



Cleveland Chapter One NEWSLETTER

Established 1951

Winter Quarter 2018

W8LYD 146.850 PL 110.9

<http://qcwa-cleveland-1.org>

Come to our Winter Luncheon on Saturday January 13th

DOES YOUR HOUSE LOOK LIKE THIS?



In a departure from amateur radio topics, Chapter 1 member **Fred Freer, W8FSF** will discuss property inspections in general and demonstrate some of the tools used to perform home inspections. He'll provide an entertaining and perhaps scary insight into what has been found in and around some people's homes.

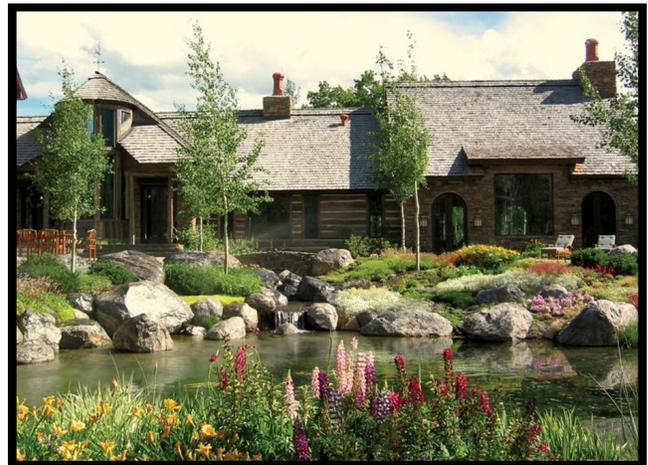
According to Fred, every purchaser should have an inspection as part of their due diligence, even if the house looks like the one on the right.

This will be very interesting!



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DOES THIS HOUSE NEED AN INSPECTION. TOO?

Join us starting at 11:30 AM. **USE BACK DOOR - GO TO "THEATER" ON GROUND FLOOR, The Play Arcade, 5900 Mayfield Road in Mayfield Heights.** Eat off the lunch menu for about \$10.00. Door prizes, 50-50 raffle, music, and fellowship awaits! RSVP on the Wednesday night net or to w2thu@arrl.net ■

DUES ARE DUE

Please send 2018 dues to our treasurer, **Jim Arcaro, WD8PFK**, at the address on page 2. A \$10.00 check drawn to "QCWA Cleveland Chapter 1" will suffice. No dues required if you are 90 years or older.



Cleveland Chapter One Newsletter

Editor: .Robert M. Winston, W2THU
Past editors: George Mistic, KE8RN; "Dee" Logan, W1HEO; Bernie Hinrichsen, W2NTB (SK); Joe Zelle, W8FAZ (SK); Joe Tomazic, WT8P (SK).

Distribution: Fred Freer, W8FSF

Roster changes: Notify Secretary Al Moriarty, N8CX; (216) 221-3682; <n8cx@mindspring.com>

Meetings: Second Saturday of January, April, July, and October at the *Play Arcade and Kitchen*

Dues: \$10.00 per year.

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Chapter One Officers

President: Robert M. Winston, W2THU; (216) 924-3314, <w2thu@arrl.net.>

Vice President: Al Moriarty, N8CX

Secretary: Al Moriarty, N8CX; (216) 221-3682 <n8cx@mindspring.com>

Treasurer: Jim Arcaro, WD8PFK; PO Box 324, Wickliffe, OH 44092; (216) 337-2793 <jgarcaro@juno.com>

Operational Group

Membership: KE9UL

Net controls: N8ZT, KC8UIQ

QCWA Journal reporter: WB8N

License trustee: TBD

Awards chairman: Open

Chief radio officer: K8QOT

Chapter musicians: WA8OZC, WB8ADF

Sunshine reporter: Dick Ingraham, WA8TPP, <reingraham@oh.rr.com >

Web administrator: K8ZGW, <dritchie@dr.com>

■
Please notify Secretary Al Moriarty of any changes in your address, e-mail etc. so your roster information can be kept current. Thanks.

PEOPLE

New Members or Friends of Chapter 1:

K8KE, Mike Morrell, Cleveland Heights
WB8ROK, Ed Stevens, Cleveland
KK8ZZ, Robert Hinkle, Solon
AB8M, Doug Dever, North Royalton
W0KM, Kirk Miller, Olmsted Township
AD8Y, David Kazdan, Cleveland Heights

Welcome to all! Be sure to check into our Wednesday night net at 8 PM on 146.85MHz, PL 110.9. Please note that all new members and friends are announced on the net and then they are called by net control.

Sunshine:

No news is good news?

Recent Activities:

Jim Arcaro, WD8PFK won Honorable Mention at the Mayfield Art and Photography Show in October with his black and white photograph of Grand Trunk Western steam locomotive #4070, taken in 1989.

