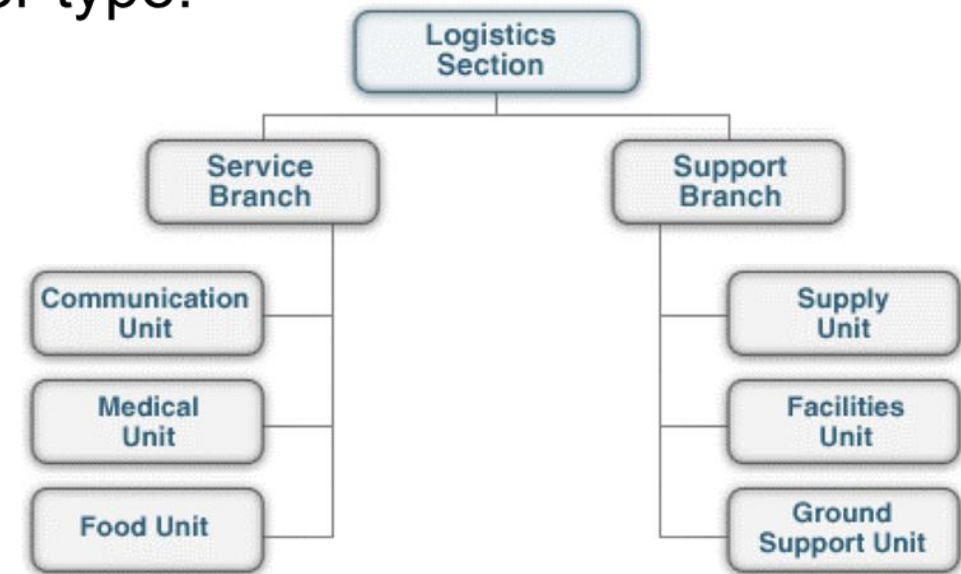
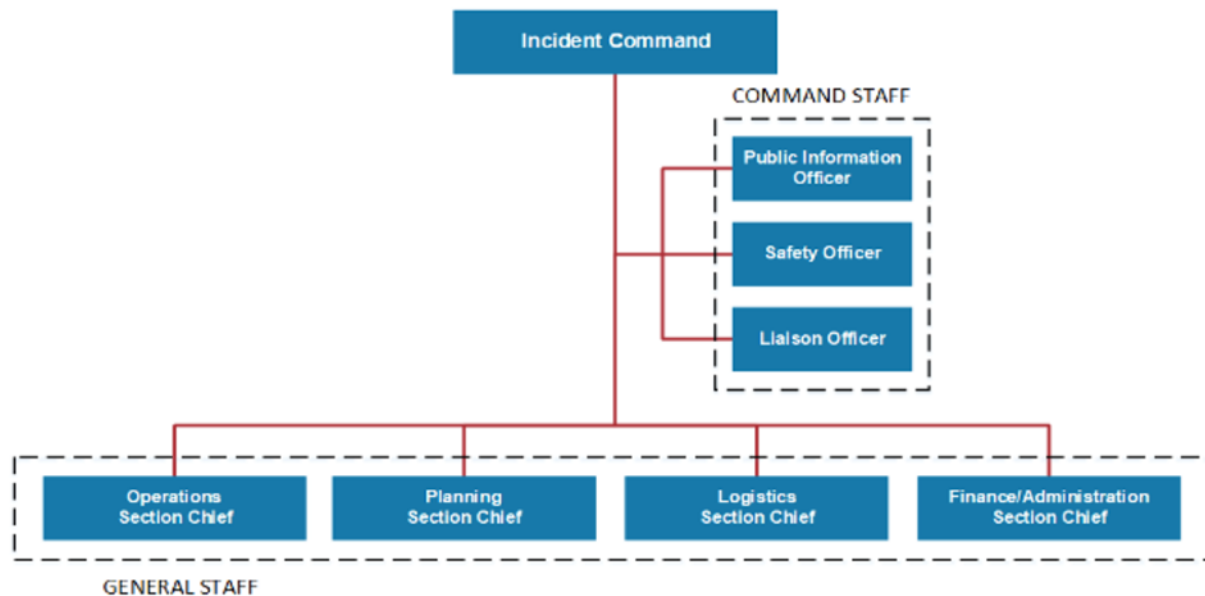


Emergency Communications (EMCOMM)

Overview of the FEMA Incident Command Structure (ICS)

- ICS: A standardized, on-scene, all-hazards incident management concept.
- Key Roles: Incident Commander, Operations Section, Planning Section, Logistics Section, Finance/Administration Section.
- Scalability: Adaptable to incidents of any size or type.



The Value of Emergency Communications



- Importance of reliable communication during emergencies.



- Key Players: **GMRS**, **Amateur Radio**, and other communication systems – **Cellular Telephones**



- How these systems support public safety and disaster response.



