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NEWSLETTER OF THE BELLA VISTA AREA RADIO CLUB

Arkansas' Largest Amateur Radio Club



SPECIAL NST TRAIN MOBILE ISSUE

JUNE 22-23

Metfield Park 49 Commonwealth Road Bella Vista, AR

- July General License Class
 Sign-Up Now Open Enroll Now
- Field Day Urban Myths and Legends
- W5NX Wins ARRL Phone Sweepstakes
- Choosing An HF Transceiver
- Elmer Find One, Be One
- DXCC Den Macquarie Island

June 2024

Monthly Meetings: 1st Thursdays @ 7 p.m. Arkansas Law Enforcement Training Academy (ALETA) 3424 S. Downum Road, Springdale AR

(HAM 101 Workshop for Newcomers @ 6pm preceding meeting)

CLUB CALLS: N5BVA / W5NX

(Repeaters)

(Contesting & Special Events)

REPEATERS: 147.255 +.600 KHZ OFFSET, PL 162.2 444.100 + 5 MHZ OFFSET, PL 162.2

Website: www.bellavistaradioclub.org

WEEKLY NETS:

BVRC HAM 101 Net
Tuesdays @ 7 pm on the
WX5NAS Skywarn Link System:

Bentonville – 146.865, -offset, pl 103.5 Springdale – 147.315, +offset, pl 97.4 Fayetteville – 147.315, +offset, pl 110.9 Huntsville – 443.625, +5 MHz, pl 97.4 Green Forest – 145.310, -offset, pl BVRC Legacy Net
Wednesdays @ 7 pm on the
BVRC Dual Linked Repeaters:

N5BVA/Bella Vista 147.255, +offset, pl 162.2

N5BVA/Springdale 444.100, +5 MHz, pl 162.2

BVRC 3830 Roundtable
Sunday Afternoons

4 pm during CST 4:30 pm during CDT 3.830 MHz



NEXT BYRC MONTHLY MEETING



Thursday, June 6, 2024 @ 7pm
Arkansas Law Enforcement Training Academy
3424 S. Downum Road
Springdale, AR

June Meeting Information

HAM 101 Workshop, 6pm preceding monthly meeting — BVRC's Field Day coordinator Tom Northfell — W5XNA will be in the spotlight for both the HAM 101 Workshop and our June meeting. For the Workshop, Tom will be presenting an interesting topic that newcomers will especially benefit from, "The Rationale of Exchanging QSL Cards". Logbook of the World (LotW) is a web-accessed database provided by the American Radio Relay League (ARRL) to implement a contact verification service among amateur radio operators. Using LotW, radio amateurs can claim and electronically verify contacts (QSOs) made with other amateurs, generally for claiming credit for operating awards, such as DXCC. Previously, hams had to rely on paper QSL cards and submit to ARRL, a slow and somewhat expensive process. LotW began operation in 2003. However, some stations do not use LotW, and contacts still need to be verified with QSL cards. In addition, many of us who use LotW also like to "collect paper." Find out a little more about this old school facet of amateur radio.

<u>BVRC June meeting, 7pm</u> – Tom will then transition over to the monthly meeting room for our June presentation on "BVRC Field Day 2024". Tom will outline the plans for the FD stations, station captains, modes to be used, etc.

He will then share the plans and arrangements for all other aspects of this great annual event including the preparation and event schedule.

We have had over 100 persons attend the past several Field Days. Tom coordinated last year's event which was the biggest success yet, and with his guidance once again this year it promises to be an even larger event. Be sure and attend this important organizational meeting.

See you then!

BOARD MEMBERS

*President*Jan Hagan – WB5JAN janhagan51@gmail.com

Vice President
Joe Hott - W5AEN
joe.hott@gmail.com

Secretary
Dana Hill – W5DGH
dana.hill1979@gmail.com

*Treasurer*Mark Whittlesey - WØKYZ

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Tem Moore – N5KWL
temmoore@gmail.com

N5BVA Trustee
Glenn Kilpatrick – WB5L
wb5l@arrl.net

Board Member At Large and Public Information Officer
Tom Northfell – W5XNA
w5xna@arrl.net



APPOINTED OFFICERS

VE Testing Committee
Chair: Don Cooper – KC7DC
don_c@hotmail.com

Elmer 911 Committee
Chair: Vinson Carter – WV5C
vinsoncarter@gmail.com

Nets Committee
Chair: Dana Widboom – KI5TGY
dcwidboom@gmail.com

Membership Committee
Chair: Tom Northfell – W5XNA
w5xna@arrl.net

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rebdgarrett@gmail.com

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Glenn Kilpatrick – WB5L
wb5l@arrl.net

Newsletter Editor
Don Banta – K5DB
arsk5db@gmail.com

MAY MEETING FEATURES NEW CLUB TOPIC

It was once again almost SRO as Bella Vista area Radio Club members once again packed the meeting room for the May 2 meeting. This month's meeting featured a topic never before presented to the club, and a very interesting one it was. BVRC member James Bennett – KA5DVS gave an outstanding program on "3D Printing: Fundamentals and Applications for Ham Radio". James has been working with 3D printing for 25 years.

