

# A hobby that's fun & useful...

## A quick overview of amateur (ham) radio



Presented to the:  
Newnan Rotary Club



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Date: September 18, 2020

# Agenda

- What is Amateur Radio?
- Getting Licensed
- Why is Amateur Radio so Much Fun?
- Why is Amateur Radio an Important Skill?
- Backup Communications
- Support for Local Events
- Skywarn WX Spotting
- Educational Opportunities
- Basic Radio Equipment
- Amateur Radio Bands
- Local Radio Repeaters
- Fun Things to Do
- Where to Get More Information





# What is Amateur Radio?

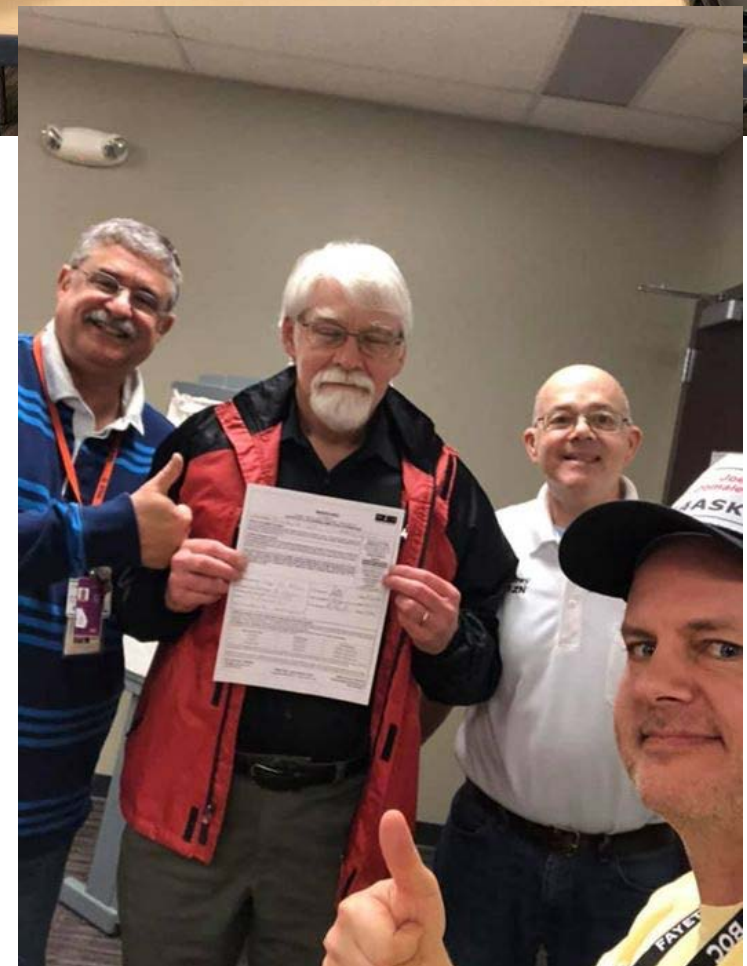
- Federally licensed radio service defined and regulated by FCC Part 97
- Fun and useful activity that involves radio technology
- Brings together people, electronics, and technology
- Allows people to talk across town, the world, and even into outer space!
- Easy to learn and enjoy with simple equipment
- Can be a lifeline in times of need when traditional means of communications aren't working





# Getting Licensed

- You must take and pass the FCC Amateur Radio exam
- Level 1 is the Technician License
- Study materials are plentiful online
- Locate a testing location (ARRL)
- Take an online practice test to check your progress
- Very easy to pass, no morse code is required anymore!



# Why is Amateur Radio so Much Fun?

- Can be enjoyed indoors (ham shack) or outdoors (portable operation)
- The social aspect of talking to friends and meeting new people
- Anyone can participate - young and old alike
- You can start with simple equipment – a \$25 portable radio
- The opportunity to use your radio skills to help others
- The satisfaction of putting together a station and making contacts
- The ability to talk locally, nationwide, world-wide, and into space!
- Multiple opportunities to learn about new things





# Why is Amateur Radio an Important Skill?

- Backup communications
- Support for local events
- Skywarn WX spotting
- Search and Rescue
- Locating interference
- Educational





# Amateur Radio – Backup Communications

“When all else fails...”

