North Fulton Amateur Radio League
NFARL eNEWS

December 2024

Over 43 Years Promoting
Service | Friendship | Education | Fun

January 2025

Antenna Propagation

The January Club Program will be on Antenna Propagation tools/programs such as Reverse Beacon Network and the PSK Reporter used to measure and compare, in real-time, your antennas with the worldwide CW/Digital Skimmer network with multi-band SDR receivers. There are thousands of listening stations, provided for and maintained by our fellow Hams. The skimmer outputs are aggregated and carried over the internet to the servers that deliver the spotting and propagation information.

My objective for the January program is to give you a way to prove that your new antenna is getting out where you want it to, and to share some of the new tools showing real-time propagation at your location.

Join us in person at Preston Ridge Community Center!

NFARL Club Meeting

January 21, 7:30p to 9:00p
(doors open 7:00p)

Preston Ridge Community Center
3655 Preston Ridge Road
Suite 100
Alpharetta, GA 30005

Zoom link

Meeting ID: 862 5582 7457
Passcode: 584698

https://us06web.zoom.us/j/86255827457?pwd=a1FHR3F1bDBqMUVuY3plMDdFa2VMQT09

President's Corner

Mike Riley, KN4OAK

January is usually a busy month. This January is no exception. NFARL Club Members will receive the first of several surveys related to development of our club operating plan before February comes around. This survey will focus on what club members would like to see the Club offer regarding radio communications education and operating proficiency during the next 12 - 48 months. There will be follow up surveys asking for member input on the options that are decided upon based on the initial survey.

Our NFARL operating plan will return to focus on the purposes described in the restated club charter document. You can find the charter document by using this link: Charter. Article II in the charter contains the six purpose statements associated with our 501(c)(3) IRS classification and filing under the Georgia Nonprofit Corporation Code. In late 2024, the NFARL Board of Directors agreed to use the six purpose statements as the framework for the club operating plan. The first plan element will be based on "*purpose a) To educate and increase the proficiency of its members in the science of radio communication*".

While the NFARL Executive Committee could generate plans around select activities in this area, it makes more sense to gather input from Club members on what they want to do. So, that's the purpose of the first survey. If you have points, ideas or topics you want to see included in this survey, please provide them to us ahead of time by sending an email to President@nfarl.org at your very earliest convenience. We've already begun the survey design but want to add any Club member input into it as well.

In addition to the planning and surveys, a special project team has identified and tested concepts for simplifying the capture of the Club meeting videos and posting them to the web. The team will be trying an expanded operational test during the January 2025 meeting while using the current Zoom video platform.

While we're on the topic of new operating tools and systems, I'd like to extend my thanks to Roy Barbosa KQ4OYM, for his fantastic effort to get our new Google Workspace up and operating. Roy and several other Executive Team members have done a great job to set the platform up and enable us to begin use of it. Google provides selected 501(c)(3) nonprofit organizations with a corporate level Workspace to enable the organizations to effectively operate with state of the art software and communications tools. The Workspace, along with our current website , will help us improve our operation and Club member communication. More on this project will follow.

Feel free to contact me or any other Club Executive Team member with any feedback you may have.

73, Mike KN4OAK

Congratulations VE Candidates!

Wes Lamboley, W3WL

The VE test session originally planned for Saturday was canceled due to adverse winter weather conditions, including snow, sleet, and freezing temperatures.

For the safety of everyone involved, the session has been rescheduled to February 8th. All candidates registered for the January session have been automatically moved to the February exam date.

We appreciate everyone’s understanding and look forward to seeing you next month!

Antenna Propagation Tools and Programs

Lee Johnson, N4WYE

This is my 3rd club presentation on our favorite Ham Radio topic - Antennas!

The NanoVNA, introduced a few years ago to me by Jim Stafford W4QO, got me excited about the product and I ended up doing a club presentation on the NanoVNA to match my antennas and get the SWR minimized.

