

Allen Pitts, W1AGP
Media & PR Manager, ARRL
With help from
S. Katz, N8WL
H. Kramer, WJ1B

Amateur Radio...



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www.emergency-radio.org

Amateur Radio

- ***Often called “ham radio”***
- ***Has consistently been the most reliable means of communications in emergencies***



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“Amateur”

- *ám'e-túr – noun*
- ***A person who engages in an art, science or other activity purely for the personal interest or self-improvement value of it, rather than a financially compensated profession***
 - ***Amateur athlete***
 - ***Amateur astronomer***
 - ***Amateur musician***



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Simply put – ham radio works!

- Most of the time things work fine***
- Despite the development of complex systems – or maybe because they ARE so complex – ham radio has been called into action again and again to provide communications when it really matters***

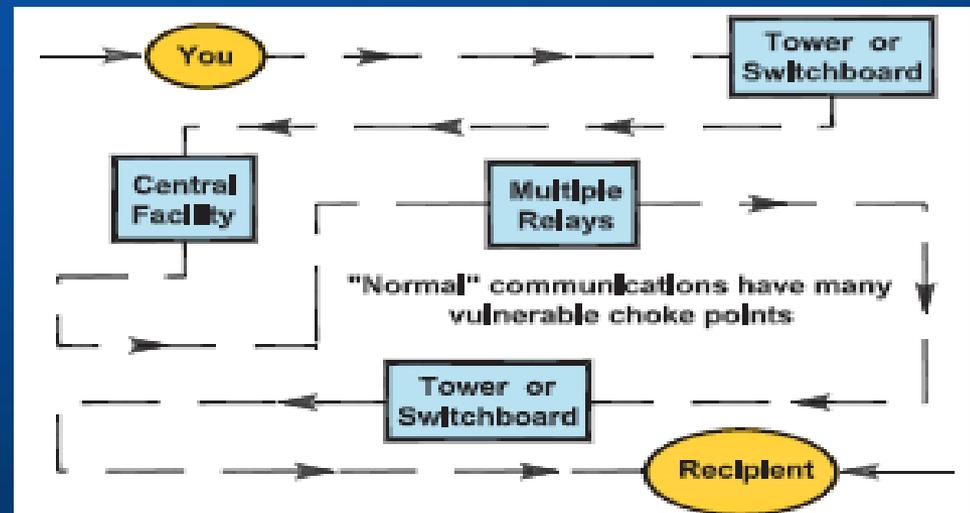


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Conventional communications systems

- *Telephones, cell phones, Internet, trunk lines, and satellite phones all go through many vulnerable choke points*



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Other reasons they may fail

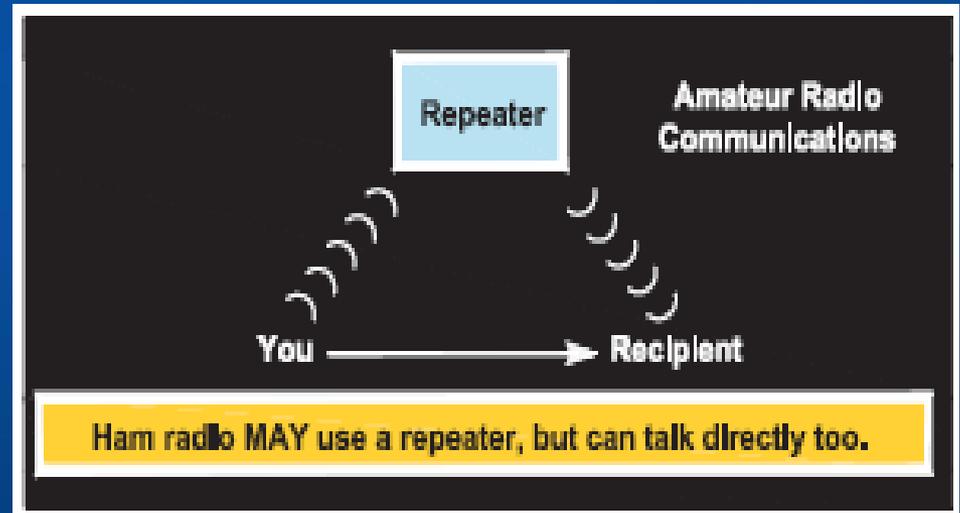
- *They need electrical power*
- *Even when functioning, they can be overwhelmed with cries for help and families seeking information*



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Ham Radio is different

- *Hams can “go direct” and talk straight to each other without intervening infrastructure*



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***By selecting the right frequencies
Hams can talk across town or
around the world***



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In an emergency...

