

# The Central Ohio Radio Club Newsletter

April 2002

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KA8IWB

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N8RRB

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Jim Gifreda  
W8MAP

Newsletter

Editor

Joe Hahn  
W8NBA

Membership

Chairman

Jim Gifreda  
W8MAP

**Repeaters**

146.16 / .76  
W8RXX

146.37 / .97  
W8RRJ

147.93 / .33  
W8NBA

442.200  
449.200  
W8RXX

**Associate**

145.49 / 4.89  
442.8/447.8  
K8NIO

## Annual Meeting Announced!

The Annual Meeting of the Central Ohio Radio Club, Inc. will be held on Saturday, May 4, 2002. As usual it will be held at the Genoa Township Hall on Old 3-C Highway, just north of Westerville. The Pot Luck Dinner will start at 6 pm. A flier is enclosed with this newsletter. As usual the club will provide the soft drinks and coffee. Please bring a covered dish and serving utensils.

Also, election of directors, whose terms are expiring, will take place as well as an overview of the last year's operations. Those directors are: John Hull, W8RRJ, Jim Gifreda W8MAP and Roy Hook, WA8UHB. Roy has declined to run again, so a new director nomination is being sought.

Anyone wishing to nominate a member for a board position should contact Roy Hook, WA8UHB, Chairman of the Nominating Committee, in writing, at least ten days prior to the meeting. Letters of Intent can be mailed to: The Central Ohio Radio Club, Inc. PO Box 398, Pataskala, OH 43062, ATTN: Roy Hook, or can be e-mailed to John Perone, W8RXX, at w8rxx@juno.com. Any member can nominate or be nominated for a board position. Be sure to have the nominee present a letter of consent with your nomination.

For your information, and according to the by-laws, printed below is Article V, Section 10 "Election of the Board" from the CORC Constitution.

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 an election is held, the Board of Directors 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 and least ten (10) day prior to the meeting. A director's failure to attend two (2) consecutive meeting may result in declaration, by simple majority of the directors, the position vacant...

# Membership Update

By Jim Gifreda, W8MAP  
Membership Chairman/Treasurer

This is an important time of the year for the CORC treasury. The fiscal year for CORC, according to the Constitution, ends on April 30 of each year. As a CORC member, that simply means that it is time to pay dues. This year is an unusual year with regard to the number of members that have expiration dates for their membership on April 30, 2002. Many of the members have paid one or more years ahead of schedule. Of the total number of full-pay members (207 as of 3/14/2), only 104 members expire on April 30. So, half of you who are reading this can ignore it. Please check your mailing label and see which group you are in. And, if your dues are due, please respond appropriately using the membership renewal form attached to the newsletter. Thank you!

The Board of Trustees welcomes the following new CORC members:

KC8SSF	Gary Ruidid
WQ8H	Keith Chambers, Sr. (welcome back!)
KC8SXE	John Snowden
W8PDJ	Art Sherlock

Please greet them when you hear them on the air!

CORC members and other individuals continue to donate time, talent and extra money to assist the club with its operating expenses. The following individuals have donated since the last newsletter was printed in January. The Board would like to thank those who were able to assist with this additional effort.

W8INO	Robert Gunderman	W8RRJ	John Hull
W8PDJ	Art Sherlock	K8NIO	Trigg Tabor
KD8OK	Mike Murphy	KA8IWB	Laura Perone
WA8UHB	Roy Hook	WD8QWR	Phil Carter
W8NBA	Joe Hahn	W8MAP	Jim Gifreda
N8RRB	Tony Fabro	K8VKA	Ed Schleppe
W8RXX	John Perone		



Here Ye, Here Ye, Here Ye

Make sure you don't forget the CORC Annual Meeting on May 4<sup>th</sup>. Great Food, Great Friends and Great Fun....

## Technical Committee

By John Perone, W8RXX

### ***Downtown Receiver Site Repaired!***

The Downtown Receiver Site has been repaired. Ed, K8VKA & John, W8RXX had determined either the receive antenna or feed line had a problem shortly after the first of the year. We finally had a chance to have a tower climber inspect the antenna, or as I should say, where the antenna used to be. It had served a long life of over 20 years, but finally the wind or ice swept it off the tower. We had a new heavy-duty fiberglass antenna installed. All three VHF repeaters 147.33, 146.97 & 146.76 have receivers on this tower. They are now again functioning.

