

THE SIGNAL



Newsletter of the Bella Vista Radio Club

VOL. 2, NO. 11

FEBRUARY 2020

Monthly Meetings: 1st Thursdays @ 7 p.m., Highland Christian Church, 1500 Forest Hills Blvd, Bella Vista
Club Call: N5BVA • Repeater: 147.255 +offset, pl 162.2 • Website: www.bellavistaradioclub.org

WEEKLY NETS:

3830 kHz Roundtable - Sundays @ 4 pm

147.255 Repeater Net - Wednesdays @ 8 pm

Wide Area Net - Wednesdays @ 9 pm on the N5UFO NWA Linked Repeater System

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B V R C OFFICERS:**President**

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Don Banta – K5DB

Secretary

Wayne Patton – K5UNX

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Marc Whittlesey – WØKYZ

Technical Officer

Tem Moore – N5KWL

Repeater / Club Call Trustee

Fred Lemley – K5QBX

APPOINTED POSITIONS:**Public Information Officer****Membership Coordinator**

Ron Evans – K5XK

Emergency**Communications Officer**

Paul Blomgren – KC7DQY

HAM 101 Chair

Gregg Doty – N5RGD

V E Testing Chair

Don Cooper – KC7DC

2-Meter Net Coordinator

Chris Deibler – KG5SZQ

Newsletter Editor

Don Banta – K5DB

NEXT BVRC MONTHLY MEETING

THURSDAY - FEBRUARY 6, 2020 - 7 PM

HIGHLAND CHRISTIAN CHURCH

1500 FOREST HILLS BLVD.

BELLA VISTA, AR

**FEBRUARY
PROGRAM:****FT8
OPERATION**

For the first time for a BVRC program, the digital mode of FT8 will be topic of presentation for the BVRC February meeting. A foursome of some of the club's serious FT8 operators will be hosting the program: Paul-K5YH, Steve-W5KI, Mark-K5XH, and Don-K5DB. If you've never ventured as yet into FT8 operation, this will whet your appetite! Don't miss it . . . see you there!

STELLAR HAM CLUB SUCCESS STORY SPOTLIGHTS BVRC JANUARY MEETING



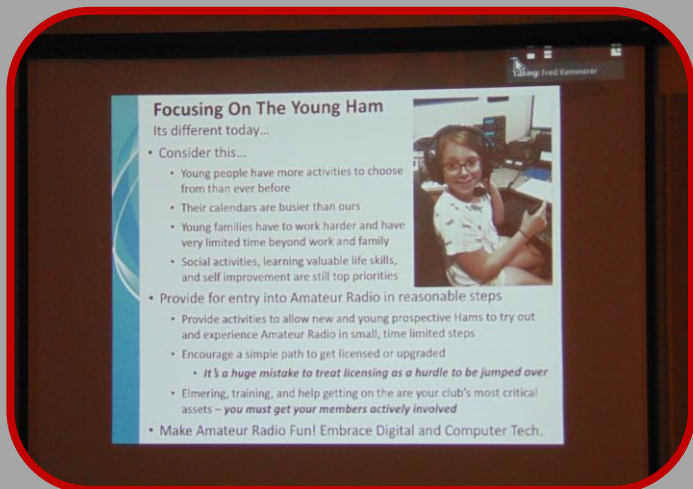
Fred Kemmerer – AB1OC, President of the Nashua (NH) Area Radio Society, returned for an encore presentation to the great turnout of BVRC members, in which he related the very impressive story of NARS, how successful the club has become, and how they got there. Fred previously gave us a splendid program on ham radio and high-altitude ballooning in November. For this evening, Fred shared on how the NARS – in four short years – went from a declining club with about 25 on the membership roster to almost 250 today, as the 2019 Amateur Radio Club of the Year at last year's Dayton Hamvention. Fred appeared to us via Skype, and provided excellent information to BVRC, as well as an excellent PowerPoint presentation complete with great bullet point screens, photos, and videos.

Fred related many plans, characteristics, and programs of the NARS that has caused them to grow as they have.

Fred said one of the BIG factors in their growth has been attributable to a focusing on *modernization*. Amateur radio has always been constantly changing, and in today's era, that is still the case. New hams, and especially younger generation hams, are interested in computer generated aspects of amateur radio,



as well as the past decades' modes and method of operation. As a result of this focus on modernization, 60% of the club members have been licensed less than 5 years. They average 50-60 members at club meetings.



One club member who is particularly noteworthy is a 10-year-old named Abby, who just recently passed her Extra class license exam, shown in the photo at left.

Fred said the club discovered that *licensing* people was just not enough – attractive programs and serious Elmering were needed to keep the new hams' attention and help them build their excitement in the hobby. They corrected many things, and re-achieved ARRL

Special Service Club status, which they had lost.

Fred said they have had very good results with many new modernization projects such as:

- ✱ STEM participation in local middle and high schools
- ✱ Getting rookie operators involved in HF events, such as the annual 13 Colonies event
- ✱ High altitude ballooning

They have gotten many teachers involved as sponsors/in-house advisors, of whom some have acquired ham licenses. With these programs and projects, Fred said the club has attained many of their goals with younger hams.

Fred emphasized these areas that have been successful for their club:

- Internet presence (modernized website, social media websites (Facebook, etc.)
- Videos from club events on the club website
- Live stream of weekly club nets, contests, Field Day
- Website for submission of articles
- Elmering section of the club website – questions, new hams needing help
- High quality licensing classes
- Tech Nights and Training Nights (after they obtain their license)
- Elmering, training, and help getting on the air (a club's most important assests – *you must get your new members actively involved*)
- ARRL Rookie Roundup and Kid's Day

Fred said it has been quite the adventure, but with club members willing to step forward and help in all the different areas of the hobby, the results have been tremendous and the rewards indescribable. He closed with this statement: "The returns for building a club like NARS is FAR GREATER than receiving ANY award.



