

Central Ohio Radio Club, Inc.

The Central Ohio Radio Club Newsletter is the Official Journal of The Central Ohio Radio Club, Inc. and is published three (3) times a year. It is mailed or e-mailed to all Full Members. All copy or advertising must be received at least four weeks prior to publication. Articles may be reproduced for other publications as long as prior permission is obtained and source acknowledged. While the Editor makes all reasonable effort to assure the information within is correct, we do not guarantee its contents and disclaim all liability. We reserve the right to edit or reject submitted items for publication. Mail all copy to: Sandy Robeano (KB8CIQ), P.O. Box 166, Sunbury, Ohio 43074-0166 Items can also be e-mailed to newsletter@corc.us.

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ARRL Special
Services Club



The Central Ohio Radio Club
January 2019 Newsletter



Editor, The CORC Repeater Newsletter
Sandy Robeano (KB8CIQ)
P.O. Box 166
Sunbury, OH 43074-0166

Web Page at <http://www.corc.us>

Membership application

Central Ohio Radio Club, Inc. (CORC)

Operating Amateur Repeaters Since 1970

CORC operates repeaters with outputs on 52.70, 146.76, 146.97, 147.33, 442.800,
444.200 145.49 D-STAR & 444.000 D-STAR

Some of the features include:

Worldwide linking on our IRLP & D-STAR Repeaters.
Repeaters are used by the Central Ohio Weather Net and the Central Ohio Traffic Net.
Multiple receiver sites located in Franklin, Licking, Delaware, Pickaway and Logan Counties
These sites ensure excellent coverage throughout Central Ohio.

Membership allows full use of the CORC facilities, Operating Manual, subscription to the CORC Newsletter,
and a vote at the annual meeting of the corporation.

Family member amateurs at the same address are NO additional charge, (No Vote at annual meeting)

\$18 / 1 year - \$32 / 2 years - \$45 / 3 years Dues Enclosed \$ _____
Optional Donation – CORC is a 501(c)(3) corporation \$ _____
Total \$ _____

Please mark one: New Application Renewal Application

Call Sign _____ Name _____ e-mail _____

Call Sign _____ Name _____ e-mail _____

Call Sign _____ Name _____ e-mail _____

Street Address _____

City _____ State _____ Zip _____

Home Phone () _____ Alternate () _____

How many of above are ARRL Members _____ (CORC is an ARRL affiliated club)

Check to Request Newsletter by e-mail (this saves the club printing & mailing costs) _____

Please make check payable to CORC and mail application with check to:

Central Ohio Radio Club, PO Box 166, Sunbury, Ohio 43074-0166

For questions call membership chairman John, W8RXX @ 614-579-0522
or visit the CORC website at www.corc.us

We Thank You for your Membership and Support!

Rev 1/19a

The Central Ohio Radio Club Newsletter

January 2019

President
Laura Perone
KA8IWB

Vice-Pres.
Warren Hull
W8WJH

Secretary
Tony Fabro
N8RRB

Treasurer
Steve Robeano
WD8JKX

**Newsletter
Editor**
Sandy Robeano
KB8CIQ

**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

CORC Announces Annual Meeting!

The 49th Annual Meeting of the Central Ohio Radio Club, Inc. will be held on Sunday, February 24, 2019 at the Genoa Township Hall. The Pot Luck Dinner starts at 6 PM. A flier is enclosed with this newsletter. The club provides soft drinks, coffee, paper plates and plastic-ware. Please bring a covered dish and serving utensils. We are giving away a new Kenwood TM-281A 2 meter Transceiver this year. Like previous radio raffles, any paid up MEMBER present is automatically given one ticket at the door per family. Anyone present, member or non-member, may purchase additional tickets for \$5 each.

Election of directors whose terms are expiring will take place as well as an overview of the last year's operations. The nominating committee consists of John Perone W8RXX, Steve Robeano WD8JKX, and Rick Tressler WA3UOO. Terms expiring are Tony Fabro N8RRB, Warren Hull W8WJH, and Laura Perone KA8IWB. Volunteers for committee positions or chairs will also be taken for later appointment by the President.

