

# Central Ohio Radio Club, Inc.

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Amateur community!

Over 50 Years of  
Service to the



Editor, The CORC Repeater Newsletter  
Joe Hahn (W8NBA)  
P.O. Box 166  
Sunbury, OH 43074-0166

The Central Ohio Radio Club  
July 2024 Newsletter



ARRL Special  
Services Club



CENTRAL OHIO RADIO CLUB


# SUMMER MEETING

August 4th, 2024  
6:PM

**Speaker: Memories of W8RRJ and  
other important items...**

CORC will Provide: Soft Drinks  
Coffee/Tea  
High Quality Plastic Ware  
Cups and Plates  
Friendly Faces

Genoa Township Hall  
5111 South Old 3C Highway  
Westerville, Ohio 43082



# The Central Ohio Radio Club Newsletter

July 2024

**President**  
Anthony Fabro  
N8RRB

**Vice-Pres.**

Vacant

**Secretary**

Vacant

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WD8JKX

**Newsletter**  
**Editor**  
Joe Hahn  
W8NBA

**Membership**  
**Chair**  
John Perone  
W8RXX

**FM Repeaters**

53.70 /  
52.94 / 52.70  
51.70 /  
W8RRJ

146.16 / 146.76  
W8AIC

146.37 / 146.97  
W8RRJ

147.93 / 147.33  
W8NBA  
IRLP Node 8094

449.20 / 444.20  
W8AIC

447.80 / 442.80  
K8NIO

**D-Star Repeater**  
**G3 Gateways**

144.89 / 145.49  
449.00 / 444.00  
W8CMH



## W8RRJ/SK, John Hull and the First Central Ohio Repeater

In 1970 Central Ohio hams first became aware of a 146.76 repeater. It was on a late Friday evening that Father's Day weekend the first Columbus repeater was brought to life by John, W8RRJ.

The repeater has gone through many improvements over the 50 plus years and continues to provide service to central Ohio amateur community today.

John passed away April 17, 2024, at the age of 95.

John was a very smart, well-educated, well-liked gentleman. Through his life he was in the U.S. Army as a radio man (go figure) worked at North American Rockwell as an antenna designer, taught audio recording at The Ohio State University, worked on special projects at Battelle Memorial Institute, and started Musicol Recording Studios where he worked daily till the end. Without the many hours of John's hard work, the Central Ohio Radio Club would not be what it is today.

He will be missed by many, both in the amateur and musical communities!

## John Hull

By: Anthony "Tony" Fabro N8RRB

My story is from the late 1990s. The club had been talking about getting the Repeaterisms back on one of the repeaters. For those who don't know, the Repeaterisms were a set of operating tips written in "Old English" and spoken in the style of someone reciting Shakespeare literature. John Hull recorded these at his business (Musicol) in the 1970s. There were 16 Repeaterisms along with several other sketches. You can find recordings of the Repeaterisms online with John given the proper credit.

One evening John got on the 97 repeater and started tinkering with things as he often did. Then he hit a code, and the response was one of the Repeaterisms. Then John played another track, and another, and another. John had gotten the Repeaterisms back on the repeater! In addition to the Repeaterisms, there were recordings of celebrity impersonations and other short bits talking about ham radio and/or CORC.

A couple people, including myself, got on the repeater and talked to John while he was playing the tracks. John gave some background information advising who was speaking and other tidbits of information. For the better part of two hours, I simply listened to John play track after track. I was fascinated by all of it!

A few days later I was talking to Trigg K8NIO on a repeater and mentioned to him the event. Trigg responded that he, too, was listening and enjoying all the recordings. He said it was like a "Fireside Chat" where, before television, a family would gather around a radio next to their fireplace and listen to a program together. Instead, this time it was a "family" of hams who, like myself, became glued to their radios listening to what John was playing. It was an evening I'll never forget.

## From your CORC Membership chairman... John / W8RXX

Thank you to everyone that have either joined or renewed their membership since our last newsletter.

## New Members... Welcome All!

The following have recently joined CORC. Please thank them for joining the club when you hear them on the air.

