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

Ch 1 of 16 Feb 2008

MCO P3550.10 Ch 1
C465
07 Jul 2005

MARINE CORPS ORDER P3550.10 CH 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: POLICIES AND PROCEDURES FOR RANGE AND TRAINING AREA (RTA) MANAGEMENT

Ref: (a) MCO 3570.1B
(b) MCO 3500.27B
(c) MCO 5100.29A
(d) MCO 3550.9
(e) MCO P11000.12C
(f) Military Construction Planning & Programming Guide
(g) DODD 4715.11, "Environmental and Explosives Safety Management on Operational Ranges Within the United States," May 10, 2004
(h) DODD 4715.12, "Environmental and Explosives Safety Management on Operational Ranges Outside the United States," July 12, 2004
(i) MIL-HDBK 1027/3, "Range Facilities and Miscellaneous Training Facilities Other Than Buildings," November 30, 1992
(j) OPNAVINST 3770.2K
(k) MCO P5090.2A
(l) MCO 3900.15A
(m) MCO 5104.1G
(n) FAAO 7400.2F, Procedures for handling Airspace Matters," August 30, 2007
(o) FAAO 7400.8N, "Special Use Airspace," February 16, 2007
(p) SECNAV M-5210.1
(q) 10 USC 34

Encl: (1) Locator Sheet

1. Situation. Combat readiness is of the utmost importance to the Marine Corps. In order to achieve the highest levels of readiness, organizations must maintain rigorous and realistic training programs based on approved training standards. Training resources must enhance safe and challenging live-fire training, enabling Marine

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1-11, 1-12, and 1-13 of the basic Order and replace with corresponding pages 1-1, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-11, 1-12, and 1-13.

c. Remove pages 2-3, 2-5, 2-7, 2-8, 2-9, and 2-11 of the basic Order and replace with corresponding pages 2-3, 2-5, 2-7, 2-8, 2-9, and 2-11.

d. Remove pages 3-3, 3-9, and 3-11 of the basic Order and replace with corresponding pages 3-3, 3-9, and 3-11.

e. Remove pages 5-3 through 5-16 of the basic Order and replace with corresponding pages 5-3 through 5-16.

4. Summary of Change. The changes to this Manual are extensive and it should be reviewed in its entirety.

5. Filing Instructions. File this change transmittal in front of the original Manual.

JAMES F. AMOS
Deputy Commandant for
Combat Development and
Integration

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units to train as they fight.

2. Mission

a. Per references (a) through (q), this Manual establishes responsibilities, and prescribes policies and procedures concerning the safety and management of Marine Corps operational ranges and training areas (RTAs), to include associated training facilities.

b. Reference (q) describes a range as a designated land or water area that is set aside, managed and used for range activities of the Department of Defense (DOD), and includes airspace areas designated for military use by the Administrator of the Federal Aviation Administration (FAA). 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 the use and handling of military munitions, other ordnance, and weapon systems.

c. Effective RTA management provides programs and funding consistent with the range investment strategy pillars of sustainment, upgrade, and modernization/transformation in order to protect limited resources (i.e., training facilities (ranges, buildings, and associated structures), range target systems, target mechanisms, scoring equipment, and associated training areas, to include real estate and airspace), while ensuring compliance with environmental regulations.

3. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. This Manual establishes the Commanding General (CG), Marine Corps Combat Development Command (MCCDC) (C465) as the executive agent and resource sponsor for aviation and ground RTA management programs, and the proponent for all range safety matters. This Manual also assigns responsibilities and prescribes policies and procedures for the following:

(a) All ranges that are designated for weapons training, explosives training, including recreational ranges, and other associated training areas located on Marine Corps property. Range safety policies are detailed in reference (a).

(b) Sustaining and modernizing Marine Corps RTAs to train Marines realistically, consistent with current doctrine and future concepts, threat analysis, and force structure; realizing economy in developing ranges; and ensuring that Marine Corps RTAs support the

fielding of new weapons and ammunition while meeting established safety, training, environmental, and occupational health standards.

(c) Development of policies and requirements that apply to all range projects funded within the Procurement, Marine Corps (PMC) Program, the military construction (MILCON) Program, and those non-MILCON projects funded by installation operations and maintenance (O&M) Total Force allocations under the purview of this Manual.

(2) Concept of Operations

(a) The Marine Corps RTA Management Program is under the direction of the CG, MCCDC (C465).

(b) The Director, Range and Training Area Management Division (C465), Training and Education Command (TECOM) provides institutional-level central management and prioritization for safety, planning, programming, design criteria, and construction activities for RTAs.

(c) Chapter 1 outlines specific RTA responsibilities.

b. Subordinate Element Missions

(1) Base/station commanders are encouraged to support individual and small unit training requirements of other Services and external agencies on Marine Corps operational RTAs, provided this training will not negatively impact on the base/station's ability to support operating force mission accomplishment. Requests from other Services or external agencies that involve priority or dedicated use of existing RTAs, or the building of new ranges and/or range-related facilities for other Services or external agencies on Marine Corps installations must be forwarded to CG, MCCDC (C465) via the appropriate chain of command for approval.

(2) Other Services and DOD commands/organizations will not be charged for use of Marine Corps ranges.

(3) Ensure that thorough reviews of range safety programs are conducted in accordance with references (a), (b), and (c).

c. Coordinating Instructions. Submit all recommendations concerning this Manual to the CG, MCCDC (C465) via the appropriate chain of command.

4. Administration and Logistics

a. The CG, MCCDC (C465) will administer the requirements and ensure the accuracy, modification, and distribution of this Manual.

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

c. Support for deficiencies in funding requirements is provided through the following:

(1) Program Objective Memorandum (POM).

(2) Procurement, Marine Corps (PMC) reprogramming action.

(3) Operations and Maintenance Marine Corps (O&MMC) midyear review action.

(4) Offices of the Secretary of Defense, Secretary of Navy, and Commandant of the Marine Corps sustainable ranges programmatic guidance.

5. Command and Signal

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

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

W. L. NYLAND
Assistant Commandant
of the Marine Corps

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POLICIES AND PROCEDURES FOR RTA MANAGEMENT

CHAPTER 1

RESPONSIBILITIES

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POLICIES AND PROCEDURES FOR RTA MANAGEMENT

CHAPTER 1

RESPONSIBILITIES

1000. INFORMATION. This chapter provides information and guidance on command and installation responsibilities.

1001. PURPOSE. The purpose of this chapter is to delineate responsibility and authority pertaining to RTA management.

1002. COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND (C465)

1. In addition to the responsibilities outlined in reference (a), serve as the proponent for all matters pertaining to the oversight and coordination of RTAs, including dissemination of policy and guidance as the executive agent for RTA issues within the Marine Corps.

2. Serve as the Service single point of contact (POC) for all RTA management issues. Represent the Marine Corps at DOD and Interservice-level meetings pertaining to RTAs. Examples include the North Atlantic Treaty Organization Range Safety Board, the DOD Operational and Environmental Executive Steering Committee for Munitions, and the Integrated Process Team/Overarching Integrated Process Team for sustainable ranges. Ensure all issues that have the potential to impact RTA operations are coordinated with the appropriate Marine Corps installation (MCI) regional and base/station commanders.

3. Serve as the decision authority for requests from other Services and external agencies that involve priority or dedicated use of existing RTAs, or the building of new ranges and/or range-related facilities for other Services or external agencies on Marine Corps installations. Coordinate the evaluation and approval of these requests with appropriate Marine Corps staff offices, and MCI and base/station commanders.

4. Coordinate with other Services, appropriate Marine Corps staff offices, and installation commanders on management information systems that allow access to RTA information.

5. Coordinate with the Naval Air Systems Command (NAVAIR), Tactical Training Ranges Program Office (PMA 205) on System Replacement and Modernization (SRAM) projects.

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6. Coordinate airspace issues with the Deputy Commandant (DC) for Aviation.

7. Serve as the Marine Corps Training Airspace Coordinator (MCTAC) As such, ensure the necessary airspace for military operations is available for Marine Air-Ground Task Force (MAGTF) training. Coordinate efforts with CMC (APC), and MCI and base/station commanders 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.

8. Coordinate with CMC (SD and LF); Commander, Marine Corps Bases Pacific; Commander, Marine Corps Bases Atlantic; Commander, Marine Corps Forces Reserve (MARFORRES); and CG, Marine Corps Systems Command (MARCORSYSCOM) for the collection of RTA requirements and deficiencies, and develop/coordinate initiatives to meet requirements and resolve deficiencies.

9. Organize and chair a range operational advisory group (OAG) that will identify range requirements and facilitate their integration into a comprehensive range program.

10. In conjunction with MCI commanders, develop a master plan/Marine Corps reference publication (MCRP) for RTAs to include a roadmap depicting requirements and capabilities for existing and future range needs.

11. Develop and promulgate RTA sustainment, upgrade, and modernization policies and programs, and coordinate them with installation commanders via the appropriate chain of command.

12. Coordinate and manage the Ground Range Sustainment Program (GRSP) with the Naval Surface Warfare Center (NSWC) Corona; CG, MARCORSYSCOM; and MCI and base/station commanders as discussed in chapter 3.

13. Serve as a co-chairman (with DC, Installations & Logistics (I&L)) on the Headquarters, Marine Corps (HQMC) Mission-Capable Ranges Working Group.

14. Assist DC I&L in the development and coordination of Marine Corps policy, guidance, and implementation for environmental matters related to RTAs and the validation and prioritization of range projects submitted for major or minor MILCON, Facilities, Sustainment, Restoration, and Modernization (FSRM) and other

maintenance/repair projects. Endorse installation requests for range closure.

15. As the resource sponsor for RTA POM matters, coordinate with MCI and base/station commanders to prioritize training resources; develop, review, validate, and prioritize RTA POM initiatives during Program and Mid-year Reviews, Unfunded Program List development, and Supplemental Appropriation Request submissions; and identify present and future RTA requirements as discussed in chapter 3. Present a single, integrated range program for POM consideration. Review and validate proposed Congressional additions to the Marine Corps budget to ensure they contribute to established goals, and adequate resources to support and sustain these additions are available.

16. Develop, coordinate, and manage the Marine Corps Air/Ground Range Safety, and Range Certification and Recertification Programs in accordance with this Manual and references (a), (c), and (d).

17. Develop, field, and manage the single range management system for the Marine Corps that provides for scheduling/operating ranges, and includes tools to enhance training effectiveness and safety.

