

Editor, CORC REPEATER NEWSLETTER
JOE HAHN (W8NBA)
P.O. Box 166
Sunbury, Ohio 43074-0166



THE CENTRAL OHIO Radio Club May 2010 Newsletter

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

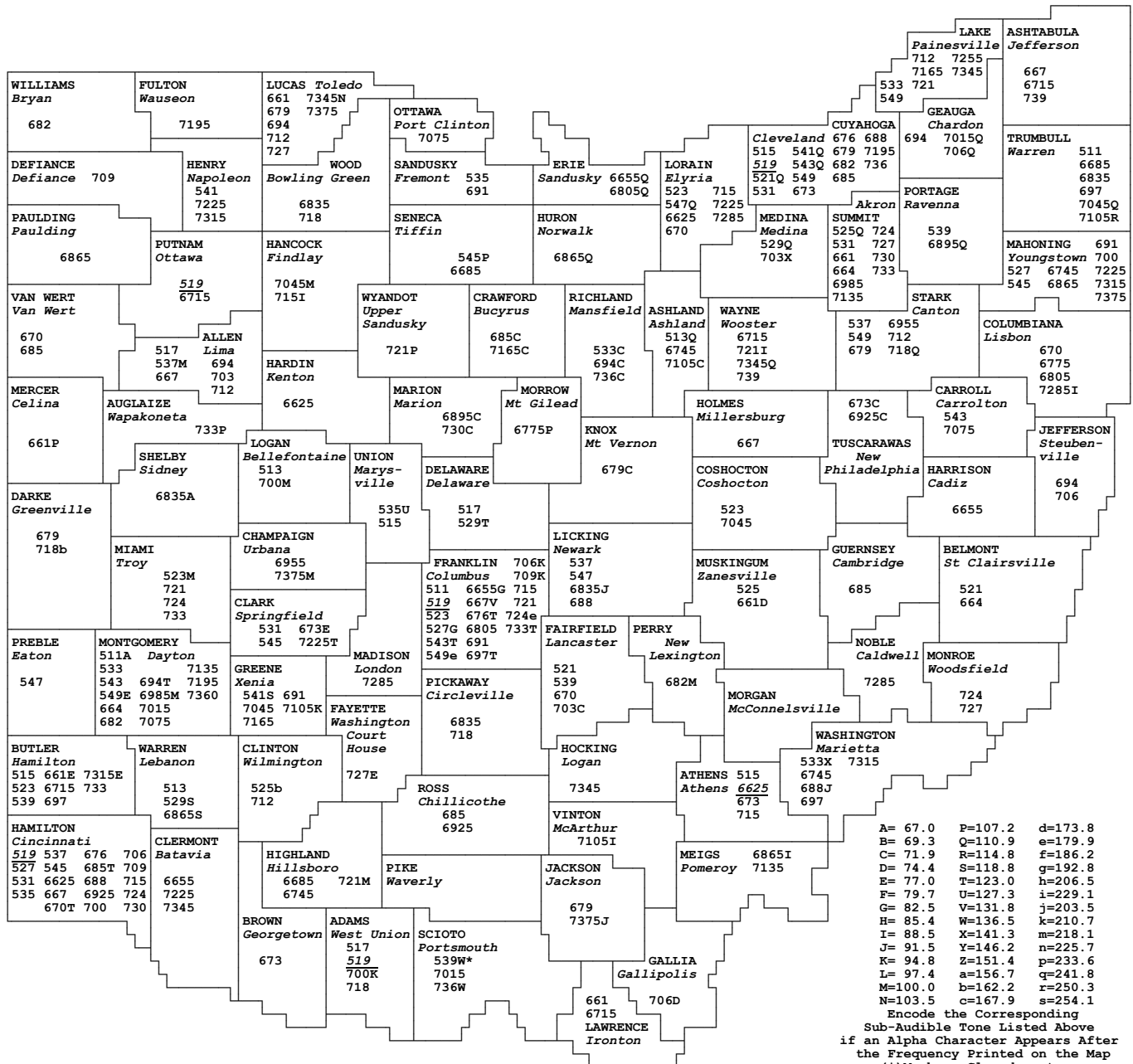


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THE CENTRAL OHIO Radio Club, Inc.

