

What Is Amateur Radio and Why Is It a Community Resource?

Local Emergency Planning Committee

December 15, 2016

Presented by:

Bob Miller WA6MTY Emergency Coordinator
Washoe County Amateur Radio Emergency Service





Agenda

- What Is Amateur Radio?
- Why Is Amateur Radio a Community Resource?
- How Can We Help?



What Is Amateur Radio?

- Narrated by former CBS news anchorman Walter Cronkite, KB2GSD, “*Amateur Radio Today*” is a video which showcases the public service contributions made by hams throughout the country.



What Is Amateur Radio?

The Federal Communications Commission definition of the Amateur Service is:

"A radio communication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs,

that is, duly authorized persons interested in radio technique solely with a personal aim and **without** pecuniary interest."



What Is Amateur Radio?

- **FCC Part 97.1 Basis and purpose.**
- (a) Recognition and enhancement of the value of the amateur service to the public as a **voluntary, noncommercial** communication service, particularly with respect to providing **emergency communications.**



What Is Amateur Radio?

- Amateur Radio operators, over **700,000** licensed by the FCC, can be found in every corner of the US.”
- They use Amateur Radio as a hobby to contact other Amateur Radio operators halfway around the world or even across town!



Operation During a Disaster

- **FCC Part 97.401 (a)** When normal communication systems are overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur in an area where the amateur service is regulated by the FCC, an amateur station may make transmissions necessary to meet essential communication needs and facilitate relief actions.



Emergency Communications

What is an emergency?

- "...Planned or unplanned occurrence or event, regardless of cause, which requires action by emergency service personnel to *prevent or minimize loss of life or damage to property and/or natural resources.*"

What is a communications emergency?

- "...The result of...anything that disrupts normal communications."
- "...When communications processes are inadequate to handle the flow required..."



Emergency Communications

How does ARES/RACES serve?

- Provide communications where the regular systems cannot.
- Provide additional and redundant communications
- Volunteer time and skills
- Provide the supporting equipment and infrastructure



Emergency Communications

What do we bring?

- A “service attitude”
- Knowledge, skill, experience, equipment
- ICS Training
- Certification in emergency communications
- We are called amateurs because we cannot be paid therefore our service is FREE!!



American Red Cross

- Shelter to Chapter Communications
- Chapter to Headquarters Communications.
- Health and Welfare Traffic
- Thank you message KATRINA



**American
Red Cross**



Skywarn

- SkyWarn is a National Weather Service (NWS) program of trained volunteer severe weather spotters.
- SkyWarn volunteers support their local community by providing the NWS with timely and accurate significant weather reports.
- The key focus of the SkyWarn program is to save lives and property through the use of the observations and reports of trained volunteers.





Nevada Hospitals

- In 2008 the Director of Hospital Preparedness obtained a grant to equip 60 Nevada hospitals with backup Amateur Radio Equipment.



ARES Training

- ARRL EMCOMM-1 Communications Training
- This training includes ICS100, ICS200, ICS700, ICS800



Just Where Have Amateurs Helped Out?

- Tornadoes
- Hurricanes
- Floods
- Earthquakes
- Wildfires
- Hams Assisted in Debris Search after Space Shuttle Explosion February 2003



Quotes from FEMA

Craig Fugate KK4INZ
FEMA ADMINISTRATOR

**“Amateur Radio is often our last line of
defense”**

**“When you need Amateur Radio, you
really need them.”**



Quote from The F.C.C.

Riley Hollingsworth

Former FCC Special Counsel for Amateur Radio Enforcement

"Amateur Radio is the only fail-safe communications service in the world"

Why?

US Amateur Radio Bands

US AMATEUR POWER LIMITS

FCC 97.213: An amateur station must use the minimum transmitter power necessary to carry out the desired communications. (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

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www.arrl.org
225 Main Street, Newington, CT USA 06111-0484



KEY
E = RTTY and data
A = phone and image
G = CW only
T = SSB phone
N = USB phone, CW, RTTY, and data
N.T. = Fixed digital message forwarding systems only

C = Amateur Extra
A = Advanced
G = General
T = Technician
N = Novice

See ARRLWeb at www.arrl.org for detailed band plans.

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How?

- AM
- FM
- SINGLE SIDEBAND
- MORSE CODE
- DIGITAL DATA
- IRLP
- TELEVISION



How Can We Help?

- During an EMERGENCY
- CELL PHONE Failure
- RADIO COMMUNICATIONS Failure
- Local INTERNET Failure
- Contact your Emergency Manager to request Amateur Radio services.



Capabilities

- NV Repeaters 499
- North West NV Repeaters 409
 - Includes Eastern California Repeaters



Proud Associations:

- Aaron Kenneston KE7GFF WC Emergency Manager
- Charles Sharke KC7JKJ Pershing Cnty Emergency Manager
- Chris Smith W4HMV Previous NV Chief EM
- Craig Harrison KE6UOW WC Telecomm Manager (RETIRED)
- Ed Atwell KB7UHM Emergency Manager UNR
- George Molnar KF2T Previous NV Interoperability Director
- Kent Choma KF7EMU EM St. Mary's Hospital
- Rob McLaughlin KG7AAK EM VA Medical Center
- Sandy Munns KG7BNZ EM City of Reno Fire Department (RETIRED)
- Shawn Taylor N7LQ WC Senior Network Engineer



For More Information

www.wcares.us

www.arri.org

QUESTIONS?