Anyone wishing to nominate a member for a board position should contact Chair of the Nominating Committee, John Perone, in writing at least ten days prior to the meeting. Letters of Intent can be mailed to: CORC Nominating Committee c/o John Perone, PO BOX 166, Sunbury, Ohio 43074-0166 or can be e-mailed to John Perone at: jper@insight.rr.com.

For your information and in accordance with our by-laws an extract from the current CORC Constitution appears below:

Section 3.10 – Election of the Board

The election of Directors to replace those whose term has expired shall take place at the annual meeting of the members, or at a special meeting called and held for that purpose. At least twenty (20) days prior to the date of which such election is held, the President shall appoint a Nominating Committee consisting of three (3) persons who may but need not be Directors. Such committee shall prepare a list of candidates to fill the Board of Directors and nominate such candidates at the meeting. Other nominations may be made from the general membership; however, any candidate's name so placed in nomination must be submitted in writing and accompanied by written consent of the nominee to the Nominating Committee at least ten (10) days prior to the annual meeting.

If nominating someone to the Board, be sure to check Section 3.01 on WWW.CORC.US for the minimum qualifications of Directors which were changed in 2018.

As required by our by-laws, all members were notified of the Annual Meeting by postal card even if they requested newsletters only by e-mail. For many members, dues are now due. **Check the label on the postcard for your expiration date.** We are trying to make sure we have everyone's up-to-date home address. If everything is correct, just mail in the label page with your payment. Please fill out the application in full *only* if anything has changed from what's printed on the label. If you want to receive the newsletter electronically, we will also need an e-mail address. Please use an address that is not forwarded as those e-mails are usually bounced or lost. Thank You!

The Central Ohio Radio Club Newsletter
From CORC President's Desk
Laura Perone KA8IWB

Happy 2019! The club spent some of your money improving the repeaters during the last several months.

On 146.76 The 25 year old Super Stationmaster antenna at the transmitter site failed... after only 25 years. Nope, it wasn't still under warranty. We had to employ a professional tower climber to remove the old and install the new. When the antenna failed, the power amplifier was also damaged. We decided to purchase a solid state 250 watt power amplifier to replace the old tube unit. Legacy tubes are getting harder to find and are expensive. The new power amp and its power supply were expensive but a good investment in both the long and short run. Also, the link package on the north site was replaced from stock spares.

On 147.33 The UHF link receiver at the transmitter and VHF exciter were replaced with much newer units. A solid state power amplifier on the transmitter was also installed. The signal is now quite a bit stronger than in the last several months.

On 146.97 A failing UHF link transmitter was replaced temporarily with an old stock Midland unit and a few days later with a permanent newer pre-programmed Motorola unit from stock.

It's a new year and CORC dues are due. Please note dues have not increased since 1970. What other organizations can say that? We need your dues, and when you can, your donations.

A post card was sent to all members a few weeks ago that had your membership expiration date noted. Those who need to hopefully have already sent their dues in. Have you? We thank you for your continued support!

The Kroger Company has been a contributor to CORC for years now. During 2018 they contributed approximately \$250. You can help increase that amount if you are a Kroger shopper and list CORC as your Community Rewards choice. This choice must be re-selected every April. Look elsewhere in this newsletter for how you can assist. THANKS!

If you didn't make it to the last potluck, here is what you missed... John, W8RXX, gave us a slide tour of WWV and WWVB. As you probably have read, there is much discussion about the threatened future of WWV/WWVB. They could be defunded by the government.

Gift cards were won by Brad, KE8HXE, Marge Daniels, and Dale, W8KTQ. Orli Fabro won the 50/50 drawing. William "Bill" Kretschmer, KD8VRN who last year won exclusive possession and use of the nationally coveted Rockbound Rig for a full year will return it at our February 24 meeting. Who knows who will win it next? Maybe you! You never know what you may go home with. We all have good visits, a good time, and not least important very good food.

