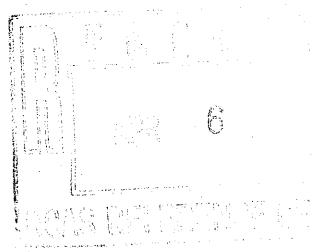
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Army Regulation 210–21

REFERENCE ONLY

Installations

Army Ranges and Training Land Program



Headquarters
Department of the Army
Washington, DC
1 May 1997

UNCLASSIFIED

SUMMARY of CHANGE

AR 210-21
Army Ranges and Training Land Program

This Revision--

- Reestablishes the scope , procedures and responsibilities for Army-wide management and acquisition of firing and non-firing ranges and training land (chaps 1,2, and 3).

- Realigns responsibilities for range and training land development and establishes the dual program managers within the Corps of Engineers and the Training and Doctrine Command (chap 2).

- Realigns the management and scoring system for the prioritization and construction of range facilities (chap 3).

- Standardizes the quality control of range development projects (chap 4).

- Provides commanders and trainers at all levels with guidance designed to optimize the efficiency and effectiveness of range and training land support of the Army's Combined Arms Training Strategy (chap 5).

- Redesigns the automation needs of the Army for control and management of range and training land development and management (chap 6).

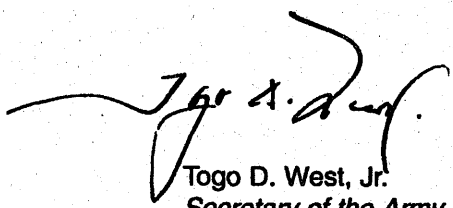
Headquarters
Department of the Army
Washington, DC
1 May 1997

*Army Regulation 210–21

Effective 2 June 1997

Installations

Army Ranges and Training Land Program



Togo D. West, Jr.
Secretary of the Army

History. This update printing is a revision of this publication. Because the publication has been extensively revised, the changed portions have not been highlighted.

Summary. This regulation assigns responsibilities and prescribes policy and procedures for the Army range and training land acquisition programs. It establishes the responsibilities of the major participants in the range and training land programs and prescribes procedures for planning, programming, developing, and operating training ranges and procedures for acquiring additional training land in the continental United States.

Applicability. This regulation applies to the Active Army, the Army National Guard, and the U.S. Army Reserve.

Proponent and exception authority. The proponent for this regulation is the Deputy Chief of Staff for Operations and Plans (DCSOPS). The DCSOPS has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation. The DCSOPS may delegate this authority in writing, to a division chief under his supervision within the proponent agency in the grade of colonel or the civilian equivalent.

Army management control process. This regulation contains management control provisions, but does not contain key management controls that must be evaluated.

Supplementation. Supplementation of this regulation is prohibited without prior coordination and approval of HQDA (DAMO-TR).

Suggested Improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publication and Blank Forms) directly to HQDA (DAMO-TR), 400 Army Pentagon, Washington, DC 20310–0400.

Distribution. Distribution of this publication's has been made in accordance with initial distribution number (IDN) 093201, intended for command levels C, D, and E levels for the Active Army, Army National Guard and U.S. Army Reserve.

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*This regulation supersedes AR 210-21, 1 April 1982.

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Chapter 1
Introduction

1–1. Purpose

This regulation assigns responsibilities and prescribes policies and procedures for—

a. Standardizing and modernizing Army training ranges to train soldiers realistically, consistent with current and future doctrine, threat analyses, and force structures; realizing economy in developing ranges; and ensuring that Army ranges support training required by the fielding of new and improved weapons and ammunition as well as published environmental, safety, and health guidance.

b. Standardizing the total Army training land acquisition process consistent with current and future doctrine, training readiness requirements, force structure, and resource guidance.

c. Development of policies and requirements apply to all projects resourced within the military construction (MILCON) program of the Army, Army Reserve, and Army National Guard (MCA/MCAR/ MCNG), and those non-MILCON projects resourced by installation Operations and Maintenance allocations of the Army, Army Reserve, and Army National Guard (OMA/OMAR/ OMNG) under the purview of this regulation. The requirements of NGR 415–5 and 415–10 for MCNG, and NGR 420–10 for OMNG projects will also apply. Should conflicts between this regulation and the aforementioned NGRs occur, adjudication and resolution will be accomplished by the NGB and Range and Training Land Program (RTLP) representatives from the RTLP Requirements Review and Prioritization Board and Advisory Council as described in Appendix B of this regulation.

d. Range operations, safety policies and requirements apply to all areas that are designated for live-fire weapons training, including recreational ranges, located on Army or U.S. Marine Corps controlled property. This regulation does not apply to RDT&E ranges. Safety policies are addressed in ARs 385–62 and 385–63 and subsequent Range Safety Policy Memorandums.

e. Prescribes policies, procedures and guidance for determining live fire and maneuver training land requirements to support operational readiness and potential land acquisition requirements for Active and Reserve components of the Army.

f. Prescribes procedures for establishing mission-based range and training land requirements.

1–2. References

Required and related publications and prescribed and referenced forms are listed in Appendix A.

1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1–4. Responsibilities

Responsibilities are located in chapter 2.

1–5. Army Ranges and Training Land Program

a. The Army Ranges and Training Land Program (RTLP) is under the direction of the Department of the Army, Deputy Chief of Staff for Operations and Plans (DA DCSOPS). The RTLP provides central management and prioritization for planning, programming, design and construction activities for live-fire training ranges and maneuver training lands. The RTLP is managed and administered by DA Program Coordinators designated by TRADOC and USACE as delineated in chapter 2 of this regulation (hereafter referred to as DA Program Coordinators).

b. The process for determining live-fire range projects is outlined in chapter 3 and depicted in figure 1–1 (located at the back of this chap). Major events and prioritization criteria for the standardization and modernization of ranges are outlined in Appendix B.

c. The process for determining training land requirements to support live fire and maneuver training is outlined in chapter 3 and depicted in figure 1–2 (located at the back of this chap). Criteria used to prioritize potential acquisition projects Army-wide are outlined in Appendix B.

1–6. Range safety

Range Safety is an element of the overall Army Safety Program, conducted under the direction of the Department of the Army, Director of Army Safety (DASAF), Office of the Chief of Staff, Army (OCSA). Policies and guidance are developed and disseminated to ensure the safe operation of Army and USMC firing ranges. The Director, Command Safety, Ammunition, Fire Protection, and Environment Office (SAFE), Headquarters, Training and Doctrine Command (HQ TRADOC), is the technical advisor on all range safety matters for DASAF. Range safety requirements are detailed in AR 385–62 and subsequent Range Safety Policy Memorandums.

1–7. Range standardization and modernization

a. Standardization and modernization of training ranges for Army-wide application to meet operational readiness is essential to the successful execution of the RTLP. Standard definitions are based on concepts and recommendations developed by TRADOC schools and centers, individual MACOMs, and DA Program Coordinators. Design manuals and specifications for standard ranges (and selected training buildings) are developed by the Range and Training Land Program Mandatory Center of Expertise (RTLP MCX) under the direction of the DA Program Coordinator for Army Training Facilities, Headquarters, U.S. Army Corps of Engineers (HQUSACE), in coordination with the DA Range and Training Land Program Coordinator.

b. Generic descriptions of range and targetry equipment are outlined in TC 25–8. Surface danger zones (SDZ) and Firing Tables to support range operations are contained in ARs 385–62 and 385–63, DA PAM 385–63, and subsequent range safety policy memorandums.

c. The DA Range and Training Land Program Coordinator provides central management of integrated requirements in support of the RTLP as outlined in this regulation. The DA Range and Training Land Program Coordinator is also responsible for the review and prioritization of Army-wide targetry and related equipment development and fielding based on recommendations from the MACOM and TRADOC proponent school/center RRPB representative. TRADOC proponent schools develop recommended fielding schedules based on MACOM Fielding Plans (MFP) in accordance with AR 700–55, ultimately leading to Basis of Issue Plans (BOIP) for specific targetry and related support equipment. The DA Range and Training Land Program Coordinator, in coordination with the DA Program Coordinator for Army Training Facilities, ensures that training requirements, priorities and resourcing allocations are integrated with other Army investment strategies and processes which support the development and maintenance of the Army infrastructure to meet training mission needs.

1–8. Planning and development

The process to support training assets under the purview of RTLP begins at the installation. Where range and training land management functions are consolidated at the MACOM level, the MACOM commander will ensure that all subordinate elements are an integral part of the RTLP planning process. In such cases, the MACOM office responsible for all RTLP activities contained herein will also accomplish all installation related activities in coordination with subordinate elements. For the purposes of this regulation, the NGB and USARC will also perform the MACOM responsibilities outlined in chapter 2 of this regulation. The RTLP planning process will be a coordinated effort by an interdisciplinary planning team consisting of, at a minimum, trainers, installation real property master planners, environmental and natural/cultural resource managers, range officers, safety managers, force developers, facility engineers, and resource managers in accordance with AR 210–20. This collective body (hereafter referred to as planners) must develop an integrated planning document which addresses mission needs, environmental stewardship, and economic feasibility; and quantifies existing training assets by—

a. Assessing the need for new or improved training assets (live-fire ranges, maneuver training land, and direct support facilities) to meet doctrinal, force structure, training, and modernization, requirements as well as efficient land management practice.

b. Complying with range availability, scheduled and actual usage objectives outlined in TC 25–8 prior to initiating and attempting to justify new range and training land requirements.

c. Evaluating alternatives to new or modified construction, training land acquisition, training instrumentation, and targetry systems to satisfy training requirements.

d. Initiating the planning process for implementing efficient training land management and development following the procedures prescribed in chapter 3 of this regulation.

e. Integrate risk management into all aspects of range planning and operations. The risk acceptance decision authority will be in accordance with FM 101–5.

f. Ensuring the site selection and training asset development process considers natural resource base sustainability and its capability to support training on a long term basis. Ensure that necessary environmental assessments and evaluations are completed in compliance with the National Environmental Protection Act (NEPA) in accordance with ARs 200–1, 200–2 and 200–3.

g. Submitting requirements for non-standard or special-purpose projects under the purview of the RTLP through the MACOM to the HQDA RTLP Requirements Review and Prioritization Board (RTLP RRPB) for decision review (See App B).

h. Incorporating range development and training land acquisition projects into the installation RTLP Development Plan (RDP), Real Property Master Plan, and Six-Year MCA Plan. Army National Guard (ARNG) projects will also be developed in accordance with NGRs 5–3, 415–15 and 420–10. Where deviations exist, resolution for presentation and inclusion in Army priorities will be adjudicated by the NGB.

i. Identifying Other Procurement Army (OPA) and Operations and Maintenance Army (OMA) funding requirements to equip, operate and maintain training facilities governed under this regulation in the MACOM Program Objective Memorandum (POM) submission to HQDA.

1–9. Project review and approval process

Projects included in the scope of this regulation are subject to the following annual reviews and approval processes:

a. Installation. Range and training land projects shall identify preferred alternatives and the type of resources needed to meet mission training requirements through the process described in Appendix B of this regulation. When the preferred alternative involves MILCON or real property actions, projects shall also comply with existing project approval limits and processes contained in AR 415–15 and AR 420–10 (AR 140–483 for MCAR projects, NGRs 5–3, 415–5 and 420–10 for MCNG projects). Figure 1–1 depicts the basic process for a range and training land project. All range and training land projects are compiled into an installation RTLP Development Plan (RDP) and forwarded to the MACOM for review and validation. Non-MCA project designs are reviewed in the same manner as MILCON projects by the DA program coordinators and the RTLP MCX. For the purposes of this regulation, the term "installation" is synonymous with "state" as it applies to the ARNG.

b. MACOM. MACOMs review and validate the training requirement and the planning effectiveness of the installation. The MACOM shall consolidate the installation RDPs listing the proposed fiscal year of funding, title (and project number for MILCON projects), relative MACOM priority, and the estimated cost. Priorities are assigned to all projects by fiscal year. Relative standing within the MACOM's overall MILCON program generally determines range and training land project success. MACOM consolidated RDP will be forwarded to the DA Range and Training Land Program Coordinator in accordance with chapter 3.

c. HQDA. MACOM RTLP submissions are reviewed by two separate and distinct boards or committees. These are the RTLP Requirements Review and Prioritization Board (RTLP RRPB) convened and chaired by DA DCSOPS (DAMO-TR); and the HQDA Program Review Board (PRB) conducted under the direction of the Office, Assistant Chief of Staff for Installation Management (ACSIM). The policies, responsibilities and procedures for these boards and committees are outlined in Appendix B.

1–10. RTLP resourcing

a. RTLP resourcing is accomplished in accordance with AR 1–1 concurrent with the activities described in paragraphs 1–8 and 1–9 above. Planners coordinate with installation resource managers to ensure that projects are included in MACOM POM submission. The MACOM POM submission identifies all appropriations to include Other Procurement Army (OPA) and Operations and Maintenance Army (OMA) funding required to equip, operate and maintain facilities governed by this regulation.

b. MACOM POM submissions to HQDA are prescribed in AR 1–1 and HQDA budgetary guidance (for example, normally no later than the month of November by appropriation type. RTLP resource requirements will be provided to the appropriate DA program coordinator prior to MACOM POM submission in accordance with procedures outlined in chapter 3 for Management Decision Package (MDEP) development.

c. Targetry is procured and installed based on program direction from the DA Range and Training Land Program Coordinator. Procurement of OPA funded targetry equipment will be based on approved MILCON and non-MCA projects identified and approved during the annual RTLP RRPB. OMA funded targetry equipment requirements will be submitted as a part of the RTLP Development Plan for HQDA RRPB review.

1–11. Quality assurance of range development projects

A series of formal quality assurance reviews and inspections are conducted for each range project during the planning, programming, design and construction phases described in chapter 3. The purpose of quality assurances is to preclude expenditure of resources on projects which may not be able to meet criteria (for example, safety, target interface, OMA funding limits). Quality assurance ensures that ranges meet warfighting doctrine (for example, FMs), standardized training objectives (for example, TC 25–8), safety requirements (for example, AR/DA PAM 385–63) and standard designs (for example, CEHND 1110–1–series Design Manuals). Quality assurance is conducted under the direction of and in coordination with the DA Range and Training Land Program Coordinator. In general, the following major functional reviews are required:

a. Planning and Programming. A review of DD Form 1391 (DD Form 1390 for ARNG) (Military Construction Program), project justification, facilities requirements, land use and environmental protection measures, targetry requirements, and estimated costs. New construction requirements should be identified on the DD Form 1391 with a statement of which existing range the new requirement replaces, if any. Identify any changes to future Real Property Maintenance Activity (RPMA) funding requirements.

b. Design. Technical reviews are conducted for all range projects throughout the design process to ensure projects meet training, safety, Corps of Engineers design engineering requirements; compliance with environmental requirements as prescribed in chapter 3 of this regulation; and to verify that estimated construction costs are within the programmed amount (PA) of MILCON funding for the project. Reviews conducted under this regulation do not substitute or abdicate the need for review responsibilities of the NGB or state required under separate regulation or guidance for ARNG projects.

c. Construction. Reviews are conducted throughout the construction process for MILCON funded range projects to ensure that construction execution, environmental regulatory requirements, lessons learned information, and targetry interface points are clearly identified; completed work meets standard design specifications and

targetry emplacement meet mandatory design requirements; and targetry and control device interface points, target emplacement quantities, and targetry installation are validated. Chapter 3 and Appendix D provide additional guidance for installation/MACOM use.

1–12. Training land requirements and acquisition process

a. The analytical process (see fig 1–2) to quantify training land requirements to support both live fire and maneuver training is outlined in TC 25–1 using the Army Training Land Analysis Model (ATLAM). TC 25–1, Appendix A, provides acreage requirements for maneuver training based on Army Mission Training Plan (AMTP) training standards. When land is inadequate, alternative approaches to planning and executing training are suggested.

b. The analysis to determine the adequacy of available land to meet readiness requirements is an installation commander's responsibility. The needs assessment evaluates the adequacy of existing training land to support mission requirements and readiness. This assessment includes consideration of the durability and sustainability of training land in accordance with Integrated Training Area Management (ITAM) land management and land carrying capacity methodologies, sound business investment practices and environmental law.

c. The Land Use Requirements Study (LURS) is the initial step to determine the adequacy of training land to meet readiness needs and identify potential shortfalls. Installation LURS should be reviewed annually to determine adequacy. When significant changes to mission, doctrine or force structure occur, installations will initiate a review and update (as necessary) of the LURS. Installation commanders will identify significant training land shortfalls as a resource constraint to unit readiness in appropriate readiness reports.

d. The process for identification of alternatives which may mitigate training land shortfalls are contained in Appendix D and TC 25–1. Should land acquisition be required, full and complete documentation in accordance with this regulation and AR 405–10 will be completed.

1–13. Range control

a. Army installations and training areas that have the mission to conduct live fire and/or maneuver training must organize, staff and manage a range control organization in accordance with applicable DA and NGB manpower formulas. The range control organization is responsible for control, scheduling, usage and organizational maintenance of range, training land, and related training facilities as directed by the installation commander. Manpower resources required for range control and safety functions are exempt from conversion to contractor performance in accordance with AR 5–20, paragraphs 1–6*e* and 2–3*b*(2).

b. Range control activities will be conducted in accordance with the procedures prescribed in chapter 5 of this regulation and TC 25–8 in conjunction with ARs 385–10, 385–62, 385–63 and DA PAM 385–63. All range safety actions comply with AR/DA PAM 385–63 and will be coordinated with the installation/community safety office. Surface Danger Zones (SDZ) will be established for each weapon fired on each range, including directed energy weapons, using the standards and procedures provided in AR/PAM 385–63 and subsequent Range Safety Policy Memorandums.

c. Additionally, the ITAM program is normally assigned as a management responsibility of the Range Control organization under the supervision of the Directorate of Plans, Training, and Mobilization (DPTM) of the installation staff or other activity with similar responsibilities (for example, ARNG POTO). Restrictions on the use of contracted labor as cited above do not apply to ITAM functions.

1–14. Range clearance.

In addition to clearance policies and guidance contained in AR/DA PAM 385–63, statutory safety and environmental considerations apply to conventional explosives under the Resource and Conservation Recovery Act (RCRA). These statutory requirements apply in the event that conventional explosives ordnance materials accumulated on or off the range prior to, in lieu of, treatment. RCRA requirements also apply in the event that the conventional explosive ordnance is recovered and removed from the range for treatment off the range. Activities not subject to RCRA regulation include:

a. Specific training required to develop and maintain proficiency in the use of special Explosives Ordnance Disposal (EOD) procedures, tools and explosives.

b. Conventional explosive ordnance firing and explosive activities conducted for personnel training and maintaining proficiency, safety testing, research and development testing, range clearance, equipment testing, or quality control/quality assurance testing.

c. In conjunction with explosive ordnance training, elimination of excess propellant charges by Open Burning (OB).

d. Range clearance activities for conventional explosives which malfunction or fail to explode when treated in place or collection for treatment on the range. Inclusive is the consolidation and treatment of conventional explosive ordnance materiel on the range for range clearance purposes.

