Support staff and operating forces in operating safe and efficient range complexes and supporting the design and execution of training. Certain RMTK Tools are hosted as Web-enabled applications on MCRTAMS found at https://rtam.tecom.usmc.mil/rm/Safety.asp. The RMTK also assists RTA Management Program and Range Managers in their efforts to modernize range resources, operate range complexes, and manage training lands. The CG MCCDC (C465) will develop, field, and maintain the RMTK, in a manner consistent with Orders and Directives applicable to range

safety and range planning, and will provide training and training aids to assist range managers in use of the RMTK.

b. The RMTK includes the following tools:

(1) Surface Danger Zone (SDZ) Tool. SDZs define the ground and airspace designated within a range complex for vertical and lateral containment of projectiles, fragments, debris and components resulting from ground-level firing launching, or detonation of weapons and explosives. The SDZ Tool generates SDZs in accordance with reference (c).

(2) Weapon Danger Zone (WDZ) Tool. WDZs define the ground and airspace designated within a range complex for vertical and lateral containment of projectiles, fragments, debris and components resulting from the firing launching, or detonation of aviation-delivered ordnance. The WDZ Tool generates WDZs in accordance with reference (c).

(3) Laser Range Management Tool (LRMT). The LRMT supports development of Laser Danger Zones and the certification of operational training ranges. The LRMT also allows users to manage the inherent risks associated with ground and airborne laser training on operational ranges.

(4) Range-related Noise Tool. Range planning tool that assists range planners to mitigate the dispersion of range-related noise. The Noise Tool determines noise contours for a given range based on weapons and munitions employed, firing locations, target locations, and other factors, utilizing modeled noise contours associated with peak noise for a single firing event.

(5) On-Range Ammunition Handling (ORAH) Tool. The ORAH Tool assists range planners to identify acceptable locations of temporary storage of ammunition on ranges. The ORAH Tool depicts the Explosive Danger Area associated with ammunition storage locations, based on standards set forth in MCO P8020.10A.

(6) Explosive Training Range (ETR) Tool. The RMTK provides the ETR Tool to generate Explosive Danger Areas required to safely conduct training with explosives and demolitions. The ETR Tool depicts Explosive Danger Area based on standards set forth in MCO P8020.10A.

(7) Operational Range Clearance Tool (RCT). The RCT is a planning tool designed to interface with RFMSS and to incorporate the Munitions Items Disposition Action System (MIDAS) database. The RCT provides the ability to monitor munitions expenditures and assist with the projected ORC requirements for range locations of accumulations of debris, inert ordnance, and UXO, in support of planning for range clearance efforts based on standards set forth in reference (c).

(8) Range Design Tool (RDT). The RDT supports assessment in a GIS environment of feasibility for siting of ranges, and supports the design of specific ranges and suites of ranges at specific locations within a range complex. The RDT incorporates criteria and standards from multiple inter-service sources relating to range design, including Engineers Manuals and Training Circulars. The RDT provides, in a single location, the data and information (including notional range designs and specifications, photographs, and range components), and the ability to incorporate outputs from other modules of the RMTK (such as SDZs and WDZs) to assist the user with range design tasks.

(9) Training Events Planning System (TEPS). TEPS supports planning of training events and exercises, by displaying in three dimensions the SDZs, WDZs, and LSDZs associated with user-designated training events.

(10) Probabilistic Surface Danger Zone Tool (PSDZ). The PSDZ Tool is an institutional-level tool used by the Range Safety Section of CG MCCDC (C465). It assists in the determination of the validity of installation range deviations by using a number of base or station-specific factors to accurately depict mitigation effects provided by terrain or structures. The probabilistic methodology relies on parameters provided by specific firing and target points, terrain, ricochet data for the munitions fired, and firing conditions. The PSDZ maintains the 1:1,000,000 chance of hazardous fragment escapement methodology and, in addition, determines the prospected shot fall after contact with terrain. The PSDZ Tool has incorporated specific probabilistic methodologies developed under the auspices of the NATO International Range Safety Advisory Group and within the multi-national Technical Cooperation Program, Weapons, Range Safety Analysis Techniques and Tools.

