

CEMP-EA Regulation No. 210-3-2	Department of the Army U.S. Army Corps of Engineers Washington, DC 20314-1000	ER 210-3-2 1 Oct 90
	Installation ARMY RANGE PROGRAMS	
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DEPARTMENT OF THE ARMY  
U.S. Army Corps of Engineers  
Washington, D.C. 20314-1000

CEMP-EA

Regulation  
No. 210-3-2

1 October 1990

Installations  
ARMY RANGE PROGRAM

1. Purpose. This regulation defines specific responsibilities and policies for the planning, programming, design and construction of training ranges established in AR 210-21.

2. Applicability. This regulation applies to HQUSACE/OCE elements major subordinate commands, districts, laboratories, and separate field operating activities (FOA) responsible for providing engineering support to the Army Range Program.

3. References. Required and related publications are listed in Appendix A.

4. General.

a. This regulation should not be considered a comprehensive, single-source document and must be used in conjunction with AR 210-21 to successfully accomplish required coordination between Major Army Commands (MACOM) and installation trainers, safety personnel and engineer facility planners.

b. The objective of the Army range modernization and standardization initiative is to provide facilities capable of meeting the complexity and capability of new weapon systems, organizations and training doctrine. Standard generic designs for ranges must be cost effective and require coordination with numerous MACOM and Army Staff (ARSTAFF) agencies and/or activities in the areas of safety, environmental protection, operations, and doctrine. A coordinated, comprehensive approach shall be used to avoid any confusion or duplication of effort by designating a Range - Mandatory Center of Expertise (RNG-MCX) for the modernization and standardization of Army training ranges and selected training facilities. The RNG-MCX will develop standard generic facility designs which identify all mandatory requirements to support high technology integration into training facilities.

c. Standardization is defined as the central management of range facility designs for commonly constructed facilities. Standard generic designs provide a facility which meets the minimum TRADOC training standard and still remains flexible enough for modification to meet peculiar requirements as determined by the installation commander. To achieve standardization:

(1) The determination of the number of each type range or facility components of the range complex should use a common analysis procedure or approach throughout the Army.

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(2) Designs must be reviewed and approved collectively with the Army proponents for training, safety, environmental protection, and engineering prior to adoption as a standard.

d. Standard generic designs are defined as the technical data (drawings, layouts and text) addressing the minimum necessary components for an operable range or facility.

#### 5. Policy.

a. Detailed procedures for implementation of the Army Range Program between HQUSACE, RNG-MCX, and USACE FOA are contained in the management plan for the Army Range Program (hereinafter referred to as the management plan). The policies and procedures outlined in this regulation and the management plan will be strictly adhered to. Any deviation must be approved by the Director of Military Programs, HQUSACE or designated appointee.

b. Tasking and direction of the RNG-MCX will be accomplished by the USACE Program Coordinator (USACE PC) for Army Training, HQUSACE (CEMP-EA).

c. A six-year work unit projection (e.g., standard generic designs, design reviews, interface inspections) will be provided by the HQDA Program Manager (PM) for Range Modernization and Standardization (RTS) for concurrence by HQUSACE and coordinated with the RNG-MCX. Six year projections will be updated on an annual basis. The RNG-MCX will coordinate directly with the RTS on programmed work units.

d. Standard generic designs will be provided in USACE design manuals (currently HNNDM 1110-1-series). Design manuals may be obtained from the RNG-MCX, CEHND-ED-PM. At a minimum, the design manuals and subsequent changes will provide an applicability statement. The applicability statement determines when and how the design information will be applied to specific range projects by type (i.e., next budget year submission, FY 92 projects). When the criticality of the design or change necessitates immediate implementation, the RNG-MCX will forward their recommendation and rationale to CEMP-EA for coordination and approval.

e. Engineer planning and design criteria will be based on HQ, TRADOC approved training requirements (strategies, standards, and objectives), environmental protection requirements (ARs 200-1 and 200-2), all applicable range safety requirements and clearances (e.g., DoD 6055.9-STD, DoD 5100.76-M, AR 385 series), Occupational Safety and Health Administration (OSHA) standards, and airspace management requirements (AR 95-2). Deviation from the above standards, requirements and directives will be based on concurrence by the proponent agencies.

f. When a standard generic design is developed for ranges, it will be based on a typical layout of each range type identified in FM 25-7 to the extent possible.

g. The term mandatory implies strict adherence and application. Mandatory standards should not be applied to existing facilities or facilities constructed under previous or emergency standards that can continue to be used without impairing operational efficiency or safety. Waivers to mandatory aspects of range design and construction will be kept to a minimum and will be approved by HQUSACE (CEMP-EA will coordinate with appropriate criteria proponents). Non-conformance to mandatory aspects of design identified in USACE design manuals and other engineering changes will not be the sole basis or requirement for existing facility modification or replacement.

