October 2021

PROPAGATION

Newsletter of the Longview East Texas Amateur Radio Club

CW Issue

Join LETARC for our next meeting on October 23rd.

IN THIS ISSUE

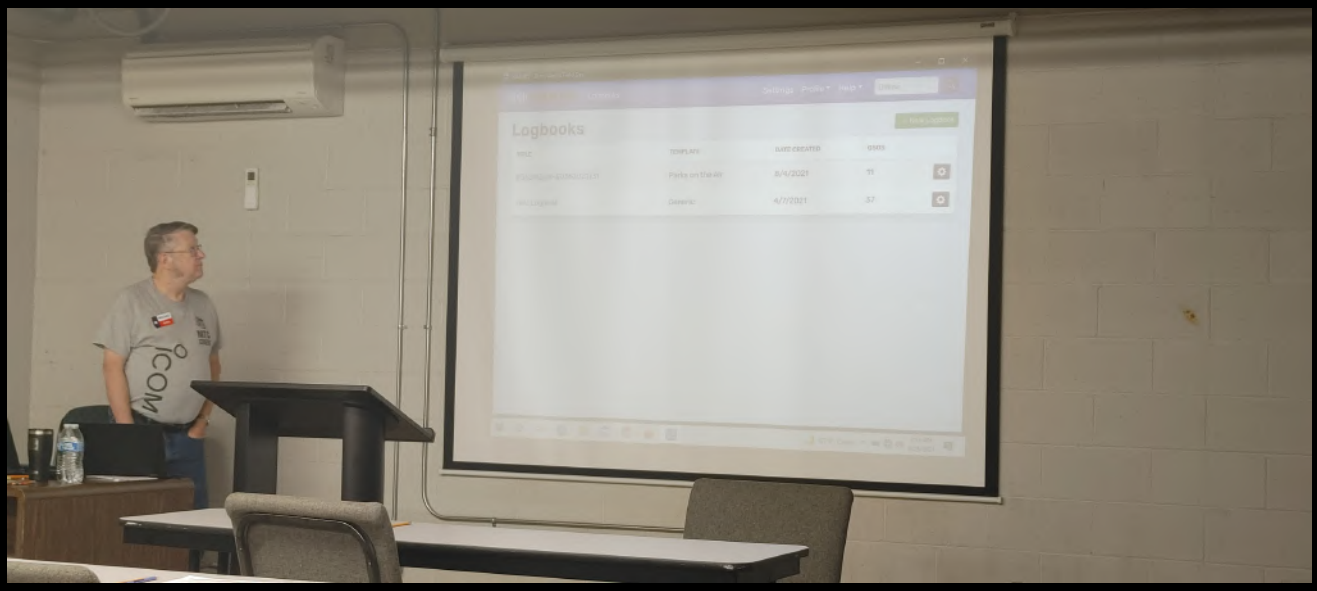
LETARC interviews Ted Rachwal K8AQM

Tips for learning code

Learn CW lingo

LETARC Activities

LETARC held our monthly meeting on Saturday, September 25th. Thank you to Chris Crawford KG5SMZ, Dr. Skip Brown AK5SB, and Randal Mays KG5IEE for their contributions and presenting about the Parks on the air (POTA) program.



Chris KG5SMZ discusses the HAMRS logging program

Skip AK5SB was kind enough to display his Buddipole gear

September 25th meeting minutes

I. Opening Ceremonies
Call to order at 0900
Prayer and Pledge by James Bray
Introductions
Welcome from James Bray

II. Adoption of Agenda
Meeting agenda adopted

III. Adoption of Minutes
Reading of minutes and finances from July meeting. No objections. Minutes adopted.

IV. Reports from Officers.
A. President Ross Bennett – not present
B. Vice President Ron Case – not present
C. Secretary/Treasurer James Bray – nothing to pass
D. Media Director Don Gamble – reminded everyone that the November newsletter will be about Veterans. Still needing submissions or suggestion for new topic.
E. Communications Director Jim Rogers – not present

V. Reports of the Board – no meeting was held.

VI. Reports by Committees – no meetings held

VII. Reports by Members – Chris Crawford mentioned he went to the Upshur County meeting with the North Texas ARRL Director who provided a great program.

VIII. Recess

IX. Reconvene

X. Program: Don Gamble, Chris Crawford and Skip Brown presented a program on Parks On The Air. Mentioned ParksOnTheAir.com and POTA App. Hamrs logging software for computer/IOS/Android. Skip Brown spoke about his Buddipole antenna. The company has great customer service. The antenna is very transportable and will support 250 watts but bring an analyzer. GoVerticalUSA.com is a good site to purchase tripod and masts for portable antenna. Must have at least 10 contacts to "activate a park". Don recommends Bienno batteries and also demoed a chameleon antenna.

XI. Unfinished Business

A. Tailgate sale on October 9th? Still undecided.

XII. VE Testing Headcount – enough proctors present

XIII. Monthly dinner – Butcher Shop Oct 12 6:30pm

XIV. Adjourn at 0946.

ARRL NTX Mentorfest

The ARRL North Texas Mentorfest is scheduled for Saturday, October 9th from 9 A.M. - 4 P.M. at the Hella Shrine center located at 2121 Rowlett road, Garland, TX 75043.

