



# THE SIGNAL

Newsletter of the Bella Vista Radio Club



Instagram



VOL. 2, NO. 8  
NOVEMBER 2019

Monthly Meetings: 1<sup>st</sup> 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](http://www.bellavistaradioclub.org)

### WEEKLY NETS:

3820 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

## THIS MONTH'S FEATURES:

- \* *WBKYZ VISITS OHIO MILITARY MUSEUM*
- \* *MEMBER SPOTLIGHT - KEBQFO*
- \* *BVRC MEMBERS ATTEND ADXA*
- \* *BVRC PARTICIPATES IN PREPAREDNESS FAIR*
- \* *SKYWAVE FROM THE USS MISSOURI*
- \* *HAM IOI - WHAT COAX DO I USE?*

**B V R C OFFICERS:**

President

***Glenn Kilpatrick - WB5L***

Vice - President

***Chris Deibler - KG5SZQ***

Secretary

***Wayne Patton - K5UNX***

Treasurer

***Marc Whittlesey - WØKYZ***

Technical Officer

***Steve Werner - K5SAW***

Repeater / Club Call Trustee

***Fred Lemley - K5QBX*****APPOINTED POSITIONS:**

Public Information Officer

Membership Coordinator

***Ron Evans - K5XK***

Emergency Communications

***Paul Blomgren - KC7DQY***

HAM 101 Chairman

***Gregg Doty - N5RGD***

V E Testing

***Don Cooper - KC7DC***

2-Meter Net Coordinator

***Chris Deibler - KG5SZQ***

Newsletter Editor

***Don Banta - K5DB*****NEXT BVRC MONTHLY MEETING****THURSDAY - NOVEMBER 7, 2019 - 7 PM****HIGHLAND CHRISTIAN CHURCH****1500 FOREST HILLS BLVD.****BELLA VISTA, AR*****NOVEMBER  
PROGRAM:*****HF  
ANTENNAS**

Steve Ellington-N4LQ, will be our guest speaker via Skype. Steve is a learned authority on HF antennas, and will provide us with ultra-interesting information, including the EFHW (End-Fed Half Wave). Be sure and join us for an evening of captivating material, which will be useful to veteran and newcomer ops alike.

# High Altitude Ham Radio Ballooning Featured at BVRC October Meeting

Around 55 members attended a super interesting BVRC October meeting, with a very out-of-the-ordinary topic as presented by Fred Kemmerer – AB1OC of the Nashua (NH) Area Amateur Radio Society. This club was voted 'Club of the Year' at this year's Dayton Hamvention. Fred himself has only been a ham for 6 years, but has grown in the hobby at warp speed. In just 4 years this club has grown from 10 to 250 members! One of his specialties is HABs – Hot Air Balloons equipped with ham radio, which was his presentation for BVRC for the October program, and a dandy presentation it was. Fred is also the 13 Colonies annual on-air event manager.



Due to the tremendous interest generated with HABs, the Nashua club has a very successful working relationship with two high schools and two middle schools in the Nashua area. The HAB activities have also enticed many school students to obtain ham licenses, for which the Nashua club is equipped with a full VE testing team.

The NAARS has developed a 12-hour classroom program on HABs, and the student and faculty interest and turnout for balloon launches, tracking, and retrieving is huge. Some of the balloons have flown as high as 150,000 feet, and provided us with a spectacular video of one of the flights. Needless to say, this program is very educational for the students. NAARS also conducts fox hunts and HF and VHF station activities in addition to the HAB projects. During the HAB program, the students learn 3 main instruct-



tional areas:

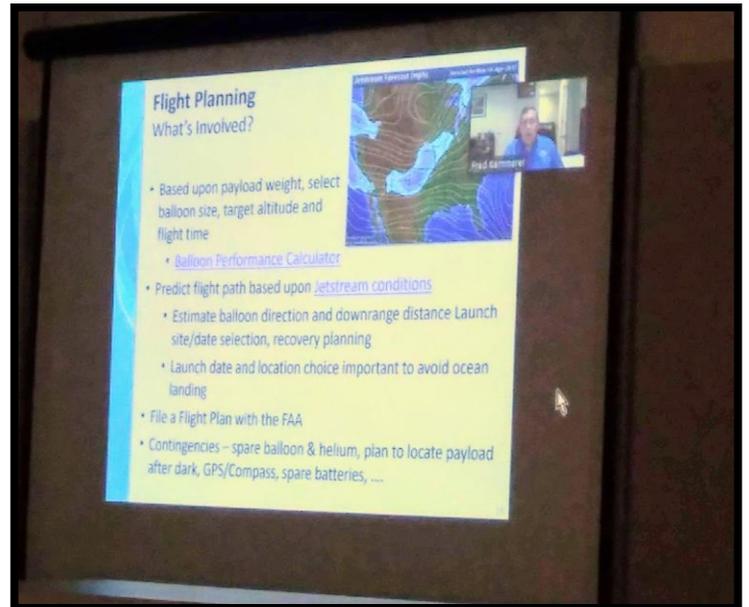
- Flight physics
- Atmospheric physics and
- Terminal physics

The topics of radio telemetry and space communications are also covered.

