# **217 ENGINEERING INSTALLATION SQUADRON**



# MISSION

The mission of the 217 Engineering Installation Squadron is to engineer and install communications systems for Department of Defense customers around the world. We provide long term, sustainable communications.

The 217 has three main mission branches: Mission Support, Engineering and Installations. Mission Support includes Logistics, Personnel, Information Management, Training, Logistics, Material Control and Vehicle Maintenance. Logistics role is to get qualified personnel with the right equipment to a specific destination in a quick and safe manner. The mobility program is managed by developing plans, training and mobility exercises. The goal is to prepare unit members for worldwide deployments and to ensure successful mission completion.

All personnel that deploy overseas or for longer than 30 days are worked through the logistics office to ensure they meet all readiness requirements. The Personnel, Information Management, and Training sections support the squadron by ensuring team members have the information, orders, pay, entitlements and training necessary to achieve success in their careers and tasks.

Material Control provides personnel with the equipment, tools and clothing items necessary to safely and efficiently get the job done. Provision of these items requires planning and coordination of funds made available to the unit. Material Control also works diligently to ensure that all unit assets are accounted for at all times.

Vehicle Maintenance ensures the unit's vehicle fleet is ready for immediate ground or air deployment. Vehicles range in size from passenger cars to 20-ton special purpose vehicles. A

unique aspect of EI vehicles is that some of the special purpose vehicles are tasked under their own UTC. This means that the vehicle or maintainers could be tasked separately.

**Engineering Branch** develops engineering packages providing instructions, materials, support requirements and drawings needed to install, remove, relocate or modify communications systems. Engineers are the first step of the installation process. They perform site surveys to gather information, validate communications requirements, and develop project packages. An EI unit has both degreed electrical engineers and engineering technicians. Most of our engineering technicians work in the civilian telecommunications industry, providing a definite advantage to the ANG, especially in technical fields.

The Systems Telecommunications Engineering Management (STEM) position resides in the engineering branch and serves as the focal point for all the ANG communications requirements. The bases in Wisconsin assigned to the STEM include Volk Field, Truax Air National Guard Base and Billy Mitchell Field. In Illinois, the bases assigned to the 217 include 182nd Airlift Wing, Peoria, 183<sup>rd</sup> Fighter Wing, Springfield and the 126<sup>th</sup> Air Refueling Wing at Scott Air Force Base. In Missouri, the base assigned for STEM responsibility is the 131st at Lambert Field. The responsibilities of the STEM manager are to meet with all our counterparts and help determine and plan their communication needs. These requirements are called upward generated programs. They typically include installation of copper cable or fiber systems, radio or crypto relocations or installations and antenna work. This work also includes maintenance assistance, cost analysis and quality assurance evaluations.

The installations branch is the largest branch in the 217, consisting of: Workload Control, Quality Assurance, Wire and Electronics personnel. Workload Control is the focal point for managing all engineering installation projects and tasking. Typically there are more requirements for cable work than for antenna or electronics. Throughout the year we work with the National Guard Bureau (NGB) Major Commands (MAJCOM) STEMs, other El units and NGB units for antenna, ground radio, SATCOM and Airfield Communications projects. Funded projects are distributed through the Total Force Group program by NGB. This process gives active duty and ANG El units an equitable distribution of MAJCOM projects based on unit size and UTC tasking. NGB has designated AEF tasking and contingency workload as our number one and two priorities to meet El mission requirements. This section also prioritizes and manages squadron funds and coordinates with the unit's customers.

Quality Assurance (QA) evaluates the quality of engineering, installation, unit support, project management, logistic support, safety, and workmanship. Quality Assurance evaluations focus on product quality, customer satisfaction, and continuous process improvement of El procedures and processes.