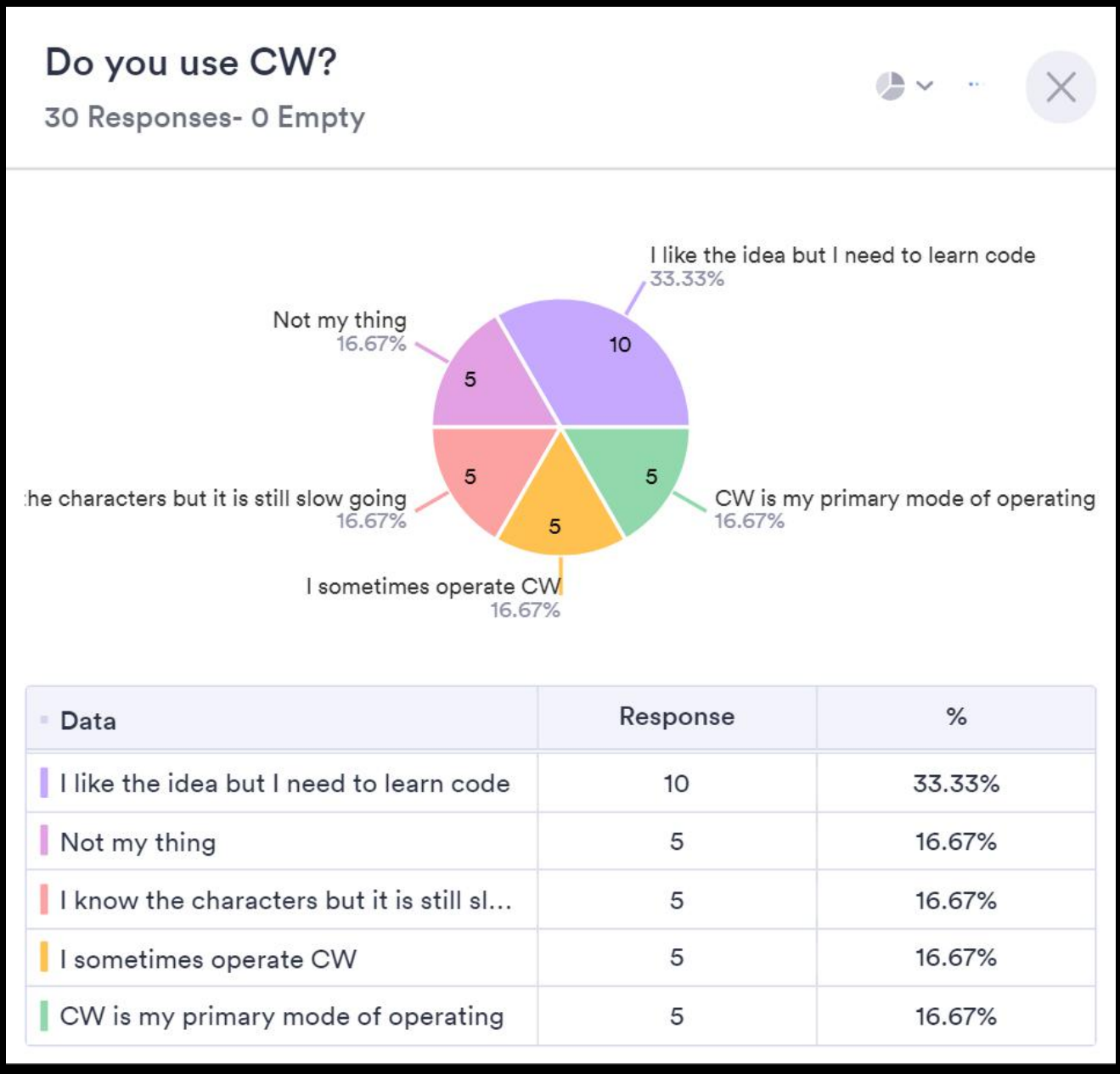
The Mentorfest will have formal presentations, tours of emergency communication vehicles, visits with local ham clubs, helpful elmers, and representatives from the ARRL, local clubs, ARES/RACES, the National Traffic System, and others showing how you can get involved.

If you are interested in becoming a mentor or volunteering to help please email mentorfest@arrlntx.org.

For more information on Mentorfest please visit their website by clicking here.

LETARC Survey
"Do you use CW?"

33.3% I like the idea but I need to learn code
16.7% I know the characters but it is still slow going
16.7% CW is my primary mode of operating
16.7% I sometimes operate CW
16.7% Not my thing



Data	Response	%
I like the idea but I need to learn code	10	33.33%
Not my thing	5	16.67%
I know the characters but it is still sl...	5	16.67%
I sometimes operate CW	5	16.67%
CW is my primary mode of operating	5	16.67%

LETARC interviews
Ted Rachwal K8AQM

Ted Rachwal K8AQM is the editor of SKCC's newsletter, the Ragchew. Ted does a great job putting the newsletter together. The K8AQM mulit multi station is a sight to behold. Ted is SKCC club secretary and a member of the board of directors. He is also an accomplished contester and a member of several CW organizations. Ted was kind enough to visit with us about CW and share his expertise.