KE8CLB – KIM	KE8PNZ – DAVID	K8MAK – KRISTOFER	KI9SS – RONALD
KF8BBW – PETER	KE8EZC – JACOB	KF8BAY – CHRISTOPHER	KC8DIJ – DANIEL
KF8BBP – EILEEN	KE8YLC – CLIFFORD	N8ESP – JOHN	KF8BSS - DUDLEY

## Donations... MANY Thanks to all!

Thank you, thank you, to those who have donated their time, talent, money, printing, etc. since the last newsletter. This extra income and work helps keep CORC financially sound.

W8NBA   N8RRB   WA3UOO   KB8CIQ   WD8JKX   WA8KKN   KA8IWB  
W8RXX   K8NIO   KC8DIJ   AC8YE   N8ESP   KF8BSS   KD8VRN   KD8PHG

## ***Amateur Radio, it's not just for breakfast anymore.***

I was recently having lunch with my good friend Lew Ramey which we often do as a group with others from the early CORC/weather net days including Stan Broadway, N8BHL and Malt Brown, WB8WKZ. That day it was just Lew and I. From the many conversations this group typically has had, it later occurred to me how our long past acceptance and adaptation to change defined what has become the future we now enjoy today. In the mid 1970's, this group and others from the whole local Amateur Radio community, developed what was to become the Central Ohio Severe Weather Net. A member of the Central Ohio Radio Club (CORC) board, Stew Banks, W8FEH (SK), Lew the head of the Columbus National Weather Service (NWS) Office along with the extensive CORC repeater network developed under the direction of John Hull, W8RRJ, were essential in making this early concept a huge success.

Then . . . NEXRAD Doppler radar technology, coupled with funding politics and other factors outside our control changed everything. The Columbus, Dayton, and Cincinnati NWS offices with their obsolete weather radars would be replaced by one modern, longer range NEXRAD system supported by a single NWS office located in Wilmington, Ohio. As NWS went through this massive national reorganization driven by this new technology, Amateur Radio communities all around the country were faced with unexpected changes. Lew chose to stay as MIC (Meteorologist in Charge) in Columbus and help facilitate the transition rather than relocate, retiring when complete. Apparently existing weather spotter network considerations were not on the list of the decision makers, so the Amateur Radio community was left to find solutions to support the new consolidated offices with their hugely expanded areas of responsibility. The Wilmington site selected for this new centralized NWS office was in rural Clinton County, Ohio with an extremely small ham population in comparison to the metropolitan areas being served by the previous offices. In this case the new challenging need was to take and forward severe weather spotter reports from over fifty counties located in three states and two different time zones.