18. Coordinate appropriate/required action involving external agencies to support the Marine Corps Range Safety Program; i.e., Bureau of Medicine and Surgery, Department of Defense Explosives Safety Board, Naval Facilities Engineering Command (NAVFACENGCOM), Naval Ordnance Safety and Security Activity (NOSSA), Naval Safety Center, NSWC Corona, Space and Naval Warfare System Command, and the U.S. Army Training and Doctrine Command, regarding Laser safety, munitions safety criteria, range construction, range safety, and inspections/technical assistance visits (TAVs).

19. Promulgate updates/changes to range safety criteria, i.e., surface danger zones (SDZs), Safety of Use Memoranda (SOUMs), ballistic footprints, net explosive weight (NEW), ammunition characteristics/new weapons, etc.

20. Coordinate with MARCORSYSCOM (Program Manager (PM), Ammunition (Ammo)) for explosives safety matters.

21. Develop and sponsor the RTA Management Officer Course to qualify and certify individuals responsible to the base/station commander for range safety, RTA management issues, and the range certification and recertification programs.

22. Certify installation range control equipment, facilities, operations, and organization every 3 years using the checklist provided in reference (d).

1002 POLICIES AND PROCEDURES FOR RTA MANAGEMENT

23. Provide TAVs for range safety inspection, range certification, and recertification purposes as required.

24. Participate in range design review conferences, pre-construction conferences, site interface inspections, and acceptance and operational testing as coordinated by MCI and base/station commanders.

25. Develop and field modern range control equipment. Receive and review requirements documents, integrated logistics support plans/user logistics support summaries, and materiel fielding plans relating to RTAs.

26. Maintain current copies of MCI and base/station RTA master plans.

27. Coordinate Marine Corps legal policy with respect to RTA issues.

28. Maintain this Manual and update as required.

1003. DEPUTY COMMANDANT FOR INSTALLATIONS & LOGISTICS (DC I&L)

1. In addition to the responsibilities outlined in reference (a), assist CG, MCCDC (C465) with the submission of RTA management initiatives into the POM process.

2. Ensure the staffing of all RTA management program matters to CG, MCCDC (C465) for review.

3. Coordinate with CG, MCCDC (C465) for prioritization of military construction (MILCON) requirements for RTA enhancement, Major Repair (M2) and Minor Construction (R2) RTA projects, RTA facility condition codes, and the application of associated Facility Sustainment Model funding per references (e) and (f).

4. Ensure that installations prepare and submit range facility management plans as scheduled per references (g) and (h).

5. Coordinate the funding, design, and construction of RTAs with CG, MCCDC (C465); CG, MARCORSYSCOM; NAVFACENGCOM; NOSSA; and U.S. Army Corps of Engineers, Huntsville Division (CEHND) per reference (i).

6. In coordination with CG, MCCDC (C465), formulate, review, and execute environmental policies, plans, and programs related to RTA operations, and provide concept approval for the Land and Airspace Use Requirements Studies.

7. Serve as the central POC on all Marine Corps encroachment issues and provide policy guidance, monitoring, education, and tasking of responsibilities for accomplishing encroachment control.

8. Provide expertise to establish policy and programs related to RTA unexploded ordnance (UXO) and munition constituent matters.

9. Provide assistance with respect to real estate issues to enhance and modernize RTAs.

10. Serve as a co-chairman (with CG, MCCDC (C465)) on the HQMC Mission-Capable Ranges Working Group.

11. Coordinate airspace issues related to encroachment and land acquisition with DC Aviation (AVN).

12. Serve as approval authority for all range closure requests.

1004. DEPUTY COMMANDANT FOR AVIATION (DC AVN)

1. Assist CG, MCCDC (C465) in identifying RTA requirements.

2. Coordinate with CG, MCCDC (C465) and CMC (LFL) on Marine Corps airspace requirements.

3. Serve as Marine Corps liaison to CNO (N885F) on airspace for military operations issues.

4. Monitor proposed RTA projects.

5. Coordinate airspace for military operations and air traffic control (ATC) procedures in support of RTA projects.

6. Coordinate with CG, MCCDC (C465) on aviation weapons and ammunition procurement as they pertain to RTA requirements.

7. Provide representation on the HQMC Mission-Capable Ranges Working Group.

1005. DEPUTY COMMANDANT FOR PROGRAMS AND RESOURCES (DC P&R)

1. Coordinate with CG, MCCDC (C465) on RTA POM submissions.

2. Provide representation on the HQMC Mission-Capable Ranges Working Group.

1006. STAFF JUDGE ADVOCATE (SJA) TO CMC AND COUNSEL FOR THE COMMANDANT (CL)

1. SJA will ensure that CL is supplied with the appropriate number of judge advocates skilled in land use and environmental law.

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2. CL, through the Field and Area Counsel Offices, will provide legal support in matters under the Counsel's primary cognizance including land use, environmental, and procurement law.

3. Provide support to CG, MCCDC (C465) on RTA legal issues.

4. Provide representation on the HQMC Mission-Capable Ranges Working Group.

1007. COMMANDING GENERAL, MARINE CORPS SYSTEMS COMMAND

1. Assist CG, MCCDC (C465) in the submission of RTA POM initiatives.

2. Coordinate with DC I&L and CG, MCCDC (C465) on the submission of procurement costs for RTA MILCON projects.

3. Request that CEHND and NOSSA inspect/survey range sites for suitability.

4. Procure, deliver, and ensure the proper interface of range training equipment.

5. Assist installation commanders with design review conferences, pre-construction conferences, site interface inspections, and acceptance and operational testing.

6. In conjunction with CG, MCCDC (C465), act as liaison with NAVFACENGCOM, NOSSA, and CEHND for range design and ammunition storage standards.

7. Coordinate contractor operations and maintenance of systems in support of automated ranges.

8. Assist CG, MCCDC (C465) to identify, validate, and coordinate the fielding of range training equipment. The PM, Training Systems (TRASYS), MARCORSYSCOM coordinates with the CG, MCCDC Range and Training Area Management Division (C465) for the requirements and policies on range sustainment, upgrade, and modernization as outlined in this Manual.

9. Coordinate with CG, MCCDC (C465) on ground weapons, ammunition procurement and storage, use of non-DOD ammunition on ranges, and explosives safety matters as they pertain to RTA requirements.

10. Provide representation on the HQMC Mission-Capable Ranges Working Group.

1008. COMMANDERS, MARINE CORPS BASES ATLANTIC/PACIFIC

1. Provide subordinate commanders with assistance in identifying future training requirements that may require additional RTAs/device resources.

2. Ensure that installation facilities and RTAs are properly used and maintained.

3. Identify, prioritize, and support installation requirements for RTAs and range training equipment.

4. Ensure that projects with a potential to impact on existing airspace procedures or areas are processed per reference (j). Reference (j) provides guidance and policy for the planning and administration of airspace.

1009. COMMANDING GENERALS, MARINE CORPS INSTALLATIONS

1. Develop and integrate regional RTA programs.

2. Participate as members of the range OAG representing regional issues.

3. Participate in validation and prioritization of regional GRSP and SRAM program requirements.

4. Develop a regional deviation authority process per references (a) and (d).

5. Identify and prioritize RTA resource and equipment requirements.

6. Assist subordinate commanders in identifying future training requirements that may require RTA resources.

7. Coordinate airspace issues, to include airspace for military operations and ATC procedures, in support of proposed RTA projects.

8. Ensure RTA airspace requirements are reflected in the annual regional airspace plan (RAP). Coordinate with CG MCCDC (C465) prior to submission to ensure forecasted MAGTF training requirements are included.

9. Ensure that airspace for military operations is available and capable of supporting MAGTF training. Forward all LOA/LOP for airspace for military operations to CG MCCDC (C465) for review prior to approval by base/station commanders.

1009 POLICIES AND PROCEDURES FOR RTA MANAGEMENT

10. Forward all requests from other Services or external agencies that involve priority or dedicated use of existing RTAs, or the building of new ranges and/or range-related facilities for other Services or external agencies on Marine Corps installations to CG, MCCDC (C465) via the chain of command. Coordinate the evaluation of these requests with CG, MCCDC (C465) and base/station commanders.

1010. COMMANDING OFFICERS, MARINE CORPS BASES AND AIR STATIONS

1. Provide facilities and personnel to support the operational requirements of RTAs.

2. Ensure that certification and recertification of ranges are completed in compliance with reference (d).

3. Review and maintain facilities support requirements planning documents in accordance with reference (e).

4. With the advice of the regional CL office, ensure adherence with applicable Federal, State, and local environmental requirements, and establish environmental review boards per reference (k). Serve as the lead for all environmental actions.

5. Ensure the use of RFMSS as discussed in chapter 4.

6. Implement an encroachment control program providing continuity and dialogue with appropriate local officials and Marine Corps staffs.

7. Implement RTA programs that will effectively use the installation range control officer (RCO) per chapter 5 of this Manual. The RCO is responsible for RTA safety and operations, as well as range certification and recertification programs.

8. Review, analyze, and prioritize current and future RTA requirements, as well as provide the long-term continuity required with RTA development.

9. Coordinate with CG, MCCDC (C465) in determining and refining RTA requirements.

10. Establish an RTA management committee composed of installation personnel and using units to identify and resolve present or potential RTA facility issues.

11. Coordinate with users to develop and prioritize RTA requirements

per reference (l), submit Universal Need Statements (UNSs) for new requirements to CG, MCCDC (C39) through the appropriate chain of command with a copy to CG, MCCDC (C465).

12. Forward all requests from other Services or external agencies that involve priority or dedicated use of existing RTAs, or the building of new ranges and/or range-related facilities for other Services or external agencies on Marine Corps installations to CG, MCCDC (C465) via the chain of command. Coordinate the evaluation of these requests with CG, MCCDC (C465) and the appropriate MCI commander.

13. Charge for direct expenses incurred as a result of supporting the range use by other Services, DOD commands/organizations, foreign military, and external agencies unless specifically waived by the base/station commander. Direct expenses include fuel, transportation, and billeting required to support the training event. Other Services and DOD commands/organizations <u>will</u> <u>not</u> be charged for use of Marine Corps ranges.

14. Develop a long-term plan for upgrade and modernization of RTAs. When the installation master plan is revised, the portion pertaining to RTAs will be submitted to CG, MCCDC (C465).

15. Notify CG, MCCDC (C465) regarding projects submitted under the SRAM Program.

16. Coordinate range design review conferences, pre-construction conferences, site interface inspections, and acceptance and operational testing with CG, MCCDC (C465).

