

A hobby that's fun & useful...

A quick overview of amateur (ham) radio



Presented by:

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Agenda

- What is amateur (ham) radio?
- How do you become a radio operator?
- Why is amateur radio fun & useful?



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



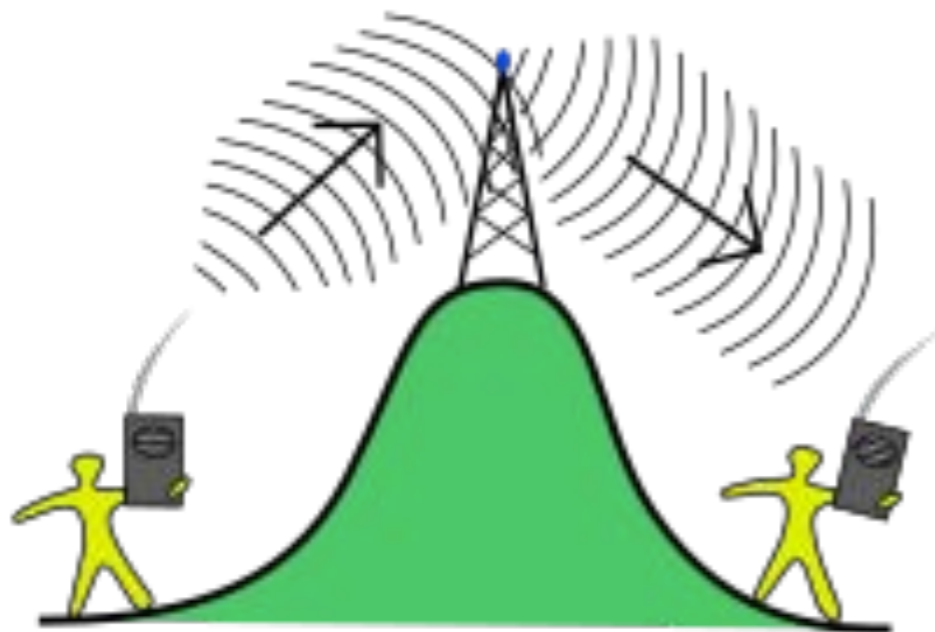
How to Get Licensed

- 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
<https://arrl.org>
- Take an online practice test to check your progress
- Very easy to pass, no morse code is required anymore!



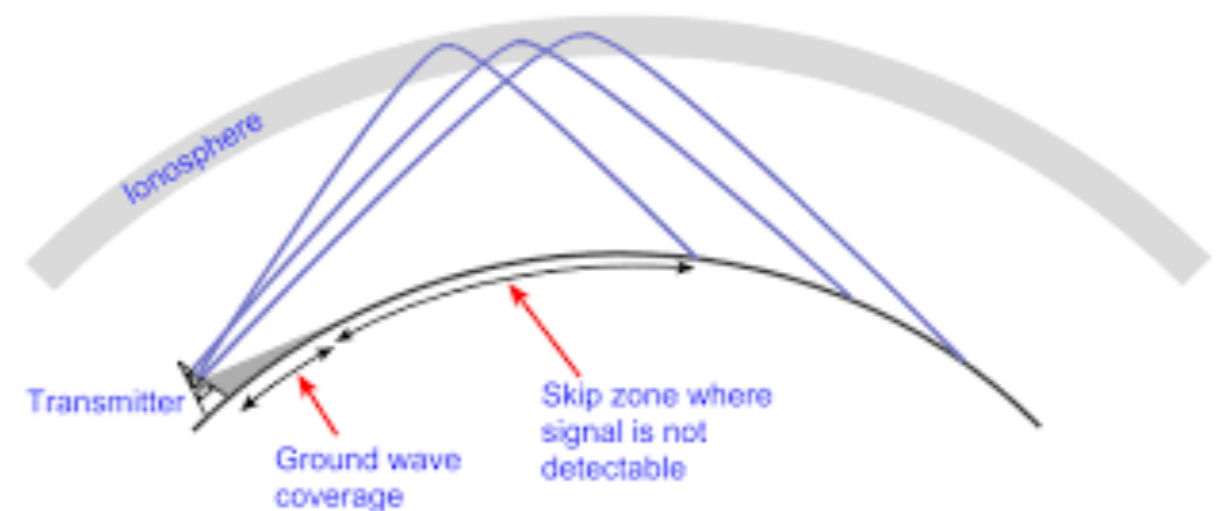
Amateur Radio Bands

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

Basic Radio Equipment



Handheld Radio – “HT”