Appendix C

Range Facility Management Support System (RFMSS)

1. RFMSS is the approved Marine Corps RTA scheduling system of record and will be used to assist Range Control with managing RTA operations by automating the scheduling process and facilitating fire desk operations at all Marine Corps installations.

2. Scheduling. The RFMSS schedule function provides the ability for users remote from the RCF to determine availability of RTA facilities, submit requests for use of the facilities, and determine the status of previously submitted RTA requests. Users can submit individual event or multiple facility event requests as well as weapon, ammunition, vehicle, target requirements and a variety of dates. A range request template can be made for recurring requests in order to save time and effort on future submissions. Mandatory entries are colored red and the user cannot advance to the next screen until all mandatory fields are completed.

a. The request processing function provides the ability for range control personnel to approve, process, and track RTA requests; resolve scheduling, safety, or environmental conflicts.

b. The conflict tab of the request form identifies scheduling, safety, and environmental conflicts associated with the RTA request.

(1) The scheduling conflict window lists other requests that are scheduled for a specific RTA for that day. RFMSS offers a co-use agreement feature that allows an organization to request the use of a RTA already committed to another unit. The unit with the reservation may approve the co-use agreement, and the range control schedule office has final approval authority for such requests.

(2) The safety conflict window reflects all safety conflicts resulting from the RTA request.

(3) The environmental conflict window lists environmental conflicts posed by the RTA request.

c. The restriction tab of the request form enables the user to view any waivers, prerequisites, limitations, and equipment associated with a particular RTA:

(1) Limitations are any restrictions that restrict the RTA from being operated at full capacity (e.g., limited hours of operation due to noise abatement or ammunition restrictions).

(2) Prerequisites are requirements for users to complete action prior to RTA usage (e.g., attend special briefing or training course).

(3) Waivers are required if special permission is needed to conduct specific types of training (e.g., firefighting training during certain seasons) or use non-DoD ammunition.

3. Fire Desk Operations. RFMSS automates/facilitates the following Fire Desk responsibilities:

a. Authorize scheduled units onto the appropriate RTAs.

b. Monitor RTA training status and activate SUA as required.

c. Clear and track "down-range" personnel and movement.

d. Coordinate and monitor MEDEVACs.

e. Catalog all mishaps.

f. Collect range utilization data.

g. Transmits RTA status changes (occupied, hot, etc.) to IRSS.

4. Reports. RFMSS generates planning, incident, utilization, scheduling, and airspace reports from accumulated RTA data. The utilization reports available from the system include:

a. Facilities Utilization Report.

b. Training Area Utilization Report.

c. Unit Utilization Report.

d. Unit Cancellation Summary Report.

e. Unit No Show Summary Report.

f. Unit vs. Facility Utilization Report.

g. Personnel/Equipment Utilization Report.

h. Total Training Ammunition Usage Report.

i. Hot Time Utilization Report.

j. Hourly Utilization Report.

k. Daily Facility Utilization Report.

l. Airspace Utilization Report.

5. Rand Training Area (RTA) Naming Standards. In order to ensure standardized facility scheduling, usage and reporting, installations'

schedulable facilities within RFMSS shall include coded prefixes by category as follows:

a. Impact Areas: Add "I" to impact areas (example: I-Imp Zulu).

b. Live Fire Ranges (includes numbered ranges, artillery firing areas, mortar firing areas, gun positions, mortar positions, known distance ranges, live fire and maneuver areas, laser target areas): Add "R" to ranges (example: R - AFA 43).

c. Training Areas (includes beaches, FOBs, land navigations, OPs, hike routes, rappel towers, etc.): Add "TS" to training sites (example: TS - FOB Sierra). Add "TA" to training areas (example: TA – Beach Red).

d. Aviation Training Ranges (includes all SUA, ACAs, CALs, DZs, IPs, LZs, VSTOL/LHD Pads, ROZs, OLFs, TERFs), and specific Air-to-ground ranges previously referred to as polygons: Add "A" to airspace/aviation facilities (example: A- LZ Hawk).

e. MOUTs (includes combat towns, Infantry Immersive Trainer): Add "M" to MOUTs (example: M-IIT Zone A).

