



The Spirit of '76 and '88



Newsletter of the
April Lake Erie Amateur Radio Association 2021
Carsten Lohrmann, KD8WBB, Editor

The next LEARA meeting upcoming talk will be on the T41 SDT that **Al Peter, AC8GY** and **Jack Purdum, W8TEE** are building, and which will eventually become an Open Source project and book.

It is a full-featured, 5 band, CW/SSB rig running up to 20 W with more DSP than many commercial rigs:



Notice the almost 100 kHz bandwidth. At the present time, the receiver is pretty much done and the PA is designed and tested, but not yet integrated into the rig. We think the final T41 can be built for under \$200 including the 5" display.

LEARA April 27. Meeting **Virtual Meeting - Online** Software Defined Transceiver

Jack Purdum, W8TEE
and
Al Peter, AC8GY
Co-Presenter

April 27.
7:30 p.m.



Click or
scan to join

The Prez Says by Bryan Torok, N8OOF



The March Meeting was a presentation by yours truly on **Fox hunting for new Hams or beginning Fox hunters**. My main take-away is

that by far the most effective method for an on-foot foxhunt is also one of the least expensive. That is using a homemade tape measure beam antenna coupled with an offset/active attenuator and an HT with signal strength display.

I also presented a few hints and tips for locating the fox along with the second main point. Like

... continue on page 2

Prez cont.

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NEWSLETTER	
<p>The Spirit of '76 & '88 is published monthly except in December. Contributions must be received by the 2nd Sunday of the month except on months with 5 Sundays and 5 Tuesdays when the 3rd Sunday will be sufficient.</p> <p>Editor: Carsten Lohrmann, KD8WBB E-mail: editor@leara.org</p> <p>Proofreading: TNX to W8AZO, N8YNR</p>	

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many things, foxhunting sounds simple on paper. But, if you want to be proficient when it matters, you need to practice. That is why we have foxhunts. Oh, and it is fun, good exercise, and a social experience with other Hams.

The April Meeting will be a very special presentation by **Jack Purdum, Ph.D. W8TEE** and co-hosted by **Al Peter, AC8GY**.

Jack Purdum, Ph.D. W8TEE is an educator with 25 years of teaching experience. He retired from Purdue University's College of Technology in 2008 where he taught various programming languages. He has been an amateur radio operator for more than 50 years. Dr. Purdum has written more than 20 books on C for microcontrollers, especially as they can be used in amateur radio projects. There are at least five of his books listed on Amazon (<https://www.amazon.com/s?k=jack+purdum>).

Al Peter, AC8GY, has a background in physics and mechanical engineering. He has been a ham since 2010, and an electronics builder-experimenter since the 1960s. Al was founder and CEO of a major engineering consulting and software company specializing in CAD and related software, and has extensive computer and software experience. He has designed and built Arduino MCU-related projects for Amateur Radio, including an add-on board for the uBITX, a high-performance Arduino-based signal generator, a scalar network analyzer, and various economical high-function tools for the ham shack.

Jack and Al recently finished a book, "Microcontroller Projects for Amateur Radio" that is not on Amazon but is listed on the ARRL web-site

(<http://www.arrl.org/shop/Microcontroller-Projects-for-Amateur-Radio/>).

The Lake Erie Amateur Radio Assn., Inc., **LEARA**, is a not-for-profit [501(c)(3)] organization dedicated to Amateur Radio and Public Service. Club information packets and applications for membership are available from **Marv Grossman, W8AZO, 440-248-0031**, or may be downloaded from our web site at www.leara.org. Annual membership is \$25.00.

LEARA's address is: LEARA, P.O. Box 22823, Beachwood, OH 44122-0823.

LEARA is an **ARRL**-affiliated club. When you **join** or **renew** the **ARRL**, **LEARA** benefits monetarily if you do so through the club. Send **ARRL** Applications/renewals to LEARA, P.O. Box 22823, Beachwood, OH 44122-0823. Make the check payable to **LEARA**, not the **ARRL**.