LETARC: Are you a member of a local hams radio club? If so, what is your favorite activity or part of the club?

Ted K8AQM: No, my local club is more of a "social gathering" and a "shack on the belt" group. Very good people but they have no interest in CW.

LETARC: How did you get started operating CW?

Ted K8AQM: As a Novice back in 1961 I had to know code to obtain my license and I had more interest in working HF even though Novices could work 2m in those days.

LETARC: What advice would you give someone who wants to learn CW but doesn't know code yet?

Ted K8AQM: Oh man, tricky to say because everyone learns differently. There are several ways that "might" work for you. The Long Island CW Club has several great classes teaching beginning learners of CW. The are computer programs that can definitely help. Learning code in groups of letters helped me back as a 12 year old. For example; EISH, TMO, AN, RK, PX ..groups that were what I called "inside out" or "reversed." As that "kid" learning code I worked with another "kid" and we would send back and forth to each other from comics and magazines.

LETARC: Do you have a favorite CW contest or event?

Ted K8AQM: I use to do heavy contesting and that included ARRL CW DX, CQWW CW, ARRL 160 and CQWW 160. I found I enjoyed "being the DX" even more and thoroughly enjoyed the huge pileups. I now do mainly "relaxed" contesting and rag chewing through various SKCC events along with mini-sort DXpeditions for needs within SKCC events.

LETARC: Are there any CW resources that you would recommend?

Ted K8AQM: I think I answered this in question #3 but I would add that once you know the letters (CW) at 5 wpm that the best "resource" to improve your CW is to "get on the air" and one of the best places to be successful is with the Straight Key Century Club (SKCC).

LETARC: Do you have any favorite gear or equipment that you enjoy using?

Ted K8AQM: I have seven (7) Elecraft K3 rigs. I have used many different radios and brands through the years and now I have settled on the Elecraft K3 radios with the outboard panadapters. Each radio has an Alpha amplifier so there are seven Alphas in the shack and even one "backup" Alpha...but Alphas never break down! I use mainly monoband antennas because in my multi operator-multi station environment antennas with "traps" talk to several stations.

LETARC: Please tell us about your work with SKCC, the dit dah CW gang, and any other CW groups that you would like to share about.

Ted K8AQM: I am currently a member of the SKCC Board of Directors, Club secretary and editor of the SKCC quarterly newsletter, "The Rag Chew." Along with K8JAD we formed the "Dit Dah CW Gang that is a group of relatively local area (SE Michigan) SKCC members that enjoy multi-multi contesting here. I am a co-presenter at the Long Island CE Clubs Zoom meeting explaining various information about SKCC activities.

LETARC: You have an awesome looking set up at the K8AQM multi-multi. How much fun is that to operate with your friends? How much set up and maintenance is involved?

Ted K8AQM: First, thank you for the kind words about the "K8AQM" station. I truly enjoy multi operating and have attached a PDF that explains the station and the fun we have operating together. The maintenance is not so bad but then I'm always tinkering and trying to make improvements to various operating positions and the gear! It's a labour of love and not a hardship, really. It's what I do. I'm currently upgrading each station with the addition of common mode chokes to eliminate any "extraneous" noise creeping into the transceivers. Another incredible recent addition is the purchase of a 2KW triplexer and bandpass filters that allows the big log periodic antenna to be used simultaneously at 1KW by the 20, 15 and 10m stations with absolutely no intermod interference!

LETARC: What advice would you give a local amateur radio club?

Ted K8AQM: (no comment)

LETARC: What is your favorite part of ham radio?

Ted K8AQM: Two favorite parts: operating CW and operating with friends!

Ted K8AQM sent some pictures of his incredible multi station

The Dit Dah CW Gang is a group of friends who get together in Adrian, MI at the K8AQM station and enjoy SKCC activities

KS8KCC station location in Adrian, MI is atop a ninety foot plateau which drops off to the northwest through the southeast in a wooded area.

The Shack

The shack was built in 2008 to replace "the White Rat." Too much equipment caused "The Rat" to burst the seams along the back walls.

With remembrance to "The White Rat," I was presented with this memorial "White Rat" for the new shack.

Although a bit old as there have been some upgrades, this picture shows the main operating positions along the west wall. The next slides will show and explain each operating position.

20m and 160m Operating positon

Station has a K3, Alpha 76ca (modified) a P3 band scope, computer, many keys and has access to the big log periodic, a 20m dipole and the 160m inverted L for antennas. There is a K9AY antenna for separate RX if needed on 160m. There are bandpass filters inline and a selection of many keys.

All computers in the shack are networked. Bonding and grounding all transceivers and amps is a must to avoid intra-station interference.

80m and 15m Station

The 80/15 station has a K3, P-3 scope (not shown), an Alpha 76 (modified) bandpass filters computer and various keys.

The 80m dipole antennas are at 75 ft and 70 ft. The 80m station also has a ¼ wave 80m sloper and a separate 80m listening antenna system.

Fifteen has access to the log periodic…even at the same time the log is in use by 20m!

17m and 12m Station

This is a station in development, current is as shown but will soon have a K3s and an Alpha 374 (modified). Currently it has a K2 and KPA 500 amplifier. It has a Cushcraft AW3S dualbander. There will be additional antennas added later.

