

# 1 COMMUNICATIONS MAINTENANCE SQUADRON



## MISSION

The 1 Communications Maintenance Squadron provides maintenance that installs, upgrades, removes and performs emergency repairs on antenna systems for 16 bases across the European theater.

## LINEAGE

1 Radar and VHF Installation and Maintenance Unit (Aviation) constituted, 30 Jul 1943  
Activated, 10 Aug 1943  
Redesignated 1 Signal Radio Maintenance Unit, Aviation, 13 Sep 1944  
Redesignated 1 Signal Radio Maintenance Team, Aviation, 13 Mar 1945  
Redesignated 1 Communication Maintenance Squadron, 22 Aug 1950  
Inactivated, 1 Jan 1959  
Disbanded, 15 Jun 1983  
Reconstituted, 5 May 2003  
Activated, 22 May 2003

## STATIONS

Robins Field, Georgia, 10 Aug 1943  
Kelly Field (later, AFB), Texas, 3 Nov 1945  
Griffiss AFB, New York, 12 Aug 1950-1 Jan 1959  
Kapaun Administrative Annex, Germany, 22 May 2003

## ASSIGNMENTS

Air Service (later, Air Technical Service) Command, 10 Aug 1943  
San Antonio Air Materiel Area, 16 Oct 1948

Air Materiel Command, 12 Aug 1950  
Middletown Air Materiel Area, 2 Jan 1952  
Air Materiel Command, 10 May 1952  
2845 Depot Wing, 1 Oct 1953  
Air Materiel Command, 3 Jan 1955  
3108 Communications Group, 16 Jan 1955  
Ground Electronic Engineering Installation Agency, 1 Sep 1958-1 Jan 1959  
USAFE Air and Space Communications Group, 22 May 2003  
86 Air and Space Communications Group, 1 Sep 2004  
435 Air and Space Communications Group, 16 Jul 2009

## **COMMANDERS**

Maj Angela Freeman

## **HONORS**

### **Service Streamers**

World War II  
American Theater

### **Campaign Streamers**

### **Armed Forces Expeditionary Streamers**

### **Decorations**

Air Force Outstanding Unit Awards  
1 Jan 1951-30 Jun 1954  
1 Oct 1956-31 Jul 1958  
15 Jan 2004-31 Oct 2005  
1 Nov 2005-31 Dec 2006  
1 Jan-31 Dec 2007  
1 Jan-31 Dec 2008  
16 Jul 2009-31 Dec 2010  
1 Jan-31 Dec 2011  
1 Jan-31 Dec 2017  
1 Jan 2018-31 Dec 2019

## **EMBLEM**



## 1 Communications Maintenance Squadron

1 Communications Maintenance Squadron emblem: On a disc as a globe Argent, grid lined throughout Celeste, a dragon passant Azure, langued and breasted Gules, eyed Or, armed, dented and barbed Sable, its raised dexter claw radiating three lightning flashes to dexter of the fourth, all within a narrow border Blue. Attached above the disc, a Yellow scroll edged with a narrow Blue border and inscribed "PROUD PAST STRONG FUTURE" in Blue letters. Attached below the disc, a Yellow scroll edged with a narrow Blue border and inscribed "1 CMXS" in Blue letters. **SIGNIFICANCE:** Ultramarine blue and Air Force yellow are the Air Force colors. Blue alludes to the sky, the primary theater of Air Force operations. Yellow refers to the sun and the excellence required of Air Force personnel. The globe symbolizes the impact of the unit upon the worldwide reach of military operations. The winged dragon represents the might and determination exhibited by unit personnel in supporting the USAFE War Fighter. The lightning bolts issuing from the dragon's claw represent the combat capability made possible through the squadron's efforts. The yellow eye signifies the unit's incessant focus on the mission. (Approved, 15 Aug 2003)

### **MOTTO**

PROUD PAST—STRONG FUTURE

### **OPERATIONS**

Airmen from the 1 Communications Maintenance Squadron at Kapaun Air Station, Germany, are installing giant voice systems throughout the United Kingdom. The 'Giant Voice' is a 2,000-watt speaker that alerts people on base of danger, whether from natural disasters or terrorist attacks. "Most people are probably familiar with the warbling tone or the steady tone that they hear when they do their Chem-Warfare training," said Master Sgt. James LeMaster the special maintenance team NCO in charge. This is the system that generates that tone, he said. The team is working in nine locations in England to ensure bases have the giant voice capability to help communicate to base members warnings so they can take appropriate actions in case of danger. "It became really self-evident when they had the bomb attacks in London a few years back, that

they lost their giant voice capability," said Tech. Sgt. Russ McCleary an airfield systems technician. "So, we bought them new giant voice systems and we came out here to set the up." Mar 14, 2007

In 2008, the 1 Communications Maintenance Squadron was tasked with removing all equipment, antennas and associated hardware at nine microwave radio communications sites located throughout northern Italy, including Cima Gallina near the Brenner Pass.