Membership Meetings are held the last Tuesday of each month (except December and June) at a Cleveland-area restaurant to be announced each month in the newsletter or, if situation requires, in a virtual conference meeting online. The LEARA newsletter usually arrives near the middle of the month. Locations for dinner may vary and often require a reservation. Those interested in dinner should arrive around 6 p.m. The meeting begins at 7:30 p.m. Meetings are open to all interested persons. You may attend without eating.

Trustees' Meetings are on the second Saturday of odd numbered months. Meetings are open to all current members of LEARA. **Locations are subject to change.** Trustees meet at one of the Cuyahoga County Public Library branches or in a virtual conference room online.

Contact a trustee or check the website at www.leara.org for details.

Prez cont.

This book provides all the introduction to C Programming you need to build projects such as a programmable power supply, a signal generator, a DSP mic processor, and more. Two of the projects I find of special interest are the Mini Dummy Load that is small enough to fit in a shirt pocket and the Double-Double Magnetic Loop antenna with multi-band remote tuning. I recently purchased the book and can't wait to get into it.

Dr. Purdum and Al Peter will be talking about a current project designing a Software Defined Transceiver (SDT).

You do not want to miss our April 2021 meeting!

Please share the meeting info on any nets you might be on, with other Ham Radio clubs, and with anyone who you think might be interested in this presentation. Attendees **DO NOT** need to be members of LEARA or even Hams. And, plan to join us early for chat time prior to the meeting. All meetings are planned to be via Zoom through May of 2021. Thanks to **Hamfest Association of Cleveland (HAC.org)** for the use of the Zoom video conferencing.

NOARS Foxhunts are starting up. The first ham radio fox hunt of the season will be this Saturday, April 24, 11:00 A.M. (rain date May 1) in the Cottonwood Picnic Area of Cleveland Metroparks. All are welcome. Neither equipment nor an amateur radio license are necessary. Following hunts to be held about every two weeks.

For further info check

<https://www.noars.net/calendar/>

or email Elaine Wilkinson, KC8FOS, at ewilkinson1951@gmail.com.

New Radio Frequency Exposure Rules Become Effective on May 3

Are you planning an antenna project for this spring? Most amateur radio stations falling below certain power thresholds or using antennas at

certain distances from the public were exempt from having to perform a Radio Frequency Exposure (RFE) evaluation. That is about to change. If you want to avoid having to immediately conduct an RFE evaluation, you need to get your antenna up or modified prior to May 3, 2021. You will still have to perform the RFE but have two years to get it done.

From the ARRL: <http://www.arrl.org/news/updated-radio-frequency-exposure-rules-become-effective-on-may-3>

The FCC has announced that rule changes detailed in a lengthy 2019 Report and Order governing RF exposure standards go into effect on May 3, 2021. The new rules do not change existing RF exposure (RFE) limits but do require that stations in all services, including amateur radio, be evaluated against existing limits, unless they are exempted. For stations already in place, that evaluation must be completed by May 3, 2023. After May 3 of this year, any new station, or any existing station modified in a way that's likely to change its RFE profile - such as different antenna or placement or greater power - will need to conduct an evaluation by the date of activation or change. The Report and Order can be found online in PDF format at, <https://docs.fcc.gov/public/attachments/FCC-19-126A1.pdf>

Until next month, talk on the radio and use the repeaters. Join us at a virtual meeting. Be careful in contact with other people, wash your hands frequently, use a mask in public, and stay healthy. Get your vaccine shots (and a flu shot) when they are available. We really want to see you when we get back to in-person meetings, hopefully soon.



LEARA "On the Air"

Club Net Information by Carl Gedeon, KB8VXE

The **Thursday Club Net** is held 8PM on our 146.760 (or 146.880 backup) MHz (-600 kHz offset, PL 110.9) repeater.