BVRC VE REPORT

January 11, 2020

**This month's test session
cancelled due to
inclement weather**

Test sessions are conducted each 2nd Saturday of the month, 2 pm, at the Highland Christian Church, 1500 Forest Hills Blvd. (AR-279) in Bella Vista.

*Help promote the availability of the Club's monthly test sessions.
Tell your friends and acquaintances!*

**Welcome new
BVRC members!!!**



Doug Markum – KI5GNI – Rogers
Dennis Walker – KEØVQL – Anderson, MO
Greg Young – KI5FAQ – Rogers
John Hansen – WB9O – Galena, IL
Mark Sutherland – K5DXR – Siloam Springs
John Henley – KG5TTZ – Bella Vista

FROM THE DESK OF THE PRESIDENT



I hope everyone was able to enjoy the holiday season. My best wishes to you and your family for health and blessings in 2020.

I was inspired by Fred Kemmerer's excellent presentation at our January meeting titled, *The Road to Dayton 2019* and took a lot of notes. Fred's ideas and helpful suggestions have also generated good discussions. It also inspired Glenn Kilpatrick (WB5L) to develop an online forum for club communication and discussion (Bella Vista Radio Club Forum).

Please check out the Bella Vista Radio Club Forum and be an active participant! He has also updated the club's website with a new look and new features. Thanks, Glenn!

This is the perfect time to set goals for 2020 and the following reflect my wish list for BVRC:

- Continue to bring in quality speakers for the monthly meetings on a *variety* of topics
- Encourage more participation in the weekly nets
- Consider forming a Wide Area Youth Net (Sundays before the 3830 Roundtable?) and a Newcomer's Net (suggested by Shawn Witt – KI5HKK)
- Encouraging those with mobile rigs to allow guests and others to experience getting on the air in the parking lot prior to monthly meetings (weather permitting)
- Board meetings via Skype or Zoom
- Provide more outreach to area youth (church groups, schools, scouts, etc.)
- Live streaming club events
- Developing training videos
- Ensuring that members have the opportunity to be or have an Elmer
- More opportunities for members to be involved in the Club
- At least one Tech class
- At least one building project (Saturdays?)
- Starting the meetings on time and ending around 8:30pm. We have members travelling over an hour to our meetings and have to go to work or school in the morning.

- Promoting more participation in Field Day, the Arkansas QSO Party, and BVRC CW Roundup and
- Continue with the many fine things already in place at BVRC

I'm looking forward to another exciting year for BVRC. If you have questions, ideas, or concerns, please contact me at w5xna@arrl.net.

73! — Tom, W5XNA

BVRC PROGRAMS NEEDED!

If you would like to share an element of our hobby that you could present at a future Bella Vista Radio Club meeting, we would love to see it! – VHF/UHF, Emergency Communications, Public Service Experience(s), Repeater Operation, Hints and Kinks you have discovered, Antennas, Equipment, HF...

We occasionally do have guest speakers to conduct presentations, but BVRC programs given by our members are even better!

Contact Tom-W5XNA at: w5xna@arrl.net or
Don-K5DB at: arsk5db@gmail.com

For his effort in the 2019 Kansas QSO Party last August, Don – K5DB received this plaque for placing 1st in the Single Operator Mobile division.



**The fastest growing
amateur radio club in
Northwest Arkansas**

**Thank you, members,
for your support!**

BVRC Members' Corner



BREAKING NEWS!!!

WB5L – Glenn has worked furiously redesigning & converting BVRC's website.....and the update is now LIVE! www.BellaVistaRadioClub.org is not only attractive, but more user-friendly, and better for small screen use on your phone, tablet, iPad, etc. Remember the Club website, is your “go to” source of amateur radio news, info & activity in NW Arkansas & SW Missouri. Bravo, Glenn!

K5XH – Mark appears to have placed #9 in the World, in the recent RTTY Roundup! A phenomenal accomplishment, especially since Mark had numerous problems with antennas. Wow, congrats Mark!

AF5XH – Phil recently celebrated his 80th birthday and has mobility issues that keep him from attending meetings. Phil &

mobility issues that keep him from attending meetings. Phil & Wanda are happy their son recently moved to Bella Vista from Oregon.

K5YH – is the sporty New Call of Paul Dixon, formerly KK5II. Nice!

KEØVQL – New member Dennis flipped his truck on black ice on a trip to XNA and was hospitalized at Mercy in Rogers, and now undergoing rehab @ NHC in Joplin. Dennis is one of our valued licensees from the April '19 weekend boot camp, and dad of Jeremy – K9DPT.

KG5MWG – Kudos to Rick, our multi-club ambassador, for recently upgrading to General class license.

K5VCA – A new ham, Vinson has also progressed to General Class. And with help from K5DB, Vinson has a Windom antenna sky-high in tall trees. Among his first QSOs after raising the antenna, the pair logged a PY2 station in Brazil.

WAØTDQ – Hugh is adjusting to life in assisted living in Neosho. He has been listening on HF using a Tarheel ‘screwdriver’ mobile antenna in his room but has a high noise floor on his ICOM IC-7100. Hugh will be 96 Feb 3rd!

K5OY – Although Steve lives in an antenna-restricted neighborhood, he continues to be active in contests using a stealth G5RV, preferring CW.

K5DB – Don has earned his coveted Worked All States ‘Triple Play Award,’ awarded to those who earn ‘WAS’ with all QSO confirmations via Logbook of the World, on each of the Phone, CW, and Digital Modes! Kudos, Don!