In 2011, the 1 Communications Maintenance Squadron was tasked with removing 21 high-frequency antenna systems located at Royal Air Force Croughton and Barford St. John. RAF Croughton is a U.S. Air Force communications base in Northamptonshire, England. It is home to the 422nd Air Base Group and operates one of Europe's largest scope command HF antenna sites and military switchboards, processing approximately one-third of all U.S. communications in Europe. The radio site at RAF Barford St. John has been used for communications purposes since World War II. The decommissioning efforts started 14 months ago when HF global communications system antennas, in service since the 1980s, started being replaced with less maintenance intensive systems.

The 1 Communications Maintenance Squadron dispatched cable/antenna theater maintenance teams between 2011 and 2012 for a phased decommissioning approach. In 2011, 10 HF antennas were removed, facilitating installation of five new antenna systems. Late this spring, the 1 Communications Maintenance Squadron was again called upon to remove 11 HF antennas and complete the decommissioning efforts at both U.K. sites. In April, Master Sgt. Mark Malloy led a team of five cable and antenna maintainers and two vehicle operation specialists on a 30-day decommissioning trip.

The team endured austere weather and ground conditions, working through the U.K.'s coldest spring since 1989 and worst rain fall totals in more than 100 years. The combination of hail, freezing rain and wet ground made for slow, sometimes treacherous, conditions for working aloft - frequently above 90 feet. Upon arriving at the site, Malloy went over his plan of attack with his team and within two hours had the first antenna on the ground.

The 422nd Communications Squadron's cable antenna work center took advantage of this opportunity to augment the 1 Communications Maintenance Squadron with three personnel, gaining vital on-the-job training while also providing additional manpower to the 1 Communications Maintenance Squadron team. Assistance was also provided by the SERCO Group, which transported and disposed of \$306,000 worth of materials to RAF Molesworth. "I was truly amazed when the team arrived and, within a couple hours, had the first antenna on the ground and began the disposal process," said Master Sgt. Steven Haro, 422nd Communications Squadron's Cable Antenna Systems NCOIC. "Even with less than ideal weather and ground conditions, the team continued an exceptionally fast work pace, which kept them well ahead of schedule."

Despite weather conditions, the can-do attitude of the entire team increased productivity exponentially, reducing a 55-day project to 30-days, saving \$19,000 in temporary-duty costs. The team also coordinated turning more than 30 HF antenna support poles to local farmers to rebuild a bridge used for farm access, saving \$154,000 in disposal costs and strengthening community relations. By the time the team finished the project, they traveled more than 1,100 miles and removed one weather intercept loop array, two low take-off, three rotatable log periodic and five

high take-off HF antenna systems. They also removed 42 60-foot antenna support poles and 800 feet of fence and disposed of 12.5 tons of materials.

The 1 Communications Maintenance Squadron, part of the 435th Air Ground Operations Wing, is a hand-selected team of communications maintenance experts that provide specialized maintenance support and emergency restoration for Department of Defense communications and information systems throughout the U.S. European Command and U.S. Africa Command areas of responsibility. "This HF decommissioning team is a perfect example of the technical expertise and professionalism of the 1 Communications Maintenance Squadron commander Dragons," said Maj. Angie Freeman, 1 Communications Maintenance Squadron commander. "By having 1 Communications Maintenance Squadron perform this decommissioning, we saved the Air Force \$5 million in contractor fees while paving the way for Air Force-wide HF system upgrades."

3/9/2012 The Air Force has implemented a plan to streamline the maintenance of all Air Force air traffic control and landing systems around the globe, saving the Air Force an estimated \$336 million by 2025. On March 9, U.S. Air Forces in Europe, in cooperation with the 1 Communications Maintenance Squadron, cut the ribbon to the USAFE Air Traffic Control and Landing Systems Regional Maintenance Center on Kapaun Air Station, signifying the start of the multi-million dollar savings plan. "Most of the systems in USAFE (and Air Force) have outlived their life expectancy and are becoming harder to maintain," said Master Sgt. Donald Sheppard, USAFE Regional Maintenance Center chief.