For those schedulable facilities in RFMSS with multiple uses, use the prefix that aligns with the facility's predominant use.

6. Range and Training Area (RTA) Utilization Accuracy. Accurate usage data regarding RTAs is critical to effective range management. Commanders must ensure that RTA data is fully and consistently captured in RFMSS on an ongoing basis. At a minimum, the following data points must be captured in RFMSS:

a. RTA scheduling, by unit.

b. Dates and times of actual RTA utilization for training.

c. Dates and times RTA is "hot."

d. Dates and times the RTA is scheduled but not used ("no-show").

e. Number of personnel training.

f. Number of vehicles, by type, in training.

g. Number of aircraft, by type, in training.

h. Types of weapons and systems employed in training.

i. Munitions expenditures, by type (DODIC).

j. Dates not available for training and reason not available (e.g., safety, inoperability of targets of systems, scheduled maintenance, fire danger condition, etc.).

7. Installation Range Regulation. Installation Range Regulations must define requirements and processes for using units and range control personnel to capture scheduling and utilization data in RFMSS. At a minimum the using unit must report to Range Control all range/airspace/sea space occupations, departures, changes in firing status, ordnance expenditures, all mishaps and requests for medical support.

8. Range Facility Management Support System (RFMSS) Accounts. To gain access to RFMSS, users must request an account from the RCF RFMSS functional administrator through the Internet address: https://rfmss.belvoir.army.mil. The on screen "Help" link provides step-by-step instructions for each "page" of the RFMSS application. All DoD RFMSS users are required to enable and utilize CAC login. RTA user communities without access to CACs are authorized to utilize log-in and passwords.

9. Range Facility Management Support System (RFMSS) Training Visibility System (RTVS). The RTVS was developed for Reserve units to provide a mapping search engine for locating military training facilities within the proximity of a particular user. Potential users can specify the types of weapons, ammunition, event, and facility desired, and the RTVS will provide the location of all qualifying facilities, directions, additional facility capabilities, and a link to the RFMSS site for facility reservation. RTVS is CAC (only) enabled and is accessed via RTVS links on the Marine Corps RFMSS log-in pages https://rfmss.belvoir.army.mil. RTVS will allow the user to:

a. Search for training locations.

b. Zoom in on training locations.

c. Get directions to a facility.

d. View training facility details.

e. Access RFMSS link to schedule training.

f. View any special scheduling instructions.

g. View a list of all RFMSS sites.

Appendix D

Making Copies/Transcripts of Voice Recordings

Copies of Voice Recordings

1. In order to protect original voice recordings from wear and possible damage, arrangements shall be made to rerecord all pertinent recordings as soon as possible after a mishap occurs within RTAs. This rerecording should include all communications data pertinent to the accident and the time track, when available, from a period of 5 minutes before the initial contact to 5 minutes after the last contact.

2. A voice announcement containing all information normally furnished at the beginning of a transcription (except abbreviations) shall preface the copy or separate portions of the copy if several channels are recorded. In the case of an accident resulting in serious injuries or fatalities or a midair collision involving any type of civil aircraft, two copies shall be made. The first copy will be impounded with the original; the second or working copy will be used in making transcriptions or an analysis of the accident.

3. To make copies of voice recordings:

a. Make an initial rerecording for Range Control Facility (RCF) use in preparing transcriptions or analysis of an incident. Additional copies of voice recordings should be made from the RCF rerecordings, if equipment permits, to minimize replays of the original tape.

b. A voice announcement preceding a rerecording of an original tape shall be made using the format in Figure D-1 as necessary.

c. The rerecording of each position of operation will be preceded by a statement identifying the specific position and the start/stop times of the rerecording in local time.

d. All tape cassettes, reels, and digital recording systems on which rerecordings are prepared shall be clearly identified (i.e., mishap unit identification, mishap date and time, and mishap number if appropriate). Cassette tapes shall have the recorder tabs removed.

e. Conclude the rerecording with the following statement: “This is the end of the rerecording concerning the mishap involving (mishap unit identification).”

4. The individual supervising this operation should include a brief written statement; the original and first copy should identify the contents, specifying the date and time removed from the recorder and recorded.

