

## ARES Meeting Agenda - 8/16/23

- Welcome to Our Guests
- Training
- Area Repeater & Simplex Testing Net
- Infrastructure Activities
- Emergency Expo Review
- Winlink News
- Midwest SuperFest
- NVIS Testing on 80 Meters
- ARES Net Reminders



### Welcome to our Guests

- Thanks for joining us tonight
- ARES Amateur Radio Emergency Service
- For those new to ARES, we do 3 major things:
  - Severe Weather Storm Spotting
  - Communications Support for Community Events
  - Emergency Communications for Served Agencies
- Major Tools that we utilize:
  - Ham Radios, typically VHF and/or HF gear, including Go-Kits
  - Winlink Express software for over-the-radio email messages
  - Internet Email and text messaging for inter-team communications
- Training much more to ARES than holding a mic and talking



## **Training Documentation**

- Happy to report that I received a new Training Form during the past month
- Now at 12 of 29 ARES members who have submitted a training record



## **Training Resources**

- Training Documentation Form
  - Also on our website on the "Training" Tab
  - https://www.peoriacountyares.org/wp-content/uploads/ 2023/01/Training-Documentation-Fillable-Form.pdf
- How to get a FEMA Student ID (SID)
  - Go to https://cdp.dhs.gov/femasid
- FEMA Training for IS 100, 200, 700, & 800
  - Go to https://training.fema.gov
- More details in our 07-20-2022 Meeting slides
  - https://www.peoriacountyares.org/wp-content/ uploads/2022/07/ARES-Meeting-07-20-2022.pdf



## Repeater & Simplex Testing

- Repeat the testing as we performed in 2019 and 2020
- Asking use of dual-band mobiles and car-mounted antennas
- No Base Stations or Base Antennas (except Bunker & RC)
- No Handi-Talkies
- No Home Stations
- Some proposed sites may fail to reach some repeaters, and some may fail to reach others via Simplex
- Participants record GPS Coordinates at their test locations
- Maximum Simplex QSO distance in 2020 was 42.1 mi (1-way), and 24.2 mi (2-way)



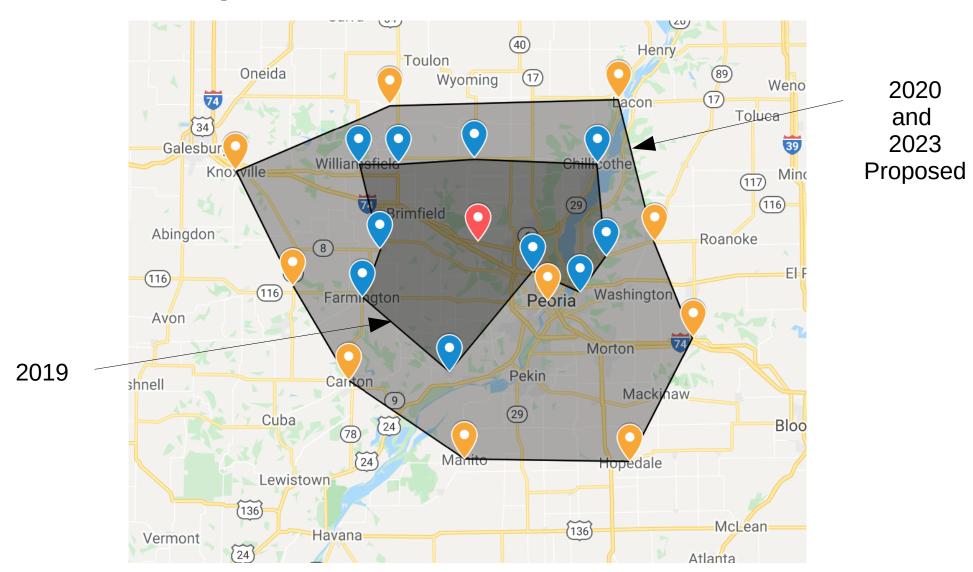
## Repeater/Simplex Test Field Sites

- 2019
  - Kickapoo, IL
  - Laura, IL
  - Williamsfield, IL
  - Elmwood IL
  - Farmington, IL
  - Glasford, IL
  - Illinois Central College
  - Germantown Hills, IL
  - Chillicothe, IL
  - Princeville, IL
  - Peoria, IL (near Northwoods)

- 2020 and proposed for 2023
  - Kickapoo, IL
  - West Jersey, IL
  - Knoxville, IL
  - Rapatee, IL
  - Canton, IL
  - Manito, IL
  - Hopedale, IL
  - Goodfield, IL
  - Metamora, IL
  - Sparland, IL
  - Peoria Red Cross



### Repeater Test Field Sites





### Proposed Repeaters to Test

- W9UVI (147.075)
- W9BFD (146.970)
- WX9PIA (147.330)
- W9JWC? (UHF 444.475 BU Radio Club)
- Plus Simplex on 146.535
- Any others we should test?