- Public safety support
- Auxiliary communications
- Hurricanes & Tornadoes
- Power outages



*Resiliency* - Each radio operator maintains their own gear



# Amateur Radio – Support for Local Events

- Parades
- Road races
- Triathlons & bike events
- Festivals
- Trail events





# Amateur Radio – Skywarn WX Spotting

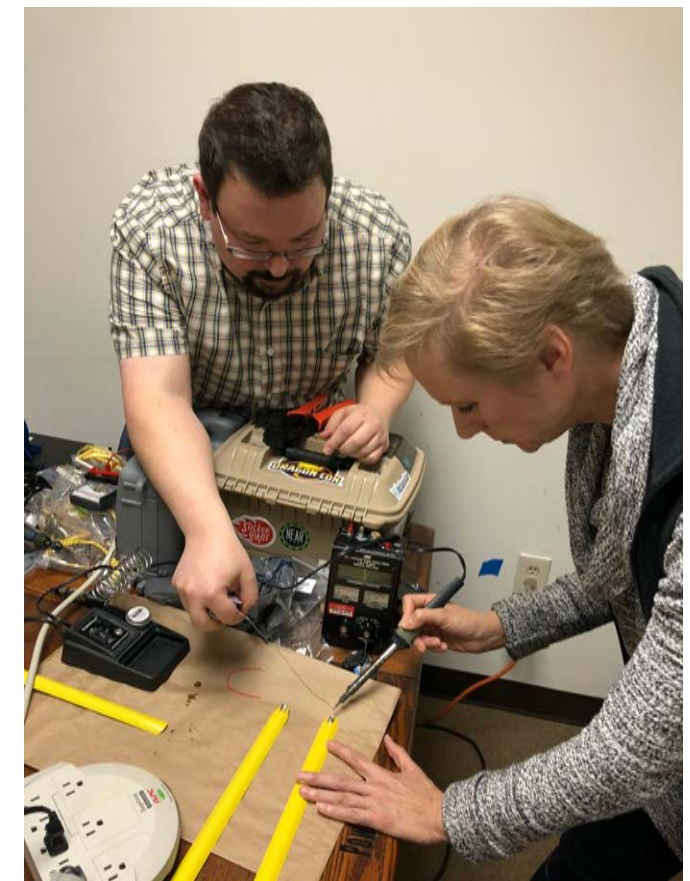
- NWS Skywarn program
- “Spotter activation”
- Skywarn linked network
- Assistance at NWS
- Spotters in the field
- Public relations - SRD





# Amateur Radio – Educational Opportunities

- School clubs
- Scouting
- STEM activities
- Contact with the ISS
- Fox hunting (ARDF)
- Science fairs
- Building tech





# Basic Radio Equipment



Handheld Radio – “HT”



