Engineering & Installation (E&I)

Proficiency Code: A

85th Engineering & Installation Squadron

This lesson discusses the communications mission of Engineering & Installation (E&I). The Air National Guard mostly performs this mission, but one active duty squadron still proudly performs this critical mission, the 85th Engineering Installation Squadron (EIS).

The 85th EIS is an indispensable part of the USAF war-fighting community. The 85th EIS install, reconstitute, and test critical C4 systems for combatant commanders (COCOM) anywhere and anytime. Currently, part of Air Combat Command (ACC), the 85th EIS is located at Keesler AFB, Mississippi. The 85th EIS reports to the ACC Communication Group in Langley AFB, Virginia. They are a Rapid Response Force that is deployable worldwide, standing ready to insure commanders have communications capability throughout any level of conflict. Their responsive combat capabilities have resulted in customer requests from all over the world. The 85th EIS has deployed teams to Saudi Arabia, Turkey, Italy, Germany, England, Spain, Japan, Korea, Virgin Islands, Puerto Rico, Canada, Panama, Ascension Islands, and throughout the United States. This worldwide commitment presents unique opportunities and challenges.

A recent mission placed a five man team from Keesler's 85th Engineering Installation Squadron in mid-October at Tyndall AFB, just days after Hurricane Michael hit the Florida Gulf Coast. Quickly getting to work, the engineering team restoral effort began with assessing the buildings for any useable equipment and materials to get base communications up and running. Despite the power outages and limited communication material, the crew was able to successfully restore initial connectivity and avenues of communication around base. The engineering team had quickly restored the base-wide 'giant voice' mass notification system, as well as patching up new antennae's and fiber work to get air to ground communications connected.

38th Cyberspace Engineering Installation Group (38 CEIG)

The 38th Cyberspace Engineering Installation Group (38 CEIG) headquartered at Tinker Air Force Base (AFB), Oklahoma, is the Air Force's premier engineering and installation group - the backbone of the cyberspace domain. The Group boasts five squadrons: the 38th Engineering Squadron (ES) and the 38th Operations Support Squadron (OSS) at Tinker AFB, Okla., the 38th Cyberspace Readiness Squadron (CYRS) at Scott AFB, Ill, the 38th Contracting Squadron (CONS) at Joint Base San Antonio-Lackland with an Operating Location at Tinker AFB, Okla., and the 85th Engineering Installation Squadron (EIS) at Keesler AFB, Miss.

Mission
Plan, engineer, and deliver a survivable and resilient infrastructure to establish the cyberspace domain and enable the Air Force to conduct net-centric offensive and defensive air, space, and cyberspace operations.

Vision
Air Force experts delivering a robust, secure, and resilient cyberspace domain supporting Air Force and Joint missions for the National Defense.

People
Employing over 650 specially skilled civilian and military professionals including the two geographically separated locations, 38 CEIG provides expert and rapid engineering planning, implementing and installation capabilities delivering the latest cyberspace infrastructure systems and equipment to customers worldwide during both peace and war time conditions. In addition to engineers, contracting, budget, information technology and program management professionals are the primary skill sets required to execute the Group's mission.

Organization

The 38 CEIG is part of the 688th Cyberspace Wing (CW) headquartered at Lackland AFB, Texas, under the 24th Air Force and Air Force Space Command (AFSPC). The group is organized into five squadrons.

The 38 ES provides technical guidance on the development and documentation of the cyberspace infrastructure by translating mission-based requirements into achievable solutions. Cyberspace Integrators (CSIs) provide worldwide systems engineering, technical consultation and implementation to cyberspace communications and infrastructure planning, in collaboration with Air Force, DoD and other government agencies. Special Mission Teams (SMTs) are tasked by the 24 AF to perform missions regarding network and infrastructure operability. Program Managers in 38 ES oversee the AF Work Plan ensuring the AF cyberspace infrastructure is mission ready.

The 38 CYRS functions as the AF lead and DoD-level representative for all provisioning, requirements, budgeting, management and sustainment for the AF's Defense Information Services Network (DISN) and non-DISN Long Haul Communications services and circuits including, but not limited to the DISN Infrastructure Services (IS), FTS2001/Networx and Network Services (NS) 2020/Enterprise Infrastructure Solutions (EIS), Military Satellite Systems and Teleport. The squadron serves as the AF’s focal point for providing technical, provisioning, managerial and procedural guidance to AF long haul users, as well as plans and develops DISN service transition and migration strategies. In addition, the squadron serves as the AF SMEs (Subject Matter Experts) for system management and provide logistic support to the AF IT (Information Technology) asset management system, radio frequency transmission system and the cable and antenna system. 38 CYRS also serves as the AF Military Auxiliary Radio System (MARS) program lead which provides contingency radio communications support to the DoD components, civil authorities and provides health, moral and welfare radio communications support to military members, civilian employees and contractors when in remote or isolated areas. The Chief of MARS is the sole AF-funded government representative supporting this DoD program.

The 38 CONS is the only contracting squadron supporting mission requirements for 24 AF. They provide comprehensive acquisition support to include both program management and contracting expertise for large complex service acquisitions in defense of the AF's vast network and enabling 24 AF's full spectrum of cyberspace capabilities both offensive and defensive. Additionally, they support cyberspace infrastructure and communications customers world-wide. They provide local telephone (dial-tone) service with over 250 Communication Service Authorizations (CSA) procured and administered by contracting professionals. They provide full service acquisition expertise to assist 38 CEIG customers with acquisitions in support of the Air Force Work Plan projects worldwide.

The 38 OSS is responsible for all areas of personnel management to include employment planning, performance management, and disciplinary issues. They support the war fighter by providing timely and relevant financial management information and oversee the POM process for the Group. Manage Operations and Maintenance (O&M) as well as customer funds to include AF Work Plan dollars. Government and contractor personnel manage the Cyberspace Infrastructure Planning System (CIPS). This is the AF enterprise tool of choice for tracking telecommunication EI requirements cradle-to-grave and provides a collaborative environment for jointly managing the cyberspace infrastructure. Information Technology professionals are responsible for a multitude of areas in support of the group such as Information Assurance, Emission Security, hardware/software management and also frequently called upon to support 38 ES SMTs.