### ***444.200 Improvements – PL is now 151.4hz***

There has been for some time, noise that brings up the repeater from time to time. Wanting to get this figured out before severe weather season is upon us, John, W8RXX has been busy. First the duplexer was changed to a band pass, band reject type. Comtech, Inc. with their knowledgeable staff and state of the art test equipment was kind enough to tune it for the club. This both helped and hurt performance. It helped receive selectivity but hurt the transmit side. A spur on 222.1 mhz. (the national calling frequency) was now not being filtered out. With the help of Jim, W8FNW & Scott, AI8S it was finally determined that the exciter was the culprit. It was replaced and eliminated the spur. Since the repeater was off the air for a day another item was

changed. The PL frequency was changed to 151.4 hz. This helped eliminate any intermod signals with 60hz hum from bringing up the repeater. If you recall we were using 179.9 hz before. (the 3<sup>rd</sup> harmonic of 60hz is 180hz). John, W8RRJ pointed this out. It takes many people and an assortment of ideas to finally put a workable system together. Thanks to all that continue to volunteer...

### ***147.33 Now has Battery Backup***

Thanks to Phil Carter and Buckeye Power for supplying a surplus 500-watt UPS for the 147.33 Repeater. Since this unit only supplies power to the controller and link receivers and transmitter, it looks like it will keep the repeater on the air for about four hours during a power outage. Pataskala, where the controller is located, is well known to have numerous power outages during spring thunderstorms and periods of high wind. This repeater can now be counted on as another backup to the 146.76 during weather emergencies. It can also be used to keep in touch with the Newark area, as the phone patch is now local to most of the 740 calling area. Later this summer, feed line to both the link receive and transmit antenna is being replaced as well as the local receive antenna that was taken out by lightning last year. These repairs added to the recently repaired main transmitter will bring this repeater back to full strength.

# February Groundhog Potluck

By Madam President Laura Perone, KA8IWB

The beautiful weather we hope was the only thing that kept more people from attending. Other than directors, only 12 members attended. It was fortunate we did not have a speaker that evening, as it would have been very embarrassing. PLEASE try to attend these events so we can continue them. The cost of renting the hall for just a few people to attend is prohibitive...

The good thing was that those who were in attendance had a great time. Everyone got a grab bag, good ones too.... The 50-50 winner was Carol, KA8VOV.

Bill, K8UHH won the Nextel phone that Comtech, Inc. donated to the club for a give away. I think we may see more donations from Comtech, Inc. in the future. If you are interested in a cell phone or a commercial radio application please give Ed, K8VKA a call at 614-267-2585 for a ham discount.

Fred, W8WTB won the Grand prize of AMC movie tickets, popcorn and drinks.

Pictures from this event can be viewed at: <http://216.185.99.68/inv/65E4BF49DEA3812>, no password is needed. Or you can just go to the CORC website and click on the link there.

One of the surprises of the night was a yummy desert brought by Pat Reeves. Here is the recipe.

## Yellow Cake with Broiled Icing\*

Bake yellow cake in 13" X 9" oblong pan.

### Broiled Icing

Mix together:

- 6 Tbsp. soft butter
- 3/4 C. brown sugar
- 4 Tbsp. rich cream or milk
- 1/2 C. chopped nuts
- 1 C. coconut

Spread over top of warm cake.

Place cake about 3" under broiler until mixture bubbles and browns.

\*From the 1950 edition of the Betty Crocker's Picture Cook Book.