17. Adhere to range safety requirements per references (a) and (m).

18. Maintain information on other Services' RTAs as appropriate. Materials are available from CG, MCCDC (C465) upon request.

19. Ensure that adequate O&MMC funds are programmed and dedicated to RTA/facility maintenance, sustainment, and allowable upgrades. Once incorporated and operational, the RTA portion of the Facility Sustainment Model should guide decisions on the application of O&MMC funds. Coordination must occur between installation operations and facilities personnel in this regard. Authorized Facilities, Sustainment, Restoration, and Modernization (FSRM) funds within the installation O&MMC budget encompass local RTA maintenance requirements.

1010 POLICIES AND PROCEDURES FOR RTA MANAGEMENT

20. Serve as the using agency for FAA designated SUA associated with, or in direct support of, their RTAs. Proposals to designate another military unit or organization as the using agency must be approved by CG MCCDC (C465).

a. Per references (j), (n), and (o), the using agency is the military command or other organization whose activity established the requirement for the SUA. Using agencies are authorized direct liaison with the controlling agency or appropriate ATC facility on local airspace matters. The using agency has jurisdiction over the area unless it has been released to the controlling agency. The controlling agency is the FAA ATC facility that exercises control of the SUA when it is not activated. A military ATC facility may be the controlling agency, subject to the concurrence of the FAA regional air traffic division and the appropriate air route traffic control center.

b. Using agencies shall ensure:

(1) The airspace is used only for its designated purpose.

(2) Proper scheduling procedures are established and used.

(3) The controlling agency is kept informed of changes in scheduled activity, to include completion of activities for the day.

(4) Authorization is provided for transit through, or flight within, restricted areas as feasible and contain within the restricted area all activities conducted therein in accordance with the purpose for which it was designated.

(5) A POC is made available to enable the controlling agency to verify schedules and coordinate access for emergencies, weather diversions, etc. The RCO shall serve as this POC, and be designated as the liaison between the controlling and using agencies per Appendix F, paragraph 4 of reference (j).

(6) Required restricted area/military operations area annual utilization reports are submitted.

c. The RCO will execute the responsibilities of the using agency. MCI commanders and CG MCCDC (C465) must approve designation of officials other than the RCO for this duty.

d. Bases with using agency responsibilities that do not have organic ATC facilities shall assign command airspace liaison officer (CALO) responsibilities outlined in reference (j) to the RCO.

21. Comply with the airspace for military operations administrative requirements of this Manual and reference (j).

22. For MCAS commanders with ATC facilities providing oversight as defined in reference (j), ensure that ATC support provided to the adjacent command are specified in a written agreement.

23. Appoint the ATC facility officer as the CALO per reference (j).

24. Forward all LOA/LOP for airspace for military operations to CG MCCDC (C465), 2079 Barnett Avenue, Quantico, Virginia 22134-5001 for review prior to signature.

1011. HEADQUARTERS, MARINE CORPS MISSION-CAPABLE RANGES WORKING GROUP

1. Given the functional structures of the offices of the Secretaries of Defense and Navy, sustainable ranges process responsibilities are distributed throughout multiple boards, committees, and working groups. The Marine Corps likewise has multiple staffs involved in encroachment control and the sustainable ranges process. As no central funding exists, organizations plan, program, and budget for their respective initiatives.

2. As a result of the requirement to integrate priorities, programs, policy, and resource components of a comprehensive and sustainable ranges process and encroachment control programs, the HQMC Mission-Capable Ranges Working Group was established. The working group develops strategy and an implementation plan to realize the sustainable ranges process tenets found within the RTA Master Plan and *Marine Corps Installations 2020* vision. The HQMC Mission-Capable Ranges Working Group mirrors efforts underway within the Office of the Secretary of Defense (OSD) Integrated Product Team (IPT). The OSD IPT charter is contained in appendix A of this Manual.

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

CHAPTER 2

RTA PROJECT DEVELOPMENT

2000. INFORMATION. RTA project development necessitates a well-coordinated and sophisticated effort in training requirement identification and resolution. Encroachment issues, such as regional population shifts, urbanization, and environmental restrictions impose ever-increasing pressure on installations, adversely affecting combat readiness by the degradation or denial of RTAs. As a result, the RTA project development process is based on a methodology that integrates four primary considerations: safety, mission support, environmental stewardship, and economic feasibility.

2001. PURPOSE. This chapter provides information and guidance for the development of new RTA construction projects.

2002. RTA MASTER PLAN

1. Due to the long lead times inherent in the MILCON process, it is critical that installation commanders have a strategic RTA master plan supporting the project development process. The process requires information on the type of RTAs and the target/training devices required to meet training standards. Installation commanders drive the determination of requirements and subsequent submission of Universal Needs Statements (UNSs) to the Director, Expeditionary Force Development Center (C39), 3300 Russell Road, Quantico, VA 22134-5001, with a copy to the CG, MCCDC (C465), as outlined in this Manual and reference (l).

2. Operating force training officers, installation planners, environmental and natural resources managers, facility planners, RTA management officers, regional airspace coordinators, CALOs, and program managers must use a systematic, well-coordinated approach to initiate, guide, and monitor the long-term RTA development process. These personnel will assess the need for new or improved RTA facilities that are standardized to meet training, doctrinal, facilities, and environmental requirements. These requirements are submitted to commanders for evaluation and the identification of deficiencies, resulting in the submission of UNSs.

b. Compile information on existing range availability, and scheduled and actual range usage prior to initiating new RTA requirements.

c. Initiate the planning process for the required project development following the procedures prescribed in this Manual. Support the Marine Corps Range Modernization Plan, or modification thereof, which determines and sets target dates for new range development/modernization.

d. Perform required safety surveys and risk assessments to determine potential hazards and identify mitigation actions to ensure safe and compliant operations.

e. Incorporate range development and land acquisition projects into installation master plans.

f. Ensure that conflicts with existing airspace procedures or areas are identified and factored into the planning process.

g. Initiate environmental analyses to ensure compliance with the National Environmental Policy Act of 1969 (NEPA).

h. Initiate a safety and explosives safety review to ensure compliance with DoD, Naval Sea Systems Command (NAVSEA) instructions, and MCOs. Construction of new facilities/ranges shall be reviewed for the project's relationship or proximity to all possible hazards; i.e., blast, fire, fragment hazard, or contaminated areas.

2003. PROJECT REQUIREMENTS

1. Planning

a. Facility and operational forces planners must work closely to ensure a comprehensive RTA plan. A thorough understanding of established training standards is necessary to articulate training deficiencies and recommend solutions. These standards are found in the MCO 1510 series and the Training and Readiness Manuals.

b. Source documents such as *Expeditionary Maneuver Warfare* (EMW) and *Ship-To-Objective Maneuver* provide guidance for identifying training requirements. Using the information contained in these

documents, experts in tactics and doctrine work closely with design engineers to ensure that the terrain available is used most efficiently. Plans for targetry must also be closely coordinated with tacticians, engineers, and industry experts.

3. Assessment. The programming of required projects begins with the commander's assessment of needs. At a minimum, this assessment includes the following:

a. The establishment of a baseline RTA requirement that satisfies the current training standards and mission requirements.

b. The determination of new RTA/facility construction requirements by facility planners in close concert with using units and training personnel in order to generate MILCON requirements documentation.

c. Prioritized RTA/facility requirements.

d. A site analysis conducted with base and tenant unit personnel. NOTE: Commanders will forward MILCON project documentation per chapter 3 of this Manual and reference (f) to CMC (LFL-4) with a copy to CG, MCCDC (C465) and CG, MARCORSYSCOM (TRASYS).

4. Preliminary Project Development. Parallel planning efforts must occur early in the RTA project development process to ensure established Marine Corps training standards can be met. Initial project development includes:

a. Preliminary range/facility layout.

b. Site description.

c. Accurate total cost estimates.

d. Funding/construction methodology.

e. Resolution of conflicts with existing airspace procedures. It is important to ensure that the installation's airspace for military operations can support a three-dimensional battle space and the planned training RTA/facility footprint.

f. Adherence to NEPA and other applicable Federal, State, and local requirements and USMC environmental policy per chapter 12 of reference (k). Initiation of environmental documentation in compliance with NEPA should commence at the earliest possible opportunity. Final design criteria for projects must conform to the NEPA documentation. There are three levels of NEPA documentation: Categorical Exclusion, Environmental Assessment, and the Environmental Impact Statement.

4. Design

a. Range project designs must be based on the guidance contained in references (a), (d), and this Manual for range safety and operations. Reference (i) and U.S. Army Training Circular 25-8 should be used as engineering references for range design and construction guidance. Installation commanders must ensure that RTA designs conform to validated training standards. Designs for steel target ranges, shooting houses, military operations in urban terrain (MOUT) facilities, and breaching facilities require CG, MCCDC (C465) approval.

b. CG, MCCDC (C465) validates and standardizes RTA design criteria Marine Corps wide to ensure that current and future needs are met. Additional assistance for range design may be provided by CG, MARCORSYSCOM (TRASYS), MCCDC Directors, Expeditionary Force Development Center (EFDC) (C39) and Requirements (C44) Division, and CG, TECOM (Ground Training Branch). Effective range design requires the above agencies to identify:

(1) A plan to implement training solutions with applicable life-cycle resource data.

(2) New weapon systems or munitions effects.

(3) Anticipated employment of new weapon systems.

(4) Changes to Individual Training Standards.

c. Additional design activities include:

(1) Upgrading RTA/facility layout to include firing/target positions and SDZ overlays.

(2) Preparing concept design overlays.

(3) Preparing facilities planning documents.

(4) Preparing any required environmental and risk assessment reports.

d. Decisions to deviate from approved project scope at any stage of programming or construction will be coordinated with the appropriate installation, with the final decision made by CMC (LFL).

e. Project design should not be considered complete until airspace for military operations and ATC procedures have been addressed by the appropriate airspace planners.

5. Construction

a. Installation commanders ensure that RTAs support approved training requirements. Ranges that are not certified per reference (d) require CG, MCCDC (C465) approval.

b. NAVFACENGCOM will provide engineering and design support as required.

c. Thorough review by tactics and weapons experts during construction is highly desirable to ensure that the end product replicates the desired scenario(s) and accomplishes the established training standards.