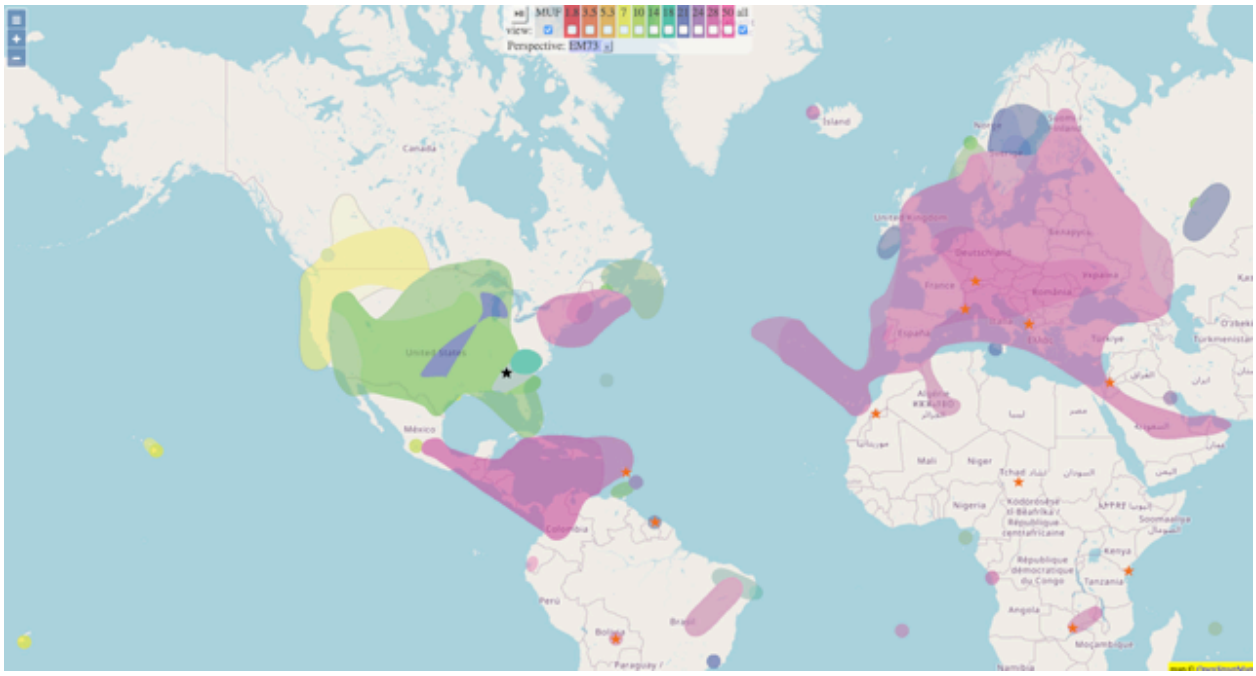
The second club presentation that I gave was on the subject of “Antenna Modeling" using the MMANA-GAL program. Now that I had the antenna SWR optimized with the NanoVNA, I wanted to check the coverage areas. I identified several areas that needed better coverage in azimuth and distance. I used the modeling tool, and tried several antenna types and heights to optimize my overall antenna situation, taking into account my lot dimensions in an HOA.

This third presentation will be a walk through of the most popular real-time Propagation tools/programs to help make sure that your station is really getting out!

The link below will open one of the newest and most surprising tools that we will explore at the January 21st Club meeting.

