



LARA Newsletter

Volume 4 - Issue 5 May 9th, 2019



Breakfast & Club Members Meetings - May, 2019

Breakfast

- 4 - Saturday @ 8AM Site A.
- 11 - Saturday @ 8AM Site A.
- 18 - Saturday @ 8AM Site B.
- 25 - Saturday @ 8AM Site A.

Business

- 18 - Saturday @ 8AM Site B.

Breakfast

Saturdays @ 8AM Site A.

Key:

Site A. - IHOP at I-35 and Main St.
647 West Main St.
Louisville, Texas

Site B. - Lewisville Central Fire
Station Training Room
188 N. Valley Parkway

Association Contact Information:

Mailing Address: P.O. Box 292282
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Email Address:
W5LVC.Club@gmail.com

Check us out:

Facebook: facebook.com/w5lvc/



Minutes for the Monthly Club and Officer's Meetings may be viewed on our website w5lvc.org.

Editor: Ron Bath
KG5VIS
aro.kg5vis@gmail.com

What's Your Story?

Send your articles / photographs to:
aro.kg5vis@gmail.com



Table of Contents

- Officers & Support.....2
- Message from our President.....3
- Message from our VicePresident.....4
- Treasurer's Report.....5-6
- Technical Director's Report.....7-12
- World Scout Jamboree.....13-16
- Special Regognition.....17
- Club News.....18
- New Club Officers.....19
- Ham Humour.....20
- Ideas / Suggestions.....21



President Ron Ford
Re-elected



2019 - 2020 Officers & Support

President

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Association membership is open to all persons interested in amateur radio. Join at any meeting, by mail or on-line through our web site. Annual dues are \$25 individual, \$30 family.



From the President's Shack

Thanks to Dale, KB5NFT, for his informative presentation on Radio Scouting along with the Philmont Scout Ranch and World Jamboree. See an article elsewhere in the newsletter for more info on these venues.

Thanks to the officers for the 2019-20 club year. The election closed on April 19 with the following individuals being elected to serve.

President: Ron Ford, KF5OMH

Vice President: Roger Carver, AE5EZ

Secretary: Ron Swain, KG5VIV

Treasurer: Clark Highsmith, KG5LX

Operations Director: Mike Reitz, W5EVT

Technical Director: Jim Horton, WB8YWA

So, with a new club year in front of us, is there something new or different that you would like to get involved in over the next year? If so, make your proposal to one of the officers or, better yet, come to an Officers Meeting on the Tuesday prior to the monthly Membership Meeting. Meetings are held at the Korner Café at 5:30 PM.

The SWAP Meet was held on April 27. Weather-wise it was a great day. We had a few sellers and buyers. Unfortunately, we picked a date where there were many other ham related activities along with other family related things going on.

Welcome to a new club in the area. W5CPL is the Coppell Amateur Radio Enthusiasts (CARE). Their web site is www.coppellhams.org.

At last month's Officers and Membership meeting we discussed a method of communicating various information to members who might like to participate in special events such as 13 Colonies and Route 66. The idea behind this communication is for folks to pass potential contact info to the group in a quick timely manner. In order to make this a reality we've set up a WhatsApp group. It's easy to do – just go to www.whatsapp.com and download the app to your phone. Once the download is complete just send me (KF5OMH) your telephone number and I'll add you to the group. This will allow anyone in the group to send information to the entire group without going through the gyrations of using your messaging system.

Looking forward to seeing everyone at the meeting on the 18th. Please come and bring a guest.

73,

Ron KF5OMH



From the Desk of Roger Carver - AE5EZ Our New Vice President

I am working up a presentation on Personal GoKits to give at a club meeting soon.

Here is a teaser:

Personal GoKits

What should be in a GoKit?

- Radio(s) - what band is most necessary for comms the kit will be used for?
- Antenna or means to connect/make an antenna. (slim jim, j-pole, dipole, ...)
- Battery or means to connect to external DC power for at least 24 hrs.
- Reflective Vest and/or Hat
- Personal lighting, flashlight/torch, beacon,...
- Cordage/tie wraps to secure antennas or other items.
- Any badging necessary for usage. (RACES, ARES, CERT, MERT,...)
- Food/water/energy snack necessary for at least 8 hrs.

