

OFFICE OF THE CHIEF TECHNOLOGY OFFICER (CTO)



Bridging science and technology to the mission

The Chief Technology Office and staff serve as the scouts for the U.S. Army Space and Missile Defense Command's leadership to uncover potentially game-changing innovations, concepts and technologies to support the command's missions and enable multidomain operations.

The CTO, as the principal adviser to the commanding general and the deputy to the commanding general for science and technology matters, provides timely and relevant near-, mid- and long-term information, and planning and resourcing recommendations on science and technology matters.

The CTO serves as the command's scout in searching for, collecting, reviewing, screening, and filtering science and technology efforts at external government agencies, academia, industry, and intelligence organizations that meet the needs of homeland defense, warfighting and training.

- Coordinate and integrate command technology efforts
- Collaborate with external CTOs science and technology directors
- Identify new technologies needed for current and future warfighters
- Support the development of new concepts and leading edge technologies



CTO ROUNDUP

The CTO Roundup is a quarterly meeting for the exploration and collaboration of mutual science and technology interests in the Redstone Arsenal, Alabama, area, by providing better situational awareness of science and technology efforts across diverse organizations, and potentially leveraging related science and technology efforts and core competencies.

This forum enables organizations to:

- Share strategic visions and plans for technology capability development
- Explore collaborative science and technology agreements between Department of Defense and non-DOD organizations
- Identify mutually beneficial, cooperative events and efforts
- Develop subject matter expert contact lists for various mission-supporting technologies
- Form spin-off working groups or tiger teams to explore multiple organizational technology challenges

STUDENT/INTERN/DEVELOPMENTAL OPPORTUNITIES

The CTO promotes science and technology innovation and knowledge through support of government and academic programs. The CTO has also instituted technology-focused developmental assignments from across the command to promote workforce development and better understanding of command processes.

SPACE AND HIGH ALTITUDE RESEARCH CENTER

The CTO provides command oversight and guidance to the U.S. Military Academy's SMDC-SHARC. The center provides space operations training and education, and directs space, high altitude, and missile defense research at West Point to develop warfighting concepts and space-aware and space-smart leaders for the Army and the Army's contribution to the joint force. In support of the training and education effort, the SMDC-SHARC coordinates and sponsors cadets on internships at multiple Army and joint space organizations during summers; informs cadets about potential careers in Army space and missile defense; and helps cadets prepare for the Assured Functional Area Transfer board and interview process. In addition the center supports the Department of

Military Instruction with integrating multidomain concepts into cadet training and education.

CYBERSECURITY

In support of the USASMDC director, cyber integrator, the CTO is exploring the technology aspects of the cybersecurity of the network and systems that are critical to the command's missions. This effort will address cultural, organizational, mission and industry/academic frames of reference.

CTO OUTREACH

The CTO and USASMDC are uniquely positioned to collaborate with both DOD and non-DOD organizations in the interests of Army equities. The command collaborates with:

- Army, Navy, Air Force and Marines science and technology organizations
- DOD staffs
- Commands, combatant commands, program executive offices and project activities
- Academia
- · NASA
- · Symposia, conferences, forums and clubs
- Leadership and science and technology boards, committees, groups and meetings

TECHNOLOGY SCOUT

The CTO is the command scout for monitoring and assessing emerging and innovative technology, providing technical oversight and guidance, and serving as the focal point for DOD and other government science and technology organizations. The CTO oversees the command science and technology roadmap, providing scientific advice and expertise to senior leaders to support adaptive missions.

ARTIFICIAL INTELLIGENCE SUPPORT

- Command lead for bringing Al into the command
- Foster a culture of innovation, and develop a skilled AI team
- Ensure required data is of sufficient quality (adequate, timely, accurate, reliable, complete, relevant and trustworthy) to support AI requirements
- · Establish clear goals and specific use cases
- · Select the appropriate AI models and train them
- Verify and validate the results

