



The Spirit of '76 and '88



Newsletter of the
February Lake Erie Amateur Radio Association 2022
Carsten Lohrmann, KD8WBB, Editor



**Event
Support
Group**



Mat Nickoson will update us about recent news from the Event Support Group and will give an overview of the Communications Truck they built.



LEARA February Meeting **Virtual Meeting - Online**

**Event Support
Group
Mat Nickoson,
KC8NCJ**

**February 22.
7:30 p.m.**



Click or
scan to join

The Prez Says by Bryan Torok, N8OOF



The January 2022 meeting was held via Zoom. Dave Andrzejewski, AD8G, gave an updated presentation on the **Automatic Packet Reporting System (APRS)**. I must say that I was amazed. I've seen several presentations on APRS and wasn't expecting anything new. But, Dave made the presentation very interesting and along the way I learned some new things about the capabilities

... continue on page 2

Prez cont.

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Bryan Torok President	N8OOF btorok@sbcglobal.net
Eric Jessen VP, License Trustee	N8AUC 440-554-3057
Jeff Garvas Sec'y-Treasurer	N8YNR 216-496-3928
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Marv Grossman Membership	W8AZO 440-248-0031
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Eddie Stevens Venue	KD8FTS 440-668-7409
Ted Alexander Trustee	W8IXY amfmtv@aol.com
Jon Anhold Trustee	KM8V km8v@arrl.net
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Al Severson	AB8P (SK)
Dave Foran	WB8APD (SK)
Bob Winston	W2THU
POINTS OF CONTACT	
Carl Gedeon "Sunshine"	KB8VXE 440-243-5710
Bryan Torok Radio Officer	N8OOF btorok@sbcglobal.net
Dave Andrzejewski Radio Officer	AD8G 330-353-9754
NEWSLETTER	
<p><i>The Spirit of '76 & '88</i> 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>	

v05/2022-02-28

and use of APRS. I've always associated APRS with vehicle tracking and location as that is how I've seen it used at public service events. That led me to always thinking of the "P" as standing for "position," which is incorrect. In reality, it stands for "packet."

From **aprs.org**: "APRS is not a vehicle tracking system. It is a two-way tactical real-time digital communications system between all assets in a network sharing information about everything going on in the local area. On ham radio, this means if something is happening now, or there is information that could be valuable to you, then it should show up on your APRS radio in your mobile." That information can include current weather conditions, a list of repeaters in an area, as well as hams who may be traveling and other frequencies they are monitoring.

The February 2022 meeting will be (was, by the time you read this, with apologies) held via Zoom. The speaker for our February meeting will be **Mat Nickoson, KC8NZJ**, talking about the **Event Support Group and Public Service**. I'm betting he will have some neat pictures of the Hambulance, a mobile command center for Ham Radio.

The meeting time will be at 7:30 P.M. The link will be sent out as usual. Thanks to the **Hamfest Association of Cleveland (HAC.org)** for the use of the Zoom video conferencing.

Future meetings:

The March meeting presenter will be **Tim Duffy, K3LR**, of DX Engineering with a presentation on **Grounding and Bonding in the Ham Shack**. Our April meeting will feature **Mat Nickoson, KC8NZJ**, with a presentation about **Skywarn**.

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.

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 event. Attendees DO NOT need to be members of LEARA or even Hams.

Big Changes for CB Radio

Many Hams, myself included, got their start in two-way radio in Citizens Band (CB) radio. During the 1970s, 23 channel and later 40 channel solid state radios were relatively inexpensive. CB radio was originally intended for short range personal communication. Also, originally a license and call sign were required and certain channels were reserved for inter-station and intra-station communications. By the late 1970s, most of that had gone away. Clubs were formed and groups would meet for public service and socializing. And, people began using “skip” for long range contacts similarly to Hams on HF. After all, the CB band is on 11-meters, right next to the Ham 10-meter band.

As CB was originally constituted, amplitude modulation (AM) was the primary form of modulation with single sideband (SSB) rarely used as it was generally only available on expensive upper and units. These days, the cheaper CB radios are AM only, but SSB capable radios are far more common.