KI5HTX – is the new callsign of newly licensed ‘YL’ Clara Orvin, daughter of Jere - KI5FPD, and niece of Vinson – K5VCA. Clara is 16 years of age, homeschooled, and in the 10th grade. In addition to amateur radio, Clara enjoys tennis, playing music on multiple stringed instruments, and multiple church groups. Her future plans are to pursue a career in aerospace engineering! Clara is planning, along with her dad, to pursue the General class ticket in the very near future!

AB5UN – Since reactivating recently, John has been checking-into the BVRc weekly 2-meter net on Wednesdays, attending monthly meetings and weekly breakfasts at Rosario’s on Saturday mornings.

KØETA & KI5EQL – Sheila and Faith have been heard rag chewing on the repeaters recently. Sheila is the XYL of Alan – KE0QFO, while Faith is the ‘better half’ of Bonner – KI5DUV. It’s great to hear lady ops on the air!

KCØDX – Ed loves to hear our YLs (Young Ladies) on the air and encourages the ladies to not only participate in our various nets, but to consider rotating as Net Control Stations.

N5KWL & K5DVT – Tem, with help from Jon, has begun repairs to the NWA Link System. Some of the repeaters have had issues in recent months. The Signal Hill repeater near Winslow may be back online in the near future, allowing stations with HTs to access the link from Ft Smith. (Also, thanks to Jon for filling in as NCS on the Wide Area Net during the holidays!)

K5XK & WAØTDQ – Ron and Hugh represented BVRc recently at the memorial service for Bob, AC5LX-SK, our recent Silent Key.

KI5GCD – Young Luke Kessler recently acquired a new HT, and a uBITX HF transceiver kit. Club members that are subscribed to the BVRc Facebook Group, can see some great pics of Luke participating in ARRL Kids Day on Jan 4th from the family HF station. (Luke’s parents are Will – K5ITM, and Jen – KG5WOC.)

KCØDX – Ed has been mentoring his sister, Patti/KI5HOL, and nephew, Duncan/KI5HOM, new hams in the Prairie Grove/Lincoln area. (Nice photo on the BVRc Facebook Group page.)

WA5BDU – Nick was recently interviewed by Denny – K5DCC, on his DigiComm Café podcast: <https://anchor.fm/digicommcfe>

WBØAUQ – Bob has been gifted a Drake 2-NT tube-type HF transmitter, reminiscent of his Novice station years ago. Now Bob is on the look-out for a Drake R4-B receiver, if members have a lead on one in the local area.

K5GJT – Greg has a new job and is hoping to have more time available to attend Club meetings in the near future.

KG5MWG – As WBØAUQ & Rosalee take a break from the cold WX, Rick is filling-in coordinating the Club’s informal Saturday morning “8:01 a.m.” breakfasts at Rosita’s in the Macadoodle’s complex, just north of the AR/MO line. [Email](#) Rick if you’d like to be on the weekly reminder list.

Curious QSLs

Collecting QSLs is fun! Here's a sampling from WBSL's mailing this month from the ARRL Incoming DX Bureau, including cards from the Baltic country of Kosovo, Ducie Island in the Pacific, and a SWL (Short Wave Listener) card from the Czech Republic.

(Editor's note: For those of you who haven't gotten into DXing as yet, when you do, you'll always be as excited as a little kid whenever a 'treasure chest' envelope arrives from the incoming DX bureau.....you never know what new countries and beautiful QSLs you'll find in it.)



MEMBERSHIP RENEWAL

A reminder for everyone wanting to keep their BVRC memberships current for the coming year, club dues can be paid in person at the monthly meetings, cash or personal check via snail mail to the club treasurer Marc-WØKYZ, or via PayPal by using Marc's e-mail address: almarc11@yahoo.com.

Also remember that BVRC memberships are "family memberships," to include all other licensed family members living under the same roof, at no additional charge.

Dues should be paid by March 31. If you pay in person at the meeting, please see BVRC Treasurer Marc - WØKYZ to make sure he has you noted on his membership roster when you pay.

Additional information is included on the club membership web pages. For further information, check this web address:

<https://www.bellavistaradioclub.org/application.pdf>



BVRC CLUB ACCESSORIES!

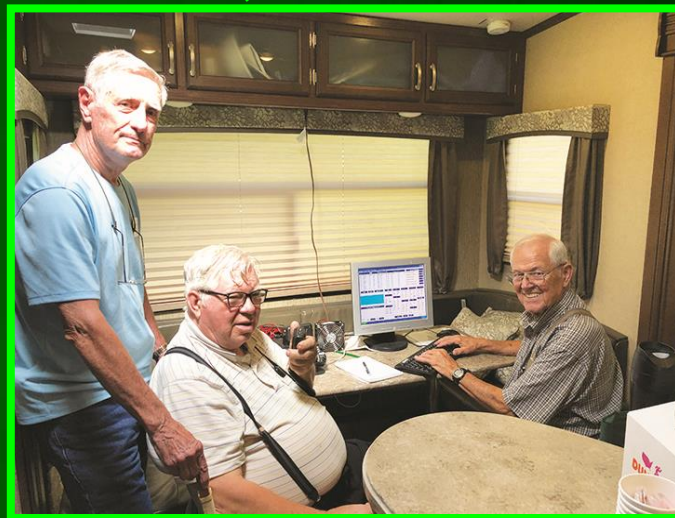
*Show you're a proud BVRC
member with:*

- Key Tags
- Badges
- Mouse pads
- Trailer Hitch Cover
(not shown)
- Desk Name Plates
- Ceramic Mugs
- White & US Flag License Plates

To order your personalized club product, click [here](#) !