5. Use a direct electronic connection between playback and rerecording equipment to accomplish this rerecording. Do not use the speaker-to-microphone method in the rerecording process, except at locations where there may be some tape units and belt recorders that have not been adapted for electronic takeoff of sound.

6. Stereo equipment shall be used to produce rerecordings when the capability exists. Time shall be recorded on the right track and pertinent data recorded on the left track. Digital time shall be used when available and shall always be rerecorded on stereo equipment. When stereo capability does not exist, voice time may be recorded simultaneously with other pertinent data on monaural tape. Volume of the voice time shall be adjusted so that pertinent voice transmissions are not blocked out.

7. Two certified rerecordings only of the original recording shall be made. Any additional rerecordings shall be made from a certified copy of the original and shall have a voice announcement preceding the certification indicating the date the rerecording was made and identifying for whom it was made.

8. In accordance with NAVAIR 00-80T-114 Para: 3.4.7.3; Original recordings shall be retained for at least 15 days where the archive media is magnetic tape, and 45 days for locations utilizing STARS or where the archive media is a hard disk.

Transcriptions of Voice Recordings

1. Written transcriptions shall be prepared for all formal mishap/SIR packages and shall contain all recorded communications concerning the subject mishap for a period of 5 minutes before initial contact until 5 minutes after the mishap. Those positions that provided normal services to the mishap unit and did not either (1) work with the unit/aircraft just prior to or at the time of the mishap and/or (2) have no pertinent transmissions can submit a statement certified by RCO stating that "...all services provided (by that position) were normal and there were no pertinent transmissions." A chronological summary of mishap events will accompany the certified statement and will include those services provided by that position.

2. Transcriptions shall be made from the copy of the voice recording rather than from the original, in order to protect the original recordings from wear or damage.

3. The original recording may be used to check the transcription after this recording has been reviewed by the investigators or otherwise released by them. The first page of each transcription shall be on letterhead paper and shall give the following information:

    a. Name of RCF preparing the transcription.

b. Date transcription was certified.

c. Subject of the transcription.

d. Date and period of time covered by the transcription.

e. List of agencies making transmissions together with the standard abbreviation for each agency.

f. Certification in the following form by the person making the transcription (not the RCO unless he/she prepared the transcription).

I HEREBY CERTIFY that the following is a true transcription of the recorded conversations pertaining to the subject mishap:

_____
NAME

_____
TITLE

g. The body of the transcription shall be single-spaced. Each separate contact shall be separate from the next contact by triple spacing.

h. Where transmissions of more than one agency are recorded, each transmission should be prefaced by the abbreviation for the agency for identification purposes. Where breaks occur in the continuity of any particular contact, such breaks will be shown by a series of dashes. When time-announce systems are installed, time entries shall be entered at the beginning of each transmission. When time-announce systems are not available, a remark will be entered in the certification regarding the method of timing used.

g. The transcription shall be verbatim and abbreviations shall not be used. Where numbers are spoken, the number shall be spelled out to indicate the exact manner in which it was spoken. Where the recording is unintelligible, the word “unintelligible” shall be inserted in parentheses in the proper location. Where an interpretation of a garbled word or portion is made, the word or portion interpreted shall be surrounded by parentheses and asterisked. A footnote at the end of the transcription shall be provided as follows: “This portion of the recording is not entirely clear, but this represents the best interpretation possible under the circumstances.” Extensive punctuation should not be used. At the end of the transcript enter “End of Transcript.”

COPIES OF VOICE RECORDINGS

Make an initial rerecording for Range Control Facility (RCF) use in preparing transcriptions or analysis of an incident. Additional copies of voice recordings should be made from the facility rerecordings, if equipment permits, to minimize replays of the original tape.

A voice announcement preceding a rerecording of an original tape shall be made using the following format as necessary.