Portable Radio



Base Station Radio



Mobile Radio

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



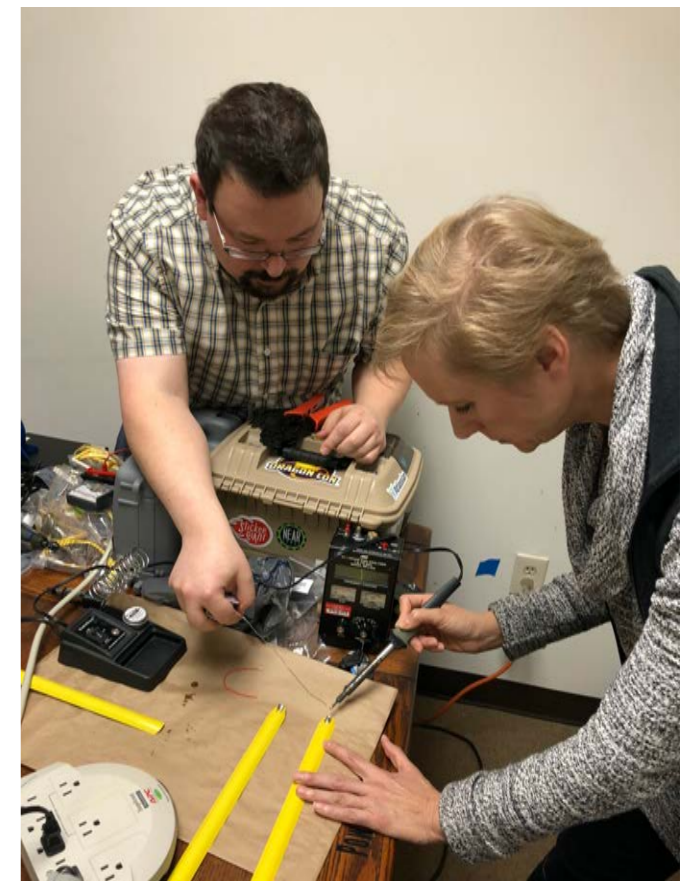
Why is Amateur Radio an Important Skill?

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



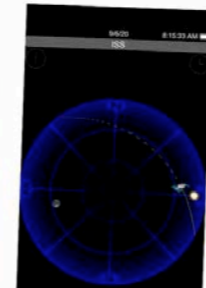
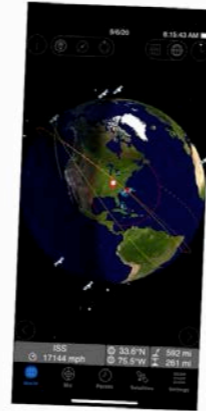
Amateur Radio – Educational Opportunities

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

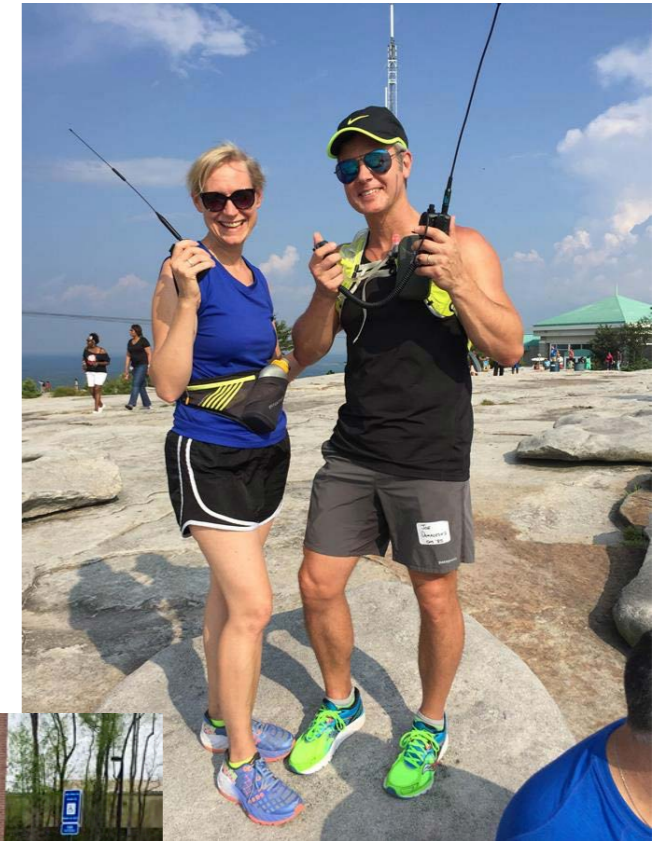


Fun Things to Do with Amateur Radio

Talking on the ISS



SOTA



Fox Hunting



Where to Get More Information

- ARRL – <http://arrl.org> (start here!)
- FCARC – <https://kk4gq.org>
- Skywarn - <https://www.weather.gov/SKYWARN>
- Georgia AUXC – <https://gaauxcomm.org>
- Georgia ARES - <https://gaares.org>
- Contact me! mdomaleski@student.clayton.edu