Check-ins for March					
AABCL	Carmen	KB8WUA	Leon	N8AUC	Eric
AB8MD	Andy	KC8FQV	Mark	N8OOF	Bryan
AB8UM	Mike	KD8FTS	Eddie	N8RKE	Larry
AC8JR	Andy	KE8CED	Robert	N8UPZ	Bill
AD8G	Dave	KE8FRL	Robert	W8DKA	Doug
K2WJS	Bill	KE8NNC	Brian	W8IE	Ed
K8ARP	Arp	KE8DLR	Michael	W8IXY	Ted
K8EHP	Mike	KE8QLZ	Jim	W8PKT	William
K8RJH	Ron	KG8DN	Ken	W8TAB	Tom
K8SAS	Steve	KM8V	Jon	W8ZHN	Jim
K8SGX	Bill	N8AGM	Tom	W88ROK	Ed
KB8VXE	Carl	N8AHS	Fred		

Remember if you missed a net, check out the web page for a recap of the trivia and discussion questions.

For April, May
and June, the
tentative
scheduled
NCOs are:

Please check
the website for
current
assignments.

--- click ---

Net Control Schedule			
04/29/21	Eric	N8AUC	
05/06/21	Ken	KG8DN	
05/13/21	Jon	KM8V	
05/20/21	Mike	AB8UM	
05/27/21	Ed	W8IE	
06/03/21	Carl	KB8VXE	
06/10/21	Eric	N8AUC	
06/17/21	Ken	KG8DN	
06/24/21	Jon	KM8V	

NCOs	AB8UM	MIKE	KG8DN	KEN
	K8SAS	STEVE	KM8V	JON
	KB8VXE	CARL	N8AUC	ERIC
	KD8ACO**	DAVID	W8IE	Ed

*Short time leave **Long term leave

The Wednesday Night Skywarn Practice Net

The Skywarn season has changed and now runs from April through September. Skywarn nets are held on LEARA's 146.880 repeater (until the 146.76 returns to the air) every Wednesday at 8:30 p.m. with a simplex net that follows on 146.475. Should the National Weather Service issue a severe weather alert, a Skywarn net will be started on the available repeater.

Visit www.ccskywarn.org for more information.

ARES

ARES nets are held every Tuesday at 8 p.m. on 145.410 +110.9. A simplex net will be held afterwards. Ares Meetings will still be held via Zoom. The next meeting is April 11, 2021 at 2 p.m. Please monitor the ARES website at www.n8esg.org/ares for information on nets and events. Please note that as of now the Cleveland Marathon has been postponed until the fall. A new date will be set after the Browns football schedule has been finalized. Feel free to sign up. You do not have to be an ARES member to participate.

Thursday Net NCOs

Do you know K2??? How about ??UPZ? Do you recognize the voice. Have you met them in person? What about N8OOF? A great way to learn who these voices belong to is to be a net controller! Consider being a net controller.

HELP! We have several people who are on temporary leave of duty. We can always use more LEARA Members to be-come Net Control Operators (NCOs). It's an easy to learn job that is very important in emergencies.

We look forward to your participation!

Carl, KB8VXE, E-Mail: kb8vxe@arrl.net

Sunshine

• We offer our condolences to Catherine Nickoson, wife of Mat Nickoson KC8NZJ, who's brother passed March 29.

Volunteer Exam Dates and Locations

from www.arrl.org



Due to the Coronavirus outbreak, please verify with your VE team that the exam session is being held.

04/27/2021 | [Westlake OH 44145-5115](#)

Sponsor: AD0VR

Location: Dover Masonic Temple

Time: 7:00 PM (Walk-ins allowed)

[Learn More](#)

05/09/2021 | [Independence OH 44101](#)

Sponsor: CARS Cuyahoga ARS

Location: To Be Determined

Time: 9:00 AM

(No Walk-ins / Register or Call ahead)

[Learn More](#)

06/05/2021 | [Kirtland OH 44094-8500](#)

Sponsor: Lake County ARA

Location: Kirtland Library

Time: 12:00 PM (Walk-ins allowed)

[Learn More](#)

06/22/2021 | [Westlake OH 44145-5115](#)

Sponsor: AD0VR

Location: Dover Masonic Temple

Time: 7:00 PM (Walk-ins allowed)

[Learn More](#)

COVID-19 (Coronavirus) Cancellations

David Andrzejewski is maintaining a list that's as comprehensive as possible of ham radio-related events that are canceled due to COVID-19. You can check it out here:

<https://geaugaara.org/coronavirus/>

You are also encouraged to submit new data, so the list keeps getting better; keeping us all up-to-date on all cancellations.