Best regards,

Roger
AE5EZ



Howdy! members and friends of LARA.

First off, I would like to thank you for entrusting me with the position of treasurer for a second year. I hope that the hard-earned experience from the first year will make me more efficient the second time around.

May marks the time of year when we transition from spring to summer. And summer for amateur radio means special event stations, 6 and 10-meter openings, and of course, Field Day. In April we realized some income from the sale of excess gear. A big thanks goes to Jim Horton, WB8YWA for dealing with the hassle of selling the items while fetching good prices. We also had the privilege of making a significant donation to support the work of teaching ham radio to Boy Scouts at Philmont Ranch this summer. If you missed the April meeting presentation by Dale Finley, KB5NFT, about Philmont, well, that is your loss.

This month we will need to cover several more domain renewals. I also believe that our annual mailbox rental fee will soon be due. Things are looking good for Field Day. We paid the deposit for the Connor Park pavilion back in January. As this is one of our biggest events, there might be other costs. I hope to see you at the May 18th meeting.

Clark Highsmith — Treasurer



TREASURER'S REPORT

LARA Treasurer's Report – April 30, 2019

Checking Account

Beginning Balance			\$3,739.71
Income			
	ARRL memberships	\$49.00	
	Miscellaneous	\$125.00	Gear sold
	Total Income	\$174.00	
Expenses			
	Web site	\$21.17	Domain renewal
	ARRL Memberships	\$34.00	
	Miscellaneous	\$300.00	HamVentures Donation
	Total Expenses	\$355.17	
Ending Balance			\$3,558.54
Petty Cash (Included in balance)			\$49.00

CLUB ASSETS

For Sale	\$0.00	
Stock (Not for Sale)	\$1,744.28	Adjustment/gear sold
Loaner Equipment	\$375.00	
		\$2,119.28

LARA NET VALUE

\$5,677.82

Jim Horton, WB8YWA, during one of the Information and Help Nets the topic was Long Wire Antennas. I mention I would provide more information in our Newsletter on helping you build one. Here it is and can be found at these two web sites below;

<http://www.hamuniverse.com/randomwireantennalengths.html>

<http://udel.edu/~mm/ham/randomWire/>

The "Best" Random Wire Antenna Lengths
Random wire lengths you should and should not use!

Jack, VE3EED - SK

Updated 07-08-2013

The random wire antenna is probably one of the least expensive, easiest and cheapest HF antennas to use if you have a tuner and you want to get the "most" out of a length of "random" wire without having to pull out that calculator, doing the math, getting the center insulator built or bought, running the feedline, and all the rest that goes with putting up a more elaborate antenna.

All you need for a random wire antenna is some wire, your tuner, one or more supports up as high as you can get them to string the wire from the supports to the tuner, at least one or two insulators and a little time.

One single wire, no solder connections, very simple.... all the way from the tuner to the end support. That's it in a nutshell.....**or is it?**

Many hams have tried till they are blue in the face to install the random wire antenna that works on most; if not all of the HF bands with terrible results.

SWR usually is all over the place and the tuner will just not do its job. You can get good loading and low SWR on sometimes 2 or 3 bands, but one or more of the bands that you want, just will not cooperate with an SWR that can be adjusted with the "tuner".

So after much frustration, down it comes and you go on to a totally different type of antenna....all that time just wasted in your opinion.....until now!

We recently found some good information about random wire lengths that you **should** and **should not** use.

Jack, VE3EED, hopefully has solved a major headache we all have when we attempt to go thru the trial and error and frustration with getting the random wire to work where WE want it to work.

He knew that in order for the tuner to "see" a fairly low SWR to work within its range, that the antenna had to be *NOT A HALF WAVE ON ANY FREQUENCY* that we wanted to use, because a half wave will give us a very high impedance and the resulting SWR into a 50 ohm transmitter!

So Jack took most of one day, did the math with the aid of his trusty calculator, several cups of coffee and came up with.....