In 2017, Cobra Electronics Corporation (Cobra) petitioned the FCC to add frequency modulation (FM) to radios it sold in the USA. A leading competitor, Group President Electronics USA (manufacturers of President CB radios), supported Cobra’s request. According to an FCC Fact Sheet published in July 2021, both companies pointed out the benefits of FM.

“[Cobra] argues that a dual modulation approach has been used successfully in other countries for many years,” the FCC Fact Sheet states. “Cobra and others suggest that an FM option will benefit the CB radio user—both professional and

recreational—in that it will provide better quality and clarity of communications.” Further, Group President Electronics USA believes “that AM and FM each have unique advantages and together provide a better user experience for CB radios.” Many people think that Cobra and President are hoping to revitalize CB radio in the USA and thus sell more radios.

The FCC granted the petition effective October 28, 2021. We should be seeing CB radios with FM as one of the modes by early to mid-2022.

FM on CB radio has been legal in the UK since 2006 and most of Europe for at least the last 10 years. In fact, CB radio has evolved rather differently in Europe from the USA. While all of the frequencies have remained in the 27 MHz band, many of the specific frequencies used are different from the 40 channel plan specified in the USA. There are frequencies reserved for LSB, USB, Packet, and PSK31, as well as frequencies generally recognized for calling North America and South America.

They are doing all sorts of activities on CB that we associate with Amateur Radio in the USA including: IOTA, POTA, SOTA, SSTV, digital modes, special events, and DX clubs.

It will be very interesting to see how CB evolves in the next few years. Perhaps it will bring a new crop of people interested in playing radio. If that occurs, we may eventually see some who will take the next step into Amateur Radio.

Until next month, talk on the radio and use the repeaters. Check into one of the many nets available on the LEARA repeaters. Join us on the air, online, or in person. If you don’t feel safe meeting in person due to the pandemic, we understand. But, we really want to see or at least hear from you, even if it is only by Radio or Zoom.



LEARA "On the Air"

Club Net Information by Carl Gedeon, KB8VXE

The **Thursday Club Net** is held 8 p.m. on our 146.760 (or 146.880 backup) MHz (-600 kHz offset, PL 110.9) repeater. Note that the '76

repeater is back in service. All nets will be held on this repeater. Please use it and notify any trustee of any troubles or issues.

January 2022 Checkins					
AB8UM	Mike	KC8FQV	Mark	N8AHS	Fred
AC8JR	Andy	KD8AIR	Rudy	N8AUC	Eric
AD8G	Dave	KD8AJZ	Rich	N8QMK	Mike
AF8A	Gary	KE8NNC	Brian	N8UPZ	Bill
K2WJS	BILL	KE8PMM	Bill	W8DKA	Doug
K8ARP	Arp	KE8RGC	John	W8IE	Ed
K8EHP	Mike	KE8RMV	Shawn	W8IXY	Ted
K8RJH	Ron	KE8TLB	Randy	W8SDG	Sean
K8SAS	Steve	KE8TLG	Jim	W8ZHN	Jim
KB8VXE	Carl	KG8DN	Ken		

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

For February,
March and
April, the
tentative
scheduled
NCOs are:

Please check
the website for
current
assignments.

--- click ---

Net Control Schedule			
02/24/22	Mike	AB8UM	
03/03/22	Ed	W8IE	
03/10/22	Carl	KB8VXE	
03/17/22	Eric	N8AUC	
03/24/22	Steve	K8SAS	
03/31/22	Ken	KG8DN	
04/07/22	Jon	KM8V	
04/14/22	Mike	AB8UM	
04/21/22	Ed	W8IE	
04/28/22	Carl	KB8VXE	
05/05/22	Eric	N8AUC	

NCOs	AB8UM	MIKE	KG8DN	KEN
	K8SAS	STEVE	KM8V	JON
	KB8VXE	CARL	N8AUC	ERIC
	KD8ACD**	DAVID	W8IE	Ed

*Short time leave **Long term leave

The Wednesday Night Skywarn Practice Net

The Skywarn season runs from April through September. The Skywarn practice nets are now on winter hiatus. Should the National Weather Service issue a severe weather alert, a Skywarn net will be started on the 146.760 repeater.

Visit www.ccskywarn.org for more information and training sessions.