The Role of *Amateur Radio* and *GMRS* in Emergency Communications (EMCOMM)

- Enhancing Public Safety through Effective Communication on all Levels
- Professional – **SNACC** (**S**o **NV** **A**rea **C**ommunications **C**ouncil) Metro PD, FD, EMS, City/County
 - **NSRS** (**NV** **S**hared **R**adio **S**ystem) NHP, UNLV, many State Agencies
- Non-Professional – ARES and RACES



CITY OF LAS VEGAS

What are the course fees?

The course is free. The Community Emergency Response Team Program is sponsored through a grant from the Department of Homeland Security.

How do I join?

The CERT course is delivered in the community by a team of first responders who have the requisite knowledge and skills to instruct the sessions. The CERT training for community groups is usually delivered in 2½ to 3 hour sessions, one evening a week over a 6 or 8 week period.

City of Las Vegas EOC

Saturday, August 24, 2024 and Sunday, August 25, 2024

8 a.m. to 5 p.m.

Address: 7551 W. Sauer Drive, Las Vegas, NV 89128 ([map](#))

Contact us at (702) 229-0076 or mredmond@lasvegasnevada.gov



Role of Radios in **CERT**



- Communication Needs: Importance of communication for **CERT** teams during disasters.



- Radios in **CERT**: Use of **GMRS, FRS,** and **Amateur Radio** for coordination.



- Examples: Communication between **CERT** members, with local authorities, and other emergency response teams.



Radios and CERT Operations

Case Study 1: Hurricane Katrina (2005)

- **Scenario:** During Hurricane Katrina, CERT teams were deployed to assist with rescue and recovery operations. Communication infrastructure was severely damaged, making traditional forms of communication difficult.
- **Radio Use:** CERT members used GMRS, FRS, and amateur radio to coordinate with each other, relay information to emergency operations centers, and communicate with other response teams. These radios played a crucial role in organizing search and rescue efforts and managing volunteer resources.



Radios and CERT Operations

Case Study 2: California Wildfires (2017-2020)

- **Scenario:** CERT teams were activated in multiple wildfire incidents across California to assist with evacuations, manage shelters, and provide situational updates to authorities.
- **Radio Use:** CERT members used handheld radios (mostly GMRS and FRS) to maintain communication within their teams, especially in areas where cell service was unreliable. Amateur radio operators also provided vital communication links between different emergency response teams and the incident command sites



Looking for a Communications Platform during an Emergency Situation

HAM	GMRS
MURS	FRS
CELLULAR	CB
MARINE	COMMERCIAL



Overview of Amateur Radio

- Licensing: Three license classes:
 - **Technician** - **General** - **Amateur Extra**
- Capabilities: Long-distance communication, wide range of frequencies, and modes.
- Usage: **Skywarn**, **ARES**, and **RACES** involvement in emergency communication. APRS and digital messaging.
- Comparison with GMRS: Greater flexibility and range but requires more technical knowledge and training.



Overview of GMRS (General Mobile Radio Service)

- The General Mobile Radio Service (GMRS) is a licensed radio service that channelized around 462 MHz and 467 MHz. The most common use of GMRS channels is for short-distance, two-way voice communications using handheld radios, mobile radios and repeater systems. The FCC also allows short data messaging applications including text messaging and GPS location information.
- Licensing: Simple process; online application, \$35 for 10yrs, Shared License
- Range: Suitable for local communication with repeaters extending range.
- Usage: Family communication, neighborhood watch, and emergency communication.
- Comparison with Ham Radio: Simpler alternative with fewer technical requirements. Channelized. Less Versatility



Advantages of Amateur Radio in Emergencies

- Flexibility: Wide range of frequencies and modes for various situations.
- Interoperability: Ability to communicate across long distances and with different services. **REPEATER LINKING / NETWORKING**
- Community: A well-organized network of trained operators ready to assist.
- Amateur Radio: Best choice for those who need extensive communication capabilities, message handling and wide-area communications.



Advantages of GMRS in Emergencies

- Simplicity: Ease of use for non-technical users.
- Local Coverage: Excellent for neighborhood and community-level communication.
- Cost: Relatively low cost compared to other radio systems.
- Choosing GMRS: Ideal for families and small communities needing reliable communication.



GMRS and Amateur Radio Working Together

- Complementary Roles: GMRS for local, Amateur Radio for broader communication.
- Examples: Coordinated efforts during natural disasters, search and rescue operations.
- Real-Life Cases: Success stories of collaboration between GMRS and Amateur Radio operators.

(ARRL – QST October 2023 – www.arrl.org)





Challenges and Considerations

- Regulation: Adherence to FCC rules and regulations.
- Training: Importance of training together and joint preparedness for effective use.
- Coordination: Need for clear protocols and cooperation between services.
- Making the Choice: Considerations for choosing between GMRS and Amateur Radio.