For Sale:

Yaesu

### PACKAGE DEAL-Original Owner

- TWO (2) - FT-208R 2 Meter Radios  
(Both have PL Encode Modules installed)
- 1 - Drop in Charger
- 1 - Wall Charger
- 2 - Speaker Mics
- 1 - Leather case
- 2 - Manuals
- 2 - Original Boxes

Both radios operate great  
Both have good Displays & Batteries  
Complete Package Price \$225.00  
Call Laura KA8IWB 740-548-7707

# Repeater usage revisited

by: Tony Fabro N8RRB  
afabro@sprynet.com

For the past several years I have kept track of the repeater usage of a few selected repeaters in central Ohio. I first started doing it to note how overused one repeater was while all the others were underused. Since then the survey has evolved somewhat to note the overall trends of the repeater usage in the area. Keep in mind that by no means is this survey all-inclusive.

## **Repeaters in the survey**

The survey includes five repeaters: The CORC 146.760 and 146.970 repeaters, the CCRA 145.430 and 147.240 repeaters, and the jointly affiliated 145.490 repeater. The CCRA 147.120 repeater had been surveyed in years past but due to it being off the air for most of 2001 it has been dropped from the survey.

## **The numbers from 2001**

Last year the busiest repeater was the 146.760 repeater with an average monthly usage of 8654 minutes, or about 4.8 hours of use every day. This was a little less than double the number two repeater in terms of usage, the 147.240 repeater, with an average of 4837 minutes/month (about 2.7 hours/day). Next was the 145.490 repeater averaging 2225 minutes/month (1.2 hours/day), followed by the 146.970 repeater with an average of 1759 minutes/month (1 hour/day), and finally the 145.430 repeater with 1312 minutes/month (.75 hours/day).

The repeater controllers report Autopatch activity in two different ways. The controllers on the CORC repeaters count the

number of autopatches, while the controllers on the CCRA repeaters (and the jointly affiliated repeater) count the number of minutes the autopatch is active. Both CORC machines report an average of 43 autopatches each month. This is surprising since the 146.760 repeater is almost five times busier than the 146.970 repeater.

The CCRA machines rank as follows: 145.490 with 111 minutes of autopatch activity per month, 147.240 with 109 minutes/month, and 145.430 with 47 minutes/month. Once again this is a surprise with 145.490 and 147.240 being so close since 147.240 is more than twice as busy as 145.490.

## **Trends**

The overall trend for all repeaters combined is that the amount they are being used is falling from year to year. When the survey first was taken in 1994, the repeaters (including 147.120) had a cumulative average monthly total of 43160 minutes, or about 24 hours of usage each day. In 2001, the cumulative average monthly total was 18786 minutes, or 10.4 hours each day. To put this in perspective, in 1994 the 147.240 repeater alone had an average monthly usage of 19646 minutes, or almost 11 hours per day.

Autopatch usage mirrors the airtime totals over the same period. In 1994 the CORC machines recorded an average of 639 autopatches each month, while last year that total was 86. The CCRA machines (including the affiliated repeater) in 1994 recorded an average of 2071 minutes/month

(1.15 hours/day), but in 2001 only recorded 268 minutes/month (.15 hours/day).

**Observations/Conclusions**

The downward trend in usage is no surprise. Over this same time period the proliferation of the internet and cell phones are certainly reasons why repeater usage has gone down. This trend may also represent a shift from repeaters to simplex activity, or could represent a shift to other repeaters not surveyed. During this same time both of the COARES repeaters were rebuilt, and a few new UHF repeaters have been put on the air.

I would anticipate a much slower decline in activity over the next couple years. The

renewed interest in emergency communications might possibly offset some of the other losses incurred. Autopatch activity will probably continue to fall. That may result in the clubs reconsidering whether it is economically feasible to even have autopatches on the repeaters anymore.

## Director Profile

By Phil Carter, WD8QWR



I'm Phil Carter, your current secretary and long time board member. Joe has been after me to do something for the newsletter

on myself for a long time now. Most of you probably haven't seen anything in writing from me since I was your treasurer.

I was born one morning in August...Ah, to heck with that...

I joined CORC back around 1978, It was a young club then, being formed in 1947 and later becoming a repeater organization around Fathers Day 1970 as I recall...maybe it was 1971, the brain tends to slip a bit at my age.

