

Intro to the Amateur Radio Emergency Service



What is ARES? - Basics

- National, voluntary program of the ARRL in which “licensed amateurs have registered qualifications and equipment for communications duty in a communications emergency.”

What is a “communications emergency”?

The hard-core definition:

- A communications emergency exists **when regular communication methods fail or are inadequate due to natural disasters or other emergencies.**
- Communications needs in an emergency vary widely, from local FM simplex, to intra-and-interstate communication by HF.

Who Are the Hams In ARES?

Any licensed amateur is eligible to apply for membership in ARES.

Don't have to be a member of ARRL or any other organization.

Interest in serving, and in practicing for communications service to the community.

ARES Organization

State Emergency Coordinator (SEC)
Robert Littler W9DSR

District Emergency Coordinator (DEC)
Debby Gray WX9VOR (Districts 3&4)

DuPage County Emergency Coordinator (EC)
Randy Broadwell N9APP

DuPage Ass't EC
Ed Worst K9EW

Illinois ARES Districts



What Do We Do? - AuxComm Readiness (1)

AuxComm – A position within the Incident Command Structure for non-Public Safety Communications:

- The FEMA “Good Housekeeping Stamp of Approval” - credibility rather than suspicion
- Mostly hams, but could include CB, CAP, GMRS, CERT FRS, etc.
- Reports to a “COML” within ICS
- WE NOW HAVE A HOME WITHIN OFFICIALDOM!!!!

What Do We Do? - AuxComm Readiness (2)

AuxComm is recognized by IEMA, ILEAS etc.,
leading to:

“Dark Web” Exercises in 2018 and 2019 (Pre Covid)

- Organized by ILEAS (Illinois Law Enforcement Assistance System).
- Assumption that all IP-reliant comms (StarCom, Cell Phones, Internet, Land-lines, were down.
- Setup on DuPage OHSEM Campus along with other communications assets – ITECS trailers, mobile command post, Salvation Army canteen.

What Do We Do?

Public Service Events (1)

- Ham Radio IDEAL for providing comms for events such as runs, & especially bike rides.
 - Darien Dash
 - Cystic Fibrosis Cycle for Life (in Kane Co.)
 - Swedish Days Bicycle Ride (in Kane Co.)
 - Cantigny 5K Run/Walk
 - Individual DCARES hams – Chicago Marathon

What Do We Do?

Public Service Events (2)

- Recruited among membership to support public service events run by other ham groups:
 - Bolingbrook
 - Wheaton

It doesn't have to be a “DC ARES” event to interest us.

- Purpose is to help hams provide public service and grow skills, however, wherever
- Contact us if you need people . . . or our assets

Our Assets: Repeaters

- Fixed Repeaters in Lisle – W9AUX
 - 442.050 + 5 MHz offset, PL 114.8
 - 146.655 – 600 KHz offset, PL 103.5
- Two Portable Repeaters
 - 442.125 + 5 MHz offset, PL 114.8 (Statewide non-protected frequency)
 - 442.050 + 5 MHz offset, PL 114.8 – as backup if our fixed repeater goes down
 - 40 ft. Penninger Mast with cable and antennas

The 442.125 Portable Repeater



Assets – The Trailer

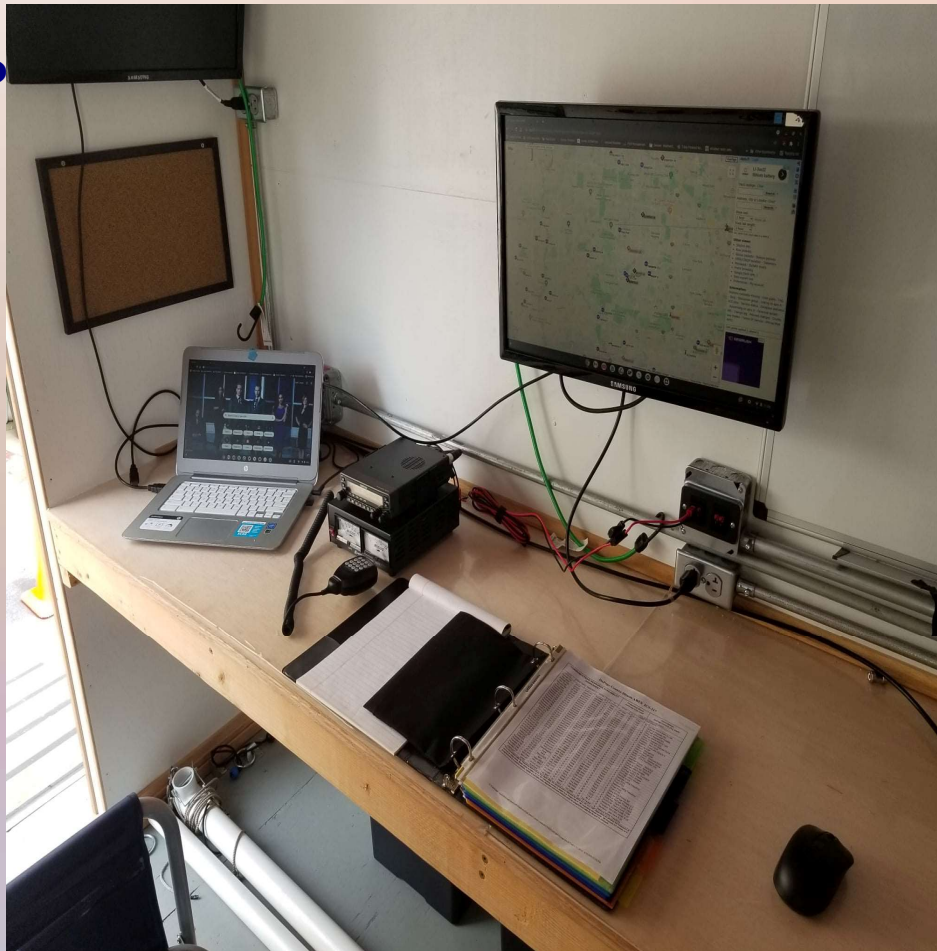
Recently converted a small, donated trailer into a communications center.