Wilmington NWS  
Groundbreaking Event

Jerry Lindsey Dayton NWS and Lew Remy Columbus

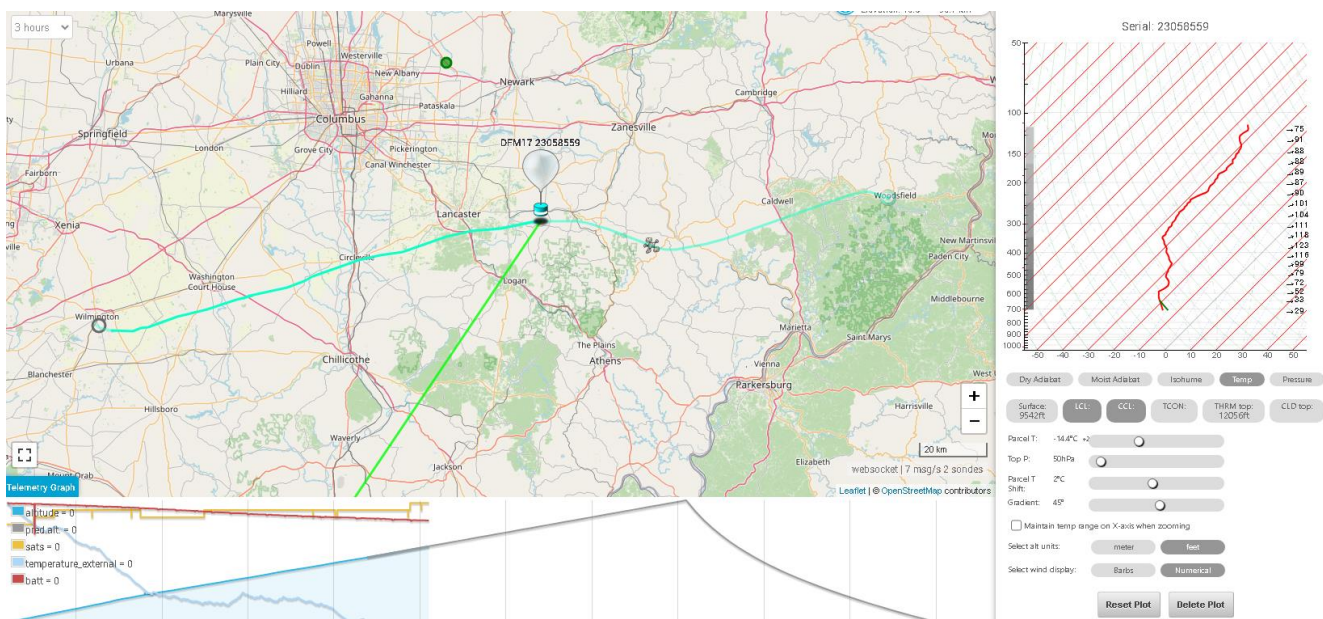
Knowing that none of the existing organizations serving this area could possibly meet the challenge alone, members of Clinton County ARA stepped up and organized a task force/steering committee group. This group was made up of representatives from each of the existing spotter groups along with the Wilmington group now tasked to support the new NWS NEXRAD office placed in their county. They quickly realized that a traditional spotter net large enough to cover this expanded area would not only be unmanageable, but inefficient. The group ultimately concluded that the existing nets should continue to operate as independent sections and feed spotter reports into the central Wilmington location for coordination there. This allowed each to retain its identity and to tailor its design to the needs of their



individual community. Those located within offices being closed would also need to find new fixed base homes. Then the realization hit, there was a whole geographic area of responsibility encompassing south/central Ohio and north/central Kentucky that could not be covered effectively by any of the existing nets. DeForest ARA of Adams County Ohio came to the rescue establishing an all new fourth net to provide coverage for that area.

The group realized that a new repeater system concept would be required to coordinate such a large area and maintain efficiency and the flexibility required by the varied needs of all the individual local groups. John Perone, W8RXX, with his technical knowledge of the extensive central Ohio repeater system worked closely with the group to develop the required, never tried new system design. Each of the remote reporting sections was tasked with developing additional technical solutions to facilitate linking of their section to the new central Wilmington location while also addressing all their local needs. As some of these early participants relocated around the country and with the support of NWS management, the word spread of this weather spotting concept. Sky Warn as it is known throughout the country today, became the result of these early concept creators' migration, mimicking this success in many Amateur Radio communities around the country.

It has now been thirty years since we faced the major challenges just described. Change continues to test the Amateur Radio community. Faced with an aging ham population, how do we find the people with the passions to propel our hobby into the future like those exhibited in this success story? I was sitting at breakfast with Paul Gehringer WB8ZZR who provided most of the content for this article, when he pulled out his phone to show me real time telemetry being sent from that morning's weather balloon launch. Yes, they still use balloons, but the technology that he was showing me is an amazing, whole new dimension to the weather spotting I was involved in 40 years ago.



Paul invited Lew and me to their annual spring steering committee meeting at the Wilmington NWS office. Kind of like a 30th class reunion for us.

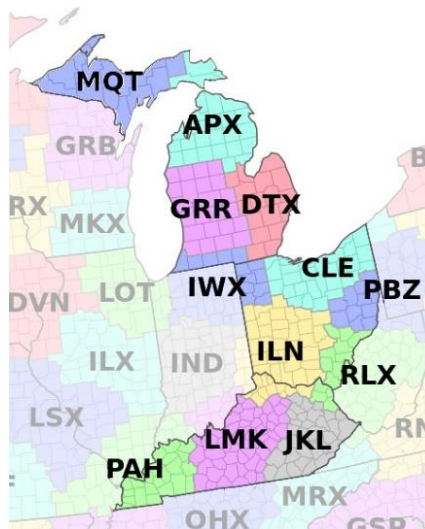


With the goal of igniting new passions, are all of us doing all we can to provide awareness and acceptance of new unfamiliar technologies as part of how we describe Amateur Radio to others? I recently met a newly licensed high school girl at HamCation and I asked what her future ambitions were. She said she wanted to go on to school in meteorology. To me that sounds likely to become another success story of how Amateur Radio provides direction and passion for future endeavors and careers, just as it has for many of us.

