

# Pentagon MARS Station

## Military Auxiliary Radio System

### **Mission:**

The mission of the Pentagon MARS Station as outlined in DoDI 4650.02 is to provide contingency radio communications support to Department of Defense (DoD) senior leadership during National Security/Emergency Preparedness (NS/EP) events, provide backup communications support to the Joint Chiefs of Staff (JCS), National Military Command Center (NMCC), and to provide contingency radio communications support to other Federal departments, such as the Department of Homeland Security and its subordinate agencies, in providing Defense Support of Civil Authorities (DSCA).

### **Capabilities:**

The radio room has the capability to provide interoperable communications between local, state, and federal agencies in the National Capitol Region (NCR) using a variety of radio systems at both the unclassified and classified levels. See Appendix A for radio communications capabilities.

### **Tenants:**

In addition to MARS operations, the Pentagon MARS Station serves as a backup net control facility for the Department of Homeland Security (DHS) National Communications System (NCS) SHARES HF Radio Program, hosts the monthly meetings of the Pentagon Amateur Radio Club (PARC), and serves as a military recreation radio station for uniformed services personnel.

### **Physical layout:**

Pentagon room 5D1061A is an interior windowless room containing 400 square feet of space (20'x20') and is secured by a GSA approved X-09 high security electromechanical combination lock. The room is safeguarded by a monitored alarm system. MARS personnel have 24/7 access regulated by Pentagon building pass card swipe access and PIN code. The room has carpeted floor and modular style furniture housing the radio equipment. The room contains emergency lighting and has acoustical control panels mounted on the walls to reduce noise. A copper ground bar system connected to the building electrical ground provides RF ground for the radio equipment.

### **Telecommunications:**

#### **A. Voice**

There are two analog telephone lines for unclassified calls, facsimile use, and for radio-to-telephone patches. For classified calls, an Integrated Services Digital Network (ISDN) telephone line has a Secure Telephone Equipment (STE) connected to it. This allows secure STE-to-STE telephone calls, secure remote access into the Defense Red Switched Network (DRSN), and Defense Switched Network (DSN) connectivity. All telephones have Push-To-Talk (PTT) handsets. A Government Emergency Telecommunications Service (GETS) card is available for making priority telephone calls in support of NS/EP use.

#### **B. Data**

A computer and laser printer linked to the DoD Non-Secure Internet Protocol Router Network (NIPRNet) connection is available to exchange sensitive but unclassified record traffic between internal DoD users as well as providing access to the Internet. This computer requires the use of a DoD Common Access Card (CAC). A computer with removable hard drives and laser printer linked to the DoD Secure Internet Protocol Router Network (SIPRNet) connection is available to exchange classified record traffic between internal DoD users. A separate Local Area Network (LAN) supports four computers used for automated radio equipment control.

### **Multimedia:**

A 42-inch high-resolution flat screen monitor is wall mounted with attached tuner and VCR/DVD combo connected to the Pentagon cable television system. A desktop AM/FM radio is available for commercial radio reception. Speakers mounted in the room's suspended ceiling tiles provide output sound for the multimedia system. A multi-zone GPS capable digital clock displays both GMT and local time zones in addition to the day/date.

### **Electrical Power:**

The room is fed by both 120 volt and 240 volt electrical power service. The room contains red power receptacles that are fed from the Pentagon NMCC auxiliary power system to supply mission critical power needs. The 240 volt service supplies power to the RF amplifiers.

### **GSA approved safe:**

A 2-drawer GSA approved security container with X-09 high security electromechanical combination lock provides secure storage of over-the-air challenge/response material, storage of the KSV-21 Enhanced Crypto Card used for the STE, the SIPR computer removable hard drives, and for storage of the KY-100 HF radio encryption device.

### **Antenna Patch Panel and Transmission lines:**

Eight Andrews LDF6-50 Heliac 1-1/4 inch coaxial cables run between an antenna patch panel located in the radio room and a Environmentally Protected Cabinet (EPC) located on the Pentagon roof. Jumper cables installed on the patch panel allow patching between different radios and antennas. Andrews VXL5RN-50 Heliac 7/8 inch coaxial cables exit the lightning protection devices contained in the EPC on the roof and connect to individual antennas. Three multi-conductor control cables run between the patch panel and the EPC for controlling antenna rotators and remote antenna tuners. All coax cables are terminated with "N" style military RF connectors.

### **Rooftop Antennas:**

There is a mixture of VHF/UHF and HF antennas supporting mission requirements. MARS personnel have 24/7 security swipe access to the roof and the EPC for antenna and cabling maintenance. See Appendix B for antenna details.

### **Call Signs:**

The following call signs are used for MARS and SHARES operations: Department of Defense – WAR, Army MARS – AAN3PNT, Air Force MARS – AGA3DC, and Navy-Marine Corps MARS –NNN0PNT. The call sign K4AF is used during amateur radio operations. Tactical call signs are used during NS/EP operations as required by mission requirements.

### **Amenities:**

The radio room contains a conference table and chairs, leather sofa, small refrigerator, microwave oven, coffee pot, cross-cut paper shredder, cork bulletin board, white board, filing cabinets, and miscellaneous office equipment. Rest rooms, water fountains, fire extinguishers, and Emergency Escape Mask cabinets are located just outside and down the hall from the radio room.

### **Personnel:**

When the radio room is activated in support of an NS/EP event, the Pentagon MARS Station is staffed by military personnel, civilian Federal employees, and other radio operators who hold the appropriate security clearances required to support the assigned NS/EP mission and to provide DoD contingency radio communications. At all other times, the station operates at the unclassified level.