I look forward to meeting you at the February 24th annual potluck meeting...

Laura, KA8IWB
CORC President

The Central Ohio Radio Club Newsletter

Travelin' Tony's Timetables by Anthony "Tony" Fabro N8RRB

***“If you always do what you’ve always done,
you’ll always get what you always got.”*** [Editor’s Note]

‘Scarecrow’ in L. Frank Baum’s “The Wonderful Wizard of Oz”
May 17, 1900 (source unconfirmed)

First, a wish to you and yours for a happy and prosperous 2019!

I am not a person who makes resolutions at the start of the year (resolutions can be made at any time). However, for the sake of writing this article, I’ll throw out some thoughts regarding resolutions for you to consider for the New Year.

First, resolve to learn how your radio functions. OK, I know this sounds odd and maybe a bit condescending, but consider this: it has been documented in many articles regarding gadgets (and I consider a radio a gadget), that we learn to use only a small fraction of any gadget’s available functions. For our radios, we may learn how to punch in a frequency and save it into memory, but our knowledge gain may not go much beyond that.

I admit I am as guilty of this as anyone. My Yaesu mobile radio has 59 menu settings to change CTCSS tones and other variables, and I think I’ve used five of those 59 menu settings. There very well could be other useful things to learn! So resolve to sit in front of the radio with manual in hand (yes, that means read the directions) and see what else your radio has to offer.

Next, resolve to learn something new about our great hobby. Ham radio is a constantly evolving hobby, embracing new technology which results in new areas of interest. It’s quite possible that, like that radio you only know 10% about, there is an area of ham radio that you don’t know about that might be of interest to you. The hobby is so much more than two people communicating via their radios. Look at the ARRL or QRZ web pages for ideas of what is out there, and challenge yourself to learn something new.

Finally, resolve to attend a ham radio event in person. For millennials and younger, this might be a challenge since their communications seems to be via a device only! Regardless of your age, get out of your comfort zone and attend an event. This could be one of CORC’s famous potlucks (the next one is on February 24th), or attend a hamfest, or even volunteer as a communicator for an event. The point is to get active in the hobby, and you’ll learn from others what they are doing (which might satisfy the resolution above about learning something new about the hobby!).

I bid you good luck in your resolutions, and hope that you will make ham radio a bigger part of your routine in 2019.

Have a safe day.

The Central Ohio Radio Club Newsletter

Membership News

by CORC Membership Chair John Perone, W8RXX

Many thanks to the following who have donated their time, talent, money, printing, etc. since the last newsletter was printed. This all helps keep CORC financially sound.

W8RRJ	W8NBA	WD8QWR	N8RRB	KD8ASZ	KB8CIQ	WD8JKX	W8RXX
WA8KKN	KA8IWB	KD8RTP	N8XYP	WA3UOO	KV8Z	KROGER	

Please welcome the following who have joined CORC since the last newsletter was printed. Thank them for joining when you hear them on the air.

N8PRB - Philip	KD8ASZ - Robert	KD8BDO - Royden	KD8BGR - Charlotte
KV8Z - Chris	KE8HXD - Karen	KC8GLT - Frank	

CORC is Sponsoring an ARRL VE Test Session

by CORC Membership Chair John Perone, W8RXX

Come UPGRADE or bring that potential NEW ham friend who has been studying so hard...

Date: Sunday February 24, 2019 (same day as CORC Potluck)

Time: 1:00 PM (Walk-ins allowed)

Contact: Craig J. Blaine (614) 245-8697 Email: wb2fve@gmail.com

VEC: ARRL/VEC

Location: Genoa Township Hall 5111 South Old 3C Highway, Westerville, OH

[Editor's Note: I was very nervous before I took my first driver's test back in the last century. I was worried I might not be ready. A friend told me to calm down and added "..., nobody stamps on the license how many times you took the test." If you think you might be ready, go for it!]