Roy Hook, W8REH  
Vice Director - ARRL Great Lakes Division

If you are not already involved with a NWS/Amateur Radio Severe Weather Spotting group, you can help. There are many opportunities around the Great Lakes Division. Just talk with your local club or find the NWS Forecast office supporting your area.

Grand Rapids Michigan ((GRR)  
Gaylord Michigan (APX)  
Marquette Michigan (MQT)  
Detroit/Pontiac Michigan (DTX)  
Northern Indiana (IWX)  
Wilmington Ohio (ILN)  
Cleveland Ohio (CLE)  
Louisville Kentucky (LMK)  
Jackson Kentucky (JKL)  
Paducah Kentucky (PAH)  
Charleston West Virginia (RLX)  
Pittsburgh Pennsylvania (PBZ)



## Let's Talk RF Connectors - Crimp vs Solder

Rick Tressler WA3UOO

I was chasing an RFI problem that needed a trip up to the roof to install a common mode choke on my HF vertical. While working, I noticed the outer jacket of several coax runs was (and still is) flaking off and has been for years. I put it up around 2000, so 24 years in service. This caused considerable concern, even though the antennas have been working well and the SWR still is very good.

New coax will be of better quality and will require some price shopping and data sheet reviews. Inclusive of that, coaxial cable connectors will be needed to terminate several runs of the stuff. I started the project by going to DX Engineering, <https://www.dxengineering.com> for coax, connectors and tooling. I reference them throughout this article. They're not the only vendor out there but I like the quality of the things they sell. Others include but are not limited to Powerwerx, (<https://powerwerx.com>), Pasternack (<https://www.pasternack.com>), HRO (<https://www.hamradio.com>), and Gigaparts (<https://www.gigaparts.com>), to name a few. When shopping at Amazon, be careful!

The connector part of my search revealed both traditional solder-only and crimp & solder types. They include PL-259, Type N and BNC. The article focuses on PL-259 and N types. My interest in switching to crimp connectors was piqued the more I looked at it. Crimp connectors are not a recent revelation in the industry. They have been around for years, and it took a while to become convinced, but crimping is not only very effective, I think it's a better method than soldering. I've been soldering PL-259's since I was a kid and I'm good at it, being able to fully solder the braid through those four evenly spaced holes. Center conductors of PL-259 and type N connectors must still be soldered.



“Old Style” solder type PL-259 “UHF” connector. Crimp type looks similar, but the connector back end of the body slides over the dielectric and UNDER the shield, then crimped with a third piece called a ferrule.

The big difference with crimp connectors is that a crimping tool and die is required for the connector you're working with. With DX Engineering products, you need but one tool, but more than one die may be needed if you're working with multiple coax sizes and connectors. The tool accepts a variety of dies including those for Anderson Power Poles. Cable grippers and stripping tools, while not truly necessary, make cutting and stripping coax faster, easier, safer and easier than a box cutter. If you make patch cables and find yourself making up coax runs for replacement projects like mine, or just want to make the task easier, tools are worth it.



Crimp type PL-259 for RG-8 showing the crimp ferrule on the left.





PL-259 crimped on RG8 coax. Center pin requires soldering.



Crimp type PL-259 for use on RG8-X

Before you buy crimp connectors, carefully consider which coax you're using. **Read the coax and connector descriptions as well as all provided technical notes.** Some crimp connectors may not be compatible with double-foil/braid coax like DXE-400M offered by DX Engineering. Not all connectors work with all coaxes, however you can bet, just as there are several .405 in. diameter RG-8/U type coax cables out there, so are the different connectors that you may think are universal.

How much can you expect to pay for crimp tooling and connectors? As most know, prices can be wide ranging along with variations in quality, tooling, dies and customer service. At DXE, crimp type PL-259's cost about \$33 for a pack of 6. Crimp types for RG-8X are about \$34 for 6. As for tools, see below.