6. Real Estate Acquisition

a. Acquisition, for the purpose of this paragraph, concerns only the outright purchase of real estate. It does not refer to RTA projects within a present installation boundary. Installation commanders determine the adequacy of available land to meet readiness requirements. Land requirements for RTAs originate from validated missions and training standards. RTA land shortfalls must be identified as a constraint in appropriate command readiness reports.

b. Land acquisition is a long and involved process; CMC (LFL) has cognizance. Prior to any action, installation facility personnel/trainers must validate the requirement. RTA facility acquisition projects for land or capital improvements will be documented in the installation capital improvements plan.

c. Acquisition should not be finalized on projects that require airspace for military operations until airspace requirements are resolved. Airspace is controlled by the FAA and must be coordinated in accordance with reference (j) and this Manual.

d. Practical alternatives must ensure the protection of RTAs by improved management of existing ranges, training areas, and training facilities. Building a life-cycle RTA management program is central to this process.

2004. PROJECT REVIEW AND VALIDATION

1. Planners at all levels will continually review, validate, and inspect documentation and construction activity milestones during the development of an RTA project. Reviews ensure compliance with established training requirements and standards, environmental requirements, good engineering practices, and standard design criteria.

2. CG, MCCDC (C465) validates and recommends prioritization of RTA projects to CMC (I&L).

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

4. NAVFACENGCOM is the contracting and construction management agent for the Marine Corps.

5. CEHND is the design agent for instrumented target systems; i.e., Remote Engaged Target Systems. CEHND is also the review agent for DD Form 1391, MILCON Project Data Request.

6. Installation commanders will ensure that NEPA documentation is completed and approved before RTA construction contracts are awarded.

7. Documentation review consists of:

a. Comparing project descriptions with the appropriate design manual.

b. Confirming stated training, safety, and environmental requirements are being addressed.

c. Verifying centrally managed targetry equipment and all other (collateral) equipment requirements with the general guidance established by review boards.

d. Comparing projected cost estimates with empirical cost data for similar projects.

e. Identifying potential environmental issues as part of the NEPA process.

8. A pre-design conference will be held with appropriate installation personnel; CEHND; DC Aviation; CG, MARCORSYSCOM (TRASYS); and CG, MCCDC (C465) to address the following criteria:

a. Range site visit, SDZ layout, and terrain walk.

b. Airspace for military operations consideration and requirements.

c. Safety standards integral to the design package.

d. Training requirements.

e. Approved changes to the appropriate standard design.

f. Target equipment interface and functional design considerations.

g. Environmental considerations and requirements, to include NEPA.

9. The concept and preliminary design review of all projects is conducted in coordination with CEHND. Preliminary designs must be completed in order to meet MILCON documentation milestones for the new budget year. The review includes:

a. Training comments based on MCO 1510 series and the appropriate weapon systems gunnery manuals.

b. Facility planner comments based on the appropriate CEHND design manual.

c. Environmental comments based on reference (k) and applicable Federal, State, and local requirements, to include NEPA.

d. Safety department comments regarding occupational health and safety issues, as required.

e. RCO comments, to include a risk assessment of SDZ layouts of the proposed range and adjacent ranges prepared by the installation.

f. Industrial hygiene comments regarding noise abatement and/or protection and air quality in the case of indoor ranges.

10. CG, MCCDC (C465); CG, MARCORSYSCOM (TRASYS); CEHND; Armament and Chemical Acquisition and Logistics Activity (Code AMSTA-AC-CTRR); NAVFACENGCOM (Code 15C); and installation representatives will meet to:

a. Resolve discrepancies resulting from the reviews.

b. Ensure that the design meets established training standards and mission requirements.

c. Verify targetry/hardware quantity requirements.

d. Prioritize design cost items for possible cost reductions.

11. CG, MCCDC (C465); CG, MARCORSYSCOM (TRASYS); CEHND; and installation representatives will review the final design drawings and specifications for all projects. The review includes the following:

a. Training comments based on MCO 1510 series, MCO 1553.35, the appropriate weapon systems gunnery manuals, and input from tactics and doctrine experts.

b. Engineering comments based on the applicable CEHND design manual.

c. RCO comments to include the risk assessment review of SDZ layouts for the proposed range and adjacent ranges. At this stage of design, all SDZ safety questions should have been addressed and resolved.

d. All environmental and industrial hygiene (bioenvironmental) requirements (permits) to construct and operate.

12. The pre-construction conference for all projects is conducted after the construction contract has been awarded. CG, MCCDC (C465); Chemical Command (if appropriate); CEHND; NAVFACENGCOM (EFD); and CG, MARCORSYSCOM (TRASYS); U.S. Army Armament, Munitions, and installation representatives meet with the construction contractor to:

a. Review lessons learned from previous range construction projects.

b. Inspect the different type(s) of equipment to be used on the range.

c. Ensure that the target interface points are constructed in accordance with the mandatory requirements as stated in CEHND design manuals.

d. Identify construction deficiencies and assign responsibility and suspense dates to correct deficiencies.

13. CG, MARCORSYSCOM (TRASYS) in coordination with CG, MCCDC (C465); CEHND; and the construction contractor will schedule the site interface inspection once all target emplacements and the control tower have been completed, and all deficiencies identified during previous inspections have been corrected.

2005. REVIEW AND APPROVAL PROCESS

1. The review and approval of RTA projects are conducted per reference (e).

2. Installations will establish technical review boards to ensure that projects meet required user needs and fit with local development plans, and that NEPA documentation has been reviewed and approved. If possible, one project officer will have responsibility over designated projects from start to completion to ensure a continuous level of expertise.

3. Airspace for military operations proposals will be coordinated in accordance with this order and reference (j).

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

CHAPTER 3

RTA RESOURCE MANAGEMENT

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targets on ranges to support the Predator weapon system. The Predator has a look-down and attack function that made pre-existing target systems obsolete. This type of project is normally executed using PMC funding. CG, MCCDC (C465) is the principal agency responsible for defining RTA upgrade requirements. The organization responsible for the management of PMC funds is CG, MARCORSYSCOM (PM TRASYS).

(1) RTA PMC funding is 3 year money that is available for obligation only during the three fiscal year period for which the appropriation is made, and must be expended within 5 years. POM planning for PMC funding begins with the identification by installation commanders of programs in the summer of the odd-numbered year preceding the POM year.

(2) For example, PMC planning for POM06 began in the summer of 2003 for the POM that was developed and approved during FY04. This process generated PMC budgets for FY06 and FY07. Range managers must initiate planning for RTA PMC funding well in advance of the actual POM cycle.

(3) The Range Investment Strategy upgrade "pillar" is associated with the modernization program element for Real Property Maintenance per the FSRM Program. FSRM modernization refers to all new construction or alterations of facilities solely to implement a new or higher standard (including regulatory changes) to accommodate new functions, or replace building components that typically last more than 50 years.

d. Modernization/Transformation

(1) Modernization/transformation of RTAs will facilitate accomplishing "tomorrow's training tomorrow." As detailed in chapter 2, it is essential that facilities be planned and constructed to provide realistic training opportunities for Marines of the future. Most modernization/transformation projects require MILCON funding as the largest share of the construction appropriation.

(2) Requirements for this type of investment come from conceptual publications such as *Expeditionary Maneuver Warfare (EMW)* and *Ship-To-Objective Maneuver*, and as a result of the fielding of new weapon systems. As an example, the Marine Expeditionary Brigade (MEB) performs an integral EMW role in a variety of contingencies. Modernization/transformation requirements have resulted for a MEB-level military operations in urban terrain (MOUT) facility and expanded maneuver areas at the littoral training bases.

a. Base Operating Support. The installation commander uses the base operating support (BOS) budget for the upkeep and maintenance of RTAs. Recurring requirements such as grass cutting or brush clearing must be included in the annual BOS budget process. Range managers must provide installation comptrollers with timely identification of RTA BOS requirements to ensure resources are available and to avoid project backlogs.

b. Sustainment. Sustainment of RTAs is normally accomplished using O&MMC funding. Sustainment funding supports "today's training today" through periodic or cyclic maintenance expenditures beyond that authorized by the annual BOS budget. O&MMC funding is budgeted as single-year money, and is intended to pay for normal operations and maintenance of installations. Single-year money refers to the fact that it must be obligated during the fiscal year (FY) in which it is appropriated.

(1) RTA POM planning for O&MMC appropriations begins in the fall preceding the even-numbered POM year. For example, planning for POM06 began in September 2003 for the POM that was developed and approved during FY 04. This process generated budgets for FY06 and FY07.

(2) O&MMC funding is sometimes available for RTA expenditures as a result of midyear review action. RTA managers of both Marine Corps and Navy-funded activities should maintain a prioritized list of required equipment, complete with purchase orders, to provide to installation comptrollers in case midyear funds become available. The GRSP augments the O&MMC POM process by funding certain RTA requirements that cannot be accommodated within the installation budget.

(3) The Range Investment Strategy sustainment "pillar" is associated with sustainment and restoration program elements for Real Property Maintenance per the FSRM program. FSRM sustainment refers to maintenance and repair activities necessary to keep an inventory of facilities in good working order over a 50-year service life. FSRM restoration refers to repair and replacement work to restore facilities damaged by inadequate sustainment, excessive age, natural disasters, fire, accident, or other causes.

c. Upgrade. RTA upgrade projects enable Marine Corps organizations to accomplish "today's training better tomorrow" through the procurement of new equipment, target systems, and other support items. An example of an RTA upgrade would be replacing

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

CHAPTER 3

RTA RESOURCE MANAGEMENT

3000. INFORMATION

1. CG, MCCDC (C465) is the resource manager for RTA budgetary matters. The RTA investment strategy is developed around the three pillars of sustainment, upgrade, and modernization/transformation.

2. In general, the classification of funding depends on the nature of the project to be funded. Sustainment projects are normally funded using O&MMC appropriations because they involve maintenance and repair of existing RTAs. Upgrade projects most often require PMC funding to procure new, more sophisticated equipment and targetry. Modernization/transformation projects principally use MILCON funding to construct ranges to meet emerging requirements or accommodate new weapon systems.

3001. PURPOSE. This chapter provides information and guidance on various funding streams that can be utilized for the sustainment, upgrade, and modernization/transformation of RTAs.

3002. RTA RESOURCING

1. RTA resource requirements will be provided to CG, MCCDC (C465) prior to POM submission in accordance with procedures outlined in this chapter. CG, MCCDC (C465) will prioritize those requirements. CNO (N885F) is the executive agent and resource manager for all SUA and naval air station airspace acquisition for the DON.

2. The POM submission identifies all appropriations (including O&MMC, PMC, and MILCON) required to construct, equip, operate, and maintain facilities governed by this Manual.