Soon afterward I became involved in the membership committee. I helped Bob

Stanhope, the 'then membership chairman' until he was transferred to Erie, Pennsylvania and became KB3YS (I don't remember his 8-land call). I then became the membership chairman for eleven years while Stew Banks, W8FEH, and Malt Brown, WB8WKZ were the treasurers. We used a PDP-11 for membership records management, and I was involved in keeping that program current, along with its author, Jim Azbell, WB8SYK. Later I became a board member in 1982, and soon after became the Treasurer. I was the treasurer and membership chairman for six years. I began writing the current membership records computer program sometime around 1991 when Rick Farquhar, W8FQ became membership chairman.

During all this time I worked for a Motorola service shop repairing all kinds of radio equipment, and working on large (for most people) transmitters for my current employer, Buckeye Power. I have been with

Buckeye since 1981, and plan on retiring soon.

Until the mid 80's, CORC was using a myriad of different equipment for the repeater system. 76, 97, 33, 223.98, 444.2 and 52.94 all used different stuff, and different controllers. Heck we even used Digital Equipment Corp. PDP-8 computers as repeater controllers! You can read about the 33 repeater in one the Tab books #1212 The Practical Handbook of Amateur Radio FM and Repeaters, by Pasternak and Morris. This repeater was quite the showplace and the envy of many clubs in the USA, as was the 76 and 97 repeaters. We have since gone to ACC controllers, as PDP-8s were difficult to replace with hardware being scarce and interface equipment being hand built. Uniqueness sometimes is time consuming, and we were coming up on the bad weather season. The ACC-850 equipment was "new" and available, although we had to give up much versatility of the multitasking environment. We still use these controllers today.

In 1986 my company had decided to upgrade its load management equipment, and the current CORC transmitter equipment was born. Last year we decided to do it again, and CORC inherited another truckload of equipment. This new equipment should go into service later this

spring, and be much less expensive to maintain. It's got a solid-state exciter! Needless to say I do a lot of work with the technical committee also.

I became a Volunteer Examiner in 1991 after attaining Advanced class, and upgrading to Amateur Extra in 1993. I have been heavily involved in testing for both amateur and commercial licensing ever since. Although I wasn't personally involved in the process (?) my wife did finally become a ham in 1993. I really didn't push her, my nephew did. I guess it was sorta a race. If he won he got a handheld. If she won I... aaah ...WE got a tower... well, there is no tower. Heck you may even catch her on the air-mobile now and then...as KB8PZA.

So, without a tower it's QRP for me. It is fun, and we get together as the CQRP club once a month. It just doesn't take a lot of equipment to have a good time in ham radio. Come by sometime and check us out. We meet at Universal on the first Saturday of each month. You can check our web site at <http://www.qsl.net/cqrp>

Currently I am the secretary for CORC. My term as secretary expires at the end of this fiscal year in April. My Board of Directors term expires in 2003. I wonder what the retirement benefits are for CORC?

**SPECIAL ANNOUNCEMENT** From time to time the constitution needs to be updated. Two items for membership consideration at the Annual Meeting this year are:

Article V

Section 1. The business and affairs of this corporation shall be managed by a "Board of Trustees" shall be changed to "Board of Directors" These members shall be known as Directors. The term Trustee throughout the Constitution shall change to Directors.

Section 2. The Board shall meet for the transaction of business on the first Sunday of February, May, August and November... shall be changed to the Board shall meet during the calendar year.

# Central Ohio Severe Weather Watch

By John Montgomery, N8PVC

What A Winter So Far . . .

Wow! Are we finishing up a warm winter or what? Mild temperatures have made monthly utility bills easy on the budget this season. Think of how much road salt wasn't used, thus saving highway surfaces and auto finishes. Car washes seemed to enjoy a brisk business as above freezing temperatures provided numerous opportunities to keep the car clean. I wonder how many auto accidents were avoided because we had less ice and snow on our highways. When it's all said and done weather affects all sectors of the economy in a big way.

I recently attended a severe weather spotter seminar held at Washington Township in Dublin, Ohio. The seminar was sponsored by the Franklin County Emergency Management Agency, the National Weather Service (NWS) and the Central Ohio Severe Weather Net. The NWS has done a superb job of keeping the presentation fresh by including video clips of recent weather events that illustrate various aspects of severe weather. Attendance was good with lots of audience participation.