The HAB consists of the balloon, the parachute, and the flight platform which contains the PC, APRS, and radio components. They use commercial weather balloons, usually weighing 750 grams. However, they have used 1500 gram balloons for very high altitude work.

The students also learn the VERY important aspect of a balloon flight – Flight Planning: Which direction the balloon will go and what altitude the balloon will burst at. They also file a flight plan with the FAA before launch. The batteries on the flight platform only last a couple of hours, which presents a challenge to the students as to how to calculate the time of the flight, and where the flight platform will come down so that it can be tracked for the duration of the flight before the batteries go dead. One of the flights landed 84 miles from the launch point, and was found in a pond in ‘next door’ Maine. Fred’s club also has a retrieval team that recovers the flight platform.

This was a super program and ultra-interesting. Fred promised to return in 2020 with another program on the club projects and activities that garnered the ‘Club of the Year’ award for NAARS. We are already looking forward to it!



WEBSITE ENHANCEMENTS UNDERWAY – President Glenn Kilpatrick, WB5L announced that the BVRC website is being redesigned for viewing on small screens, like phones and tablets. Glenn has engaged the services of Addam Hardy – N5HAX for this project. Addam demonstrated a portion of the new website, which is now in the testing phase. We’re all looking forward to the unveiling! A big THANKS, Addam!

After the completion of the website re-mod, Glenn will continue as BVRC webmaster.

# *From The Desk of the President*



As the yearly election time rolls around, I find myself thinking about the club as a whole. Club membership is at an all-time high with 114 members, 44 new in 2019! Out of those, 100 are voting members with 14 family members, and 111 are licensed. As life happens, we all know that things change. We have good reason to believe that the club will continue to grow. However, out of those 114 members, we only have 10-15 members who are really active in participating with the business of running the club. I know we regularly have 40-50 at the club meetings, which continue to be awesome with the great presentations we have had. You all have a big part in the success of the club. It was your vote that removed the business meeting from the presentations, and I believe that was a good move. It makes for a much more pleasurable club meeting.

Ideally, there are several ways to increase club participation:

## ***1. Advertise and Promote***

- We have a good website and are working towards a more modern look with dynamically adjusting to several small screen formats.
- Ron, K5XK has been stupendous in promoting the club through the local news as well as nationally with the ARRL.

## ***2. Create a sense of ownership***

Not everyone can be a carbon copy of the current membership. Friendly and diverse people have different ideas and perspectives. This can benefit the club and enrich the experience of the whole group. I've always said, "It's your club". Everyone has value and their part is making the club what it is today.

### *3. Keep it fun and easy to engage*

We have such a fun group that we are attracting lots of attention! We are all easy going, and we invite newcomers to our hobby with a genuine smile. The great presentations and camaraderie make it easy for folks to like us.



So with all that being said, we invite your continued support. Some of you have really great ideas and should “step up to the plate”, so to speak. I am looking forward to new and improved leadership for the Bella Vista Radio Club!

I believe we have set a good foundation for the club with the By-Laws, & 501-c3 status, as well as ARRL club benefits. We have many benefits too much to list here for our membership.

**All officers are up for election. Won't you join us? Consider becoming a key person in the continued growth of the club.**

**Very, very 73 –**

Glenn Kilpatrick – WØ5L

# WØKYZ VISITS OHIO MILITARY MUSEUM

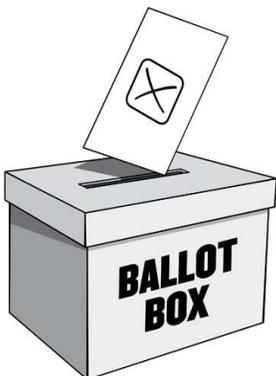
During a recent visit to the eastern United States, BVRC Treasurer Marc Whittlesey – WØKYZ and his XYL stopped by a military museum in Groveport, OH. Mark says the facility was a gem to say the least. One of the displays that caught his eye was a Maxim machine gun, which was the first portable fully automatic machine gun developed in the 1880's by Hiram Stevens Maxim. H.S. Maxim was the father of Hiram Percy Maxim, co-founder of the ARRL. Hiram Stevens was quite an inventor in his own right. He also invented and patented a menthol inhaler to help bronchitis sufferers. Among his other brainchilds were: a curling iron, eyelet and riveting machines, an aerial torpedo gun, and various oil, steam, and gas engines.



Thanks for sharing, Marc!

## Volunteers needed for BVRC officer elections

Please contact  
Jessie Costulis – KG5YJV  
and let him know you're interested in  
helping with the upcoming BVRC  
ballots and elections:  
[jcost1918@gmail.com](mailto:jcost1918@gmail.com)



# NM5AB

## NM5AB

Noel Morris  
17891 Sundown Point  
Springdale, AR. 72764



Ron – K5XK and Don – K5DB recently QSO'd and exchanged QSLs with Noel – NM5AB. Noel lives near the US-412 Beaver Lake Bridge. Whereas some hams are DXers, county hunters, and working on their Worked-All-States, Noel enjoys chasing national and state parks in the POTA (Parks On The Air) program. He says he also hopes to do some mobile work for POTA in the future. His QSL card depicts a water color rendition that was done for the card by a family friend who is also a retired art teacher. Vista Prints produced the QSL for him.