1. This rerecording is being prepared by _____.
(RCF)

2. The subject concerns mishap occurring with
(installation name)

range and training areas involving _____ on _____ at
(unit identification) (date)

approximately_____.
(local time)

3. The agencies involved in this mishap are _____.
(do not use abbreviations)

4. Positions of operation are recorded in the following sequence _____.
(supervisor, range ground, range air)

5. I hereby certify that the following is a true rerecording of the original transmission pertaining to the

subject mishap. My name is_____and I am at_____
(name) (position title)

at_____.
(RFC)

The rerecording of each position of operation will be preceded by a statement identifying the specific position and the start/stop times of the rerecording in local time.

6. This portion of the rerecording concerns communications at the _____
(RCF position)

during the period _____to _____.
(local time)

All tape cassettes or reels on which rerecordings are prepared shall be clearly identified (i.e., mishap unit identification, mishap date and time, and SIR/mishap number if appropriate). Cassette tapes shall have the recorder tabs removed.

Conclude the rerecording with the following statement:

7. This is the end of the rerecording concerning the mishap involving _____.
(unit identification)

Figure D-1

Appendix E

Format for Range and Training Area Regulations (RTA)

TABLE OF CONTENTS

Appendix F

Format for Installation Range Control Facility Manual

TABLE OF CONTENTS

APPENDIX O RANGE CONTROL FACILITY SAR CHECKLIST
APPENDIX P BOMB THREAT CHECKLIST
APPENDIX Q DAILY RECORD OF FACILITY OPERATIONS

Appendix G

Local Certification Standards for Range Controllers/Fire Desk Operators

RANGE CONTROL FACILITY TRAINING PROGRAM

1. General

a. This appendix provides guidance to the Range Control Officer to develop and maintain a successful Range Control training program.

b. The Range Control Facility training program consists of three parts:

(1) Part 1 — A Range Control Facility Manual (FacMan) that includes information required for position or facility qualification/designation.

(2) Part 2 — A Range Control Orientation that orients newly assigned range control personnel.

(3) Part 3 — Local Qualification Standard (LQS) for each operating and supervisory position to establish and standardize the minimum knowledge factors and performance factors required for qualification/designation. The Range Control training program is designed to ensure required training elements are not overlooked and to standardize the basic structure to the maximum extent possible.

2. Part 1 — Facility Manual (FACMAN) Outline

a. The FACMAN outline described in Appendix F is provided as an example of the type of information that should be included in a facility manual and training program. The format closely aligns the manual to other manuals frequently required by range control facilities and is the standardized format for use by range managers.

b. Command missions and operational requirements vary. Such requirements along with other factors such as weather, location, airfield facilities and range control equipment vary the knowledge and qualification standards required by range control personnel. These factors do not allow facilities to share a standard facility manual. All facility manuals will differ in a number of areas if they are to meet the facilities' needs. Therefore a facility manual should be developed for individual facilities following this basic outline and format per Appendix F when possible.

3. Part 2 — Facility Indoctrination

a. The Range Control Facility Indoctrination may include but is not limited to the following:

(1) Range control/unit policies, and training expectations.

(2) Range control facility, RTA and other appropriate unites/agencies/facilities tour/briefs.

(3) Facility specific information (e.g., RTAs, airspace, training customers, assigned frequencies, equipment, references, etc.).

(4) General control and operations information (e.g., abbreviations, definitions, radio/interphone communications, weather).

(5) General information (e.g., security, safety, emergency/mishap procedures).

4. Part 3 — Local Qualification Standards

a. LQSs establish and standardize professional knowledge and performance factors. LQSs are developed by local subject matter experts; they are used to set the minimum required level of qualification for operators at that specific Range Control facility.

b. A LQS shall be developed for each position in the facility; including ground range controller/fire desk operator, air range controller/fire desk operator, senior fire desk operator/range controller supervisor, range safety specialist/inspector and range scheduler.

c. Approving authority for position qualification is the Range Control Officer.

d. An example of a LQS for the ground range controller/fire desk operator is provided in Figure G-1.

e. Additional examples of LQS's for other operator positions are located at the Marine Corps Range and Training Area Management website: https://rtam.tecom.usmc.mil/rm/

5. Part 3.1 — Lesson Topic Guides

a. Lesson topic guides are organized outlines of single topics and used as a blueprint of what is to be accomplished in the lesson. It is complete in detail and includes:

(1) The objectives.

(2) Main teaching points.