Of course it has its own computer and collection of keys.

40m Station

40m is the "bread-and-butter" band for any contest station in the Midwest. Contesters in the Midwest say, "there's no meters like 40 meters."

This station is like all the stations; K3, Alpha amp (99), bandpass filters, P3 scope and a collection of keys.

Antennas include 2 2L yagis at 65 and 20 ft. There is a dipole and a special dipole called a "Death Ray."

30m Plus Station

A K3 transceiver, an Alpha 374 amplifier (modified), P3 scope, bandpass filters, a collection of keys. The antennas include a 2L yagi for 30m, a 30m dipole, a 60m ¼ sloper and a 160-40m dipole.

10m Plus Station

This is a newly rebuild station. It is a K3, P3 scope, and Alpha 76ca (modified), log periodic used at the same time as 20 and 15m for 10m! It also has a 4L 10m yagi, 5L 6m yagi, 2L 17m yagi and 15m ground plane.

Of course a fine collection of keys to choose from.

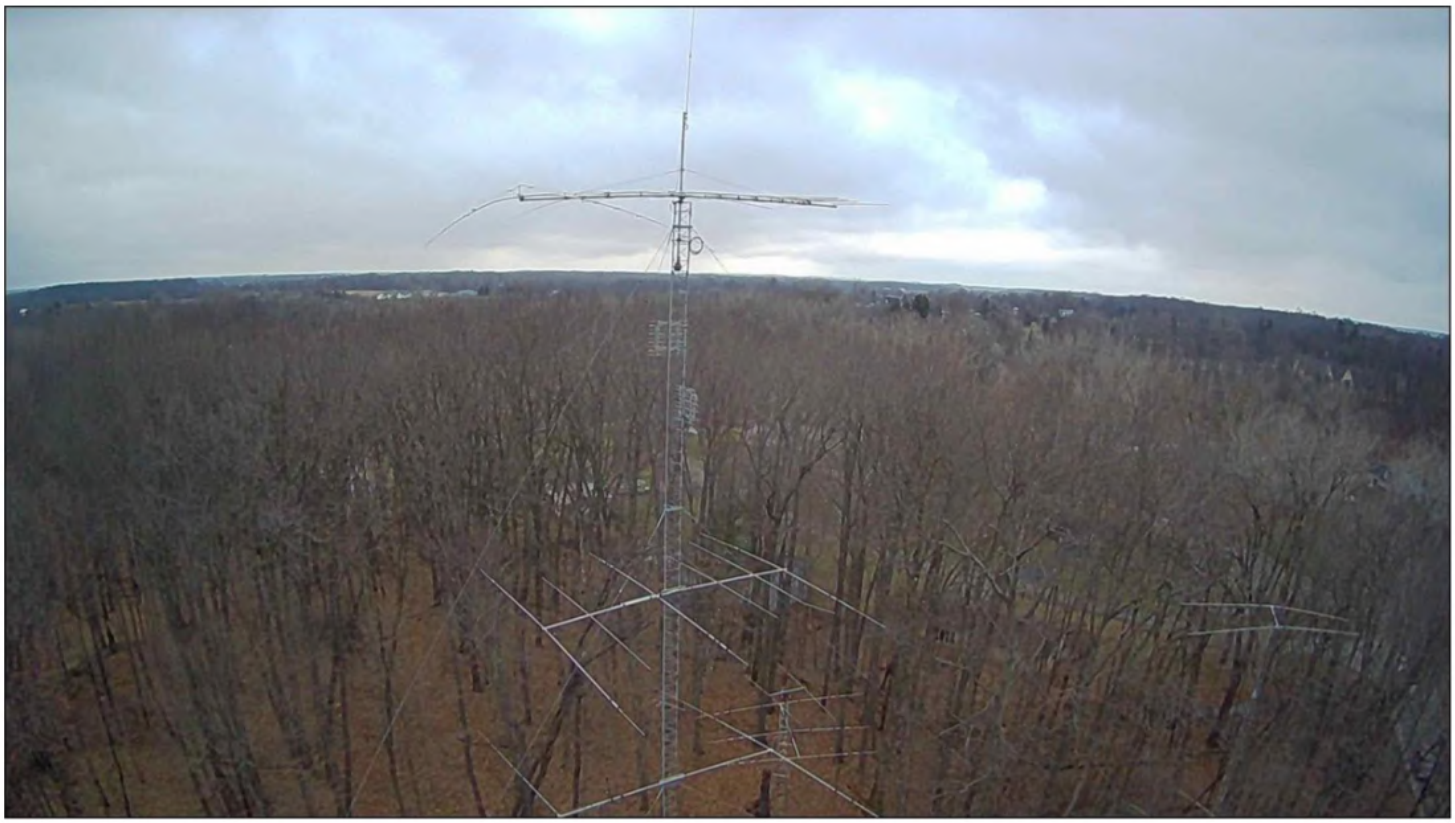
The Latest Addition

Ok, I have mentioned that the 20m, 15m and 10m station can all use the big log periodic…at the same time.