Volunteer labor, cost around \$2000 of donations.

Room for three operators/loggers

Powered by shoreline (either generator or from fixed AC) to keep two batteries charged.

Our Assets: Trailer



Our Assets: Go Kits

- IC-880A's for use in vehicles without permanent mobile installation, such as Support and Gear (SAG) vehicles of volunteers on bike rides
- IC 2820 with power supply deployable as a Net Control Station.
- All Go-Kits have appropriate accessory kits, such as MagMount Antennas, power cables, etc.
- Also mast and antennas (20 foot)
- Small stash of BaoFeng dual band transceivers

Other Assets include shelter, Table, Chairs, Generators, etc.



What Do We Do? - Nets (1)

- DuPage EmComm “ARES” nets – twice a month
 - 1st Tuesday @ 1900 – Voice Net
 - W9AUX UHF Rptr 442.050 PL 114.8
 - Pass Voice Messages – Radiogram or ICS213
 - Training Topic
 - 3rd Tuesday @ 1900 – Digital Net
 - MT63 – 2K Mode
 - Winlink

What Do We Do? - Weather Net

- DuPage Weather Net – WCRA Rptr 444.275
 - Work Jointly with DuPage ARES, DuPage OHSEM, WCRA
 - Training Net - 2nd and 4th Tuesdays of Month
 - Training Topics, Chceking equipment, passing messages.
 - Hams unable to attend can participate sending a Winlink severe weather report
 - Activation for Severe Weather -
 - Monitor Kane Co Spotting net
 - Report WX to Chicago NWS Office (LOT).

What Do We Do? - Team Meetings

- 2nd Monday of Every Month - 1900L
 - Now on Zoom, but normally at DuPage Office of Homeland Security and Emergency Management Training Room (County Farm Road in Wheaton)
 - Training Topics - Examples:
 - Tom Beebe W9RY on USGS “Did You Feel It” Initiative for hams to report earthquake effects.
 - NWS Approved Weather Spotting Class
 - Message Handling
 - Misc topics of interest – AREDN, Winlink, etc.

Looking To the Future - Goals

- Increase number of registered hams and active participation
- Grow ties with local jurisdictions, such as EMA's
- Get back on a schedule of regular county-level drills and activities
- Continue to train with DuPage OHSEM and other state organizations and assets.
- Strengthen support for public service activities of local ham clubs

Dark Web

- ARES hams sat outside PD's, FD's & Hospitals and passed inject messages to the Dark Web “campus”
- VHF Winlink messaging from EOC's
- HF Messaging from DuPage to Springfield using HF SSB Voice and HF ARDOP digital modes
- Observed by FEMA Auxcomm and Illinois Statewide Interoperability Coordinator (SWIC)
 - After exercise, SWIC Joe Galvin said he considered ham radio part of Illinois Strategic Technology Reserve

Dark Web Campus Setup



How Can We Support You?

Are You “Elmer-ing” someone? Emcomm can help hams grow in ham radio.

- Technical Skills
- Operating techniques
- The ability to improvise and adapt to meet communications challenges
- Creates a reason to stay active in ham radio

How can we support your club?

- Participate in your public service events
- Provide presentations on emcomm-related topics such as Winlink, Message Handling, etc.

Our Contact Information

Our group email address is:
dupagecoares @ gmail.com

My direct email address is:
n9app @ arrl.net

Visit our website:
dupagecountyares.org