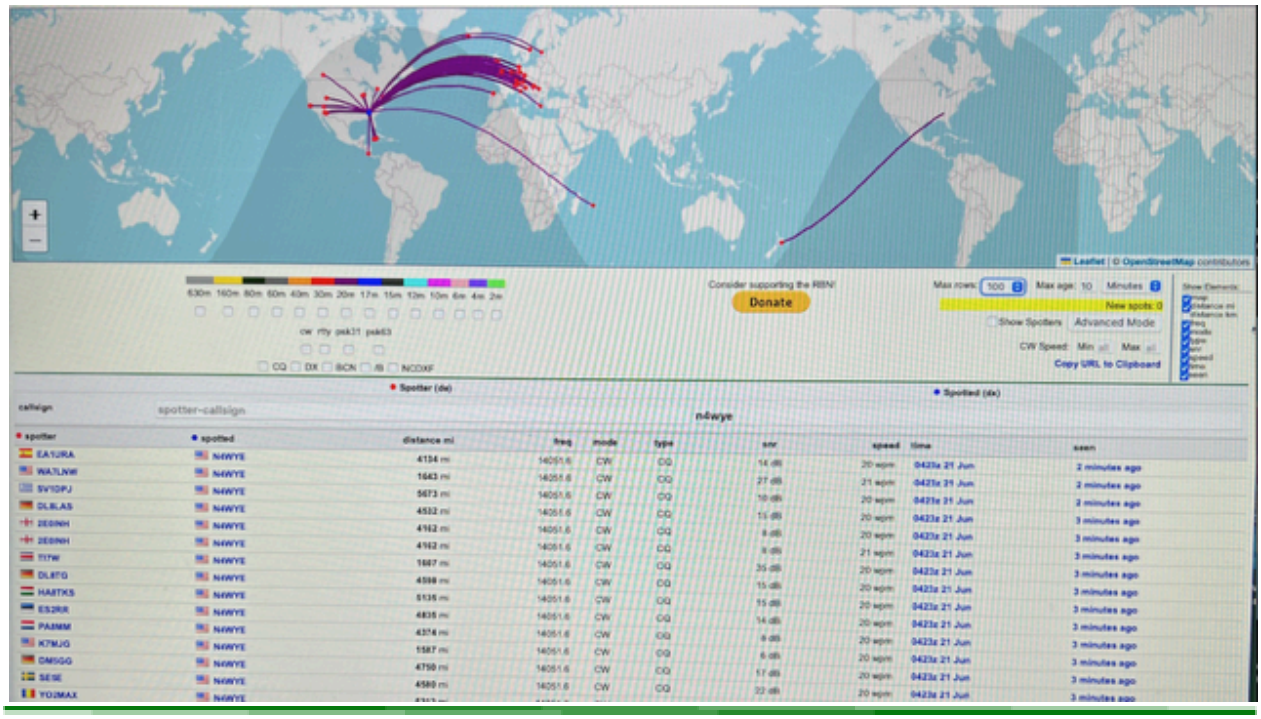
HF DXView Propagation Map shows real-time radio propagation from stations operating on 11 bands between 1.8 and 54 MHz. The display shows world-wide activity from the last 15 minutes and is automatically updated about every minute.

This is now my go-to website propagation tool each day to get started with. When you click this link, you will see the current world-wide propagation map for each of the HF bands at your current location. I keep it open on my desktop computer so I can take a look at each band separately and see the actual coverage for Digital, SSB and CW modes shown as you hover your mouse pointer over the coverage patterns. With this program you do not have to transmit to get the propagation details. The maps are plotted using the active Spots on the SDR Skimmers, so it is a real-time view of the propagation.

