Communications-Electronics Research, Development and Engineering Center

Overview

- CERDEC provides in-house science and engineering expertise in the dynamic, fast-paced area of information, sensors and communication technologies.
- More than 1,500 scientists and engineers research, develop and engineer the diverse technologies that make up Army command and control, communications, computing, intelligence, surveillance and reconnaissance, or C4ISR, systems and subsystems.
- CERDEC also designs the networks and architectures and provides the expertise and infrastructure to develop, build and partner to advance the Army's mission command and intelligence capabilities for 2025 and beyond.
- State-of-the-art facilities are equipped to support technology development, acquisition systems integration, test and experimentation requirements, and a broad range of technical needs from Army customers.
- Core competencies: space and terrestrial communications (spectrum management), sensors (position, navigation, and timing; EO/IR; counter IED, radar); mission command; cyber/electronic warfare; power generation and storage.
- Major Partners: Communications–Electronics LCMC; PEO Command, Control, Communications Tactical; PEO Enterprise Information Systems; PEO Intelligence, Electronic Warfare and Sensors.
- People:
    - 2,108 civilians
        - 1,620 scientists and engineers
            - 105 doctorates, 941 master's degrees, 515 bachelor's degrees
    - 42 military
    - 1,044 contractors

2014 Successes

- CERDEC established the C4ISR/Electronic Warfare Convergence program to reduce size, weight and power, or SWaP, on Army ground and air platforms, implement open and modular architectures and standards, and maximize the sharing of radio frequency components and services.

- CERDEC led a team of subject matter experts from more than 30 Army organizations, including the Training and Doctrine Command, Army Cyber Command and multiple PEOs, to develop the Army's first Cyber Materiel Development Strategy. In partnership with Army Research Laboratory, CERDEC compiled and synthesized an overview of Army cyber S&T investments, providing the Army Acquisition Executive with the status and direction of Army S&T for offensive and defensive cyber operations — its programs, priorities and unfunded requirements.

- In Intelligence, Surveillance, Reconnaissance and Targeting, CERDEC delivers the infrastructure, technologies and the means and interfaces for agile capability. The Integrated Sensor Architecture, or ISA, provides a government-owned, cost-effective, cross-cutting approach for dynamic discovery and communication between legacy and future sensor systems.

- Mission Command Technology Enabled Capability Demonstration, or MC TECD, is an ongoing program to develop a collection of handheld technologies intended to mitigate the element of surprise for the small Army unit.