1–15. Deviations

Occasionally, the requirements of this regulation may be incompatible with mission accomplishment. In such cases, MACOM may forward requests for deviation of specific requirements in accordance with RTLP board procedures outlined in Appendix B.

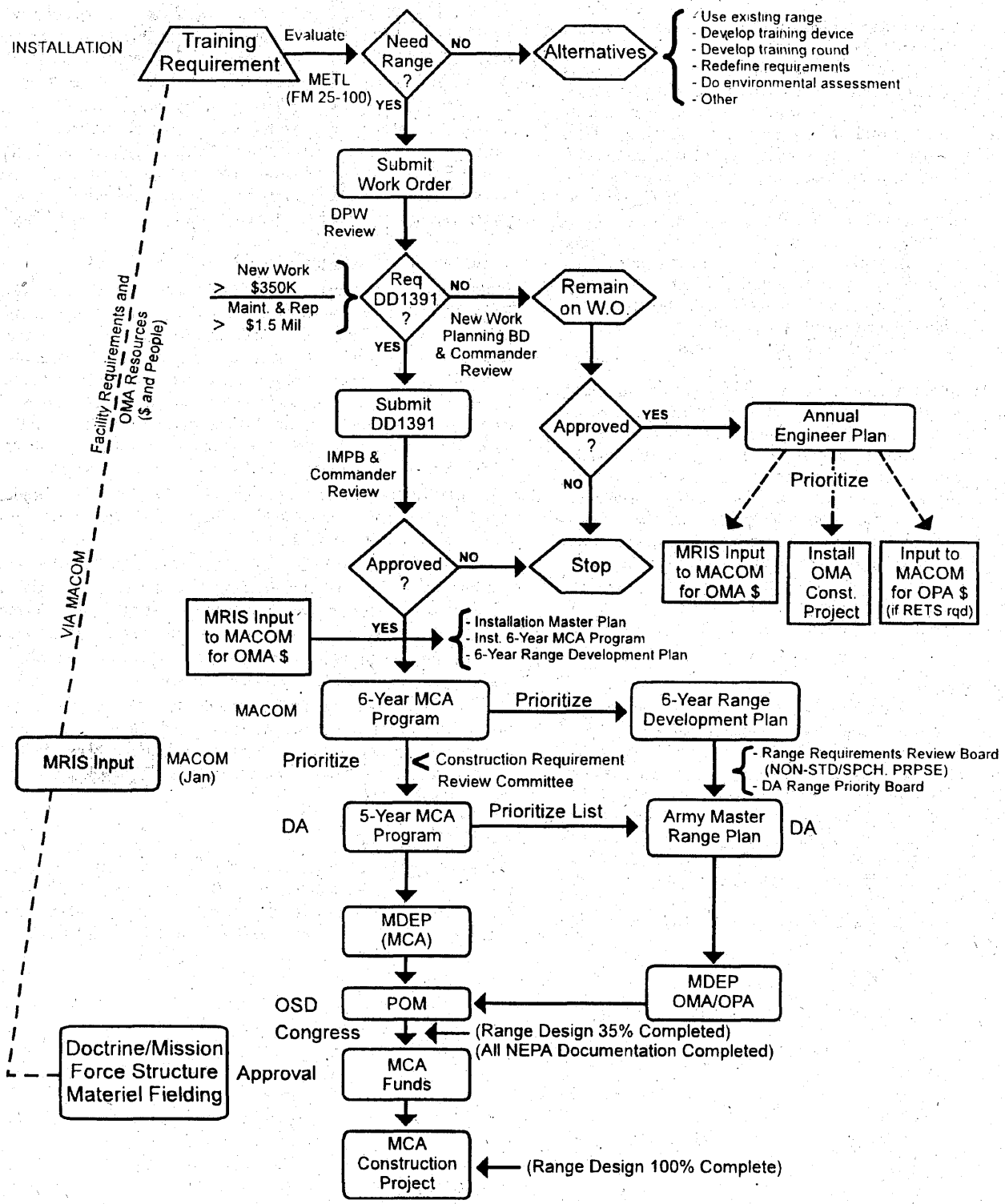


Figure 1-1. Range Development Project Approval and Funding Flow

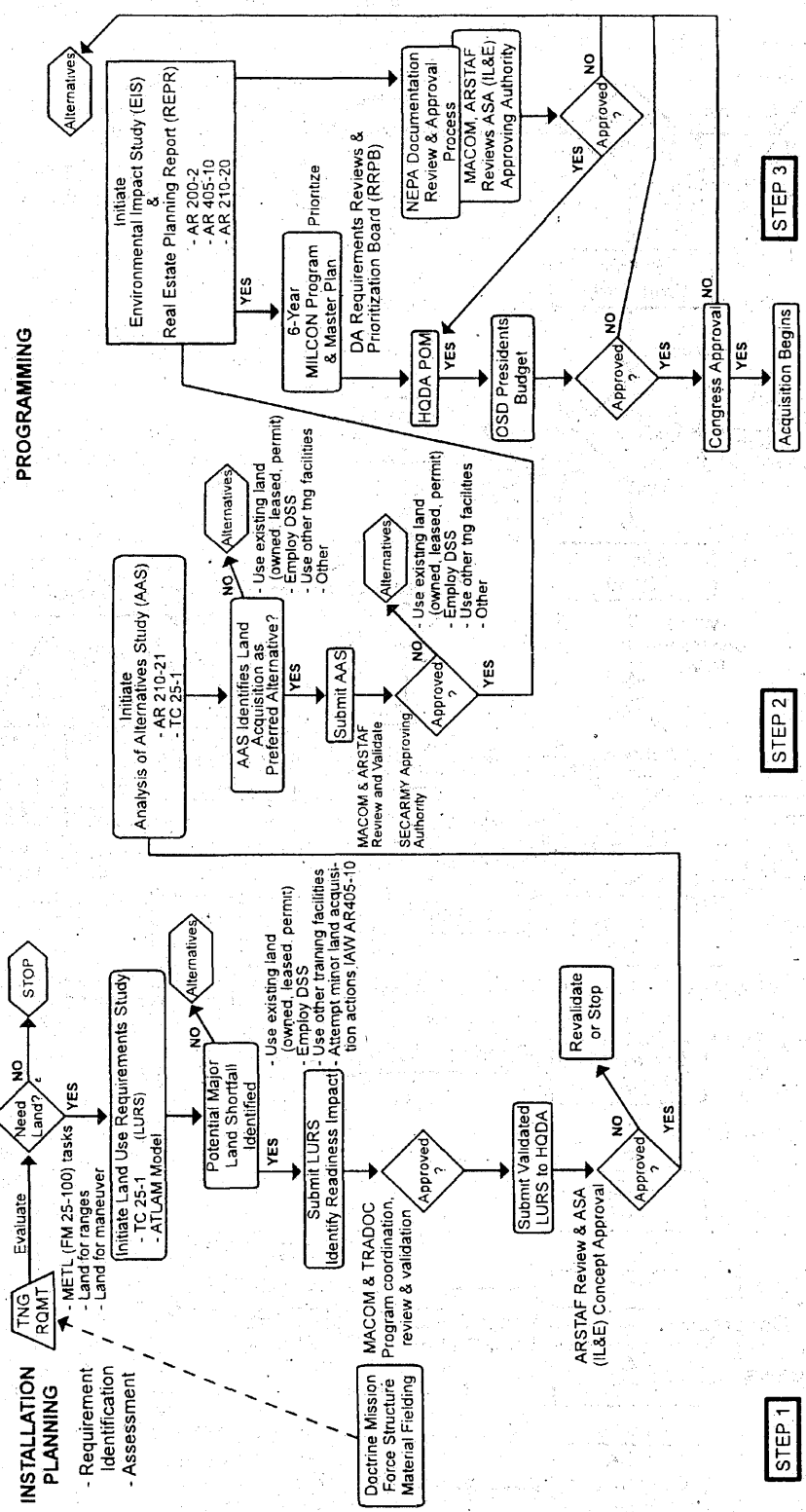


Figure 1-2. Training Land Requirements and Acquisition Model (ATLAM)

Chapter 2
Responsibilities

2–1. The Assistant Secretary of the Army for Installations, Logistics & Environment (ASA(IL&E))

The ASA(IL&E) will—

a. Be responsible for General Secretariat oversight for the formulation, execution and review of related policies, plans and programs relating to the RTLP, safety and occupational health, and the National Environmental Policy Act (NEPA), and provides concept approval for Land Use Requirements Studies (LURS).

b. Establish program objectives and appraisal of performance.

2–2. The Assistant Secretary of the Army for Manpower and Reserve Affairs (ASA(MRA))

The ASA(MRA) will—

a. Be responsible for General Secretariat oversight for force structure requirements and management, force operational readiness, and training for the Active and Reserve Components.

b. Approve training requirements that will generate new land purchases or political interest.

2–3. Department of the Army, Assistant Chief of Staff for Installation Management (DA ACSIM)

The DA ACSIM will—

a. Provide policy and guidance for environmental compliance and conservation in support of the RTLP. Serve as the Army staff point of contact for environmental matters.

b. Provide policy and guidance for real property master planning in support of the RTLP. Serve as the Army staff point of contact for real property master planning.

c. Ensure that Real Property Maintenance Account (RPMA) requirements to support the RTLP are programmed in coordination with DA DCSOPS.

d. Provide assistance in reviewing environmental documents, assessing environmental impacts, and determining mitigating alternatives in accordance with ARs 200-1, 200-2, 200-3, 200-4, 210-20, and 405-10 in coordination with the ITAM proponent (the Director of Training, HQDA ODCSOPS).

e. Provide direction and assistance in land acquisition upon concept approval by the ASA(IL&E).

f. Identify and prioritize RDT&E support or integration of installation management initiatives and automated systems ICW DA DCSOPS (DAMO-TR) and the DA Program Coordinator for Army Training Facilities.

g. Provide Military Construction (MILCON) programming guidance based on prioritized projects contained in the Army Master Range Program (AMRP) in conjunction with DA DCSOPS (DAMO-TR) and the DA Program Coordinator for Army Training Facilities.

h. Serve as proponent for real property, designated land use management and environmental automated systems.

i. Provide an environmental and a facilities representative to serve on the Advisory Council of the RTLP Requirements Review and Prioritization Board (RRPB) and Configuration Control Board (CCB) as required.

j. Establish and promulgate facilities maintenance and repair policy.

k. Provide a member to the ITAM program Council of Colonels (COC) and Executive Management Council (EMC).

l. Integrate Natural Resource Management procedures with those of the RTLP and ITAM processes.

2–4. The Director Army Safety (DASAF), Office of the Chief of Staff, Army (OCSA)

The DASAF will—

a. Establish and promulgate Army-wide range safety policy and guidance.

b. Serve as proponent for ARs 385-63, 385-64, DA PAM 385-63, Range Safety Program, and Subsequent Range Safety Policy Memorandums. Act as the focal point to coordinate range safety matters within HQDA and USMC.

c. Serve as the proponent for safety-related aspects of range and training land management and automated systems.

d. Serve as a member of the Advisory Council of the RTLP RRPB and CCB meetings as required.

2–5. Department of the Army, Deputy Chief of Staff for Operations and Plans (DA DCSOPS)

The DA DCSOPS will—

a. Establish and promulgate policies for the planning, programming and operating of ranges and training land as the functional proponent of this program.

b. Provide policy and guidance on recreational ranges on Army installations to ensure that the operation and management comply with Army range operations and safety policies in coordination with DASAF.

c. Establish and promulgate procedures for HQDA review and approval of Military Construction (MILCON) funded range and training land projects and for non-MCA (OMA) funded range projects.

d. Establish policy and guidance for resourcing the RTLP.

e. Establish policy and guidance for planning, programming, and resourcing major (1000 acres or more or $1M acquisition costs or more) training land acquisition proposals.

f. Provide guidance to U.S. Army Training and Doctrine Command (TRADOC) schools and centers responsible for developing requirements for ranges and training land.

g. Provide guidance to U.S. Army Materiel Command (AMC) in the fielding of new weapon systems by ensuring that comprehensive and feasible training plans exist to identify all training device and support facility requirements.

h. Convene, chair and serve as a principal (voting) member of the RTLP Requirements Review and Prioritization Board (RTLP RRPB), and the RTLP Configuration Control Board (CCB) as required. Serve on other councils and boards having direct influence and support on the RTLP as required.

i. Direct Headquarters, U.S. Army Corps of Engineers (HQUSACE) on the issuance of stop work orders for MCA range development project design, construction or land acquisition activities when required.

j. Serve as the ARSTAF proponent for RTLP automated systems and information technology as well as designating appropriate technology integration centers or activities.

k. Serve as the proponent for this regulation.

l. Chair, convene and serve as a member of the Council of Colonels (COC) and Executive Management Council of the ITAM program ensuring integration of the ITAM and RTLP processes.

m. Develop criteria for the evaluation of ranges and training land adequacy to perform training missions.

n. Integrate RTLP requirements into the overall Army infrastructure investment strategy.

o. Establish and promulgate policies for determining manpower resources required to operate and maintain Army training ranges and training areas based on demographic and trend data.

2–6. Department of the Army, Chief of Engineers (DA COE) and Headquarters, U.S. Army Corps of Engineers (HQUSACE),

The DA COE/USACE will—

a. Designate a DA Program Coordinator for Army Training Facilities who will—

(1) Serve as a principal (voting) member on the RTLP RRPB and CCB.

(2) Ensure that resource requirements to support the RTLP are included in the HQUSACE Program Objective Memorandum (POM) submission to HQDA.

(3) Advise and assist DA DCSOPS (DAMO-TR) in determining range, training land and support facility requirements during the

development of new weapon systems in accordance with AR 700-127 under the auspices of the Combat Readiness Support Team (CRST), HQUSACE.

(4) As the CRST Team Leader, promulgate guidance which establishes, integrates, and implements RTLP standardization and modernization processes and procedures which ensure compliance with the tenets and objectives of the Army Facilities Standardization Program.

(5) Serve as an advisor to the Council of Colonels (COC) member of the Executive Management Council (EMC) of the ITAM program.

(6) Assist DA DCSOPS (DAMO-TR) in the development of Army training investment strategies and program objectives in coordination with the DA Range and Training Land Program Coordinator.

(7) Assist MACOM and installations/communities in the planning, programming, design, construction, operations and maintenance of RTLP projects under the auspices of the CRST, HQUSACE.

(8) Provide USACE support for planning, programming, design, construction, and maintenance of standard ranges and support facilities as required.

(9) Issue stop work orders for MCA/MCAR design, construction, or land acquisition activities as directed by DA DCSOPS.

(10) Maintain and provide information on the current status of MCA/MCAR/MCNG design and construction schedules.

(11) Identify and implement processes and procedures that ensure integration between the training and real property/master planning communities that maximize resource expenditures, enhance decision making, and formulates programmatic investment strategies under the auspices of the CRST, HQUSACE.

(12) Ensure that all planning documentation and actions necessary to implement real estate acquisition are met under the auspices of the CRST and in coordination with the Directorate of Real Estate, HQUSACE, DA Range and Training Land Program Coordinator, and ACSIM.

b. Establish and maintain a Force XXI/Army Force Modernization Program Office (FXXI/AFM PO), CRST, HQUSACE, and Mandatory Center of Expertise (RTLP MCX) for standardization, modernization and centralized program execution management or functional manager in support of the RTLP. The program office will continuously identify potential benefits and investment areas of concentration to include partnerships with other agencies, activities or the private sector. Upon approval by either DA Program Coordinator or other governing body of the program, establish and implement coordination and integration of processes, procedures or practices leading to program efficiencies, enhancements or investment strategies. The FXXI/AFM PO will ensure that all planning documentation and actions necessary to implement programming, design and construction of MILCON projects are met to support the requirements identified and prioritized by the functional proponent (DA DCSOPS) in coordination with DA Program Coordinators.

c. Ensure the RTLP MCX reviews projects to ensure safety compliance in coordination with TRADOC Command Safety, Ammunition, Fire Protection and Environment Office (SAFE). Advise the RTLP RRPB and CCB on related technology applications, research and development as appropriate. The RTLP MCX is also responsible for implementing necessary compliance and quality assurance measures that ensure MILCON and non-MCA projects meet the requirements of this program.

d. Provide USACE Research, Development, Test, and Evaluation (RDT&E) support.

e. Acquire, manage and dispose of real property and facilities as well as provide guidance and assistance to MACOM and installation in support of RTLP projects.

f. Advise and assist ACSIM (and other DA staff elements) in establishing real property requirements and necessary legislative initiatives which are integrated with overall support to the RTLP in coordination with the DA Program Coordinator for Army Training Facilities.

g. Develop RTLP real property program management and analyses in coordination with the DA Program Coordinator for Army Training Facilities.

h. Provide technical advice and support in the administration, management and execution of design, construction, research and development, and real estate programs covered by this regulation.

2–7. The Surgeon General (TSG)

TSG will provide policies and guidance for occupational health protection, laser hazards, and control of environmental noise on training ranges and associated work areas.

2–8. The Chief, Army Reserve (CAR) and Headquarters, US Army Reserve Command (USARC)

The CAR will—

a. Designate a point of contact to serve as the central manager of all range, training land, and related support requirements for program execution and coordination with DA Program Coordinators.

b. For installations which USARC has installation management responsibilities—

(1) Program and budget for range development and sustainment requirements resulting from the introduction of new weapon systems identified in the Army Modernization Information Memorandum (AMIM) in accordance with DA Pam 5-25.

(2) Review and validate installation Land Use Requirements Studies (LURS) in accordance with chapter 3.

(3) Ensure that installation commanders plan range requirements according to pre- and post-mobilization training requirements based on actual or estimated individual and collective training throughput requirements to support mission essential task lists (METL) developed in accordance with FM 25-100. Planning will include IDT and AT of Reserve Component units within their areas of responsibility, in accordance with AR 5-9.

(4) Establish a RTLP Development Plan (RDP) comprising installation/community range and training land requirements arranged in priority sequence by fiscal year during which construction is required for initial operation by the user. The RDP must be coordinated with the MACOM Engineer Installation/Master Planning Section for inclusion into the Future Year Plan.