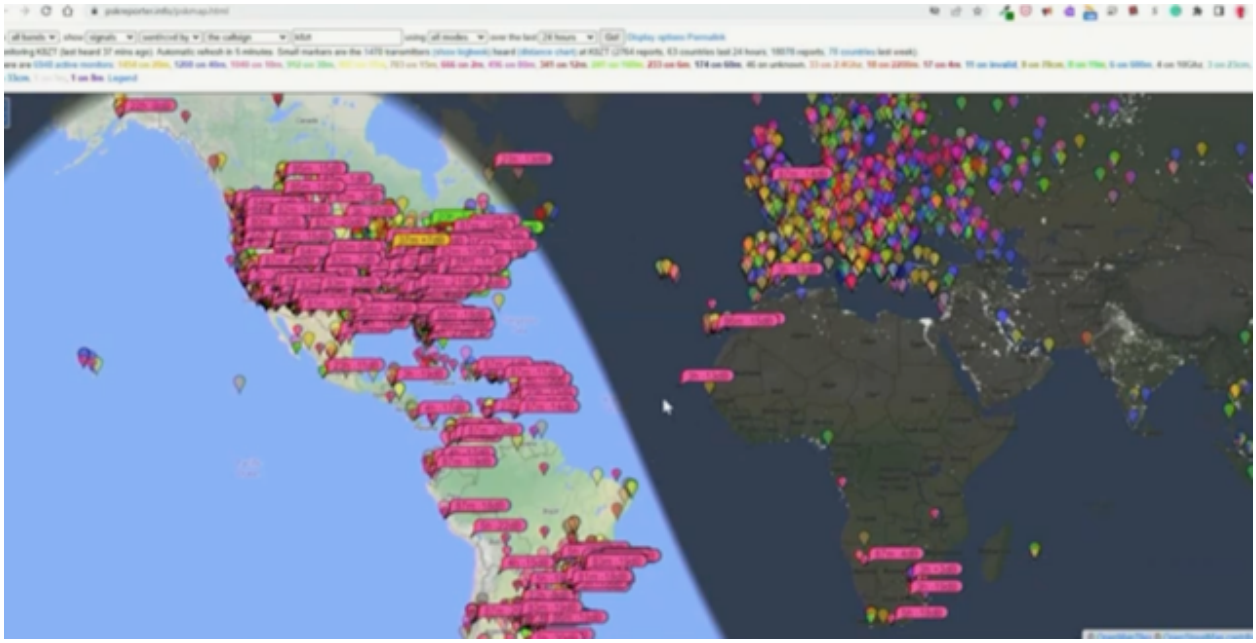


Since I am primarily a SSB operator, my primary propagation mapping tool is the Reverse Beacon Network. RBN is an internet based network of dedicated wide band SDR receivers, aggregators and servers, which can decode CW and RTTY signals. They generate the “SPOTS” containing call sign, frequency, modes, and signal to noise ratio then display it on a map as well.

Here is an RBN map showing each Spot/contact of my transmissions on 20 meters recently.



The next tool , PSKReporter, is aimed at the Digital modes, with all the FT-8 traffic, it dominates in the number of Spots being recorded and plotted.
The platform works by collecting digital signal reports from software clients such as WSJT and



FLDIGI, then mapping them to show which stations are being heard by other clients.

We will explore other propagation programs, as well, during the presentation on the 21st.

I look forward to seeing you at the meeting.

73,

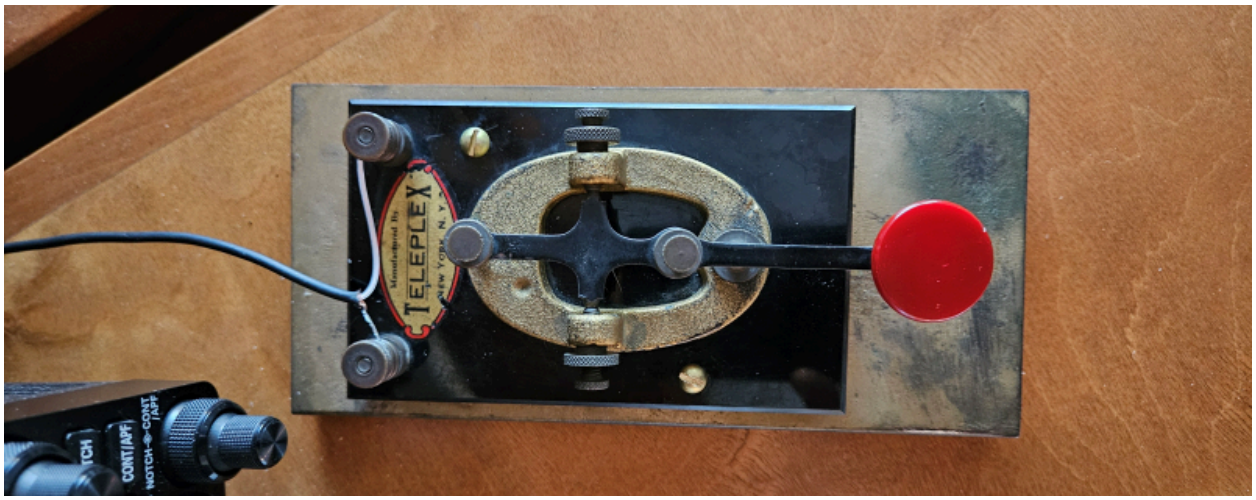
Lee N4WYE

My Straight Key

For many of us our straight key is like an old friend. It is, well, no, wait...it's not like an old friend, it is an old friend.

