Returning to LEARA Tuesday, April 30
Bill Fraedrich, WB9LBI, with Updates on Traffic Handling

Stancato's ITALIAN RESTAURANT

WB9LBI

Photo by Tom Parkinson, KB8UUZ

Long before there was anything like email or texting, hams were passing messages by radio via specialized nets. Every day, hundreds if not thousands of messages are moved efficiently throughout the USA and Canada by means of **amateur radio traffic nets.**

Bill Fraedrich, WB9LBI, a Portage County amateur widely known for his CW and SSB traffic handling skills, returns to LEARA to share his vast experience in traffic handling.

"This is a skill that every emergency communicator should master," he asserts. In all of his presentations, Bill is not content with just telling us about the subject. On Tuesday, April 30, at the meeting he will DEMONSTRATE how it is done.

Bring your HT ALONG to participate!

Bill Fraedrich, WB9LBI, a frequent participant as the "CW Liaison" for various traffic nets, has been involved in traffic handling on the National Traffic System since the early 1970s. He is one of the few people you could meet who was paid full-time to handle messages as an Army MARS station operator in Germany. There, while operating the station, Bill set up phone patches to connect the troops with their families back home, and sent message traffic, among his many duties at the station.

Dinner will be served at 6:30 PM and
Bill's program will begin around 7:30.

Meetings are open to all interested persons. You may attend without eating, but reservations are required if you do wish to eat.

Dinner entrée choices are:
> Beef Tips with Noodles
> Chicken Scaloppine
> Stuffed Shells

Side dishes with dinner are:
> Salad
> Au Gratin Potatoes
> Buttered Sweet Corn

Your $21. provides a main entree, the sides, and the included beverages coffee, tee or soda. Tax and tip are also included. Bar beverages can be purchased that evening at the restaurant.

See other details at
www.stancatos.com.

To reserve your dinner (before 11:00 AM that day, please), either telephone Marv Grossman's line at **440-248-0031** or go to the club **website…**
www.leara.org. **Please state the main entrée preference** for yourself and for anyone else in your group.

Make your dinner reservation or just come to the meeting near the start time of 7:30 PM. We all hope to see you at Stancato's in Parma on the night of Tuesday, April 30! **-AR-**

On April 30, LEARA gets large first floor room at
Stancato's in Parma
7380 State Rd., Parma, Ohio 44134
On State Road just north of Pleasant Valley Road
Exit I-71 at Bagley Road and Go East, or take
I-480 to I-77 South, then Pleasant Valley Road West

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 Tuesdays, when the 3rd Sunday will be sufficient.)
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Marv, W8AZO and Jeff, N8YNR

The Prez Says
by Gary Zimmet, WA8TJL

As I get older, I have noticed that "**Motivation**" plays a bigger role in my evening and weekend activity planning than it did years ago. Recently, we have had some very nice weather over the weekend. I got **motivated to investigate** some of the **power utility noises that I have been hearing on the radio** in my neighborhood during the winter months, ranging from S4 to S9+. I document those noises in a small notebook in my shack, with date, time, frequency, s-meter signal strength, and antenna azimuth (if on a directional antenna). I also try to include notes about the humidity and temperature conditions present when those noises are occurring.   In a perfect world, and according to the FCC's web site, *I am to inform the local utility company of the suspected interference and they will "take care of it."* ...   **However,** I know better than that because of past previous interactions with the power company. Finding these noises so they can be corrected **requires the "motivation**."

♦ **What does power utility noise sound like? —** I have experienced **two types** in my neighborhood. **Common power line noise**- I will call it 120 hz static, it occurs as AC current attempts to flow through a poor electrical connection or across a bad insulator, and is commonly affected by humidity. It may be continuous or in bursts. Remember that the first "spark gap" transmitters generated RF energy by creating a spark. **Carona noise**- sounds like a "hissing" noise on a SSB, CW or AM receiver. It is not always from the power utility and is not as common.
♦ **Inside Work** — I start by going to" Google Map" on my computer and print a map of my neighborhood with my address in the center, scaled so that about 2 blocks are displayed in each direction around my address.