Kroger Community Rewards Program – Upgrade

by CORC Membership Chair John Perone, W8RXX

The Kroger Company has recently upgraded their Community Rewards system. As a result the Central Ohio Radio Club, Inc. as a Non-Profit Organization has a new account number **SU216**. Please reference this new number when signing up or re-confirming each year.

If you are not signed up yet, now's the time! Also, please remember that every April you **MUST** reconfirm your donation. If you missed reconfirming this year, please do it **now**! There are still 3 months left before next April. CORC thanks you for these extra donations. It ALL helps!

How much does it help? Since we joined the program nearly 6 years ago, Kroger has given us a little over \$1,600 or about \$265 per year. Want to know more about the program? See <http://www.corc.us/page9.html>. Kroger Community Rewards will **NOT** affect your Kroger Fuel credits or other Kroger benefits in any way.

The Central Ohio Radio Club Newsletter

Central Ohio Traffic Net 2018 Activity by Matthew Curtin KD8TTE

Central Ohio Traffic Net (COTN) is among the groups that CORC supports with its repeater system. We meet at least once every day of the year to move messages in the form of *Radiogram* from one station to another. When disaster or emergency strikes, phone and Internet service can be lost or become unreliable through outages and overload. Amateur Radio's system of routing messages (collectively known as *traffic*) from one station to another is a critical component of providing relief and how amateur radio supports the affected populations.

We train with other radio organizations, including other parts of the American Radio Relay League (ARRL) and Radio Relay International (RRI), as well as other response organizations including Community Emergency Response Teams (CERT). We function as part of the auxiliary communications component of Franklin County Emergency Management & Homeland Security (FCEM&HS). Our coverage area also includes the State of Ohio's Emergency Operations Center, and therefore provides relay support to the W8SGT amateur radio station there.

Disasters that require us to respond are of course rare. Developing and maintaining the skills of operators, as well as the 'health' of the complex system of relays and liaisons, is the work that happens *between* emergencies. When we meet most evenings, it's to exchange greetings and well-wishes, or to participate in an exercise. Staying active helps to ensure that we have a stable force of operators who can perform the duties of net control, traffic routing, as well as origination, relay, and delivery of messages on behalf of others.

CORC supports COTN on both the 146.97 (primary) and 146.76 (backup) repeaters. You'll find us meeting daily at 7:15 PM, as well as other times as needed. We meet in person for business and training monthly on the second Thursday of each month at FCEM&HS—and the on-air net session still takes place then.

COTN held sessions **380** times in 2018. We had **3,639** checkins and operated for **7,244** minutes—the equivalent of over five days of continuous operation. Total *traffic*—unique messages through a net session—was **1,059**. Thirteen unique stations acted as net control for one or more sessions throughout the year, and seven acted as liaison—taking messages from COTN and checking in with them to another net that will relay them closer to their destination, or doing the same to bring messages into COTN.

We're grateful for the support CORC continues to provide. COTN is a training net and we are always happy to hear **others** check in. Find operating procedures, training tips, announcements and more on our web site at www.cotn.us.

Matthew Curtin, KD8TTE
Net Manager

Optimizing Antennas – Not Just for Hams by Anthony Fabro N8RRB

When putting together our ham stations, whether it be at home or in the car, the decision of what kind of antenna to use is dependent on what our goal is. On VHF/UHF, if we just want to talk on repeaters or locally via simplex, an omni-directional antenna is usually selected. On HF, if we want to focus on DX, we might select a beam antenna with a high elevation.

Businesses go through a similar decision process when selecting radios and antennas. What will they be used for? What is the terrain? How far does the signal need to be heard? Will the equipment be subject to potential interference from other RF sources? Each of these questions plays a factor in the final radio and antenna decisions.

An article was published recently online at <http://www.railwayage.com> describing Trinity Rail's decision process when they were selecting antennas for their new TEXRail commuter line from Ft. Worth to the DFW Airport. The article has some nice field strength and antenna diagrams, as well as some good information about *why* they picked the antennas that they did. It's an interesting read even if you don't like trains!