Portable Radio



Base Station Radio

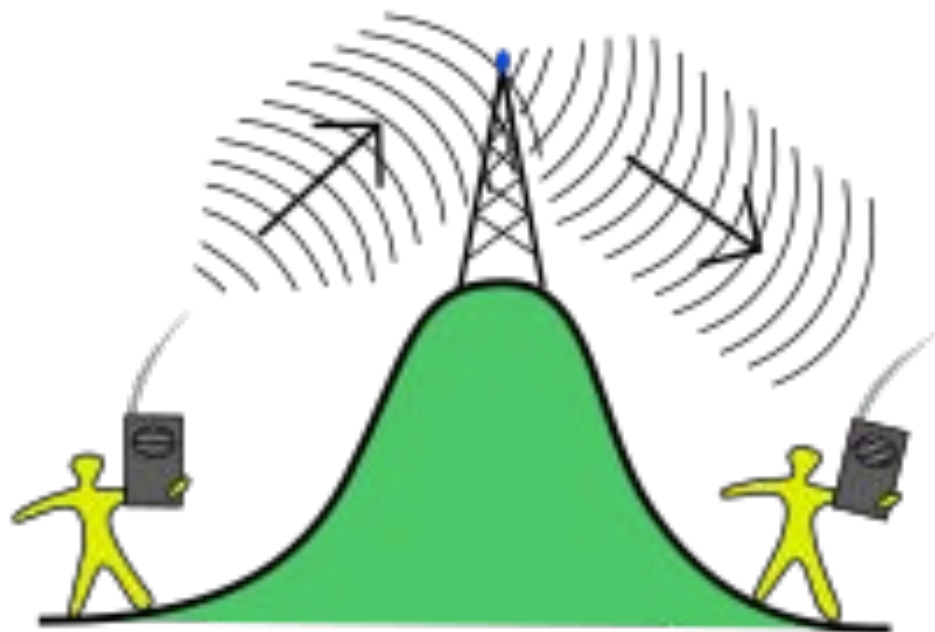


Mobile Radio



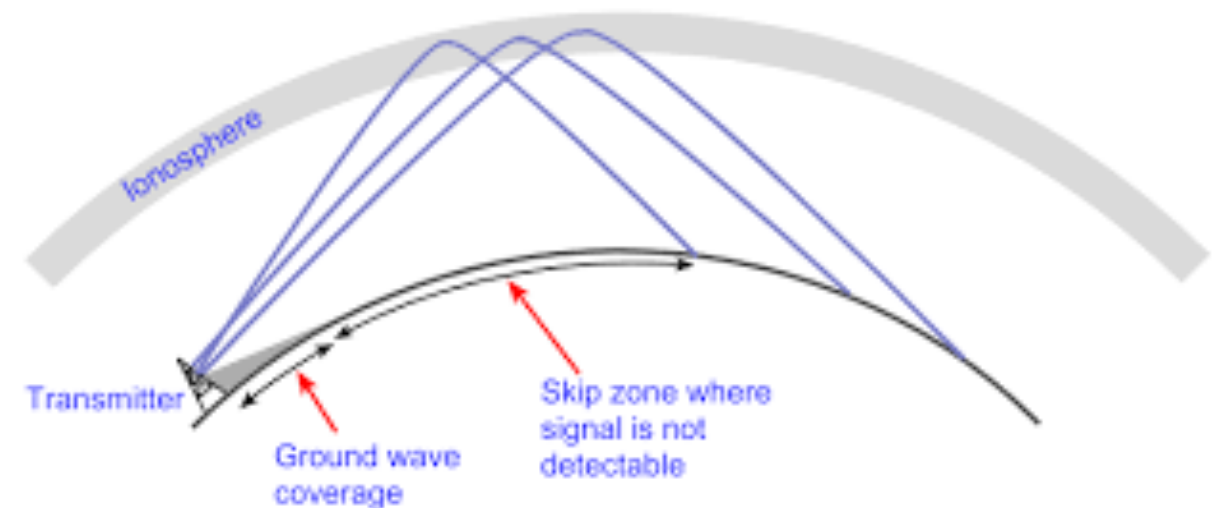
# Amateur Radio Bands

## VHF / UHF – line of sight



- Most commonly used
- Local coverage
- Simple equipment
- Very reliable
- Lots of usage scenarios