The next step is to look at my notes and check for reports that may have a common azimuth and have been observable over time — these are the "repeat offenders" — and transfer that azimuth information to my neighborhood map with a protractor.   My map now looks like a **number of strobes** radiating outward from my home, one strobe representing the azimuth to each noise source.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
April		*16* *8 PM ARES®* *Cuyahoga* *NET '41*	*17* *8PM Skywarn* *Practice '76*	*18* *8 PM* *LEARA NET* **World Am.** **Radio Day**	*19*	*20*
21	*22*	*23*	*24* *7 PM* *ARES®'7.015* *8PM Skywarn* *Practice '76*	*25* *8 PM* *LEARA* *NET '76*	*26*	*27*
28	*29*	*30* **6:30 PM** **LEARA** **Stancato's in** **Parma**	*1* 8 PM Skywarn Practice '76	*2* *8PM* *LEARA* *NET '76*	*3*	*May*

Sun	Mon	Tue	Wed	Thu	Fri	Sat
5	*6*	*7* *8 PM ARES®* *Cuyahoga* *NET '41*	*8* *7 PM* *ARES®'7.015* 8 PM Skywarn Practice '76	*9* *8 PM* *LEARA NET* *9 PM* *DIGI NET*	*10*	*11*
12	*13*	*14*	*15* 8 PM Skywarn Practice '76	*16* *8 PM* *LEARA* *NET '76*	*17* **Dayton** **Hamvention**	*18* **Dayton** **Hamvention**
19 **DHVn** *Cleveland* *Marathon* email KC8PD	*20*	*21* *8 PM ARES®* *Cuyahoga* *NET '41*	*22* *7 PM* *ARES®'7.015* *8PM Skywarn* *Practice '76*	*23* *8 PM* *LEARA* *NET '76*	*24*	*25*
26	*27*	*28* **6:30 PM** **LEARA** **MiMi's** **Restaurant**	*29* 8 PM Skywarn Practice '76	*30* *8PM* *LEARA* *NET '76*	*31*	

The 2013 Rite-Aid Cleveland Marathon will be held on **Sunday, May 19th** and amateur radio volunteers from across Northeast Ohio will be providing communications support for the race. This event requires more than thirty ham radio operators over the 26-mile course that starts and finishes at the Cleveland Browns Stadium and covers a wide area over both the west and east sides of town.
If you would like to assist with this event, please contact **Jim Aylward, KC8PD**, at either aylwardjim@aol.com or 330-297-7979. Thanks to all who volunteer for this and other events!
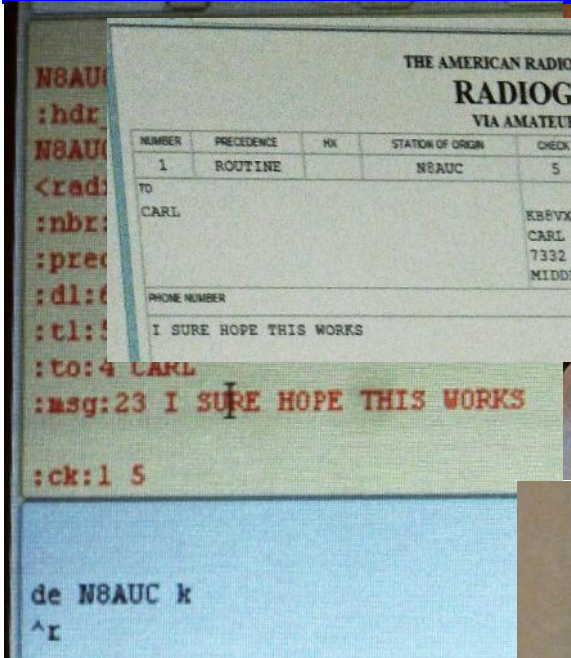
http://www.clevelandmarathon.com/

**LEARA Dinner and Monthly Meeting
at Harry's Steakhouse on March 26th.**

Eric Jessen, N8AUC, with Carl Gedeon, KB8VXE, presenting a program on Digital Communications at Harry's Steakhouse on March 26th.