Check it out at <https://www.railwayage.com/cs/ptc/good-antennas-make-good-neighbors/>.

Tony

Central Ohio Radio Club, Inc
Sponsored
ARRL VE License Exam Session
(Walk-ins Allowed)

SOUTH OLD 3C HWY IS STILL CLOSED ½ WAY BETWEEN
****OH RT 3 & BIG WALNUT RD****

Sunday February 24th 2019 1:00 PM EST

Genoa Township Hall
5111 Old 3C Highway
Westerville, OH 43082

CONTACT: Craig J. Blaine (614) 245-8697 eMail: wb2fve@gmail.com
VEC: ARRL / VEC



Put this notice on your refrigerator as a reminder or tie some RG-8 around your finger.

Lead-Acid Battery Storage During Winter Months

by Rick Tressler, WA3UOO

Many hams use batteries for portable and EMCOMM use. They are portable and, depending on their electrical size, can deliver enough power to operate radios and other equipment for hours, even days. During the summer months, batteries are used quite a bit and should be recharged shortly after their use, making them ready for another outing. This is especially the case when the warmer months turn our attention to field day, public service events, camping and other warm weather activities when we like to take our radio gear out into the field. Storage and charging between uses is an important part of obtaining reliable service and long life from your batteries. This article will discuss the basic care and feeding of lead-acid batteries.



Fig 1 12 volt maintenance free lead-acid battery

Lucky for hams, much, if not most radio gear can be operated using a 12 volt battery. This makes selection and use quite easy. Care of a lead-acid battery can be confusing at times. It's important to know that all batteries, including lead-acid types experience "self-discharge", also known as standing loss, which drains some of its energy during periods of non-use. When stored for too long the internal components called plates, will become discharged to the point where some of the capacity becomes unrecoverable. Loss of capacity in any battery occurs over time but owners can do a few things to extend battery life with proper charging and storage.

Lead-acid batteries should be stored in a fully charged condition and whenever possible, in a cool, dry environment. Higher than recommended storage temperature increases the rate of self-discharge and this is one area where unrecoverable capacity loss occurs. Normal room temperature is recommended for storage. Cool storage temperature will reduce self-discharge and purely for the purpose of storage, it's better to be on the cool side than warm.

Lead-acid batteries can be stored for up to 6 months before a freshening charge is needed. Nothing can be connected to the battery that would constitute a parasitic load or your battery will be dead when you need it. In addition, you'll need to dig into your pocket for a new one. Such a charge can easily be accomplished by connecting your battery to a suitable charger for 12-24 hours. The battery can then again be placed back into storage for another 6 months.



Fig 2 Battery maintainer used only while in storage

The use of special chargers called "battery maintainers" has become popular. It's important to know that these chargers deliver a very low rate of charge, just a few milliamperes, to always keep the battery fully charged. They cannot, however, recharge a dead battery, not even one that has been partially discharged, so make sure your battery has been fully charged before using on these charge maintainers.

Continued on next page

Lead-Acid Battery Storage During Winter Months - Continued

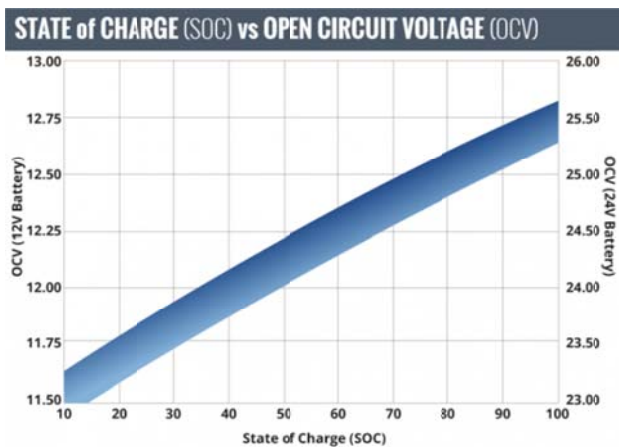
If you happen to be using a battery that requires periodic water additions, be sure to add the proper amount of distilled water after it has been charged but while it's still on charge. These batteries are called "wet" or "flooded" with the proper term being "vented lead-acid." Adding water before charging is a great way to cause overflow, loss of electrolyte and other problems. The tops of the plates are visible when the vent caps are removed. Electrolyte must always cover the plates. Since most hams use popular "maintenance free" batteries, water additions are of no concern.