In Jack's own words....

"Here's the word on random-wire antennae."

Presented for your consideration by Jack, VE3EED.

The table below represents half wave lengths and multiples that you **DO NOT WANT TO USE!**

You have to stay away from a half wavelength on any frequency.

Therefore, we came up with the following numbers to avoid (IN FEET):

These lengths in the table below are the *culprits* that cause all of the trouble when using random lengths.

Frequency MHz	1/2 Wave	2nd Multiple	3rd Multiple	4th Multiple
1.9	246	492	738	984
3.8	123	246	369	492
7.2	65	130	195	260
10.1	46	92	138	184
14.2	33	66	99	132
18.1	26	52	78	104
21.3	22	44	66	88
24.9	19	38	57	76
28.5	16	32	48	64

So those are the numbers above that we have to stay as far away from as possible when building a long-wire antenna.

Here they are in order:

REVISED: 16 19 22 26 32 33 38 44 46 48 52 64 65 66 76 78 80 88 92 95 96 99 104 110 112 114 123 128 130 132 133 138 144 152 154 156 160 165 171 176 182 184 190 192 195 198 208 209 220 224 228 230 231 234 240 242 246 247 256 260 264 266 272 276 285 286 288 297 304 308 312 320 322 323 325 330 336 338 342 352 361 363 364 366 368 369 374 380 384 390 396 399 400 414 416 418 429 432 437 440 442 448 455 456 460 462 464 468 475 480 484 494 495 496.

Some of these numbers are too close to squeeze in between them.

Here are the final numbers (in my opinion) in green below that would be good for a long-wire antenna: (You may want to make a note of them).

REVISED: 29 35.5 41 58 71 84 107 119 148 203 347 407 423

REVISION NOTE: We had a note from James, KB5YN, pointing out that one of my so-called GOOD numbers was 220 feet. That is the 10th multiple of a half wave on 15 meters. Well, I didn't think it would make any difference at that many multiples. However, the radio didn't tune up very well on 15 meters.

So, having nothing better to do one day, I re-did the calculations going out to 500 feet. That meant calculating all the way to 32 multiples of a half wave on 10 meters. I won't bore you with all that so the first portion of this still only shows up to the 4th multiple. There are so many new frequencies to stay away from, that it gets pretty tricky for the longer wires. However, the list has been revised and is good for wires as long as 500 feet.

73.... JACK, VE3EED
=====

More on Random Wire Lengths from Mike, AB3AP (06-29-2012)

Hello everyone!

I was surfing around Hamuniverse.com and found this page on random wire antennas: which got me thinking. Jack, VE3EED, used center frequencies of the bands described in the article above, and I thought it would be nice to use band edges.

I wrote a small C program that does just what Jack did, but I used the band edges. Because I'm more visually oriented I then plotted the many overlapping "red zones" and ended up with the page at: <http://udel.edu/~mm/ham/randomWire/>

I plotted the results for the U.S. CW band edges for use with my 4 band Elecraft K1 qrp rig. You will note that when comparing my results with VE3EED that some of the results are a bit different.

Just an FYI that I thought you might be interested in.

73,
Mike ab3ap

Editors note: *Many thanks to Jack, VE3EDD (SK) and Mike, AB3AP for sharing their math and computer skills with us.*

Hopefully these random wire length calculations will help us all make this "easy" antenna work better!

(Also note that here may be instances where the suggested lengths may not work exactly due to the many variables in the surroundings of the antenna, wire length variances, your tuner, it's height above ground, its construction, etc. Just add or subtract as needed a little at a time to get the best compromise. (The numbers above are a great start, thanks to Jack and Mike!)

Note that Jack, VE3EED, went SK several years ago...he will be missed.

(Also check out AB3AP'S [website](#) and say thanks for sharing his skills.

They just saved you and I loads of time and frustration.

N4UJW Hamuniverse

Jim Horton, WB8YWA, during one of the Information and Help Nets the topic was Propagation – HF Beacons and Reverse Beacon Network. I thought it would be good to put this information in print form also for the club.