Summary

- **Logical Conclusion:** The importance of GMRS and Amateur Radio in emergencies.
- **Call to Action:** Encourage "cross-licensing" for all operators: Ham  GMRS and GMRS  Ham and more training.
- **Final Thought:** The power of Emergency Communication will continue saving lives – *Keep Communicating!*



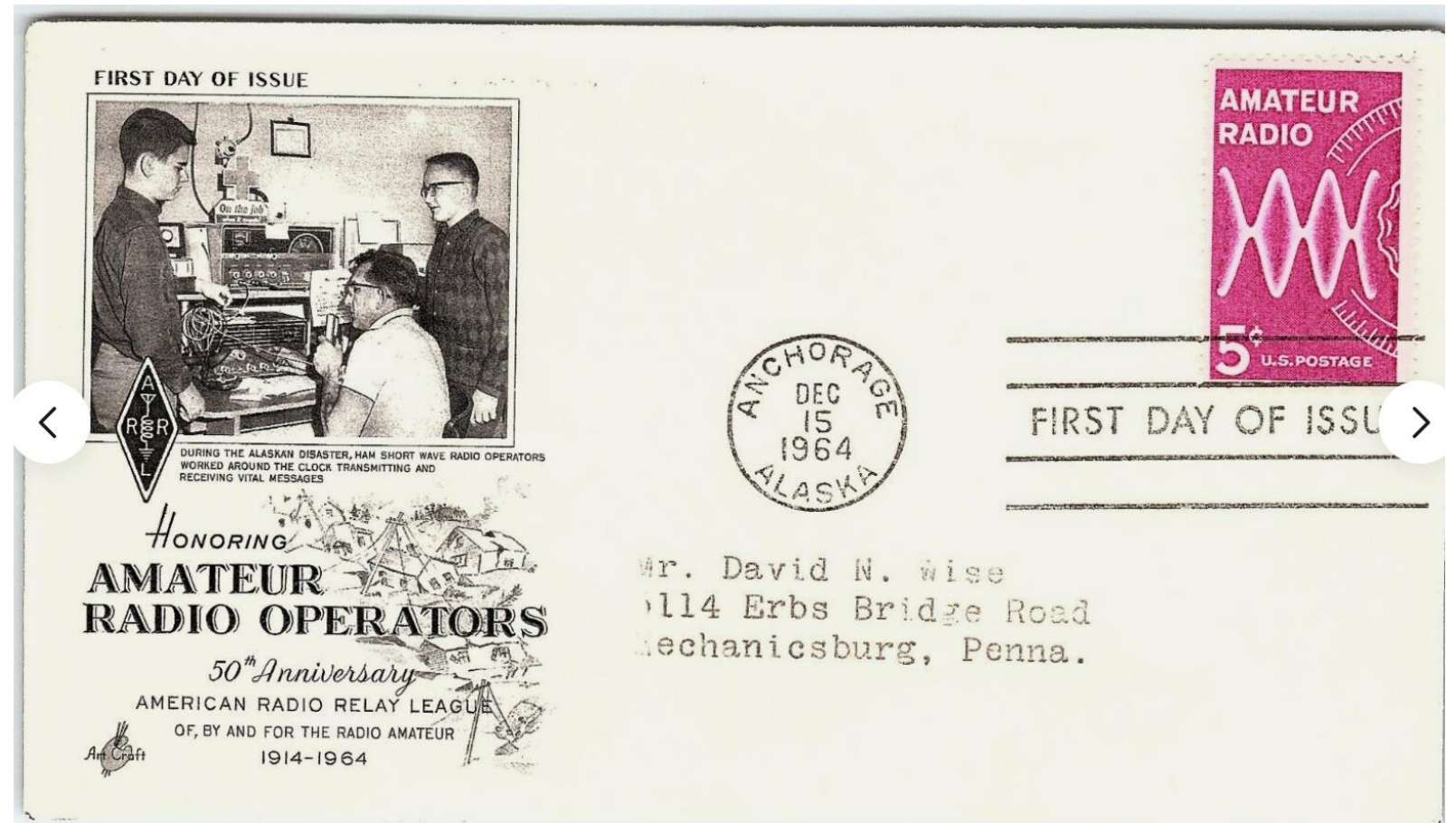
Names & Numbers

•

	US	Nevada	Clark Co	HARC
Active Amateur Radio Operators	847,048	9322	4600	219
GMRS Licensees	296,865	5131	3370	
Number of Hams with GMRS License	80,595	1276	769	120



Why a 5-cent Amateur Radio Stamp?



GigaParts

Technology Superstore

Explorer QRZ-1 5W VHF/UHF Handheld Transceiver

The **Explorer QRZ-1** is a lightweight, compact, and easy to operate VHF/UHF handheld transceiver that is perfect for new and old hams alike! It's rugged and uses high-quality materials. The speaker is loud and clear, and the FM broadcast receiver present on the **QRZ-1** is one of the best-sounding receivers you'll find on a handheld radio.

You can Purchase your **Explorer QRZ-1** handheld radio at GigaParts today! **SKU:ZXP-QRZ-1 \$59.95**



Customer Service:

1-256-384-1008

9am-6pm CST



General Membership Meeting
August 27, 2024

Gene McAvoy – KG7XD

Amateur Radio, GMRS, and Emergency Communications