(5) Establish and implement procedures to validate the adequacy and accuracy of range and training land plans, to include conformance with the Installation Real Property Master Plan.

c. Identify range and training land requirements to support Army Reserve training based on input from MACOM with USAR support responsibilities in accordance with AR 5-9.

d. Determine and prioritize range and training land requirements in accordance with this regulation and forward to DA DCSOPS.

e. Coordinate Military Construction, Army Reserve (MCAR) and non-MCAR range and training land requirements with the DA Range and Training Land Program Coordinator.

f. Develop procurement, operations, maintenance and construction resource requirements to support RTLP projects for inclusion in POM submissions in accordance with AR 1-1 (PPBES). Coordinate resource requirements to MDEP level of detail with DA DCSOPS (DAMO-TR).

g. Identify all managed targetry and device requirements to support RTLP projects and forward to the DA Range and Training Land Program Coordinator.

h. Advise DA Program Coordinators of program implications resulting from force structure and stationing changes, initiatives or Congressional actions (for example, MILCON or non-MCA additions).

i. Coordinate planning, design and construction milestone reviews and target interface inspections (TII) with the DA Range and Training Land Program Coordinator and the RTLP MCX.

j. Establish and promulgate policies for determining manpower resources (technician, Active Guard Reserve (AGR) and/or Site Agreement Employees) required to operate and maintain training ranges and training areas.

k. Forward all major safety issues and concerns that have potential Army-wide impact on training operations and facilities directly

to TRADOC SAFE for HQDA review, including accurate description of any mitigative action taken pending DA resolution.

l. Participate in RTLP RRPB and CCB meetings as required.

m. Assist installations in identifying pre- and post-mobilization training land and range requirements, to include Inactive Duty Training (IDT) and Annual Training (AT), of USAR units within their areas of responsibility in accordance with AR 5-9.

n. Serve as a participating member of the Configuration Management Work Group.

2–9. The Chief, National Guard Bureau (CNGB)

The CNGB will—

a. Identify range and training land requirements to support Army National Guard training on federally controlled property. Coordinate requirements with state Adjutants General and commanders of state-owned or state-controlled property.

b. Determine and prioritize range and training land requirements in accordance with this regulation and forward applicable projects to DA DCSOPS.

c. Coordinate applicable Military Construction, National Guard (MCNG) and non-MCNG range and training land requirements with the DA Range and Training Land Program Coordinator.

d. Advise DA Program Coordinators of program implications resulting from force structure and stationing changes, BRAC initiatives or Congressional actions (for example, MILCON or non-MCA additions).

e. Encourage commanders of state-owned/controlled installations to adhere with the policies and procedures established in this regulation.

f. Develop procurement, operations, maintenance and construction resource requirements to support RTLP projects for inclusion in POM submissions in accordance with AR 1-1 (PPBES). Coordinate resource requirements to MDEP-level of detail with DA DCSOPS (DAMO-TR).

g. Identify all targetry and device requirements to support RTLP projects and forward to the DA Range and Training Land Program Coordinator as appropriate.

h. Resource planning, programming, design, and construction technical assistance on National Guard range projects provided by the RTLP MCX and DA Range and Training Land Program Coordinator.

i. Coordinate the MCNG program, design and construction milestone reviews, and TIIs with the DA Range and Training Land Program Coordinator and the RTLP MCX.

j. Establish and promulgate policies for determining manpower resources (technician, Active Guard Reserve (AGR) and/or Site Agreement Employees) required to operate and maintain training ranges and training areas on Army National Guard installations.

k. Forward all major safety issues and concerns that have potential Army-wide impact on training operations and facilities directly to TRADOC SAFE for HQDA review including accurate description of any mitigative action taken pending DA resolution.

l. Participate in RTLP RRPB and CCB meetings as required.

m. Assist installations in identifying pre- and post-mobilization training land and range requirements, to include Inactive Duty Training (IDT) and Annual Training (AT), of Reserve Component units within their areas of responsibility in accordance with AR 5-9.

n. Serve as a participating member of the Configuration Management Work Group.

2–10. The Commanding General, Training and Doctrine Command (CG TRADOC)

The CG TRADOC will—

a. Develop and promulgate Combined Arms Training Strategies for unit types, training strategies, standards, and objectives for all weapons and weapon systems currently in or entering the Army inventory; develop training strategies and general configuration requirements for standardizing ranges for Army-wide applications; develop standards of proficiency to be achieved on training ranges; provide alternative strategies to achieve training standards in constrained land-use environments; develop Basis of Issue Plans (BOIP) for centrally managed target devices in accordance with AR 71-2.

b. Integrate requirements for the interoperability of training instrumentation and targetry systems across Army and Joint applications; and, establish standards for data collection, analyses, and feedback.

c. Participate in RTLP RRPB and CCB meetings as required.

d. Develop procurement, operations, maintenance and construction resource requirements to support RTLP projects for inclusion in POM submissions in accordance with AR 1-1 (PPBES). Coordinate resource requirements to MDEP-level of detail with DA DCSOPS (DAMO-TR).

e. Designate a DA Range and Training Land Program Coordinator. The DA Program Coordinator will act as the Executive Agent for DA DCSOPS in range and training land matters, and will—

(1) Review installation/MACOM LURS submissions. Validate training criteria used, submit findings and recommendations to DA DCSOPS (DAMO-TR).

(2) Serve as a principal (voting) member on the RTLP RRPB and CCB.

(3) Serve as executive agent for HQDA ODCSOPS (DAMO-TR) for the ITAM Program, serve on the Council of Colonels (COC) and Executive Management Council (EMC) of the ITAM program. As such, integrates ITAM and RTLP land management processes and procedures as appropriate.

(4) Coordinate and integrate modifications to doctrine, force structure, and materiel system fielding which may impact on training land and range facility requirements with DA DCSOPS (DAMO-TR), the Chief of Engineers (Military Programs Directorate), and DA ACSIM (Facilities and Housing Division).

(5) Assist DA DCSOPS (DAMO-TR) in the development of Army training investment strategies and program objectives in coordination with the DA Program Coordinator for Army Training Facilities.

(6) Serve as the functional proponent for TC 25-1, Training Land, and TC 25-8, Training Ranges, and related automated systems such as those described in paragraph 5-5.

(7) Determine range and training land requirements resulting from changes to doctrine, force structure, and weapon system acquisition in coordination with the DA ACSIM and DA DCSOPS (DAMO-TR). Provide assistance to MACOM, OCAR, NGB and installations as required.

(8) Develop and maintain the data base of record for the Army Master Range Plan (AMRP).

(9) Coordinate with TRADOC SAFE, TRADOC schools and centers, other MACOMs, and HQUSACE on requirements for the development of range designs.

(10) Assist DA DCSOPS in developing estimated OPA/OPAR funding requirements to procure targetry in MDEP program years.

(11) Consolidate MACOM submissions and provide RTLP targetry and device requirements to AMC for procurement and distribution in accordance with target densities included in the approved range design.

(12) Coordinate targetry installation and range construction completion schedules with the RTLP MCX and the AMC commodity manager.

(13) Participate in meetings and review designs for range projects to ensure training standards and requirements are satisfactorily met ICW the RTLP MCX.

(14) Schedule and conduct Construction Compliance Reviews (CCR), Targetry Interface Inspections (TII), and coordinate facility acceptance for range projects.

(15) Recommend stop work on design and construction activities to DA DCSOPS when appropriate.

(16) Schedule and host RTLP RRPB, CCB, and related conferences or meetings as directed by DA DCSOPS. Serve as a principal (voting) member.

(17) Determine RTLP requirements resulting from changes to

doctrine, force structure, and weapon system acquisition in coordination with the appropriate TRADOC service school, DA Program Coordinator for Army Training Facilities, and DA DCSOPS (DAMO-TR).

(18) Ensure that sustainment training for range support personnel on RTLP targetry and device operation, maintenance and repair is resourced and implemented.

(19) Ensure that lessons learned are disseminated to the field and incorporated into appropriate documentation and guidance governing this program.

(20) Conduct range and training land assistance visits to MACOM and installations, when requested.

(21) Coordinate requests for engineer research, development, test, and evaluation assistance with HQUSACE (CEMP-EA).

(22) Consolidate MACOM updated submissions on Army range assets, utilization/throughput, and operation and maintenance for inclusion into appropriate DoD and HQDA decision support systems as required.

(23) Coordinate inter-agency actions required to resolve problems associated with range construction, preparation of the ranges to accept targetry, and targetry procurement and fielding in coordination with the HQUSACE (FXXI/AFM PO).

(24) Serve as the users representative on weapon systems, targetry and devices with either the TRADOC System Manager or Combat Developer in coordination with HQUSACE (CRST) in accordance with AR 700-127.

f. Designate a technical advisor (TRADOC Command Safety, Ammunition, Fire Protection, and Environment Office (SAFE)) to DASAF for all range safety matters. The technical advisor will—

(1) Support the RTLP in accordance with responsibilities in AR 385-63.

(2) Coordinate range safety matters with DA Program Coordinators.

(3) Provide technical assistance to the RTLP MCX in reviewing range project designs for safety compliance and considerations.

2–11. The Commanding General, U.S. Army Materiel Command (CG AMC)

The CG AMC will—

a. Coordinate with DA DCSOPS and CG, TRADOC to identify the need for ranges to support weapons fielding, in accordance with AR 700-127 during the development of new weapon systems. Coordinate design, training, and environmental impacts with HQ USACE, HQ TRADOC, and DA ACSIM.

b. Develop range equipment and targetry devices to support training strategies and standards established by HQ TRADOC in accordance with AR 700-127.

c. Support the development of surface and airspace danger zones in accordance with AR 385-63 and other system safety requirements in accordance with AR 385-16.

d. 'Program and budget for the development and acquisition of range instrumentation and targetry through the appropriate commodity manager.

e. Coordinate the procurement of targetry and related support equipment with the DA Range and Training Land Program Coordinator. Ensure installation schedules are consistent with MILCON/non-MCA completion and equipment delivery dates.

f. Participate in TIIs conducted prior to installing targetry and related support equipment.

g. Coordinate with appropriate MACOM for the use of major ranges for RDT&E of targetry and control devices during the materiel development and acquisition process.

h. Provide the DA Range and Training Land Program Coordinator with periodic reports on—

(1) The status of targetry orders, production, and delivery.

(2) The status of OPA funds allocated for the procurement and installation of RETS targetry.

(3) Problems encountered in the development, procurement or installation of targetry devices.

i. Coordinate programmatic logistics and supply support for targetry and related support equipment with the DA Range and Training Land Program Coordinator and DA DCSOPS.

j. Participate in DA Program Coordinator meetings and conferences and provide technical descriptions and/or acquisition milestones for developmental and fielded range/instrumentation equipment.

2–12. MACOM commanders

The MACOM commanders will—

a. Designate a point of contact to serve as the central manager of all range, training land, and related support requirements for program execution and coordination with DA Program Coordinators and DA DCSOPS.

b. Program and budget for range development and sustainment requirements resulting from the introduction of new weapon systems identified in the Army Modernization Information Memorandum (AMIM) in accordance with DA Pam 5-25.

c. Review and validate installation Land Use Requirements Studies (LURS) in accordance with chapter 3.

d. Ensure that installation commanders plan range requirements according to pre- and post-mobilization training requirements based on actual or estimated individual and collective training throughput requirements to support mission essential task lists (METL) developed in accordance with FM 25-100. Planning will include IDT and AT of Reserve Component units within their areas of responsibility, in accordance with AR 5-9.

e. Establish a RTLP Development Plan (RDP) comprised of installation/community range and training land requirements arranged in priority sequence by fiscal year during which construction is required for initial operation by the user. The RDP must be coordinated with the MACOM Engineer/Installation Master Planning Section for inclusion in the Future Year Plan.

f. Establish and implement procedures to validate the adequacy and accuracy of range and training land plans, to include conformance with the Installation Real Property Master Plan.

g. Provide range requirements pertaining to USAR units within their areas of responsibility to Headquarters, Forces Command (HQ FORSCOM), in accordance with AR 5-9.

h. Develop procurement, operations, maintenance and construction resource requirements to support sustainment of ranges and training lands for inclusion in POM submissions in accordance with AR 1-1 (PPBES). Consolidate and ensure MACOM O&M requirements are integrated as a part of the overall infrastructure investment strategy as appropriate. Coordinate resource requirements to MDEP level of detail with DA DCSOPS (DAMO-TR).

i. Identify all targetry and device requirements to support RTLP projects and forward to the DA Range and Training Land Program Coordinator.

j. Advise DA Program Coordinators of program implications resulting from force structure and stationing changes, BRAC initiatives or Congressional actions (for example, MILCON or non-MCA additions).

k. Identify and submit requirements for all non-standard or special purpose ranges requiring with centrally managed targets to the DA Range and Training Land Program Coordinator for RTLP RRPB review and approval.

l. Comply with range availability, scheduled and actual usage objectives outlined in TC 25-8 prior to initiating and attempting to justify new range and training land requirements.

m. Forward RDP and any potential land acquisition requirements to the DA Range and Training Land Program Coordinator for RTLP RRPB consideration, prioritization and inclusion in the AMRP.

n. Participate in RTLP RRPB and CCB meetings as required.

o. Obtain host nation approval for development of training ranges and use of weapon systems within host nation training areas, as required.

p. Participate in planning meetings, design reviews, construction compliance inspections, and targetry interface inspections for command sponsored ranges as required.

q. Coordinate range and training assistance visits to command

installations with the DA Range and Training Land Program Coordinator.

r. Review, approve and forward annual installation updates to the DA Range and Training Land Program Coordinator for inclusion in DoD and HQDA decision support systems.

s. Ensure local range and training area-related requirements comply with AR 385-63, TC 25-1, and TC 25-8.

t. Identify USAR requirements and forward to OCAR for consolidation into the OCAR RDP.

u. Review and validate range and training land projects in coordination with the RTLP MCX and geographical engineer divisions in accordance with AR 415-15.

v. Approve site selections for range and training land projects in accordance with AR 210-20.

w. Evaluate and verify range and training land requirements are consistent with Army investment guidance and adequately meet mission training requirements per functional proponent developed criteria, established in the installation and MACOM consolidated RDP, and integrated as a part of the overall infrastructure investment strategy.

x. Establish MACOM policy which integrates RTLP and natural resource management (INRMP) through the ITAM program as a land management process for sustaining land to support mission requirements.

y. Serve as a participating member of the Configuration Management Work Group.

2–13. Installation/community commanders

Installation/Community commanders will—

a. Designate a point of contact to serve as the central manager of all range, training land, and related support requirements for program execution and coordination with the corresponding MACOM, DA Program Coordinators, and DA DCSOPS.

b. Determine the number and type of ranges needed to accomplish individual and collective training to support METL developed in accordance with FM 25-100, Reserve Component training needs (in accordance with AR 5-9), and chapter 3 of this regulation. Integrate requirements into the installation's RDP, real property master plan, and the Future Year Plan.

c. Comply with range availability, scheduled and actual usage objectives outlined in TC 25-8, prior to initiating and attempting to justify new range and training land requirements.

d. Identify live fire and maneuver training land requirements in accordance with TC 25-1 and AR 405-10. Update and forward installation LURS in accordance with chapter 3.

e. Submit the installation RDP to the MACOM for integration into the MACOM RDP. Future Year Plans will be processed in accordance with AR 415-15 or AR 140-483, NGR 5-3, NGR 415-5, and NGR 420-10 as appropriate.

f. Develop procurement, operations, maintenance and construction resource requirements to support RTLP projects for inclusion in POM submissions in accordance with AR 1-1 (PPBES) and forward to the respective MACOM.

g. Identify all targetry and device requirements to support RTLP projects and forward to appropriate MACOM and the DA Range and Training Land Program Coordinator.

h. Advise MACOM of program implications resulting from force structure and stationing changes, BRAC initiatives or Congressional actions (for example, MILCON or non-MCA additions).

i. Develop and forward annual installation RDP updates (See app C) to include overall O&M requirements to MDEP level of detail to the MACOM or for ARNG installations, NGR 5-3 and NGR 415-5, for review, validation, and submission to the DA Range and Training Land Program Coordinator for inclusion in DoD and HQDA decision support systems.

j. Establish procedures for the safe conduct of operations on all firing ranges within the installation area of responsibility, including recreational ranges in accordance with AR 385-63. Ensure that commanders of using units and subordinate organizations and activities designate, train, and certify individuals to perform the duties of range officer-in-charge and range safety officer during firing periods.

k. Identify potential environmental, cultural resource and natural resource impacts early during the planning process in accordance with AR 200-1, AR 200-3 and AR 200-4. Prepare National Environmental Policy Act (NEPA) documentation in accordance with AR 200-2.

l. Coordinate with the installation medical activity to ensure that all reasonable measures to prevent adverse health effects (for example, hearing loss and lead residue recovery) are incorporated into range regulations and standard operating procedures.

m. Establish education programs to preclude injury to military and civilian personnel, authorized family members, and the general public in accordance with AR/DA PAM 385-63.

n. Establish accident reporting procedures in accordance with AR 385-40 and AR 75-1.

o. Forward all major safety issues, concerns or impacts on training operations through the installation/community safety office to the MACOM safety office. Issues and concerns which may have Army wide impact will be forwarded through TRADOC SAFE to HQDA for resolution.

p. Evaluate and validate range and training land requirements are consistent with Army and MACOM investment guidance and adequately meet mission training requirements per functional proponent developed criteria, established in the installation and MACOM consolidated RDP, and integrated as a part of the overall infrastructure investment strategy.

q. Utilize the RDP as the basis for the mission requirement for training land within the installation's INRMP.

r. Establish an ITAM program in accordance with HQDA ITAM Strategy to facilitate integration of mission requirements, training land and range requirements, and training land management operations established through the RTLP process; and natural resource management as described in the installation INRMP.

Chapter 3
Ranges and Training Land Program Processes

3–1. Introduction

The RTLP planning process is based on a methodology which integrates three primary considerations: mission support, environmental stewardship, and economic feasibility. The availability of training land mandates that existing and future training land and ranges serve multiple purposes to support a variety of training tasks. Sound, proactive land management is essential for ensuring training can be accomplished on existing training land assets. AR 200-3 outlines the policies and procedures for the planning and execution of effective land management programs. The individual components contributing to the process and methodology are defined herein. Army training philosophy and strategies must meet the following considerations:

a. Effective individual, crew, and unit live fire and maneuver proficiency on modern combat systems is essential to the Army's Readiness Program. Training proficiency is facilitated with the use of well-planned and well-developed, modern training areas that incorporate state-of-the-art equipment. Computer-controlled target systems portray realistic battlefield conditions and provide trainers instant, accurate feedback on soldier and unit performance.

b. Environmental laws require that available land and natural resources be properly protected, operated, and maintained. Planners must achieve a balance between the effective use of available resources to maximize training readiness and must comply with federal, state and host nation environmental laws. To accomplish the integration of sound business investment practices and effective land use, the ITAM program was initiated. The ITAM program serves as the environmental linkage to the RTLP, Natural Resources Management, and real property management programs.

c. General procedures, strategies and considerations which must be addressed regarding alternatives, resources, information sources,

other Army activities, and documentation requirements are outlined in Appendix D.