Crimper with die for RG8 - \$73

RG8 stripper tool - \$45

Cable gripper for RG8 - \$20

As a side note about coax, you can pay a little or a lot for the stuff. DXE will send you a copy of their coax reference chart, but you have to ask for it. It is not all-inclusive, but you can see specs on popular products most hams use. Send an email to [support@dxengineering.com](mailto:support@dxengineering.com).

From RG-58 at \$0.58/ft. for short runs and work on HF to the LMR-600 very low-loss product at \$4.73/ft. DXE-400MAX sells for \$1.49/ft. DXE-8U is goes for \$1.29. Times Microwave Systems LMR-400-DB (direct bury) comes in at \$1.73. Consider the application first. HF? VHF? UHF? The higher the operating frequency, the more power loss will occur for a given length. Will you need to bury your coax? It's not all created equally, and you can't directly bury the stuff if it's not designed for it.

If you have any questions about this article, contact me at [wa3uoo@gmail.com](mailto:wa3uoo@gmail.com). Good luck and as always, be careful.

Rick Tressler  
WA3UOO  
CORC

# Technical Committee Report

By Chuck Wood WA8KKN

The technical committee has been quite busy with the re-arrangement of the 146.970 MHz repeater. This included trouble shooting an intermittent problem at the '97 transmitter which was not touched in the '97 changeover process.

All other CORC repeaters are operating normally.

Re-arrangement of the 146.970 MHz repeater control point (where the receiving voter and controller are located) was relocated to the Westerville Receiver site. The previous location of the control point was in W8RRJ's basement. This changeover was due to the passing of W8RRJ (SK).

At the Westerville receive site, we added new link receiving equipment and installed a new antenna/feedline for a new link transmitter pointing towards the 146.970 MHz transmitter. It took a few days to get the bugs out of the new system. The '97 repeater was down a very short time in the cutover process.

*None of the 146.370 MHz receivers in the system were changed.* Only the RF links receivers at the control point were changed. The CAT-1000 controller is the same unit that was previously located in W8RRJ's basement.

## **W8RRJ Repeater (146.970 MHz) Transmitter Location.**

As many of you know, the 146.970 MHz repeater had a catastrophic power amplifier failure at the end of last year which was covered in the February newsletter.

We replaced the tube amplifier with a "not cheap" commercial Henry Electronics 250-watt solid state amplifier. This Henry amplifier is the same final amplifier model used on the 146.760 repeater. CORC can now say that there are no more "TUBES" in the CORC repeater system.

User of the '97 repeater have noticed the signal strength of the repeater dropping off after continuous use of 15 minutes or so. Trouble shooting this has been a lengthy experience. What we found were two problems.

1. The RF amplifier thermostat. The fans were not running when the heat sink reached 50°C. This proved to be insufficient thermal heatsink compound covering the thermostat. Henry Radio graciously sent us a new thermostat which we now have in our spare parts inventory.
2. Power supply issues. This one took a long time to diagnose. We could not reproduce the intermittent problem during the daytime. The site is not accessible in the evening when the temperatures are the highest from the afternoon Summer heat.

What we found were temperature issues and/or component failures within the power supply. The power supply would re-set after a "cooling off" period of 20 minutes or so. No documentation is

available concerning the 50 AMP 12 VDC DuraComm power supply. This power supply was discontinued by DuraComm in 2022 due to the non-availability of high current parts. They still manufacture 24VDC and higher voltage power supplies.

### **Power Supply Replacement for the 146.970 MHz amplifier.**

CORC has purchased a new power supply to replace the DuraComm unit. Henry Radio built us a new power supply which will handle the 40+ AMP RF amplifier load on a continuous basis. Expected receipt is during the week of July 29, 2024.



The DuraComm Unit (black panel with meter above the microphone) is being replaced with a new Henry power supply

The heatsink with the two fans is the RF amplifier which was purchased last year.