h. Special purpose or non-standard Military Construction, Army (MCA) range projects are exceptions to the Department of the Army (DA) Facilities Standardization Program and will be reviewed by the HQDA Requirements Review Board (RRB), or other appropriate approval body. Corps activities, having a need or desire to raise specific issues for consideration by the RRB, should forward such information to HQUSACE (CEMP-EA) in accordance with (IAW), Appendix B, AR 210-21.

i. Range issues are defined as matters or actions which cannot be resolved at MACOM, FOA or lower level and are forwarded to DA for resolution. Issues are not limited to engineering areas of concentration. All range questions and/or issues shall be coordinated with CEMP-EA prior to coordination with other Army staff agencies or activities for resolution. It is highly recommended that CEMP-EA be consulted prior to coordination with other Corps offices or activities to preclude any duplication of effort in an often time sensitive environment.

## 6. Responsibilities.

a. Directorate of Military Programs (CEMP), HQUSACE will designate an Assistant Director (AD) for the Army Range Program. The AD will review engineer resource requirements and ensure Program Objective Memorandum (POM) submissions are executed to fund the Corps' mission in support of the Army Training Program.

b. Engineering Division, Directorate of Military Programs, HQUSACE (CEMP-E) will--

(1) Designate an USACE Program Coordinator (CEMP-EA) to serve as the Corps focal point for management, coordination, and representation of Corps of Engineers policies, procedures, and guidance IAW Appendix A, of the Army Range Program Management Plan. At a minimum, the USACE PC will:

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(a) Provide HQUSACE management, direction and tasking on the activities of the USACE RNG-MCX.

(b) Establish procedures for handling projects which have not met necessary requirements (e.g., safety, environmental, master planning, operational).

(c) Provide either technical assistance to or present HQUSACE engineering policies, procedures and criteria at various related boards, meetings, or conferences.

(d) Identify those special facilities which should be reviewed by the RRB.

(e) Serve as the principal member on the DA Requirements Review Board (AR 210-21) and the HQUSACE representative on multi-disciplinary assistance and advisory team visits.

(f) Serve as the alternate HQUSACE representative on DA Range Prioritization Boards.

(2) Ensure doctrinal, organizational structure and material system changes are considered in planning, programming, designing and constructing range facilities (CEMP-EA) by:

(a) Keeping abreast of changes in material development for impact on Corps initiatives, policies and procedures, and maintaining documentation on data, analysis, rationale and decisions made based on HQ, TRADOC approved training requirements and impacts during the development of new systems (AR 700-127).

(b) Providing technical guidance on doctrinal and organizational structure changes that affect training ranges.

(c) Forwarding applicable information to the DA Program Manager for validation and prioritization for the development or modification of standard generic designs.

(d) Developing and providing to the field, training range facility requirements identified above in conjunction with DAEN-ZCI-A.

(3) Develop for distribution to the field in both engineer and trainer documents (CEMP-EA):

(a) Master planning "how to" guidance for integrating the installation's total range requirement into the installation master plan, RDP, and into the installation project phasing plan (AR 210-20), recording the applicable portions of the trainer's rationale(s).

(b) Planning and programming criteria and guidance specifically for standardizing the basic range facility components.

(4) Assist MACOM and installations in planning and programming facilities in support of the Army Range Program and in the development of Range Development Plans (RDPs), as requested in conjunction with DAEN-ZCI-A.

c. Project Management Division, Directorate of Military Programs, HQUSACE (CEMP-M) will--

(1) Provide and update on a quarterly basis, range project construction schedules to RTS.

(2) Coordinate DA directed and corporate group design and construction actions with the USACE PC, as required.

(3) Issue directives to stop work on design and construction actions through CEMP-M, as directed by the USACE PC.

d. Office of the Assistant Chief of Engineers (OACE) will--

(1) Coordinate or provide:

(a) Formal OACE positions on range issues with the Army staff.

(b) MCA (OACE) and Military Construction, Army Reserve (MCAR) (OCAR) programming guidance for developing prioritization strategies which are consistent with published guidance to the USACE PC.

(c) Current programming status and assistance to HQDA, Deputy Chief of Staff for Operations and Plans (DAMO-TR) and RTS at DA range prioritization board meetings.

(d) Training range requirements that originate from either the materiel acquisition process or organizational restructuring to the field in conjunction with CEMP-EA.

(2) Serve as:

(a) Corps representative at DA range prioritization board meetings.

(b) ARSTAF representative for environmental considerations and documentation requirements relating to AR 200-1 and AR 200-2.

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(3) Assist MACOM and installations in planning and programming facilities in support of the Army Range Program and the development of the RDP, as requested in conjunction with CEMP-EA.

e. The USACE RNG-MCX will--

(1) Support Army range modernization and standardization by:

(a) Developing and updating standard generic designs for ranges to meet training requirements.