Upcoming Hamfests and Conventions

from www.arrl.org



Due to the Coronavirus outbreak, please verify the websites of the hamfests and conventions if the event is being held.

07/10/2021 - [Mansfield Mid-Summer Trunkfest](#)

Location: MANSFIELD, OH

Type: ARRL Hamfest

Sponsor: Intercity Amateur Radio Club

Website: <http://WWW.IARC.CLUB>

[Learn More](#)

07/17/2021 - [NOARSFEST](#)

Location: Elyria, OH

Type: ARRL Hamfest

Sponsor: Northern Ohio Amateur Radio Society

Website: <http://noars.net>

[Learn More](#)

08/07/2021 - [DX Engineering Hamfest](#)

Location: Tallmadge, OH

Type: ARRL Convention

Sponsor: DX Engineering

Website: <http://dxengineering.com>

[Learn More](#)

09/26/2021 - [Cleveland Hamfest](#)

Location: Berea, OH

Type: ARRL Hamfest

Sponsor: Hamfest Association of Cleveland

Website: <http://www.hac.org>

[Learn More](#)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
25 April	26	27 7:15 p.m. ARES 80m OSSB 7:30p.m. LEARA Virtual meeting 8 p.m. OHDN	28	29 8 p.m. LEARA VOICE 146.76/R	30	1 May
2 2 p.m. ARES meeting Helwig Whistle Stop, Berea	3	4 7:15 p.m. ARES 80m OSSB 8 p.m. OHDN	5	6 8 p.m. LEARA VOICE 146.76/R	7	8 9 a.m. Trustee Meeting
9	10	11 7:15 p.m. ARES 80m OSSB 8 p.m. OHDN	12	13 8 p.m. LEARA VOICE 146.76/R	14	15
16	17	18 7:15 p.m. ARES 80m OSSB 8 p.m. OHDN	19	20 8 p.m. LEARA VOICE 146.76/R	21	22
23	24	25 7:15 p.m. ARES 80m OSSB 7:30p.m. LEARA Virtual meeting 8 p.m. OHDN	26	27 8 p.m. LEARA VOICE 146.76/R	28	29
30	31 10 a.m. Garfield Hts Memorial Day Parade	1 7:15 p.m. ARES 80m OSSB 8 p.m. OHDN	2 June	3 8 p.m. LEARA VOICE 146.76/R	4	5



Membership renewals!

Please be aware that membership renewals are **overdue!**

If you are still missing out, you can find renewal information or pay directly on our website:

<https://www.leara.org/club-information/membership-renewal>

BRRO Monday Packet Net

by Doug Dever, AB8M

Burning River Radio Ops are holding a new net on Monday's to facilitate more packet traffic in the region, give amateurs the ability to test their gear, and to identify opportunities for over-the-air links throughout the region or to other regions. This isn't a conventional net where all participants meet simultaneously. Instead, the concept is that amateurs send a message anytime between 0600 and 2100 on Monday. All messages will be acknowledged and you will receive a response on Tuesday.

For complete details go to:

<http://www.nw8s.com/news/brro-monday-packet-net/>

Ohio ARES D10 2021 Messaging Exercise

by Jon Anhold, KM8V

District 10 will be running some lightweight, easy-to-follow activities throughout 2021 to help you keep those messaging and digital muscles that are needed for the Simulated Emergency Test (SET) in-shape. As any potential activation may have different requirements, the objective is to keep a variety of messaging modalities fresh in people's minds, ensuring we have as many tools in the toolbox as possible when needed.

For more info visit:

<https://www.km8v.com/hamradio/ohio-ares-d10-2021-messaging-exercise/>

Puzzle 3 (Medium, difficulty rating 0.46)

4			7		3	2		
9	7	2		4				
		1				6	4	
		3			7	1		
8								9
		6	4			5		
	1	4				9		
				5		3	6	1
		5	6		1			4

Puzzle 1 (Hard, difficulty rating 0.61)

	4					5		1
			7	3				8
3		8				7		
8	2		3			6		
	3		1		2		5	
		5			6		2	3
		7				4		5
2				5	7			
1		3					9	