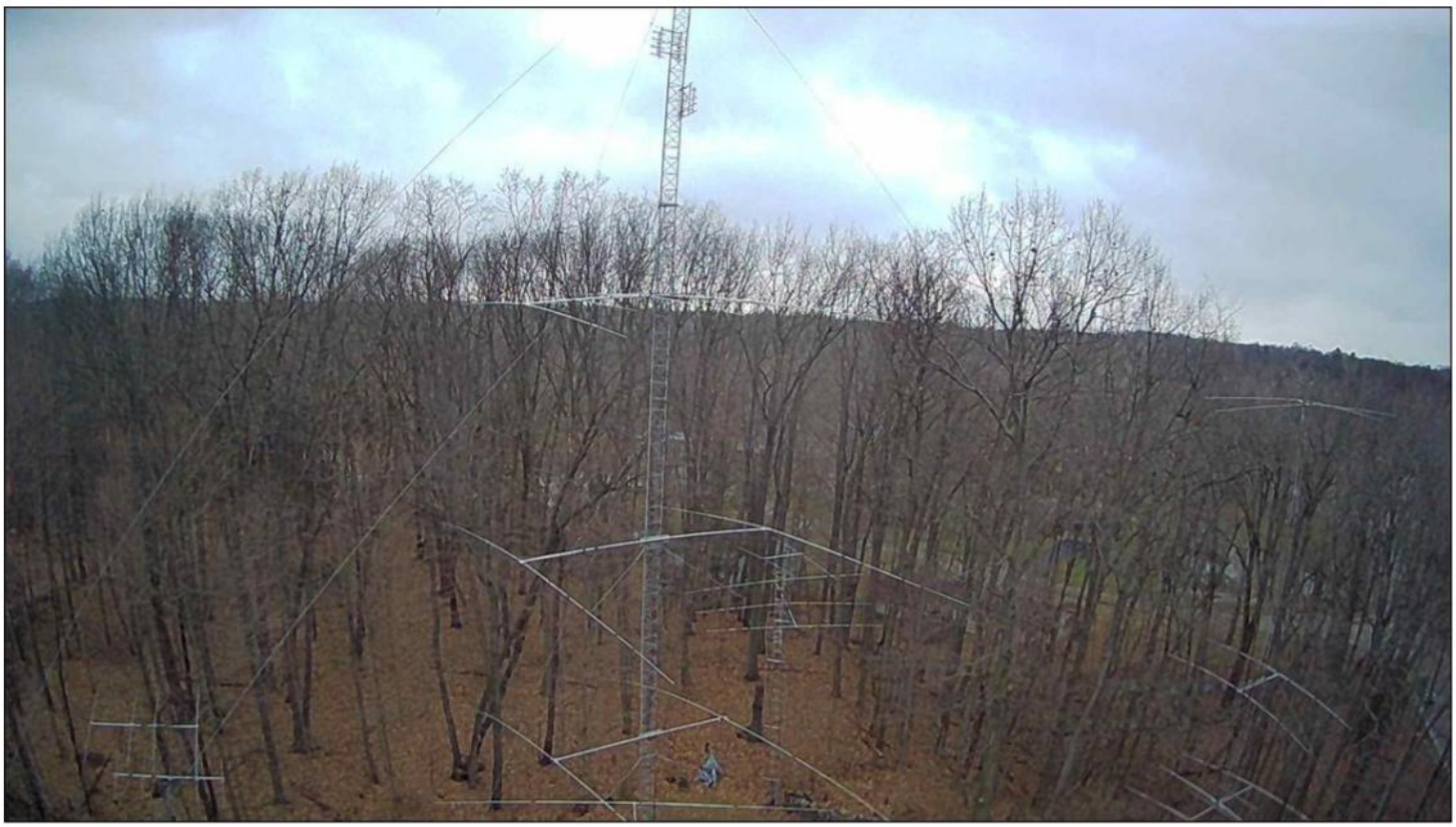
This picture illustrates how it's possible. This is a high power (2000 watt) triplexer and bandpass filters for 20, 15 and 10m. Believe it or not, there is no station intermod when all three stations use this at 1+ Kw. Yes, it was expensive….but worth every penny!

Antenna layout: Towers and wires cover the area

View of the top of the Big Tower



View of Big Tower and Lesser Towers



Operating Fun with K3Y/8

The "get-togethers" are never too serious. We enjoy the eye BS secessions just as much as the operating. The standing joke is "did we consume more calories than QSOs?" The answer is "of course…always!"

LETARC would like to send a Texas size thank you to Ted Rachwal K8AQM for this great interview, the pictures and description of this incredible station, and for everything that he contributes to our hobby. Thank you Ted!

thank you

Tips on learning CW

Learn the characters

- Learn by sound and not by sight.
- Think "dits and dahs" not "dots and dashes."
- Hear the **ENTIRE CHARACTER**, avoid counting dits and dahs.
- Listen to the characters at 15 - 20 WPM but with a lot of space between characters (AKA the Farnsworth method.)
- Numbers are relatively easy and the only punctuation needed is ?
- You can use apps, recordings, software, or W1AW bulletins.