ELMER — Find One, Be One

Amateur radio is a complicated hobby, and it's doubtful if any of us have all the answers! By its technical nature, the permutations of the hobby's aspects are endless – if a ham isn't concerned about how to use a particular kind of radio or mode, there's antenna construction and station setup. Once a ham is up and running, there's an endless array of on-air events and activities – not to mention what the local radio club presents, and on and on. And then there's the brainy stuff – the tons of radio theory and regulations required to not only increase your license privileges, but to pursue and enjoy even more radio activities.



We have questions about stuff all the time, and the hobby is just too vast and varied for one single person to fully comprehend. That's why finding an "Elmer" is so important!

"Elmer" is a nickname or term used to describe someone that can answer lots of your ham radio related question(s). An Elmer is a mentor – showing you 'the ropes' to operating a station and encouraging your enjoyment of the hobby. New hams especially benefit from the guiding hand of an Elmer who may actually be a vital component to the new ham's future longevity in the hobby. But, if you think an Elmer is only needed by the neophyte ham, think again – if even the most seasoned veteran benefits from the priceless counsel and perspective of his fellow radio clergy. Think of how all of us not-so-new hams from time to time could still use an Elmer or two!

The term "Elmer" first appeared in the March 1971 issue of QST magazine. In his "How's DX" column, Rod Newkirk – W9BRD, called Elmers "the unsung fathers of amateur radio." He wrote that an Elmer is "the ham who took the most time and trouble to give you a push toward your license." Elmers are integral to the vitality of the hobby. Not only from fostering a novel interest in prospective licensees and guiding new hams just starting out, but also acting as a life-line to existing hams needing to learn about new aspects of the hobby.

Elmers are especially important to existing hams that may be having questions that have been nagging them for a while. He/she is the person that you turn to when you have a problem with an antenna. Or, maybe you need to learn how to tune an old "boat anchor". While some of the time you can probably get along just fine without an Elmer, without an occasional helping hand it's easier to get frustrated, become less active and even just give up on amateur radio. Your Elmer is the one who keeps you going when that happens!

Recently, a ham club in Florida added an Elmers list to their club website. They asked their members and other local hams to list any skills that they might have so that anyone with a question could contact them for

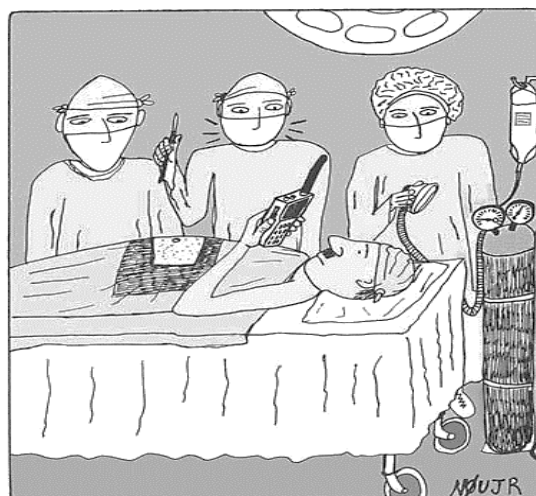
help. The list they developed literally offers a vast array of amateur radio know-how from "Antennas" to "Vintage Equipment." They advise that there is no way to know how many people have used that site, but the club Facebook page manager says that he has been able to make many referrals to that page in the past year and has had very positive feedback from those individuals who have used it. In the most recent occurrence, he said a person asked a very nonspecific question, "Is there someone in the club I could contact if I have a technical question?" He referred them to the Elmers list with apparent success.



Not only should you, as a ham, consider *finding* an Elmer, but you should endeavor to *be one* as well. While most of us are not experts in a lot of areas, many of us do have unique skills and talents in a given area that we can share with others. If you do have a fair amount of expertise in any particular area, consider being an Elmer! It will be well worth your time, and you'll never be forgotten.

And remember - don't worry if you don't have all the answers about your topic. Remember, none of us are experts – we are all "amateurs!"

Chances are, you are here reading this newsletter, and enjoying your amateur radio license privileges because of the influence and guidance of an Elmer. You owe it to the hobby you love and enjoy, to offer your care and assistance to others. Being an Elmer can be fun and enjoyable – and the hobby is more fun and enjoyable because of them!



"Mr. Nelson...I'm afraid you will have to leave the air for a while during this procedure."

THE WINDOM OFF-CENTER FED DIPOLE ANTENNA

By: Don – K5DB



BVRC is now experiencing many new hams joining the Club, who have attained the Technician license but have also upgraded to their General and/or Amateur Extra licenses. If you are now a General or Amateur Extra (and as you probably well know), you have now acquired privileges to operate on the HF bands.

Unless you have a fairly deep pocketbook to put-up a tower and a quad, beam, or similar antenna (which I did not when I first began operating HF) for starters, you're probably going to be wanting a simple dipole antenna that is easy to erect, is low maintenance, and emits a good signal. You'll probably want to suspend it between two trees (if your property provides that luxury) in a "flat top" configuration, or you might not have that much room and desire to opt for a 30 to 40-foot TV mast that you can hang it from, in an Inverted-V position.

When I first began on HF, I started with a G5RV dipole that I had pretty good results with. In later years, I used an Alpha Delta multi-band "fan" dipole which I was also fairly pleased with.

Then, about 20 years ago when I moved into this area, one of the clubs I began getting involved with was the Ozark Wireless Society (which is still going strong today). I then became acquainted with Gene Gaines – W5SXV. Gene can forget more about amateur radio in 15 minutes, than I could learn in a lifetime. And, I'll never forget him telling me this: "Don, do you want a really good dipole that will work on all the bands and especially the lower bands? Do you want to put-out a really good signal? Get you a Carolina Windom – you won't be disappointed."