(3) References.

(4) Training aids.

(5) Methods.

(6) Procedures.

(7) Supplemental information as needed.

b. Organized outlines ensure instructors address every portion of a subject ensuring standardization in the classroom/knowledge portion of a

facility training program. These outlines will be developed by local subject matter experts and made available to all range control personnel.

c. Because of the unique requirements of each facility the number of lesson topic guides will vary. The Range Control Officer will determine requirements for each facility.

Figure G-2 is an example of one lesson topic guide that covers a specific topic.

Local Qualification Standard
Ground Range Controller/Fire Desk Operator

NAME: _____ RATE/RANK: _____
Date Commenced: _____ Date Completed: _____

REQUIRED READING

1. Base Range and Training Regulations
2. Range Control Facility Manual
3. MCO 3500.27C
4. MCO 3550.10
5. MCO 3570.1C
6. MCO P5100.8F
7. MCO 5100.29B
8. MCO 5104.1C
9. MCO 6260.1D
10. MCO P8000.2B
11. MCO 8020.10A
12. RFMSS Users Guide

TRAINING PREREQUISITES	Int	Date
1. Local Safety Danger Zone (SDZ) class	_____	_____
2. Installation familiarization tour	_____	_____
3. Range Safety Officer (OIC/RSO) class	_____	_____

DETAILED KNOWLEDGE FACTORS/REFERENCES

1. Operational Duties and Responsibilities (Base Range Regulations)		
a. Ground Range Controller	_____	_____
b. Air Range Controller	_____	_____
c. Facility Manual	_____	_____
2. Ground Operations (MCO 3570.1C; MCO 3500.27C; MCO P8000.2B; MCO 8020.10A; Base Range and Regulations; RCF FACMAN)		
a. Live-Fire	_____	_____
b. Indirect-Fire	_____	_____
c. Training Areas	_____	_____
d. Lasers	_____	_____
3. Ranges and Allowable Weapons (MCO 3570.1B; MCO 3500.27C; Base Range Regulations)		
a. Allowable Weapons and Ammunition	_____	_____
b. Special Instructions	_____	_____
c. Conflicts (i.e. Facility, Activity, etc.)	_____	_____
d. Explosives and Demolitions	_____	_____
e. Safety Conflicts	_____	_____

Figure G-1. Local Qualification Standard for Ground Range Controller/Fire Desk Operator

		Int	Date
4.	Laser Ranges (MCO 5104.1B; MCO 3500.27C; Base Range Regulations; RCF FACMAN)		
	a. Allowable Systems	_____	_____
	b. Safety Parameters	_____	_____
5.	Special Areas/Training Restrictions (Range Regulations, RCF FACMAN)		
	a. Live Fire and Maneuver Areas (LFAMS)	_____	_____
	b. Drop Zones	_____	_____
	c. Gas Chambers	_____	_____
	d. Rappel Towers/Assault Climbers Courses	_____	_____
	e. Pools	_____	_____
	f. Water Borne Training Areas	_____	_____
6.	Combat Towns (Range Regulations)		
	a. MOUT Facility	_____	_____
	b. Combat Towns	_____	_____
	c. MAC	_____	_____
	d. IIT	_____	_____
7.	MEDEVACS (Range Regulations)		
	a. Types of medevacs	_____	_____
	b. Information required	_____	_____
	c. Fire desk procedures	_____	_____
	d. Post incident report/info collection procedures	_____	_____
8.	Downed Aircraft (Range Regulations)		
	a. Downed Aircraft in a Training Area	_____	_____
	b. Pilot reported emergency in a Training Area	_____	_____
	c. Downed Aircraft in an Impact Area	_____	_____
	d. Pilot reported emergency in an Impact Area	_____	_____
9.	Fires and Fire Danger Rating (Base Range Regulations)		
	a. Fire Danger Ratings	_____	_____
	b. Information required for fire reporting	_____	_____
	c. Fire desk fire procedures	_____	_____
	d. Post fire report/info collection procedures	_____	_____

Figure G-1. Local Qualification Standard for Ground Range Controller/Fire Desk Operator