### **Last minute fun facts!!!**

Here are who won prizes at May 5th Potluck:

#### Gift Cards:

Mike Hahn / KF8AAR  
Stan Sutton / KE4RS  
Tony Fabro / N8RRB

#### 50/50 Winner:

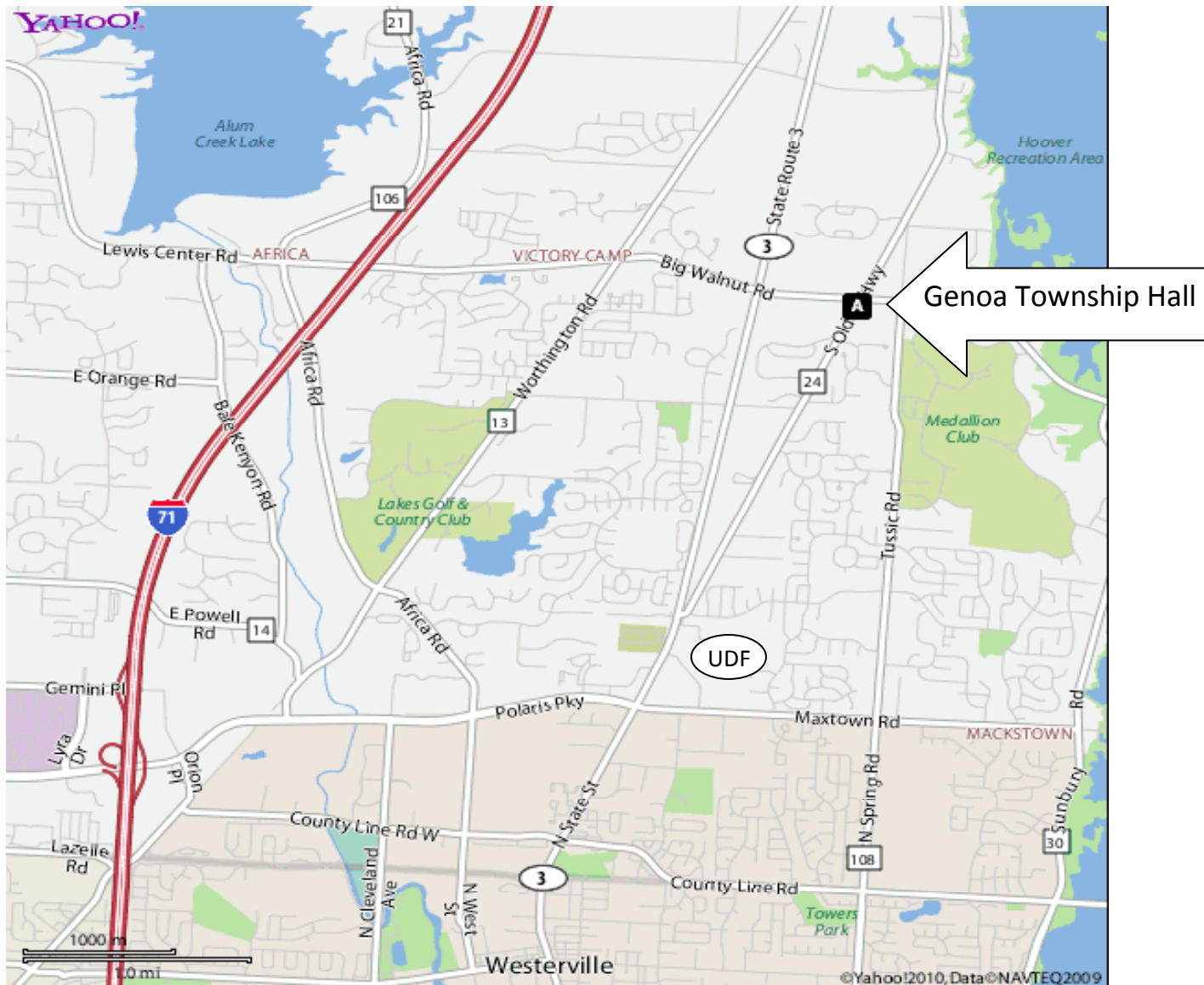
Anita - XYL of Tom Johnston / KB8UVF

#### Rock Bound Rig:

Carol - XYL of Trig Tabor / K8NIO

And now that you know about it...

Here is how you get there!



From 71 take Polaris Pkwy to State Route 3 and turn on Old 3C Highway and go North to The Genoa Township Hall.

From 270 exit on State Route 3/ Westerville Road and go north to Old 3C Highway.

Genoa Township Hall is on the corner of Big Walnut and Old 3C Highway.