3–2. RTLP planners

Planning the development or improvement of Army training areas is a continuous process and must be a coordinated effort. Planners (as defined in para 1-8 of this regulation) at all levels of command ensure efficient and safe use of existing training assets. Planners determine and identify the requirements for ranges and training land to support assigned missions and training objectives. Additional assistance from DA integration centers are available upon request from installation/MACOM. Training requirements definition and standards assistance may be obtained from the DA Range and Training Land Program Coordinator. Real property, facility or training land planning assistance may be obtained from the Combat Readiness Support Team (CRST), HQUSACE. Requests for interdisciplinary assistance teams will be coordinated through the DA Program Coordinators or RRPB.

3–3. RTLP planning process

a. The RTLP planning process is a sequential six-step process:

(1) The "asset accounting" of existing training assets at a given installation or site.

(2) The "needs assessment" which includes METL requirements and an evaluation of range and training land conditions to perform training missions.

(3) A "comparative analyses" to determine training asset shortfall(s) or adequacy.

(4) A "requirements definition" to develop specific capabilities, characteristics and functionality.

(5) An "alternative analyses" identifies all viable or potential alternatives; defines mission support, environmental consequences and economic feasibility for each alternative identified; and site planning to determine any land use conflicts or environmental impacts.

(6) The "implementation plan" identifies preferred alternatives prioritized and an implementation timeline to establish critical milestones and resources.

(7) The requirement identified in the process culminating in the RDP serves as the description of the mission requirement for land in the installation INRMP.

b. Planners must comply with regulatory requirements, environmental matters, and consider a variety of factors when considering a site. Specific factors, procedures, and related policies are contained in TCs 25-1 and 25-8. Should the alternative require the development of a range, see paragraph 3-4 below. The training land acquisition process is further defined in paragraph 3-5 below. Additional guidance on requirements identification and needs assessment include:

c. Requirements Identification. Doctrine, force structure, weapon systems, and mission tasks are evaluated to determine the specific training requirements necessary to realistically train soldiers and units to meet operational readiness and Army training goals. FM 25-100 provides the foundation for development of unit Mission Essential Task Lists (METL). The following documents will assist in identifying requirements:

(1) FM 25-100 assists in the development of METL that focus on those training tasks which are essential to accomplishing an organization's wartime mission.

(2) Army Training and Evaluation Programs (ARTEPs) and the Combined Arms Training Strategy (CATS) provide unit training requirements to be executed on live-fire ranges.

(3) Weapon system training strategies and standards are outlined in respective weapon system field manuals.

(4) DA Pamphlet 350-38, Standards in Weapons Training (STRAC), outlines recommended weapons training programs, qualification standards, training ammunition, operating tempo (OPTEMPO), and suggested training strategies.

(5) The Support Facility Annex (SFA) to the Integrated Logistics Support Plan published by HQUSACE identifies facility implications associated with materiel fielding, including training considerations and is continuously updated as the weapon system matures. SFAs are developed in coordination with the materiel system PEO/PM and TRADOC System Manager. SFAs are available to installations and MACOM via the Programming, Administration, and Execution (PAX) system under the Facility Planning System utility.

(6) TCs 25-1 and 25-8, and ARs 385-62 and 385-63 provide guidance on site planning, range layouts, safety standards, surface danger zones (SDZs), standard range facilities, training land, instrumentation, and specific weapon system requirements.

d. Needs Assessment. Planners must evaluate existing capabilities to meet standard training readiness requirements, alternative methods to maximize training effectiveness, and resources (for example, ammunition, fuel, land, range facilities, manpower, life cycle O&M) to meet operational readiness. Inclusive is an assessment of range and training land effectiveness, conditions, utilization factors, and environmental influences to perform training missions. During the STRAC process, training strategies are developed incorporating combinations of devices, simulators and live fire requirements to satisfy training proficiency requirements in a holistic manner. Potential environmental restrictions related to range standardization or modernization, and training land requirements must be identified during the needs assessment and may mandate a tailored training strategy to accommodate existing training land restrictions. The following documents will assist in assessing potential range construction and training land needs:

(1) ARs 200-1, 200-3, 200-4, and 210-20, and TC 25-1 outline planning considerations to be addressed during this assessment.

(2) ARs 200-2, 415-15, 415-20 and the Master Planning Instructions outline technical procedures for planning, programming, estimating construction costs and milestones required to either construct or acquire facilities.

(3) USACE (CEHNDM 1110-1 series) design manuals depict standardized facilities.

(4) AR 385-10 and AR 385-63 outline range safety considerations and SDZ requirements.

e. Potential impacts of noise from a new or modified live-fire range on the surrounding civilian community can inhibit full utilization during the conduct of training. Environmental considerations as defined in AR 200-1 and applicable to Installation Compatible Use Zones will be evaluated when modifying existing ranges or siting new ranges.

f. The ITAM Training Requirements Integration (TRI) process is employed to identify optimum siting of training ranges and facilities and optimum modifications to training areas.

3–4. Range project development process

a. General. A result of the planning process identified in paragraph 3-3 above, the range project development process consists of four general phases: planning, programming, design, and construction. Alternatives to construction must be considered during the planning phase to justify MILCON expenditure. Planners may also identify alternative courses of action other than MILCON which may be adopted Army-wide. An example would be a materiel acquisition requirement to provide training rounds or devices to mitigate existing facility or real property limitations.

b. Phase I—Project Planning. Project planning will be based on the requirements definition and needs assessment results from the RTLP planning process described in paragraph 3-3 above. The specific characteristics, capabilities and functionality for each project scope and associated site development are derived from the planning process described in paragraph 3-3.

c. Phase II—Project programming. During this phase, documentation to support the potential MILCON or OMA range construction or training land acquisition project is initiated in accordance with ARs 1-1, 405-10, 415-15, and NGR 5-3, 415-5, and 420-10. Previously submitted resource documents (for example, POM, Six-Year Defense Plan, Long Range Facilities Plan, and so forth.) are reviewed to ensure that changes resulting from the current programming process are corrected to adequately reflect new requirements.

Budgeting strategies and the types of funds resourced under this program are outlined in Appendix D.

d. Phase III—Project Design. During this phase the entire facility design process from concept through development of the final design and specifications is initiated. The design process is divided into mandatory and optional design review sub-phases which serve as milestones for measuring project progress and exercising quality assurance.

(1) Mandatory design reviews are conducted upon completion of the concept design (35 percent) and pre-final design (95 percent) stages.

(2) An optional design review may be conducted at the 60-65 percent design completion stage. This review is recommended for large scale, multipurpose ranges because of the large number of target emplacements and firing positions and the variety of training scenarios that support such ranges.

(3) Design reviews for indoor ranges should be coordinated with local safety and medical representatives to avoid creating potential hazards or exacerbating existing constraints.

e. Phase IV—Project Construction. The construction phase includes all of the site development and facilities construction activities required to meet range design and equipment installation criteria. Two major surveys of the facility are conducted during the construction phase to ensure that work accomplished is in compliance with design requirements and that follow-on installation of targetry equipment can be successfully accomplished. These events, a construction compliance inspection and a targetry interface inspection, are described in Chapter 4. Changes to the approved design must be kept to an absolute minimum during this phase to avoid the high costs of changes and the associated risk of exceeding Congressionally-approved project costs and incurring construction delays. Such changes require additional environmental evaluation and may include time consuming deliberations and approval procedures from environmental regulatory agencies.

3–5. Integrated Training Area Management (ITAM) Program

The Integrated Training Area Management program (ITAM) provides the management and decision-making process that integrates Army training and other mission requirements for land use with sound natural resource management of land. The specific training land management policies, objectives, goals and procedures regarding ITAM are provided in the AR 200-series and 350-series. In general, the overall goal of the Army's ITAM program is to achieve optimum, sustainable use of training lands by implementing a uniform management program which includes inventorying and monitoring land condition, integrating training requirements with land capacity, educating land users to minimize adverse impacts, and providing for land rehabilitation, and maintenance. The program supports proactive rather than reactive conservation and land management.

a. The ITAM Program provides a consistent management capability at installation, MACOM and HQDA levels under the direction of operations/training staff elements as the primary customer or beneficiary. The ITAM capability "bridges" doctrinally based training land requirements articulated through the installation's Range and Training Land Program (RTLP) with sound conservation policy and practices, articulated in the installation's Integrated Natural Resource Management Plan (INRMP). The ITAM management process also incorporates installation Cultural Resource Management Plans (CRMP).

b. HQDA DCSOPS (DAMO-TR) is responsible for implementing ITAM by establishing management procedures and tools to optimize availability of Army lands for mission requirements including operational and developmental testing. Army natural resource managers and environmental scientists participate in the management process to integrate sound natural resource management practices. The ITAM process also integrates training land and facility requirements with natural resource requirements, and coordinates both with overall real property management process. The ITAM program is intensively managed through a series of interdisciplinary management reviews with representatives from HQDA, MACOM and installation levels. ITAM is resourced through a standardized funding model (rather than based on environmental compliance requirements) which is refined by annual ITAM Workplan submissions.

c. ITAM fosters collaborative management of ranges and training lands at HQDA, MACOM and installation levels by serving as the primary link or bridge between the Army's RTLP and Natural Resource Management (NRM) programs as well as supporting sound business practices and collaboration with the Army's real property management program. The "partnership" involves operations/training managers who identify training land requirements through the RTLP, and natural resource managers who apply best scientific technique through NRM.

d. The ITAM program consists of four components described in detail in the ITAM regulation (AR 350-series). They are—

(1) *Land Condition Trend Analysis (LCTA).* LCTA is a methodology for inventorying and monitoring Army land resources. It incorporates a relational database and Geographic Information System (GIS) used to support land use planning decision processes that relates land conditions (physical and biological data) to training activities to effectively manage land use and natural resources. LCTA encompasses a combination of techniques including remote sensing, in situ data collection, and use of related data sources from other agencies. These techniques are designed to meet installation needs for ecological information required to manage lands through the use of a relational database and GIS (for example, wetlands survey/mapping, endangered species inventories, and archeological surveys).

(2) *Training Requirements Integration (TRI).* The TRI component of ITAM integrates the installation's training requirements for land use derived from the RTLP with the natural resource conditions of the installation's lands derived from the LCTA and other NRM processes. The RTLP identifies doctrinally based range and training land requirements (for example, unit METL and Combined Arms Training Strategy (CATS)). Scheduling procedures are used to allocate parcels of land to conduct training. TRI provides the necessary data to determine optimum siting of training facilities (for example, ranges) to conduct and support training. Both scheduling and siting are based on a concept of land carrying capacity/sustainment factors. While land carrying capacity/sustainment factors are subjectively based today, the integration of RTLP tools and TRI will provide for more objective, scientifically-based measures which will support predictive decision-making. TRI also affords the capability to balance training requirements with natural resource conditions and maintenance activities by selecting options which will sustain use of lands indefinitely to support training readiness.

(3) *Land Rehabilitation and Maintenance (LRAM).* LRAM includes programming, planning, designing, and executing land rehabilitation, maintenance, and reconfiguration projects based on requirements and priorities identified in the TRI component of ITAM. LRAM uses best management practices (that is, professionally accepted, cost-effective practices) for design (including training area redesign and reconfiguration due to recurring use) and execution of projects affecting all environmental media to ensure that the rehabilitation, repair, and maintenance results are commensurate with the resources applied. LRAM includes long-term land maintenance plans coordinated with other real property management programs and in coordination with development of the installation Real Property Management Plan (RPMP). Prioritization of management actions and investments are also accomplished to ensure the long-term military viability of Army installations.

(4) *Environmental Awareness (EA).* EA improves land user understanding of the impacts of their mission, mission training, and other activities on the environment. The EA component of ITAM applies to tactical units, leaders, and soldiers, who are assigned to, or using, the installation; tenant activities; installation staff, including civilian employees; and other installation training land users, including local populations, family members, and so forth. ITAM

EA is established at the installation level and relies on a foundation of institutional environmental training provided by Army schools. The US Army Engineer School (USAES) is the TRADOC proponent for environmental training. Installation ITAM EA consists of three elements: training/educational materials; a plan for awareness training implementation; and command emphasis. Command emphasis is an essential aspect of conveying and training for the Army's environmental stewardship responsibilities.

e. The ITAM process has four components based on the fundamental integration of installation mission requirements with natural resource and environmental conditions. The conceptual process begins with the LCTA component's survey and monitoring of natural resource and other environmental conditions; uses the TRI component to integrate environmental conditions with training and mission requirements identified through the RTLP and range operations process; mitigates training impacts by educating land users on practices which minimize the severity of effects; and provides the means to design and execute effective and efficient rehabilitation, repair, and maintenance of the land resulting from the conduct of training and mission activities. All components actually occur simultaneously and continuously throughout the installation training complex (for example, ranges and training lands).

3–6. Training land requirements and acquisition process

The procedures outlined in this regulation and TC 25-1 are used to identify training land requirements to support changes in doctrine, mission, force structure, weapon systems, and materiel fielding. When the availability of training land to support either live fire ranges or maneuver training appears to be a significant resource constraint to operational readiness, the LURS process is initiated. Land acquisitions are categorized as either minor (under 1k acres/ $1M cost) or major (over 1k acres/$1M cost) acquisition projects. All training land acquisitions will be supported and fully documented by an updated and validated LURS in accordance with this regulation and AR 405-10. A LURS validation is accomplished by MACOM staffing with the DA Range and Training Land Program Coordinator.

3–7. Army Master Range Plan (AMRP)

The AMRP is the prioritized list of Army-approved range and training land projects for all categories of resourcing. The AMRP is a compilation of prioritized training requirements resulting from the annual review and accreditation of MACOM verified and installation validated RDPs by the various DA RTLP councils and boards. The AMRP contains all projects regardless of the type of work, dollar threshold, or resource appropriation. RTLP reviews generally span a seven-year period beginning in the same FY as the review is conducted. The AMRP is intended as feeder data to the Army Long-Range Training Plan (ALRTP) as well as source data for integration into various Army investment strategies and long range plans. It is the master repository for range project information during the life of the project. It includes all targetry and related support equipment requirements, projected milestones, schedules, funding requirements, and a complete audit trail for the RTLP program. The AMRP is an automated data base and the Army's data base of record maintained by the DA Range and Training Land Program Coordinator.

3–8. HQDA Program Review Board (PRB)

In addition to the DA boards and associated procedures outlined in Appendix B, the HQDA PRB is convened and chaired by the Office of the Assistant Chief of Staff for Installation Management to develop the Army's MILCON program. A brief summary of the HQDA PRB process and how it interfaces with the RTLP RRPB is provided below:

a. MACOM submits to HQDA (Office of the Assistant Chief of Staff for Installation Management) on 1 February of each fiscal year, complete DD Form 1391 to support of the projects in their MCA program.

b. MACOM formally presents their program to the HQDA PRB during yearly MCA project review boards held at HQDA in April-June time frame based on prioritized projects contained in the AMRP. RTLP perspectives and training needs are represented by DA DCSOPS and DA Program Coordinators. The AMRP is updated with the results from these reviews.

c. The HQDA PRB provides recommendations to the Office of the ASA(I,L&E) who provides final release approval of the projects for 35 percent concept design.

d. During Program Objective Memorandum (POM) development, the HQDA PRB forwards a prioritized list of MCA projects to the Program Budget Committee for approval. RTLP RRPB priorities contained in the AMRP are utilized by the HQDA PRB representative for MILCON program development.

3–9. Summary

The processes discussed in this chapter reflect a holistic, bottom-up process which begins when installations develop and submit their annual RTLP Development Plan (RDP) to the MACOM as outlined in Appendix B and D. The RTLP process necessitates complete and constant coordination by all members of the RTLP interdisciplinary planning team described in this regulation at all levels from installation to HQDA and includes coordination with the ITAM program and process. Inclusive is the horizontal and vertical integration of training requirements, environmental stewardship and regulatory responsibilities, mission support and economic feasibility needs.

Chapter 4
Quality Assurance of Range Development Projects

4–1. Standard design development

The development of standard designs is conducted as a coordinated effort by DA DCSOPS, HQUSACE, DA Program Coordinators, TRADOC SAFE, the MACOM, the RTLP MCX, the U.S. Army Materiel Command (AMC), and the TRADOC schools and centers. In developing standard designs, these agencies—

a. Assess the need for standard designs based on—

(1) Fielding of new weapon systems or munitions and commensurate safety standards.

(2) Changes in doctrine, force structure and existing weapons systems training strategies and requirements.

(3) Changes in ARTEP Mission Training Plans (AMTP) standards.

(4) RRPB approval of a non-standard range for Army-wide application.

b. Incorporate any new standard designs in the following publications:

(1) TC 25-8, which serves as the primary source of generic range layouts and as a reference in applying training doctrine, strategies, and criteria to the range development process.

(2) USACE (CEHNDM 1110-1 series) design manuals, which provide the specifications and designs for approved Army standards.

