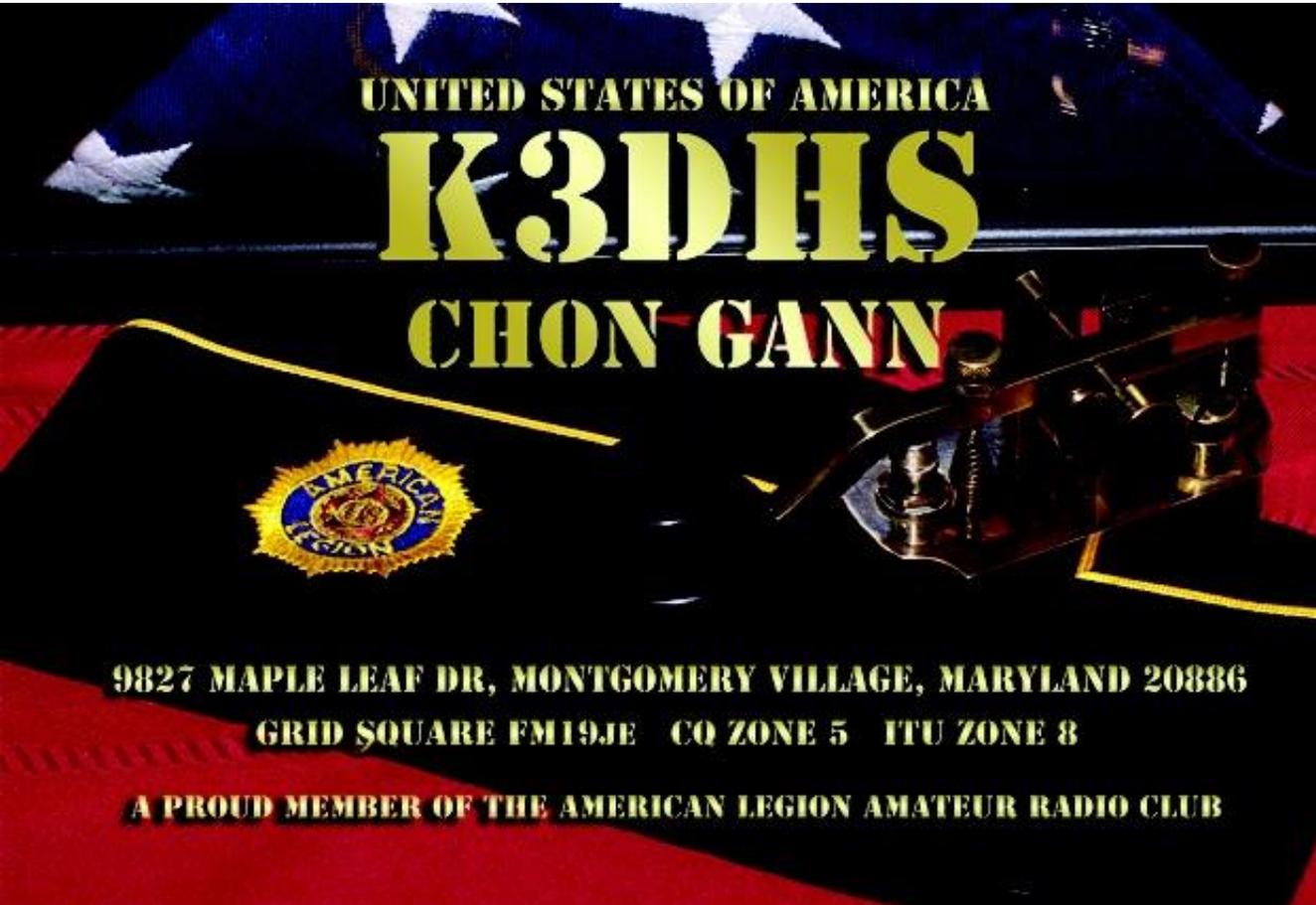


# FED ECOMM

## Opportunities in Federal Emergency Communications for Amateur Radio Operators a Presentation for Montgomery Amateur Radio Club