ARES

ARES nets are held every Tuesday (Except the first Tuesday of the Month) at 8PM on 145.410 (+)110.9. A simplex net will be held afterwards. ARES Meetings and Nets are resuming in January. The next ARES meeting will be on the first Tuesday of the month starting in January 4, and February 1, 2022, It will be held in the meeting room at the Helwig Whistle Stop 599 West Bagley Rd. Berea, OH. at 2PM. The March meeting will be held at the County Emergency Operations Center at E93 and Quincy Ave. Please register for this event on the calendar at n8esg.org/events. Please monitor the ARES website at www.n8esg.org/ares for information on nets and events. www.n8esg.org/events.

There is a new ARES DMR practice net. It is Scheduled for Thursdays an 7:30PM on talk group 31395.

Thursday Net NCOs

Do you know K2??? How about ??UPZ? A great way to learn who these voices belong to is to be a net controller! Consider being a net controller.

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 are looking for someone to take over the Sunshine duties. You do not have to be a trustee to perform these duties. If you would like more information or would like to help out, please contact Carl Gedeon (kb8vxe@leara.org) or any of the trustees.



Membership renewals!

Please be aware that membership renewals are due!

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>

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.

03/13/2022 | [Independence OH 44 131](#)

Sponsor: Cuyahoga ARS

Location: Old Elmwood Recreation Center

Time: 9:15 AM (Walk-ins allowed)

[Learn More](#)

04/02/2022 | [Kirtland OH 44 094](#)

Sponsor: Lake County ARA

Location: Kirtland Library

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

[Learn More](#)

Puzzle 1 (Medium, difficulty rating 0.53)

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

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.

03/13/2022 - [Winter Hamfest](#)

Location: Elyria, OH

Type: ARRL Hamfest

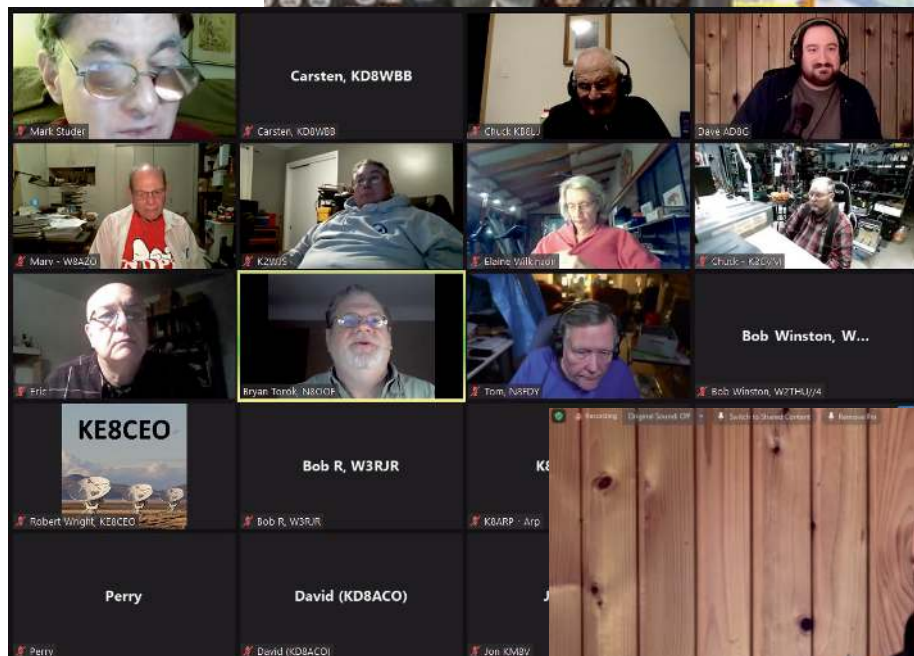
Sponsor: NOARS

[Learn More](#)



APRS

Dave Andrzejewski, AD8G
from 25. January 2022



Radios with Integrated APRS®

- Kenwood D710 Mobile, TH-D74A Portable
- Yaesu FTM-300, FTM-400 Mobiles, FT-5D and other Portables
- Alinco DR-135T Mobile
- AnyTone D878UVIIPlus Portable (Also has DMR!)



