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	Organization and Functions U.S. ARMY CONSTRUCTION ENGINEERING RESEARCH LABORATORIES	
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DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

CERM-O

Regulation
No. 10-1-26

25 March 1992

Organization and Functions
U.S. ARMY CONSTRUCTION ENGINEERING RESEARCH LABORATORIES

1. Purpose. This regulation defines the mission and establishes the organization of the U.S. Army Construction Engineering Research Laboratories (CECER), formerly called the U.S. Army Construction Engineering Research Laboratory (CECER).

2. Applicability. This regulation applies to HQUSACE/OCE elements, major subordinate commands, districts, laboratories, and field operating activities.

3. References:

a. AR 10-69, Organization and Functions of the U.S. Army Corps of Engineers

b. AR 70-1, Research, Development and Acquisition: System Acquisition Policy and Procedures

4. Establishment. The U.S. Army Construction Engineering Research Laboratory was established as a field operating activity of the Corps of Engineers by OCE GO No. 17, 9 September 1968. When USACE was later established as a MACOM, CECER was organizationally placed under the MACOM.

5. Mission. The U.S. Army Construction Engineering Research Laboratories, an activity under the command of the Commanding General, USACE, and the staff supervision of the Director of Research and Development, performs infrastructure and environmental sustainment research, development, studies, and technical assistance to maintain a quality trained and ready Army; set the standard in preserving and protecting Army lands, waters, and natural and cultural resources; and repair, maintain, and rehabilitate civil works facilities. CECER provides Army-wide support for demonstrations of products and systems developed in its research and engineering studies for USACE major subordinate commands, Army MACOM HQs, and installations. CECER also performs

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This regulation supersedes ER-10-1-26, 28 July 1987.

research and development for enhancing engineer capability to deploy rapidly and sustain a full range of military operations.

a. Infrastructure Laboratory. Plans and executes basic research, applied research, and engineering studies in support of the Army's program of construction, revitalization, operation, maintenance, and repair of conventional military facilities worldwide, in both peacetime and mobilization states. Develops, tests, and evaluates technologies for electromagnetic protection of survivable structures, and for construction management in a theater of operations. Plans and executes basic and applied research, and develops, tests, and evaluates technologies in support of civil works facility and installation operation, maintenance, and repair, and facilitates the transfer of these technologies to the Army.

(1) Construction/Acquisition. Research and development areas include alternate construction technologies and advanced building systems, utility systems, and materials; physical security; quality control and quality assurance technologies; seismic, structural, and masonry engineering for military building systems; conventional and emerging railroad technologies; computer-aided design and construction management technologies; and management methodologies for all phases of the acquisition cycle, applied on a life-cycle basis.

(2) Installation Operations. Research and development areas include facility and real property maintenance activity planning; programming, and real-time simulation models for decision making; mathematical models for optimum allocation of resources; and knowledge processing theory for integrating the decision making process at all levels of installation operation.

(3) Maintenance and Repair. Research and development areas include maintenance technologies, diagnostics, and advanced materials for repair and rehabilitation; protective coating materials; application methods for composites, ceramics, and metallic coating systems; maintenance management systems for major cost elements such as corrosion failures, roofs, railroads, and utility distribution systems; and maintenance practices for buildings, utilities, roads, railroads, and bridges.

(4) Energy and Utilities. Research and development areas include utility supply and distribution; energy conservation design, methods, controls, and diagnostic techniques; and alternate energy systems. Research is conducted on central heat plant modern-ization; air pollution control equipment; electrical generation and supply; thermal energy supply and distribution;

water supply and distribution; material selection for reduced maintenance; incineration and heat recovery; energy analysis, design, and management techniques; acceptance testing; control systems; and system failure diagnostics.

(5) Civil Works Support: Research and development areas include electromechanical and electrical systems in civil works facilities, coatings, decision processes, and diagnostics. Research and development is conducted within the Support-for-Others mission of the Corps. The Infrastructure Laboratory develops, tests, and evaluates technologies for civil works, and facilitates the transfer of these technologies to the Army.