(b) Assisting HQUSACE in program formulation, technology transfer, program coordination, and publication of documents related to range design and construction.

(c) Monitoring technological advancements from industry and HQUSACE laboratories for adoption into applicable aspects of range design and construction. Of primary interest are those advancements which can enhance or improve current engineering practices and capabilities. Coordination with RTS and the USACE PC will be required prior to adoption.

(d) Establishing and maintaining archives of USACE design manuals.

(2) Support range project programming, design and construction by:

(a) Validating programming documentation (e.g., DD Forms 1390/1391, ENG Form 3086) for conformance to the mandatory aspects of range design prior to project inclusion in the MILCON Program. When available, Project Development Brochure (PDB) documentation will be used in the validation process. Lack of PDB documentation should not be the sole basis for delaying project reviews.

(b) Participating in all predesign and preconstruction conferences for range projects for which a standard generic design has been published, or when Remoted Target System (RETS) targetry will be used.

(c) Reviewing range design documentation from preconcept to final design (e.g., drawings, specifications, and design analysis).

(d) Participating as the HQUSACE representative in interface inspections for ranges utilizing RETS targetry.

(e) Providing a technical consulting service to FOA during design and construction of range modernization projects (e.g., interface requirements, ballistic and digitized terrain modeling/analysis, targetry protection).

(3) Advise RTS where the application of design guidance for a project does not appear to meet training requirements. Provide information copy

to USACE PC.

(4) Develop target catalogs for facilities identified in Appendix B of the management plan.

f. Operating engineer divisions and engineer districts, USACE will--

(1) Execute design and construction of approved projects in coordination with the RNG-MCX.

(2) Ensure RNG-MCX inclusion as a part of the predesign and preconstruction conferences, and design reviews for mandatory items.

(3) Incorporate all mandatory aspects of the USACE design manuals into all designs.

(4) Provide programming and design documentation as described in Appendix C of the management plan for each range project and any other facility for which a USACE design manual has been published.

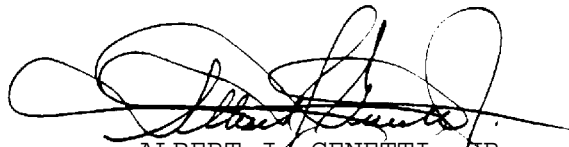
(5) Comply with all RNG-MCX comments relating to the mandatory aspects of the design.

(6) Execute stop work orders on design and construction actions as directed by CEMP-M and advises on impacts to project execution.

(7) Upon request, provide assistance and guidance to MACOM and installations for developing their RDP and programming documents preparation (e.g., DD Form 1391, PDB, ENG Form 3086).

(8) Coordinate with RNG-MCX and RTS for scheduling appropriate interface inspections and turnover to the target installer on ranges utilizing RETS targetry IAW Appendix C, of the management plan.

FOR THE COMMANDER:



ALBERT J. GENETTI, JR.  
Colonel, Corps of Engineers  
Chief of Staff

1 Appendix  
App A - References



APPENDIX A

References

Section I. REQUIRED PUBLICATIONS

AR 95-2	Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigational Aids.
AR 140-478	MCAR Program Development (Facilities, Projects and Programs).
AR 200-1	Environmental Protection and Enhancement.
AR 200-2	Environmental Effects of Army Actions.
AR 210-20	Master Planning for Army Installations.
AR 210-21	Army Training Ranges
AR 385-10	Army Safety Program.
AR 385-62	Regulations for Firing Guided Missiles and Heavy Rockets for Training, Target Practice, and Combat.
AR 385-63	Policies and Procedures for Firing Ammunition for Training Target Practice, and Combat.
AR 415-15	Military Construction, Army (MCA) Program Development.
AR 415-20	Project Development and Design Approval.
AR 415-25	Construction with Research, Development, Test and Evaluation Funds.
AR 415-32	Special Civil Engineering Engineer Troop Unit Construction in Connection with Training Activities.
AR 415-35	Minor Construction.
AR 700-127	Integrated Logistics Support.
DA Pam 5-25	Army Modernization Information Memorandum (AMIM).
DoD 5100.76-M	Physical Security of Sensitive Conventional Arms, Munition and Explosives, dated Feb 83.

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DoD 6055.9-STD	Ammunition Explosives Safety Standards, dated July 1984.
FM 25-7	Training Ranges.
TC 25-1	Training Land.
HNDM 1110-1-Series	Range Standard Design Information Manuals. Section II. RELATED PUBLICATIONS
AR 420-10	Management of Installation Directorates of Engineering and Housing.
NGR 415-5	Standard Operating Procedures for Military Construction Army National Guard Programs (MCARNG) Major and Minor Projects.
NGR 415-10	Installations and Facilities Construction Standards.
NGB Pam 21-10	Training Site General Information Summary.
NGB Pam 415-11	Construction Standards.