My straight key – the only one I've owned, is a really old friend. It came into my possession in 1960 as I was studying “the code” to pass the novice exam. I don't recall the details surrounding how I got it. I do know I'm not the first owner.

Like enduring friendships, my straight key shows wear. It has a nick or two from unintentional rough handling and it has needed repair at times to keep it serviceable. It's also seen neglect. Years of neglect. I rebuilt parts of it this year to get it ready for Straight Key Night.



Here's my key. It's branded “Teleplex.” The decal on the Bakelite base says “Manufactured by Teleplex, New York, N.Y.” The Teleplex company is long out of business, but traces of its history can be found using Google. I have never seen another Teleplex key in the wild. There are two examples however in Tom Perera's (W1TP) key museum.

The Teleplex Co. did business at an address that puts a smile on my face: 76 Cortlandt St., New York. For those who aren't, ahem, of a certain age group (read: old) and/or didn't grow up around NYC, Cortlandt Street was the epicenter of what was once called “Radio Row.” Radio Row is a good subject for a future column. For anyone interested in electronics, and particularly for hams, Radio Row was the place you went to get everything from parts for your next project to complete radios.

For years, Radio Row was overflowing with World War II surplus. ARC-5s, Command Sets, ART-13s, BC-610s, you name it – they were all for sale. The prices were fair and negotiable; the smell of cosmoline hung in the air. Need a CRT to build yourself a tuning scope for RTTY? Head to Radio Row. You'd have your pick of screen size, phosphor color and persistence.

Here are the first two paragraphs of the Wikipedia article on Radio Row:

“New York City's Radio Row, which existed from 1921 to 1966, was a warehouse district on the Lower West Side of Manhattan, New York City. Major firms that started there include Arrow Electronics, Avnet (founded by Charles Avnet in 1921), and Schweber Electronics.

The first of many radio-related stores was City Radio, opened in 1921 by Harry Schneck on Cortlandt Street, which became the central axis of a several-block area of electronics stores.”

Arrow Electronics at 82 Cortlandt Street and nearby Harrison Radio at 12 West Broadway were ham heaven. All the major manufacturers sold through both, including National, Hallicrafters and Hammarlund. Think of Arrow and Harrison as early versions of HRO and Gigaparts.

It may seem odd that Radio Row had a specific end date, 1966, if you don't know the history. By the mid '60s Radio Row found itself in the wrong place at the wrong time. In 1966, the Port Authority of New York and New Jersey seized the entire area claiming eminent domain. 164 buildings (including most of Radio Row) were demolished to provide the land on which the World Trade Center twin towers were built.

Now, back to my Teleplex key. It apparently began its life on Cortlandt Street in NYC. Teleplex came into being in the early 1920s. Its principal products were code practice sets. Teleplex ran ads in QST every month from April, 1927 until January, 1945.

Figure 2

Figure 3

Figure 4

Figures 2, 3 and 4 show QST ads for the basic product.