Ken Kane, KG8DN and **Al Moriarty, N8CX** have both reported that they are working on increasing their code speed to become skilled CW operators (again).

George Mistic, KE8RN, has published many articles in *Electric Radio* magazine, the most recent "Radios Now Selling For More Than Their New Cost" in the December 2017 issue.

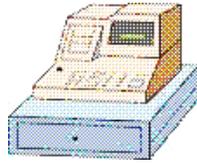
Jeff Covelli, WA8SAJ has published 26 articles in *Electric Radio* magazine since 2001.

Silent Key:

Dick Albert, W8RMA (formerly WB8HNX), who managed the AES store in Wickliffe many years ago.

TREASURER'S REPORT

By Jim Arcaro, WD8PFK



Fellow members and friends of QCWA Chapter 1, the bank account is in fine shape, with a balance of 6,861.59 at this time. We will have expenses over the coming year for printing, postage, web site maintenance, door prizes, awards, and other miscellaneous items. The account is sufficiently large that we do not pay additional bank fees - which is a good thing. Some of you still have receipts for past expenses. Please remember to submit those to me to be reimbursed.

Also, it is time for your annual dues renewal. If you have not paid your dues in the last six months, for 2017 or 2018, now is the time. Dues are a very reasonable 10 bucks a year. Please send your checks to: QCWA Chapter One, Jim Arcaro Treasurer, PO Box 324, Wickliffe, Ohio 44092. You can also pay in person at the meeting on January 13, 2018.

Reminders: As a perk to our elder statesmen and women, if you are 90 years of age, or older, you do not have to pay local dues. Your local membership is "on us". If you forgot, and are behind more than one year, I will only ask for 10 bucks. I have not deleted anyone from the list, unless asked. That sometimes happens when a member or friend moves away, etc.

Note: We DO NOT collect dues for National QCWA. If you belong to national, you are a "Member". You must renew directly with national too. If you do not belong to national, you are a "Friend".

PLEASE make sure we have your current Email address. I have sent out several reminders, with the newsletter attached, that have bounced. If you are not sure, send me an Email and I'll look it up on my roster. Send your inquires to: jgarcaro@juno.com Thanks !

In the past year I have created a Facebook group for "QCWA Cleveland Chapter 1". If you are on Facebook, please send us a friend request. I post meeting notices, updates, links to our local Chapter One newsletter, and related stories and pictures. January 2018 features DRAKE equipment, as well as other great rigs of years gone bye. If you know nothing about Facebook, but

have access to a computer, and use the Internet, send me an Email, or ask me at the meeting.

To stay safe on the Internet I use several programs. I use the FREE versions of Super Anti Spyware, and Malware Bytes. I have tried many over the years, and these two seem to be the most user friendly. You have to manually update them, but it is fairly easy.

I hope to see many of you at the meeting. Till then, stay warm ! de WD8PFK

VP/SECRETARY'S REPORT

By Al Moriarty, N8CX

Hi again everyone and *please let me wish you and yours a very, very*

happy, prosperous and healthy New Year. I

certainly hope that everyone had the very best of the Holiday and Christmas Seasons.



Well, welcome to winter. This is the biggest 'deep freeze' with snow that we have had in at least a few years. The bands have been pretty awful of late unless you have some form of gain antennas; especially on the low bands. With a solar flux of 70 and an A index in the vicinity of 5, not much will be heard. We are really close to being at the bottom of the cycle, known as 'the pits'. This usually lasts for about 2 to 3 years before we start climbing up again.

Okay, that's about it for now. I hope to see all of you at the meeting. As for my New Year's resolutions:

1. To be on the net much more often.
2. Getting my code speed back up to where it was when I was very active in the section and regional level CW traffic nets.

In the meantime, the vy vy best 73s to u es urs,

Al, N8CX

VP / Secretary (n8cx@mindspring.com)



Birthdays this Quarter

Happy Birthday to the following Chapter 1 members. Many happy returns and many, many more birthdays as well.

January

K8PP	Fred Doob	1/15
KD8OXS	Tim Hunter	1/16
N8UIN	Sherrell Wimer	1/21
W8DDD	David Dennis	1/28
W8LDV	Charles Martin	1/28

February

KC8FF	Betty Scholz	2/18
N8ZT	Craig Kollai	2/21
KE8RN	George Misic	2/22
WB8APD	Dave Foran	2/23
N8IJG	William Wihebrink	2/29

March

WA8NJP	Charles Whalen, Jr.	3/2
K8HLJ	George Harizal	3/2
K8EHP	Michael Cegelski	3/2
N8OOG	James Wimer	3/4
W8AZO	Marvin Grossman	3/10
WA8VSJ	Arthur Lewis	3/11
W8KYD	Ronald Mayer	3/18
K8JAD	Jeff Dettmer	3/19

*Is your birthday missing or wrong?
Then, let our secretary know.*

Birthdays are announced each week during the chapter's Wednesday night net at 8:00 p.m. on 146.850 pl 110.9. Join us!