## BVRC CLUB ACCESSORIES!

Show you're a proud  
BVRC member with:

- Key Tags
- Badge
- Desk Name Plates
- Mouse pads
- Ceramic Mugs
- White & US Flag License Plates



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

**BVRC VE REPORT**

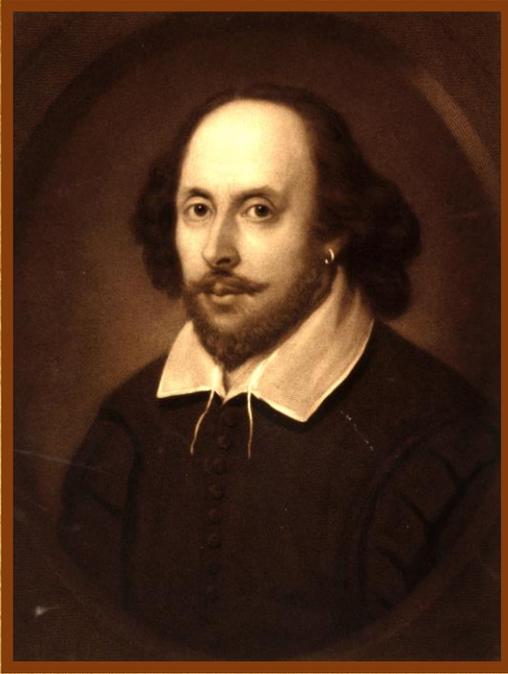
October 12, 2019

**Congratulations!****Bryan Vernetti – Bentonville  
New Technician!**

*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!*

**New BVRC  
Members!!!****WELCOME****Vinson Carter – K5VCA – Springdale****Jere Orvin – KI5FPD – Fayetteville****Craig Jones – KC5MXV – Sprindale****James Skinner – KG6HSD – Pea Ridge**



You don't have to write like William "Bill" Shakespeare in order to write an article for **The Signal**. In fact, we prefer articles without the words "thy", "whilst", "'tis", and "oft".

Working on a new kit or homebrew project? Have you recently received a rare or interesting QSL card to share?

Received a new radio award? Or, do you have a cool photo ham radio related or some comments to share with other

members? Maybe you have acquired a new piece of equipment, or constructed a new antenna? Taken a trip focused around ham radio to share an amateur radio related experience? Why not write an article for **The Signal**? The article can be short or long, simple or elaborate. Please include pictures! We're always looking for material for the BVRC newsletter, and feedback from our readers goes a long way toward keeping the newsletter interesting! So why not give it try? Write an article and send it to **The Signal** editor, and we'll get it in there! It's fun, and at the same time your contribution helps support BVRC and our hobby! Articles can be submitted electronically or on paper, whichever way you feel most comfortable with. Send pictures, too! As **The Signal** editor, I *particularly* look forward to putting a new issue together when I have material submitted by our club members! Hope to hear from you soon! 73! (Send it in!)

*Submit your material to:*

Via e-mail: [arsk5db@gmail.com](mailto:arsk5db@gmail.com)

Via regular mail: Don Banta, K5DB  
3407 Diana St.  
Springdale, AR 72764

A graphic of a spotlight shining from the top left corner onto the text.

## BVRC Member Spotlight

# ALAN KATZ KEØQFO



For this month's edition, THE SIGNAL salutes one of the "unsung heroes" of BVRC, Alan Katz – KEØQFO. Not only a gentleman of the airwaves, Alan is always willing to help with *anything* concerning BVRC activities. Alan usually stays 'in the background' and hardly ever gets any accolades, but a LOT of "stuff" wouldn't get done if it wasn't for Alan. We appreciate him and all that he does!

Alan, now retired, worked for the Occupational Safety and Health Administration as Safety Manager for the Naval Hospital in Camp Pendleton, CA. Before that, he served for 20 years in the U.S. Marine Corps as a motor transport driver, and also wore many other hats during his tenure.

As to how Alan got interested in amateur radio, Alan tells us, "My father had a short wave radio that I would listen to all the time, then he got us boys a Radio Shack HT set. I would go down the street and he would call and say he was from Alabama. I was hooked. As I got older I got my first CB, and have had one ever since. I still have them in my vehicles today. After 38 years of GOV service, it was time to retire. We moved back home, found a place in SW Missouri, and needed a way to reach out in times of an emergency. My base CB was not getting out, so I determined that ham radio was the way to go. I did a little research and found BVRC and Glenn. He invited me to come to a meeting, and the rest is history. As far as giving credit as to who has been my Elmer, I have learned so much from so many BVRC members, I can't start to name them all!"