Quick look at HF Beacons and the Reverse Beacon Network.

A beacon is a fix transmitter that is usually set to low power on CW. On timely intervals transmits its ID and Location. Purpose you can monitor the beacons around the world and see where propagation is. You hear a beacon in Japan, mostly likely stations in Japan will hear you when you call CQ. Most beacons are on VHF and UHF for weak signal 6,2, 1.25 and 70 CM bands. But there are some set up for HF as well which we will discuss here.

- First the International Beacon Project;
 - Band and Frequency used;
 - 20 meters – 14.100
 - 17 meters – 18.110
 - 15 meters – 21.150
 - 12 meters – 24.930
 - 10 meters – 28.200
 - There are 18 Beacons around the world transmitting on these frequencies.
 - Each beacon has its unique time to transmit on each of this bands.
 - The transmission is in CW and is done in this format.
 - Beacon sends its Call Sign at 100 watts into a vertical antenna.
 - Following the ID it sends a long dah also at 100 watts
 - Then a second long dah at 10 watts
 - Then a third long dah at 1 watt
 - Then ends with a long dah at .1 watt
- These 18 stations are transmitting this data on these five bands around the clock.

- A station starts its transmission on 20 and goes through the next four bands ending with 10 meter. It then becomes silent until each of the other 18 stations rotates through their transmissions.
- This is the WEB site for these beacons. <https://www.ncdxf.org/beacon/index.html>

- Now the Reverse Beacons and how they work;
- The reverse Beacon Network is a revolutionary new idea. Instead of beacons actively transmitting signals, the RBN is a network of stations listening to the bands and reporting what stations they hear, when and how well.
- So why should you care? Well, to begin with, you can see band openings in near-real time posted to the web site. You can call a quick CQ, and see which reverse beacon hears you, and how strong you are. NOTE: There was an animated map when the network was first set up, but cost to post from Google cause RBN to drop the Map feature. They are working on a different approach.
- But the real breakthrough is in the database of past "spots". You can instantly find out what stations, from a given country or zone, have been heard, at what times and on what frequencies. You can see when you've been spotted, who spotted you, and how loud you were.
- The RBN depends on volunteer stations. Currently, they have a few dozen, some active almost 24/7, others coming up only occasionally. They have decent coverage in North America and Europe, but can always use more. It doesn't cost a lot, or tie up your station equipment.
- How does this work:
- Each of the volunteer receive beacons stations has a SDR type wide band receiver that can copy the entire CW portion of the band and some are able to monitor more than one band at a time. So when you transmit either by sender Morse Code (CW), PSK31 or Teletype (RTTY) if one of these receivers hears your signal it is posted as a spot on the reverse beacon network web site. NOTE: You must send very clean CW to have the SDR Reverse Beacon Receiver to be able to copy you. They use CW and RTTY Skimmer Software to decode these signals.

- By you connecting to this WEB server you can see if and where your signal was heard around the world plus all the others stations that are active.
- There is more to both of these services then I capture here and if interested please go to the web sites of each service which is posted below.

Beacon Network – North California DX Foundation <https://www.ncdxf.org/beacon/index.html>

Reverse Beacon Network <http://reversebeacon.net/index.php>

World Scout Jamboree News

Submitted by Ron Ford

World Scout Jamboree Gearing Up for Significant Amateur Radio Presence

Amateur Radio will be a part of this summer's 24th World Scout Jamboree in West Virginia, the first World Jamboree held in North America since 1983. The Jamboree has chosen the theme "Unlock a New World." Thousands of Scouts and Scout leaders from some 200 countries are expected to attend. The Jamboree's Amateur Radio Exhibit will use the call sign [NA1WJ](#) -- **North America's 1st World Jamboree**. It will be on the air during the event, July 22 until August 2, at the Summit Bechtel Reserve, hosted by Canada, Mexico, and the US. Amateur Radio testing is expected to begin as early as July 14. Operating frequencies will be posted in real time via [Facebook](#) and [Twitter](#) or via an [NA1WJ email group](#).