(6) Military Engineering Sustainment Support: Research and development areas include decision support systems for the theater of operations sustainment mission.

(7) Installation Logistics Support: Develops, tests, and evaluates logistics technologies for the supply, maintenance, facilities, and transportation functions, and facilitates the transfer of these technologies to the military function.

b. Environmental Sustainment Laboratory. Performs basic and applied research in Army installation environmental management; environmental and spatial modeling; resource modeling and simulation; design and construction of pollution control facilities; and development of environmental planning systems to support the Army in training, readiness, and mobilization missions.

(1) Natural Resources. Research and development areas encompass training area rehabilitation and management, including training requirements integration, land inventory and monitoring, land management and scheduling support, rehabilitation and maintenance, and environmental awareness indoctrination; noise source control, assessment, prediction, mitigation, and management; protection of threatened and endangered species; collection, analysis, storage, and retrieval of environmental resources information; and command-level environmental resource planning and analysis systems.

(2) Pollution Prevention. Research and development areas include hazardous waste and pollution abatement and management systems; air pollution analysis and standards; water supply, treatment, and distribution; wastewater collection and treatment; solid waste management; and industrial operations pollution control.

(3) Environmental Compliance. Research and development areas include environmental auditing; systems for compliance; land resources analysis; NEPA process; training area management; land condition trend analysis methodologies and systems; base closing and realignment; and scientific environmental management. The Environmental Sustainment Laboratory investigates, and facilitates the transfer of, technologies addressing environmental compliance for the Corps, the National Guard, the Army Reserve, and other agencies within the Support-for-Others mission of the Corps.

(4) Civil Works Support. Research and development areas include environmental auditing, systems for compliance, scientific environmental management, air pollution analysis and standards, and solid waste management. Research and development is conducted within the Support-for-Others mission of the Corps. The Environmental Sustainment Laboratory facilitates the transfer of technologies developed for the Army to the civil works function.

(5) Office of GRASS Integration. Coordinates multi-agency activities related to the Geographic Resources Analysis Support System (GRASS). Supporting agencies sign a memorandum of understanding with CECER and participate in an oversight committee, the GRASS Inter-Agency Steering Committee, to which the office chief submits an annual report. Functions include coordination of agency resource and software development efforts related to GRASS, and integration of software from agency sources into new releases of GRASS. The Office of GRASS Integration facilitates the sharing of spatial and environmental data among participating agencies.

c. Technology Assistance Center. Works with the appropriate Environmental or Infrastructure Laboratory Principal Investigator and with the Research and Development (R&D) Proponent in implementing CECER-developed technologies and capabilities.

(1) In conjunction with the appropriate Principal Investigator and R&D Proponent, provides support for technologies that are ready for field adoption until such support is made available by the proponent. Works with the appropriate Principal Investigator to prepare documentation required for transfer of support to organizational elements designated by the proponent.

(2) In conjunction with appropriate Principal Investigator and as requested by the R&D Proponent, provides support for technology adoption, enhancement, and update, including technology implementation assistance and guidance.

(3) Assists the appropriate Principal Investigator and the R&D Proponent in supporting training courses and workshops, video and other visual media, and written media supporting technology transfer. As requested by the USACE proponent, assists the appropriate Principal Investigator in developing and updating Corps of Engineers guide specifications, technical manuals, and other documents.

(4) Provides technical support to the Rock Island District in the procurement of paint for all USACE major subordinate commands.

(5) Provides consulting services to DoD organizations and other Federal and state agencies. Prepares project designs for DoD organizations and other Federal and state agencies when the USACE geographical major subordinate command or Technical Center of Expertise requests assistance.

