

NOARS Log

K8KRG

April 2020

Volume 56, Issue 4



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I hope you are all healthy and being safe. We are in unprecedented times, but we will all get through this Covid-19 crisis and be better for it. I think there will be lifelong changes in what we have considered normal in both our personal and economic, not to mention political, lives.

I am seeing so many cases where this has brought parents, kids, and families in general closer together and I don't mean only physically. I am seeing communities joining in to support their neighbors and small local businesses. I received a video call from a nephew who I haven't heard from in decades who just wanted to connect again and see how I was doing.

Prez Sez

As ham operators, we probably have more options to occupy our "spare" time. There are so many different modes and methodologies with which we can communicate and stay socially in touch with others around the world. I have been putting a great deal of my time into preparing for Fox Hunting. I have built a few measuring tape antennas. I have constructed a Fox by using my idle Baofeng UV-5R with a Byonics BFoxCon controller. I mounted them in an ammo box and have a weather proof Fox transmitter. I found and dusted off my Ramsey DDF1 Doppler Direction Finder and have it operating. Once the weather warms I will do the final calibration outside. I have also (Continued on page 2)

April 20, 2020 Virtual Meeting on Zoom at 7 PM It's easy to sign on. Look for information on page 2 of this newsletter.



Nets

NOARS nets are Tuesday nights at 8 pm on 28.370 MHz, and Thursday nights at 8 pm on 146.700 MHz. All licensed amateurs are welcome. Participation is encouraged and appreciated. assembled 2 measuring tape 2M antenna kits which will be available for purchase by anyone who wants to join in on this fun part of our hobby.

Since we have cancelled our membership meetings at the Library for April and May, I am looking forward to holding our meetings online using Zoom. By the time you read this, we will have already had a Zoom practice meeting on Monday, March 30 at 7PM. This test has given us all a chance to become familiar with the Zoom platform. We will hold the first "real" meeting on Monday, April 20 at 7PM. Members will receive another email with the link and password.

Everyone, take care. Until next month, be safe and 73,

Carl W8KRF

Vice President's Message

These are trying times for all of us. The COVID-19 virus has changed the way we live and interact with everyone in more ways than I could have thought possible, most negatively. We may never return to the Old Normal. However, we may discover new ways to do things and add them to the old ways we have interacted. I will encourage you to be prudent health-wise but get on the bands as much as possible. Especially nets, both NOARS and others. I plan on attending NVIS Antenna Day on April 25th @ 9:00AM @12375 Baumhart Road, Amherst. Maybe you might be interested. Also keep Field Day in your plans, June 27/28.

73

Dave, KY8OSU

NOARS April 20 and May 18 Meetings Will be Held on Zoom

Below is information sent by Carl. W8KRF in an email.

What do I need to participate in a zoom meeting?

You will need a computer or device with a webcam and microphone to participate in a Zoom session. If you do not wish to have an account, all you'll need to do to participate is click on the link for the class that your contact will send to you via an email invitation.

Do you have to have a zoom account to join a meeting?

A Zoom account isn't required to attend a meeting. Users do need a Zoom account to host a meeting. ... Anyone can join a meeting using the Zoom mobile apps or desktop applications for Windows and Mac.

Do you need a webcam for zoom?

Do I have to have a webcam to join Zoom? You are not required to have a webcam to join a Zoom group video call. You will not be able to transmit your video. You will continue to be able to listen to video calling and view any screen sharing.

How long is a free Zoom meeting?

With the free version of Zoom, users can hold an unlimited number of meetings, but group meetings with multiple participants are capped at 40 minutes in length, and meeting can't be recorded.

Newsletter Submissions

Email submissions for the Log to <u>noarslog@noars.net</u>. The deadline is seven days before the first of the month. That gives us time to create and get the Log uploaded to the Website.

Social Events Canceled and Postponed

Due to the need for social distancing at this time, the April NOARS Monthly Lunch has been canceled.

The April 18 Fox Hunt event, an informational and antenna build get-together, will be postponed. The

actual Fox Hunt, scheduled for May 16, will also be postponed. Have no fear, the Fox Hunt events will happen when the current Covid-19 experience is behind us. And it will, at some point, be behind us.