OHIO 2 METER REPEATER MAP

Prepared by KB8SSH since 2002



A= 67.0 P=107.2 d=173.8
 B= 69.3 Q=110.9 e=179.9
 C= 71.9 R=114.8 f=186.2
 D= 74.4 S=118.8 g=192.8
 E= 77.0 T=123.0 h=206.5
 F= 79.7 U=127.3 i=229.1
 G= 82.5 V=131.8 j=203.5
 H= 85.4 W=136.5 k=210.7
 I= 88.5 X=141.3 m=218.1
 J= 91.5 Y=146.2 n=225.7
 K= 94.8 Z=151.4 p=233.6
 L= 97.4 a=156.7 q=241.8
 M=100.0 b=162.2 r=250.3
 N=103.5 c=167.9 s=254.1

Encode the Corresponding Sub-Audible Tone Listed Above if an Alpha Character Appears after the Frequency Printed on the Map (*)Maybe a Closed system or may need DTMF to use Repeater

Additions or corrections to kb8ssh@arrl.net.
 Your RX frequency is shown. All RX frequencies below 147MHz use 600KHz minus offset for TX.
 All RX Frequencies at or above 147Mhz use a 600KHz plus offset for TX. EXAMPLE: 676T in Franklin County Indicates 146.760MHZ RX and 146.160MHZ TX with a sub-audible tone of 123.0Hz.

Wide area FARA linked repeaters are in ***bold italics*** in these counties: Hamilton, Putnam, Cuyahoga, Franklin, Athens.

Map is available for viewing and printing in .pdf format at <http://www.qsl.net/kb8ssh/map.html>
 3/14/2010

Central Ohio Radio Club, Inc. (CORC)

Membership application

**CORC operates repeaters on 52.70, 146.76, 146.97, 147.33 and 444.200
CORC affiliated repeaters are on 145.49 and 442.800**

Some of our features include:

**Autopatch access to Columbus and Delaware. IRLP linking on 147.33
Rapid access dialing to public service or member telephone numbers.
Repeaters used by the Weather Net in Central Ohio in support of The National Weather Service.
Multiple receiver sites on in Franklin, Licking, Delaware and Logan Counties
to ensure excellent coverage throughout Central Ohio.**

General 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.

We welcome amateurs of your family at the same address a family membership at no charge.

**Associate membership is available to interested parties that live
outside the general coverage area of the repeaters for \$10.00
Associate members have no voting privileges and receive an e-mail copy of the newsletter.**

***Please see dues
Schedule on
Reverse side...***

***Dues Enclosed \$ _____
Optional Donation \$ _____
Total \$ _____***

Please CIRCLE one: New Application Renewal Application Associate 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 above are ARRL Members ____ Check to request Autodial for Home Phone ____

Check to Request Newsletter by e-mail (this saves the club mailing cost) ____

Please make check payable to CORC and place call sign on check.

Mail application with check to:

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

For More Information call John, W8RXX @ 740-548-7707 or visit the CORC website at www.corc.us

Thank You for your Membership and Support!

Rev. 4-10

CORC DUES 2010 SCHEDULE

THIS TABLE ADJUSTS EXPIRATION MONTHS TO THE CALENDAR YEAR

Month you are Joining Or your expiration month	Selecting \$18 One Year Plan		Selecting \$32 Two Year Plan		Selecting \$45 Three Year Plan		
	Pay	To Expire on Dec 31	Or Pay	To Expire on Dec 31	Or Pay	To Expire on Dec 31	
JAN FEB MAR	\$18.00	2010	\$32.00	2011	\$45.00	2012	
APR MAY JUN			\$13.50		\$28.00		\$41.25
JUL AUG SEP			\$9.00		\$24.00		\$37.50
OCT NOV DEC	\$18.00	2011	\$32.00	2012	\$45.00	2013	

Since 1970 CORC Membership still is only \$18.00 for 1 yr - \$32.00 for 2 years - \$45.00 for 3 years

We are striving to get every ones membership to the calendar year schedule. Thanks for your understanding!