LEARA "On The Air"
Club Net Information
by Bill Schultz, AC8CO, and Carl Gedeon, KB8VXE

<u>The Thursday Club Net</u> is held on our 146.760 MHz (-600 kHz offset, PL 110.9) Repeater.

This past month (March), the following persons have checked into the Net:

AB8RZ	TOM	KD8SXN	RICK
AC8CO	BILL	KD8TQU	MIKE
K8ARP	ARP	KD8TWG	DAVE
K8EHP	MIKE	KG8DN	KEN
K8ISY	JOHN	N8AUC	ERIC
K8JTK	JEFF	N8DOA	BILL
K8RWC	RICH	N8ETP	TOM
K8WHB	BILL	N8JIW	DON
K8WLF	FRITZ	N8ORC	BOB
KB8MHZ	LILLIE	N8UPZ	BILL
KB8TGT	DOUG	N8UZF	SIMPSON
KB8VBR	LEONE	ND8B	DON
KB8VXE	CARL	W2THU	BOB
KB8WOQ	SCOTT	W8NRA	JOHN
KC8FQV	MARK	WA8LGM	JOHN
KC8MNW	JEANNE	WB8QLT	LINDA
KD8NVX	LEON	WB8ROK	ED
KD8QAZ	KEVIN	WD8GEO	GEORGE

For the months of May and June the scheduled NCOs are:

4/25/13	Bill	AC8CO
5/2/13	Bob	W2THU
5/9/13	Ken	KG8DN
5/16/13	Jeanne	KC8TJH
5/23/13	Eric	N8AUC
5/30/13	Matt	W8DEC
6/6/13	David	KD8ACO
6/13/13	Carl	KB8VXE
6/20/13	Jeanne	KC8TJH
6/27/13	Bob	W2THU

The Thursday ARES Digital Communications Net is held on the 146.760 MHz (-600 kHz offset, PL 110.9) on the second Thursday of every month at 9:00 PM ET. The software used for this net, FLDIGI, is available for download at http://www.w1hkj.com. FLDIGI, FLWRAP, and FLMSG are the primary components needed to participate. Since **LEARA's Friday SSTV Net** has been suspended, please consider joining the Thursday ARES Digital Net until the SSTV Net resumes. Eric Jessen (n8auc@hotmail.com) or David Schultz (ad8ws@arrl.net) can be contacted for further information concerning the ARES Digital Net.

The Wednesday Skywarn Practice Net

Practice Nets are scheduled each Wednesday at 8:00 PM on LEARA's 146.76 repeater. The backup repeater is our 146.88 repeater. A third repeater that is used and monitored for local traffic is the 442.125 repeater (+600 PL 82.5). This year we will be exercising techniques for running a net on simplex, (146.475) in case all repeaters should be inoperable. As always, there can never be enough net control operators. During a storm, we need net control operators and liaisons for District 2 and NWS information relays. If you would like to give us a hand please contact us at cuyahogaskywarn@gmail.com. Be sure to visit the web page at www.ccskywarn.org.

The Thursday Club Net (continued):

The LEARA Net operations committee is composed of the Net Control Operators (NCOs), Bill (AC8CO and Carl (KB8VXE) are the present committee co-chairs

AC8CO	Bill
KG8DN	Ken
KB8VXE	Carl
N8AUC	Eric
KC8TJH	Jeanne
W2THU	Bob
KD8ACO	David
W8DEC	Matt

We need more LEARA Members to become Net Control Operators (NCOs). Okay, we said the same thing last month! But, we hear many more than us check-in to the net each week! Why not give the NCO slot a try? It's an easy to learn job that is very important in emergencies (see also the Skywarn Net). Your help is really needed!