Highlights from the April ARRL Ohio Section Journal

There are many interesting articles. Some of the highlights are:

The Ohio Section encourages the use of Zoom for meetings. Carl, you were ahead of the curve!

Technical Coordinator Jeff Kopcak, K8JTK, advises what to do if a prepper (also called survivalist) contacts you on the air. Most are unlicensed.

Section Emergency Coordinator Stan Broadway, N8BHL, discusses what would happen to ARES and amateur

radio if things do hit the fan. There will be a practice session April 4.

Section Traffic Manager David Maynard, WA3EZN, provides a list of major outbreaks of disease in the US, starting in 1793. It's amazing how many we've survived. He also shares information about NVIS Day.

If you would like to read these articles and so much more, go to

http://arrl-ohio.org/news/2020/OSJ-Mar-20.docx

RFSOC, An Amazing New Chip

Chet, K8KIZ, received the following in an email.

Thought you might be interested in the part I am currently designing with. (Datasheet attached.)

It is a new family of FPGAs called an RFSOC. The SOC means "System-On-Chip"; The RF implies it has Radio Frequency capability. An SOC combines the logic resources/capabilities of the traditional FPGA with an ARM based processor subsystem. The RF portion consists of multiple, 12bit/14bit ADCs sampling at 4.096 Gbps and multiple 14bit DACs sampling at 6.554 Gbps.

The era of affordable direct RF conversion and software defined radio has most certainly arrived. Take this chip, add an antenna, LNA, and PA and you've got a full functioning radio transceiver with enough processing power to run a user interface, Ethernet access and pretty much any encoding/decoding scheme desired; Even MIMO, Beamforming and Radar.

Link to datasheet: <u>https://www.xilinx.com/support/</u> <u>documentation/data_sheets/ds889-zyng-usp-rfsoc-</u> <u>overview.pdf</u>.

Upcoming Ohio Section Hamfests

04/26/2020 - Athens Hamfest

Location: Athens, OH Type: ARRL Hamfest Sponsor: Athens County Amateur Radio Association Website: <u>http://www.ac-ara.org/</u>

Food Group Net

The Food Group is held every Wednesday evening on the 146.700 repeater at 7 PM. The conversation is not just about food – we talk about many things, including amateur radio issues, books, tales from our childhoods, current projects, family happenings, and more. We hope you can join us.

April Birthdays - Happy birthday!

David, K8WRS Allen KE8KZO Tom, W1PDI Bryan, W8JMI Dan, K8KGX If your birthday doesn't appear here it's a good chance that it's not in our database. Please contact Carl, W8KRF so we can wish you a Happy Birthday!



March Meeting Attendance

Dave, W1AFC	Russ, KE8GNX	Allen, KE8KZO	Tom, W8WLI
Dan, K8AGW	Joe, W8GWD	Bob, W8NNC	Tim, NC8X
Fred, W8AHS	Chris, KE8HCE	Walter, KE8NQL	Bill, KB8ZNR
Dan, W8AJF	Roger, AB8IF	Dave, KY8OSU	Dave, KB8ZNS
Steve, WA0DVY	Bryan, W8JMI	Clark, N8PZD	Keith McCormick
Bill, AC8FD	Chet, K8KIZ	Tom, K1TRB	
Tom, N8FDY	Carl, W8KRF	Russ, WB8UPA	
Elaine, KC8FOS	Tom, W8KYZ	Bill, K2WJS	

Heard on the Nets in March

Greg, N9AGC	Tom, N8FDY	Rick, KD8LQU	Tom, W1PDI
Phil, KC8AGU	Elaine, KC8FOS	Jim, W8MCR	Alan, KF8PM
Dan, K8AGW	Mark, KC8FQV	Alex, KE8MQH	Tom, K8PPZ
Fred, N8AHS	Jody, KE8GKO	Dave, KD8MXE	Larry, N8RKE
Dan, W8AJF	Chris, KD2HCE	Linn, KD8NGE	Russ, WB8UPA
Rich, KD8AJZ	Bryan, W8JMI	Walter, KE8NQL	Bill, K2WJS
Steve, W8ANJ	Keith, K8KBZ	Jeff, KE8NSD	Tom, W8WLI
Ray, KA8BPU	Dan, K8KGX	Jim, KD8OCW	Bill, N8WS
Rich, WA8CAC	Carl, W8KRF	Ron, N8OD	Leon, KB8WUA
Chuck, K8CVM	Sandy, W8KYS	Bob, W8OOT	Tim, NC8X
Robert, NW8D	Tom, W8KYZ	Dave, KY8OSU	George, WA8YVF