Associate Membership is \$10.00 per calendar year regardless of application date

All associate memberships expire December 31 of the year joining

If you have difficulty understanding this chart please call membership chairman... Thanks!

The Central Ohio Radio Club Newsletter

May 2010

President

Laura Perone
KA8IWB

Vice-Pres.

Phil Carter
WD8QWR

Secretary

Tony Fabro
N8RRB

Treasurer

Steve Robeano
WD8JKX

Newsletter

Editor

Joe Hahn
W8NBA

Membership

Chairman

John Perone
W8RXX

Repeaters

52.70 / 52.94
W8RRJ

146.16 / .76
W8RXX

146.37 / .97
W8RRJ

147.93 / .33
W8NBA
IRLP Node
8094

444.200
449.200
W8RXX

Associated

Repeater

145.49 / 4.89
442.8/447.8
W8CMH

CORC Spring Meeting Planned

The *Central Ohio Radio Club* will hold its annual Spring Meeting on Sunday May 23rd at the Genoa Township Hall. It will start at 6 PM. Please bring a covered dish to share with a serving utensil. CORC will provide the drinks, plastic ware, cups, plates and many other surprises. Don't miss this opportunity to meet many of the operators you have spoken with over the years. A splendid time is guaranteed for all. The speaker for the evening will be Ken Haydu from the National Weather Service in Wilmington, OH. His topics will include what is needed from weather spotters in the field and safety while weather spotting. He will also have an overview of Wilmington NWS operations. Look for the fridge flyer later in this newsletter for more information and directions. The latest info on this will be on the CORC website at: www.corc.us . Don't miss this fun event.

The Annual Meeting held last January had the largest attendance that we can recall. Over sixty members and guests enjoyed good food, good company and super speaker in Gary Mackey and his talk on IRLP. K8NIO, Trigg Tabor was the big winner by having the lucky raffle ticket for the Two Meter Transceiver. WB8RUW, Denny Dittiacur won the 50/50 drawing and KA8HEO, Larry Cummings won a years use of the clubs RCA rockbound rig.

Tech to General without a Test!

Did you receive your Technician license prior to March 21, 1987. Did you know you can upgrade in one easy step to General. In some cases a current or former licensee can earn credit for certain exam elements based on the license currently or formerly held. If you hold a Technician license that was issued prior to March 21,1987, you have lifetime credit for Element 3, General. To upgrade you must provide proof that you held such a license by producing the original license or a letter from the FCC stating that you held such a license. In some cases the COLVET VE Team may be able to find you in an old callbook for proof. Contact them through their website at colvet.org before an exam session to see if they can provide your needed proof. Usually there are enough VE's at the CORC meeting to do this type upgrade and the best thing is through COLVET's VEC it is 'FREE'. If you hold a current Technician license, you can be issued a CSCE giving you credit for having earned a General class license. Otherwise, you will need to take the Element 2 Technician exam and, if you pass, you will be issued a CSCE giving you credit for having earned a General class license. You earned the credit way back when so why not take advantage. Contact Bill Neill, NE1LL for more information at ne1ll@ymail.com .

Membership Update

By John Perone, W8RXX

We want to welcome the following who have joined CORC since the last newsletter was printed. Please welcome them when you hear them on the air.

W5JAJ	JACK FLESHER	N8XYZ	LIZ SMITH
W8LAD	LYNN DURHAM	KD8MWL	TIM TRIPLETT
N8SCU	KRIS SMITH	KC8MLO	RALPH HUMPHREY
KD8CWH	BRIAN REESE	KD8NDX	JERRY HANCOCK

Thanks to CORC members who have donated time, talent, extra money or equipment to the club in addition to their dues.

The following members have given something extra to CORC since the last newsletter was printed:

KB8CIQ	N8JYV	WB8A
WB8RUW	N8PCJ	W8INO
WD8JKX	KD8LVA	W8WZZ
KB8EUX	KA8IWB	W8RRJ
W5JAJ	W8LAD	N8OCQ
W8FEH	KC8MLO	K8KDR
KD8BZF	KD8IDJ	WD8QWR
N8RRB	KA8ZNY	K8NIO
K8VKA	N8PVC	W8RXX

Greetings from the President

Spring is here. It is nice to see the leaves on the trees. The leaves however absorb RF and decrease the coverage of repeaters. Keep this in mind if told you are noisy into the repeaters.