#### When to do this Test?

- Open for discussion
- Sat. or Sun. afternoon likely to get most operators
- Planning for 11 locations, need 11 operators
- Net Start Time was 1:00 PM in the past







## **Emergency Expo Wrap-Up**

- Thanks to everyone who came out
- I plan to get a banner that says "Weather Spotters"
- I'm also thinking we need to hand out candy to the kids next year
- Anyone else have observations or comments regarding this year's event?



#### Winlink News

- Tazewell EMA recently installed a new antenna on their Winlink Station
- It seems to have a better range, I can now hit it from my QTH north of Peoria, without going through a digipeater
- W9TAZ-10 is on 145.610 MHz



### Infrastructure Activities

- VHF Station at the Bunker
  - Available for Peer-to-Peer Winlink Packet Practice
- HF Station at the Bunker
  - Debug the End-Fed NVIS antenna High SWR
  - Next obtain <del>computer and</del> soundcard for HF Winlink
- Peoria Red Cross Radio Room
  - Want to get the Kenwood TS-2000 to do VHF Winlink
  - Want to get the Yaesu FT-991A to do HF Winlink



#### **Detailed List**

- Yaesu FT-950 at Bunker Resolve high SWR. KD9AER and KB9SF have been working to on this. See next slide for details.
- Research how to get the Kenwood TS-2000 to do Winlink on VHF (and HF if the built-in TNC will work) [Some progress has been made]
- Research what is needed to get the Yaesu FT-991A at the Red Cross to do Winlink (on HF and/or VHF)
- Investigate Logging software option for use at Bunker and Red Cross
- Perform RF Exposure Calculations for all stations at Bunker/Red Cross



# High SWR on Bunker HF Antenna

- This Antenna is an End fed random length (84ft) with Nelson 9:1 UnUn
- Works good on 40m but SWR is 7+ on 80m (appears inherent on such antenna configurations – know of 3 like this.)
- Tried longer antenna wire but no help
- Tried counterpoise but no help
- Tried grounding unun but no help
- Tried to use FT-950 internal tuner on 80m and is appears to tune up
- KD9ANU to bring Signalink Interface and cable to the bunker before 9am when 80m is still good
- If that doesn't work, we will try 1:1 common mode choke on radio end of coax
- Then try common mode choke along with counterpoise
- If still not able to tune 80m then consider replacing end fed with dipole
- Would appreciate any comments, recommendations, etc



### Yaesu FT-950 & Winlink

- An initial test of the Bunker's FT-950 rig has proven that this radio can send a Winlink message
- Using an antenna similar to that at the Bunker
- With a borrowed Signalink interface, on 40 meters, through KS0A in Geneseo
- Next try 80 meters
- Purchase an interface/cable for use at Bunker –
  Signalink or Masters Communication?



# Midwest SuperFest is Coming

- PAARC will be holding the Midwest SuperFest in Chillicothe on September 16 & 17 Sat & Sun
- At Three Sisters Park, west side of Route 29
- Setup will be on Thursday the 14<sup>th</sup> and Friday the 15<sup>th</sup>
- Please come and support the club and ARES
- Forums will be held Saturday morning
- Lots of flea market spots and vendors
- Go-Kit Competition is on Sunday at 10 AM
- Raffle Prize drawing will be on Sunday mid-day
- Will return rented tables on Monday the 18<sup>th</sup>



## **NVIS Testing on HF**

- Do you have an antenna configured for NVIS?
- (Generally a low altitude long wire antenna)
- I have an NVIS antenna back up
- Plan to do some testing, variables include:
  - Band Selection, Power level, Time of day
- So far, the following folks have indicated interest:
  - KD9AER, K9RCS, W9WGN, KD9ERS, KD9DQB, NP2WJ (anyone else?)
- I'm ready to start, when shall we test?



### **ARES Net Reminders**

- Illinois State ARES HF Net
  - 1st and 3rd Sundays of month at 4:30 PM CST
  - 3.905 MHz LSB (alternate 7.230 MHz LSB) & Echolink 824404
  - Informal 60M & 40M check in (7230 KHz) at 4:10 PM
  - 60M check at 4:20 pm (5403.5 kHz Channel 5, if busy then 1, 2, 3, 4)
- Illinois Digital Net every Wednesday 8:00 PM on Illinois Link
  - WIRES X 21565
  - Brandmeister DMR 31171
  - TGIF DMR 31171, DMR+ Reflector 4636
  - NXDN 3117
  - P25 31171
  - YSF Reflector Illinois Link 83132
  - D-Star XLX 334G, DCS 334G, XRF 334G, and XLX 312G
  - Allstar Link 42810



### **END**

- www.peoriacountyares.org
  - ilares.org
  - www.arrl.org/ares