3. RTA resource guidance is contained in references (g), (h), and this Manual. It is imperative that RTA planners coordinate with installation resource managers well in advance to ensure that projects are included in CG, MCCDC POM submissions. Aviation range instrumentation requirements must be coordinated with Commander, Fleet Forces Command, for Navy O&M funding.

(3) MILCON projects require a tremendous amount of advance planning to accommodate the staffing requirements necessary to obtain Congressional approval. The MILCON POM process takes place every 2 years in advance of the O&MMC and PMC POM cycles. In the summer of even-numbered years, installations must submit candidate MILCON projects for consideration. Detailed documentation in the form of completed DD Forms 1391 is due in September of that same year.

(4) As an example, the 2006 MILCON POM process began in August 2002, when installations submitted their construction requirements summary to HQMC. This summary provided a six-year construction program (FYs 06-11). In September 2002, the installations submitted DD Form 1391 documents for FYs 06 and 07 construction projects for review.

(a) Once reviewed, prioritized within the POM, and approved by Program Evaluation Group, the projects were forwarded for inclusion in the DON's MILCON submission. They were then submitted to Congress for approval and appropriation.

(b) Once the MILCON appropriation is approved and the project appears in the budget, construction on RTA projects must begin within 3 years of the year budgeted. MILCON appropriations typically remain available for obligation for a period of 5 years. The details of MILCON funding are provided in reference (f).

(5) The Range Investment Strategy modernization and transformation "pillar" is associated with MILCON per United States Code (U.S.C.) 2801. MILCON includes any construction, development, conversion, or extension of any kind carried out with respect to a military installation. Construction projects consist of all types of buildings, roads, airfield pavements, and utility systems.

e. Maintenance, Repair, and Construction. There are several other categories of RTA projects that may be eligible for funding: maintenance, repair, and construction. These projects are normally monitored and controlled by the installation facilities maintenance officer. Maintenance projects are normally considered to have no funding limits, and are approved by the installation commander and funded with O&MMC appropriations.

(1) M1 refers to repair projects that cost less than $300,000 and are approved by the installation commander. M1 projects are funded from local O&MMC appropriations.

(2) M2 is repair work that requires CMC (LFL) approval and deals with projects estimated to cost more than $300,000. Projects approved under this category are funded with O&MMC appropriations centrally managed by CMC (LFL). M2 repairs that cost more than $5 million must be approved by the Assistant Secretary of the Navy (I&E).

(3) R1 is minor construction that costs less than $100,000 per project; it is approved by the installation commander and funded from the local O&MMC budget.

(4) R2 is construction that costs between $100,000 and $750,000, and must be approved and funded with O&MMC appropriations. The limit is $1.5 million for construction projects intended to correct deficiencies that pose threats to life, health, or safety.

(5) Unspecified minor construction (UMC) is a program with limited resources, but can be an effective tool for funding construction projects that do not fit into the regular POM schedule, and need to be constructed in a much shorter time-frame than regular minor projects. To be eligible for UMC funding, a project must have a higher priority than can be accommodated by the regular MILCON Program. Projects under the UMC Program are submitted to CMC (LFL); if approved at that level, they are forwarded to the Assistant Secretary of the Navy (I&E) for final approval and funding. The funding range for UMC projects is currently set at between $750,000 and $1.5 million.

f. Environmental Compliance Funding. Centrally-managed funding is available from CMC (LFL) for environmental compliance and protection. RTA projects may qualify for this funding if they are required by applicable laws, regulations, executive orders, or DoD, DON, or USMC policy. Close coordination with the installation environmental office is required to identify and obtain this funding.

3003. GROUND RANGE SUSTAINMENT PROGRAM

1. The priority for the GRSP is the 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 computers 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. RTA requirements often cannot be foreseen and would not be funded in a timely manner if subjected to the constraints of the POM budget cycle. Funding of specific 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 $200,000. CG, MCCDC is the waiver authority for projects exceeding this amount.

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. Sustaining and replacing 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 and targets should be obtained with BOS funds.

e. Spare or repair parts.

f. Exercise instrumentation such as the multiple integrated laser system, position location instrumentation, indoor simulated marksmanship trainer, and the infantry squad trainer.

g. Computer equipment for administrative functions.

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

3004. GROUND RANGE SUSTAINMENT PROGRAM CYCLE. The GRSP functions on an annual cycle as outlined below:

1. During the fourth quarter of each FY, installation commanders must submit RTA investment projects into the GRSP database available at the RTA Management Division, TECOM website and at the following Internet address: https://www.ttr.navy.mil/grsp/. Instructions are provided for authorized users requiring access at the GRSP website.

2. During the first quarter of each FY, a team of officials from MCCDC, NSWC, and MARCORSYSCOM will visit installations to validate GRSP submissions.

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

4. CG, TECOM will then provide the project listing to Commanders, Marine Corps installations (MCIs) for comment and input. MCI input will be considered during the prioritization board proceedings.

5. During the second quarter, a board representing the Marine Corps warfighting advocates, MCCDC, NSWC, and MARCORSYSCOM will meet to establish the consolidated prioritization list. MCI commanders will have an opportunity to brief their projects to board members.

6. The prioritized list of projects is then submitted to CG, TECOM for approval. Based on the prioritization and funding levels for that year, the approved projects will be funded.

7. This annual process will be announced by Naval message and electronic mail.

8. In addition, submissions through the GRSP website for future-year RTA projects are both authorized and encouraged.

3005. SYSTEM REPLACEMENT AND MODERNIZATION (SRAM) PROGRAM

1. The SRAM Program is an ongoing acquisition program designed to provide the Navy's tactical training ranges with vital minor instrumentation and support equipment closely linked to aviation. Sponsored by CNO and executed by the NAVAIR Tactical Training Ranges Program Office (PMA 205), the SRAM Program fills the acquisition gap between major POM projects and O&MMC expenditures.

2. The goal of the SRAM Program is to ensure that the quality of tactical training support provided by aviation range instrumentation is maintained during infrastructure downsizing actions and as the next generation of range instrumentation systems is developed. The SRAM Program supports this goal by:

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

b. Ensuring that current fleet training capabilities are not degraded for lack of minor equipment.

c. Providing for the fleet's immediate training needs.

3. A link to the SRAM Program is available for the convenience of installation range managers at the Range Management System website, outlined in chapter 4. The SRAM Internet address is https://pma205.navair.navy.mil/sram/.

3006. RTA MODERNIZATION

1. Modernization of RTAs throughout the Marine Corps to meet operational readiness requirements is essential to the successful execution of RTA management. Design manuals and specifications for standard ranges (and selected training buildings) are provided in references (a) and (i). The range project development process is outlined in this Manual.

2. RTA modernization projects are submitted for validation via the Marine Corps Expeditionary Force Development System as outlined in reference (l). Projects are submitted to CG, MCCDC (C039) in the form of UNSs and are vetted through the Marine Corps warfighting advocates. Once validated, the project is assigned a lead advocate and the requirement is further defined. Once the staff action is completed, the project will compete for funding and subsequent fielding.

3. CG, MCCDC (C465) will normally be the lead advocate for RTA projects. As such, that office will prioritize the requirements, submit validated projects for funding through the POM process, and return the results to the originator. As funded projects are identified, installations will incorporate approved range plans into installation and RTA master plans and other documents.

4. Guidance and recommendations for range and targetry equipment can be provided by CG, MCCDC (C465). SDZs and firing tables to support range operations are contained in reference (a).

5. CG, MCCDC (C465) will establish the requirement for an annual conference of representatives from DC AVN, MCCDC, MARCORSYSCOM, and installations to discuss RTA modernization, sustainment, and upgrade plans and policies.

6. CG, MCCDC (C465):

a. Provides institutional-level central management of integrated requirements in support of RTA management as outlined in this Manual.

b. Reviews, prioritizes, and fields Marine Corps targetry and related range equipment.

c. Coordinates with CG, MARCORSYSCOM (TRASYS) concerning new range equipment and targetry. Both offices coordinate targetry fielding schedules and requirements with the appropriate agencies to ensure compliance with published regulations.

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

CHAPTER 4

RANGE MANAGEMENT SYSTEM

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CHAPTER 4

RANGE MANAGEMENT SYSTEM

4000. INFORMATION. A dilemma facing installation commanders and range managers is the requirement for expanded, more complex RTAs that provide challenging expeditionary maneuver warfare training opportunities while addressing encroachment and meeting increasingly stringent environmental requirements. The Range Management System, available at the CG, MCCDC (C465) website, https://rtam.tecom.usmc.mil, was developed to assist installation commanders in confronting the modern-day challenges of preparing Marines for war.

4001. PURPOSE. The purpose of this chapter is to describe the Range Management System, the online capabilities it provides, and its role in standardizing RTA procedures throughout the Marine Corps.

4002. RANGE MANAGEMENT SYSTEM OVERVIEW

1. The Range Management System contains the web-based RFMSS, which allows users to schedule ranges at any Marine Corps or U.S. Army range complex. It includes range inventory requirements, links to the Marine Corps GRSP and the U.S. Navy SRAM Program, and a SDZ management tool that enables rapid and extremely accurate SDZ development. One of the more useful aspects of the site is the only comprehensive Geographic Information System (GIS) database of all Marine Corps RTAs.

2. The system also includes the Range Safety Program, briefings related to the Marine Corps range investment strategy, and all safety of Use Memorandums (SOUMs). The historical information of the ranges on each installation is contained in the Archive Search Reports. Valuable information on encroachment, environmental issues, and UXO/munitions is available, along with RTA-related references that are linked to the original source so that updates are made automatically.

3. The Range Management System presents RTA managers with the following capabilities:

a. Schedule RTAs.

b. Plan/develop training.

c. Gather utilization and environmental data.

d. Facilitate cross-service range use.

e. Measure encroachment effect.

f. Perform training cost-benefit analysis.

g. Plan/prioritize range sustainment and modernization.

h. Relate RTAs to operational readiness.

4003. RANGE FACILITY MANAGEMENT SUPPORT SYSTEM (RFMSS)

1. RFMSS is the centerpiece of the Range Management System; it is the approved Marine Corps RTA scheduling and management tool. CG, MCCDC (C465) is the RFMSS functional manager. This system provides a standard, integrated, web-based program that installation RTA management personnel can use to schedule training support for users and manage Marine Corps RTA property. One advantage of formalizing this process is that the Marine Corps can capture RTA usage data, which, in turn, adds value to the real estate from a national defense perspective. It also affords installation commanders the opportunity to assess installation training resources, and plan improvement and capital investment programs.