So, if you are a LEARA member, please consider joining us as an NCO. We meet every Thursday, we learn to lead and test our radio skills, and we all want to help you be the best! Contact Bill (ac8co@arrl.net) or Carl (kb8vxe@arrl.net) via email to join us and get started.

This year "on-the-net" is going great. The fun stuff: Hamvention, Field Day, and many service events are on the horizon. Carl and I look forward to participating with you!

Bill — AC8CO **-AR-**

Need a RIDE to Dayton May 18th?

The **CARS** club (Independence) and the **PARF** club (Akron) are offering one-day rides to and from the **Dayton Hamvention** starting in the wee hours on Saturday morning. Space is limited and **prices & terms differ**, so you may wish to check on these options soon. (*Hamvention admission ticket is NOT included..*)

<u>CARS bus:</u> Leaves at 3:30 am from Kmart at Engle and Bagley in Middleburg Hts. and then picks up riders at 4:00 am from the Kmart lot at I-71 and Rt. 303 on the way.   **CARS:...www.2cars.org**

<u>PARF bus:</u> Leaves 5:30 am from the Akron Baptist Temple, 2324 Manchester Road. Email or call Joy Spencer: KA8TDF@arrl.net, or 330-745-5115.
PARF:...http://www.qsl.net/w8ctt/2013%20Dayton%20Application.htm   -AR-

Upcoming Hamfests and Conventions
from **www.arrl.org**

04/28/2013
Athens Hamfest
Location: Athens, OH
Type: ARRL Hamfest
Sponsor: Athens County Amateur Radio Assn.
Website: http://ac-ara.org/
Learn More

04/28/2013
Two Rivers ARC Hamfest
Location: Boston (McKeesport), PA
Type: ARRL Hamfest
Sponsor: Two Rivers Amateur Radio Club
Website: http://www.trarc.net
Learn More

05/17/2013
Dayton Hamvention
Location: Trotwood, OH
Type: ARRL Hamfest
Sponsor: Dayton Amateur Radio Assn. (DARA)
Website: http://hamvention.org
Learn More

Volunteer Exam Dates and Locations
from **www.arrl.org**

04/18/2013 | Cleveland OH 44114-1130
Sponsor: NOTACON VE Team
Location: Hilton Garden Inn
Time: 7:00 PM (Walk-ins allowed)
Learn More

04/19/2013 | Cleveland OH 44106-1712
Sponsor: W8EDU
Location: Case Western Reserve University
Time: 6:30 PM (Walk-ins allowed)
Learn More

04/21/2013 | Elyria OH 44035-1343
Sponsor: American Red Cross
Location: American Red Cross
Time: 1:00 PM (Walk-ins allowed)
Learn More

04/30/2013 | Cleveland OH 44106-1712
Sponsor: W8EDU
Location: Case Western Reserve University
Time: 6:30 PM (Walk-ins allowed)
Learn More

05/09/2013 | Stow OH 44224-4097
Sponsor: Cuyahoga Falls ARC
Location: Stow-Munroe Falls Public Library
Time: 7:00 PM (Walk-ins allowed)
Learn More

05/12/2013 | Independence OH 44131-4841
Sponsor: Cuyahoga ARS
Location: Town Hall
Time: 9:00 AM (Walk-ins allowed)
Learn More

05/19/2013 | Elyria OH 44035-1343
Sponsor: American Red Cross
Location: American Red Cross
Time: 1:00 PM (Walk-ins allowed)
Learn More

05/21/2013 | Akron OH 44314-3614
Sponsor: Pioneer AR Fellowship
Location: Akron Baptist Temple
Time: 7:00 PM (Walk-ins allowed)
Learn More

05/26/2013 | Newton Falls OH 44444-1639
Sponsor: Warren ARA
Location: Newton Falls Community Center
Time: 6:30 PM (Walk-ins allowed)
Learn More

A View from the "Cape" by Ron Jakubowski, K2RJ

 One of the plusses of living on the beach only a mile from the entrance to Port Canaveral is the variety of ships we get to see going in and out of the harbor each day. Some days there are as many as 5 large cruise ships (carrying between 2,000 and 5,000 passengers. This morning, for example, when I woke up to "stretch my legs" about 5 a.m., I saw the **brightly-lit Carnival Pride** arriving from Baltimore. Yesterday just after dawn a large cargo ship arrived.