I had never even heard of a Windom antenna up to that point. They had been around for years, but I just plainly had never been introduced to one. I purchased a Carolina Windom® 80 (for 80-meters and above) from Radio Works in Virginia and gave it a try. *I have never used any other type of dipole since.*

I am in no way discrediting or demeaning any of the other brand or types of dipoles or homebrews that are out there. But performance-wise, the Windom is HARD to beat. The ham that owned Radio Works, Jim-W4THU, retired a couple of years ago after decades of making and selling the Carolina Windom®, so that particular antenna and the way it is constructed is no longer available commercially for at least 10 years, as it is a registered trademark and copyrighted. However, there other good commercial Windom dipoles or kits available, or you could build a homebrew of your own. I currently have a semi-homebrew Windom.

The photos in this article are of my Windom OCFD (Off-Center Fed Dipole). It is an Inverted-V at about 60'. It has served me well.

As with anything, there are skeptics that are of the opinion that the Windom dipole is not what it's cracked-up to be. – They say the vertical radiator feature of the Windom is a bunch of "hooley", that it's a sales gimmick, and that it isn't that much better of a wire antenna than other dipoles, loops, doublets, etc.

All I can respond with, is what I know and have experienced with mine. You do need an antenna tuner with it, because it is a multi-band antenna. Some auto-tuners will not work well with it and some will, but any manual tuner should – mine does. With a tuner, you can use it on any band above 80-meters (there are 160-meter Windoms available also, I just do not have the room for one of those, or I would have one) including the WARC bands.

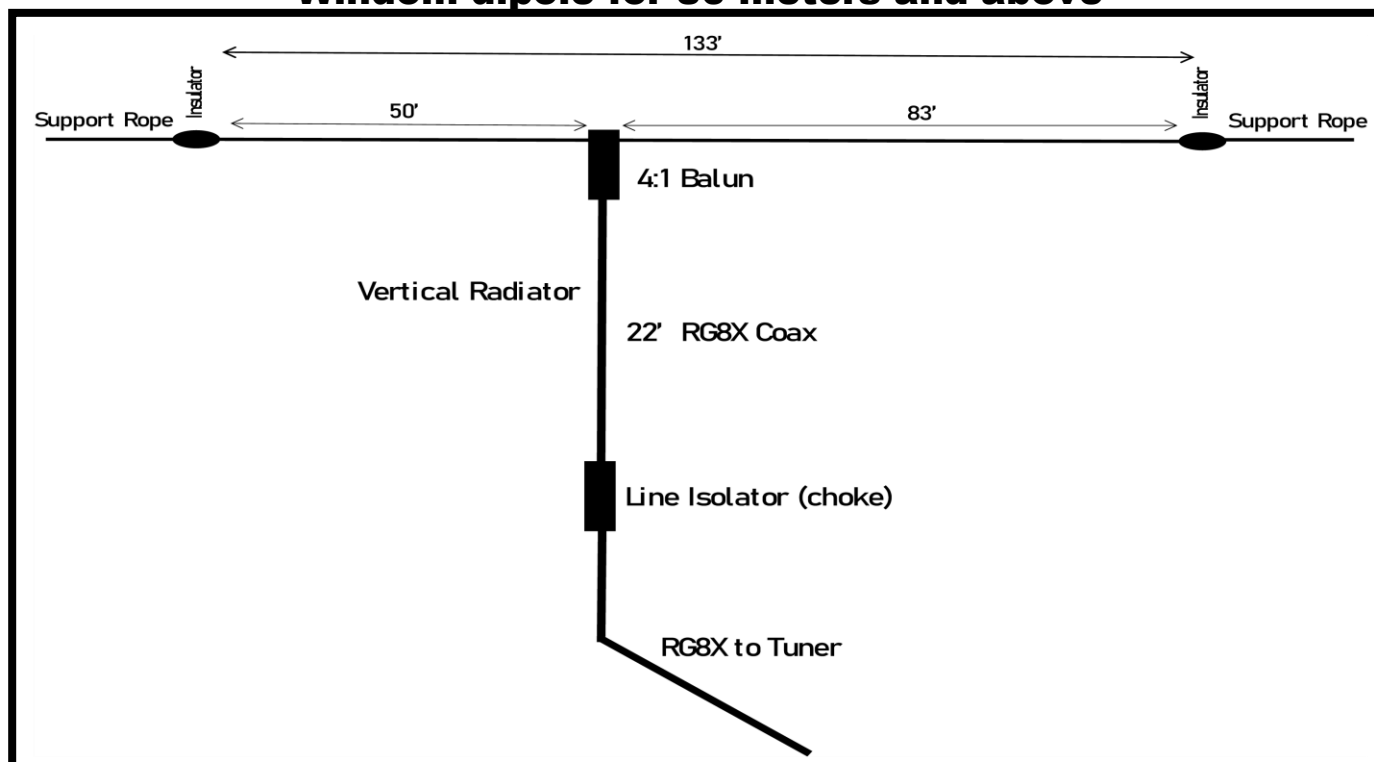
I have Worked-All-States and achieved DXCC on both 80 and 40 meters with this antenna, and presently am working on DXCC on 30 meters. In my opinion, its performance is excellent.

To conclude, please enjoy this well written short article by Claude Jollet – VE2DPE, as he describes the basic operation of the Windom OCFD:

THE WINDOM OCFD ANTENNA

Think of the Windom antenna as an "upside down vertical antenna", hanging down from its counterpoise strung – more or less horizontally – some 30 feet (or more) above ground.