Also keep in mind that handi-talkies are wonderful as receivers. As transmitters, they can be another story. I realize CORC has just added a new receiver on 146.76 to help with coverage, but inside cars, in severe weather, and around tall buildings your transmission could be noisy although reception of the repeater is great. A great help to this problem is using a mobile antenna when in a vehicle. The weather net suggests we have mobile rigs for this reason.

Help to spread the word about the May 23 potluck. I hope to see you there. A refrigerator note is printed towards the end of this newsletter to help remind you of the date and time.

One final thing, CORC now has a PO Box in Sunbury for all official business. You will notice the address on the membership renewal form is now: CORC, PO BOX 166, Sunbury, Ohio 43074-0166. Newsletter submissions will still go to Joe Hahn W8NBA, PO Box 398, Pataskala, Ohio 43062-0398.

73,
Laura Perone
KA8IWB

Technical Updates

New 146.76 W8RXX Downtown Receiver Site:

We have added an additional receiver on the 146.76 repeater in downtown Columbus. There is still additional filtering and a squelch / PL decode timing issue but as it is it really helps downtown coverage. As soon as these two issues are solved additional receivers for 147.33 and 146.97 will be installed here.

147.33 W8NBA Repeater

Just after getting 147.33 repeater audio tweaked and IRLP node working we get a call advising us that the tower and building that the transmitter and antenna is located at is coming down. It has been located at WCVO radio station in New Albany for over 25 years. They sold the land and the new owner is removing the tower. After much searching for a site that could both hear the UHF link from W8NBA's QTH and provide reasonable coverage for the transmitter we think we have a winner. Comtech, Inc. has offered a site just a few miles east of the old WCVO location. It should be back on before the May meeting if all goes well. Thanks to Tom Schleppe, K8VKA who recently received Ed's old call and Comtech.

Letters to Corky – and some Re-Runs...

When making an auto-patch can I have the telephone number I dial NOT be spoken over the repeater? J.K. Columbus

The 146.76 repeater controller and most other repeaters have this security feature built in. All you have to do is after dialing wait for the repeater to say auto-patch, then key your mike once, the repeater will **NOT** speak back the number called. The reason for having the repeater normally speak back the number is to allow you to be certain you dialed correctly while mobile.

Can you explain the function of the reset beeps on the repeaters? K.W. Columbus

The "reset beep" has more than one purpose. First it advises the repeater is available for another 3-minute transmission. Secondly, it allows someone wishing to join in the conversation, time to do so. An example: You have finished transmitting and release your PTT. The station wishing to join into the conversation states their complete call sign immediately, without waiting for the reset "beep". After identifying, the joining station waits to be recognized by one of the stations already in the conversation. The FCC requires this 3-minute timer so repeaters will not become locked on. There is a 5 second timer that holds the transmitter on after the reset beep. You **do not** have to wait for the repeater carrier to completely drop before transmitting, just wait for the reset beep. The club runs announcements of upcoming events at the conclusion of the 5 second timer. If you wait the entire 5 seconds your transmission may become covered up by this announcement.

Where do my dues go and what do they do? M.B. Canal Winchester

Your dues are the lifeblood of the club. These along with the donations allow the club to replace equipment, as nature seems to take its toll. They also pay the utility bills, upgrades of equipment, newsletters. With the price of copper and aluminum going up feed lines and antennas are quite a bit more expensive.

Keep those card & letters coming for Corky... Please e-mail your questions to any of the directors, they will pass them on... Thanks!

Central Ohio Severe Weather Network

By John Montgomery, N8PVC

Reportable hail size changing to one inch across the country

New this season is a change in what the National Weather Service (NWS) considers for reportable hail size. Since the 1950s, $\frac{3}{4}$ inch hail was required in order to meet severe thunderstorm criteria. Beginning this season, hail size criteria jumps to 1 inch across the United States. Thunderstorm warning criteria becomes 1 inch or larger hail and/or winds at 58 or more miles per hour.