"The goals of the Amateur Radio station at the World Scout Jamboree are to introduce Amateur Radio to Scouts and Scout leaders through hands-on participation in two-way communication with other stations across the globe. This activity will also serve as the Amateur Radio voice of the Jamboree," the [World Scout Jamboree Amateur Radio Exhibit Operational Vision document](#) states.

Other facets of Amateur Radio at the Jamboree will include Amateur Radio direction finding (ARDF), Amateur Radio satellite contacts, and a scheduled Amateur Radio on the International Space Station (ARISS) contact with an ISS crew member.

"We also expect to launch one or two balloons with Amateur Radio payloads and track them as they cross the Atlantic," the vision document continues.

Organizers are encouraging radio amateurs around the globe to get on the air during the World Jamboree to help NA1WJ demonstrate Amateur Radio for Jamboree visitors.

The 2019 World Scout Jamboree operation at the Summit Bechtel Scout Reserve will take advantage of lessons learned by the K2BSA Amateur Radio operation during the 2013 and 2017 USA National Jamborees. It will also take advantage of the existing infrastructure, which includes three VHF/UHF repeaters installed by Icom America, as well as the utility poles for installing antennas. K2BSA ham gear stored in West Virginia includes antennas, rotators, and cables.

Evening operation from NA1WJ will involve at least two operators using the buddy system. VHF/UHF repeaters will offer full coverage of the Jamboree area via handheld transceivers, facilitating networking as well as emergency communication. The exhibit will include an Amateur Radio station with the special event call sign W8J.

The demonstration station will include multiple operating positions offering a variety of modes. These

include six stations with 100 W HF transceivers, computer logging software, and large screen computer displays; two VHF/UHF stations for demonstrations and repeater monitoring, and two satellite communication systems. The antenna farm will include two HF directional antennas, three HF dipoles, three HF vertical antennas, VHF/UHF verticals and satellite antennas with azimuth and elevation control, a trailer-based crank-up tower, a five-band Yagi, a 40-meter rotatable dipole, and a 6-meter Yagi.

Each station will be able to accommodate four participants at a time, plus one control operator. The goal is to give each participant up to about 10 minutes of operating time.