Windom dipole for 80 meters and above



HOW THE WINDOM WORKS

The Windom is an OCFD (Off-Center Fed Dipole) antenna. Because it is not fed at its center, the RF currents in each horizontal radiating section are very much *unequal*.

This makes the vertical coaxial feedline radiate RF energy.

Normally, in the case of normal (balanced) dipoles, we try to *avoid* this from happening.

But, in this case we **want** the feedline to radiate!

By letting it do so, the outer shield of the 22 feet long *vertical* coax (the gray RG8X section shown at right) radiates to fill-in the gaps of the signal pattern radiated by the top portion of the antenna.

The 22' portion of the feedline effectively becomes an *upside down* vertical, located high above ground and free of ground losses normally associated with verticals based on the ground!

The Windom OCFD thus becomes a near-omnidirectional antenna. This is a very desirable characteristic on the lower bands – 40, 80, and 160 meters.



The Line Isolator (or choke balun) at the bottom of the 22-foot radiating vertical, effectively isolates it from the coaxial feedline going down to the transceiver. This prevents RF from being fed back into the radio operation position. Another very desirable feature.

OUTSTANDING PERFORMANCE

Some users residing in the Caribbean and other similar locales, have reported that the near-omnidirectional characteristic of the Windom is most pronounced near and over saltwater.

The Windom OCFD antenna is...

- Very efficient because no RF energy is lost in a "lossy" ground system.
- Very effective because a large portion of the RF energy is radiated, much of it at low angles, omnidirectionally.

These same characteristics also make the Windom OCFD an excellent receiving antenna.

THE ORIGINAL WINDOM ANTENNA OF THE 1930S

The original Windom was a Zepp-type antenna fed 14% off-center with a single wire.

The single-wire feeder radiated RF all the way into the operating position.

A very undesirable side-effect that modern Windom versions have not only eliminated, but transformed into an extra asset by...

1. Choking off the RF, present on the coax, before it enters the shack,
2. Thus, forcing the choked-off RF to travel, instead, toward DX stations.

Final thoughts from K5DB:

If you are fairly cramped for space, you might consider the EFHW (End Fed Half Wave) antenna. As I said at the beginning of this article, there are many other good types of dipole antennas out there and available. BVRC was given a splendid program on this antenna this past November by Steve Ellington – N4LQ, and the video of that program is available for a nominal fee at the welcome table at any BVRC meeting. But if you have the room, consider the Windom dipole. It's a wonderful antenna!

New BVRC President Tom Northfell — W5XNA



The BVRC January meeting saw Tom — W5XNA take the chair to administer his first meeting as our new BVRC President, and a stellar job it was.

Tom is a teacher with the Springdale School District and is currently in his 18th year of service.

He is also a retired Chicago police Captain where he devoted 25 years of service. He spent a large segment of his career as a sergeant in the Gang Crimes Unit, Special Operation Section, and Hostage-Barricaded-Terrorist (HBT) Unit. He also developed and supervised the inaugural Chicago PD Bike Patrol Unit.

With Tom's administrative and tutorial experience, we have an outstanding person to lead BVRC to a successful and progressive 2020.

BVRC is still in need of members to fulfill some chairperson positions of the Club. When Tom voices these needs, please step forward and enjoy an administrative role in helping BVRC grow! You won't regret it....

**Refreshment
Chair
Needed!**



BVRC is in need of a Meeting Refreshments Chair/Coordinator for our monthly meetings. If you would like to help the Club in this area, we need you! Contact Tom, Don, or any of the Club officers at the next meeting or via e-mail. You WILL be appreciated!



Something Different For The Cold Winter Nights of 2020 :

The GERATOL Net

By Don-K5DB

(Editor's note: Even though this article is mainly geared for those who hold an Amateur Extra Class license, if you are presently a Technician or General license holder, keep reading! This article is written to supply interesting information to our readers who currently hold an Extra license, but even more so to encourage our Technician and General class license holders to upgrade and obtain your own Extra class

license! After you digest the information to follow, you will understand more about the GERATOL Net, the reason the Net was birthed in 1971 (celebrates its 49th anniversary this year), why it operates in the Extra Class portion of the 75-meter phone band, and how much fun and rewarding it can be. Of course, there are many advantages of holding an Extra license other than operating on the GERATOL Net. But, if you want to have a lot of fun working the states on 75-meters, the net is one of the numerous advantages of holding the Extra ticket . . .)

If you have never worked all of the 50 United States (or even if you have) and you have the capability and license privileges of operating in the Extra Class phone sub-band of 75 meters, here's a dandy activity that will definitely keep you occupied for the remainder of the 2020 winter and early spring season, and is loads of fun. Not only will you be working toward a Worked-All-States award, but you will be doing so in the Extra Class portion of 75-meters, which is actually the phone sub-band of 80 meters. It is a challenge, but it is NOT impossible. I have done it many times, and it is very rewarding and fun.

Now about the Net's name – GERATOL does not refer to the old Geritol tonic (although it's pronounced the same), nor does it suggest that the Net members are a bunch of old-timers or decrepit operators. On the contrary, operators of all ages are Net members. GERATOL is an acronym which stands for Greetings Extra Radio Amateurs Tired of Operating Lately.

I have been a member of the GERATOL Net for 19 years, and there are several BVRC members who also have GERATOL #'s. I had the pleasure of serving as Net Control Station Coordinator for 5 of those years. You will not find a more cordial, gracious, and helpful group of hams anywhere on the bands. The story of how the GERATOL Net began is interesting:

“The FCC is going to open up the 75-meter Extra Class sub-band to Advanced Class operators!!!” That was the topic of conversation between John-WØNL and Hank-K2DS on the evening of September 28, 1971. The lack of activity by U.S. Extra Class operators in the exclusive 3800-3825 KHz Extra Class sub-band was the problem. John and Hank decided that working all the 50 states *within that sub-band only*, would provide the needed incentive to increase the activity, and the GERATOL Net was born.