Trident submarines, Army training vessels and naval research vessels all call Port Canaveral home. This is in addition to the large tankers bringing fuel from Houston which is then distributed to tanker trucks providing gasoline and diesel for the central Florida gas stations or onto other tankers to stock the Bahamas and other nearby islands. Of course there are the many commercial fishing and shrimp boats as well as the pleasure boats that are constantly going in and out of the channel. I have found a website (and a companion Android app) which shows which vessels are in port on a map overlay with their names, as well as which vessels are in range and what direction they are moving. You can even look at their past travels and see pictures of the vessels taken in many harbors around the world.

The site is **www.marinetraffic.com** and allows you to see what ships are in or near ports anywhere in the world. You can even search for a particular ship. And the system, which operates very similar to APRS, shows ships on the Great Lakes and major rivers as well. And you can even set it up to send you emails when certain of your "favorite" ships approach, enter or leave a port. They will even provide you with a free transponder if you want to add your boat to their tracking system! A few of the Trident subs even have them! (with the ship's name as "US Submarine".)

Along with being able to view what is happening, **I can also listen to the harbormaster and pilot** as they coordinate the entrance and departure of each vessel on Marine channel 10. The Pilot climbs aboard each large ship as it enters the channel about 3 miles out from the jetty and takes the helm until it is docked (even the submarines!). When they are ready to leave, he takes them back out. That would be an interesting job!   Ron J. **-AR-**

Prez cont.

I had lines on my map marking the azimuths for 5 bothersome noise sources: Three west of my QTH, and two east.

Now the outside" nice weather" work — I utilize a portable shopping stroller with a IC-706, and a battery inside. I carry a 3-element, 2-meter Yagi with about 6 feet of RG-58 cable connected to the IC-706, and my map with the azimuth plots. The IC-706 features all band coverage, an S-meter, a preamp, and an attenuator.

♦ **Start Triangulation** — Now referring to the map, go to a point on the map where an azimuth plot crosses a street or equally good access point one half to one block away. With the small Yagi, s-meter, pre-amp, and attenuator on radio, determine if the noise is farther out on that azimuth line, or back toward my QTH. Head toward the strongest direction looking for a good access point that may be 50 to 75 yards perpendicular to the azimuth line and take another reading. Repeat the process as necessary. You might already be able to see the electrical hardware that may be the source of the noise. By using the three element yagi, and the attenuator on the radio, and selecting the best distance and angle to the source you can learn to discriminate to individual poles or clusters of hardware. When you have located the noise source, the yagi can also help you determine the polarization of the noise. I usually hunt with the yagi "horizontally polarized" (the yagi elements are parallel to the ground). But I do also check the noise source for "vertical polarization".

♦ **Documenting The Findings —** After finding each noise source, I document it on my map, and in a paragraph usually describing the source, and it's location, and pole number (if available), along with signal strength, signal polarization, and azimuth from my home QTH.

♦ **Reporting it —** I send a tactful letter to the utility, advising them of suspected power utility RFI in my neighborhood, and how it is negatively impacting my FCC licensed Amateur Radio communications. I usually hear from someone during the next 10 days to confirm and discuss it. Now I use the notes and refer to the map and text descriptions of the locations of the noise sources.

♦ **Action Time — Don't hold your breath!** - This is where you learn to be patient! They do not want it fixed nearly as much as I do.

NOTE: My wife believes that I should be **billing** them for finding their problems...

PS. on **Field Day** — I do not have any updates yet for Field Day status. Upper Gordon Park has been our Field Day location for several years. **Last Word on this:** Cleveland was in the process of taking over the Metro-Parks from the State. We do not know what impact this will have. I will be calling to find out. I hope to have the info before the next Thursday night net.