Learn CW "Lingo"

Everything is shortened, and not always by syllable. We often omit characters with dahs in favor of those with dits.
Examples -
Fer = For Gud = Good HIHI = Haha N = 9 Agn = Again

We always use the 3 number RST signal report, such as 599

QSO's almost always follow a format at least at first. Here is an example -

CQ CQ CQ CQ de KG5CMS KG5CMS KG5CMS K

KG5CMS KG5CMS de K5LET K5LET K5LET K

K5LET de KG5CMS TNX FER CALL UR RST 599 599 QTH KILGORE TX KILGORE TX OP DON DON HW CPY? K

RRR KG5CMS de K5LET FB DON TNX FER CALL UR RST 559 559 QTH LONGVIEW TX LONGVIEW TX NAME LETARC LETARC HOW CPY? K

OP means operator. RRR means that the station copies the last transmission, kind of like "Roger" on voice. HW CPY? is did you copy? QTH is often just the two letter state abbreviation. If you hear BT that means that the station is changing thoughts or subject, think of it as a pause. K or BK means that one station is turning it over to the other station.

CW transceivers

Almost all HF transceivers are already set up for CW operation. Some use 3.5 mm (headphone jack) size and others use 1/4" size inputs for keys. Some have separate ports for straight keys and paddles, some only have one port for both.

If your rig has a keyer that is a control for paddle type keys. You can change the speed that the paddles transmit CW. You can also change the weight of the dits vs. dahs. Default weight is a 1:3 ratio of dits vs. dahs in length. Most rigs will allow you to change the sidetone.

Get familiar with the filter settings of your radio. A wide filter will make it easier to find stations calling CQ. The process of matching your frequency to theirs is called "Zero beating" their signal. If you move to a narrow filter and find the signal you heard on the wide filter you will be close. Tune until the signal sounds the strongest and usually you will be on the same frequency. Many radios can zero beat a signal automatically.

A note of caution for those of you that use headphones - sometimes we move the volume up trying to find a weak signal. A strong signal such as a station tuning can transmit loud and sudden startling you and/or hurting your ears. Many operators move headphones forward on their temples instead of wearing the headphones on their ears.

Selecting a key

There is no shortage of CW keys available. Straight keys are often suggested for beginners. If someone has pain in the wrist paddles can be easier. Paddles automatically send the correct length of dits or dahs. Iambic paddles alternate dits and dahs when both paddles are pressed.

I would not suggest semi-automatic keys (bugs) or side-swiper keys (cooties) for a beginner. These are fine keys to move to once you can send on a straight key or paddles. External keyers are available for those that wish to use paddles but don't use a radio's internal keyer.

Most people feel as though a straight key is easier to use at slower speeds and paddles are easier to use at higher speeds. I find that from 3 - 10 WPM paddles are difficult to use but a straight key is fine. Above 20 WPM my fist (CW for how well you send) starts to get sloppy on a straight key. Many contests run 25+ WPM so I often use paddles for contests.

It is easy to spend a lot of money on keys. A good first key is the MFJ - 553. The key has a wide base and it is adjustable. It comes pre-wired for about $40.00. If you would like to try one I will be happy to lend one to you. If you are interested in 3D printed keys check out cwmorse.us

Get on the air!

Once you know your characters try and get on the air. Don't be afraid of making mistakes, everyone does. If you make a mistake send a series of dits and send your thought again. Don't be afraid to send QRS PLS - please slow down. Almost any operator will slow down and meet your speed.

A few tips

Don't call CQ faster than you can copy. If you can do 5 WPM then call CQ at 5 WPM.

Make sure your dits and dahs don't sound alike. It is okay to be slightly farther than a 1:3 ratio.

Put some space between your characters, don't run them together. Without spacing it makes you very difficult to copy.

40 meters is a great band for CW. The "elmer" frequency for slow code is 7.114 MHz. I often hear slow code from 7.11 MHz - 7.12 MHz. The 20 meter version is 14.112 MHz - 14.118 MHz when 20 meters is open. Many helpful elmers monitor these unofficial QRS frequencies looking to help operators new to CW. You may have to move if a RTTY or other digital signal is occupying these frequencies.

Helpful and fun groups

Straight Key Century Club (SKCC) - SKCC has over 23K members. It is completely free to join. They promote the use of mechanical keys such as straight keys and semi-automatic keys (bugs) and side-swiper keys (cooties.) SKCC has a very strong mentor/elmer community. SKCC has a slow speed night each month along with multiple events each month. Check out the special event K3Y for January. A very useful page for new CW operators is their sked page that can be found here. Login into this page and post that you are new to CW and there will be several operators that will be happy to swap SKCC numbers with you and have a QSO.

CW OPS - CWops offers free training to anyone interested in learning CW. They do a great job increasing operator's speed in a short amount of time. Elmers use online training to help new people with CW.

Long Island CW Club - You don't have to be near Long Island to join. This group also uses online classes to help new CW operators.

FISTS - FISTS holds monthly events and has elmers available to help new CW operators. The link provided is for the North American FISTS group.

North American QRP CW Club - NAQCC promotes the use of low power (QRP) CW operations. They have events each month. Allen KA5TJS holds a Monday night net on 3.566 MHz at 7 P.M.

RST Signal reporting

READABILITY

1--UNREADABLE

2--BARELY READABLE, OCCASIONAL WORDS DISTINGUISHABLE.

3--READABLE WITH CONSIDERABLE DIFFICULTY.

4--READABLE WITH PRACTICALLY NO DIFFICULTY.