What's the reasoning behind the change? According to the NWS there is a concern that people will become desensitized by numerous warnings being issued for marginal hail sizes. Add that roofing damage does not occur until 1 inch hail is observed and there is a reason for the change. Both the central and western NWS regions have used the 1 inch criteria experimentally for some time with some offices using it for several years. The NWS received 63 comments on the topic with 54 (86%) supporting the change during a recent survey.

How does this change affect the Weather Net and its reports to the National Weather Service? The NWS is interested in hail and encouraged us to report $\frac{1}{2}$ inch hail when the criteria was $\frac{3}{4}$ inch. What we're doing now is bumping our limit up to $\frac{3}{4}$ inch hail as requested by the NWS. This gives the NWS an indication of the hail size being produced by the storm and puts them in a good position if hail size gets to the 1 inch criteria.

It is possible that severe thunderstorm warnings could decrease as much as 30 to 40 percent annually. Broadcasters would not have to run scrolls on the screen or place warning maps on your television screens. It would very likely save them money.

How does this change affect you? You're going to have to realize that a severe thunderstorm warning, when issued, is more serious. There will be wind possibilities of 58 miles per hour and / or hail at 1 inch or larger. You want to be under cover with 1 inch hail. Remember that tornadoes may be possible.

Note that I didn't use penny, dime or quarter size hail as a measurement. Today, at the OSU Severe Weather Symposium, I heard a story where rice-sized hail was reported. Please use real measurements like $\frac{3}{4}$ inch or 1 inch hail. We do have ways to translate some of the larger objects (golf ball, baseball) to a measurement.

If you'd like to read additional information on the hail size change I've included some web addresses below.

<http://www.srh.noaa.gov/tsa/?n=hailchange>

http://www.nws.noaa.gov/om/notification/scn09-19hail_change.txt

http://www.spc.noaa.gov/misc/scn09-52_1inch_hail_oper.txt

<http://www.crh.noaa.gov/dvn/?n=oneinchhail>

What is PL and why do I care?

by: Anthony "Tony" Fabro N8RRB

If you listen to either the 146.760 or 146.970 repeater long enough, you'll hear one of the repeater IDs say "One Hundred Twenty Three Hertz PL". There's a good reason why the repeater is promoting the use of PL, and this article will explain what it is, and why you need to make sure you are using it.

CTCSS = PL

CTCSS, or "continuous tone coded squelch system", has been used for years both in ham radio and on the commercial radio market. PL or "private line" is Motorola Corporation's registered trademark for CTCSS. Hams today usually refer to the shorter PL designation when noting a repeater using sub-audible tone.

CTCSS or PL is simply a sub-audible tone transmitted with the carrier frequency. The tone either allows a ham to access a repeater, or allows a ham to hear only the audio which has the selected sub-audible tone. The primary purpose of PL is to assist in eliminating stray distant signals and inter-mod.

Decode vs. Encode

PL decode indicates that your radio *decodes*, or *passes* the receive audio only when the PL tone selected on your radio matches the PL tone being received. Just about all VHF/UHF radios built within the past 20 years have this feature.

For example, all of the CORC two meter repeaters transmit a PL tone of 123.0 Hz. If you have your radio set up to decode 123.0 Hz PL, then the audio will pass through the decoder and you can hear the repeater audio. If you have any other PL tone selected, your radio will show a signal present but you will not hear the audio. This is a helpful feature to use when listening in areas with a lot of inter-mod present.

PL encode indicates that your radio *encodes*, or *transmits* a PL tone. While this is a standard feature of most VHF/UHF radios of the past 10 years, older radios sometimes had this as an option and required the purchase of a separate PL encode chip. PL encode is used to access parts or all of a repeater.

As an example, let's go back to the CORC two meter repeaters. On 146.970, there are four receivers on the repeater out there to hear your signal. Three of the receivers require a PL tone of 123.0 Hz in order to access. So if you *encode* or *transmit* a PL tone of 123.0 Hz, all four receivers can potentially hear your signal. If you do not encode the tone, only one of the four receivers can potentially hear your signal.