4–2. Project review and validation

Planners at all levels review, validate, and inspect documentation and construction activities at key milestones during the life cycle of a project. The purpose of these reviews is to ensure compliance with established training requirements and standards, range safety requirements, environmental laws, sound engineering practices, and Corps standard design criteria. The DA Range and Training Land Program Coordinator coordinates and conducts reviews and inspections for applicable range projects as indicated below. Reviews of non-MCA (OMA funded) projects during the construction and TIIs (paras 4-2*g* through 4-2*h*) are the responsibility of the installation and MACOM. If a need to construct or modify a facility is established, the installation should begin preparation of NEPA documentation in accordance with AR 200-2. NEPA documentation must consider both the construction and operation of the proposed facility. If there are no issues pending RRPB resolution, the key development events are—

a. Documentation review (all projects). DD Forms 1390/1391 for

MCA and MCAR projects, DA Form 4283s (Facilities Engineering Work Request-XFA, XFB, XFC), NGB Form 420-R (OMARNG Project Request), for OMA funded projects, are reviewed by the DA Range and Training Land Program Coordinator and the RTLP MCX. The review ensures that training and design standards compliance is met and are consistent with RTLP requirements.

b. MACOM validation of MCA projects is a joint activity between the MACOM engineer and the appropriate USACE major subordinate command (geographical division) in conjunction with the RTLP MCX. MACOM validation must be completed and all review comments adjudicated before an MCA project can be submitted to the MACOM PRB for programming approval and submission as a part of the HQDA MILCON Program.

c. Pre-design conference (all applicable projects). The pre-design conference is normally held when a design contract is awarded to an architectural and engineering (A&E) firm or when a decision is made to accomplish the design in house. The DA Range and Training Land Coordinator, RTLP MCX, MACOM, and the AMC equipment commodity manager meet with installation range planners, Corps of engineers representatives, and the A&E firm. The conference addresses all aspects necessary to ensure an operable facility which meets training standards, environmental requirements, SDZs and installation mission.

d. Concept/preliminary design review (all projects). Concept/preliminary design drawings are prepared upon receipt of concept design approval (code 2) from HQUSACE. The concept/preliminary design review is conducted upon notification from the USACE design agent (or NGB for ARNG projects) that the design is 35 percent complete. Designs must reach this stage by August of the design year to be included in the MCA Program for the next Budget Year. The DA Range and Training Land Program Coordinator, the RTLP MCX, AMC commodity manager, and the MACOM review the concept (35 percent) design drawing and specifications (preliminary design drawings for ARNG ranges). The review ensures that all criteria, comments, perspectives and requirements identified during the pre-design conference are incorporated into the preliminary design. NEPA documentation in accordance with AR 200-2 should be completed prior to notification that the design is 35 percent complete.

e. Sixty to sixty-five percent design review (optional review for combined arms or collective training complexes). This review, and all subsequent actions, require receipt of USACE (or NGB for ARNG projects) authorization to proceed to final (100 percent) design (Code 6). The DA Range and Training Land Program Coordinator, the RTLP MCX, AMC commodity manager, and MACOM representatives meet with all installation range planners designers to resolve any issues, incorporate or adjudicate all design review comments, and verify schedules.

f. Final design review (all projects). This review is scheduled upon notification from the USACE design agent (or NGB for ARNG projects) that the design is 95 percent complete. Designs should be at this stage of completion by August of the Budget Year (approximately 3-6 months prior to commencing construction). The RTLP MCX and MACOM representatives meet with all installation range planners designers to resolve any issues, incorporate or adjudicate all design review comments, and verify schedules. The DA Range and Training Land Program Coordinator may participate based on coordination with either the RTLP MCX or MACOM.

g. Pre-construction conference. The pre-construction conference is conducted after award of a construction contract. Contract award normally occurs during the December-February time frame of the Program Year (FY construction is anticipated to commence in), depending on Congressional budget approval. The RTLP MCX, AMC commodity manager, and MACOM representatives meet with installation representatives and the construction contractor to ensure that outcomes and expectations necessary to ensure construction and equipment interfaces will be met, disseminate lessons learned, and resolve any discrepancies between the construction plans and the design. The DA Range and Training Land Program Coordinator may participate based on coordination with either the RTLP MCX or MACOM.

h. Construction Compliance Inspection (CCI). The DA Range and Training Land Program Coordinator schedules this review when construction is approximately 40-60 percent complete. Normally, this will occur 6-7 months after construction starts on a small arms range and 11-12 months after construction starts on a collective or combined arms training range. The RTLP MCX, MACOM, installation and contractor representatives review includes all necessary inspections, evaluation of at least one position for each critical or mandatory feature, and resolution of any mandatory interface or standard design conformance discrepancies. The DA Range and Training Land Program Coordinator may participate based on coordination with either the RTLP MCX or MACOM.

i. Target Interface Inspection (TII). Approximately 30-90 days prior to construction completion, the DA Range and Training Land Program Coordinator schedules a TII in coordination with the RTLP MCX who conducts the TII with the appropriate AMC commodity manager, and the engineer construction agent. This event normally occurs 11-12 months after construction starts on a small arms range and 18-20 months after construction starts on a collective training range. Two inspections may be conducted on large, complex ranges such as collective or combined arms facilities. The target contractor, the construction contractor, and other installation/community personnel also participate in the conduct of the TII. The purposes of the inspection are to ensure equipment interface points conform to the standard design, identify any deficiencies in the work accomplished (to include resolution, schedules, and responsibilities), and verify final targetry requirements. Follow-on assistance and support for all phases of range project programming, design, construction and targetry installation is available through the DA Range and Training Land Program Coordinator.

4–3. Support for OMA funded/non-standard ranges

a. The DA Range and Training Land Program Coordinator identifies the quantity of equipment needed to support MACOM requests as approved by the RTLP RRPB. MACOM requests shall include estimated project costs and targetry or device quantities in similar detail as provided for MILCON projects. Out-of-cycle requests (not presented at the annual RRPB session) are submitted to the DA Range and Training Land Program Coordinator for review. The DA Range and Training Land Program Coordinator will forward any recommendations for approval to RTLP RRPB members for consideration. DA DCSOPS will either identify additional OPA funds or changes to priorities which need to be included in the MDEP to meet these out-of-cycle requirements.

b. Non-MCA Ranges. The MACOM provide a prioritized list of non-MCA projects to the DA Range and Training Land Program Coordinator for consideration at the annual RTLP RRPB session. The MACOM must ensure that these ranges meet valid training requirements. Information to be considered will be consistent with that provided for MILCON projects.

c. The criteria and considerations used to review and validate non-MCA projects will generally conform to standards established for MILCON projects. Reviews will be conducted on a cost reimbursable basis funded by either the requesting MACOM or installation.

Chapter 5
Range and Training Land Operations

5–1. Introduction

Range and training land operations include all activities associated with the conduct of military training, firing, and target practice on training, recreational, or approved civilian ranges under Army control. This chapter provides the recommended minimum requirements for the conduct of safe, efficient, and realistic training. Conduct of firing and maneuver operations requirements for using units are addressed in AR 385-63. The functional proponent for ranges and

training land management at the installation is the Directorate of Plans, Training, Mobilization (DPTM) or functional staff equivalent (for example, MACOM DPTM or ACS, G-3 when RTLP functions are centralized at MACOM level). The installation DPTM is also responsible for the execution of the ITAM program and process which is used to integrate the natural resource management with the RTLP process, the RDP requirement, range and facility planning, and range and training land operations.

5–2. Range organization

The range organization is a part of the installation/community commander's staff. It is normally a division of the Directorate of Plans, Training, and Mobilization (DPTM) and performs functions described in this regulation and AR/PAM 385-63. The organization is structured to provide safe, efficient, and effective support of training programs established for individuals, crews, and units using installation/community firing ranges and other weapons training facilities and training areas. The organization is staffed in accordance with DA or NGB guidelines as applicable. The minimum functions which must be performed to meet the installation commander's responsibilities are outlined in Chapter 2 and are supplemented in TC 25-8. The range organization generally consists of—

a. Range manager/officer. The range manager/officer provides overall supervision of the range organization to develop and implement the installation range program for the commander.

b. Operations officer. The operations officer plans and schedules the use of all installation firing ranges, weapons training facilities, airspace and training areas excluding recreational ranges.

c. Range technician(s). Range Technicians perform a variety of tasks necessary to control, maintain, and coordinate the use of installation firing ranges, weapons training facilities, and training areas in accordance with local policies and procedures.

d. ITAM coordinator or program manager. The ITAM coordinator is responsible for collecting, assessing and characterizing training land for integration with the training mission of the installation. In overseas locations, the appropriate staff activity will ensure host nation coordination is accomplished.

5–3. Range regulations and standard operating procedures

Range regulations and standard operating procedures are developed and tailored for application to the weapon systems fired or anticipated to be fired on the installation, and the management and allocation of training areas. The minimum areas of consideration which must be addressed are—

a. Procedures for the safe conduct of military training and recreational use of training land in accordance with the applicable documents listed in Appendix A. Installation procedures must address, at a minimum, access and egress control, control and coordination of training facilities, environmental compliance, communications, accident reporting, fire-fighting, ammunition and munitions handling, medical support, Special Use Airspace (SUA), range safety requirements and procedures, and severe weather conditions.

b. Procedures to develop and maintain topographical maps, geographical information, and spatial data bases of training facilities. Included are catalogs of training facilities by type; inventory and utilization data; trigonometric survey tables; and reporting, handling and disposal of ammunition, munitions, and unexploded ordnance (UXO). Management controls shall be established that ensure the safe and efficient use of ranges and training land by tenant activities, Reserve Components and other services and Government agencies. Educational programs in coordination with other staff activities to ensure that all installation military and civilian personnel, authorized family members, and the general public are cognizant of potential hazards, environmental awareness, conservation efforts and relevant procedures must be accomplished. Additionally, through mechanisms inherent in the ITAM process specifically the Training Requirements Integration (TRI) module, establish procedures for the conduct of recreational live firing, hunting, fishing, forestry, land rehabilitation, and the maintenance of training land and facilities in accordance with the installation's Integrated Natural Resources Management Plan and the Army's Integrated Training Area Management (ITAM) program.

5–4. Communications systems

Effective communications are required to control firing, coordinate requests for medical assistance, and announce unsafe conditions. TC 25-8 outlines additional communications requirements and procedures recommended for effective range operations. The minimum requirements are—

a. Establishment of primary and secondary two-way communications between range control and using units for all live fire and weapons training activities within the installation training complex for each live-fire range and weapons training facility. Units losing communication with the range control organization will cease firing/training operations until contact is re-established. Units occupying bivouac sites or non-live-fire training areas must maintain at least primary two-way communications with range control.

b. During special exercises when units are operating under the control of their higher headquarters (for example, tactical operations center), adequate communications with using units and the range control organization will be maintained as prescribed above.

5–5. RTLP management automation systems

Automated systems are being developed or improved to assist Army planners, trainers, and operators in maximizing the use of available resources (manpower, time and dollars) associated with managing training land. Some of these systems serve as centralized data bases for interactive or shared use with other DoD and DA decision support systems. Functionality, characteristics and configurations for the systems promulgated by this program are the responsibility of the ARSTAF proponent (the Director of Training, HQDA ODCSOPS) for RTLP information technologies. Where these RTLP technologies are integrated with technologies under separate proponents, the overall functionality, characteristics and configurations are joint efforts managed by DA Program Coordinators in coordination with designated technical agents or centers. In general, the program execution or implementation of technological solutions to meet RTLP requirements shall be accomplished by the designated RTLP Integration Center. The integration center will identify hardware, software, communications and/or networking solutions required to support implementation or fielding of technological solutions that are reviewed, prioritized and approved through the decision process contained in Appendix B. Integration or interface requirements for DoD and Army-wide systems are coordinated by the RTLP Configuration Control Board with the appropriate service or department agent responsible for configuration management.

5–6. Notice of firing

Before conducting firing activities involving potential hazards to the general public, a warning notice is issued through the public affairs office to the local news media. Procedures to be followed are listed in AR 385-63.

5–7. Impact areas

a. Permanent impact areas designated within the training complex and intended for indefinite use to contain high explosive or dud producing ordnance, are land use areas which are irreversibly committed. The expense to operate and maintain impact areas is resource intensive. Commanders will ensure that all mitigative actions such as scheduling or range reorientation are considered before a new, dudded impact area is created. New dud-producing impact areas will not be created prior to joint approval by HQDA ACSIM and HQUSACE. Additionally, overseas MACOM approvals are subject to appropriate article(s) of applicable host nation treaty or other international agreements that may apply.

b. Access to impact areas will be restricted to mission essential activities and coordinated with the controlling range office prior to entry. Appropriate clearing of UXO will be accomplished prior to entry except under emergency situations (for example, aircraft mishaps or life safety). Entry into Army impact areas by other than

Army authorized personnel must be coordinated in advance with the installation range manager/officer. The requesting agency assumes all responsibility and liability of personnel and costs associated with entry to the impact area. The safety of military and civilian personnel within an impact area takes precedence over all other activities. Access control procedures will be established and implemented by the installation or community commander.

5–8. Trespassing on Army installations

Installation/community commanders must take precautions to prevent: unauthorized persons from entering the installation training complex, entry by livestock not addressed through written agreements with the owners, handling or removal of unexploded ordnance (UXO) by unauthorized personnel, or encroachment by SDZ or noise contours established by agreement or local jurisdiction beyond the training complex or installation boundary.

5–9. Other range and training land usage

a. Installation/community commanders may approve the use of ranges and training areas by schools, federal or state and local government agencies, organized clubs, and civic associations. Requests for such use should be submitted through the installation/community public affairs officer to the range officer. Civilian organizations must comply with Department of Defense and DA regulations and directives governing the use of Federal property. Overseas locations must also conform to requirements or considerations on usage by other than US agencies governed by the Foreign Military Assistance Act, Arms Export Control Act, Foreign Military Sales Act or other applicable statutes. OCONUS MACOM shall coordinate with their supporting international legal counsel prior to approving non-US use of their facilities.

b. Written bilateral agreements between the installation and using organizations are prepared for each approved use. These agreements specify the rights, liabilities, procedures, regulatory requirements, and responsibilities associated with the use of the Army property by lease or permit in accordance with AR 405-80. Completion of the National Rifle Association approved pistol and rifle instructor's course, or equivalent, is mandatory for individuals designated to perform range Officer in Charge (OIC) or Range Safety Officer (RSO) duties on small arms ranges. OIC and RSO responsibilities are detailed in AR 385-63.

c. Private and local government organizations are subject to the provisions of this regulation while using Army ranges or training areas. The use of personal protective equipment, such as hearing protectors, for all individuals in the immediate vicinity of shooters is required while shooting on ranges.

d. Installation/community commanders may withdraw use privileges from any person or organization that willfully disobeys rules and regulations prescribed for the firing range or whose conduct on the range or installation warrants such action. Installation/community commanders may refuse the use of firing ranges to any individual whose knowledge of the principles of weapons handling and marksmanship is so deficient as to pose a threat to life and property.

5–10. Training event spectators and firing military weapons by non-military personnel

Approved non-military personnel may fire on installation firing ranges when engaged in an approved course of marksmanship training or when participating in activities involving familiarization firing of small arms, such as unit organizational or family days. Specific safety requirements are addressed in AR 385-63.

5–11. Hunting, fishing and other recreational activities

a. The allocation of training land and ranges to recreational use (for example, all hunting, fishing and trapping) on all Army installations are normally reached through ITAM management procedures, primarily TRI, in coordination with the preparation or update of the installation's Integrated Natural Resources Management Plan (10 USC 670) and all applicable federal, state, host nation or other local laws and regulations (10 USC 2671).

b. The use of the installation/community training complex for outdoor recreational activities shall be coordinated with and approved by the range officer to prevent military personnel and the general public from exposure to hazards. Installation or community commanders will ensure participating personnel have successfully completed all safety and education requirements as described in this regulation.

c. The conduct of uncontrolled or unscheduled outdoor recreation activities within the installation/community training complex is prohibited.

d. Outdoor recreational activities in temporary or permanent (dud-producing) contaminated impact areas are strictly prohibited, without exception. There will be no other hunting, fishing or other recreational activities in officially designated or marked impact areas. The range, safety, and natural resource officers shall determine recreational use area boundaries adjacent to an impact area in accordance with ARs 385-63 and 200-3.

e. Firing on marksmanship or recreational ranges without an approved range OIC and RSO is strictly prohibited.

f. Installation or community commanders will establish a "blaze-orange" policy for hunters in coordination with host nation, state wildlife or management officials.

5–12. Education

At minimum, installation/community commanders will—

a. Conduct an aggressive education program for all military and civilian personnel, authorized family members (especially school age children) and the general public on the dangers of dudded ammunition and other UXO in coordination with the installation safety office, public affairs office, and range control organization. Maximum use should be made of Explosive Ordnance Disposal (EOD) personnel and the general guidance contained in FM 9-15.

b. Provide periodic public service notices through the public affairs office to warn neighboring communities of the hazards involved in trespassing on Army installations and handling unexploded ammunition.

c. Educate the local community of the hazards associated with special-use airspace, if applicable, to the installation/community.

d. As a part of ITAM management responsibilities, conduct environmental awareness education programs concerning the conservation of natural and cultural resources during training.

e. Completion of an NRA hunter safety course or equivalent is mandatory before individuals participate in hunting activities on Army land.

f. Maintain appropriate warning signs and barriers as prescribed by AR 385-63.

g. OCONUS MACOM may be required to complete the above in the host nation's native or designated language and the PAO or CMO can assist in completing language translation requirements.

5–13. Policing ranges

Range and training area police are mandatory portions of the installation training plan. The range officer will plan these activities and facilitate inspections to support this requirement. AR 385-63 lists requirements and responsibilities. Range managers are responsible to ensure that any materials or dunnage resulting from MILCON maintenance or repair activities are cleared prior to resumption of training activities.

a. Commanders at all levels shall ensure that the collection and removal of expended brass and dunnage associated with units occupying firing ranges, weapons training facilities, and training areas are completed on a routine basis. The only exceptions to this requirement are areas where aircraft-mounted weapons are fired over extended terrain or inaccessible areas, or unscheduled clearance operations supporting UXO impact areas.

b. Disposing of serviceable or unserviceable ammunition into contaminated impact areas or elsewhere within or outside installation/community boundaries is strictly prohibited.

c. Units are expected to repair and police, as described above, based on "fair wear and tear" . ITAM Land Rehabilitation and Maintenance (LRAM) component provides maneuver damage

repair, repair of environmental damage to ranges and training facilities, and training area reconfiguration guidance as proactive measures to sustain training land and ranges.

5–14. US Army use of civilian or host nation ranges

a. Army use of civilian indoor/outdoor firing ranges is authorized for organizational training activities contingent upon obtaining the necessary approvals and the completion of required documentation as outlined in TC 25-8. Use agreements will be prepared in accordance with AR 405-10 and/or applicable statutes or international agreements.

b. Only weapon systems and ammunition compatible with the range, as designed and constructed, may be used when firing on civilian ranges.

c. Range safety policy and procedures set forth in AR 385-63 or applicable civilian or host nation range requirement (whichever is more restrictive) apply to Army personnel when firing on civilian or host nation ranges.

d. Surface danger zones (SDZ) for civilian or host nation firing ranges will correspond to the SDZs in DA PAM 385-63. Those SDZs exceeding range boundaries must be controlled by the civilian or host nation firing range owner(s) through a formal agreement with the owner(s) of the affected lands.

5–15. Installation compatible use zones

Potential impacts of noise from a new or modified live-fire range on the surrounding civilian community can inhibit full utilization during the conduct of training. Range managers should be cognizant of environmental considerations in compliance with the guidelines contained in AR 200-1, Installation Compatible Use Zones. Installations shall establish a proactive community noise awareness program which is factual and informative.

Chapter 6
RTLP Automation and Configuration Management

6–1. General

Maximizing the use of available ranges and training areas is essential to justify additional resource expenditure to support facility modification or new construction and acquisition initiatives for RTLP. Effective management of RTLP resources must be demonstrated and support the policies discussed in paragraph 3-1. The use of automation systems and analytical models are proven, accepted methods of demonstrating effective resource management. Automation systems used by installations and MACOM must use approved SDZs (for example, Automated Surface Danger Zone or ASDZ); preclude uncoordinated simultaneous occupancy of the same live-fire range, weapons training facility, or training area; allocate sufficient Special Use Airspace (SUA) to contain ballistic trajectory and ricochet characteristics for the weapon systems and ammunition/munitions to be used; maintain scheduling request forms or other types of automated requests; provide opportunities for training range and maneuver land rehabilitation activities; and have the capability to integrate with other Army analytical models and decision tools which support RTLP.