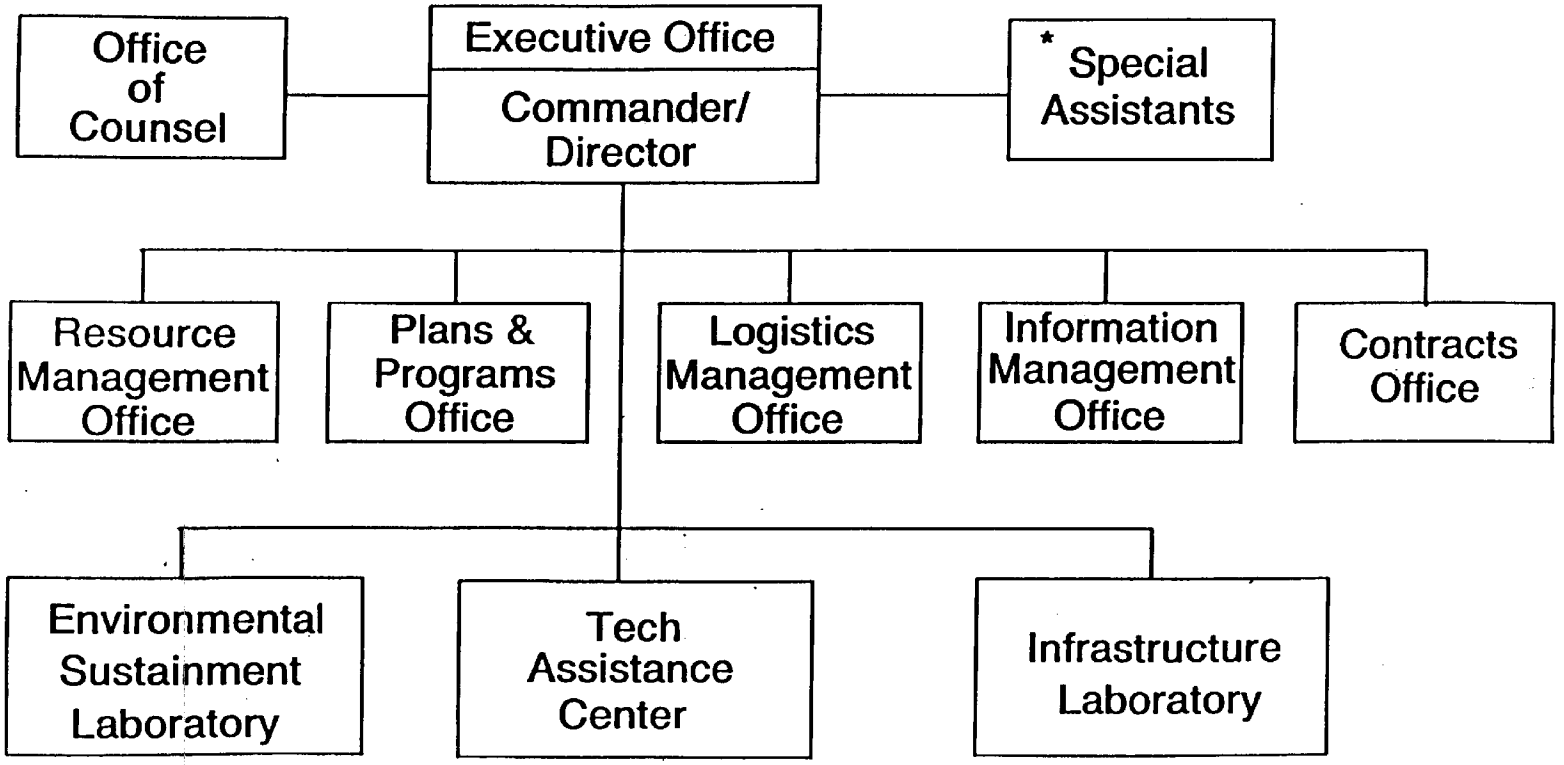
6. Organization. The approved organization of CECER is shown in Appendix A. Changes to organization structure or title from those shown on the chart require advance approval of HQUSACE in accordance with procedures set forth in ER 10-1-2.

FOR THE COMMANDER:

MILTON HUNTER
Colonel, Corps of Engineers
Chief of Staff

1 Appendix
Organization Chart

USA Construction Engineering Research Laboratories



*Functional Areas Include TQM, Public Affairs, EEO, Security, Safety, Technology Advancement, Continuing Education.