



Amateur Radio Volunteers
Providing National
Contingency Communications
Supporting
Homeland Defense

Proud, Professional, and Ready

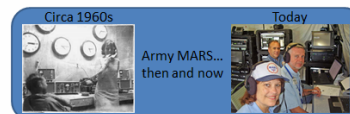
MARS Mission

DOD Instruction 4650.02
AR 25-6

- Provide contingency radio communications to the Department of Defense and civil authorities at all levels
- Assist in effecting normal communications under emergency conditions
- Provide training in military communications, techniques, and procedures
- Improve HF, VHF, and UHF communications techniques
- Conduct amateur radio exercise as part of annual Armed Forces Day
- Provide health and welfare radio communications

A Brief MARS History

- Originally created by Major General Saltzman, Chief Signal Officer, in November 1925 when he approached the American Radio Relay League and proposed a partnership:
 - The Army-Amateur Radio System would provide backup communications in times of emergency use when telephone and telegraph land lines are seriously damaged or destroyed.
 - ARRL commented: "this affiliation is about the most important thing that ever happened to amateur radio in this country."
- In 1928, the great Caribbean hurricane killed some 2,000 Floridians.
 - Two heroic members of the Army-Amateur Radio System, Ralph Hollis and Forrest Dana, provided the only communications out of beleaguered south Florida, summoning aid from the Army and Red Cross.
 - Posthumously inducted into the CQ Amateur Radio Hall of Fame in 2010, the first members so honored.
- Renamed Military Amateur Radio System in November 1948 and established separate Army and Air Force Programs
- Navy Marine Corps MARS established August 1962
 - Following Cuban missile crisis
- Renamed Military Auxiliary Radio System December 2009



The Army Connection

Like any military unit, Army MARS fits into a chain of command. The Chief of Army MARS reports to the Network Enterprise Technology Command (NETCOM) which operates the U.S. Army's worldwide computer and communications networks.

NETCOM in turn has vertical links to the Army Cyber Command, which is charged with network protection, and the Army's Chief Information Officer/G6 who reports to the Secretary of the Army.

In a major disaster, MARS members might be working with their state's National Guard or with Regular Army units assigned to the Army Northern Command, or with state/federal agencies that have requested Defense Support to Civil Authorities (DSCA). In these situations, the member's immediate superior is the Incident Commander.

Within Army MARS, the Region Directors (RD) report to the Chief and are responsible for administrative and operational decision-making within their territories. Together the RDs constitute the MARS Governance Executive Board (MGEB). It meets regularly to coordinate Army MARS-wide policy under the Chief's leadership.

The RDs, like all Army MARS field officers, are volunteers. The State directors report to them. Both are assisted by staff Officers (emergency operations, training, administration, etc.) which are stepping stones to promotion into the senior leadership.

Army MARS Organization



Paul English
Chief Army MARS



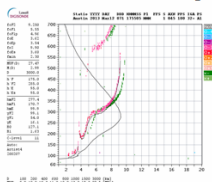
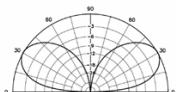
- Closely aligned with the 10 FEMA Districts
- MARS Region IV also includes Puerto Rico
- MARS Region 11 includes EUROPE/Africa
- MARS Region 12 includes the Pacific region
- Each region assigned a MARS Region Director

Army MARS Membership Requirements

- 17 years of age and a US citizen or resident alien
- FCC amateur radio General class license
- HF station capable of operating on MARS frequencies (2 to 30 MHz)
- Agree to follow Army MARS rules
- 15 hours of participation per quarter with 9 of the 15 hours on HF
- Internet/email availability
- Serve as Net Control Station quarterly
- Participate in two exercises per year
- Complete MARS Basic Training Course and FEMA Online classes (ICS 100, 200, 700, 800)

Army MARS Membership Benefits

- Provide support to homeland security at the local, region, and national levels
- Camaraderie with a large group of professional communicators
- Increased knowledge and proficiency in long-range, reliable HF communications and propagation
- Proficiency in a variety of digital communication techniques
- Participate in large scale DOD and DHS training exercises



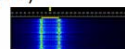
How Army Members Participate

- **Home located MARS HF Stations**
 - Conduct voice and digital operations
 - Operate via emergency power
 - Serve as Net Control Stations
 - Serve as message relay stations
 - Report local incidents and conditions when requested
- **Customer fixed location stations**
 - Conduct voice and digital operations
 - County and state operations centers
 - Deployable command posts
 - Originate Incident Commander (IC) messages
 - Provide disaster situational awareness to IC



Army MARS Operating Modes

- **Voice:** single sideband
 - Phone patch
 - Automatic Link Establishment (ALE)
- **Digital waveforms:**
 - Computer Sound Card
 - MT-63, Forward Error Correction (FEC)
 - Olivia, FEC
 - Mil Standard
 - 188-110A Phase Shift Keying (PSK), FEC
 - 188-110B Frequency Shift Keying
 - Hardware Modem
 - PACTOR Automatic Repeat Request
 - Winlink 2000 HF email
 - Remote Message Server (RMS) station hubbing
 - Peer to peer



Typical MARS Operating Frequencies

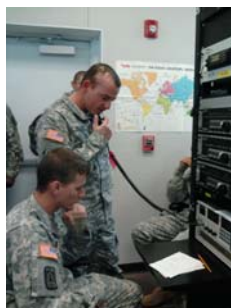
MARS*

2200 KHz
3200 KHz
4020 KHz
5200 KHz
6800 KHz
7500 KHz
8000 KHz
9300 KHz
13.9 MHz
16 MHz
20.5 MHz

US Amateur Radio Band Plan

1800-2000 KHz (160M)
3500-4000 KHz (80M)
5335.5-5403.5 KHz (60M)
7000-7300 KHz (40M)
10.1-10.15 MHz (30M)
14-14.350 MHz (20M)
18.068-18.168 MHz (17M)
21-21.450 MHz (15M)
24.890-24.990 MHz (12M)
28-29.7 MHz (10M)

- *MARS frequencies use only Upper Side Band
- *Mixed mode (voice/data) authorized on same frequency
- *Amateur radio transceivers must be modified



For More Information

Visit our web site:

www.usarmymars.org

Like us on Facebook:

www.facebook.com/HQArmyMARS

Region 2 Director

Carver L Washburn

973-694-3336

clwashburn@verizon.net