5--PERFECTLY READABLE.

SIGNAL STRENGTH

1--FAINT SIGNALS, BARELY PERCEPTIBLE.

2--VERY WEAK SIGNALS.

3--WEAK SIGNALS.

4--FAIR SIGNALS.

5--FAIRLY GOOD SIGNALS.

6--GOOD SIGNALS.

7--MODERATELY STRONG SIGNALS.

8--STRONG SIGNALS.

9--EXTREMELY STRONG SIGNALS.

TONE

1--SIXTY CYCLE A.C OR LESS, VERY ROUGH AND BROAD.

2--VERY ROUGH A.C., VERY HARSH AND BROAD.

3--ROUGH A.C. TONE, RECTIFIED BUT NOT FILTERED.

4--ROUGH NOTE, SOME TRACE OF FILTERING.

5--FILTERED RECTIFIED A.C. BUT STRONGLY RIPPLE-MODULATED.

6--FILTERED TONE, DEFINITE TRACE OF RIPPLE MODULATION.

7--NEAR PURE TONE, TRACE OF RIPPLE MODULATION.

8--NEAR PERFECT TONE, SLIGHT TRACE OF MODULATION.

9--PERFECT TONE, NO TRACE OF RIPPLE OR MODULATION OF ANY KIND.

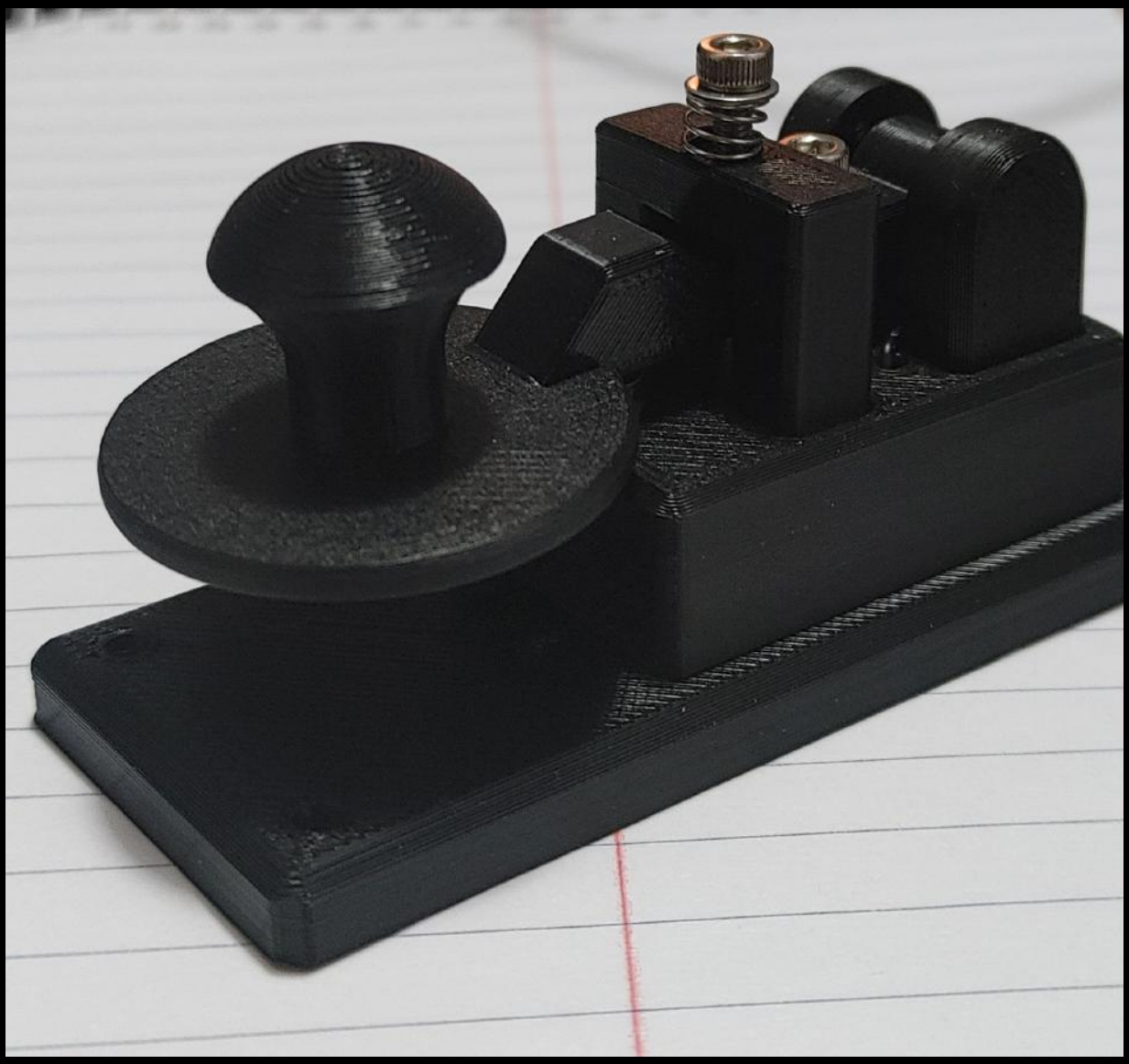
SKCC member and friend David Wink KA8KOQ SK

David KA8KOQ or "Wink" as he was known on the air would often be found calling CQ on 30 meters. Wink always looked for a rag chew and often talked about his rain gutter antenna set up that generated DX contacts and good signal reports. Several LETARC members have worked Wink on CW.