2. RFMSS supports all major range management processes, to include unit/organization RTA requests, subsequent range control approval/disapproval action, and the automation of range firing desk operations. The system provides the capability to schedule both Marine Corps and U.S. Army RTAs from remote locations via a local area network or the Internet; it facilitates the data collection efforts of the fire desk and stores RTA cost and utilization information.

3. RFMSS also contains a significant GIS module for each Marine Corps RTA. It allows users to manipulate the data in a variety of ways and then print maps to meet their training requirements. Future RFMSS upgrades will include real-time airspace, encroachment, and

global/regional viewing and scheduling management functions. The specific capabilities provided by RFMSS are described in the following paragraphs.

a. Scheduling

(1) The RFMSS schedule function provides the ability for users remote from the range control facility 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 multiple facility or individual event requests as well as weapon, ammunition, vehicle, and target requirements. RTAs can be reserved through RFMSS as much as two years in advance.

(2) The schedule function concurrently provides the ability for range control personnel to approve, process, and track RTA requests; schedule training area maintenance; resolve scheduling, safety, or environmental conflicts; and publish a range bulletin that reflects RTA assignments for a specific period.

(3) The location of MARFORRES training areas may be determined by using RFMSS. MARFORRES training areas can be scheduled by contacting the Force G-3 training officer.

b. Fire Desk Operations. RFMSS automates the following fire desk responsibilities:

(1) Authorize scheduled units onto the appropriate RTAs.

(2) Monitor RTA training status.

(3) Clear and track down-range personnel.

(4) Collect range utilization data.

With RFMSS, the fire desk can view RTA data in both tabular and graphic format. Both modes use color-coding for rapid identification of RTA status.

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

(1) Facilities Utilization Report.

(2) Training Area Utilization Report.

(3) Unit Utilization Report.

(4) Unit Cancellation Summary Report.

(5) Unit No Show Summary Report.

(6) Unit vs. Facility Utilization Report.

(7) Personnel/Equipment Utilization Report.

(8) Total Training Ammunition Usage Report.

(9) Hot Time Utilization Report.

(10) Hourly Utilization Report.

(11) Daily Facility Utilization Report.

4. The scheduling capability of RFMSS was designed to permit users without military network access to request RTAs. Remote users require the following:

a. A workstation with internet connectivity.

b. A valid RFMSS user identification (ID) and password assigned by the range control functional administrator.

5. To gain access to RFMSS, the remote user must first contact the range control facility functional administrator to request a user ID and password; installations will publish specific access procedures for remote users. Once the user has obtained authentication information, access is obtained through this Internet address: https://rfmss.lmfs.belvoir.army.mil. Access allows the user to view a RFMSS demonstration and range schedule bulletins, and to submit requests for RTAs. Users and RFMSS administration manuals are also available at the website.

6. An electronic request form is accessible from the RFMSS main menu on which users can request multiple training events covering a variety of dates and facilities, and a wide range of weaponry,

ammunition, and vehicles. Mandatory entries are contained on the form, preceded with an asterisk, and colored red. The user cannot advance to the next screen or submit the request until all mandatory fields are completed.

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

a. 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 must approve the co-use agreement, and the range control schedule office has final approval authority for such requests.

b. The safety conflict window reflects all safety conflicts resulting from the RTA request.

c. The environmental conflict window lists environmental conflicts posed by the RTA request.

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

a. 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).

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

c. 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.

4004. NATIONAL DEFENSE AUTHORIZATION ACT (SECTION 366)/RANGE INVENTORIES

1. Section 366 of the 2003 National Defense Authorization Act, in part, required the Secretary of Defense (SecDef) to develop a plan to address training constraints caused by limitations on the use of

military lands, marine areas, and airspace. As part of preparing this plan, the SecDef was required to assess current and future training requirements and evaluate DoD resources to meet those requirements.

2. As a result, the Marine Corps developed the first comprehensive, institutional-level inventory of its RTAs. The Marine Corps relies on an extensive portfolio of land and airspace resources to accomplish training at all levels of the continuum: entry, individual, unit, Marine Air-Ground Task Force, and multi-service.

3. RTAs comprise the core of this portfolio. The Marine Corps also depends on access to other services' ranges and airspace. In addition, other nations' ranges, non-DoD Federal lands such as Bureau of Land Management property, and non-Federal lands, both public and private, are used by Marine Corps organizations. Each range, airspace, and training area is vital, and retaining access to the entire portfolio is a priority in RTA management efforts. The range inventory function resident at the Range Management System website establishes a baseline database that will be used to ensure the viability of Marine Corps RTAs, and must be updated annually.

4005. PROGRAMMING/FISCAL

1. CG, MCCDC (C465) is the primary proponent for programming and funding RTA initiatives in the Marine Corps. As a result, in coordination with DC I&L, that office manages the Sustainable Range Program. The DoD Sustainable Range Program was established with the understanding that large, unencumbered training and testing ranges, instrumented to support realistic combat training and testing, are a unique American military capability. As such, they are an essential training aid to meld personnel and material into a combat-ready force. They provide a tool to transform the force to meet new missions and take advantage of new technology.

2. DoD tasked the services with developing sustainable range programs that address RTA infrastructure, operations, maintenance, encroachment, environmental responsibilities, outreach, and new technologies opportunities. With this charter, CG, MCCDC (C465) generated a range investment plan for the Marine Corps that is posted on the Range Management System website.

3. The Programming/Fiscal section of the website also contains information on the U.S. Navy SRAM program and the Marine Corps GRSP as discussed in chapter 3, as well as a copy of the Military Construction Planning and Programming Guide for the convenience of RTA managers and planners.

4006. SAFETY/OPERATIONS

1. All classes for the Resident Interservice Range Safety Course (Intermediate) are available from the Range Management System and can be used for local range safety officer (RSO) courses. Range design guidance and criteria are contained in the Safety/Operations database, in addition to all Marine Corps and U.S. Army SOUMs.

2. An electronic SDZ tool is available that allows rapid and extremely accurate SDZ development. Users can download the SDZ tool and use it anywhere to develop safe expeditionary ranges. A pocket guide is also accessible at the website that provides the user with a quick, ready reference for training plan development. It provides standards and procedures for the safe firing of ammunition, demolitions, lasers, guided missiles, and rockets for training.

4007. HISTORY/STATUS

1. The historical use of the ranges on each installation is captured in Archive Search Reports on the Range Management System website. This database provides an invaluable, detailed historical resource, and a frame of reference for the determination of environmental restoration responsibilities.

2. Range status reports reflecting both quantity and quality of RTAs as obtained from the Commanding Officer's Readiness Reporting System (CORRS) are contained at the website. The CORRS report includes sections on both aviation and ground RTAs. It provides installation commanders with the unique opportunity to relate RTAs to readiness. This information will become more critical during the process of range transformation as envisioned in *Marine Corps Installations 2020*.

4008. ENCROACHMENT/ENVIRONMENT

1. Encroachment is a challenge to be confronted by 21st century RTA managers. DoD has numerous programs addressing encroachment, including the Readiness and Range Preservation Initiative (RRPI). RRPI is an ongoing program of limited legislative proposals necessary to preserve military training from unintended consequences of environmental and natural resources laws. With these legislative proposals, DoD seeks to balance military warfighting requirements with environmental protection.

2. CG, MCCDC (C465) has partnered with DC I&L to monitor RTA encroachment and develop policies for meeting environmental requirements while preserving realistic training programs. These policies include buffer zone acquisition, the purchase of undeveloped private lands adjacent to installation property lines. Buffer zone lands serve a military purpose, but may not be used for military munitions training and/or testing. Acquisition of this property precludes future negative impact on RTA training evolutions that would be created if this real estate were to be commercially developed. DC I&L has responsibility for the buffer zone land acquisition program, with assistance from CG, MCCDC (C465) for RTA management issues.

4009. UXO/MUNITIONS. The Range Management System website includes hyperlinks 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.

4010. REFERENCES. A detailed list of numerous links to Federal, Congressional, DoD, Government Accountability Office, and other Services' RTA-related directives is provided by the Range Management System. These links provide a wealth of pertinent data to RTA managers.

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

CHAPTER 5

RANGE CONTROL FACILITY MANAGEMENT

5000. INFORMATION

1. Sound range control management practices enhance the safe and realistic training opportunities available to the Total Force, and ensure viable RTAs for future generations of Marines.

2. The safe day-to-day operation of RTAs is the installation commander's responsibility. Range control agencies 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 the safe, efficient, and effective management of RTAs to the O&T department (or G-3/S-3 as appropriate). As a member of the O&T department's staff, the installation RCO serves as the commander's primary representative for range control facility operations.

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

5001. PURPOSE. This chapter standardizes Marine Corps range control facility functions, procedures, and responsibilities.

5002. RANGE CONTROL FACILITY ORGANIZATION

1. Range control facilities provide safety, control, maintenance, and administrative functions for aviation, ground, and combined-arms training events within RTAs, to include both live-fire and non-live-fire events.

2. Range control facilities may be supported by either co-located or remote DON ATC facilities providing ATC oversight as defined in reference (j). 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.

5002 POLICIES AND PROCEDURES FOR RTA MANAGEMENT

3. The RCO shall be appointed in writing by the base/station commander, and a copy of that appointment letter will be forwarded to CG, MCCDC (C465). The RCO, at a minimum, must complete the Interservice Range Safety Course (Intermediate) and the Military Airspace Management Course (Service School Code 73D). The RCO's responsibilities are delineated in reference (a), and expanded upon in the following paragraphs.

5003. RANGE CONTROL FUNCTIONS. Installation RCOs are normally responsible for the successful execution of the following functions and responsibilities.

1. Safety. RCOs establish and implement the installation range safety program and provide safety oversight for all RTA activities through the following procedures:

a. Coordinate RTA Safety. RTA safety is of critical importance, therefore, its responsibility and the personnel charged with providing it are inherently Governmental in nature (meaning Government supervision). Safety regulations contained in references (a), (c), and local directives will be strictly enforced. Range safety personnel will be trained in accordance with applicable MCOs and local directives, and assigned in writing prior to assuming RTA responsibilities.

b. Coordinate Emergency Response. 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 per the local mishap plan.

c. Coordinate Explosive Ordnance Disposal (EOD) Response. Coordinate procedures for routine as well as emergency EOD requirements. Emergency EOD communication frequencies must be established.

d. 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 reference (c).

e. Provide and Conduct Training. As part of the overall installation Range Safety Program, establish and provide a training

and certification program for RSOs and range officers in charge (OICs) regarding the conduct of training and RTA procedures.

f. Provide Personnel Briefs. Conduct face-to-face brief for live-fire and airspace RTA evolutions with RSOs, range OICs, tactical air control agencies, unit air officers and command representatives, as appropriate.

g. Conduct Inspections. Range safety specialists will conduct random inspections of RTAs to confirm strict adherence to range safety regulations, ensure area police is performed, and identify required maintenance. Per reference (b), evaluations of operational risk assessments will be conducted 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.