Harry-W3ZM and others developed guidelines,

adding sport to the already challenging feat. One idea was to restrict contacts toward a “WAS”, to a 2-letter suffix callsign format. U.S., Canadian, and Caribbean operators who were authorized for those frequencies were welcomed to join the group. The word spread quickly spread, and the fraternal group could always be found somewhere within the Extra Class 75-meter sub-band.



The ARRL Communications Department was asked to assist with the development of the unique 2-letter WAS (Worked-All-States) award, in addition to the ARRL family of WAS awards. Rules for obtaining the serialized WAS award were published on page 88 of the February 1972 issue of QST.

During the fall of 1972, the FCC *did* allow Advanced Class operators to expand into the 3800-3825 kHz sub-band. ***However, the FCC's band usage review had shown a LARGE increase in Extra Class operator usage within that sub-band!*** Consequently, the FCC rewarded Extra Class operators with a **NEW** exclusive sub-band: 3775-3800 KHz. (So, Extra Class operators, whether you know it or not, the 75-meter Extra Class phone sub-band that you have available for your enjoyment today, is largely attributable to the past efforts of the GERATOL Net.)

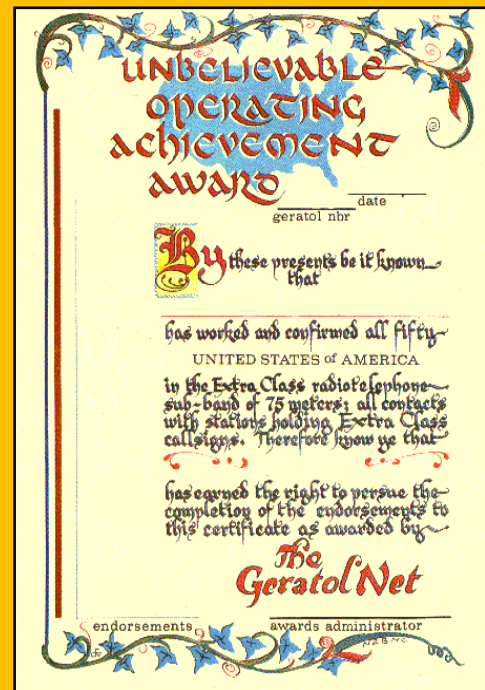
In 1984, the FCC reallocated the Extra Class sub-band to 3.750-3.775 KHz, at which time the Net moved its operating frequency to 3.768 KHz.

Then, on December 15, 2006 the FCC once again reallocated the Extra Class sub-band to 3.600-3.700 KHz. Today, the GERATOL Net enjoys its home on 3.668 KHz.

“Sounds kind of interesting. How do I join?” I’m glad you asked. Now, if you do get fully bitten by the ‘GERATOL bug’ as I did many years ago, you will have many follow-up questions as there are many, many other areas that the Net envelopes. Those questions can probably be answered in the FAQs section of the Net’s website. (More on that in a moment.)

But to cover the very basic requirement to join, all you have to do is *hold an Amateur Extra license and participate.*

When you first begin operating on the Net, you will be working toward your goal to obtain the Geratol Unbelievable Operating Achievement Award, of which the Net refers to as “The Basic Award”. (Prepare to get a big frame for this one...it’s big!)



To achieve the Basic Award, you must work and confirm an operator in each of the 50
(cont. next page)

states that holds an *Amateur Extra Class formatted callsign*. What this means is the station you work in each of the 50 states has to possess a callsign that can only be issued to an Extra Class license holder.

There are 4 categories of these:

*The 1x2 Extra Class callsign – Examples: K5YH, W1AB, NØLW, K5DB, etc.

*The 2x1 Extra Class callsign – Examples: WV4A, NA9A, KX8P, NL7S, AH6Y, WB5L etc.

*The Alpha-2x2 Extra Class callsign – Examples: AA1EP, AE7SW, AG9HP, etc.

*The 2x2 KH6 and KL7 Extra Class callsign – Examples: KH6YF, KL7IC, etc.

There is one thing I **do not** want you to be confused about –

To participate in the GERATOL Net, you **DO NOT** have to possess an Extra class call such as the above examples. Whether you have an Extra Class formatted callsign or not, does not matter – the only requirement is that you hold an Extra Class license as the Net does operate exclusively in the Extra Class portion of 75-meters. However, the stations you work for the Basic Award **DO** have to possess a callsign of one of the above categories.

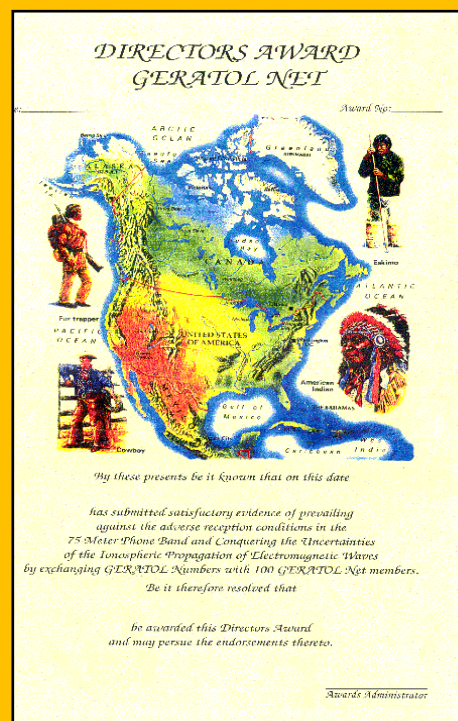
ALSO . . . You DO NOT have to work all your states on the Net only. The Net is there as an aid in *helping* you work the states. The only requirement for the Geratol Basic Award is that you work all 50 states with Extra formatted calls, within the Extra Class portion of the 75-meter phone band.