Ann, KA8ZEP

Jeff, KB8ZUN

April 2020 Sun Mon Tue Wed Thu Fri Sat

			1	2	3	4
			Food Group 7PM 2M	2M Net 8 PM - NCS Elaine, KC8FOS		
5	6	7 10M Net 8 PM NCS Elaine, KC8FOS	8 Food Group 7PM 2M	9 2M Net 8 PM - NCS Tom, W8KYZ	10	11
12	13	14 10M Net 8 PM - NCS Tom, W8KYZ	15 Food Group 7РМ 2М	16 2M Net 8 PM - NCS Carl, W8KRF	17	18
19	20 NOARS Zoom On Line Mem- bership Meeting 7 PM	21 10M Net 8 PM - NCS KY8OSU	22 Food Group 7PM 2M	23 2M Net 8 PM - NCS Dave, KY8OSU	24	25
26	27	28 10M Net 8 PM - NCS Tim, NC8X	29 Food Group 7PM 2M	30 2M Net 8 PM - NCS Carl, W8KRF		

Pets of Ham Radio

Dan, W8AJF and Ann, KA8ZEP are owned by a cat named Fiddler.



Fiddler, watching from atop a BTI amplifier



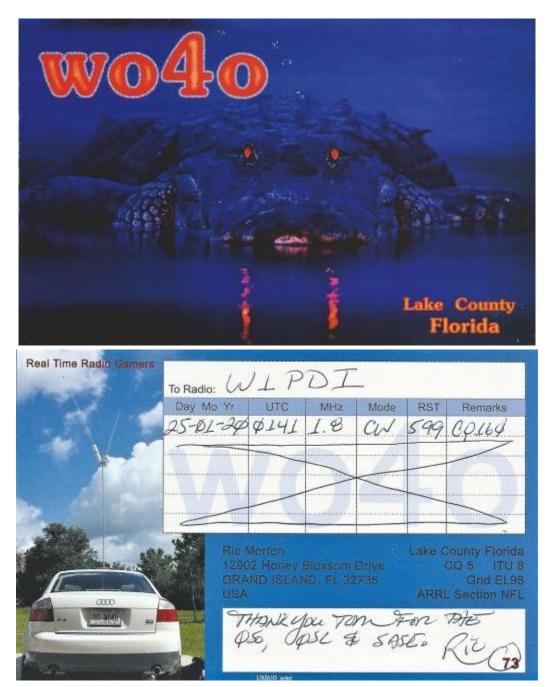


Helping Ann with contesting.

Drinking after getting his teeth brushed.

QSL Cards

Below are the front and back of a QSL card received from Tom, W1PDI



If you have received QSL cards that you'd like to share, please submit them to the NOARS Log Editors via <u>noarslog@noars.net</u>. You can scan or take photos and send.

Golden Nuggets from the Sixties

Sent in by Tom, W1PDI

A.A.R.L Official Observer's Cooperative Reports from the Sixties. Received by an adolescent W1PDI, known then as WN1GLS.

Remember these, from back when Official Observers monitored the airwaves?