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

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

a. Schedule. 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.

(1) Utilization Data. As discussed in chapter 4, RFMSS will be used to store RTA (to include airspace) utilization data. Utilization data must be updated daily by range control personnel. This data will be used by CG, MCCDC (C465) and installation commanders for budgeting and planning purposes.

(2) Reports. RTA utilization data resident in RFMSS can be used to generate various routine or ad hoc reports. As an example, commands can use RFMSS data to report annual usage of airspace for military operations as required by reference (j).

b. Publish Notices. 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 time 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.

c. Operate Fire Desk. The fire desk is the hub of range control operations. The fire desk coordinates activation and deactivation of RTA airspace with the controlling agency, admits scheduled units onto the appropriate ranges, and authorizes personnel and aircraft movement within RTAs. The fire desk also coordinates RTA training operations status, tracks all RTA incidents and initiates emergency procedures, clears and monitors any down-range personnel, dispatches range inspectors as needed, and alerts range control supervisory personnel of any cease-fire situations.

d. Provide Management of RTA Airspace. Airspace is a critical component of Marine Corps RTA. As the volume of air traffic in the National Airspace System (NAS) grows, pressure to increase the availability of airspace for military operations to civil and commercial users will grow. Through effective airspace management, per references (j), (n), and (o), Marine Corps bases/stations can retain, expand, and create training airspace vital for mission accomplishment.

(1) The FAA provides airspace for military operations within the NAS to support MAGTF training. Per reference (j), airspace for military operations includes SUA, Air Traffic Control Assigned Airspace (ATCAA), and Airspace for Special Use.

(a) 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.

(b) ATCAAs of defined vertical/lateral limits should be 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.

(c) Airspace for Special Use was developed to satisfy airspace requirements for point-to-point flight at airspeeds that reflect military training demands in excess of speeds authorized in 14 CFR Part 91.117.

(2) 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. The following are MCB/MCAS airspace responsibilities for range complexes with airspace for military operations.

(a) Execute the requirements of the using agency as described in references (n) and (o). In addition, the RCO will also serve as the range liaison officer (RLO) per reference (j). The RLO 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 RLO (planning and administration) to ensure compliance with applicable directives.

(b) Publish specific and comprehensive RTA information.

(c) 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.

(d) Ensure all aircrews receive appropriate installation safety briefs prior to operating within assigned airspace.

(e) 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.

(f) Establish and publish weather restrictions for air operations within the RTA.

(g) Develop and publish procedures and control measures to integrate close air and simulated close air support, aerial lasing, unmanned aerial vehicle, and forward arming and refueling point operations.

(h) 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.

e. Control Personnel and Aircraft Movement and Access. Range Control will monitor and control access of personnel, vehicles, and aircraft activities within training areas. No personnel or aircraft will enter a RTA containing hazardous activity without prior approval of range control. All personnel traveling within a RTA will maintain communication 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, and coordinate with the controlling agency and restore operational safety.

f. Provide and Enforce Physical Security. Range control measures and other RTA regulations are provided for the safety of personnel and protection of government property. Through regular patrols, range control personnel will ensure compliance with those measures and regulations. The RCO may recommend the revocation or suspension of RTA complex privileges or 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 facilities.

g. Provide and Coordinate RTA Communications

(1) RTA communication requires a common operative link for all training evolutions. RTA controllers will establish and maintain communications between the range control facility, the appropriate SUA controlling agency, and using units for all live-fire weapon and aviation training activities. Implement and coordinate procedures for emergency response scenarios, to include emergency communication frequencies.

(2) Each range will have a primary and alternate means of communication. Loss of communications with range control will result in an immediate cessation of range operations. Positive two-way communication with range control is required at all times.

(3) Procedures will be established and published pertaining to the loss of communications between the range control facility, ground units and aircraft within the installation's RTA, and controlling agencies. All radio circuits, interphones, telephones and radar video used to support range control instructions and operations shall be recorded continuously during the hours of operation and maintained per reference (p) SSIC 2000.2. All range communication equipment must be supported by an uninterruptible power supply.

h. Provide and Coordinate Radar Surveillance. Range control facilities with RTAs that include airspace for military operations will incorporate a radar surveillance capability for the using agency. This radar will provide appropriate displays to monitor restricted airspace and permit a real-time tracking capability of aircraft operating within restricted airspace, to include authorized non-participating aircraft and unauthorized intruders.

3. Maintenance. The following tasks are integral to an effective RTA management program that supports a safe training environment.

a. Provide and Coordinate Range Clearance. Range managers will establish procedures for contracted range clearance operations to permit the sustainable safe use of operational ranges for their intended purpose.

b. Coordinate 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 range control facility SOP.

c. Construct and Maintain Targets and Training Devices

(1) Training devices and targets will be used to provide challenging training opportunities. Training devices and targetry on ranges will support training for both collective and individual training standards. Training devices and targetry should provide as realistic training as possible to simulate the battlefield; i.e., shoot-back capability, feedback of fires, threat emitters, and visual threats/effects.

(2) Joint National Training events will further require targets and battlefield effects simulators be controlled as part of the plan for an aggressive, free-playing opposition force. CG, MCCDC (C465), along with CG, MARCORSYSCOM (TRASYS), ensure that adequate contracts exist to maintain training devices to include target systems and ground simulators.

d. Provide and Maintain Range Boundary Signs, Fences, Cameras, Gates, etc. All training areas will be clearly marked, fenced, and gated in accordance with reference (a). 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.

e. Provide and Coordinate Vehicle/Transportation Operations and Maintenance. RTA motor transport assets will be maintained and used to maximize training support.

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

4. Administration

a. Certify and Recertify Ranges. Reference (d) directs the certification and re-certification of Marine Corps ranges 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 (d).

b. Conduct Range Inventories. As discussed in chapter 4, updated, accurate RTA inventories will be maintained as required by DC, I&L and CG, MCCDC (C465).

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

d. Coordinate Special Events. Unit or command-sponsored RTA events that include civilian personnel must be approved and coordinated through the installation commander (O&T department). 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. Inspectors from range control will conduct inspections of special events to monitor the safe use, police, and maintenance of the RTAs.

e. Develop SOPs and RTA Regulations. SOPs and regulations will be developed as discussed to ensure the safe, efficient, and effective operation of RTAs. At a minimum, the SOPs will include the following:

(1) Procedures for the safe conduct of military training in the RTAs; i.e., 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.

(2) Range control facility organization, mission, tasks, and billet descriptions.

(3) Information on the installation's range controller position certification program.

(4) Policies and procedures for range controllers serving as fire desk supervisors.

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

(6) 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.

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

(8) Ammunition malfunction reporting and disposition procedures.

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

(10) Marine Corps RTA usage by other services and Federal, State, and local agencies.

(11) Educational programs to ensure that military personnel, their family members, civilian employees, and the general public are aware of potential hazards associated with RTAs.

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

(13) Recreational shooting, hunting, fishing, forestry, and land rehabilitation guidelines. Recreational activities will not take place in dudded impact areas.

f. Promote Environmental Sustainability. Per reference (k), coordinate with the installation environmental office. Range control facility SOPs must incorporate guidance regarding RTA environmental requirements, procedures, and considerations.

g. Manage Personnel. Range control personnel have the critical responsibility of overseeing the safe integration/de-confliction of simultaneous aviation and ground live-fire and non-live-fire evolutions. These duties are inherently governmental in nature. As a result, the Sustainable Ranges Program requires the establishment of a multi-disciplined career program for these personnel. This section provides the basis for the development of such programs.

(1) Range Control Manning. The following billets are appropriate for a typical range control facility. The number of personnel and rank/grade required to fill these billets will be determined by the installation commander based on local requirements.

(a) Range Control Officer. The RCO provides overall supervision of the range organization and is directly responsible for the safe operation of RTAs. Specific duties and responsibilities are contained in references (a), (d), and this Manual.

(b) Deputy Range Control Officer. The Deputy RCO 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.

(c) Range Operations Officer. The range operations officer is responsible to the RCO for the daily plans, schedules, and operation of installation RTAs.

(d) Range Safety Officer. The range safety officer is responsible to the RCO for the installation range safety program outlined in paragraph 5003.1.

(e) Range Safety Specialists. Range safety specialists will assist the range safety officer in the execution of the range safety program as outlined in paragraph 5003.1g.

(f) Range Environmental Coordinator. The range environmental coordinator will coordinate with the installation environmental office to address RTA environmental issues.

(g) Fire Desk Operators. Fire desk operators are range controllers who perform the duties listed in paragraph 5003.2c.

(h) RFMSS Operator. The RFMSS operator maintains the system network and ensures connectivity for the range control facility and users as described in chapter 4.

(i) Schedulers. RTA schedulers perform the functions outlined in paragraph 5003.2a.

(2) Range Control Personnel Certification Requirements. Military and civilian personnel performing duties as range controllers shall be certified as having completed applicable DOD and local training programs. The RTA SOP should contain information required for range control position certification. Local certification standards establish the minimum knowledge and performance standards for each range control position. Appendix (B) provides an example of local certification standards for range controllers/fire desk operators.

(3) 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, 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 range control facility and retained per reference (l), SSIC 1510.3 for enlisted personnel, SSIC 1520.1 for officers, and SSIC 12410.14 for civilian personnel.

(4) 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. Conditions that reduce this state can decrease performance and increase mishap potential. RTA managers will ensure that personnel are fit to perform their critical responsibilities.

(a) 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 military medical authority for evaluation. Personnel temporarily suspended or relieved from performing range control duties shall not control or supervise the control of range operations from any position in the facility.

(b) Physical Qualification and Examination. Personnel performing duties as range controllers shall undergo annual medical examinations. Coordination for medical support to accomplish these physicals will be accomplished at the local level. Installation commanders of these facilities may also deem it necessary that other range control personnel undergo annual medical examinations. RTA managers shall suspend from range control duties any personnel whose physical impairment might impact their ability to perform satisfactorily.