The Wire section consists of antenna and cable. This section works with HF, VHF and UHF antenna systems and also performs periodic maintenance inspections. In addition, the section installs copper cable and splices, terminates and troubleshoots traditional copper wire and fiber for communication services. The Electronics section was just recently re-organized under the

new Air Force Specialty Code (AFSC) conversions. We no longer have Ground Radio or Wideband/Satcom/Telemetry AFSCs. The new AFSCs are in RF Transmissions and Airfield Communications.

Electronics provides the qualified personnel to install, relocate and remove pre-positioned HF, UHF and VHF ground radio systems and facilities and/or microwave, troposcatter radio equipment, satellite and repeater systems and meteorological equipment.

Our Engineering and Installations Branches work hand-in-hand even though they could be tasked independently. Once the unit is assigned or picks up a project the Engineering Branch sends engineers to validate requirements and determine the actual scope of the project. Engineering designs the system and identifies all materials required to include end components and all materials needed for the installation. Projects are selected to meet the training requirement for our cable, electronics and engineering UTCs. The specific installation section determines special tools, equipment and personnel needed for the installation. The size and duration of the project determines the installation cost. Material, engineering and installation costs are then fed back to the requesting MAJCOM. El operates on a fee-for-service concept and the customer pays for all material, man days and per diem for the teams.

Once all material is on site, host base requirements are met and days and dollars are received teams are set up to deploy. The individual that runs the project is a certified Team Chief and carries the Special Experience Identifier, SEI 200. The team chief must ensure the project is installed as directed in the engineering package. Once the installation is complete the team chief will have the system inspected before it is signed over to the gaining activity. This is the formal Commissioning and Acceptance document. The team chief must have this signed by the MAJCOM representative, usually the base commander or his designee, before he can release his team.

# LINEAGE

606 Communications Construction Squadron, 1952 Redesignated 217 Communications Construction Squadron Inactivated, 1953 Activated, Nov 1954 Redesignated 217 Ground Electronics Engineering Installation Agency Squadron, Jan 1959 Redesignated 217 Electronics Installation Squadron, 1970 Redesignated 217 Engineering Installation Squadron

# **STATIONS**

Midway Airport O'Hare International Airport, IL, 1 Jul 1968 Springfield, IL

# ASSIGNMENTS

#### COMMANDERS

Col William W. Black, 1 Nov 1950 Capt Arthur J. Shaw, 8 Nov 1954 Maj Stanley M. Arnold, 1 Jan 1959 Capt James E. Long, Aug 1962 Maj Eldred Dusold, 12 Sep 1967 Col Walter J. Dobrowolski, 8 Nov 1970 Lt Col James Loux

HONORS Service Streamers

#### **Campaign Streamers**

#### **Armed Forces Expeditionary Streamers**

#### Decorations

Air Force Outstanding Unit Award 16 Feb 1987-15 Feb 1989

#### EMBLEM



#### ΜΟΤΤΟ

# **OPERATIONS**

The history of the 217 EIS in the Illinois Air National Guard began at the end of World War II, when the 1080<sup>th</sup> Signal Company was returned to the States and redesignated the 606th Signal Light Company, Aviation, National Guard, but inactivated during the post-war demobilization. As Cold War tensions began to build, the 606th was again activated in December 1948, and in 1950 became part of the 126th Composite Wing.

During the Korean Conflict, the 606th was recalled to active duty and assigned to the 156th AC&W Group, In 1952 it was reorganized as the 606th Communications Construction Squadron, and in 1953 the unit was released from active duty, redesignated as the 217 Communication Construction Squadron and inactivated.

In November 1954, the 217 was activated as an Air National Guard unit and attached to the 126th Fighter-Bomber Wing at Midway Municipal Airport.

217 Communications Construction squadron performed field training at Brookley AFB, Alabama. (15-29 June). Under the command or Capt Artur J. Shaw, they constructed a 90 foot microwave tower. 1957

In January 1959, the 217 was redesignated as the 217 GEEIA (Ground Electronics Engineering Installation Agency), and assigned training missions through GEEIA Hqs at Griffiss AFB, New York. GEEIA at this time was a seperate branch of the Air Force Logistics Command (AFLC).