***When your family's lives may be
at risk...***

***which communications system
would YOU want to have?***



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Every year hams help out

- *Hawaiian earthquake 2006*
- *NE states flooding 2006*
- *Katrina, Wilma and Rita 2005*
- *TX, OK, NM wildfires 2005*
- *Charley, Frances, Ivan, and Jeanne 2004*
- *Asian tsunami 2004*
- *Central CA earthquake 2003*
- *Isabel 2003*



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and...

- ***NE blackout 2003***
- ***Shuttle Columbia Recovery 2003***
- ***CO wildfires 2002***
- ***KY flooding 2002***
- ***Terror attacks 9/11/2001***
- ***TWA plane crash 1996***
- ***OK City bombing 1995***
- ***And many, many others***



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National Weather Service

- ***Relies on ham radio operators***
- ***SKYWARN program***
- ***Ground level reports***
- ***Radar can't see everything***

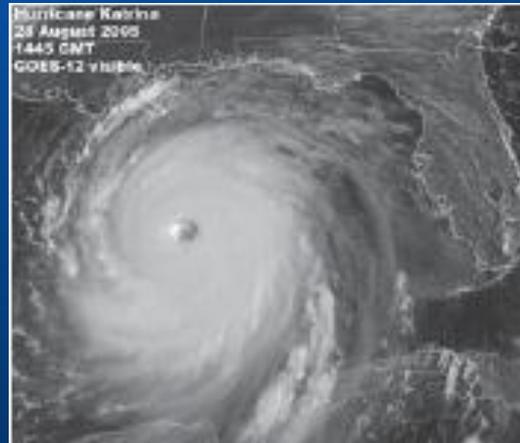


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National Hurricane Center

- ***Miami, FL***
- ***Relies on ham radio***
- ***Has station WX4NHC***
- ***Receives reports from hams in affected areas on the HWN***



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Hundreds of hams...



- ***Volunteered for service to the devastated areas of the Gulf Coast after Hurricanes Katrina, Rita, and Wilma pounded 5 states and destroyed other communications systems***
- ***Received commendations from President and Congress for their meritorious work***
- ***“When all else fails, ham radio works!”***



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Within minutes of the 9/11 terrorist attacks...

- ***Ham operators communicated from emergency operations centers as other system failed***
- ***They continued for weeks to handle emergency and other important messages for***
 - ***Disaster and government agencies***
 - ***Displaced families***

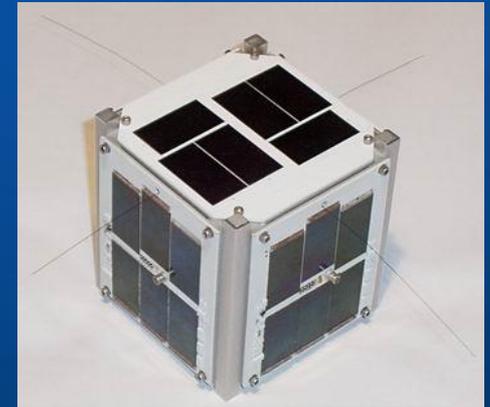


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Hams stay prepared

- *When there isn't an emergency, hams use all sorts of radios and antennas on many different frequencies to communicate with other hams*
 - *Across town*
 - *Around the state*
 - *Around the country*
 - *Around the world*
 - *Even outer space!*



They use amateur radio

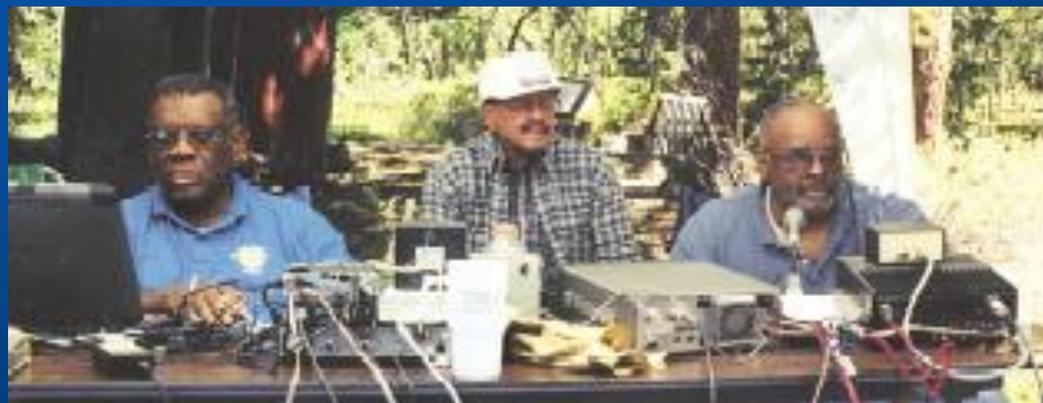
- ***For personal enjoyment***
- ***For keeping in touch with friends and family***
- ***For public service events***
 - ***Races***
 - ***Parades***
 - ***Public events***
- ***For experimenting with technology***



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Hams...