On Christmas eve of 2020 Don KG5CMS had a rag chew with Wink and asked if he could use a picture of his rain gutter antennas in the CW issue of this newsletter. Wink agreed. Sadly, Wink passed days before this issue was published. RIP Wink.

Company Spotlight - cwmorse.us

There are a number of companies that make great CW keys. Vibroplex, Bencher, Kent, Begali, etc. If you are looking for an affordable and well built 3D printed key check out cwmorse.us. Joseph Delgado KC5ILR runs cwmorse.us. They offer a variety of keys in different colors. Cwmorse is based out of Bon Weir, TX.



A 3D printed Navy flameproof style key from cwmorse

Our next meeting

Please join us at LETARC's next monthly meeting will be 9:00 A.M. on Saturday, October 23rd at the Longview Fire Training Center located at 411 American Legion BLVD Longview, TX 75601. Don't forget that you can attend our meeting virtually via phone or internet. Phone # 601-516-5566 Pin 206-446-183# or google.com/mds-ndwd-cwo. Anyone interested in amateur radio is welcome to attend.

There will be a VE test session at 2:00 P.M. that same day at the Glaske science building of LeTourneau University. Walk ins are welcome. Testing costs $15.00 (soon to be $35) and you will need a government issued identification such as a driver's license, a valid email address and an FCC issued FRN number. LETARC VEs can help you get your FRN that day if you need help.

For more information about VE testing please contact
John Zenter AE5OY at j.zenter@w-rg.com.

LETARC Wednesday 2 meter net

Please join us each Wednesday night at 8:30 for our weekly LETARC net on the 147.34 MHz repeater. The tone is 136.5. All licensed amateurs are welcome to check in, you don't have to be a member of LETARC. Afterward there is sometimes an informal simplex chat on 146.52 MHz.

A special thank you to

Ted Rachwal K8AQM
Mims volunteer fire department
The Longview fire training center on American Legion BLVD
Jim Perry KA5BCM for our radio room
John Zenter AE5OY and our VE team
Marty Duplissey N5KBP for his great work on the ARRL audio news
Steven Lott Smith KG5VK - ARRL North Texas Section Manager
JoAnn Keith KA5AZK - ARES Section Manager
Ross Bennett KI5SR - Gregg County ARES
David Chenault W5CWT - Rusk County ARES
John Keith W5BWC - Upshur County ARES
Tom Noe W5TDN - Gregg County SKYWARN coordinator
Jim Rogers N5VGQ - Repeater trustee
Ron Case W2RLC - letarc.org webmaster
Jim Quinn AJ1MQ - groups.io coordinator
Dr. Hoo Kim AG5ZS - Letourneau university liaison
Dr. Ron Morton KF5GMA and Carolyn Morton KF5GLT Longview CERT

Thank you for reading our newsletter. We hope to see you at our meetings and dinner gatherings and we hope to hear you on our nets. If you would like to contribute to the PROPAGATION please email Don at gambledon@gmail.com.

Please visit our website at letarc.org.

73 de Don Gamble KG5CMS.

Dit Dit

OCTOBER 2021

MEETINGS

OUR MEETINGS BEGIN AT 9AM AT THE LONGVIEW FIRE TRAINING CENTER AT 411 AMERICAN LEGION BLVD, LONGVIEW, TX, 75601. THERE WILL BE A VE TEST SESSION AT LETOURNEAU UNIVERSITY AT 2:00 PM ON THE SAME DAY.

REPEATERS & NETS

LETARC NETS ARE WEDNESDAY NIGHTS AT 8:30 PM ON THE 147.34 REPEATER WITH AT TONE OF 136.5

UPSHUR ARES NETS ARE THURSDAY NIGHTS AT 8 PM ON THE 146.9 REPEATER WITH A NEGATIVE OFFSET AND TONE OF 107.2

SUN	MON	TUE	WED	THU	FRI	SAT
					1 Newsletter	2
3	4	5	6 LETARC net 8:30 PM	7 Upshur ARES net 8 PM	8	9 ARRL NTX Mentorfest
10	11	12 LETARC dinner Butcher Shop 6:30 P.M.	13 LETARC net 8:30 PM	14 Upshur ARES net 8 PM	15	16
17	18	19	20 LETARC net 8:30 PM	21 Upshur ARES net 8 PM	22	23 LETARC meeting 9AM
24	25	26	27 LETARC net 8:30 PM	28 Upshur ARES net 8 PM	29	30
31						

Upcoming amateur radio events

October 2	California QSO Party
October 2	SKCC QSO Party
October 9	ARRL NTX Mentorfest
October 9	Nevada QSO Party
October 9	Arizona QSO Party
October 9	Pennsylvania QSO Party
October 9	South Dakota QSO Party
October 16	New York QSO Party
October 17	Illinois QSO Party
October 17	Run for the Bacon QRP Contest
October 18	ARRL School Club Roundup
October 23	ARRL EME Contest