(c) Use of Intoxicating Drugs and Beverages. Range controllers shall not perform control functions or directly supervise personnel performing these functions within 12 hours after consuming intoxicating beverages. Any range controller suspected of using alcohol while in a duty status or reporting for duty under the influence of alcohol shall be suspended from all range control duties and referred to competent military medical authority for evaluation. Range controllers shall not perform control duties while under the influence of any drug and/or medication likely to affect the alertness, judgment, vision, equilibrium, or state of consciousness.

(d) Drug Abuse. Any range control personnel charged with violating Federal, State, or local statutes; 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.

(e) Reassignment of Personnel. Personnel charged with violating 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 Manual. The reassignment of any range control civilian employee for misconduct must be coordinated with counsel.

5003 POLICIES AND PROCEDURES FOR RTA MANAGEMENT

(5) Work Loads. Range control facility operational requirements will determine normal working periods and work schedules. 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 fire desk billets 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.

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

APPENDIX A

CHARTER

DEPARTMENT OF DEFENSE (DOD)
SUSTAINABLE RANGES INTEGRATED PRODUCT TEAM (IPT)

A. PURPOSE

The Sustainable Ranges Integrated Product Team (IPT) charter implements relevant sections of the *Sustainable Defense Readiness and Ranges Initiative* memorandum referenced below. The IPT is charged with development and integration of DoD Sustainable Ranges requirements, process, direction, policy, and guidance.

B. MISSION

Over the past decade, encroachment on operational ranges -- land, air, space, sea, underwater, and electronic spectrum -- has emerged as a significant impediment and a growing challenge to quality testing and training. A coordinated DoD effort is required to sustain the necessary test and training range infrastructure for readiness and acquisition support. Accordingly, the Sustainable Ranges IPT process is defined as the coordination of all functional elements of installation, range and training area management that provides for their long-term viability and ability to support realistic testing and training.

The Deputy Secretary of Defense (DepSecDef) directed the formation of the IPT (Deputy Secretary of Defense memorandum, *Sustainable Defense Readiness and Ranges Initiative*, December 4, 2001). In response, the Under Secretary of Defense for Personnel and Readiness (USD(P&R)) established both an Overarching IPT and a Working IPT to implement the Deputy Secretary's guidance. See USD(P&R) memorandum, *Sustainable Defense Readiness and Ranges Initiative Integrated Product Team (IPT)*, December 21, 2001.

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.

C. STRUCTURE

The Sustainable Ranges IPT consists of an Overarching IPT (OIPT) and a Working IPT (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 USD(P&R); the Director, Operational Test and Evaluation (DOT&E); the Senior Readiness Oversight Council (SROC); and the DepSecDef. In addition, the OIPT formulates and manages a disciplined, multi-tiered outreach effort that supports range sustainability objectives. 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. Broadly speaking, encroachment control describes DoD efforts now underway and planned to mitigate the effects of current and emerging encroachment on military testing and training capabilities.

The WIPT reports regularly to the OIPT membership on its efforts to plan and implement a comprehensive DoD encroachment response.

D. MEMBERSHIP

The OIPT representatives are senior members of the DoD Components. The WIPT includes staff members representing the OIPT membership. The members of the Sustainable Ranges OIPT are:

- Deputy Under Secretary of Defense (Readiness) [Co-chair]

- Deputy Under Secretary of Defense (Installations and Environment) [Co-chair]
- Principal Deputy Director, Operational Test and Evaluation [Co-chair]
- Assistant Secretary of the Army (Installations and Environment)
- Director, Army Training (G-3)
- Assistant Secretary of the Navy (Installations and Environment)
- Director, Fleet Readiness Division (OPNAV N43)
- Commanding General, U.S. Marine Corps T&E Command (TECOM)
- Assistant Deputy Commandant, Installations and Logistics (LF)
- Assistant Secretary of the AF (Installations, Environment and Logistics)
- Director of Operations and Training (AF/XOO)
- Principal Deputy Assistant Secretary of Defense (Legislative Affairs)
- Principal Deputy Assistant Secretary of Defense (Public Affairs)
- DoD Deputy General Counsel (Environment and Installations)

Each OIPT member designates one representative as that organization's official WIPT member. Additional participants from these or other DoD organizations with sustainable range interests are encouraged to participate in the WIPT as non-voting representatives.

E. ORGANIZATIONAL RELATIONSHIPS

The IPT provides broad oversight and coordination of the Department's comprehensive response to encroachment and range sustainment. A number of other groups and organizations within DoD have significant roles in this effort. The IPT maintains a close working relationship with these groups that have subject matter expertise required to address specific range sustainment process issues. Relevant information and products provided by these groups will be used, as appropriate, to support WIPT and OIPT activities and Headquarters-level decision-making. Supporting working group chairs and/or their designated representatives have standing invitations as participants in

WIPT meetings. The following have been identified as working groups with supporting responsibilities to the IPT and the Sustainable Ranges Initiative:

- Operational and Environmental Executive Steering Committee for Munitions (OEESCM).
- DoD Conservation Committee.
- Multi-Service Maritime Sustainability Working Group.
- Land Use Inter-Service Working Group.
- DoD Environmental Noise Working Group.
- Policy Board on Federal Aviation.
- Range Spectrum Requirements Working Group.
- Clean Air Act Services Steering Committee.
- Clean Water Act Services Steering Committee.
- Land Initiatives Working Group.

The IPT may coordinate with other groups that do not have direct supporting responsibilities, but may have overlapping interests with the Sustainable Ranges IPT. These can include:

- Defense Test and Training Steering Group.
- Range Commanders Council Environmental and Sustainability Working Groups.

Where necessary and appropriate, other existing groups may be identified or new groups formed to provide assistance or specialized expertise in addressing the IPTs Sustainable Ranges mission.

F. RESPONSIBILITIES

- Analyze encroachment, outreach, and sustainment issues.
- Develop and recommend range sustainment and encroachment strategies.
- Identify and communicate necessary range sustainment programs.
- Develop a disciplined, multi-tier DoD outreach effort.
- Develop and recommend organizational changes that support range sustainment, as appropriate.
- Develop and recommend policy and plans related to range sustainment and encroachment strategies.
- Develop and support DoD legislative, regulatory, and administrative initiatives.
- Develop and propose legislative and regulatory reviews, analyses, and strategies.
- Coordinate OIPT activities with the DoD Components.

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

- Liaise with local, regional, Tribal, and State civilian authorities, as necessary.
- Liaise with non-DoD Federal agencies.
- Liaise with Non-Governmental Organizations (NGOs).
- Provide the USD (P&R), SROC, and DepSecDef with issues, observations, analyses, and recommendations.

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

APPENDIX B

EXAMPLE GROUND RANGE CONTROLLER CERTIFICATION STANDARDS

REQUIRED READING

1. Base Range and Training Regulations
2. RTA SOP
3. MCO 3500.27A
4. MCO 3570.1B
5. MCO P5100.8F
6. MCO 5100.29A
7. MCO 5104.1B
8. MCO 6260.1D
9. MCO P8000.2B
10. MCO 8020.10A
11. FAA 7110.65 (Pilot/Controller Glossary)
12. RFMSS Users Guide

TRAINING PREREQUISITES

1. Local SDZ class
2. Installation familiarization tour

DETAILED KNOWLEDGE FACTORS/REFERENCES

1. Operational Duties and Responsibilities (Base Range and Training Regulations, RTA SOP)

    a. Ground Range Controller
    b. Air Range Controller
    c. Fire Desk Supervisor

2. Ground Operations (MCO 3570.1B; MCO 3500.27A; MCO P8000.2B; MCO 8020.10A; Base Range and Training Regulations; RTA SOP)

    a. Live-Fire
    b. Direct-Fire
    c. Indirect-Fire
    d. Training Areas

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

3. Ranges and Allowable Weapons (MCO 3570.1B; MCO 3500.27A; Base Range and Training Regulations; RTA SOP)

   a. Allowable Weapons
   b. Special Instructions
   c. Facility/Activity Conflicts

4. Laser Ranges (MCO 5104.1B; MCO 3500.27A; Base Range and Training Regulations; RTA SOP)

   a. Allowable Systems
   b. Safety Parameters

5. Special Areas/Training Restrictions (Base Range and Training Regulations, RTA SOP)

   a. Live Fire and Maneuver Areas (LFAMS)
   b. Drop Zones
   c. Gas Chambers
   d. Rappel Towers/Assault Climbers Courses

6. Combat Towns (Base Range and Training Regulations, RTA SOP)

   a. MOUT Facility
   b. Combat Towns

7. Medevacs (Base Range and Training Regulations; RTA SOP; FAA 7110.65)

   a. Types of medevacs
   b. Information required from a unit reporting a medevac
   c. Fire desk procedures once a medevac is reported
   d. Post incident report/info collection procedures

8. Downed Aircraft (Base Range and Training Regulations; RTA SOP; FAA 7110.65)

   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

POLICIES AND PROCEDURES FOR RTA MANAGEMENT

9. Fires and Fire Danger Rating (Base Range and Training Regulations; RTA SOP; FAA 7110.65)

   a. Fire Danger Ratings
   b. Information required from a unit reporting a fire
   c. Fire desk procedures once a fire is reported
   d. Post fire report/info collection procedures

10. Check Fires (MCO 3570.1B; MCO 3500.27A; Base 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

11. Use/Maintain Equipment (Base Range and Training Regulations, RTA SOP)

   a. Communications Panel
   b. Radar Indicator
   c. Cameras

12. Equipment Failures (Base Range and Training Regulations, RTA SOP)

   a. Communications failure - immediate actions
   b. Communications failure requiring the Fire Desk to relocate
   c. Loss of radar

13. Call Signs and Frequencies (Base Range and Training Regulations; RTA SOP; FAA 7110.65)

   a. Agency/Unit Call Signs
   b. Frequencies

14. RFMSS (RFMSS Users Guide; Base Range and Training Regulations; RTA SOP)

   a. Activate/De-Activate Units
   b. Add/Cancel Units
   c. End of Day Processing
   d. 1594 Entries

15. Maintain Firing Logs (RFMSS Users Guide; Base Range and Training Regulations; RTA SOP)

    a. KD Log
    b. Hot Log

16. Maintain Training Logs (RFMSS Users Guide; Base Range and Training Regulations; RTA SOP)

    a. Non-Fire Training Log
    b. Environmental Log
    c. TRIMMS Log
    d. Airspace Release Log
    e. Airspace Utilization Log

17. Complete Turnover Logs (RFMSS Users Guide; Base Range and Training Regulations; RTA SOP)

    a. Morning Brief Sheet
    b. Evening Brief Sheet

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.