

NVIS Day, 2023

It's coming! Ohio NVIS Day 2023 will be held Saturday April 22, from 10AM until 4PM EDT.

The purpose of NVIS day is to construct and try various antenna ideas, all working as NVIS (Near Vertical Incident Skywave) antennas. These antennas are low to the ground and provide coverage generally within a 400 mile radius- extremely important for regional HF communications in an emergency.

Take a big step forward and build upon the concept to answer the question, "How would we actually use these antennas?"

For 2023, we have added a couple operating scenarios that will make your day more fun and be a learning event for actual disaster communications. We propose a commercial power blackout, with the need to communicate within your ARES district and to 'The Sarge' at the Ohio EOC in Columbus. Here's the deal:

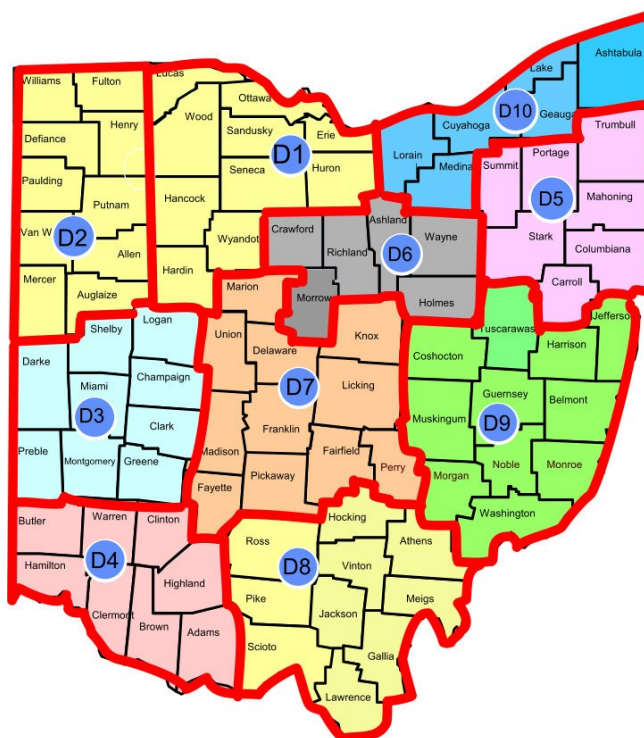
1. The event runs from 10 AM until 4 PM local time.
2. Stations will construct and test NVIS antennas.
3. Transmit power is limited to 100 watts.
4. Power for the station will be any form of "off-grid" supply: typically, generator, battery or solar or whatever form you might have in an emergency setup. (Optional, but preferred)
5. Stations may test antenna coverage as in the past by contacting as many different locations as possible.  
This year, we are adding collecting Grid Squares and S-Meter readings as part of the exchange .
  - a. Stations are to originate a message to their ARES District, local net, OHDEN, OSSBN and to W8SGT reporting their location and county, stating if you are "Participating or Not Participating".
  - b. This message may take any form: ARRL message form ICS 213 or radiogram must be used. If you're going to use the traffic system, ARRL message radiogram is recommended.
  - c. Each county is to send a message to the SARGE with a sitrep of their operation.
  - d. The message should contain the call sign, operating location (include county) and number of operators. Any other brief antenna information is optional but appreciated!
  - e. Contact with the District net may take place on VHF or HF (Repeaters OK).
  - f. WinLink may also be used as long as it sent via RF, local node (VHF, UHF) or an HF node to KD8SCL and or W8SGT.
  - g. For more information on node locations, visit [WinLink.org](http://WinLink.org).

6. Operating frequencies are proposed to be in the 80 and 40 meter bands. Voice is preferred for testing.
  - a. Optimum frequencies centered around but not limited to: 3.902 and 7.240
  - b. Digital messages may be passed to OHDEN Net as available.
  - c. Digital OHDEN frequency: 3584.5 (typical is Olivia 8/500)
  - d. OSSBN frequency: 3972.5, Net Times: 10:30, 16:15, 18:45

You can create your own log (Excel preferred) or Word format. Be sure to include a photo of your group or your antenna! Submit your results to [contest@n8ara.org](mailto:contest@n8ara.org)  
 Have fun! Take a lunch break! I hope to hear you!!

Union County is in Ohio ARES District 7 that includes the following counties:

- Marion
- Knox
- Union
- Delaware
- Licking
- Madison
- Franklin
- Fayette
- Pickaway
- Fairfield
- Perry



[http://arrl-ohio.org/SEC/district\\_map.htm](http://arrl-ohio.org/SEC/district_map.htm)

Union County NVIS Day guidelines in conjunction with what is listed above are as follows:

Station operators are encouraged to pair up with each other. It is easier for 2 or more people to setup antennas and operate a station compared to one. Its good to take turns and have 1 person talking on the radio and another person logging the contacts that are made.

If you don't have a NVIS antenna, HF Radio, or privileges for voice on 40m and 80m and want to participate, PLEASE PAIR UP with someone that does.

Stations participating can operate from home, a portable location (park, etc) or from EMA Station 720. If you don't have "off grid" power and/or your operating time is limited, use commercial power. We would rather hear you on the air operating and not have setting up "off grid" power prevent you from getting on the air or setting up at a portable location that offers commercial power.

Remember to know the grid square of your operating location, since it will be part of the exchange. This page has an interactive gridsquare map that will help you find the gridsquare based on station location. <https://k7fry.com/grid/>

If you have an 80m/40m NVIS antenna already made and/or setup at home, this would be a good opportunity to see how well it works in and around Ohio.

If you don't have a NVIS antenna, you are encouraged to make a NVIS antenna to try out. Part of NVIS Day is to try out different NVIS antennas to determine which ones worked better based on the number and location of stations you were were able to contact using them. There are a lot of NVIS antenna ideas on the Internet. This page has some links to get you started [http://arrl-ohio.org/SEC/nvis\\_day.html](http://arrl-ohio.org/SEC/nvis_day.html)

I would like participating stations in our group to try to make contact with Station 720 (W8UCO) on both 80m and 40m along with the State EOC ( W8SGT the "Sarge") and other stations in District 7 and Ohio. For Parts 5a and 5b, Please send a message to the Ohio Section Emergency Coordinator Bret, KD8SCL or W8SGT, the Sarge using one of the traffic nets listed below or using winlink, reporting your location and county. Also state if you are "Participating" or "Not Participating" We can use the 2m N8IG repeater to coordinate HF frequencies with each other to make contact on. Please let us know at Station 720 the county you are operating from and the number of operators you have at your station.

We will be sending a message from Station 720 to Bret and W8SGT that will include number of stations, number of operators, and counties that were operated from by our group.

Nets mentioned :

**District Net** - The District 7 net is the Central Ohio Traffic Net, COTN. Information about the Central Ohio Traffic Net can be found at <https://www.cotn.us/> Please familiarize yourself with their Standard Operating Procedures.

**OHDEN** Ohio Digital Emergency Network - Information about OHDEN can be found at <http://arrl-ohio.org/SEC/ohden/>

Please familiarize yourself with their Standard Operating Guide

**OSSBN** Ohio Single-Side Band Net - Information about the OSSBN can be found at <http://ossbn.org/> Please familiarize yourself with the OSSBN guidelines <http://ossbn.org/about/guidelines/OSSBN%20GUIDELINES.pdf>