

Note: We will be recording all Bootcamp Sessions. Anyone not wishing to be recorded should mute their video or disconnect.



INTRODUCTION TO EMCOMM BREAKOUT SESSION

Ham Bootcamp
Fall 2022



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A Bit About Me

- Stu Solomon - W1SHS
- Career Spent in High Tech Industry
- Licensed Since 2019
 - Technician 1/31/19
 - General 2/15/19
 - Extra 3/5/19
- Assistant Section Manager, Eastern MA 11/29/19
- District Emergency Coordinator, Eastern MA 3/30/20
- Assistant Section Emergency Coordinator, Eastern MA 9/15/22
- ARRL Volunteer Examiner
- SKYWARN Coordinator and Net Control for NWS Boston/Norton Coverage Area

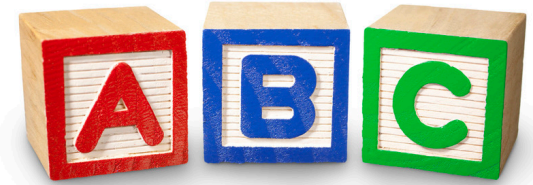


Who is This Presentation For?

- Anyone With Interest in Public Service & Emergency Communications
- New and Seasoned Amateur Radio Operators
- Those Wishing to Increase Their Radio Skills
- Exposure to Aspects of Amateur Radio Not Typically Exposed To
- Desire to Use Their New Skills in the Interest of Public Service



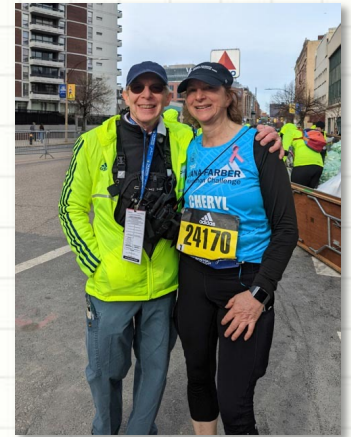
EmComm Alphabet Soup



- **ARES® - Amateur Radio Emergency Service**
 - **RACES - Radio Amateur Civil Emergency Service**
 - **AUXCOMM, ACS - Auxiliary Communications Service**
 - **NTS - National Traffic System**
 - **SKYWARN - National Weather Service**
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- **MARS - Military Auxiliary Radio System**
 - **SHARES - *SH*Ared *RE*Sources High Frequency Radio Program**
 - **CERT - Community Emergency Response Team**
 - **COML/COMT - Communications Leader/ Technician**
 - **ARESMAT – ARES Mutual Assistance Team**
 - **ARDEN - Amateur Radio Emergency Data Network - Mesh Networking**

What Do EmComm and Public Service Communicators Do?

- Message Handling
 - Formal and Informal Messages
 - Health and Welfare Messages
- Situational Reporting
 - Report Local Conditions and Infrastructure Issues
 - Roads, Bridges, Power Outages, Flooding
 - Weather Conditions
- Provide Inter-Organizational Communications
- Assist Partner Agency Leadership with Communications Support
- Communications Links Between a Disaster Area and Outside World
- Public Service Event Communications



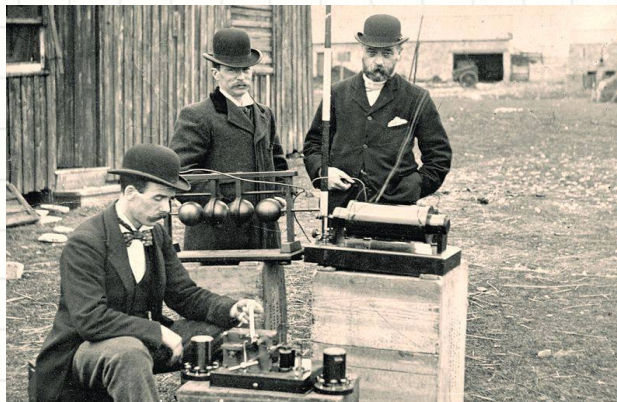
Skills You Will Learn

- Message Handling
 - Voice
 - Forms/Data - ICS, Red Cross
 - Digital Modes - Winlink, Fldigi
- Situational Reporting
- How to Be an Effective Net Control Operator
- Public Service Event Communications
- Setting up a Portable Station and Troubleshooting
- Understanding the Best Transmission Modes & Bands to Use
- Ability to be Flexible and Improvise When Things Don't Go According to Plan!