# FED ECOMM

## Opportunities in Federal Emergency Communications for Amateur Radio Operators

- **Military Auxiliary Radio System (MARS)**
- [U.S. Army MARS Information](#)
- [U.S. Army MARS Application](#)
- [U.S. Air Force MARS Information](#)
- 
- **U.S. Air Force Auxiliary – Civil Air Patrol (CAP)**
- Web site - [www.gocivilairpatrol.com](http://www.gocivilairpatrol.com)
- [Civil Air Patrol Fact Sheet](#)
- [Civil Air Patrol Senior Brochure](#)
- [Civil Air Patrol Membership Information](#)
- 
- **Department of Homeland Security**
- [DHS SHARES Program](#)
- [U.S. Coast Guard Auxiliary](#)



**NETCOM.ARMY.MIL/MARS**  
U.S. ARMY MILITARY AUXILIARY RADIO SYSTEM



# **THIS IS ARMY MARS**

*Proud, Professional, Ready*

Chon A. Gann (K3DHS)

Civil Affairs Officer, Region 3, Army MARS

UNCLASSIFIED



# 21<sup>st</sup> Century MARS



Military Auxiliary Radio System

- DoD Directive 3025.18, *Defense Support of Civil Authorities*
- DoD Instruction 4650.02, *Military Auxiliary Radio System*
- Army Regulation 25-6, *Military Auxiliary Radio System and Amateur Radio Program*





# A Joint Service Program



Military Auxiliary Radio System

MARS - contingency radio communications support to U.S. Government operations...through the utilization of organized volunteer radio operators...under appropriate authorities, as directed by and coordinated within the DoD. (DoDI 4650.2)

- Provide contingency radio communications support to the DoD Components
- Provide contingency radio communications support to civil authorities at all levels
- Provide health, morale, and welfare radio communications support...when in remote or isolated areas, in contingencies or whenever appropriate





# The Army Mission



Military Auxiliary Radio System

Army MARS mission is to support a global HF Enterprise in cyber impaired or denied environments on behalf of the U.S. Army and DoD, in order to support objectives of the United States

## Three Primary Tasks:

- Provide radio communications support by staffing the Global High Frequency Enterprise Radio Network (GHFERN)
- Support DoD Humanitarian Assistance and Disaster Relief (HADR) efforts by interfacing with the Amateur Radio Community
- Provide temporary disaster communications support to Federal, State, and Local Civil Authorities until military support is no longer required



# The Army Mission



## Military Auxiliary Radio System

### The Secondary Mission

- Training cadets, soldiers and guardsman in HF radio fundamentals
- Processing Morale, Welfare and Recreation (MWR) related messages and telephone calls to or from U.S. Servicemen and women located throughout the world, commonly known as the “MARSGRAMS”