Battery Storage Box

There's an old "wives' tale" that says storing a battery on a concrete floor will result in killing it. That's false, so don't worry about it. That said, it's not a bad idea to keep your lead-acid batteries in a plastic storage box designed for the purpose.

When fully charged, having been standing on open circuit for 24-72 hours, a 12-volt maintenance free battery should read *about* 12.9 volts. As the state of charge decreases with storage time, so does the open circuit voltage.



Many people think that if they're reading 12 volt, the battery is good. That's not the case. Open circuit voltage decreases with state of charge. So, the reality of a battery reading 12 volts indicates it is significantly discharged and in need of immediate recharge. Prolonged periods of storage while a battery is discharged results in a condition called "hydration". It is an unrecoverable condition and must be avoided. Left to stand indefinitely, the voltage will eventually reach 0 volts.

Your batteries will give you long, reliable service as long you take care of them. This includes proper storage and charging. Questions can be directed to me via email at wa3uoo@gmail.com.

CORC TechNet Update for 2019 by Rick Tressler WA3UOO

Net meets on 146.76 repeater every other Sunday at 7:30p for about an hour to discuss technical & educational ham radio topics. PL tone of 123.0 Hz is required to access repeater. You don't need to be a member of CORC to participate. All amateur radio operators are welcome and encouraged to check in. Current remaining TechNet schedule is below, subject to change.

- March 10 - Open
- March 24 - Batteries for Portable & HT Operation
- April 7 - Computers
- April 21 - Hamvention / Hamfests

CORC Fall Meeting & Potluck

Sunday February 24th 2019 6:00 PM EST

Genoa Township Hall (See Map on Back)

**SOUTH OLD 3C HWY IS STILL CLOSED ½ WAY BETWEEN
OH RT 3 & BIG WALNUT RD**

Bring a Covered Dish (with Serving Spoon)

CORC will Provide

High Quality Plasticware, Soft Drinks, Coffee, Tea
Cups and Plates, Napkins and Ice

(Editor's Note: The ice that will be used was harvested from the Perone driveway in Galena at 7:56am on January 21)

Program Speaker

Richard "Rick" Tressler, WA3UOO CORC Director

Basics of Digital Mobile Radio ("DMR")

Rick will give us an introductory survey of DMR.

*DMR has the capability to 'work the world' from your easy chair with a handheld radio and a ¼ of a watt!
Okay...so it's not quite that simple but it's darn close!*

But Wait There's More!