Some repeaters require a PL tone to be *encoded* in order to access. Examples of this are the CORC 444.200 repeater (PL 151.4 Hz), and the two COARES two meter repeaters of 147.060 and 147.090 (PL 94.8 Hz).

Get your radio, check it twice

Most radios have PL decode and PL encode as separate functions. My Kenwood TH-D7AG has a feature called "Tone Freq" which only encodes PL, and another feature called "CTCSS" which both encodes and decodes PL. For any repeater using PL, I enable the CTCSS feature and then set it to the required tone.

Be sure that you are familiar with the functionality and are able to correctly program your radio. Test with another ham or another radio to see if your radio is encoding the correct PL tone. On the CORC repeaters, using the correct PL tone means your signal will potentially be heard by all of the receivers, thus improving the range of your signal. This is especially important during severe weather when lightning de-senses signals, or in marginal coverage areas such as river valleys.

Have a safe day.

YAESU

FTM-350R

NEW!



- 1000 Memories
- Six Scan Modes
- Bluetooth Ready
- Optional GPS
- Cross-Band Repeat
- Backlit DTMF Mic.
- CTCSS Encode/Decode
- TNC for APRS

The **Yaesu FTM-350R** dual band mobile transceiver operates on 2 meters and 70 centimeters. And that is with a full 50 watts of reliable power on both bands. And even QRP 220 MHz (1 watt) is supported (USA). It has two separate receivers with dual speakers on the rear of the control head. The controls are easy to use. On the left receiver enjoy the AM, FM and stereo FM broadcast bands with extended receive: 0.5-1.7, 76-108, 108-250, 300-1000 MHz (less former cellular frequencies). The right receiver covers 108-250, 300-1000 MHz (less former cellular frequencies). Enjoy 500 memories with alpha tagging for the left band and 500 for the right band (total 1000) plus 9 DTMF memories. And the FTM-350R menu system is easy to use. There are also stereo line inputs available. This radio has a built-in TNC for APRS® applications. Cross-band repeat is supported. The FTM-350R is ready to accept the optional FGPS-1 internal GPS receiver-antenna. The front panel is easily remoteable with the 10 foot included cable. A 20 foot remote cable is available optionally. There is a front panel built-in microphone activates PTT transmission. Supplied with: MH-48A6JA DTMF hand mic, front panel suction type mounting bracket, DC power cable, 10 foot control panel cable, speaker cable and manual.

Yaesu FTM-350R 2M/440 50/50W (220 1W)
List \$780.00 Order #3350 Please Call

ARRL REPEATER DIRECTORY

This famous 3 3/4" by 5 1/4" pocket sized guide has 19,828 listings for repeaters operating from 10 meters to over 1.2 GHz. 768 p. List price \$10.95.



Order #4649 \$9.95

ARRL DESKTOP REPEATER DIRECTORY

This famous pocket sized directory is also available in a bigger 6 by 9 inch format with larger type. 622 p. Published March 2010.

Order #3995 \$14.95

YAESU

VX-8R VX-8DR VX-8GR



The **Yaesu VX-8R** HT provides 5 watts FM on 50/144/430 MHz plus 1.5 watts on 222 MHz. It supports Blue Tooth hands-free operation with the optional items. There is also an optional GPS unit. This radio supports APRS® (B band only). The VX-8R is submersible to IPX57 specs. It supports simultaneous independent 2-signal dual receive function with both V+V or U+U. It has weather alert and a barometric sensor is included. The dot matrix LCD provides memory tags (to 16 characters). You even get a high-resolution spectrum analyzer with ±60 channels indication with wave monitoring of received and modulated signals! DCS and CTCSS encode and decode are standard. A 7.4 V 1100 mAh Li-Ion battery is included. 2.36 x 3.74 x 0.92".

Yaesu VX-8R Order #0008 Please Call

The slightly more expensive **VX-8DR** version is enhanced for even more sophisticated APRS® applications. Please see our website for details.

Yaesu VX-8DR Order #1608 Please Call

YAESU

FT-1900R

NEW!