Gary Zimmet WA8TJL   "Motivated at this Time"

W8TTY (SK)

We give thanks
for one of our own.

-

Former LEARA Trustee
Allen Amster, W8TTY (SK)
April 7, 2013
Notice

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A Remembrance:

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Years ago Shaker Heights had a Pumpkin Patrol where hams volunteered their time by driving their own vehicles up and down the streets during Shaker's 2-hour official trick or treat window.

Al and I used to team up together riding in either his car or mine. This gave us 2 hours of quality time discussing ham radio, family, business and world events.

Toward the end, Al just stayed home, but I would stop by his house during my patrol, since he lived in Shaker, and we would chat.

Occasionally, I would meet Al at his favorite restaurant, Yours Truly on Chagrin Blvd., for lunch or dinner. I always enjoyed the conversation.

What really defined him as a ham was his passion for RTTY to the point that he gave up his call sign of approximately 50 years (W8HYG) for W8TTY.

He told us that he was just waiting for that call to become available. I guess it was a long wait.

Bob, W2THU

-

Stan Horzepa, WA1LOU

Surfin': Microcontrollers -- Small But Mighty

By Stan Horzepa, WA1LOU
Contributing Editor from arrl.org

Microcontrollers are gaining a foothold in the ham radio world. Here are some resources to help begin your explorations.

I've added a new book to my library: **Ham Radio for Arduino and PICAXE**, edited by Leigh L. Klotz Jr, WA5ZNU.

No, Arduino is not a new entity on the DXCC list, but rather a single-board microcontroller, that according to the **Arduino website**, provides "an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. It's intended for artists, designers, hobbyists, and anyone interested in creating interactive objects or environments."

Similarly, PICAXE is a microcontroller that is "designed to be the brain of your electronic project." According to the **PICAXE website**, the PICAXE system was "[o]riginally designed as an educational system for schools, [but] has now also been widely adopted by hundreds of thousands of 'hobbyists' due to its ease of use."

WA5ZNU's book is full of ham radio applications based on Arduino and PICAXE. Visit the **book's companion website** for a list of the projects and other pertinent information. By searching Google, you will find hundreds of entries on Arduino and PICAXE applications in Amateur Radio. For example, one of my favorite websites, hackaday.com recounts Todd Harrison's recent attempt to build an Arduino frequency counter for a Kenwood TS-520S transceiver.

Speaking of ham radio project development platforms, there also is **HamStack**, a website I have mentioned before. HamStack concentrates on ham radio projects and is a presence in the ham radio maker community. I was first introduced to HamStack at the 2011 **Dayton Hamvention**®. Last year, I attended their excellent presentation at Dayton and just received word that HamStack's George Zafiropoulos, KJ6VU, will be **presenting at Dayton again this year**. If you are going to be at Hamvention and are interested creating your own microcontrolled ham radio gizmo, be sure to attend George's talk. See you there! Until next time, just keep on surfin'!..................................

*ARRL Editor's note: Stan Horzepa, WA1LOU, seeks the unusual in radio. To contact Stan, send **e-mail** or add comments to the **WA1LOU blog**.*

LEARA — The Lake Erie Amateur Radio Association

- 43 Years of Serving Greater Cleveland Since 1969 -

VOICE REPEATERS:

146.76/R-	• Highland Hills (Requires 110.9 Hz tone)
146.88/R– *IRLP*	• Lakewood (Requires 110.9 Hz tone) IRLP Node 4282
224.90/R-	• Lakewood (141.3 Hz tone)
444.40/R+	• Macedonia (Requires 131.8 Hz tone)
444.70/R+	• Lakewood (131.8 Hz tone)

PACKET NODES: CLE1 145.01 MHz: **CLE5** 145.05 MHz: **CLEV220** 223.70 MHz
These nodes are part of the Cleveland Net Cluster in K8EIW's backbone system.

INTERNET:
● **www.leara.org**
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