"The Air Force Flight Standard Agency will purchase new remote instrument landing systems to replace these legacy systems, which will allow Regional Maintenance Centers to perform remote maintenance." Air Force Flight Standard Agency is the agency leading the maintenance and oversight for the systems and provides funding for the three Regional Maintenance Centers throughout the Air Force; one in the United States and two overseas, which includes the one at Kapaun.

The new systems are able to be dialed into from the Regional Maintenance Centers to show whether the system is up and running, offline or in need of maintenance. "If a system goes down at a base, their systems will dial into ours and alert us of the change in real time," said Master Sgt. Brian Capps, USAFE Regional Maintenance Center non-commissioned officer in charge of airfield systems. "If that happens and we get an alarm, we will be ready to troubleshoot it remotely and if need be, have a team on their way out to that base in 48 hours." Concurrently, the Regional Maintenance Centers have a response time of 30 minutes during normal duty hours, and one hour during non-duty hours.

With the addition of the regionalized maintenance center, each base will maintain an appropriate number of Air Traffic Control and Landing Systems maintenance personnel at the bases with older legacy systems that require hands-on maintenance. Bases around USAFE are scheduled to receive 13 remote tactical air navigation systems, one remote, very-high frequency, omni-directional range system, and 13 instrument landing systems by 2017. "The Regional Maintenance Center will bring with it the opportunity to leverage cyberspace to remotely monitor and maintain the new systems right here from Kapaun," said Maj Angela Freeman, 1 Communications Maintenance Squadron commander. "Our guys are the best of the best, they are chosen for their position here, it's a special duty assignment, and to have that kind of

experience at this Regional Maintenance Center will be invaluable." Air Force Flight Standard Agency is also in the process of finalizing the continental United States Regional Maintenance Center in Oklahoma City, Okla., and the Pacific Air Forces' RMC at Yokota AB, Japan.

7/19/2012 Airman assigned to the 1 Communication Maintenance Squadron are in high demand providing specialized communication maintenance technicians that support cyberspace systems throughout U.S. European Command and U.S. Africa Command areas of responsibility. In 2011, the 1 CMXS spent more than 5,200 combined days on the road throughout the theater, visiting 45 sites in 11 countries on four continents. "So far in FY12, the 1 CMXS has spent over 3,000 days on the road and is currently in our busiest time of the year," said Maj. Angela Freeman, 1 CMXS commander.

The 1 CMXS is Maj. Freeman's first command and she has witnessed the unit's ability to solve complex problems and provide expert emergency restoration, preventative maintenance, training expertise, and maintenance support throughout the theater. "Commanding the 1 CMXS has been an amazing experience," she said. "The personnel in this unit are hand-selected, so they are the best our cyberspace community has to offer." Additionally, the unit maintains a vehicle fleet of 86 vehicles and fully equipment is valued at more than \$7 million.

This vehicle fleet includes specialized vehicles to perform theater-wide emergency repairs within 24-48 hours. The Cable Antenna Systems Maintenance Special Communications Team (SCT) falls under the 1 CMXS and is a handpicked team that installs, inspects, upgrades, removes and performs emergency repairs on more than 667 antenna systems valued at \$106 million supporting 109 thousand missions per year for Department of Defense, NATO, and EUCOM. "There are very few bases that actually maintain the antenna side of the career field," said Master Sgt. Mark Malloy, 1 CMXS cable and antenna field supervisor.

"Like the bases in the U.S., here we tend to assist and maintain several projects engineering and installing infrastructure across U.S. Air Forces Europe and Royal Air Force." The Cable Antenna Systems Maintenance SCT's are heavily involved in an Air Force wide High Frequency Global Communications System decommissioning effort, setting the stage for system upgrades. The most recent decommission was at Royal Air Force Croughton where 11 antennas and 25 thousand pounds of equipment was removed. Using the 1 CMXS for this decommissioning saved the Air Force \$5 million in contractor fees to accomplish the same mission. Whether it is providing 24 hour communication maintenance response or traveling to repair antenna towers in remote locations across the European theater, the 1 CMXS has proven time after time their unit's ability to provide some of the most highly trained technicians the Air Force has to offer.

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#### Sources

Air Force Historical Research Agency, U.S. Air Force, Maxwell AFB, Alabama.

The Institute of Heraldry, U.S. Army, Fort Belvoir, Virginia.

Air Force News, Air Force Public Affairs Agency.