*(Corrections to Al Moriarty, N8CX—
n8cx@arrl.net)*

Our Fall Awards Luncheon



Some of the many members, friends and guests who attended the awards luncheon

Chapter 1 maintained its tradition of honoring and recognizing its members at the October meeting, when our musicians **Al Lada, WA8OZC** and **Jerry Dusa, WA8ADF** were given handsome trophies in recognition of their musical performances.

QCWA Anniversary Awards were given to **Al Lada, WA8OZC** (50 years), **Chuck Patellis, W8PT** (55 years), **Ken Wolenski, K8YLY** (55 years), **Allan Jaffe, W8AJ** (55 years), **George Harizal, K8HLJ** (60 years) and **Bob Winston, W2THU** (60 years).

After a moment of silence in memory of longtime Chapter member **Jack Goldfarb, W8WGO**, a special *In Memorium* President's Award was presented to Jack's brother **Marvin Goldfarb, W8YEO**. Jack's great-niece, Morgan Caruso, eulogized her great-uncle, remembering how much he enjoyed QCWA Chapter 1 including our nets and quarterly luncheons.

President's Perspective

By Bob Winston, W2THU

Happy New Year to all! January's off to a great start with some of the coldest weather in decades gripping not only the Cleveland area, but most of the country. I have a weather app (hate that word) on my smart phone where I have selected some of my favorite cities, including Reykjavik, Iceland (TF) and Stockholm, Sweden (SM0). I'm amazed that it is warmer in those far northern cities than in Cleveland. This is true every winter. Makes you wonder how a capital city located so close to the arctic circle (TF) can be warmer than here. Jeannie's best friend just returned from a week touring Iceland and I suggested that she went there in the winter just to warm up!

Looking back at 2017, our Chapter 1 had a good year. We have a core of around 40 members and friends who attend at least one quarterly luncheon. Almost thirty of those attend all of the luncheons. The luncheon speakers are wonderful. If you haven't come at all, then you missed such varied topics as steam engines by **Jim Arcaro, WD8PFK**, broadcast radio by **Ted Alexander, W8IXY**, and fox hunting by **Eddie Stevens, KD8FTS**. We gave out approximately 40 door prizes, about one hundred fifty dollars in the 50-50 raffles, and we were entertained by our talented musicians **Al Lada, WA8OZC** and **Jerry Dusa, WB8ADF**. But, most of all, our members and friends come for the comradery of sharing all the aspects of amateur radio with experienced and talented hams who were first licensed at least 25 years ago. Many memories are exchanged at these meetings.

Our Wednesday night net has not fared as well. When I got active in our Chapter we had about 25 check-ins. Lately, we

are down to around 10. So many have become silent keys or are unable to go on the air anymore. Normally, younger members take their place but we don't see that happening anymore. If you have any suggestions to increase net participation please let your officers know. (Contact information on page 2.)

Whether we have 8 or 25 check-ins, it's the same amount of work for our regular net control operator, **Craig Kollai, N8ZT**, and our alternate **Bob Robertson, KC8UIQ**. Many thanks to them for keeping the net going.



Our standard poodle, Kelby, ignoring the no dogs on soccer field sign.

Also deserving our gratitude is Chapter 1 treasurer **Jim Arcaro, WD8PDK**, who is doing more than his job description, secretary **Al Moriarty, N8CX** for maintaining the database and mailing labels, **Fred Freer, W8FSF** for taking over the distribution of the snail mail Newsletter, **Don Ritchie, K8ZGW** for maintaining our web presence and email list, **Dick Ingraham, WA8TPP** for Sunshine reports, **Joe Nocifora, KE9UL** for membership, **Jim Pracker, K8QOT** for maintaining our repeater and **Tom Wayne, WB8N** QCWA Journal reporter.

Best 73, Bob W2THU

National HRO Receivers Through the Years

By George Mistic, KE8RN



The National HRO receivers were made from 1934 until 1981 close to when National went completely out of business in 1992. National already had a few superheterodyne receivers on the market before the first HRO appeared; the AGS [Aircraft Ground Stations] first appeared in 1932 and the FB-7 receiver joined in 1933. The AGS evolved to the AGU which employed ganged plug-in coils to change bands; the AGS used plug-in coils that were not ganged, as did the FB-7. The AGU led to the creation of the first prototype of the HRO in 1934. The original HRO did not have an internal power supply, speaker, or coils. The coils determined the frequency coverage of the receiver. Each coil had four separate units assembled to a common mechanical support.