in the second	
A A B B I OFFICIAL OPS	
	ERVER'S COOPERATIVE REPORT
(are) Dear WN/YLS	
Your signals were RST. J-7-9	7412
Your signals were RST.	the frequency notedkc.
9/14/11 11/04.	calling O D D La cours
on 1/-1/06 at 1017 5/m/	, when you were working C Q & W/C YS
Adate) (time)	
attention to the above noted off-frequency operation re	of all amateur regulations. This friendly notice is to invite sulting from harmonic (or parasitic) radiations so that you monics are at integral multiples of the operating frequency, able obtained by the considerable defit.
Data on parasitic elimination and harmonic reducti Harmonics Off the Air, May '60 OST: Evils of Multiband	on may be found in the ARRL Handbook. See How to Keep Ant. Systems, and the Cure (bandpass filters Mar. '57 QST) . Suggestions for reduction of harmonic radiation: 1. Use an
and 80-Meter Loading Without Harmonics, Aug. '58 QS7 antenna tuner. 2. Link couple antenna tuner to final 3. C	. Suggestions for reduction of harmonic radiation: 1. Use an round one side or center-tap of the link, 4. Ground the trans-
mitter chassis. 5. Check transmitter for proper drive, bis	s and neutralization.
and be present. Detter still, arrange with the Unclai Un	to look for the offending signal, since skip, QRN, or QRM erver who sends you this card for a check at some scheduled
time. Would welcome a line from you on how you fixed y	our trouble to help others,
WIBLP	Sincerely.
ST. ANNE'S OHUR	H John Dealy
PALMYRA, N.Y. 145	
Form 22 10M-1064	Printed in U.S.A.
	()
A.R.R.L. OFFICIAL OBSER	VER'S COOPERATIVE REPORT
- Dear WNIGLS Vour CW is	nal was 556 at 2/38 GMT 8 april 1967
(mode)	RS(T) (date)
when you were ealling WNDOA	(uate)
V Working	X Your frequency 2/11/4 kc,
Discrepancy or other condition. A.C. hum	- malead of purch DC note -
	-
	FCC Regs. Par. No. 92,23
This friendly notice from one amateur to another monitors check the bands looking for violations of all	is to invite your attention to the above. Government regulations. We hope our information may help you to Where a report concerns operating procedure violations re-reading of applicable sections of the regs may help. In normation section the best sprift of the amatemeter distan-
avoid jeopardizing our amateur operating privileges,	Where a report concerns operating procedure violations
any event we hope it's clear this is NOT a citation, but i	nformation sent in the best spirit of the amateur tradition.
The nature of signal difficulties and possible remet See index there or consult OST. We urge personal steps	its will be indicated in the Radio Amateur's Handbook, to look into all discrepancies, if they are found to check if not corrected, signal or procedural conditions reflect on Y warnings or citations as well. In addition to one's one
with your log of transmissions. This is necessary since,	if not corrected, signal or procedural conditions reflect on
signal monitoring, a friend across town who will give one	did and hannet manager and the addition to one a own
in OO reports are discussed to give information on corr	acting such problems and more common difficulties noted
one's own signal. For this you are invited to send a self-a. Department, if interested. Ask for TAS-I. Luck and 73.	
V.O. Box 295, 2A	Sincerely, 10 0
malwood, Ma. 33533	al. Jaunders WHUF
Address	ARRL Official Observer
Form 10A 20M-267	Printed in U.S.A.

Membership Meeting March 9, 2020

Listening raptly to Keith McCormick, guest speaker at the March meeting.









Membership Meeting Minutes March 9, 2020

Submitted by Elaine Wilkinson, KC8FOS.

The meeting was called to order at 6:30 PM by President Carl, W8KRF. Twenty-nine members and one guest were in attendance.

The Pledge of Allegiance was recited by the group, followed by roll call by call sign

Motion to pay \$321.32 for 1000 NOARS pamphlets made by Dan, W8AJF, seconded by Chet, K8KIZ. Motion passed. Motion was errantly not voted on last month. Doing so now.

Bob, W8NNC, made a motion to accept the minutes of the February meeting, as they are printed in the NOARS Log. Roger, AB8IF, seconded the motion. The motion passed.

Treasurer's Report - Tom, W8KYZ. "We have a good report... due to the Winter Hamfest," Motion to accept the report was made by Elaine, KC8FOS, seconded by Dave, W1AFC. The motion passed.

Parliamentary Committee – Tom, N8FDY, no report.

Club Property - Tom, W1PDI, not present. No report.

Repeaters - Carl, W8KRZ. Seem to be going well. Carl hasn't had to go out lately. Assume they are working fine.

Web Site - Carl, W8KRF. Up-to-date. Report any problems, including broken links, to Carl.

Membership - Two renewals received tonight, taking us to seventy-six members. December 31, 2019, there were 101 members. "We are still a little short." Complementary memberships given to those who pass license test at VE testing. None renewed. It's still a good gesture on our part.

Field Day - Al, N8CX, not present. Carl announced we will have the Pre-Fleld Day meeting on Saturday, June 20 at 10AM at Indian Hollow Reservation. If you are going to be logging. Be sure to have the most recent software from N3FJP loaded on the computer you will bring to the Pre-Field Day meeting and Field Day itself. Carl will bring the program on a flash drive in case someone doesn't have it. Will check network and set up router. Will probably need Windows 10.