- *Meet on the air and in person*
- *630,000 hams in the USA*
- *Ham radio clubs and gatherings all over the country*



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Ham radio



- ***Has been around for over a century***
- ***Has grown into a worldwide community of licensed operators*** (approx. 2.5M)
- ***Uses every conceivable means of communications technology***



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Hams communicate in many ways

- ***Microphones (voice)***
- ***Telegraph (Morse Code)***
- ***Computers***
- ***TV Cameras***
- ***Amateur Radio Satellites***



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Ham radio

- ***Attracts those who have never held a microphone to***
- ***The technical expert who grew up with a computer***
- ***Even rocket scientists and rock stars are in the ham ranks!***



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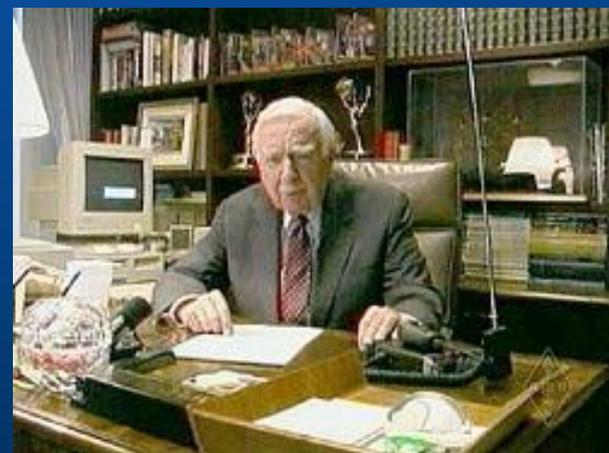


Some famous hams...

- ***Joe Walsh***
WB6ACU of the
rock group, The
Eagles



- ***News anchor***
Walter Cronkite
KB2GSD



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More famous hams...

- *Senator Barry Goldwater (Rep. AZ) K7UGA*
- *King Hussein of Jordan, JY1*



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But most hams...

- ***Are just normal folks who***
 - ***Transmit voice, data, and pictures through the airwaves***
 - ***Use the Internet, lasers, and microwave transmitters, satellites, and TV***
 - ***Range in age from youngsters to great grandparents***

Clarence Hollow - Age 91

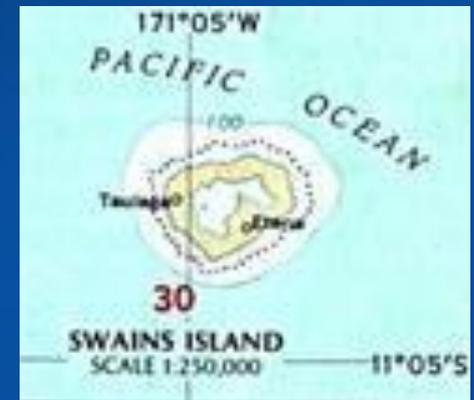


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Ham travelers use it

- *Boaters*
- *RV-ers*
- *Outdoor enthusiasts*
- *All find it an excellent way to maintain communications wherever they are*



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And...

- ***Some hams even travel to unusual places near and far just to make contacts on the air***



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Big station or small and portable



- ***Hams enjoy the security of knowing they can get a message through***
- ***In almost any situation***
- ***Without depending on a fragile infrastructure***
 - ***Which can fail***
 - ***Or become overloaded and unusable***



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FEMA advises...

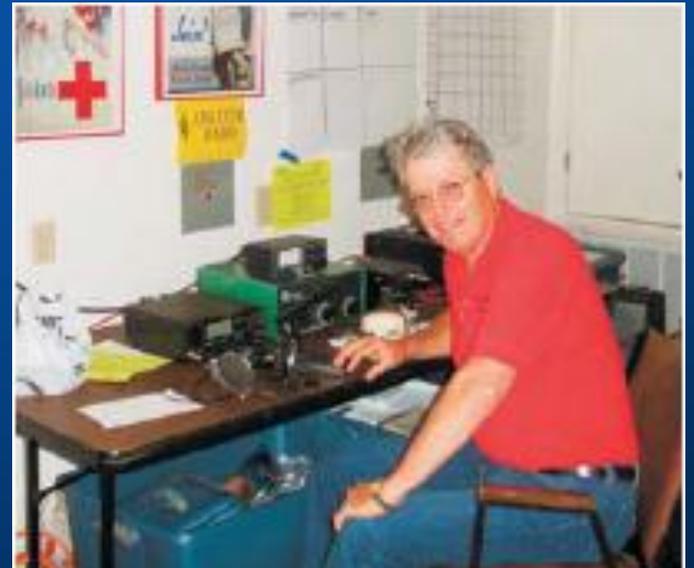
- ***In a crisis, you should plan to be totally on your own for at least 3 days***
- ***How will you communicate?***