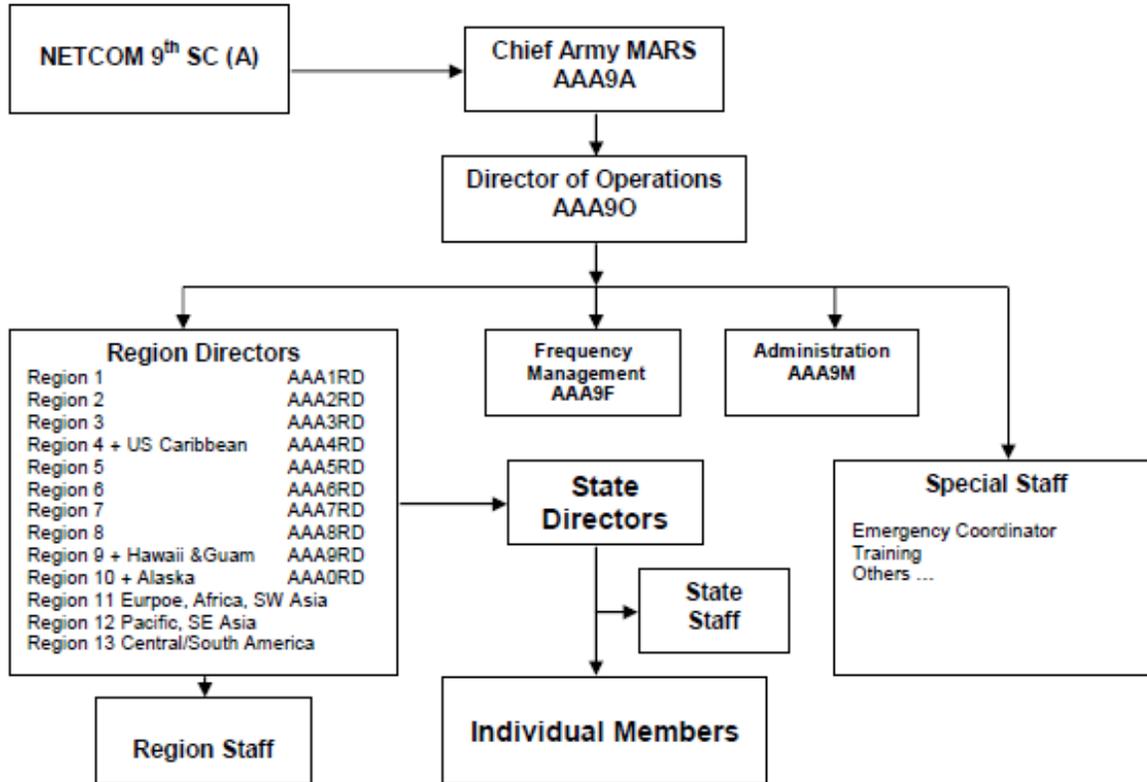




# Army MARS Organization



Military Auxiliary Radio System





# Interoperability Building Partnerships



Military Auxiliary Radio System

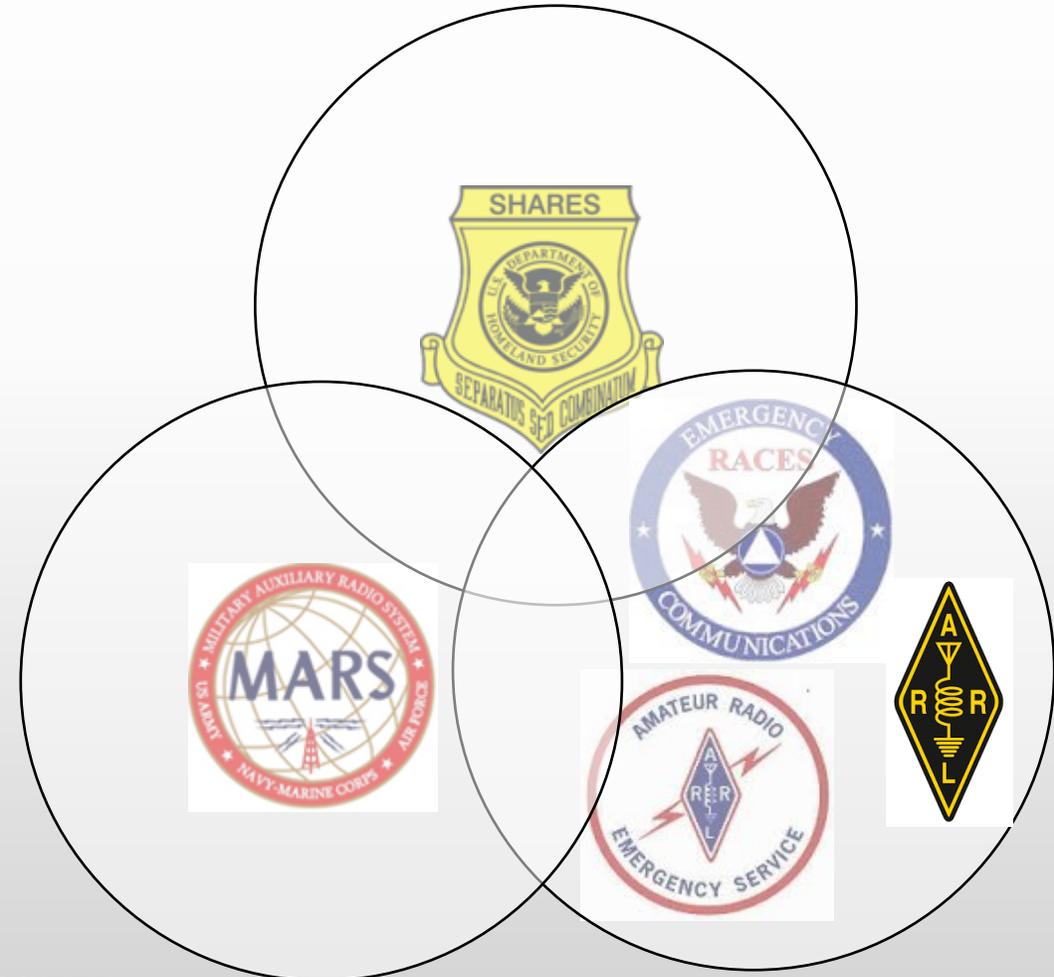
## Interoperability Space

“60 Meters”

Channel 1	5330.5
Channel 2	5346.5
Channel 3	5357.0
Channel 4	5371.5
Channel 5	5403.5

Amateurs may contact military and federal stations directly during periods of interoperability.

MARS stations with amateur radio operators will use their military call-sign.





# COMEX 16-2

## 071200-2359Z MAY2016



Military Auxiliary Radio System

### **Mission**

(U) Local coordination with available amateur radio resources

(U) Demonstrate interoperability between DOD networks, government, and amateur radio stations.

### **Intent**

(U) Establish and maintain dependable, multi-layer HF radio-only Network communications to support DOD objectives and interface with relevant amateur radio networks and required to fulfill DOD requirements.

### **Friendly Forces**

(U) Air Force MARS

(U) Army MARS

(U) Amateur Radio Operators

(U) DOD Forces

(U) DHS

(U) ARRL

### **TASKS**

(U) Support RFI for County Status Reports

(U) Support RFI for WXOBS and local damage assessment observations



# Army MARS Operator



## Military Auxiliary Radio System

Amateur Radio operators represent the Nation's reservoir of electronic and communications experts. It is through the service of these citizen volunteers that MARS is able to accomplish its mission.



### MARS Operators:

- Communicate effectively and concisely utilizing specific protocols and procedures across all approved HF/VHF bands and modes
  - Utilizing the effects of the ionosphere apply techniques to maximize the radio frequency path between two points of communications
  - Operate and maintain HF/VHF radio equipment, antennas, and telecommunications technology
  - Utilize computers in conjunction with radio equipment, various software, soft-modems, while maintaining operating systems and secure computer systems
- ❖ Note – MARS operations is primarily a HF operating environment



# Membership



Military Auxiliary Radio System

## Qualifications

- Adult - U.S. Citizen (18yrs >)
- FCC Amateur Radio License
- Pass a background check
- Agree to follow the rules, regulations, and procedures prescribed by the U.S. Army

## Training

- Complete FEMA's Incident Command System (ICS) 100 and 200
- Achieve General of higher FCC Amateur Radio License within first year.
- Complete Basic Training within first six months