Social Committee - Elaine, KC8FOS. Fox Hunt in two events. April 18 at Dave's house: How fox hunts work,

antenna build and potluck. Fox Hunt May 16. It will be a an easy fox hunt for beginners. Other clubs are interested. If you don't have the equipment necessary, can attend and buddy up with someone. License not needed since we will be only receiving. The April Monthly Meal will be on Tuesday, April 7 at noon at the Golden Corral in Elyria. It's always the first Tuesday of the month. May 16 is Hamvention. Will need to reschedule fox hunt.

Program Committee - Elaine, KC8FOS. April 20 program will be Tony Emanuele, speaking on earth-moon-earth communication.

Hamfest We had a very successful Winter Hamfest. We will change the start time for our hamfests. New start time will be 9 AM. Vendors set up at 7 AM. Next one will be Saturday, July 18.

Sunshine - Tom, W8KYZ. Bob, W8RET in Life Care Center, 1212 South Abbe Road in Elyria. A phone call to him would be appreciated. Sallie, AF8GI having foot problems. Dave, KD8MXE, hospitalized and back home.

Nets - Elaine, KC8FOS. Number of check-ins go up and down. The nets have different personalities, depending on what day it is and who is on the net. Always a lot of fun. Food Group has check-ins of a few people that don't check into the bigger nets.

VE Testing - Tom, W8KYZ. February VE testing – all passed. Free memberships offered, no responses yet.

Newsletter - Tom, N8FDY. Submit by March 24. Please let us know if you sold something so we remove the ad. We don't want to disappoint people who would be interested. If you place an ad and never talk to us again, we will leave the ad in for four months.

Elaine, KC8FOS, reminded of a new column in the Log called the Pets of Ham Radio. Send a photo of your pet and a few lines about it, and it will be published.

Old Business - Carl, W8KRF.

Constitutional Amendments as pertain to officers and the Board of Directors. In the NOARS Log. Changes to the club's constitution need to be voted on tonight, including makeup of the Board. Nine members changed to seven. Four current officers, most recent past president, and two full members from the general

(Continued from page 10)

membership. If there is a vacancy on the Board after appointments are made, the President may appoint a full member to serve, for not more than two years. Appointment will be commensurate with the President's term of office. Officers – elected annually in accordance with Article 7 of the Bylaws. One-year term changed to two-year term.

<u>Changes to the Bylaws:</u> Automatic life membership – Duty of the Membership Committee changed to the duty of the eligible member to notify the Membership Committee of their eligibility for Life Membership.

Regular business meetings – Specific time used to be given, requiring a Bylaw change complete with vote. Not practical. Regular business meetings will be held the third Monday at each month at a time and place determined by the President, with consent of the Board. Meetings may be changed for holidays or special events.

Election of Officers: Candidate must be a member is good standing and have attended at least four meetings in the last 12 months. Current president and vice president my not run again if they've held the office for two consecutive years changed to two consecutive terms. Terms of office will be two years, with President and Vice President elected in even number years and Secretary and Treasurer elected in odd number years.

Motion made to accept the changes to the constitutional amendments made by Dan, W8AJF, seconded by Bob, W8NNC. Motion passed. New Constitution will be on the NOARS Website

Chet, K8KIZ made a motion to adjourn the meeting, seconded by Tom, W1PDI. The motion passed. The meeting adjourned at 7:05.

Looking for a good deal?



Free from Tom, W8KYZ

MFJ - 1811 scanner/receiver telescopic antenna. 1.8-1800 Mhz.

800 foot spool 22/4 conductor wire. New. Great for home doorbell, indoor/outdoor security systems, outside video, or weather station hookups.

Sangean ATS-803A portable all band receiver. Manual, ac adapter, and all parts. Does not work.

Olson Electronics S-677 Air Speaker.

Free Desk and Operating Table

From the Estate of Mark Lewis, K8WON SK

Sauder desk and table. 30 inches high by 43 inches wide by 20 inches deep. 70 pounds. Two drawers.

Pick up in Avon Lake, Ohio.

Contact Tom, W8KYZ. 440-320-5523.

The DX Engineering Retail Showroom More products on the shelves—get hands-on with the newest radio gear!