As we enter the severe weather season it's time to remind everyone about the use of PL tone on the 146.76 repeater as it applies to the Weather Net. In normal operation, no weather net, the 146.76 repeater encodes a PL of 123 Hz. on its output. For those decoding PL, much of the interference from intermod is muted.

The repeater also decodes a PL of 123 Hz. Some receive sites on this repeater will only

pass a signal if they detect the 123 Hz. PL tone. CORC policy is to PL new receive sites and PL existing receive sites as they are upgraded. The intent of this policy is not to limit access to the system but rather deal with crowded band conditions and interference issues.

PL has other uses for the Weather Net. When the repeater is placed in weather state the transmitted PL changes to 71.9 Hz for about 90 seconds. If your receiver is set to decode a PL of 123 Hz. it will go silent. Why do we change the PL tone in midstream? Other repeater systems and public service agencies in the area have receivers that listen for the 71.9 PL tone on 146.76. This helps get the message out alerting field spotters when severe weather is in the area.

If your receiver is decoding a PL of 71.9 Hz. you'll hear the severe weather announcement. As further weather statements are issued the PL will again be changed for 90 seconds to 71.9 Hz before the announcement is read.

Are you confused yet? Here's the bottom line. If you want to be alerted when the Weather Net is activated or hear warnings only, set your receiver to decode a PL of 71.9 Hz. If you want to be ready to participate after the net is activated set your radio to ENCODE ONLY a PL of 123 Hz. This will insure that all receive sites that hear your signal will pass it along. Do NOT decode PL when the Weather Net is active because you'll miss the warnings when the PL is changed to 71.9 Hz.

Some folks program 3 memory channels in their radios to cover all of the situations described above. One channel is set to encode and decode a PL of 123 Hz. This is for normal repeater operation when severe weather is not present.

Another channel is programmed to encode a PL of 123 Hz. with all decoding turned off. This is used when the Weather Net is UP and will give your signal the best opportunity to be heard by the repeater and insure that you hear all repeater transmissions. NOTE: This is the recommended channel setting for weather spotters.

The third channel is programmed to decode a PL of 71.9 Hz. This will allow you to hear

warnings and bulletins only when a PL of 71.9 Hz is being transmitted. Some use this setting as an "alarm" to alert them to weather net activation or some weather-related announcement.

Check out the Weather Net web site for information on upcoming spotter training sessions as well as the Sixth Annual OSU Severe Weather Symposium on April 26<sup>th</sup>. We also have some quick links to RADAR graphics. You can find us at:

[www.severe-weather.org](http://www.severe-weather.org).

As we begin a new severe weather season, let's hope that it remains mild just like the winter and we're saying that's good.

## FRANKLIN COUNTY HAMFEST

>> AN ELECTRONICS FLEA MARKET OPEN TO ALL <

BUY --- SELL --- TRADE

>>> ELECTRONIC EQUIPMENT <<<  
AMATEUR RADIO, AVIATION, MARINE,  
ANTIQUE, AUDIO, COMPUTER.

**SUNDAY MAY 26, 2002 9:00 AM**

FRANKLIN COUNTY FAIRGROUNDS,  
JUST WEST OF COLUMBUS  
( IN HILLIARD, OHIO )

Take the I-270 outerbelt to west side of Columbus, Ohio. Exit at Cemetery Road (Hilliard). Drive 1.5 miles west on Cemetery Road to Norwich Street and turn RIGHT (just before R/R overpass). Go 0.5 mile north on Norwich (look for fairgrounds signs) and turn right onto Columbia Street then straight ahead to fairgrounds entrance. Free Parking.

>>>> Talk in repeater: 146.76 Mhz. Courtesy of Central Ohio Radio Club and W8RXX <<<<

**Admission is \$5.00 per person to buy or sell.**

For sellers, inside tables or outside spaces are \$5.00 each. Set up time: 7AM.

Hotels, restaurants, and shopping are all near-by.

For more information, contact Chris Lind, KC8BJO, P.O. Box 14281, Columbus, Ohio, 43214  
Ph. 614/267-7779 FAX 614/263-7934 clind2@juno.com