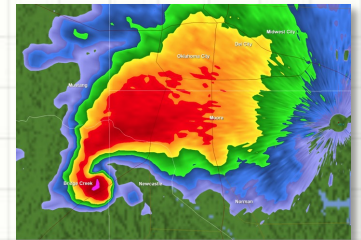
How Will I Learn These Skills?

- Learn from Fellow ARES Team Members
- Participate in Local and Regional Nets
- Practice Being a Net Control Operator
- Join SKYWARN and Participate in Call Ups
- Free Online Courses from FEMA and ARRL
- EmComm-Training.org – Winlink Thursdays
- Get involved with Exercises and Drills
- Participate in Skills Practice Nets
- Field Day



When Will I Put These Skills to Use?

- Callups and Deployments Can be Anticipated or Unanticipated
- Callups Can Vary Greatly by Region of Country
- Severe Weather Events
- Natural Disasters
 - Earthquakes, Mudslides, Wildfires
- Infrastructure Failures
 - Power, Water, Communications, Roads, Bridges
- Public Service Events
- Search and Rescue Operations
- Rapid Response Teams



What is ARES®?



- Amateur Radio Emergency Services
 - Organization under the ARRL Field Services Branch
 - Volunteer Licensed Amateur Radio Operators
- ARRL ARES Mission Statement
 - *“The Amateur Radio Emergency Service, a program of the ARRL, offers to its partners at all levels, trained Amateur Radio Service licensees who are skilled in the use of a wide range of emergency and disaster communications techniques and who are committed to supporting our partners’ missions in service to the public. “*
- Qualifications to join ARES
 - Licensed Amateur Radio Operator
 - Desire to Learn New Radio Skills
 - Willingness to Train In and Practice These New Skills
 - Desire to Put These New Skills to Use in the Public Service

What are RACES and ACS?



- RACES or the Radio Amateur Civil Emergency Service
 - Radio Service Defined in Part 97 of FCC Regulations
 - Provides Radio Communications During Periods of Local, Regional, National Natural Disasters and Other Civil Emergencies
 - Administered by Local/County or State Emergency Management
 - Apply to Emergency Management Agency to Become Registered RACES Operator
- AUXCOMM (ACS) or the Auxiliary Communications Service
 - Falls under FEMA Incident Command System or ICS Structure
 - Certain Training and Other Requirements to Become Certified AUXCOMM Operator
 - May Encompass RACES/ARES in Some Parts of the Country

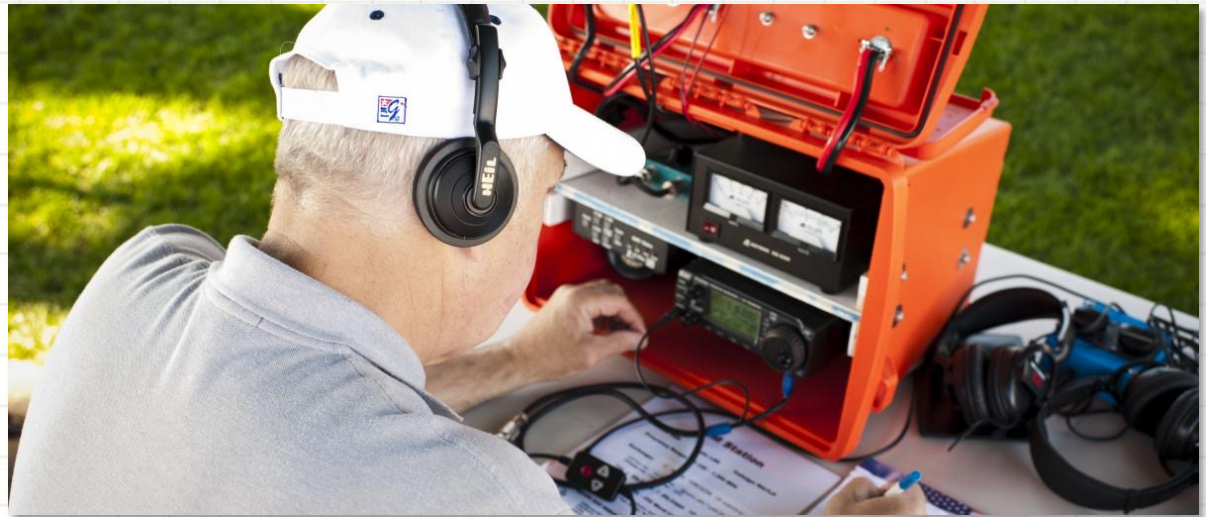
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What is SKYWARN?