# Activity and Equipment



## Military Auxiliary Radio System

- Maintain ATO, which requires current FCC Amateur Radio License
- Perform a minimum of 72 - hours of service every year
- Usually 18 hours per quarter.
- Participate in at least one quarterly COMEX per year
- **Non-MARS radio activity does not meet HF requirement**
- Have/Modify a radio station capable of RX/TX on both SSB voice and digital between 2-30MHz
- Equipment must meet NTIA technical parameters
- Have computer compatible with MIL-STD software and messaging formats
- Internet and email service



# Tasks



## Military Auxiliary Radio System

- Routinely check into MARS nets
- Train to be an NCS on MARS nets
- RX/TX messages using MIL-STD waveforms and ACP message text formats
- Encode and Decode using provided MARS military software
- Train in at least one annual DoD Exercise
- Daily and Weekly Nets
  - (State, Regional, National, Global)
- Weekly Training Nets
- Weekly Admin Nets
- MIL-STD ALE Nets
- Quarterly Exercises
- Annual Events
  - Armed Forces Day
  - QRP Exercise
  - Operation Christmas Cracker
  - Regional Conference



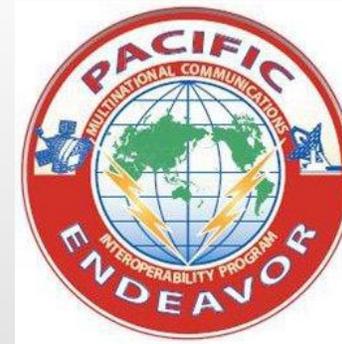
# Army MARS Partnerships



Military Auxiliary Radio System



- Allied Forces
- ARRL & the greater amateur radio community
- ARES & RACES
- NCS & SHARES
- TSA
- FEMA





# How to Find Out More



Military Auxiliary Radio System

- <https://www.youtube.com/watch?v=dfDWsZiWcFY>

# Civil Air Patrol



**Presented by:**

*Lt Chon Gann*

*Communications Officer*

*Bethesda Chevy Chase Composite Squadron*



# What is Civil Air Patrol?

- Federally chartered
- Nonprofit, Humanitarian Organization
- Serves as the Civilian Auxiliary to the United States Air Force
- Serving America for over 65 years





# CAP Missions

## *Emergency Services*



- Search and Rescue
- Disaster Relief
- Homeland Security

- Counterdrug
- Humanitarian Services
- Air Force ROTC Flights





# CAP Missions

## *Emergency Services*





# CAP Missions

## *Cadet Programs*



- Leadership Skills
- Aerospace Education
- Physical Fitness
- Character Development
- Activities



# CAP Missions

## *Cadet Programs*



### Major Samantha Weeks, USAF

- Former CAP cadet
- USAF Academy Graduate
- Previous Lead Solo in the U.S. Air Force Thunderbirds



### Major Kim Campbell, USAF

- Former CAP cadet
- Former USAF Academy cadet wing commander
- Safely lands heavily damaged A-10 after sustaining hostile fire over Iraq