- 221 Memories
- Wires™
- NOAA Weather
- DTMF Memories
- CTCSS Encode
- CTCSS Decode
- 55 Watts Output
- Weather Alert

The **Yaesu FT-1900R** provides Yaesu's legendary mechanical toughness in a low-cost, high-performance, 2-meter FM transceiver. It has strong receiver performance, covering 136 to 174 MHz. It has illuminated front panel keys and boasts 200 memories. You get CTCSS and DCS Encoder and Decoder circuits. 5.6 x 1.6 x 5.8 inches. The FT-1900R is similar to the famous FT-1802M, but adds a *Memory Only* mode and provides 5 more watts.

List \$193.55 Order #1900 Please Call

GRUNDIG

G8 TRAVELLER II

The **Grundig G8 Traveler II** covers long-wave, medium wave, shortwave and FM bands. Short-wave coverage is: 3190-3450, 3850-4050, 4700-5100, 5700-6300, 7080-7600, 9200-10000, 11450-12200, 13500-13900, 15000-15900, 17450-17900, 18850-19100 and 21430-21950 kHz. The G8 has an analog circuit with digital display. It features a 24 hour clock with alarm that can wake you to a buzzer or to music. Other features include: key lock function, backlit display, fast or slow tuning, longwave disable function, DST adjust and 9/10 kHz AM band step. There is also an extensive memory system that may be filled manually or automatically (ATS). The capacity is: 50 FM, 100 AM, 100 longwave and 200 shortwave frequencies. There is a built in ferrite bar antenna for longwave and medium and a telescopic whip for FM and shortwave. This radio even employs DSP-Digital Signal Processing to improve reception. Requires three AA cells (not included). With: carry pouch, stereo ear buds and manual. 6.625 x 4.125 x 1.125 inches 12.2 oz.



G8 Traveller II Order #0888 \$49.95

The new 2M/440 **VX-8GR** with built-in GPS has just been announced. Please see our website for details on the newest member of the VX8 family.

Yaesu VX-8GR Order #3008 Please Call

This device has been approved by the FCC, but price and availability have not been announced.

HT GO BAGS



These insulated bags are great for creating an *Emergency Go Bag* for your HT. There is plenty of room for your radio, batteries, accessories, *Repeater Directory* and more. The top is zippered and it has a carry strap plus an open pocket on the front panel. 8 x 6 x 5 inches.

Alinco Logo - Red Order #0611 \$7.95

Icom Logo - Blue Order #0589 \$7.95

Kenwood Logo - Green Order #0592 \$7.95

Yaesu Logo - Orange Order #0429 \$7.95

✓ **Looking for a new HT? Universal Radio will give you the appropriate Go Bag FREE with your new HT purchase to 06/30/10.**



Showroom Hours
Mon.-Fri. 10:00 - 5:30
Saturday 10:00 - 3:00

universal radio inc.

Universal Radio, Inc.
6830 Americana Pkwy.
Reynoldsburg, OH 43068

☎ 800 431-3939 Orders-Prices

☎ 614 866-4267 Information

➔ 614 866-2339 FAX Line

✉ dx@universal-radio.com

Guaranteed lowest prices on the web?

Not always. But we do guarantee that you will find our website the most informative.

www.universal-radio.com

- ✓ Ask for our 124 page free catalog
- ◆ Prices & specs. subject to change.
- ◆ Prices shown are after mfg's coupons.
- ◆ Returns subject to a 15% restock fee.
- ◆ Prices and promos valid to 05/30/10