	Int	Date
10. Check Fires (MCO 3570.1B; MCO 3500.27C; Range and Training Regulations; RTA SOP)		
a. Situations that cause a unit to be placed in a Check Fire condition	_____	_____
b. Procedures for initiating Cease/Check Fire/Resuming Fire	_____	_____
11. Use Equipment (RCF FACMAN)		
a. Communications Equipment	_____	_____
b. Radar Display (IRSS)	_____	_____
c. Cameras	_____	_____
d. Recorders	_____	_____
e. RFMSS	_____	_____
12. Equipment Failures (Base Range Regulations)		
a. Communications failure – immediate actions/Reporting	_____	_____
b. Communications failure requiring the Fire Desk to relocate	_____	_____
c. Loss of radar	_____	_____
d. RFMSS Help Desk	_____	_____
13. Call Signs and Frequencies (Base Range Regulations)		
a. Agency/Unit Call Signs	_____	_____
b. Frequencies	_____	_____
14. RFMSS (RFMSS Users Guide; Base Range Regulations)		
a. Activate/De-Activate Units	_____	_____
b. Activate/De-Activate Airspace	_____	_____
c. Add/Cancel Units	_____	_____
d. End of Day Processing	_____	_____
e. 1594 Entries	_____	_____
f. Maintain Logs	_____	_____
15. Maintain Fire Desk Logs (RFMSS Users Guide; Range Regulations)		
a. Status Change	_____	_____
b. Ammunition	_____	_____
c. Personnel	_____	_____
d. Vehicle	_____	_____
e. Aircraft	_____	_____
f. Comm Check	_____	_____
g. Inspection	_____	_____
h. Airspace	_____	_____
i. Down Range Incident	_____	_____

Figure G-1. Local Qualification Standard for Ground Range Controller/Fire Desk Operator

		Int	Date
16.	Complete Turnover Briefs	_____	_____

DETAILED PERFORMANCE FACTORS

1.	Watch Routine		
a.	Receive verbal/written pass down	_____	_____
b.	Verify equipment status	_____	_____
2.	Complete written test on items covered by certification standards.	_____	_____
3.	Label the following on the installation special map.		
a.	Ranges	_____	_____
b.	Training Areas	_____	_____
c.	Impact Areas	_____	_____
d.	Beaches	_____	_____
e.	Special Use Airspace	_____	_____
4.	Demonstrate the ability to satisfactorily perform the ground range controller duties.	_____	_____

I have evaluated the above trainee and certify that all required training and performance factors have been met and trainee has demonstrated the ability to perform all duties of the position.

Recommended by:_____ Supervisor_____ Date_____

Approved/Disapproved:_____ RCO_____ Date_____

Figure G-1. Local Qualification Standard for Ground Range Controller/Fire Desk Operator

GROUND RANGE CONTROLLER/FIRE DESK OPERATOR

Lesson Topic Guide GRC-1

Date: 6 Jan 2016

A. Title: Reference Documents

B. Purpose: To familiarize the trainee with the required information in various documents.

C. Objective: Upon completion of lesson, trainee will be able to locate specific final control information in reference documents.

D. Time: 2 Hours

E. References:

1. Ground Range Controller Local Qualification Standard
2. BO 3500.1
3. MCO 3570.1
4. MCO P3550.10

F. Training Aids:

1. Watch Relief Checklist
2. IRSS Radar Service Instruction Manual
3. RFMSS Service Instruction Manual
4. Maps/Charts

G. Information Sheets: None

H. Instructor Procedure:

1. Preparation:

a. Ensure that all reference documents are available.

2. Introduction

a. State the lesson objective.

3. Presentation:

a. Locate, identify and specifically explain the required Information for ground range controller in each reference document.

b. Give examples of when this information would be important to know and locate.

I. Trainee Application:

1. Upon completion of this lesson, the trainee should be able to:

a. Locate reference document information identified in the Ground Range Controller LQS.

b. Explain the information required for Ground Range Control.