# CAP Missions

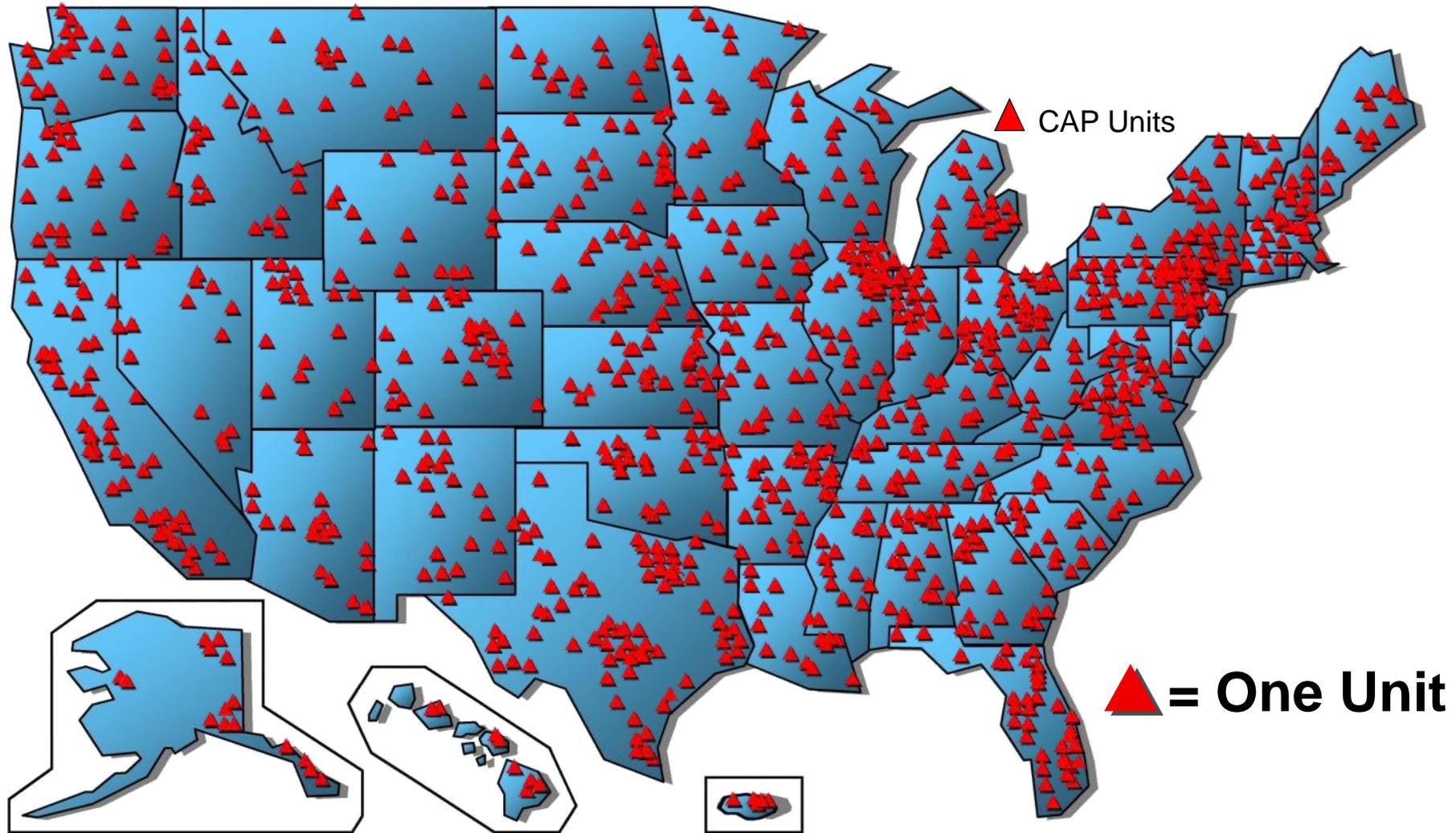
## *Aerospace Education*

- CAP Members
- Aerospace Education Members
- General Public





# Where is CAP?





# CAP in Montgomery County

- Cadet and Senior Squadrons conducting Cadet Programs, Aerospace Education and Activities, and Emergency Services
- Montgomery County Senior Squadron – Montgomery County Airpark, Gaithersburg, seniors only, flying Cessna 182T
- Bethesda Chey Chase Composite Squadron, Montgomery County Public Safety Building, Gaithersburg, seniors and cadets
- Upper Montgomery County Composite Squadron, Salvation Army center, Germantown, seniors and cadets



## How you can help



- Join as a volunteer member
- Become a patron member
- Donate or become a sponsor



# Civil Air Patrol



Lt Chon Gann

Communications Officer

Bethesda Chevy Chase Composite Squadron

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[www.bcc-cap.org/](http://www.bcc-cap.org/)

[www.gocivialairpatrol.com](http://www.gocivialairpatrol.com)