**CORC ANNUAL SPRING MEETING
and Pot Luck**

SUNDAY

May 23, 2010

6:00 PM

The Genoa Township Hall

CORC WILL PROVIDE

Soft Drinks

Coffee/Tea

Plastic Ware

Cups, Plates

\$\$ 50-50 Drawing \$\$

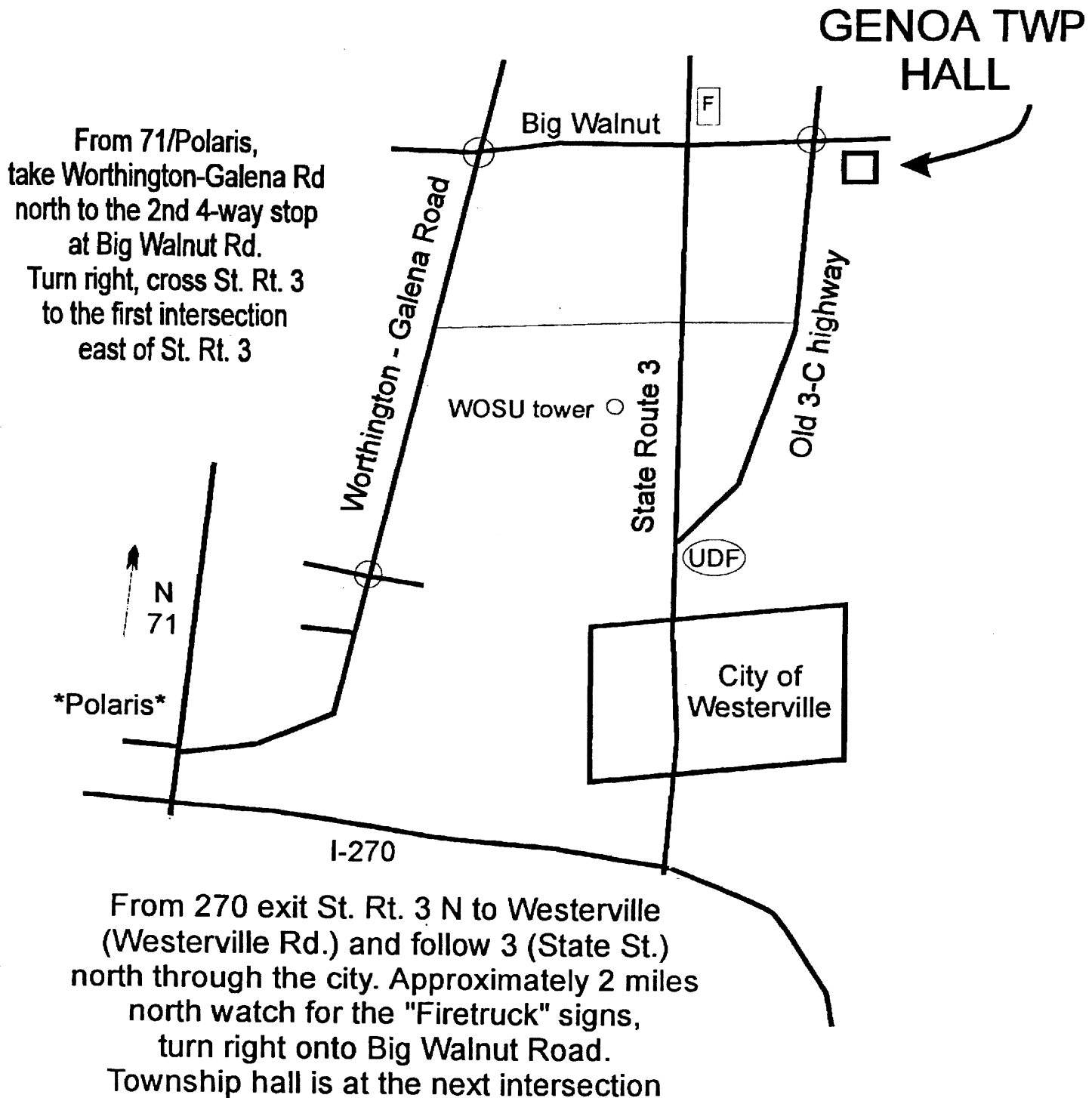
Guest Speaker

Ken Haydu from

The National Weather Service

in Wilmington, Ohio

Now that you know about it . . . Here's how you get there!



From 71/Polaris,
take Worthington-Galena Rd
north to the 2nd 4-way stop
at Big Walnut Rd.
Turn right, cross St. Rt. 3
to the first intersection
east of St. Rt. 3

From 270 exit St. Rt. 3 N to Westerville
(Westerville Rd.) and follow 3 (State St.)
north through the city. Approximately 2 miles
north watch for the "Firetruck" signs,
turn right onto Big Walnut Road.
Township hall is at the next intersection