6–2. RTLP automation products

Automation relationships to RTLP management are discussed in paragraph 5-5 of this regulation. In the context of this regulation, RTLP products are defined as the use of technology which provides data and information as tools to support the decision making process. The functional proponent for RTLP automation is HQDA DCSOPS (DAMO-TRS). System requirements and their relative priority for development and fielding are provided by the DA Range and Training Land Program Coordinator. Overall management of automation integration within this program is accomplished by the RTLP Configuration Control Board (RTLP CCB) which is convened and chaired by HQDA DCSOPS. In many cases, RTLP automation products represent joint use initiatives between the Army, other services and federal departments. Therefore, this portion of the regulation applies to all participants.

a. RTLP automation products are generally categorized under three major areas; (1) Operations Management, (2) Safety, and (3) Land Management. There are also many other functional categories which may support or influence the needs and outcomes for one or more of these three categories such as facilities engineering or materiel acquisition. RTLP automation products shall focus on technology applications rather than research and development. Research and development activities in support of the RTLP shall be coordinated with the appropriate scientific or academic principal activity. The following guidelines will apply to the assessment, approval, development and fielding of designated Army programs or automation products which fall under the proponent and subject area of this regulation.

b. RTLP automation products designated as Army programs or systems will directly support the Army Decision Support System (DSS). Relationships and connectivity for all RTLP automation products shall include a functional description and proposed system architecture diagram identifying system and program interfaces prior to adoption. It is anticipated that automation products supporting range operations management functions will also support ITAM functions through data reuse and interchange, integration and/or commonality.

c. Whenever possible or practical, a streamlined development and fielding process will be used to maximize Government's return on investment and respond to programmatic needs in a timely manner. For those projects which require either formal development due to technical complexity or long lead-time (for example, 3-5 years), product development will be accomplished through the most appropriate and expeditious Army process.

d. MACOM and installation commanders are responsible for ensuring that functionality, integration, data exchange and connectivity is maintained with RTLP designated programs when using either commercially available or independently developed site specific automation products. The RTLP CCB is responsible for identifying and maintaining characteristics and capabilities necessary for efficient integration and connectivity. The RTLP CCB is also responsible for defining and standardizing all necessary interfaces with other designated DA automation products or systems.

6–3. Review and prioritization

At a minimum, automation products in support of this program will be identified, reviewed, and prioritized based on the following general parameters before being adopted as Army designated systems or enhancements to existing systems.

a. Provides data for departmental decision making processes.

b. Fulfills an existing requirement or capability shortfall.

c. Does not duplicate a projected or existing capability without ARSTAF proponent (the Director of Training, HQDA, ODCSOPS) approval.

d. Does not substantially add to the operations and support (for example, manpower, time, dollars) burden of the command level(s) to be supported.

e. Has been reviewed and recommended by the appropriate Configuration Management Work Group (CMWG) (for example, Operations Management CMWG, Safety CMWG or Land Management CMWG) and approved by the RTLP CCB.

f. Provides improved installation level training support management, sustainment of existing training facility capabilities, and improved maintenance efficiencies.

6–4. General automation management policies and process

Automation integration under the purview of this regulation will adhere to the specific automation policies, procedures and guidance published in the RTLP Automation Management Plan. Management of RTLP automation integration will be accomplished through the

appropriate CMWG and RTLP CCB in accordance with Appendix B.

a. The RTLP automation plan is developed and maintained by the DA Range and Training Land Program Coordinator based on recommendations from the various CMWGs and approved by the RTLP CCB. Modifications and additions will be effective immediately upon approval of the automation plan by the RTLP CCB.

b. Changes to Army designated systems must be reviewed by the appropriate CMWG to determine Army-wide utility or local application. Local applications compatibility with updated versions, future improvements, or additions to baseline system configurations not adopted for Army-wide use are the responsibility of the originating activity or agency. Local modifications may be presented for Army-wide adoption as an engineering change package (ECP) at any time subject to review and approval by the RTLP CCB and incorporated into an RTLP automation plan in accordance with the RTLP Boards and Councils Management Plan.

c. Requests for programs or systems to be adopted as Army designated systems will be submitted through the appropriate MACOM prior to review by a CMWG.

d. RTLP CCB decisions, development and fielding of designated, candidate or nominated systems, applications, or utilities for inclusion in service or departmental end-item development programs coordinated through the appropriate or relevant decision process. ARSTAF proponent for all RTLP information technology projects resides with the Director of Training, HQDA ODCSOPS. The ARSTAF proponent is responsible for designating the appropriate technology agent or center responsible for the overall functionality, characteristics, configuration, and, where functionally or fiscally prudent, integration or interface of all RTLP automation products. Coordination with the ARSTAF functional proponent for joint or integrated data exchange programs will be determined prior to adoption by the RTLP using the process described here-in.

e. Other Automation products. Automation programs or systems deemed inappropriate for incorporation into service or departmental development, acquisition, or fielding processes will be accomplished under the same general guidelines described in paragraphs 6-4*a*, *b* and *e* of this regulation.

f. Commercially Available Product Use. To The extent feasible, RTLP automation will maximize the use of commercially available products in order to avoid the expense of developing and maintaining unique code or programming language. Furthermore, RTLP automation products will conform to open systems interoperability strategies and avoid the use of proprietary hardware or software to the maximum extent feasible. The RTLP CCB is responsible for assessing the impact of using commercially available products on fielded RTLP automation products based on—

(1) The ability of the proposed commercial product to transfer data between Army designated systems, protocols and hardware

(2) Any licensing requirements for complete Technical Data Packages where projected or potential modification by Government instead of private vendor is likely or more cost effective from a life cycle perspective.

Appendix A
References

Section I
Required Publications

AR 1–1
Planning, Programming, Budgeting, and Execution System. (Cited in para 1-10*a*.)

AR 5–9
Interservice Support, Installation Area Coordination. (Cited in para 2-8*b*(3), 2-8*c*, 2-8*m*, 2-9*m*, 2-12*b*, *d*, *e*, and *g*, and 2-13*b*.)

AR 5–20
Commercial Activities Program. (Cited in para 1-13*a*.)

AR 25–9
Army Training Information Management Program or Army Open System Interconnectivity (OSI) Interoperability and Transition Plan. (Cited in para B-7*b*(2)

AR 25–400–2
The Modern Army Recordkeeping System (MARKS) (Cited in para 5-2*a*(11)

AR 40–5
Preventive Medicine. (Cited in para 6-6*a*.)

AR 40–46
Control of Health Hazards from Lasers and Other High Intensity Optical Sources. (Cited in para 6-6*a*.)

AR 71–2
Basis of Issue Plans and Qualitative and Quantitative Personnel Requirements Information. (Cited in para 2-10*g*.)

AR 75–1
Malfunctions Involving Ammunition and Explosives (RCS DRC-132 (Min)). (Cited in para 2-13*m*.)

AR 95–2
Airspace Management and Terminal Instrument Procedures. (Cited in para 5-3*b*.)

AR 140–483
Army Reserve Land and Facilities Management (Facilities, Projects, and Programs). (Cited in para 1-9*b* and 2-13e.)

AR 200–1
Environmental Protection and Enhancement. (Cited in para 2-5*m*, 2-13*k*, 3-3*d*(1)(*d*), 3-7, 3-8*a*, 5-2*a*(21), and 5-3*m*.)

AR 200–2
Environmental Effects of Army Actions. (Cited in para 2-5*m*, 2-13*i*, 3-3*d*(1), 3-7, and 3-8*a*.)

AR 200–3
Natural Resources: Land, Forest, and Wildlife Management. (Cited in para 2-3*d*, 3-1, 3-1*d*(1), 3-3*d*(1), 3-7, and 3-8*a*.)

AR 200–4
Cultural Resource Management. (Cited in para 3-3*d*(1).)

AR 210–20
Master Planning for Army Installations. (Cited in para 1-8, 3-2 3-3*a*(1), 3-7, and 3-8*a*.)

AR 210–30
Selection of Sites for Army Installations. (Cited in para 3-8*a*.)

AR 385–9
Safety Requirements for Military Lasers. (Cited in para 6-6*a*.)

AR 385–10
The Army Safety Program. (Cited in para 1-12*b*, 2-10*a*, and 3-3*d*(4).)

AR 385–40
Accident Reporting and Records. (Cited in para 6-3*d*(3).)

AR 385–62
Regulations for Firing Guided Missiles and Heavy Rockets for Training, Target Practice, and Combat. (Cited in para 2-12*m*, 2-13*k*, 3-7*c*, 5-3*b*, 5-3*e*, and 5-15*e*.)

AR 385–63
Policies and Procedures for Firing Ammunition for Training, Target Practice, and Combat. (Cited in para 1-12*b*, 2-12*m*, 2-13*k*, 3-3*a*(1)(*g*), 3-7*c*, 5-2*a* (19), 5-3*b*, 5-3*e*, 5-15*e*, 6-2 and 6-4*e*.)

AR 385–64
Ammunition and Explosives Safety Standards. (Cited in para 5-3*b*.)

AR 405–10
Acquisition of Real Property and Interests Therein. (Cited in para 2-13*d*, 3-3*c*.)

AR 405–70
Utilization of Real Estate. (Cited in para D-2*g*.)

AR 405–80
Granting Use of Real Property. (Cited in para 5-9*b*.)

AR 415–10
General Provisions for Military Construction. (Cited in para 3-13*b*.)

AR 415–15
Military Construction, Army (MCA) Program Development. (Cited in para 1-9*b*, 1-9*c*(3), 2-13*e*, 3-3*a*(1), 3-5e(3).)

AR 415–20
Project Development and Design Approval. (Cited in para 3-3*a*(1), and 3-8*a*.)

AR 415–28
Installation Facility Real Property Management. (Cited in para 3-3*a*(6.)

AR 415–35
Minor Construction. (Cited in para 3-10*a*.)

AR 700–127
Integrated Logistics Support. (Cited in para 2-5*d* and 2-10*a*.)

NGR 5–3
Army National Guard Training Centers Management and Organization. (Cited in para 1-8*h*, 1-9*a*, and 3-4*c*.)

NGR 415–5
Standard Operating Procedures for Military Construction Army National Guard Programs (MCARNG) Major and Minor Projects. (Cited in para 1-2*a* and 1-8*h*.)

NGR 415–10
Installations and Facilities Construction Standards. (Cited in para 1-2*a*, 1-9*b*, and 3-4*c*)

NGR 420–10
Real Property Operations, Maintenance, and OMARNG Minor Construction, Army National Guard. (Cited in para 1-2*a*, 1-8*h*, 1-9*a*, and 3-4*c*.)

DA Pam 5–25
Army Modernization Information Memorandum

DA Pam 350–38
Standards in Weapons Training. (Cited in para 3-3*a* (1)(*h*).)

DA Pam 385–63
Range Safety Standards. (Cited in para 1-11*d*, 1-12*b*, 2-9*c*(4), 2-12*m*, 2-13*k*, 3-3*a*(1)(*a*), 3-3*d*(4), 3-7*e*, 5-3*b*, and 5-6.)

NGB Pam 415–12
Army National Guard Facility Allowances.

NGB Pam 570–3
Manning Criteria Army National Guard Major Training Areas. (Cited in para 5-2 and 5-2*c*.)

FM 9–15
Explosive Ordnance Disposal Service and Unit Operations. (Cited in para 5-12*a*.)

FM 9–16
Explosive Ordnance Reconnaissance. (Cited in para 5-3*d*(3).)

FM 17–12–1
Tank Combat Tables M1. (Cited in para 3-3*a*(1)(*d*).)

FM 17–12–2
Tank Gunnery for M60, M60A1, (AOS), and M48A5 Tanks. (Cited in para 3-3*a*(1) (*d*).)

FM 17–12–3
Tank Combat Tables M60A3. (Cited in para 3-3*a*(1)(*d*).)

FM 23–1
Bradley Fighting Vehicle Gunnery. (Cited in para 3-3*a*(1)(*d*).)

FM 23–9
M16A1 Rifle and Rifle Marksmanship. (Cited in para 3-3*a*(1)(*d*).)

FM 23–14
Squad Automatic Weapon (SAW), M249. (Cited in para 3-3*a*(1)(*d*).)

FM 25–100
Training the Force. (Cited in para 2-12*b*, 2-13*a*, 3-3*a*(1), and 3-3*b*.)

TC 25–1
Training Land. (Cited in para 2-9*c*(1), 2-13*b*, 3-7*a*, and 3-8.)

TC 25–8
Training Ranges. (Cited in para 1-7, 1-11*d*, 2-12*m*, 2-13*k*, 2-5*l*(5), 3-3*a*(1)(*a*), 3-7, 3-7*g*(4), 4-1*b*(1), 4-2*a*(3), 4-2*c*(1), 4-2*e*(1), and 5-3*b*.)

TM 5–800–3
Project Development Brochures, Part I—Functional Requirements. (Cited in para 3-9*c*.)

TM 9–1300–206
Ammunition and Explosives Standards. (Cited in para 5-3*b* and 5-8*c*.)

USAEDHM 1110–Series
Design Information for Army Standard Ranges. (Cited in para 3-7*g*(4), and 4-1*b*(2).)

Section II
Related Publications

A related publication is merely a source of additional information. The user does not have to read it to understand this publication.

AR 5–4
Department of the Army Productivity Improvement Program (DAMRIP)

AR 10–5
Organizations and Functions, Department of the Army

AR 10–41
U.S. Army Training and Doctrine Command

AR 350–1
Army Training

AR 350–2
Opposing Force (OPFOR) Program

AR 415–17
Construction Empirical Cost Estimates for Military Construction and Cost Adjustment Factors

AR 415–28
Department of the Army Facility Classes and Construction Categories (Category Codes)

AR 570–4
Manpower Management

AR 570–5
Manpower Staffing Standards System

AR 920–30
Rules and Regulations for National Matches

DA Pam 310–12
Index and Description of Army Training Devices

DA Pam 350–39
Standards in Weapons Training for Special Operations Forces

NGB Pam 25–1
Training Site General Information Summary

TM 5–800–1
Construction Criteria for Army Facilities

NAVSEA OP5 Vol I
Ammunition and Explosives Ashore Safety Regulations for handling, storage, production, renovation, and shipping.

SPAWAR INST 5100.12
Navy Laser Hazards Prevention Program.

FIRMR
Federal Information Resource Management Regulation

CFR Title 29
Lead, Part 1910, Section 1025.

10 USC
Section 2671

16 USC
Section 670a

Section III
Prescribed Forms
There are no entries in this section.

Section IV
Referenced Forms
The following forms are related to the subject matter of this regulation but are not required by the user to understand or comply with this regulation.

DA Form 12–9A–R
Subscription for DA Unclassified Administrative Publications

DA Form 2028
Recommended Changes to Publications and Blank Forms

DA Form 4283
Facilities Engineer Work Request

DD Form 1390
Military Construction Project Data (LRA)

DD Form 1391
Military Construction Project Data (LRA)

NGB Form 420R
OMARNG Project Request

Appendix B
Headquarters, Department of the Army boards and procedures

Section I
Range and Training Land Program Requirements Review and Prioritization Board (RTLP RRPB)

B–1. RTLP Requirements Review and Prioritization Board (RRPB)
The RTLP RRPB is a policy setting, decision making and resourcing board which addresses all departmental management of Army training ranges and training land under the direction of the Training Mission Area General Officer Steering Committee (TMA GOSC) and the RTLP Quality Integration Council. Inclusive are any changes or new initiatives to meet doctrine, force structure and materiel fielding which have not been, or cannot be, resolved by other processes, decision mechanisms, or at lower command levels. The RTLP RRPB addresses all range upgrades and new construction (OMA and MCA) and maneuver training land requirements and issues. As a minimum, the RTLP RRPB meets annually with board deliberations preceding the RTLP Configuration Control Board (CCB) during the first quarter of the fiscal year. Interim issues are addressed on an as required basis at the discretion of the principal members. The RTLP RRPB coordinates with other DA decision and policy setting boards, committees and councils, as well as provide input on DA positions in response to the Office, Secretary of Defense (OSD) or Congressional inquiries. RTLP RRPB functions include—

a. Implementing DoD and DA guidance.

b. Evaluating Army initiatives.

c. Determining policy, procedural and management adequacy and applicability to meet training land requirements.

d. Identifying resource shortfalls that bear on Army training requirements.

e. Determining alternative actions that will provide interim solutions to shortfalls and long-range actions and responsibilities to overcome limitations.

f. Evaluating special purpose and non-standard range designs to determine whether the training requirement can be met with an existing (or modified) standard design.

g. Reviewing training land requirements, Land Use Requirements Study (LURS) and Analysis of Alternatives Studies (AAS) as required.

h. Designate operational beta test sites in conjunction with host MACOM as required.

B–2. RTLP RRPB Composition
The RTLP RRPB consists of three principal (voting) members:

a. HQDA, Office of the Deputy Chief of Staff for Operations and Plans (DAMO-TR), who convenes and chairs the RRPB.

b. HQUSACE, DA Program Coordinator for Army Training Facilities.

c. HQ TRADOC, DA Range and Training Land Program Coordinator.

B–3. General Procedures
a. DA DCSOPS convenes the RTLP RRPB and participating members are notified by the DA Range and Training Land Program Coordinator. Detailed procedures and process scope are contained in a separate management plan for all RTLP boards and councils.

b. MACOM planners identify issues for RTLP RRPB consideration and forward all supporting information and/or documentation to the appropriate DA Program Coordinator prior to the RTLP RRPB.

c. The DA Range and Training Land Program Coordinator hosts the board and records decisions and rationales of the RTLP RRPB. A summary is provided all attendees.

d. Unresolved issues are referred to the appropriate Army agency or activity for resolution.

e. Decisions which cannot be resolved by the board will be elevated to the TMA GOSC or other appropriate DA body for adjudication as determined by the convening authority.

B–4. Parameters of consideration and prioritization
a. The ability to train and maintain a ready force to implement the strategic mission and national military strategies of the Army is critically dependent upon maximizing the use of existing training assets (for example, training land, ranges, courses and direct support facilities). This effort must also balance the need to ensure that training land and its supporting infrastructure can sustain the long-term use of various training activities and environmental requirements. And finally, sound training asset management requires holistic, comprehensive planning strategies and documentation which considers economic feasibility during implementation. These factors become the cornerstones of RTLP prioritization.

b. The RRPB parameters for considering the relative needs and their priorities are categorized in four general categories: (1) mission support, (2) environmental stewardship, (3) planning strategies and documentation, and (4) economic feasibility. In general, the relative importance of each category to the overall program are as follows:

(1) Mission Support—40%.

(2) Environmental Stewardship—25%.

(3) Planning Strategies and Documentation—20%.

(4) Economic Feasibility—15%.

c. Within these general categories, several critical factors are evaluated annually for a six-year projection of needs and relative priorities at each level of command. The factors for consideration are—

(1) Training Readiness Shortfall Mitigation.