Alan's current favorite operating activity is just enjoying rag-chewing and meeting the great folks on the airwaves both on HF and on the local repeaters.

Alan's shack currently consists of an Icom IC-7300 and Yaesu FT-991A, along with an Ameritron AL-80B linear for HF. He uses a Yaesu FT-8100 for 2 meters.

When Alan isn't on the air, he also enjoys fishing and shooting.

Alan has been married to his lovely bride, Sheila – KØETA, for 30 years and tells us that she has supported him all the way in everything that he or the two of them undertake. Alan we are blessed to have you and Sheila as a part of the BVRC family. A big thanks to the both of you for everything you do for the Club!



# BVRC Members' Corner

**FROM MEMBERSHIP  
COORDINATOR  
RON EVANS - K5XK**

**K5FWM** – While waiting for the completion of his new Texas home, former member Frank Majdan enjoys keeping up with BVRC friends via “The Signal.”

**WB5L** – The Arkansas DX Association recognized Glenn’s Delta Division ‘Ham of the Year’ award at its 3<sup>rd</sup> quarter meeting, held at past ARRL President W5ZN’s QTH in central Arkansas. Director David Norris, K5UZ, is expected to present Glenn’s award at BVRC’s Dec 5<sup>th</sup> BVRC meeting.

**K5VCA (ex-KI5FPC) & KI5FPD** – Vince and Jere are brothers-in-law who entered the hobby together. Vince is also a ‘STEM’ professor at the U of A. After BVRC’s presentation on ‘HAB’, Vince is planning to introduce his students to amateur radio and ‘Ballooning.’

**K5YY** – When not working DX this fall, San can be found in the press box announcing Springdale area football games.

**KI5DUV/KI5EQL** – Bonner & Faith are busy converting a 35' RV 'Toy Hauler' into a family 'ham shack.'

**KG6HSD** – 'Welcome back to BVRC' to James, who has a different work schedule and is now able to participate in Club meetings and activities.

**AF5YM** – Prayers for Steve, whose cancer has returned.

**N4EW** – Jake is planning to erect his tower and K4KIO Hexbeam, soon.

**K5XK** – Ron is also planning to put up a K4KIO Hexbeam. With Mark/K5XH's assistance, Ron has begun making contacts using FT-8.

**K5QBX** – Fred is recovering from surgery and looking for QRP & DX QSOs, as time allows.

**KW5ARC** – Ryan has new VE Testing credentials and is ready to assist with upcoming Volunteer Exam sessions.



*The fastest growing amateur  
radio club in Northwest  
Arkansas... thanks to you!*

*Thank You!!!*



## BVRC Members Attend Arkansas DX Association Quarterly Meeting

By Don – K5DB

9 members of the Bella Vista Radio Club (and also the ADXA) attended the quarterly meeting of the Arkansas DX Association in Searcy, AR on Sept. 21. They were: Kathy – WQ5T, Jay – W5JAY, Tom – W5XNA, Ron – K5XK, Glenn – WB5L, Paul – KK5II, Mark – K5XH, Stan – K5VR, and Don – K5DB. (Guest Chuck – KM5G also was with our NW Arkansas entourage.)

The ADXA is comprised of ham DXers from all over the state of Arkansas. Some are veterans and some are newcomers, but the main objective of the club is to help and share with each other on how to improve one's DX operating and experience.

This quarterly meeting convened at the QTH of ADXA President Joel Harrison – W5ZN. Joel is also a past President of the ARRL. He is a veteran radio amateur in many areas of the hobby, but his passion for decades has been DXing. Joel and his wife KIM – KB5YIQ were phenomenal hosts, treating everyone to some great BBQ fare with all the trimmings, and apple and cherry pie a-la-mode. After the business meeting and lunch, Joel treated attendees to a tour of his shack and his antenna installations. Joel's monster antenna farm is indicative of why he is one of the top DXers, not only in the U.S. but internationally, as well.

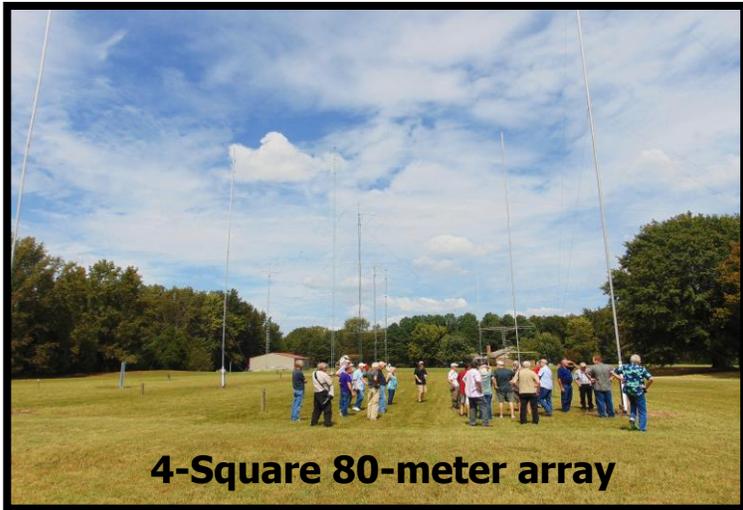


W5ZN conducts ADXA business meeting

Viewing the hundreds (perhaps thousands) of hours of work put into Joel's antenna systems, it accentuates – over and over again – the old and true adage “Your rig is only as good as your antenna”. Joel did a stellar job in explaining what each antenna was for, the technical operation of it, and how he uses it on-air.