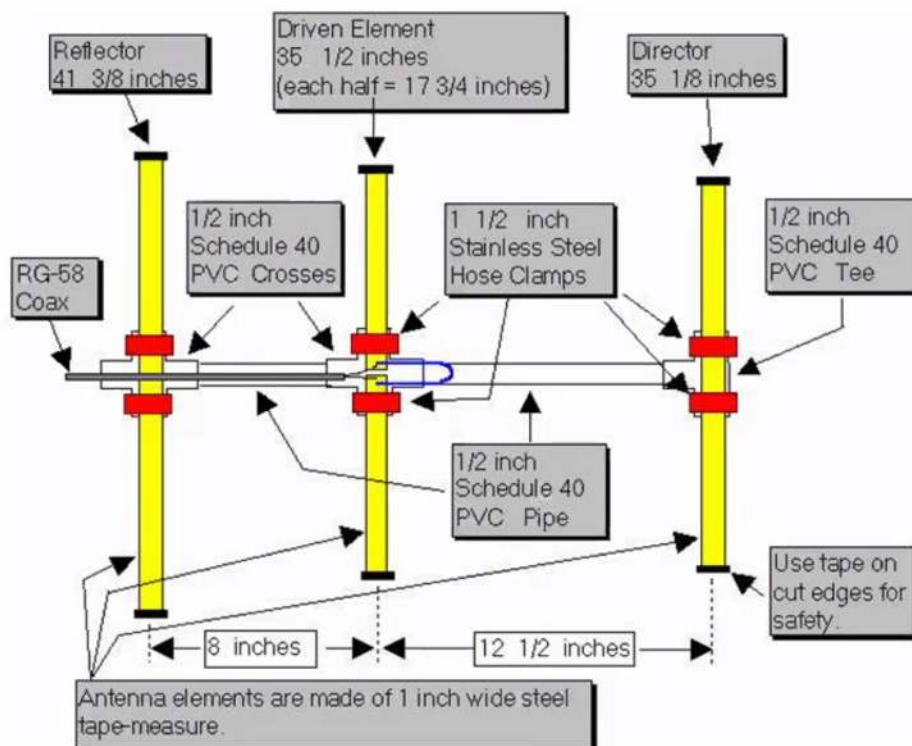
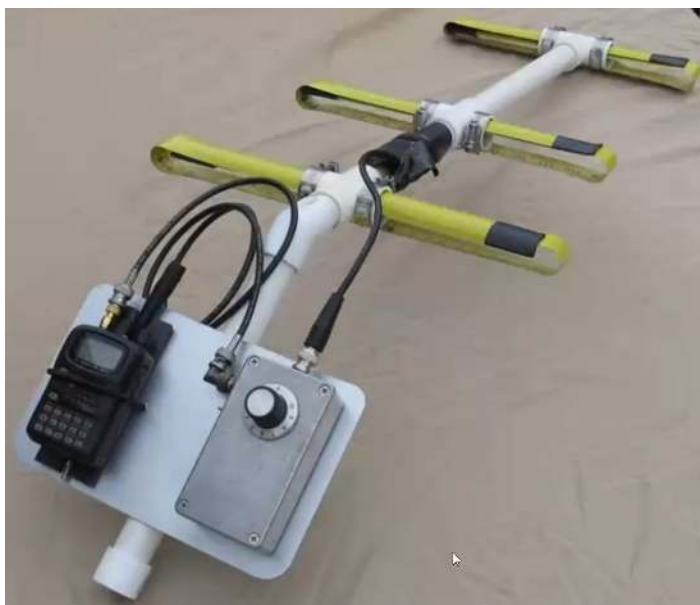


Fox hunting for new Hams or beginning Fox hunters.