Apps

- Clients for every major Operating System
- Android – aprsDroid by Georg Lukas (DO1GL)
- iOS – PocketPacket (SV1OAN), HamTracker, APRS Pro, aprs.fi
- Windows – APRSISCE/32, SARTrack
- Linux/Unix – Xastir, APRSISCE/32 and others via Wine
- MacOSX – Xastir, PocketPacket
- Cross-Platform – YAAC (Yet Another APRS Client) KA2DDO

Interfaces

- You don't need a radio with integrated APRS!
- TNCs
 - Kantronics KPC-3
 - Byonics TinyTrak4 (\$85)
 - Argent OpenTracker USB (\$45)
 - Mobilinkd (\$125)
 - TNC-X
 - TNC-Pi (\$60)
- Sound Card Interface (such as the TigerTronics Signalink)
 - Requires free software like Direwolf

Sun	Mon	Tue	Wed	Thu	Fri	Sat
20 February	21	22 6:30p.m. LEARA meeting 7:15 p.m. ARES 80m OSSB 7:45 p.m. OHDN	23	24 7:30 p.m. ARES DMR TG:31395 8 p.m. LEARA VOICE 146.76/R	25	26
27	28	1 7 p.m. Cuyahoga ARES Meeting 7:15 p.m. ARES 80m OSSB 7:45 p.m. OHDN	2 March	3 7:30 p.m. ARES DMR TG:31395 8 p.m. LEARA VOICE 146.76/R	4	5
6	7	8 7:15 p.m. ARES 80m OSSB 7:45 p.m. OHDN	9	10 7:30 p.m. ARES DMR TG:31395 8 p.m. LEARA VOICE 146.76/R	11	12 9:15 a.m. Trustee's Meeting
13 Daylight Saving Time	14	15 7:15 p.m. ARES 80m OSSB 7:45 p.m. OHDN	16	17 St. Patrick's Day 7:30 p.m. ARES DMR TG:31395 8 p.m. LEARA VOICE 146.76/R	18	19
20	21	22 7:15 p.m. ARES 80m OSSB 7:45 p.m. OHDN	23	24 7:30 p.m. ARES DMR TG:31395 8 p.m. LEARA VOICE 146.76/R	25	26
27	28	29 6:30p.m. LEARA meeting 7:15 p.m. ARES 80m OSSB 7:45 p.m. OHDN	30	31 7:30 p.m. ARES DMR TG:31395 8 p.m. LEARA VOICE 146.76/R	1	2 April



Geomagnetic Storm Leads to Loss of up to 40 Starlink Satellites

02/10/2022 - from: <http://www.arrl.org/news/geomagnetic-storm-leads-to-loss-of-up-to-40-starlink-satellites>

A geomagnetic storm on February 4 “significantly impacted” the launch of some 49 Starlink satellites. The company said the satellites were intended to achieve low-Earth orbits after being sent aloft on a Falcon 9 launcher. Starlink is a satellite internet constellation operated by SpaceX to provide satellite internet access. SpaceX said it initially deploys its satellites into low-Earth orbit so that “in the very rare case any satellite does not pass initial system checkouts, it will quickly be deorbited by atmospheric drag.” All did not go as planned, however.

“Unfortunately, the satellites deployed on February 3 were significantly impacted by a geomagnetic storm on Friday [February 4],” SpaceX announced this week. “These storms cause the atmosphere to warm and atmospheric density at our low-deployment altitudes to increase. In fact, onboard GPS suggests the escalation speed and severity of the storm caused

atmospheric drag to increase up to 50% higher than during previous launches.”

The satellites were commanded into a safe mode, where, as SpaceX explained, “they would fly edge-on (like a sheet of paper) to minimize drag — to effectively ‘take cover from the storm’ — and continued to work closely with the Space Force’s 18th Space Control Squadron and LeoLabs to provide updates on the satellites based on ground radars.”

A preliminary analysis showed that the increased drag at the low altitudes prevented the satellites from being moved into higher orbit, and up to 40 of the satellites will reenter, or already have reentered, Earth’s atmosphere.

“The deorbiting satellites pose zero collision risk with other satellites, and, by design, [burn up] upon atmospheric reentry — meaning no orbital debris is created and no satellite parts hit the ground,” SpaceX said.

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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