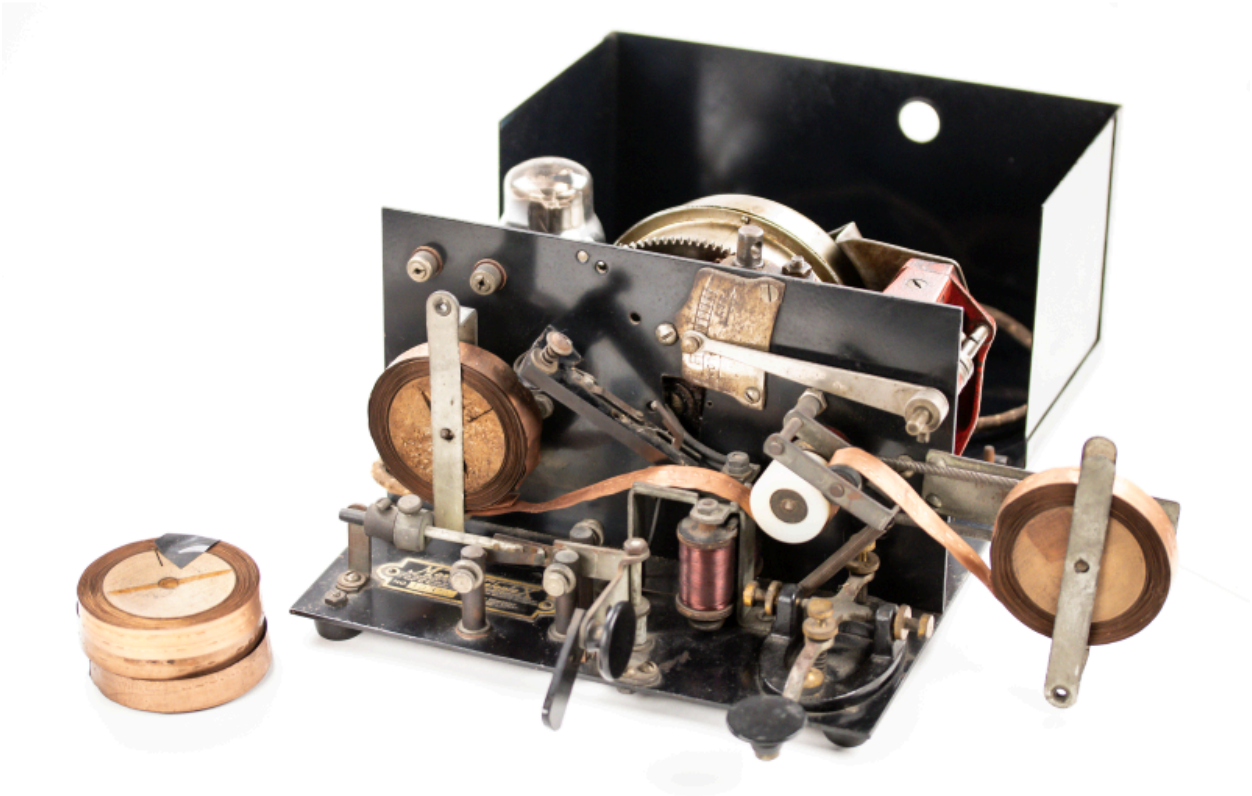


Figure 5 is a photo of one of their more advanced sets.

It included a straight key and a sideways-turned bug built into the base of the machine. Teleplex always branded their products as a “Master Teleplex.” The original Master Teleplex design was a clockworks-powered set of reels moving a perforated paper tape over a set of contacts. The contacts keyed an audio oscillator. The perforations in the paper tape corresponded to dots and dashes. The machines sent random 5 letter code groups and the speed was adjustable. You could buy a Teleplex machine, but Teleplex would also rent you one. The company survived the great depression and the second world war.

Over time the hand-cranked clockworks gave way to an electric motor and the perforated tape changed from paper to metal foil. The oscillator went through revisions too but was always based on a single vacuum tube. Teleplex packaged a straight key in with Master Teleplex sets that did not have one built in. The key was for students to practice sending and some Master Teleplex machines could record and playback! The key was also for instructors to send at speeds outside the range of the machine and for practicing something other than 5 letter groups. My Teleplex straight key probably became separated from a Master Teleplex machine no later than early in 1960. When I acquired it it had probably never keyed a transmitter.

I began making QSOs with my Teleplex straight key in January, 1961, callsign: WV2QPW. My first contact and all early QSOs were with that key and yes, there are a lot of fond memories. Within a year of acquisition however, a neighbor, Frank Hernandez, W2MOF (sk) loaned me his Vibroplex Blue Racer bug. The Blue Racer and the Teleplex sat side-by-side on the operating

desk, wired in parallel, for many years. Most of my QSOs from then on were with the Blue Racer, although for years I'd drop in on the novice bands from time to time to encourage newcomers. QSOs with novices were made with the Teleplex, rather than with the Blue Racer with a clothespin on the tail piece.