Joel operates all bands from 160 meters through the microwave frequencies. He has some very impressive wallpaper in his shack including all types of Worked-All-States awards, the A-1 Operator Award, 5BDXCC, *many* ARRL VHF QSO Party awards (these are plaques...you have to win or place HIGH in the standings to get one of these!), and the coveted DX Challenge Award.

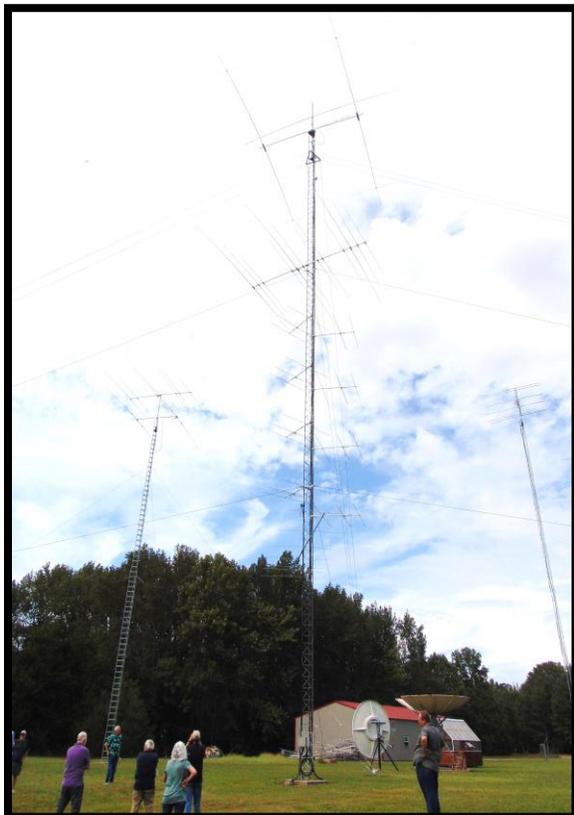
Joel said he has replaced his tower guy wires with Phillystran, since it is non-conductive and stronger. Enjoy the picture gallery from our visit to station W5ZN:



**4-Square 80-meter array**



**Joel says he gets excellent reception with this antenna**



**From top to bottom: 18 element 2-mtr beam, 2 element 40-meter Moxon beam, JK tri-band beam, seven 3 element 6-meter beams pointing to each direction of the compass.**



**220/440 MHz tower**



**Main 6-meter tower**



**W5ZN shack**



**W5ZN workbench**



Joel's first rig by Heathkit. He added the external VFO (in the middle) after he acquired his General license. Before that as a Novice, he was crystal controlled!



### **A portion of the great attendance for the 3<sup>rd</sup> quarter ADXA meeting**

*NOTE! – ADXA President Joel Harrison has just announced that **Ward Silver – NØAX** will be the featured speaker at the ADXA meeting and luncheon at the Springdale Holiday Inn on Dec. 7, 2019. Ward is world renowned in ham radio in many areas but especially DX and has authored many publications. Guests are welcome. Registration is \$50, which includes the entire day's presentations and noon luncheon. Register at [adxa.org](http://adxa.org) and don't miss it!*

# BVRC PARTICIPATES IN 2019 PREPAREDNESS FAIR



By Rick Pope – KG5MWG; Photos courtesy Paul Blomgren – KC7DQY and Rick Pope – KG5MWG

The 2019 NWA Emergency Preparedness Fair was held at the Church of Latter-Day Saints in Bentonville, on Saturday, September 21, 2019. It was a GREAT SUCCESS, despite intermittent strong wind gusts! I am so very pleased that I was able to be part of it.

We had a great turnout of hams to staff the booths and fraternize with the public, answering questions and exhibiting EmComm radio equipment. However, with all our stellar participants at the exhibit, Honorable Mention goes to Susan Walker – KI5CXH. Susan did an outstanding job bringing interested people and their families into our display tents! She deserves recognition for her efforts, and big word of thanks is sent her way. (That's Susan in the pink blouse and hat.)

We gave many demonstrations of our ham radio gear, showed videos, and distributed hundreds of ARRL information pamphlets. We also gave away dozens of past issues of QST, and many membership applications for NWA EmComm, BCRO, BVRC, and the other clubs in the area. 27 interested persons signed our guest roster.