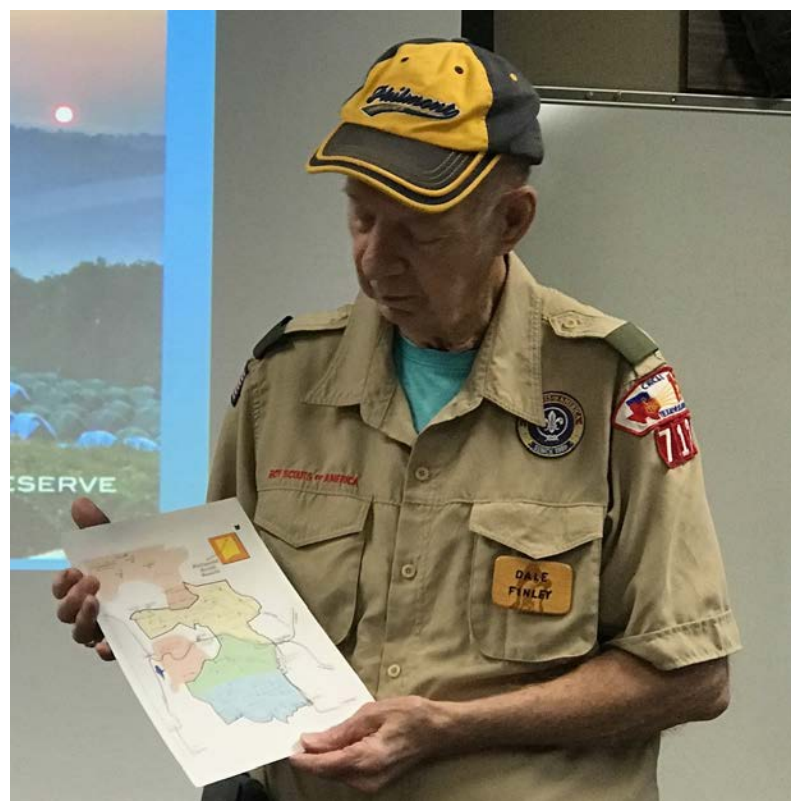
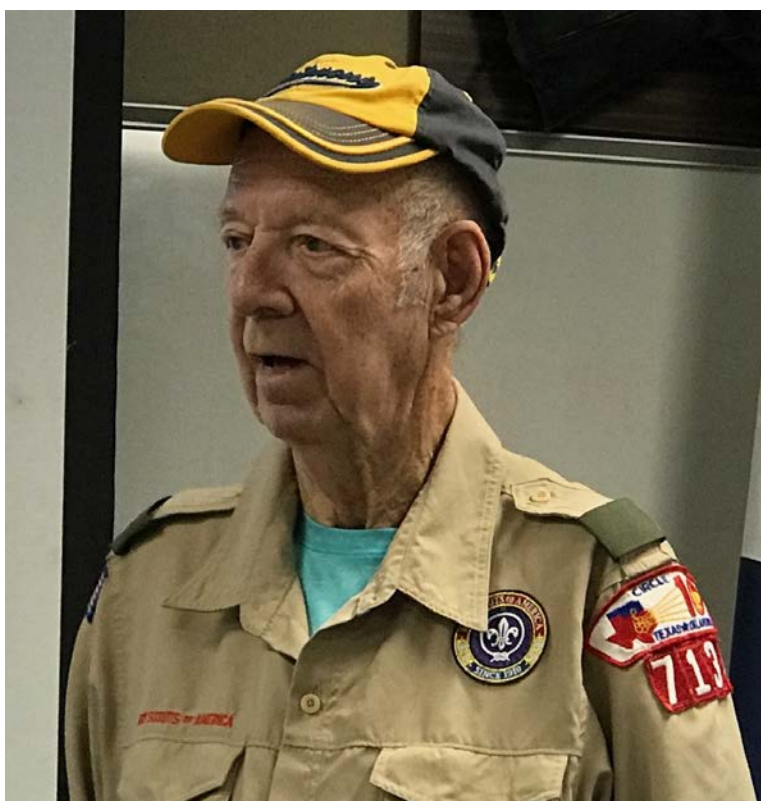
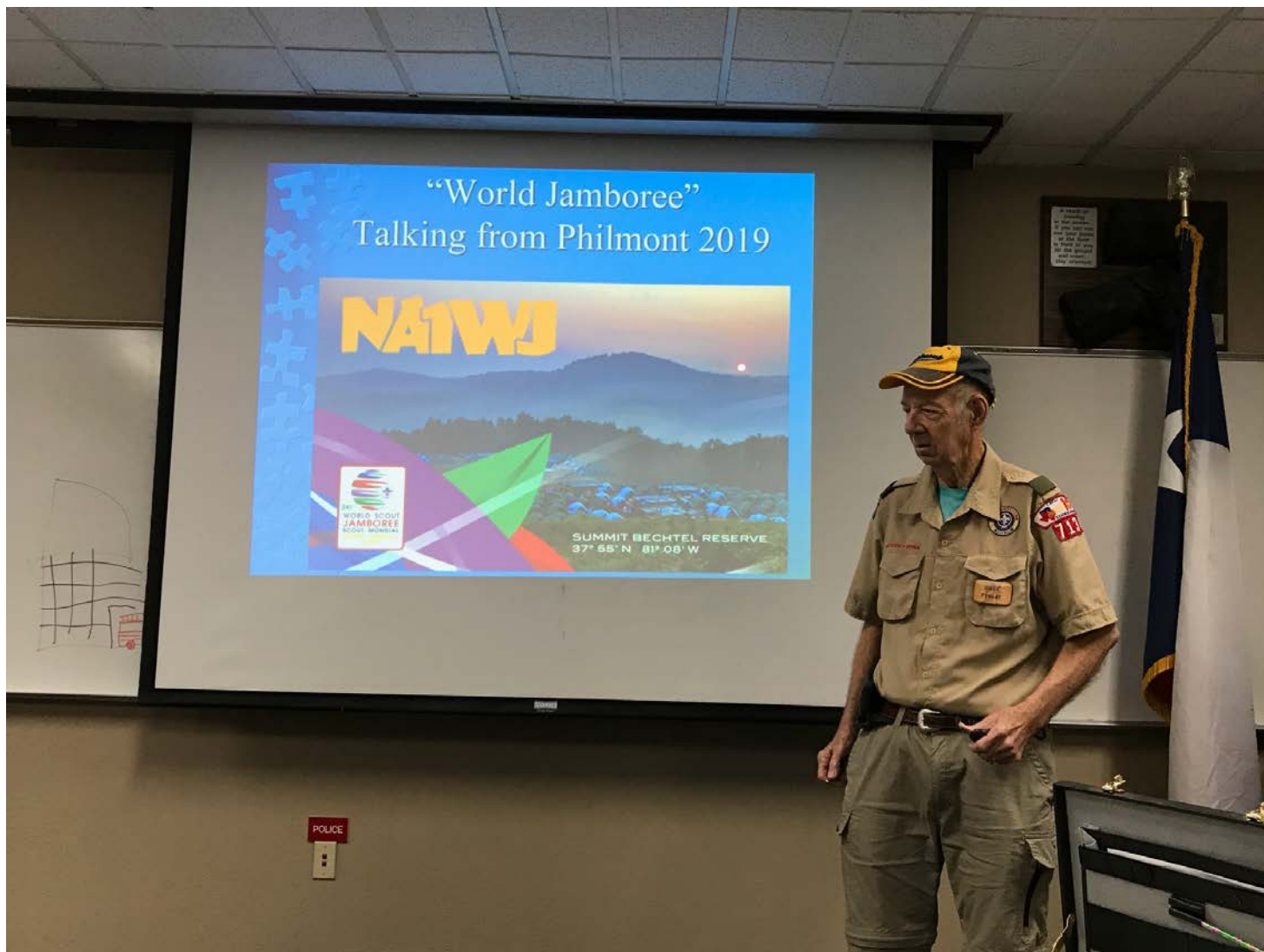
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LARA Presents Gift Check Supporting HAM Ventures, Inc. Supporting Philmont Ranch / JOTA