Over the years a lot of keying apparatus has come and gone across the operating desk at N4GG (and prior callsigns). The Blue Racer was eventually returned to W2MOF. When the bug left the Teleplex returned to center stage, but most of my scant operating time was on AM phone at that point. My story is typical - college and a new family took priority.

Shortly after returning to the hobby in the early '70s, the Accu-Keyer arrived. The Around the Shack column of November, 2022 covers the story of the Accu-Keyer. I built and still own Accu-Keyer S/N 00001. Just as the bug had earlier, electronic keying relegated the Teleplex back to the sidelines. My Accu-Keyer was first accompanied by a Brown Brothers iambic paddle. I learned iambic keying on that setup. I did incorporate a jack for a straight key on the back of my Accu-Keyer – something not suggested in the QST article. The Teleplex wasn't used much at this point– but it stayed connected.

At N4GG the succession of paddles has never stopped. The Brown Brothers, a Vibroplex and countless Bencher BY-1, BY-2 and BY-3s have come and gone. I now own three Begali paddles. Daily sending is on a Begali Sculpture. On special occasions I break out my gold-plated, mother-of-pearl finger-pieces, personally-engraved, vertical dual-lever, custom-ordered Begali Graciella (a gift from the kids). I like the Graciella, but it does not evoke memories of my starting out like the Teleplex does. I started out with paper-route money, not “Graciella money.”

Keyers have come and gone too. The Accu-Keyer was replaced by Accu-Memory S/N 00001. That gave way to a succession of keyers, the latest being a W9XT-4 memory keyer and a WinKeyer USB used during contests.

Everything has its time, many things come and go and some things never leave. The Teleplex and Accu-Keyer S/N 1 will be with me until the end. The Teleplex is in rough shape but that's okay. I like the patina. I like the scars from many Field Days. I don't plan to “fix it up” beyond what's needed for it to perform it's basic function. It comes out for Straight Key Night and my grandson Gibson (age 8) is now showing interest in Morse Code. I wonder if he would like to inherit a gift from Cortlandt Street?

73,

Hal N4GG

New info for Technicians and Generals and a refresher for Extra Class Licensees!

E0A02: When evaluating RF exposure levels from your station at a neighbor's home, what must you do?

A. Ensure signals from your station are less than the controlled maximum permissible exposure (MPE) limits
B. Ensure signals from your station are less than the uncontrolled maximum permissible exposure (MPE) limits
C. Ensure signals from your station are less than the controlled maximum permissible emission (MPE) limits
D. Ensure signals from your station are less than the uncontrolled maximum permissible emission (MPE) limits

See answer on the last page!

The new Amateur Extra-class license examination question pool, effective from July 1, 2024, through June 30, 2028, has been released and is available at the National Conference of Volunteer Coordinators (NCVEC) website.

Note the new Technician class license examination question pool is effective July 1, 2022.

Ian, NV4C, and his team hold license test sessions on the second Saturday of each month.

For more information including upcoming test dates, click here.

Contest Corner

These are some contests and events scheduled to occur in the near future.