- A Program of the National Weather Service
- Weather Spotters Provide Timely Severe Weather Reporting to the NWS to Aid in the Protection of Life and Property
- Provide Real Time 'Ground Truth' of Local Severe Weather Conditions that are Often Cannot be Seen on Radar
 - Rainfall Amounts and Intensity
 - Snow and Ice Accumulation
 - Hail Size and Intensity
 - Wind Speed, Direction, Gusts
 - Funnel Clouds, Wall and Shelf Clouds
 - Tornadoes Touchdowns
 - Flooding, Downed Trees, Utility Poles, Bridge and Road Closures, Power Outages and Other Damage
- Local Weather Service Office May Require Training to Obtain a 'Spotter ID'
- Many ARES Members are also SKYWARN Spotters and Net Control Operators



SKYWARN Traffic Audio Clips



2018 Tornado Damage Investigation, Ashford CT



2021 Major Boston Nor'easter Power Outages



2022 Storm Damage Reports, CT and Rhode Island



2022 Snow Reports North Shore, Massachusetts

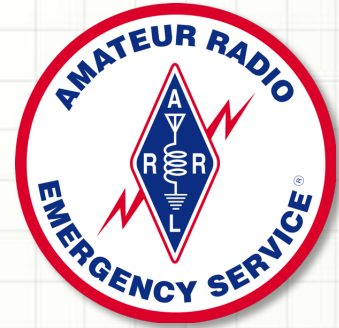


What Gear Do I Need?

- Does NOT Need to be Extensive or Expensive
- Equipment Needs Determined by Your Level of Participation
- Start Small Until Interests and Needs are Determined
 - Modest VHF/UHF Handheld
- Possibly Later, Based on Needs
 - HF Radio and Antenna
 - Computer
 - Backup Power (Generator, Battery, Solar)
 - Personal Radio Service Radios (FRS, GMRS)
 - Public Service Scanners (Police, Fire, etc.)
- Seek Advice from ARES members, Local Nets and Radio Clubs!



So, Why Join ARES or Engage in Public Service?



As an ARES member or public service volunteer you have the potential to be an important emergency communications link in times of local, regional, national and even international crisis.

Your willingness to give your time and energy in times of need will be truly appreciated by those affected by your generosity.

Questions or Comments?

To Learn More:

ARRL ARES

<http://arrrl.org/ares>

ARES-RACES FAQ

<https://www.arrrl.org/ares-races-faq>

National Traffic System

<https://arrrl.org/nts>

National Weather Service SKYWARN

<https://weather.gov/skywarn>

Welcome to ARES (Great Starter Info!)

<https://ema.arrrl.org/wp-content/uploads/2020/04/Welcome-to-ARES.pdf>

SKYWARN Memo of Understanding

https://www.arrrl.org/files/media/News/ARRL-NWS_MOU_June2011.pdf

EmComm-Training.Org

<https://emcomm-training.org/index.html>

Partner Agencies

<https://www.arrrl.org/served-agencies-and-partners>

Contact Me

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**Please Now Leave this Breakout Room which
should return you to the Main Room for the Ham
Bootcamp Wrap-up!**

***Please Be Sure to Leave Only the Breakout
Room and NOT the Entire Zoom Meeting***

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