(L-R) Dale Finley - KB5NFT - Ron Ford KF5OMH





Special Recognition

Good Neighbor Commendation

John Courtney - KI5BBE

Nominated By: Ron Bath - KG5VIS

LARA Club member John Courtney recently came to the rescue of member Ron Bath during a period of medical emergency. Ron's wife, Ellen, had recently been diagnosed with a serious health issue which made it imperative that close communication with several medical facilities be maintained over the internet.

Fontier Communications, Ron's internet provider, caused a disruption to his internet service at his residence. They either could not, or would not, restore internet service to Ron's home for an estimated 5 days. After many hours on the phone to Fontier, and after declaring a medical emergency, they continued to be unresponsive.

Ron called his neighbor John, who is a highly respected Field Service Engineer with HP (Hewlett Packard), and he came over at 8:30 PM and performed trouble shooting until he fixed the problem, restoring internet service for Ron and Ellen.

It is good to know that there are those within our organization with the knowledge, technical gifts and desire to help others when we find ourselves in a bind such as Ellen and I were.

I wish to express a big word of thanks to my good neighbor John and all those in the Lewisville Amateur Radio Association that are always willing to offer a helping hand when needed.

My two best things about moving to Lewisville, Texas some fifteen years ago were to find my way to our radio club and to move next door to the best neighbor in the world.

Sincerely,

Ron Bath
KG5VIS



Special Recognition

Good Neighbor Commendation
John Courtney - KI5BBE
(See Page 13 for Article)

Officer Elections

Congratulations to Perry Abernethy, NE5ET, on his very successful completion of assignment as our Election Chairperson for our 2019 LARA officers election. Our gratitude and thanks go to Perry for a job well done.