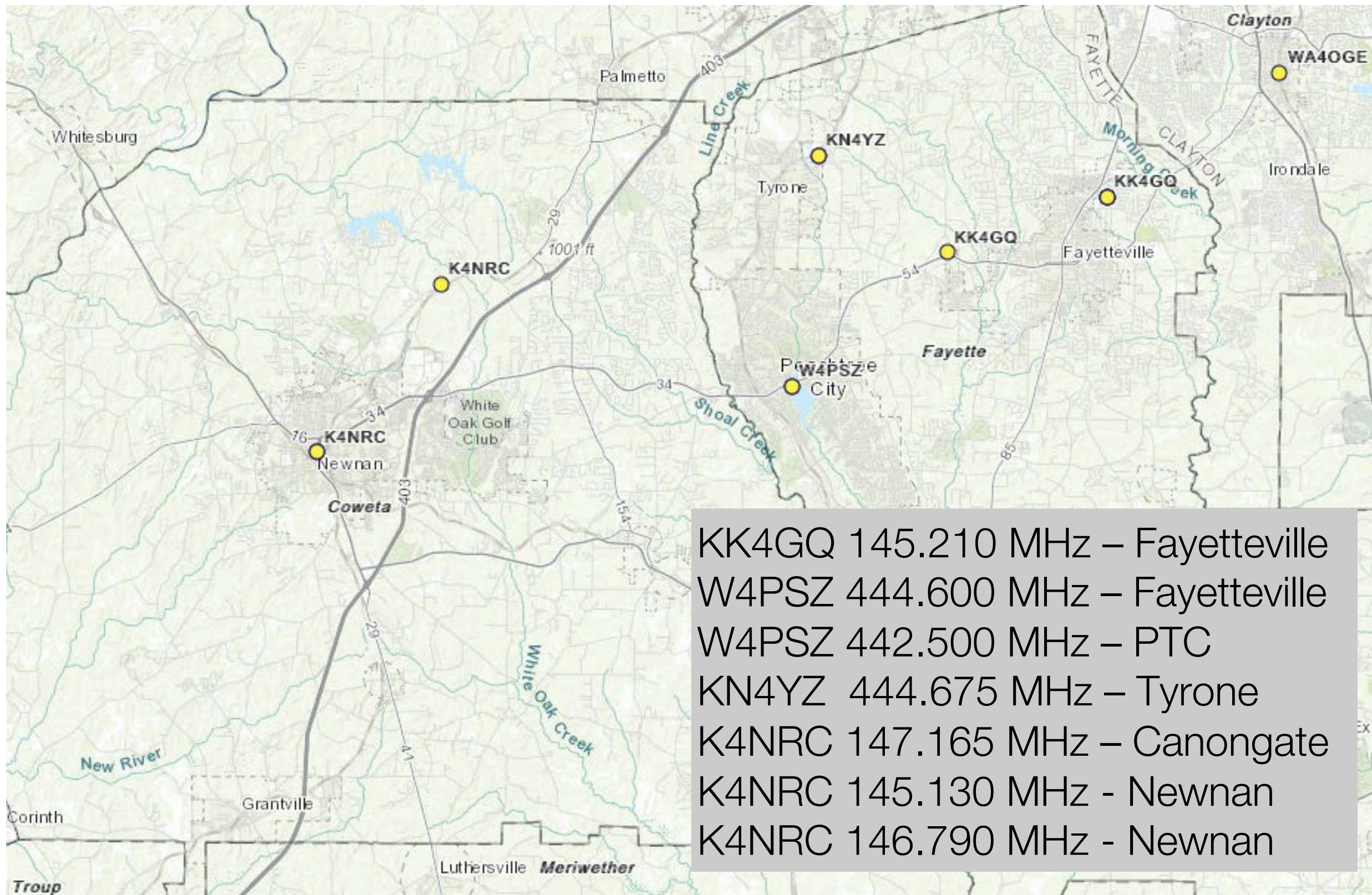
## HF – world-wide



- Most commonly thought of
- World-wide coverage
- Complex equipment
- Can be unpredictable “magic”
- Lots of fun



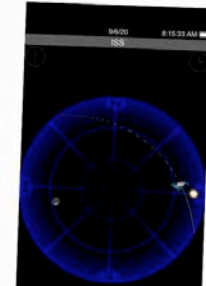
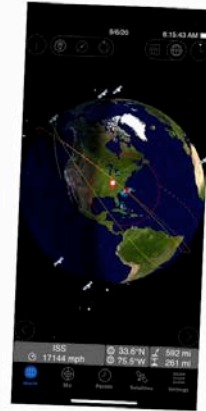
# Local Radio Repeaters





# Fun Things to Do with Amateur Radio

## Talking on the ISS



## SOTA



## Fox Hunting





# Where to Get More Information

- ARRL – <http://arrl.org> (start here!)
- BGMRC - <https://bgmrc.org>
- FCARC – <https://kk4gq.org>
- Skywarn - <https://www.weather.gov/SKYWARN>
- Georgia AUXC – <https://gaauxcomm.org>
- Georgia ARES - <https://gaares.org>
- Contact me! [ki4ask@arrl.net](mailto:ki4ask@arrl.net)