The HRO receivers had two RF amplifier stages with the first RF amplifier driven by the external antenna and the input RF tuned circuit in the first unit of each plug-in coil unit. The second unit on each plug-in coil was the RF network with tuned circuits between the first and second RF amplifier stage. The third unit on each coil set was the output tuned circuit between the second RF amplifier and the mixer stage. The fourth unit on each plug-in coil assembly contained the tuned circuits for the local oscillator. National was able to fabricate all the mechanical parts to make a top quality, high performance receiver. The HRO had elegant structures for their RF coils and the location where they plugged in. The HRO had an excellent four section tuning capacitor to tune the four tuned circuits on each plug-in coil assembly. It was driven by smooth and high performance dial drive that gave 500 steps of tuning for the rotation of the tuning capacitor. National's chief engineer and general manager Mr. James Millen had a mechanical background which was the cause for National's superior mechanical engineering.

National continued to improve the HRO receivers; all prewar models were similar but had various refinements including S-Meters, noise limiters, and bandspread capability on the plug-in coils. After World War II, the current HRO-5 became the HRO-7, which was in a new, streamlined light gray case. The HRO-7 was the first really good receiver I ever bought. I saw an ad in the Sun Press newspaper; I bought the HRO-7 from the original owner for \$35.00. The receiver worked quite well; it vastly outperformed my Heathkit AR-3 beginner's receiver. The only modification I made to the HRO-7 was to drop the value of the series resistor feeding the BFO oscillator; this made it receive single sideband quite a bit better. I still have the receiver; it still works quite well. National went on to introduce the HRO-50 about 1950; it had the power supply and audio output transformer built-in. The HRO-7 and earlier models had the audio output transformer mounted on the external speaker. I have no idea why they did this. Following the HRO-50, National next came out with the dual conversion HRO-60 in 1952. The HRO-60 had vastly better image rejection at higher frequencies than all the earlier models. The HRO-60 was manufactured from 1952 until 1964. Its selling price went from \$483.50 to \$745.00 over that period. (Please see *National HRO* continued on next page.)

National HRO

(Continued from Page 6),

In 1964, National built an early solid-state receiver with the great HRO-500. The HRO-500 had a first conversion oscillator that was phase locked to a crystal reference to give the receiver sixty 500 KHz wide bands which allowed it to cover 5.0 to 30,000.0 KHz with 1 KHz divisions on the main tuning knob everywhere. The HRO-500 is the only receiver where the 500 dial divisions on the main tuning knob directly indicate the number of KHz above the bottom edge of the 500 KHz wide band the receiver is tuned to. The HRO-500 had the same frequency readout and accuracy as the well-respected vacuum tube Collins 51S-1 general coverage receiver; in addition, it was all solid state. Of course, this impressive accomplishment did not come cheaply; the HRO-500 came out in 1964 at \$1300.00 and rose over the years it was on the market to \$1995.00 by the time it was discontinued in 1973. Thousands of the HRO-500's were built over its nine-year lifetime.

I Currently have three of these receivers; two of them are in working condition. Many people are intimidated by these receivers due to their advanced design.

The even more impressive HRO-600 offered Nixie tube digital frequency readout to 100 Hz [0.1 KHz]. It covered 16 KHz to 30.000 MHz and was made from 1971 until 1981; it cost from \$2900.00 to \$5900.00. National continued as a manufacturer of component parts until about 1992 when they finally gave up the battle. Only about 200 of these receivers were built.



RAILROADS ON VHF HIGHBAND

All year round you can easily listen to most of the area railroads, which use narrowband FM, on your VHF mobile transceiver, or scanner. In the NEO area you can hear CSX mainly on 160.860 to the east and south. CSX can sometimes be heard on 160.230 and 160.320 to the south. NS uses 161.250, 161.070 and 161.520 to the east and south. To the west, in addition to 161.250, they also use 160.98, and 161.190, and 160.440 closer to Sandusky. W&LE uses 161.025 MHz to the south. AMTRAK will use the host railroad channels, which are included in the frequencies above. If you are further interested, search for "AAR Railroad Channels" on your computer.

Keep in mind that most of these VHF communications are simplex, and while you may hear the dispatcher on the high powered/ high antenna base, you might not hear the locomotive engineer on his mobile, or the conductor on a portable. Sometimes you may hear DTMF "touch tones". That's used when the train wants to talk with a dispatcher in a far away location, like Jacksonville, Florida - so they bring up a "patch". If you turn up any other good frequencies to listen to in the VHF band, I would be interested in hearing from you. Be safe and have fun !

Jim Arcaro, WD8PFK