Announcements

Upcoming Events

- LARA** Information and Help Net – each Wednesday @ 1900 on the 145.17 repeater
- ARES** Training Net – 3rd Thurs. @1930 on 146.92 repeater
- LARA** SWAP Meet – Apr. 27, 1000 – 1400, REV. ALVIN TURNER SR. PARK, 700 Hembry and Birch, Old Town LV
- Mentorfest -- April 27, Hella Shrine Center, 2121 Rowlett Rd., Garland
- Special Event May 5 – 12 – The Indy Car Grand Prix, 17m, 20m, 40m, & 80m
- Special Event May 8-10 – 150th Anniversary of the Golden Spike, 20m & 40m
- Dayton Hamvention & ARRL National Convention, May 17 – 19, Greene County Fairgrounds & Expo Center Office, 120 Fairground Rd, Xenia, OH 45385, USA
- HAMCOM – June 7 & 8, Plano Event Center
- LARA** Summer Field Day – June 22, 1300 thru June 23, 1300
- LARA** JOTA – Oct. 19, 1000 – 1700

LARA Club Library

We are pleased to announce that LARA is initiating a pilot program to provide loaner publications related to amateur radio topics. The details will be addressed under separate email. It will be provided in the form of a virtual library with offerings listed on a new Club Library page of our website at w5lvc.org.

New Club Officers

Congratulations to Our Newly Elected Club Officers!

President

Ron Ford, KF5OMH (972) 742-7839
rfavcon@verizon.net

Vice President

Roger Carver, AE5EZ (817) 966-3412
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Secretary

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VEC Coordinator

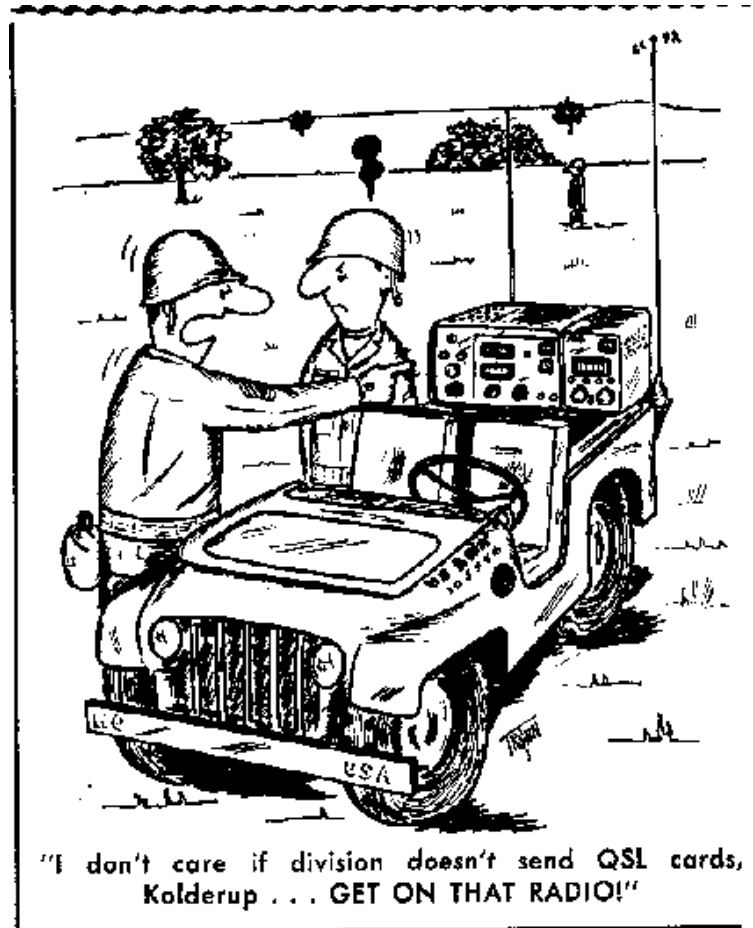
Steve Kline, W5JK (972) 679-6288
skline4@verizon.net



Ham Humour



-73 O.M., I REALLY MUST SIGN NOW- - - - -



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Ron Bath, Newsletter Editor
KG5VIS



You may address any articles, comments or suggestions to the editor
at: aro.kg5vis@gmail.com