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You can have this capability

- ***For yourself***
- ***For your friends***
- ***For your family***



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Getting your own ham license



- ***License is necessary***
- ***FCC regulates Amateur Service***
- ***Morse code testing no longer required***
- ***Three license levels***

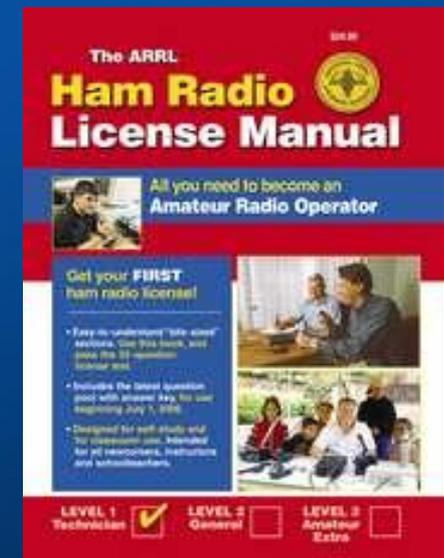


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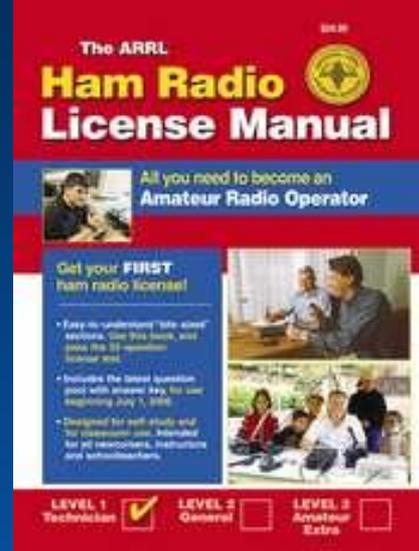
You don't buy it – you EARN it

- ***Entry level license is easy***
 - ***Takes a week or two of study***
 - ***On your own***
 - ***Study books***
 - ***Online courses***
 - ***Groups and classes***
 - ***Local clubs***



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Costs



- **About \$40 in books and fees**
- **About \$200 for first radio and other gear**
- **Used equipment is available, too**



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Join ARES



- ***Amateur Radio Emergency Service***
- ***Must have ham radio license***
- ***Continually learn about emergency communications***



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Make friends and enjoy the challenge!

- ***Practice regularly***
 - ***On-the-air “nets” or networks***
 - ***Public events***
 - ***Drills and simulated emergencies***



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ARES



- ***Has formal national agreements to provide emergency communications for***
 - ***FEMA***
 - ***Citizen Corps - DHS***
 - ***American Red Cross***
 - ***Salvation Army***
 - ***Many other organizations***



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American Radio Relay League

- The national association for amateur radio***
- Founded in 1914***
- Headquarters in Newington, CT***
- 150,000 members strong***
- Primary source of ham radio information in the US***



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ARRL provides

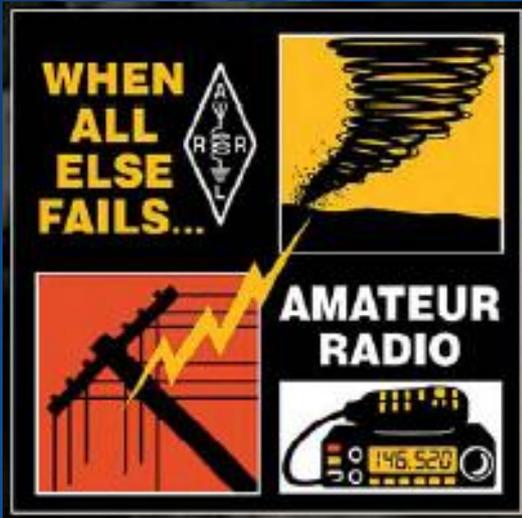
- ***Books, magazines and other printed matter***
- ***Web site www.arrl.org***
- ***News and information bulletins on the air***
- ***Continuing education classes***
- ***Support***
- ***Information***
 - ***Individuals***
 - ***Clubs***
- ***Many other benefits***



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Simply stated...

- *Ham radio provides the broadest and most powerful wireless communications capability available to any private citizen anywhere in the world*



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Where do you start?

- ***www.emergency-radio.org***
- ***www.arrl.org***
- ***You can also find more information on our local clubs at – www.arrl.org/findaclub***



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With thanks to...

– YOU, the audience!



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Questions?



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