(2) Throughput (training density and load by component and unit type).

(3) Productivity Enhancement (training and management).

(a) Multi-component/Joint/Combined Use

(b) Multi-functional or Multi-purpose Use

(c) Environmental Enhancement

(4) Land Use Management (siting, topography, airspace, environmental compliance).

(a) Safety

(b) OPTEMPO

(5) Standardization and Modernization (operations, engineering, and materiel).

(a) Planning Strategies and Documentation

(b) Economic Affordability/Feasibility

d. Each year, the RRPB publishes guidance reflecting RTLP priorities for consideration in concert with HQDA Program Budget Guidance (PBG). Each factor for consideration is weighted annually to reflect Army philosophies, strategies and affordability.

e. Each installation documents their existing training capabilities, training density and load, and requirements posture in an installation RDP. These installation RDPs are consolidated at the MACOM level for presentation to the RRPB. MACOM consolidates and prioritizes all valid MCA and OMA range and training land projects and forward to the DA Range and Training Land Program Coordinator no later than one month prior to the annual conference. A preliminary DA Priority List is prepared by the DA Range and Training Land Program Coordinator and provided to the principal members of the RRPB prior to convening the board.

f. The RTLP RRPB integrates MACOM RTLP Development Plans (RDP) into a Department of the Army Master RTLP Plan (AMRP). Specific range modernization and training land acquisition projects are prioritized by the RRPB by fiscal year in accordance with the board's operating procedures, published annual guidance, and within the categories and factors described above. All issues and MACOM perspectives are reviewed at the RRPB for conformance to Army-wide guidance and plans.

g. In general, range and training land projects are prioritized as follows:

(1) MACOM RTLP development plans (RDP) and supporting documentation are submitted for the designated POM years to the DA Range and Training Land Program Coordinator prior to the convening of the RRPB.

(2) A preliminary DA RRPB Priority List is developed which considers MACOM priorities and based on the weighted values contained in the Board operating procedures. MACOM preparation for presentation to the RRPB will be based on the criterion contained in annually published guidance and this regulation to include betterment of installation level training support management, sustainment of existing facilities, and improving maintenance efficiencies.

(3) The RRPB reviews each MACOM submission to resolve any conflicts, data shortfalls and Army perspectives. Any other questions arising from the RRPB review of projects are addressed to the appropriate MACOM for clarification.

(4) The AMRP is provided by the RRPB. The approved AMRP is provided to other ARSTAF process for further programming action or execution.

(5) Projects that are special purpose or nonstandard and that do not conform to TC 25-1, 25-8 or CEHNDM 1110-1 series design manuals, are referred to the RRPB for further review and disposition.

(6) After completion of the prioritization process, the DA Range and Training Land Program Coordinator enters each project into the AMRP automated data base by fiscal year, MACOM, and priority. The AMRP prioritized list is used by other departmental decision making bodies as a guide in prioritizing and allocating resources Army-wide. Changes in annual construction programs resulting from other decision making bodies are provided to DA Program Coordinators for dissemination to the appropriate MACOM or activity. The DA Range and Training Land Program Coordinator updates the AMRP data base to reflect necessary changes. MACOMs shall update or modify their respective RDPs accordingly and inform installations to adjust the installation RDP.

Section II
Range and Training Land Program Configuration Control Board (RTLP CCB)

B–5. RTLP Configuration Control Board (RTLP CCB)

The RTLP CCB is a policy, program definition, approval and prioritization body which addresses all issues of automation support and management to the RTLP. As is the case with the RTLP RRPB, the RTLP CCB serves as the execution mechanism for and under the direction of the Training Mission Area General Officer Steering Committee (TMA GOSC) and the RTLP Quality Integration Council. At a minimum, the RTLP CCB meets annually with at least one board deliberation in conjunction with the annual RRPB. Interim issues are addressed on an as required basis. Automation products developed by the Army under the purview of this regulation also provide support to other services and federal departments. Therefore, representation and participation in the configuration management process described in this appendix are extended to other agencies as appropriate. Issues which cannot be resolved will be forwarded to the appropriate ARSTAF activity for adjudication. Primary goals and objectives for automation integration in the Army RTLP are to—

a. Increase management effectiveness in maintaining sufficient training land through the development and implementation of a comprehensive, holistic management plan. The management plan is a "living" document which shall be used as the basis from which RDT&E, day-to-day operations and resourcing decisions are made.

b. Provide installations and MACOM with the necessary tools, standards and criterion necessary for effective management of training land. Additionally, these tools shall provide portability, support, and direct relationship to the Army decision support system.

c. Utilize DoD and Army plans regarding open systems interoperability as guidelines for all decisions regarding development and fielding of automation products.

d. Maintain close coordination with other plans, forums and bodies to ensure that training land management needs and perspectives are adequately addressed.

e. Maximize the use or integration of other Army and DoD automation capabilities while maintaining configuration management and functionality of existing RTLP systems.

B–6. The RTLP CCB Composition

The RTLP CCB consists of three principal (voting) members:

a. HQDA, Training Simulations Division, Office of the Deputy Chief of Staff for Operations and Plans who convenes and chairs the RTLP.

b. HQDA, Office of the Chief of Engineers, DA Program Coordinator, Army Training Facilities.

c. HQ TRADOC, DA Range and Training Land Program Coordinator.

d. HQ Marine Corps Combat Developments Center (Ranges), as required (non-voting).

B–7. Configuration Management Work Groups (CMWG)

a. RTLP automation products are categorized into one of three areas: Land Management (for example, ITAM), Operations Management, and Safety. Technology evaluation and integration is accomplished by the CMWG for each category. The CMWG convenes work sessions to—

(1) Identify and verify requirements.

(2) Explore alternatives to meet verified requirements.

(3) Develop milestone schedules, product or other deliverable definitions (for example, studies, functional descriptions, data collection, inventory, and technical reports), and baseline cost estimates or resource requirements.

(4) Recommend actions to be taken by the RTLP CCB or RRPB.

b. At a minimum, the CMWG will—

(1) Review existing functional concepts of range and training land management and identify potential areas which may benefit from the use of technology or automation.

(2) Evaluate and recommend standard information definition and automation architecture to ensure compliance with published Army directives and guidance (for example, AR 25-9, Army Training Information Management Program or Army Open System Interconnectivity (OSI) Interoperability and Transition Plan).

(3) Enforce those standards which have been approved by DA boards.

(4) Ensure compliance with AR 25-3 and TB 18-100.

(5) Coordinate integration requirements with the appropriate PM or proponent agency for other systems.

c. The CMWG consists of principal (voting) and participating (non-voting) members. Based on the nature and scope of this board, only the CMWG co-chairs are listed below. The complete list of principal and participating members is contained in the RTLP Automation Management Plan. Participating members include MACOM and installation representatives as well as related automation offices and technical centers. The participating membership may be added on a case-by-case basis as outlined in the specific policies and procedures of the management plan.

(1) Operations Management:

(a) DA Range and Training Land Program Coordinator (Co-chair and recording secretary).

(b) Deputy Program Coordinator, Army Training Facilities (Co-chair).

(2) Land Management:

(a) DA Range and Training Land Program Coordinator (Co-chair and recording secretary).

(b) Center for Public Works (Real Property and Planning) (Co-chair).

(c) Army Environmental Center (Co-Chair).

(3) Safety:

(a) TRADOC SAFE (Co-chair and recording secretary).

(b) HQ Marine Corps Combat Developments Center (Safety) (Co-chair).

d. At a minimum, the CMWG meets annually with at least one board deliberation in conjunction with the annual RRPB. Interim issues are addressed on an as required basis at the discretion of the principal members. The ability to maintain adequate understanding and interface with the proliferation of independent ADP systems by each functional area (for example, operations, land and safety management) exceeds available resources (manpower, time and dollars) at all levels of command. Functional areas should be mutually supportive and balance automation capabilities with available resources. Therefore, requirements identification, alternatives assessments, prioritization and resourcing of automation products which support the RTLP will utilize the general process and HQDA boards identified in this appendix and the management plan for RTLP boards and councils. Primary objectives for technology and automation integration for the Army RTLP are to—

(1) Reduce O&S resources needed at the installation and MACOM level by providing the commander with the decision making tools that will assist in identifying and quantifying requirements.

(2) Identify data and information requirements. Where automation products currently exist, maximize data or information exchange and integration prior to development of mutually exclusive products.

(3) Where common data elements are used in various training, engineering, safety, and materiel documents, develop mutually supportive, affordable automation systems which reduce manpower and hardware burdens and focus on connectivity.

(4) Approval and prioritization of automation products as Army designated programs under the purview of this regulation will be based on the general parameters established in the RTLP automation plan.

(5) The general scope of responsibility for the CMWG includes but is not limited to existing, product improved, enhanced or new automation capabilities in support of Army training ranges and training land management. When automation products under the purview of this board are provided to other Government agencies or activities, the needs of said agencies or activities will be included in board deliberations. Resourcing for other Government agencies or activities will normally be accomplished on a cost reimbursable basis unless a mutual benefit to both the allied customer and the Army exists.

B–8. General procedures.

a. CMWG is convened by the Co-chairs to address agenda items provided to attendees in advance. Participating members will identify issues not included in the coordination agenda and determine whether separate meetings and composition with the convening authority as soon as they become known. All CMWG recommendations will be finalized by all attendees in accordance with working group procedures prior to submission to the RTLP CCB for approval.

b. MACOM planners may identify issues for consideration and forward all supporting information and/or documentation to the appropriate CMWG co-chairs (for example, operations, land or safety management) prior to convening the CMWG work session.

c. The CMWG is responsible for maintaining records of decision and rationales for review by either the RTLP CCB. A summary is provided all attendees.

d. Unresolved issues are referred to the RTLP CCB for resolution.

Section III
Advisory Council to the Range and Training Land Program Requirements Review and Prioritization Board (RTLP RRPB), and the RTLP Configuration Control Board (CCB).

B–9. Advisory Council to the RTLP RRPB and CCB

The Advisory Council is composed of selected representatives of major ARSTAF activities or organizations that have a significant role in supporting the goals and objectives of the RTLP. The role of the Advisory Council is to ensure that related activities, implementation plans and actions between various functional and management aspects of the Army remain consistent, economically sound and avoids potential conflicts. Advisory Council members also provide insights on various long-range plans in their various areas of functional expertise in order to build holistic, comprehensive goals, objectives and strategies regarding Army training. Additionally, operational beta test sites are used by the Advisory Council to evaluate and analyze initiatives, prototypes, and management procedures or processes prior to adoption by the RTLP. Beta test sites represent a cross section of the various components and participating services in order to provide a full spectrum of consideration and maximizes resource expenditures through user involvement.

B–10. Advisory Council Composition

Permanent Advisory Council members to the RTLP RRPB and CCB are identified in Chapter 2 of this regulation and the US Marine Corps Combat Development Center. Representation by other DoD, DA or sister service agencies may be deemed beneficial to integrated Army decision making processes and may be appointed by the RRPB or CCB.

Section IV
Other related boards or decision making bodies.

B–11. ITAM Executive Management Council (EMC)/ Council of Colonels (COC)

a. Army lands are managed through ITAM. Four key agencies perform ITAM executive management for HQDA. HQDA DCSOPS (DAMO-TR) is the ARSTAF proponent with overall program responsibility. Conservation policies related to ITAM is provided by environmental directorate of the ACSIM (DAIM-ED-R) and environmental technical support is provided by the Army Environmental Center. The DA Range and Training Land Program Coordinator serves as the executive agent for DA DCSOPS. Additionally, ACSIM (DAIM-FDP) provides the link to real property management policy with real property technical assistance and support provided via the CRST, HQUSACE, through the DA Program Coordinator for Army Training Facilities (PC ATF). The PC ATF also serves as an advisor to the COC and EMC and serves as the primary link to the RTLP process.

b. The COC meets semi-annually to provide guidance and approval of program actions. The EMC is an action officer level panel that conducts semi-annual Program Management Reviews (PMR)

with MACOM ITAM managers and supporting agencies. The EMC PMR reviews and validates funding levels, establishes and monitors program initiatives, and makes recommendations to the COC. Close coordination, integration and continuity between the RTLP boards and the ITAM COC and EMC minimizes conflicts and redundancies thereby maximizing resource efficiencies for the Army.

Appendix C
Ranges and training facilities reports

C–1. General

The Ranges and Training Facilities Report is divided into two sections. The first part is an installation overview and part two addresses individual ranges and training facilities. Part two must be completed for each range and training facility on the installation. The report standardizes the data and information required to accomplish range and training land management as well as integration with other functional areas. MACOMs will prepare and submit the report to the DA Range and Training Land Program Coordinator upon request. OCONUS MACOM may alter or omit specific items that are CONUS specific and not applicable to their commands. When such deviations are made, annotated remarks are required to identify the office of record with command approvals and rationales. Installation/MACOM RDP will summarize deviations for review during annual RRPB sessions.

C–2. Installation ranges and training facilities data

PART I : Installation Overview

a. Section A—Areas. Area definitions are found in AR 415-28. The designation of land (maneuver, ranges, impact, non-training) is based on the primary use of the asset.

(1) *ACRES–TOTAL–INSTL.* Provide the total acres encompassed by the installation boundary. Do not include Local Training Areas or areas off post used for maneuver.

(2) *ACRES–ON–POST–MVR.* Provide the acres available for all types of maneuver training. Do not include impact areas, dud areas, drop zones, and so forth, unless they are used as maneuver areas as a matter of routine.

(3) *ACRES–IMPACT AREA.* Provide the total acres designated as impact areas and dud areas. Do not include impact areas buffer zones unless the buffer zones have been placed permanently off limits for maneuver.

(4) *ACRES–CANTONMENT TOTAL.* Provide the total number of acres encompassed by the cantonment area(s).

(5) *ACRES–EXCESS TO RQMT.* Provide the total number of acres that have been declared excess by competent authority, that is, Post Commander, U.S. Army Audit Agency (USAAA), and so forth and the date that land was declared excess.

(6) *ACRES–SHORTFALL OF REQUIREMENT.* Provide the number of shortfall by the total number of acres determined in accordance with Land Utilization Requirements Study (LURS), and the date that the LURS was submitted.

(7) *NUMBER OF FIRING RANGES.* Provide the number of live-fire ranges controlled by the installation. Most of these ranges are identified in TC 25-8, however, an installation may have "installation or MOS/mission unique firing ranges." Do not include artillery firing points in this item.

(8) *NUMBER OF NON-FIRING RANGES.* Provide the number of non-firing ranges controlled by the installation (that is, Target Detection, Hand Grenade Distance and Accuracy Course, and so forth).

(9) *NUMBER OF INDIRECT FIRING POINTS.* Provide the number of artillery and mortar firing points established by the Range Control Officer.

(10) *NUMBER OF OBSERVATION POINTS.* Provide the number of Observation Points established by the Range Control Officer.

(11) *NAME-OF LOCAL TRAINING AREA.* Provide the name of any Local Training Areas (LTA), sub-posts, or other off-post training areas controlled by the installation. Include the distance from the cantonment area in miles, and the acreage encompassed by the area. If the installation has off-post maneuver rights, enter "Off-Post MA" instead of the LTA name, the distance to the center of the off-post maneuver area, and the total acreage encompassed.

b. Section B—Installation Suitability.

(1) *BRANCH.* Select the three most significant types of training conducted at the installation (that is, Air Defense, Armor, Infantry, and so forth).

(2) *UNIT TYPE.* Enter the largest unit the installation can support (that is, battalion, brigade, division, and so forth) when the training listed is conducted.

c. Section C—General Information.

(1) *GEOGRAPHICAL LOCATION NAME.* Enter the name and state of the nearest town, the distance in miles from the cantonment area, and the most recent population of the town.

(2) *AIRPORT–NEAREST MILITARY.* Enter the nearest military airfield and its road distance in miles from the cantonment area. ("On-post" if appropriate). Enter the largest aircraft that can depart fully loaded, for example, C130, C141, C5, 727, 747, and so forth

(3) *AIRPORT–NEAREST CIVILIAN.* Enter the same type of information for the nearest civilian airport. Do not indicate modified restricted, full, and so forth Include Joint Army/Air Force Transportability (JAAT) airfields and capabilities.

PART II: Individual Range and Training Facility

a. INSTALLATION NAME. Provide the name of the installation. If the Range/Training Area is located in an LTA/sub-post, enter the name of the LTA or sub-post after the name of the installation.

b. NAME/LOCATION. Provide the local name and/or number used to identify this facility. Provide geographic or 8-digit UTM coordinates for the center of the facility.

c. TYPE OF TRAINING FACILITY. Provide the type or configuration of the range as listed in TC 25-8. If the range being surveyed is not listed in TC 25-8, provide a short description. For Field Training Facilities, list the type of training primarily conducted at the facility.

d. NUMBER OF FACILITY STRUCTURES. Provide the number of each type of structure at this facility. Identify how potable water will be provided to support training activities.

e. PRIMARY/ALTERNATE USE. Provide the primary purpose for which this facility is used and list any other training conducted on this facility without major modifications. For example, a 25-meter range may be used for 10 meter MG firing.

f. FACILITY STATUS.

(1) *ACTIVE.* The facility is fully operational and may be utilized on a day-to-day basis and can be used throughout the year.

(2) *LIMITED USE.* The facility is not fully operational, but is used on a day-to-day basis within its limitations, or it must be closed during portions of the year. Explain the limiting factors in the space provided.

(3) *INACTIVE.* The facility is not in use at this time, but can be activated if necessary.

(4) *UNDER CONSTRUCTION.* The facility is currently under modification or construction.

(5) *DEACTIVATED.* The facility is included in installation records, but has been deactivated and cannot be reactivated without construction or major repair. Provide the date the facility was declared deactivated.

g. FACILITY CHARACTERISTICS. Indicate the firing points, lanes, bays, and firing positions (other) according to the following criteria:

(1) *NUMBER OF USABLE FIRING POSITIONS.* Provide the number of fully usable points, lanes, bays, positions, and so forth.

(2) *NUMBER OF NON-USABLE FIRING POINTS.* Provide the number of non-usable points, lanes, bays, positions, and so forth. Explain why these points, lanes, bays, positions, and so forth, are not usable in this space.

h. CONSTRUCTION PROJECT INFORMATION. If a construction project has been approved for the facility, enter the project number. Indicate if it is an MCA or OMA project. For MCA

projects, enter the USACE-assigned DD Form 1391 number, project title, anticipated or actual completion date, and estimated project cost.

i. NUMBER OF FACILITY DOWNTIME HOURS. Provide the average number of hours spent on normal recurring maintenance/repair work by all organizations.

j. DOWN DAYS, NUMBER OF. Provide the total number of training days that the facility was not able to be used.

k. UTILIZATION. Provide the number of days the facility was scheduled for use and number of days actually used by unit type. Describe alternative training accomplished which deviates from the intended facility use.

l. WEAPON SYSTEMS AND AMMUNITION ACCOMMODATED. Describe the weapon systems and ammunition currently supported on the facility and any weapons or ammunition projected for future use.

m. TARGET MECHANISMS AND SIMULATORS USED ON RANGE

(1) *Type of Target Mechanisms-Quantity-Power Requirements.* List the types of target mechanisms used on the range. Provide the number of each type of target mechanisms on the range and their respective power requirements.