- · Friendly service
- · Expert tech advice from active Hams
- · Open-box deals
- · Free product brochures
- · Easy return processing

Come See Us!

Retail Showroom is Open 9 am to 5 pm, Monday-Saturday.

Even when the showroom is closed you can order items at the Cashier: Monday-Saturday: 9 am to 9 pm Sunday: 9 am to 7 pm

The DX Engineering Retail Showroom 1200 Southeast Ave., Tallmadge, Ohio





From the Estate of Mark Lewis, K8WON SK For Sale (Funds will go to the family)

G5RV Junior multi-band antenna. 52 feet, covers 40-10 meters with tuner. Handles 1500 watts. \$25.00

Yaesu FT-450D HF and 6 meters. Koss headphones, manual, and MH-31 mic. \$425.00 or best offer.

Centech 7 digital multimeter. With battery and test leads. \$5.00

Baofeng UV-6R. 2/440 HT with Nagoya NA-320A antenna, as well as a rubber duck antenna. Manual. \$35.00. Contact Tom, W8KYZ. 440-320-5523 or w8kyz@outlook.com.

For Sale by Bill, WD8OSJ

Kenwood TS-830 HF Transceiver. Has all filters. Manual. \$300 or best offer. Kenwood AT-230 Antenna Tuner for TS-830. \$75. Kenwood VFO-230 FOR TS-830. \$75.00 Contact Bill at 440-522-4622

For Sale by Tom, W8KYZ

Books

ARRL Small Antennas for Small Spaces. New. \$10.00 (AARL price is 19.95 plus postage)

ARRL Antenna Book. 1960. \$5.00

ARRL Antenna Book. 1974. \$5.00

Miscellaneous

Uniden Bearcat Scanner. BC9000XLT. Manual, indoor antenna, ac power supply. \$60.00

Kenwood MC-60 Mic. Manual. \$30.00.

MFJ 948 Versa Antenna Tuner. Manual. \$40.00.

Daiwa PS140II 10 Amp Power Supply. \$30.00.

Herald BA-45A Power Supply. 13.8/4 amp. \$5.00.

Heathkit HM2140A HF Dual Watt Meter. 1.8-30 Mhz. Manual. (Collectible) \$25.00.

Yaesu 7800 mobile separation kit. New. \$10.00.

Larsen Antenna Grab Bag. Includes (3) NLA 220 coils, (1) LM-150 coil and NLA-MNT rubber gasket, plus other parts. \$25.00.

Antennas

2 meter J-pole. Home made by NOARS members. \$5.00.

MFJ 1717S dual band 2/440 HT antenna. SMA male connector. \$25.00.

VHF Yagi vertical. Nil-Jon HD-146-V3-U antenna. New. \$30.00

Contact Tom, W8KYZ. 440-320-5523 or tporter161@oh.rr.com

For Sale by Sandy, W8KYS

Drake T4XC Transmitter 160 to 10 meters. \$200.00.

Hallicrafters S-40A all-band receiver, including AM. Best offer.

Contact Sandy, W8KYS at 440-647-2255.

Estate sale, Ron, W8GMH SK

Contact Bob Adornetto, 440-382-6710, mrhoop01@sbcglobal.net Mostly all the equipment has manuals located in top lid or small file cabinet next to the tall cabinet. Ameritron AL-1500 amplifier with EBS-1 add on board with manual: \$2000.00 Yaesu FT-990DC transceiver with 250 cycle filter and manual: \$600.00 Yaesu speaker SP-6: \$90.00 Heights 40ft alum crank-over tower with mast and rotor shelf: \$450.00 Hy-Gain antenna TH6DXX, must remove from tower: \$175.00 Hy-Gain Ham IV rotator & rotor box with upgraded cable connector, must remove from tower: \$150.00 Heathkit SA-2060 ant tuner: \$175.00 Drake W-4 wattmeter: \$60.00 Heathkit DX-100 (works, needs fuses in plug): \$50.00 Heathkit AT-1 (works) (collectable): \$75.00 Icom power supply IC-PS30: \$125.00 Ameritron antenna switch RCS-4 with connector box under patio awning: \$50.00 Alinco 2m/440 transceiver DR-590 with separation kit: \$100.00 Alinco 2m/440 transceiver DR-590 (2nd one): \$75.00 Kenwood 2-meter transceiver TR-7800: \$40.00 Kenwood 2-meter transceiver TR-7800 (2nd one): \$40.00 Heathkit antenna tuner AC-1 (collectable): \$50.00 Heathkit wattmeter HM-2140 (collectable): \$40.00 Heathkit wattmeter HM-2141 (collectable): \$40.00 Heathkit swr bridge AM-2 (collectable): \$20.00 Yaesu microphone MD-1 with eil HC-4 DX Dream machine cartridge: \$100.00 Cushcraft R-7 vertical antenna hanging up in garage as a bundle: \$100.00