Bryan Torok, N8OOF
30th March 2021

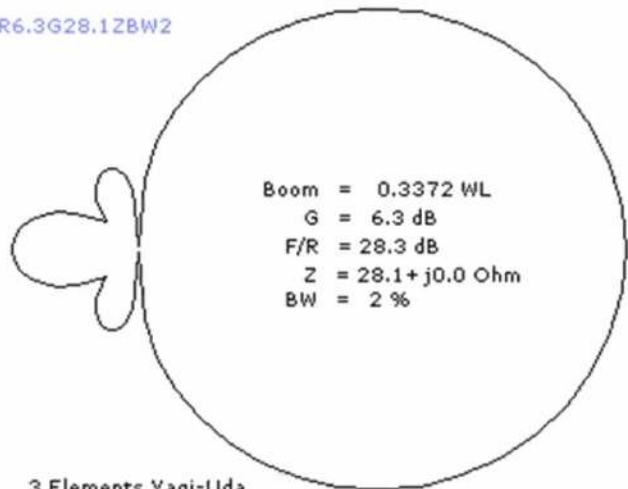
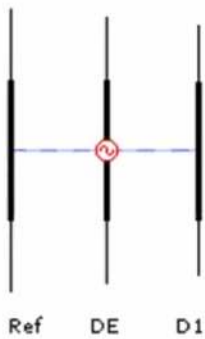


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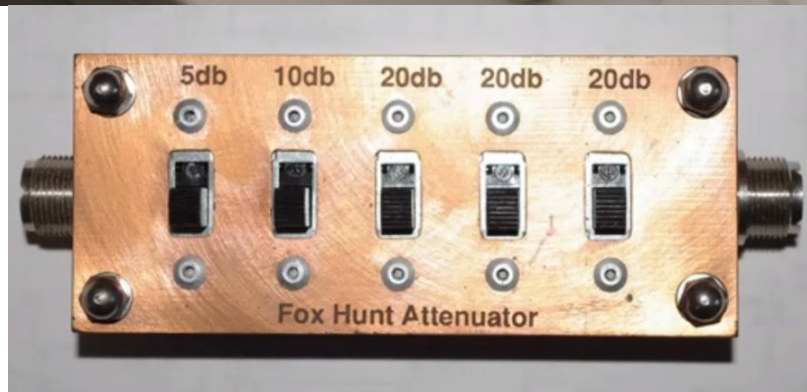


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St. Vincent Radio Amateurs on Alert During Volcano Emergency

04/13/2021

from: <http://www.arrl.org/news/st-vincent-radio-amateurs-on-alert-during-volcano-emergency>

Donald de Riggs, J88CD, on the Caribbean island of St. Vincent, says that on April 13, the 42nd anniversary of the 1979 eruption of the La Soufriere volcano, island residents were awakened to another column of volcanic ash creating a thick blanket, obscuring part of the eastern sky as the volcano continues to erupt violently.

“Almost all residents in the Red Zone have been evacuated, save for a few diehards who will not move, for reasons unknown,” he said. Since the effusive eruption began last December, local hams have been in a state of readiness via 2-meter networks and regional networks via HF. A 24-hour regional HF network and vigil has been active since the violent eruptions began 4 days ago, to provide communication support should telephone service be disrupted by the volcanic hazard. This includes a twice-daily link-up on HF with the Caribbean Disaster

Emergency Management Agency (CDEMA).

There is also a 2-meter gateway via EchoLink on the J88AZ node. The other active VHF repeater is the main resource for domestic communications. The Grenada repeater, which is linked to St. Lucia and Barbados, is also accessible by hams in Tobago, Trinidad, and St. Vincent and the Grenadines.

Frequencies being used for disaster-related communications may include 3.815, 7.188, or 7.162 MHz.

The La Soufrière volcano on St. Vincent began a series of explosive eruptions on April 9, sending clouds of hot ash some 20,000 feet into the air, blanketing much of the island in ash and causing water and power outages. The volcano is “a constant threat,” according to CDEMA. — Thanks to The Daily DX

LEARA — The Lake Erie Amateur Radio Association

More than **50 YEARS** of Serving Greater Cleveland Since 1969

VOICE REPEATERS:

146.76/R-	• Highland Hills	(Requires 110.9 Hz tone)
146.88/R-	• Lakewood	(Requires 110.9 Hz tone)
224.90/R-	• Lakewood	(Requires 141.3 Hz tone)
444.40/R+	• Macedonia	(Requires 131.8 Hz tone) (Offline)
444.70/R+	• Lakewood	Digital System Fusion & Analog (Req. 131.8 Hz tone)

INTERNET:

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