In 1962, the 217 GEEIA assumed the posture it maintains today - performing live installation and maintenance work on weekend UTA's for both the regular Air Force and National Guard bases The first formal national recognition of the unit took place in 1965, when the 217 was selected as the Outstanding ANG GEEIA squadron in the Air Force, hi 1968, the unit moved to Chicago's O'Hare military base from Midway Airport.

217 Communications Construction squadron performed field training at Brookley AFB, Alabama. Under the command of Capt Artur J. Shaw, they constructed a 90 foot micro-wave tower, 15-29 Jun 1955

217 GEEIAS 30 Members installed six, 50Ft steel towers at Vance AFB, Okla. to house 33 Antennas for transmitters for radar approach control in two weeks during Annual Training. They were divided into two shifts to complete the schedule.



Cpt James E. Long

15 Nov 1966 the 217 GEEIA Airmen volunteer for project FAST RACE to HELP NATO. Airman

Bart J Curtin, Leo Verzani and Raymond J Wakup were among 433 volunteer Air National Guardsmen from 13 states. They went TDY (15 Nov to 15 Dec) to help remove all AF Communication Electronic equipment from Phalsbourg, France.

26th Oct 1968 to 23 Nov. 1968: 217 GEEIA 30 Members installed six, 50ft steel towers at Vance AFB, Okla. to house 33 Antennas for transmitters for radar approach control in two weeks during Annual Training. They were divided into two shifts to complete the schedule.

217 EIS Installs CCTV Cable in Aurora-Elgin School District. Initial Installation at Schneider School, N. Aurora during UTA. (c. Sep 1972)

217 EIS REORGANIZED. Expands to Get Engineering Section, (c. Sep 1972)

Members of the 217 Electronics Installation Squadron of the Illinois Air National Guard put some muscle into placing an antenna tower at Antigua AS, British West Indies, to aid the AFCS support of NASA projects

Just a short 10 years ago the 217 Engineering Installation Squadron (EIS) officially relocated to Springfield from O'Hare Field, Chicago IL. Many of our unit members had never ventured south of Interstate 80. Quite a bit has changed in the last 10 years; we went from Air Force Materiel Command (AFMC) to Air Combat Command (ACC) in 2005 and effective October 2009 we transferred to the Air Force Space Command (AFSPC). Once relocated, the 217 started deploying rotations of personnel to the area of responsibility (AOR) to work the Friendly Forces Housing project at Prince Sultan Air Base. These rotations later became the standard for our Air Expeditionary Force (AEF) tasking.

After 9/11 we sent out mobilized teams, seems like each year we have been busier than the last. In 2009 we used almost 8,000 man days which equates to over 60 man days per unit member. Slightly less than half of this figure is from our Defense Information Services Agency (DISA) mission. We have 10 members on Title 10 orders that form the Engineering Installation Site Implementation Team. They are tasked to provide immediate response to support DISA worldwide; they also manage DISA workload for five other EI units. We are constantly on the road, training our members and adapting to new missions and demands of our customers.

The 217 started as a U.S. Army Signal Platoon. Its history goes back to 1942, and was officially designated as the 217 Engineering Installation Squadron in January 1954. Since its beginnings the unit has also been Signal Company, a Communications Construction Squadron and a Ground Electronics Engineering Installation Squadron. It is the oldest ANG EI unit. Our unit motto is "Nobody Does It Better". Our unit is the recipient of six Air Force Outstanding Unit Awards. In July 1999, the 217 moved from O'Hare International Airport, Chicago, to Capital Airport in Springfield and became part of the 183rd Fighter Wing. Sep 1999 marked the dedication of P-46, the new EIS building, and in December 1999 the unit took possession of the building.

USAF UNIT HISTORIES Created: 26 Dec 2010 Updated: 20 Sep 2023

Sources Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.