BVRC members participating in this year's EPF were Paul Blomgren-KC7DQY, Mark Maddox-KL7IWT, Alan Katz-KEØQFO, Sheila Katz-KØETA, Rick Pope-KG5MWG, Susan Walker-KI5CXH, Gregg Doty-N5RGD, Brian Doty-N5VSD, Harold Sobotka-K5HJS, Wayne Patton-K5UNX, and Bill Dean-ACØQU.



Gregg Doty-N5RGD (2<sup>nd</sup> from left, and Paul Blomgren-KC7DQY visit with members of the public, while Rick Pope-KG5MWG demonstrates an EmComm contact.

Visitors enjoy the exhibits, handouts, and information supplied by NWA EmComm, BVRC, and BCRO clubs.





# ANNOUNCING THE 1<sup>ST</sup> ANNUAL BVRC CW ROUNDUP



**Date:** Saturday, Nov. 9, 2019

**Time Period:** 0000 – 0300 UTC (6pm – 9pm local time)

**Frequency:** 3.540 – 3.560 kHz

**Operating classes:** **CLASS A** – BVRC member – Experienced CW operator  
**CLASS B** – Newcomer or newer CW operator (BVRC member or non-member)  
**CLASS C** – Non-BVRC member – Experienced CW operator  
**CLASS D** – Listeners who copy and log only, with the use of FL Digi, code readers, etc.

**CQing:** Send “CQ CWR CQ CWR”

**Exchange:** Signal report (including operating class) / QTH (your location) / name

**Example:** You are a newer CW operator and you are in QSO with K5XYZ. Their signal is readable, their signal strength is registering a ‘7’ on your S-meter, and their signal tone is good. ----- Your callsign is W5ABC, you live in Bentonville, and your name is Albert. You would send something along the lines of:

K5XYZ DE W5ABC  $\overline{BT}$  (break)

RST IS 579 B 579 B  $\overline{BT}$

QTH IS BENTONVILLE, AR BENTONVILLE, AR  $\overline{BT}$

NAME IS ALBERT ALBERT  $\overline{BT}$

HW CPY? (How did you copy my transmission?)

K5XYZ DE W5ABC K (Over)

The other station would then reply with their information using the same format. After the exchanges are completed, short informal remarks can be made during the QSO, after which the contact would end with something along the lines of:

TNX FER QSO (thanks for the QSO)

GL ES 73 (Good luck and best wishes)

K5XYZ DE W5ABC  $\overline{SK}$  (end of contact)

**Description of event:** This 3-hour event is not a contest. Rather, it is a celebration of our area CW newcomers, returners to the mode of CW, and listeners. It is also intended to enable our veteran CW operators to enjoy helping the newcomers in making CW contacts. There are no points scored, and no results or standings posted. You do NOT have to be member of BVRC to participate.

A handsome certificate will be available to each participant submitting a log entry from the event.

Send logs no later than Saturday, Nov. 23, to Don Banta – K5DB:

**Regular mail log:** Don Banta  
 3407 Diana St.  
 Springdale, AR 72764

**Electronic log:** [arsk5db@gmail.com](mailto:arsk5db@gmail.com)  
 Attach file: [call].log

**KH6BB****Skywave from the  
USS Missouri in Hawai'i***By  
John A. Jones – W5OX*

*Editor's note: This is a very interesting story from my cousin in Harrison, John – W5OX. John got me interested in ham radio in 1969, and between him and Sam Housley – K5AKS (sk), no one could have had better elmers. John is a veteran DXer and has worked over 330 countries. – K5DB*

In the year of 2003, our family took our annual vacation. We were fortunate enough this year to go to Hawaii and had a wonderful time in that tropical paradise. We had previously been there in 1985, but this trip was much more memorable. We were received with our "lei greeting and tropical drink" upon disembarking the plane, and the weather was as it always is there – terrific. The temp in Honolulu is always 85°.

Over the years, I had become acquainted with Lee Wical – KH6BZF, better known as the "Bloomin' Zipper Flipper". Lee, now a silent key, was a brilliant engineer and possibly you were familiar with his famous propagation reports.



**W5OX and XYL Sharon – WA5FOX  
on the deck of the USS Missouri**

On our first trip there, we called his home when we arrived to personally meet him for an eyeball QSO. Upon reaching his XYL, she informed me that Lee was in the Kaiser Permanente Hospital for an appendectomy. She said, "If it's at all possibly you be sure and go see him." We did. My daughter Shelly – KE5DX and I went to the hospital with our 2-meter HT in hand. Lee spotted us coming across the hospital parking lot from his window and called me "Dr. Jones" as we rode up on the elevator with everyone watching and listening to us on the HT. He is a big cut-up and a great guy. I presented him a wood carving

of his callsign which he immensely appreciated, and we became great friends. I had spoken with Lee on HF and advised him that we were again making the trek over. He told me, "Be sure and bring a copy of your license, and I will get you on the battleship USS Missouri, and you can operate our club station KH6BB." You can imagine my excitement presented with the prospect of operating from such an iconic ship of great historical value! Volunteer hams were in the process of restoring the club's radio room on the ship and all the updates were wonderful.