Contest	Time & Date
CQ 160-Meter Contest, CW	2200Z, Jan 24 to 2200Z, Jan 26
UBA DX Contest, SSB	1300Z, Jan 25 to 1300Z, Jan 26
Winter Field Day	1600Z, Jan 25 to 2159Z, Jan 26
LABRE-RS Digi Contest	0000Z, Feb 1 to 2059Z, Feb 2
Vermont QSO Party	0000Z, Feb 1 to 2400Z, Feb 2
10-10 Int. Winter Contest, SSB	0001Z, Feb 1 to 2359Z, Feb 2
European Union DX Contest	1200Z, Feb 1 to 1200Z, Feb 2
F9AA Cup, CW	1200Z, Feb 1 to 1200Z, Feb 2
Minnesota QSO Party	1400Z-2400Z, Feb 1
British Columbia QSO Party	1600Z, Feb 1 to 0359Z, Feb 2 and 1600Z-2359Z, Feb 2
Marconi Club ARI Loano Slow CW QSO Party	1300Z-2300Z, Feb 2
NRAU 10m Activity Contest	1800Z-1900Z, Feb 6 (CW) and 1900Z-2000Z, Feb 6 (SSB) and 2000Z-2100Z, Feb 6 (FM) and 2100Z-2200Z, Feb 6 (Dig)
Dutch PACC Contest	1200Z, Feb 8 to 1200Z, Feb 9
KCJ Topband Contest	1200Z, Feb 8 to 1200Z, Feb 9
OMISS QSO Party	1500Z, Feb 8 to 1500Z, Feb 9
WAB 1.8 MHz Phone	1900Z-2359Z, Feb 8
CQC Winter QSO Party	0100Z-0259Z, Feb 9
ARRL School Club Roundup	1300Z, Feb 10 to 2359Z, Feb 14
DARC FT4 Contest	1900Z-2029Z, Feb 11
ARRL Inter. DX Contest, CW	0000Z, Feb 15 to 2400Z, Feb 16
YLRL YL-OM Contest	0000Z, Feb 15 to 2359Z, Feb 16
NTC QSO Party	1900Z-2000Z, Feb 20
CQ 160-Meter Contest, SSB	2200Z, Feb 21 to 2200Z, Feb 23
UBA DX Contest, CW	1300Z, Feb 22 to 1300Z, Feb 23
South Carolina QSO Party	1500Z, Feb 22 to 0159Z, Feb 23
World Wide Patagonia DX Contest	0000Z-2359Z, Feb 23
North Carolina QSO Party	1500Z, Feb 23 to 0100Z, Feb 24

NFARL Upcoming Events and Dates

NFARL Club Meeting

January 21 7:30p to 9:00p
(doors open 7:00p)

Preston Ridge Community Center
3655 Preston Ridge Road
Suite 100
Alpharetta, GA 30005

Zoom link
Meeting ID: 862 5582 7457
Passcode: 584698

NFARES net

Every Sunday 8:30 PM

NFARL Repeater
147.06 (+) PL100
All hams welcome

Tech Talk

Every Monday 8:30 PM

NFARL Repeater
145.47 (-) PL100
NFARL Discord

Hungry Hams

Every Wednesday 11:15 AM

SLOPE'S BBQ ROSWELL

34 East Crossville Road
Roswell, GA 30075

CW CHAT

Every Wednesday 8:00 PM

Zoom link

YL Net

Every Thursday 8:00 PM

NFARL Repeater
147.06 (+) PL100

Executive Team Meeting

January 28, 7:00 PM

Zoom
Groups.io

NFARES Meeting

January 14, 7:30 PM

The Church of Jesus Christ
of Latter-day Saints
500 Norcross St.
Roswell, GA 30075
Zoom link

VE Testing

Second Saturday 8:30 AM

Slope's BBQ
34 East Crossville Road
Roswell, GA 30075
Registration required

FUN Net (digital)

1st & 3rd Thursday 8:00 PM

NFARL Repeaters
147.06/443.15 (+) PL100
Echo-Link N4SBD-R
Node: 522043

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North Fulton Amateur Radio League, P.O. Box 1741, Roswell, GA 30077

nfarl.org

eNEWS can be located online at: https://nfarl.org/enews-index

Club Repeaters

Frequency	P.L. Tone	Location	Notes
145.470 (-)	100 Hz	Morgan Falls	EchoLink Node 560686 NF4GA-R
147.060 (+)	100 Hz	Roswell Water Tower	Primary ARES Repeater
443.150 (+)	100 Hz	Roswell Water Tower	
444.475 (+)	100 Hz	Morgan Falls	

Club Call signs: NF4GA and K4JJ

Extra Extra answer: **B (question E0A02)**

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