(2) *Type of Simulators—Quantity-Power Requirements.* List the type and number of simulators used on this range and their respective power requirements.

n. RANGE USE LIMITATIONS/RESTRICTIONS.

(1) *Maximum Firing Distance Capability.* Provide the maximum distance, in meters, that will contain projectiles within this facility or adjoining impact area (direct firing only).

(2) *RANGE USE LIMITATIONS (CONFLICT WITH OTHER RANGES).* List all ranges and facilities that cannot be used when this facility is in operation as established by the Range Control Officer.

(3) *SAFETY LIMITATIONS.* Describe any additional safety, weapon, or ammunition limitation on this facility. List any waivers applicable to the facility.

o. MAINTENANCE COSTS. Provide the man-hours and costs required to keep this range operational. Separate routine and recurring hours/costs from non-routine and non-recurring hours/costs, such as major repairs or construction. Wages or salaries for military personnel should not be included in the cost categories, while civilian or contractor pay should. Provide the grades, skills, and number of military/DA civilian personnel assigned to operate and maintain the range on a full or part time basis. If contractor O&M support is used, enter the labor skills, number of employees, and Defense Contracting Audit Agency (DCAA approved labor rates for each skill.

p. REMARKS. Include any additional information applicable to this facility. Any equipment or special features on this facility should be identified along with any unusual support required to maintain operational status. Include any information on environmental/archaeological/historical constraints that may affect the facility.

Appendix D
Establishing requirements for acquisition of training Lands

D–1. Process

The process for determining sufficiency of installation lands to support training requirements is divided into three phases:

a. Land Use Requirements Study (LURS).

b. Analysis of Alternatives Study (AAS).

c. Environmental Assessment/Impact Study (EA/EIS).

D–2. Considerations

The following issues must be considered when planning and developing requests for additional land:

a. Decisions must be keyed to a clearly defined study process.

b. The study process must properly integrate mission and environmental considerations.

c. All alternatives must be addressed, including improvement of existing internal land management practices.

d. Justification must be complete, well documented, and analytical. Requirements cannot be based on judgmental factors alone.

e. All training maneuver area constraints should be reflected in Unit Readiness Reports.

f. Public participation early in the planning process must be well defined and encouraged.

g. Annual real property utilization surveys of installations required by AR 405-70 must be completed and kept current.

D–3. Required Documentation

a. LURS. The installation prepares the LURS to determine whether a training land shortfall exists. The format is shown in figure D-1. Training/maneuver requirements are identified and compared to available areas. TC 25-1, chapter 2, provides a step-by-step methodology to determine if a land shortfall exists. When a shortfall has been identified, the LURS is forwarded through the MACOM to HQDA, DCSOPS (DAMO-TRS) who staffs the LURS with the ARSTAF and the DA Range and Training Land Program Coordinator. DCSOPS then forwards the LURS and any recommendations to the ASA(IL&E) for concept approval. Additionally, OCONUS MACOM shortfalls may also be addressed through acquisition methods established under treaty and/or specific host nation agreements. Should these conditions apply, OCONUS MACOM will summarize modified procedures and supporting documentation in their respective RDPs.

b. AAS. HQDA will designate the appropriate agency (for example, MACOM, and/or external agency), assign responsibility to conduct a thorough and objective analysis of all reasonable alternatives, and provide general guidance for the conduct of the AAS in coordination with the installation. The format is shown in figure D-2. The AAS restates the training land shortfall identified in the LURS, identifies alternatives, analyzes and compares the alternatives, and presents recommendations. The MACOM and HQDA will identify other alternatives for consideration and analyses. When land acquisition is determined to be the preferred alternative to satisfy the training land shortfall and approved by the ASA(IL&E), the results of the AAS will be included in the EIS.

c. EA/EIS. The installation, in coordination with the designated Corps of Engineers major subordinate command (formerly division) or geographical district, will prepare the EA/EIS in accordance with requirements and format in AR 200-1. If the proposed action will alter a draft or final EIS that is on file with the EPA, a draft supplement may be filed. The supplement is preceded by a summary with the same format as used for the draft or final EIS. It should address changes to the basic document in a logical manner, in order to facilitate the review. A copy of the supplement will be sent to each addressee of the draft or final EIS and to each individual or organization who submitted substantiated comments on it. If the supplement is to a draft EIS already circulated for public comment, the coordination and consideration of comments appendix should be part of the supplement so that addressees will know how their comments have been considered.

d. INRMP. The INRMP provides valuable information concerning the relationships of environmental factors in the various environmental media areas. INRMP management practices can and should be used in the development of LURS, AAS, and related NEPA documents cited above.

D–4. The HQDA (DAIM-FD) and HQUSACE (CERE-AM)

HQDA (DAIM-FD) and HQUSACE (CERE-AM) will direct an appropriate Corps of Engineers major subordinate command (formerly divisions) or geographical district commander to prepare a REPR or LPR only when the preferred alternative is to acquire additional land and the land area has been identified.

D–5. Notice of Intent

The Congress and the public will be informed after the AAS has

been approved by the ASA(IL&E) and that the Army is initiating an EIS to acquire land as the preferred alternative to meet training land shortfall. The Notice of Intent (NOI) will inform the public of projected hearings on the proposed action in accordance with AR 200-1 after the appropriate documents are filed with the EPA.

LAND USE REQUIREMENTS STUDY
(Name of installation), (state)

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a. Unit Level Training Acreage
(1) Maneuver Areas
(a) Requirements
(b) Actual Experience
(c) Reconciliation of Differences
(2) (Live fire) Ranges
(a) Requirements
(b) Actual Experience
(c) Reconciliation of Differences
b. Unit Level Training Days
(1) Maneuver Areas
(a) Requirements
(b) Actual Experience
(c) Reconciliation of Differences
(2) (Live fire) Ranges
(a) Requirements
(b) Actual Experience
(c) Reconciliation of Differences
3.03 Projected Future Requirements
a. Unit Changes
b. Impacts on Unit Level Baseline Requirements
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(See chap 3, TC 25-1.)
4.01 Methodology
4.02 Limitations of Approach
4.03 Requirements
4.04 Current Capacity
4.05 Shortfall

Figure D-1. Sample LURS Format—Continued

4.06 Summary

Section V—Internal Management Actions Taken to Meet Shortfall
(See note below.)
Section VI—Analyses of Other Internal Management Actions
6.01 Considered Within the Capability of the Installation Commander to Implement, But Rejected
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7.01 Conclusions
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APPENDICES

Appendix A—(Installation Name) Facilities. (Other information as necessary to supplement basic study)

Note: Some candidate actions include: use 7 day training week; centralize training management; redesign range complex; partial or complete dud clearance of impact area; use maneuver agreements.

Figure D-1. Sample LURS Format

ANALYSIS OF ALTERNATIVES STUDY
MANEUVER TRAINING AREA NEEDS
(Name of installation), (state)

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Section III—Identification of Potential Alternatives to Meet Shortfall (Subparas are only representative alternatives to be considered. All feasible alternatives need to be discussed to include a combination, or combinations, of alternatives considered.)
3.01 Alternative A—No Action
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements
3.02 Alternative B—Partial Dud clearance of Impact Area
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements
3.03 Alternative C—Redesign Range Complex
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements
3.04 Alternative D—Reliance on Maneuver Agreements

Figure D-2. Sample AAS Format—Continued

a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements

3.05 Alternative E—Transfer Units or Mission Changes
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements

3.06 Alternative F—Use of Other Military Training Locations for Fire/Maneuver Training
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements

3.07 Alternative G—Acquire Land Contiguous to Installation
(A separate alternative for each parcel under consideration)
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements

3.08 Alternative H - Acquire Land Not Contiguous to Installation
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements

3.09 Alternative I - Use of Training Devices or Simulations
a. Impacts on the Human and Natural Environment
b. Impacts on Mission and Resource Requirements

Section IV—Analysis of Alternatives

4.01 Alternative A—No Action
(Conduct an analyses on all alternatives or combinations identified in Section III above)

Section V—Conclusions and Recommendations

5.01 Conclusions

5.02 Recommendations

APPENDICES

(Information necessary to supplement basic study)

Figure D-2. Sample AAS Format

Glossary

Section I
Abbreviations

AAS
Analysis of Alternatives Study

A&E
Architectural and Engineering

ACSIM
Assistant Chief of Staff for Installation Management

AGR
Army Guard Reserve

AMC
Army Materiel Command

ACALA
Armament, Chemical, Acquisition and Logistics Agency

AEC
Army Environmental Center

AMIM
Army Modernization Information Memorandum

AMRP
Army Master Range Plan

AMTP
ARTEP Mission Training Plan (see ARTEP)

AR
Army Regulation

ARNG
Army National Guard

ARTEP
Army Training and Evaluation Program

ASA(MRA)
Assistant Secretary of the Army for Manpower and Reserve Affairs

ASA (IL&E)
Assistant Secretary of the Army for Installations, Logistics and Environment

ASO
Army Safety Office

AT
Annual Training

ATLAM
Army Training Land Analysis Model

AUTOVON
Automated Voice Network

BOIP
Basis-of-Issue Plan

CAR
Chief, Army Reserve

CCB
Configuration Control Board

CCI
Construction Compliance Inspection

CEHNDM
Corps of Engineers, Huntsville Design Manual

CG
Commanding General

CIM
Corporate Information Management

CLS
Contractor Logistic Support

CMWG
Configuration Management Work Group

CNGB
Chief, National Guard Bureau

COE
Chief of Engineers, Corps of Engineers

CTC
Combat Training Center

CVC
Combat Vehicular Helmet

DA
Department of the Army

DASAF
Director of Army Safety

DCSOPS
Deputy Chief of Staff, Operations and Plans

DCSPER
Deputy Chief of Staff, Personnel

DD
Department of Defense (form)

DE
District Engineer

DECIM
Defense Environmental Corporate Information Management

DEIS
Draft Environmental Impact Statement

DIRT
Defense Installations, Ranges, and Training Areas (data base)

DoD
Department of Defense

DPTM
Directorate of Plans, Training, and Mobilization

DPW
Directorate (or Director) of Public Works

DSS
Devices, Simulations, and Simulators, Decision Support System

EA
Environmental Assessment

EBSR
Environmental Baseline Study Report

EIS
Environmental Impact Statement

EOD
Explosive Ordnance Disposal

FM
Field Manual; Frequency Modulation

FMO
Facility Management Officer

FORSCOM
Forces Command

FTS
Federal Telecommunications System

GIS
Geographic Information System

GOSC
General Officer Steering Committee

GRASS
Geographic Resources Analysis Support System

HETS
Heavy Equipment Transportation System

HQ
Headquarters

ICM
Improved Conventional Munitions

ICUZ
Installation Compatible Use Zone

IDT
Inactive Duty Training

INRMP
Integrated Natural Resources Management Plan

ISM
Installation Support Module

ITAM
Integrated Training Area Management

LPR
Lease Planning Report

LTA
Local Training Area

LURS
Land Use Requirements Study

MACOM
Major Army Command

MAMS
Military Airspace Management System

MCA
Military Construction, Army

MCAR
Military Construction, Army Reserve

MCNG
Military Construction, National Guard

MDEP
Management Decision Package

METL
Mission Essential Task List

MFM
Military Family Member

MILCON
Military Construction

MISM
MACOM Information Support Module

MOA
Memorandum of Agreement

MOU
Memorandum of Understanding

MPB
Master Planning Board

MTA
Major Training Area

MTP
Mission Training Plan

NBC
Nuclear, Biological, and Chemical

NEPA
National Environmental Policy Act

NGB
National Guard Bureau

NOI
Notice of Intent

OCE
Office, of the Chief of Engineers

OCSA
Office, of the Chief of Staff, Army

OIC
Officer-in-Charge

OMA
Operations and Maintenance, Army

OMAR
Operations and Maintenance, Army Reserve

OMNG
Operations and Maintenance, National Guard

O&M
Operations and Maintenance

O&S
Operations and Support

OPA
Other Procurement, Army

OPTEMPO
Operations Tempo

OSD
Office of the Secretary of Defense

OSI
Open Systems Interconnectivity, Open Systems Interoperability

PA
Programmed Amount

Pam
Pamphlet

PAX
Programming, Administration, and Execution System

PBC
Program Budget Committee

PC
Program Coordinator

PDB
Project Development Brochure

PM
Program Manager, Project Manager, Product Manager

POM
Program Objective Memorandum

PPBES
Planning, Programming, Budgeting, and Execution System

PRB
Program Review Board

R&D
Research and Development

RDP
Range Development Plan

RDT&E
Research, Development, Test, and Evaluation

REPR
Real Estate Planning Report

RETS
Remoted Target System

RFMSS
Range Facility Managers Support System

RMAT
Real Property Management Tool

RMP
Range Modernization Program

ROM
Rough Order of Magnitude

RPMA
Real Property Maintenance Activity

RR
Railroad

RRPB
Requirements Review and Prioritization Board

RS
Range Safety

RSO
Range Safety Officer

RTA
Regional Training Area

RTLP
Range and Training Land Program

RTLP MCX
Range and Training Land Program Mandatory Center of Expertise

SAFE
Safety, Ammunition, Fire Protection and Environment Office

SBIS
Sustaining Base Information System

SDZ
Surface Danger Zone

SFA
Support Facility Annex

SOP
Standing Operating Procedure

SSO
Senior Safety Officer

STRAC
Standards in Training Commission

SUA
Special Use Airspace

TB
Technical Bulletin

TII
Target Interface Inspection

TM
Technical Manual

TMA
Training Mission Area

TOC
Tactical Operations Center

TRADOC
Training and Doctrine Command

TSG
The Surgeon General

USACERL
United States Army Construction Engineering Research Laboratory

USAAA
United States Army Audit Agency

USACE
United States Army Corps of Engineers

USAR
United States Army Reserve

USATSC
United States Army Training Support Center

USGS
United States Geological Survey

USMC
United States Marine Corps

UTM
Universal Transverse Mercator

UXO
Unexploded Ordnance

WET
Weekend Training

Section II
Terms

Clearances

a. Surface clearance. A range clearance operation where the surface area is searched visually and dud and other munitions contamination are removed and disposed of properly. Surface-cleared ranges are restricted to activities that require no ground breaking and limited access.

b. Shallow clearance. A range clearance operation where the area is systematically swept with standard service mine detectors. Ferrous cased duds on the surface and down to a depth of 20-24 inches should be located, removed, and disposed of properly. The use of shallow-cleared areas is restricted to activities causing only shallow surface disturbance, such as agriculture.

c. Moderate depth clearance. A range clearance, following surface and shallow clearance, to a depth of 5 feet, using a detector system more sensitive than the service mine detector. All items located are dug up and disposed of properly. Moderate depth clearance is required when an area is to undergo development.

d. Deep clearance. A range clearance that is usually only required at "point" locations (for example, where deep underground utilities or the foundations of a large building are to be placed). The area is cleared by use of mine detectors in 5-foot layers to the necessary depth.

Collective training
Training in institutions or in units to prepare cohesive teams and units to accomplish their critical wartime missions.

Combined arms live-fire exercises (CALFEX)
A combat exercise in which an Army/Marine Corps combined-arms team, in combat formation, conducts a coordinated combat firing and maneuver practice in executing the assault, seizure, and defense of appropriate objectives. Tactical air support may be included.

Contaminated area
Any area where there are known or suspected unexploded munitions, regardless of type.

Cookoff
A functioning of any or all of the ammunition explosive components due to high temperatures within the weapon.

Direct fire
Fire delivered on a target when the piece is laid by sighting directly on the target, using the gun sighting equipment.

Firing lane
The area within which an aircraft or vehicle-mounted weapon is fired. It consists of a start firing line, cease-firing-disarm line, and left and right limits-of-fire.

Firing line
The line from which weapons are fired and forward of which no one is permitted during firing, except as cited in this regulation.

Firing position
The point or location at which a weapon, other than demolitions, is placed for firing. (For demolitions, the firing position is the point or location at which the firing crew is located during demolition operations).

Hangfire
A delay in functioning of a weapon.

Impact area(s)
The land area and associated airspace within a training complex intended to capture or contain ammunition, munitions or explosives as well as resulting debris, fragments and components from various weapon system employments. In some cases, Army impact areas as defined herein and AR 385-63 are also Non-Dud Producing Impact Areas. Essentially, the phrase "non-dud producing" provides a characterization of the types of ammunition or munitions used which minimizes the expense associated with range clearance. The use of dud producing ammunition or munitions (lethal or non-lethal) in impact areas designated as "Non-Dud Producing" is prohibited unless jointly approved by HQDA ACSIM and HQUSACE.

Misfire
A complete failure to fire, not necessarily hazardous. Since it cannot readily be distinguished from a delay in functioning (hangfire), it must be handled as worst case in accordance with procedures for the weapon system.

Range
An area that is reserved and normally equipped for practice in weapons delivery and/or shooting at targets.

Roll-on roll-off
A range management technique through which operations and maintenance (O&M) activities are conducted by a permanent work force of Department of the Army Civilians or a commercial contractor. Units conducting training on the range may devote their full time to training by relieving soldiers of duties to set-up, operate, and tear-down the range.

Subcaliber ammunition
Practice ammunition of a caliber smaller than standard for the gun on which practice is being given. Subcaliber ammunition is economical and may be fired in relatively crowded areas. It is therefore used with special subcaliber equipment to simulate firing conditions with standard ammunition.

Surface danger zone
The area designated on the ground of a training complex (to include associated safety areas) for the vertical and lateral containment of projectiles, fragments, debris, and components resulting from the firing, or detonation of weapon systems to include explosives. Specific weapon system SDZs are described and illustrated in AR 385-63.

Throughput
The number of individuals, crews, or units, required to conduct training on a range. The total number of individuals, crews, or units that can accomplish all required iterations of training on a given range during a single year is the annual throughput capacity of the range.

Training complex
Includes all firing ranges, weapons training facilities, associated impact areas, and maneuver training areas within the installation/community boundary.

Training land(s)
The term training land encompasses all types

of facilities (for example, ranges, maneuver land, direct support facilities, or proficiency courses) dedicated to the conduct of preparing and sustaining personnel and units to meet mission roles and standards. Examples include but are not limited to weapon systems use and proficiency, occupational skills, and standards development.

Section III
Special Abbreviations and Terms
This section contains no entries.

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