The USS Missouri is anchored in Pearl Harbor directly adjacent to the USS Arizona Memorial. The Arizona, as most of us know, was destroyed on December 7, 1941. These edifices are definitely a sight to behold! The U.S. Navy oversees all entering and leaving the ship, and they are very strict for its protection. If you wish to operate the KH6BB club station, advance arrangements are recommended by coordinating with one of the club members.

Upon arriving, I was wearing my W5OX cap. I spotted a few other hams in the crowd by the ship with their identifying caps and ID tags on lanyards about their neck. When they spotted me, they came over and swept me from the crowd of tourists and took us on an *entirely* different route on the ship; the tourists were taken another way. The ship has a huge wooden deck and when in commission it possessed tremendous firepower as it sat offshore pounding onshore targets. It was used as late as the Desert Storm operation in the 1990's and had been adapted to more modern warfare.

We were awestruck by the very room onboard where the Japanese had signed the surrender documents to end WW-II. All the furniture was still intact and arranged just as it was in the days of General Douglas MacArthur who was present to officiate the surrender. (By the way in case you didn't know, Gen. MacArthur was born in Little Rock, AR.)

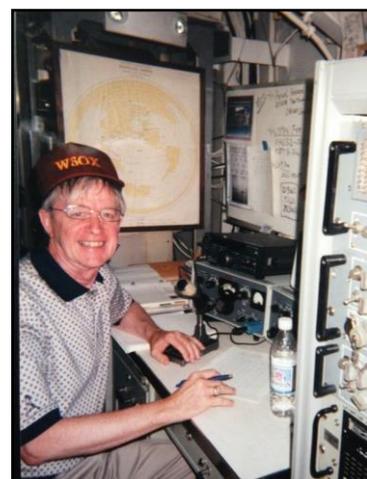
Eventually, we came to the radio room and it was a great thrill for me to see the tremendous plethora of equipment that comprised KH6BB, and also knowing that I was going to be given the pleasure and privilege to operate the station. The "BB" in the callsign stands for "Battleship Battalion". We were very graciously treated, and I operated almost 4 hours. Stations from all over the world were calling – even Japan. It was also a thrill to hear the 'sounds of home' as I worked Don-K5DB on 15 meters. I cannot express how kind our hosts were to us, and we will always be eternally grateful to the hospitality that was extended to us.



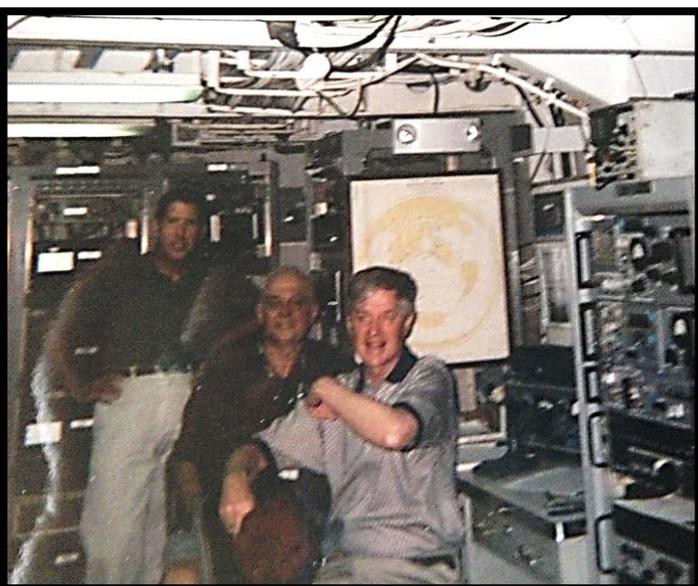
John at the controls of club station KH6BB

They presented us with guest operator cards and bottles of water labeled with "USS Missouri".

Should you ever have the opportunity, operate from this valuable piece of real estate in the Pacific. We departed for home with indelible memories etched in our minds.



W5OX logs one of many QSOs at KH6BB



John having a laugh with Lee – KH6BZF and a Battleship Battalion Club member

# HAM 101

## THE SIGNAL Monthly Column for New Hams

### WHAT COAX DO I USE?



It is of importance when making decisions about getting the right coax for your ham station to understand that there are trade-offs that have to be considered between transmitter power, antenna gain, coax loss, erp, and your total ham station system performance. Your bank account may also enter into the equation like most hams. The db differences in gains or losses on transmit and receive between the choices available to you are the important issue.

A difference of 3 db either way will not be apparent to the stations that you are communicating with on the other end – around the block or around the world. They won't hear or see (on the S-meter) any difference if you run your transmitter at 50 watts instead of its maximum 100 watt output power as an example. This is a difference of about 3db! The same ratio holds true comparing 500 watts with 1000 watts! Now take this same analogy and apply it to coax.