Traditional 50-50 Drawing

Drawings for Several Door Prizes

Drawing for 1 year Stewardship of the Legendary Rockbound Rig

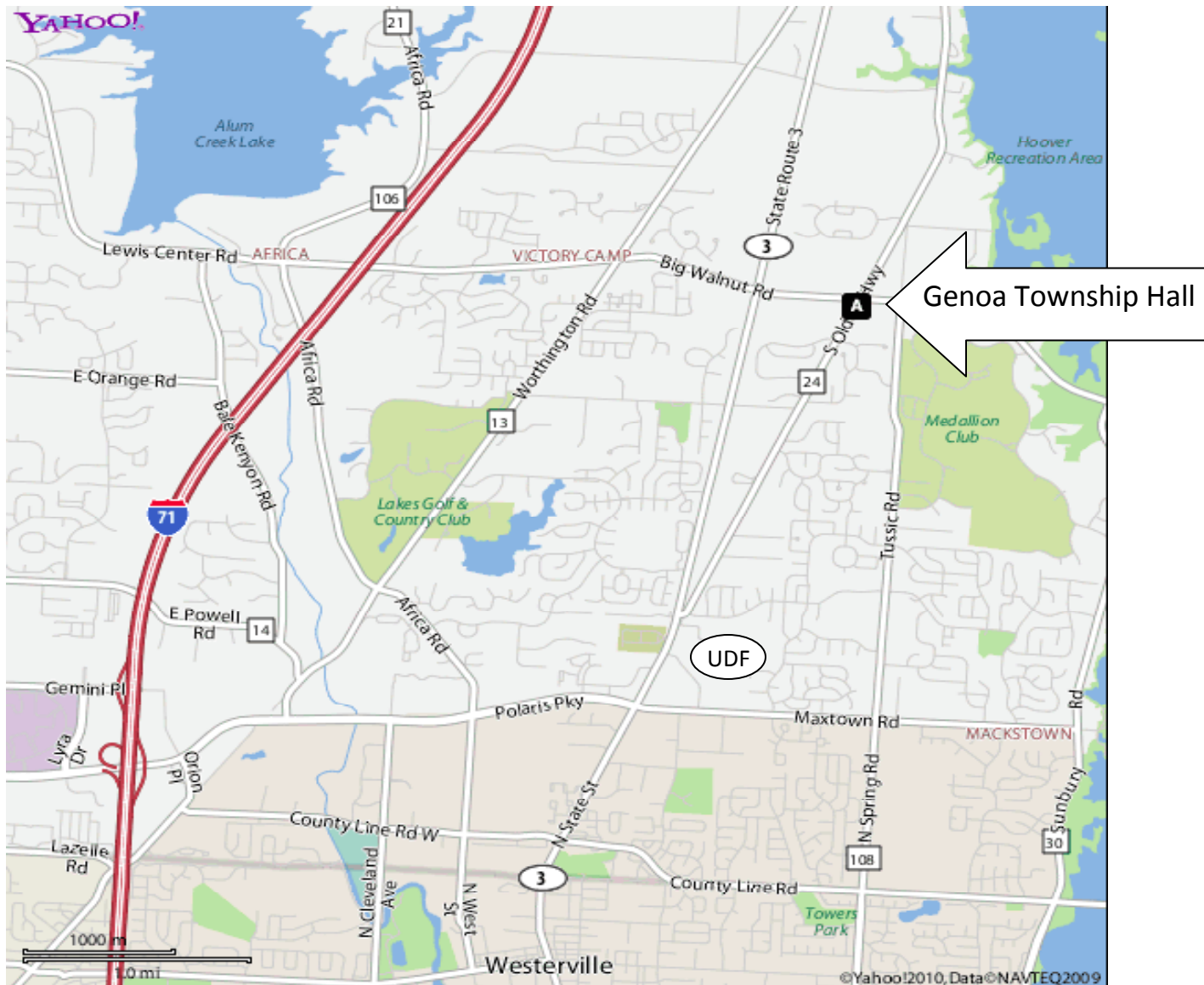
Raffle for a New Kenwood TM281A 2 Meter Mobile Transceiver

Reports to the Membership from the Officers and the Board

Election of 3 Directors to fill Expiring Terms

Put this notice on your refrigerator as a reminder or tie some RG-8 around your finger

And now that you know about it...
Here is how you get there!



From 71 take Polaris Pkwy east. Turn left onto N State Route 3. Turn right onto S Old 3C Hwy.

Go north to the Genoa Township Hall on your right at Big Walnut Road.

From 270, exit at State Route 3/Westerville Road and turn right onto S Old 3C Highway.

Go north to the Genoa Township Hall on your right at Big Walnut Road.

Genoa Township Hall is on the SE corner of Big Walnut Road & S Old 3C Highway.

5111 S Old 3C Highway

Westerville, OH 43082

GPS: 40.178632, -82.902903

Revised January 2017