J. Testing:

1. Administer written exam or performance evaluation when complete with this lesson.

Figure G-2. Lesson Topic Guide

Appendix H

Format For Personnel Training Jackets

CONTENTS

General Information/Miscellaneous

RECORD OF AUDIT

NAME	RANK/RATE/GRADE

COMMAND	AUDITOR'S SIGNATURE	DATE

SECTION 1: ADMINISTRATIVE INFORMATION

FORMAL TRAINING HISTORY

NAME		RANK/RATE/GRADE
BIRTH MONTH	SECURITY CLEARANCE	JOB SERIES:

SCHOOLS/TRAINING

COURSE TITLE	DATE

SCHOOLS/TRAINING

COURSE TITLE	DATE

SECTION 1: ADMINSTRATIVE INFORMATION

FACILITY POSITION CERTIFICATION

NAME	RANK/RATE/GRADE

START DATE	CERT DATE	POSITION	FACILITY

SECTION II: CERTIFICATION RECORDS

EQUIPMENT CERTIFICATION

NAME	RANK/RATE/GRADE

DATE	EQUIPMENT	INSTRUCTOR

SECTION II: CERTIFICATION RECORDS

ANNUAL POSITION EVALUATION

NAME	RANK/RATE/GRADE

DATE	POSITION EVALUATED	EVALUATOR SIGNATURE

SECTION III: ON-THE-JOB-TRAINING
TRAINING SUMMARY

NAME	RANK/RATE/GRADE

DATE	TRAINING SUMMURY (Annual Position Evaluation)	HOURS	INSTRUCTOR

SECTION III: ACADEMIC TRAINING RECORDS

ANNUAL PROFICIENCY TRAINING

NAME	RANK/RATE/GRADE

DATE	ANNUAL PROFICIENCY TRAINING	HOURS	INSTRUCTOR

SECTION IV: GENERAL TRAINING INFORMATION

JOB RELATED TRAINING

NAME	RANK/RATE/GRADE

DATE	JOB RELATED TRAINING	HOURS	INSTRUCTOR

FDO NAME:	POSITION: **FIRE DESK OPERATOR**	PURPOSE: **CERTIFICATION**

EVALUATION LEGEND:	SATISFACTORY (S)	NEEDS IMPROVEMENT (N)	UNSATISFACTORY (U)	NOT APPLICABLE (N/A)

LOG MANAGEMENT	ANNOTATES ACCURATE AIR AND GROUND ENTRIES	S
	UPDATES ALL ENTRIES AS REQUIRED	S
CONTROL JUDGMENT	AWARENESS IS MAINTAINED	S
	CONTROL JUDGMENT APPLIED	S
RADIO PROCEDURES	PROPERLY EXECUTES PROCEDURES	S
	POSITIVE CONTROL OF CURRENT SITUATION	S
	PROMPT ACTION TAKEN TO CORRECT INACCURATE TRANSMISSIONS	S
	SITUATIONAL AWARENESS MAINTAINED	S
	PROFESSIONAL MANNER MAINTAINED	S
	OPERATES ALL COMMUNICATIONS CORRECTLY	S
OPERATING PROCEDURES	MAINTAINS OVERALL CONTROL	S
	AIR LOGS COMPLETE, ACCURATE AND TIMELY	S
	FOLLOWS ALL ORDERS AND PROCEDURES	S
	ACCURATELY UPDATES RANGE STATUS IN RFMSS AND IRSS	S
	PROPERLY EXECUTES DAILY RESPONSIBILITIES	S
	PROPERLY CONDUCTS CHANGEOVER	S
MEDEVACS	COORDINATION IS TIMELY AND ACCURATE	S
	MAINTAINS CONTROL AND COMPOSURE	S
	COMMUNICATES INFORMATION IN A TIMELY AND CONCISE WAY	S
PHRASEOLOGY PATROLMAN EQUIPMENT	CONDUCTS REQUIRED TRANSMISSIONS ACCURATELY AND TIMELY	S
	UTILIZES PROPER PHRASEOLOGY	S
	COMMUNICATES CLEARLY	S
	KNOWLEDGEABLE	S
	PROFICIENT	S

COMMENTS: SNM has met the minimum requirements to operate as a Fire Desk Operator in the Range Control Facility (RCF)

TRAINER NAME: _____

DATE/TIMES: _____

SUPERVISOR: _____