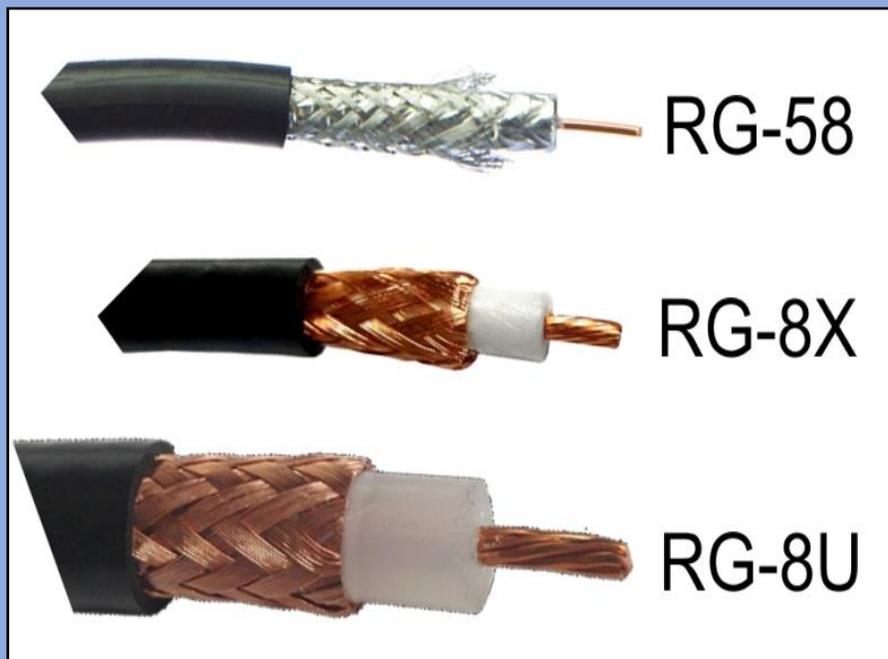
Here is an example:

Your present coax is 100 feet long and has a loss of 3db per 100 feet. You change it to the same length, 100 feet, using a more expensive coax that has only about .1db loss per 100 feet. (Very Expensive Stuff!) This is about a 3db increase in signal strength to the antenna, as compared with what you were losing in the old coax. The station on the other end usually won't know the difference, and usually, neither will your receiver! A difference of 3 db or less between two antennas, two types of coax, or two station configurations is usually not-sufficient to justify the higher costs of the more expensive, lower loss, coaxial cable unless you are a perfectionist with lots of money.

However, a difference of 6 db may well justify the more expensive approach with the higher quality coax or antenna setup.

Remember, if you can't increase your transmit or receive signal by at least 5-6 dB or more, it may not be worth the effort and expense.

Remember, you have to achieve about 6db gain or loss to to make much difference on the air to the other station receiving your signal.



#### Example:

Your antenna gain is 6db.

Your coax loss is 2 db per 100 feet as stated by the mfg. You use 50 feet.

Your total system gain or loss would be:

Antenna gain 6dbd - loss of 1db (50 feet) = total gain (or loss) = 6 - 1 = 5 db loss

#### Another example:

You add 100 feet of coax with 3 db loss at your operating frequency to an antenna with 0 db gain.

So 0db - 3db = -3db loss in signal strength...you just cut your signal in half.

#### Velocity Factor of Propagation Through Coaxial Cable

The velocity factor is the speed at which an RF signal travels through a material compared to the speed the same signal travels through a vacuum. The velocity of propagation is inversely proportional to the dielectric constant. Lowering the constant increases the velocity. Generally, the higher the velocity factor, the lower the loss through a coaxial cable.

Generally, velocity factors through different types of coax would be: Ladder Line: 95%, LMR-400: 85%, LMR-240: 84%, Twin-Lead: 82%, Coaxial Cable/Foam Dielectric: 79%, RG-6 and RG-8 (thick): 75%, and RG-58 and RG-59 (thin): 66%.

These are basic guidelines for determining what coax type you need for your shack. Taking the time to research and compare with the correct coax for your antenna configuration, will have you on the way to a successful operating experience.

# FROM STEVE – W5KI...

BVRC member Steve Norris – W5KI from Eureka Springs subscribes to the CQ-CONTEST e-mail list, and provided this interesting info to us, from Frank Donovan – W3LPL. Frank is a world renowned DXer and contester and was the featured speaker at last year's Arkansas DX Association convention in North Little Rock. Frank shared a line from the AB7E website, demonstrating the benefit of 1 dB of signal strength improvement in a weak signal situation. The audio files are very interesting to listen to. (3db could easily make a difference when running QRP power levels, noting W3LPL's info in the item from Steve/W5KI, hi!)

Thanks Steve!!!

Here's the link to the website:

[www.ab7e.com/weak\\_signal/mdd.html](http://www.ab7e.com/weak_signal/mdd.html)

## The handy-dandy QCX transceiver...



**Bob – WB0AUQ brought a neat new radio to the BVRC October meeting, the QRP Lab's QCX-40 transceiver. The single band transceiver runs 5 watts and comes in kit form. The QCX can be ordered for any of the bands: 80, 60, 40, 30, 20, or 17. It is a high-performance feature packed unit. Thanks for bringing and sharing, Bob!**



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