“Geez, this sounds tough.” That’s true, but anything worthwhile usually isn’t easy, right?

Yes, it is challenging, but it is **NOT** impossible, and it **IS** fun and very rewarding. I accomplished it many years ago and had a

a ball doing it.

After you work and confirm all 50 states with Extra class formatted callsigns and submit your application to the Geratol Awards Manager (\$10 award fee), you will receive your handsome Unbelievable Operating Achievement Award (shown on previous page), which will have a serialized number on it. This becomes your Geratol # for life. Then, you can continue participating in the Net by exchanging Geratol #'s with other G# holders. After you collect a minimum of 100 numbers, you are then eligible for the Geratol Net Director's Award:



After achieving this award, you can then pursue other awards and endorsements.

Another handsome award that I was pleased to acquire is the Geratol Net Worked Canada Award, for working a station in each of the Canadian provinces, all in the U.S. Extra Class 75-meter phone band. That was a real challenge, but I did it all in one season, and had a lot of fun.

See the GERATOL NET website at: <http://geratol.net/> for all the information.

"I bet you have to have an amplifier to accomplish such a feat on 80/75 meters, especially the hard to get states like in New England, the west coast, and Alaska and Hawaii?"

Naturally, an amplifier is helpful, but to answer that last question — NO, YOU DO NOT NEED AN AMP, not at all. After I received my Basic Award, I turned right around, turned the power output of my Ten-Tec Jupiter transceiver (that I had at the time) down to 10 watts and completed an endorsement to my Basic award by working all the 50 states again, in the Extra class phone portion of 75 meters – **QRP!!!** It wasn't easy, but it was exciting! Remember the two big words when it comes to working *any* station on *any* band or mode: *propagation and conditions*.

To begin your quest, tune the Net's frequency on 3.668 KHz (again, Extra Class ops only) at 0100 UTC (7pm local time CST, 8pm local time CDT). *The GERATOL Net operates each year from October 1 – April 30. It does not operate from May 1 – September 30, due to reduced band conditions and increased summer QRN (static).*

You may hear a casual roundtable/chat session of Net participants prior to the start of that evening's session, but at 0100, the Net begins. The Net's NCS (Net Control Station) will read the Net Preamble which will describe to you how the Net operates. Listen to the instructions and check-in. That's all there is to it. You'll probably work 10-20 states your first night!

If you want to take the boredom out of the forthcoming cold winter evenings of 2020, give it a try. The GERATOL Net is tough to beat and a lot of fun.



THIS WAS THE BEST HAM FEST, LOOK AT THESE GREAT BUYS. COULD YOU STORE THEM FOR ME TILL MY WIFE IS OUT OF TOWN ?

DOUBLE YOUR RANGE A COUNTERPOISE FOR YOUR HANDHELD

The counterpoise (sometimes referred to as a 'Tiger-Tail') is typically used in antenna systems for radio transmitters where a good earth ground connection cannot be constructed. In this application, it is simply a 19-inch length of common wire attached to the ground of your hand-held transceiver antenna terminal.



In the photo, it is attached to a ring terminal with sufficient diameter to fit under the antenna. Alternatively, it can also be stripped of insulation and simply be wrapped around the antenna base, as long as it makes a good electrical contact.

It is very effective in extending the range of a portable transceiver in that it provides the 'missing' half of the dipole antenna for 2m or 70cm operation. In order to keep antennas short and manageable, radio manufacturers coil the antenna wire into a rubber covered spring—half the antenna. The transceiver body is the other half but is not very effective from an RF perspective. Those little rubber antennas can have a very high SWR, power reflected back to your radio rather than radiating out. The counterpoise left hanging straight down beside the radio on receive and transmit provides a much more efficient solution. Try it with a weak station, you'll surely notice the difference.

(Thanks to BVRC member Steve Vandiver – AF5YM for sharing this article, authored by John Schouten – VE7II)

Don – K5DB, who is also an advisor for the Alpena High School Radio Club, reports that another VE test session was conducted on December 8, 2019, at AHS, and 4 more students were added to the radio club membership roster – *and on this occasion they were all girls!*

Congrats to new Technicians:

Kalea Valentin – KI5HON

Xandra Jetton – KI5HOO

Tina Perez – KI5HOP

Elizabeth Surface – KI5HOQ

This now raises the total membership of AHSRC to 16. The club's callsign is W5AHS.

SPACE RADIO: VOYAGER 1 & 2 SOME MIND-BOGGLING FACTS



Space probes Voyager 1 & Voyager 2 left the solar system in 2012. Their primary missions were the exploration of Jupiter and Saturn. They discovered

active volcanoes on Jupiter's moon Io as well as the intricacies of Saturn's rings. Voyager 1 was launched on Sept. 5, 1977, and Voyager 2 was launched on Aug. 20, 1977. Both have now reached interstellar space.

Both spacecraft are estimated to continue to operate until this year, and both currently remain operational.

Voyager 1 is the furthest of the two from the Earth, at 13.7 billion miles distant as of mid-January, traveling at the speed of 38,000 mph.

A transmission to or from the spacecraft now takes about 20 ½ hours.

Let's all look forward to the time when it will reach the first star – about 40,000 years from now.....

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