CW OP Lapel Pins for Sale, Created by Chet, K8KIZ



They have been sent to multiple states, Denmark, United Kingdom, Germany, Australia

CW OP Pins are \$5.75 each. US S/H is \$5.06 - International S/H* is \$15.50

(*The US Postal Service ships to most countries around the world.)

NOTE: This pricing includes shipping charges for up to 10 pins per envelope.

For Example:

1 pin + US 1st Class S/H \$10.81

2 pins + US 1st Class S/H \$16.56

3 pins + US 1st Class S/H \$22.31

1 pin + International S/H \$21.25

2 pins + International S/H \$27.00

3 pins + International S/H \$32.75

NOTE: This pricing includes shipping for up to 10 pins per envelope.

Envelopes are 5"x7" tan heavy paper with inside bubble padding.

Please send your order and full correct address with ZIP code to: CWpins05@gmail.com

Send your appropriate payment to:

www.paypal.me/ANCRSundials

Please advise me if you are using a different name with your payment (Example: a company name) so I can credit your email order.

Thank you! 73, Chet K8KIZ

For Sale by Dave, WV8P

Icom 703, QRP rig. Does not have six meters. 250 Mhz filter installed and a 500 Hz to install later.

Automatic tuner with an extra cable to use if installing it in a car.

Samlex power supply.

All items are in a hard case, ideal for travel. \$500

Contact Dave, WV8P at wv8p@roadrunner.com

NOARS Information

Members of the Board of Directors

President: Carl, W8KRF Vice President: Dave, KY8OSU Secretary: Elaine, KC8FOS Treasurer: Tom, W8KYZ Others: Tim, NC8X; Tom, N8FDY

Others

Net Manager: Elaine, KC8FOS Club Trustee for K8KRG: Al, N8CX NOARS Log Editors: Tom, N8FDY; Elaine, KC8FOS Volunteer Examiners: Tom, W8KYZ; Joe, W8GWD; John, KC8KI; Dave, K8WRS; Sallie, AB8GI

Committees

Parliamentary Committee: Tom, N8FDY Repeaters: Carl, W8KRF; Tim, NC8X Field Day: Al, N8CX Hamfest: Sunshine: Tom, W8KYZ (temp) Membership: Carl, W8KRF Club Property Committee: Tom, W1PDI Program Committee: Elaine, KC8FOS; Joe, W8DYZ; Bob, W8NNC; Dave, KY8OSU Social Committee: Elaine, KC8FOS; Dave, KY8OSU; Ann, KA8ZEP

Membership

Membership is open to anyone interested in radio communication. Dues are: Full \$15, Associate (non-licensed) \$7, Family members of a full member are \$4 each. Membership forms are available at www.noars.net. Make checks payable to NOARS and mail them to: NOARS Membership Committee, 161 Herrmann Drive, Avon Lake, OH 44Ø12.

Meetings

Meetings are held at 6:30 p.m. on the third Monday of every month, except August and December, at the North Ridgeville Branch of the Lorain County Public Library, 35700 Bainbridge Rd, North Ridgeville, OH. The doors open at 6:00 PM for a social time with coffee and donuts.

Meetings are open to the public and all are welcome.



Nets

NOARS nets are Tuesday nights at 8 pm on 28.370 MHz, and Thursday nights at 8 pm. on 146.700 MHz. All licensed amateurs are welcome.

VE Testing

VE Testing is offered the third Sunday of every month.

2929 West River Road N. Elyria OH 44035, from 12:50-3 PM.

Net Control Stations

Elaine, KC8FOS Carl, W8KRF Tom, W8KYZ Dave, KY8OSU Tim, NC8X