In this new age of computer technology, robotics, and mechanization, amateur radio has not fallen behind in keeping up the pace, and 3D printing is no exception. James gave not only a great oratory; he brought 3D printers for a live demo in addition to ham radio parts and objects that he has made for personal use.



James' interest in amateur radio 3D printing was sparked from an article that appeared in the October 2022 issue of QST.

James said 3D printing was first developed and patented in 1980. It was first termed 'Stereolithograph' (SLA). The digital printers of today are known as Fused Deposition Modeling (FDM) printers. It allows you to print operational prototypes as well as ready-to-use products such as Lego. Materials used in today's printers are variations of polyethelene and Butadiane Styrene.

He said there are multitudes of 3D websites that have plans and software to print thousands of things, and many of these websites have printer plans for amateur radio.

The basics needed to get started in 3D printing are:

- Computer
- 3D modeling software
- Slicer software
- 3D printer

An interesting item James mentioned was the Fayetteville public library. James



James - KA5DVS

shared that the library houses a fabrication and robotics lab, in addition to 3D printing classes.

James said that a very popular 3D software being used today is 3D Builder.

James then displayed and passed around the room a plethora of items for attendees to see: knobs, boxes, lids, radio panels, coil forms, spider coils, wire (or string) winders, and several other items and gadgets that he has constructed and printed that have come in really handy around his ham shack and workbench.

James said 3D printers aren't that expensive and a person can purchase their own printer at a price that won't paralyze the pocketbook. A nominal unit can be obtained for under \$200.00, although the more advanced printers with extra features can run upwards toward \$500.00. They do require assembly when they are delivered, but it isn't that difficult and takes about 30 minutes to 2 hours.

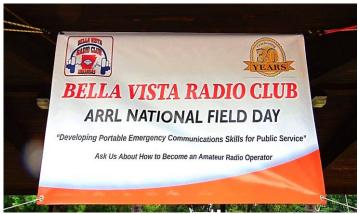
James concluded the program by advising attendees after the initial investment in the basic equipment, the cost of materials is relatively low.

James, we are fortunate and honored to have you in the BVRC family. Your presentation was outstanding and we hope you'll be back soon with more great presentations for the club!

BREAKING NEWS – James and his company, Pacific Antennas, just received a very positive review in the new June 2024 issue of QST! – The review is on one of James' many kits, the Pacific Antenna Active Antenna Kit. It can be found on page 51 of the June issue. Congrats James!

A special word of "thanks!" also goes out to Jon Williams - K5DVT for this month's presentation in the HAM 101 workshop that was held in the small classroom. We thought we might have to move into the main classroom as it was packed! 35 persons attended the Workshop this month to enjoy and absorb information on Jon's topic in which he discussed some of the best antennas to use when dealing with the variables of location, space, and which antenna to accomplish your radio objective. THANKS AGAIN, Jon!





Two closely spaced events have convinced me more than ever the value-added experience our amateur radio hobby has for our community.

In late May, severe weather produced multiple tornados throughout the footprint of our Bella Vista Radio Club membership. This destructive event disrupted the lives of most of our northwest Arkansas community and upended the lives of many. Finding specific information about what was happening quickly was difficult,

but our amateur radio capabilities helped to find accurate, on the ground information in a timely manner.

Coming up later in the third week in June is our BVRC annual Field Day event. This nationwide event is not only our club's biggest event of the year, but it is also an event that helps to practice our field operating skills that can be used in emergency situations such as the late May tornados that ripped through our area.

Amateur radio and Field Day 2024 are lots of fun with a variety of fun events happening during the Field Day weekend. Yes, the fun, food and fantastic camaraderie of the event makes attendance a highlight for many of our members.

However, let us all remember that the ARRL national Field Day event is an opportunity to hone our skills at setting up quick and effective portable radio operations that can provide assistance to local, state, and national first responders if needed during emergency situations.

Let's keep in mind while we are enjoying the fellowship and many activities associated with BVRC's Field Day operation, we are also honing our skills to serve our community as a valuable and important resource during times of need.

I am looking forward to seeing you all at Metfield Skills Park in Bella Vista on June 22nd & 23rd for Field Day 2024!

BVRC NEEDS YOU







FOR FIELD DAY 2024!

MARK YOUR CALENDAR for BELLA VISTA area RADIO CLUB's 2024 Field Day! June 22-23, 2024

Start thinking now about how you would like to be a part of this awesome event. Would you like to volunteer with site set-up (exciting!) or take-down? Bring a special dish for the Field Day feast? Radios, antennas, power sources, accessories, food, drinks, etc. are all part of the plan with which you can help. Do you plan to operate SSB? CW? Digital? This year we will be operating all three of these modes with BVRC's new contesting club call W5NX. The GOTA (Get On The Air) station will be using BVRC's flagship club call N5BVA.

Remember, this is the largest amateur radio event in the world and only happens once a year.

So plan to come and stay for a good length of time. With the station activity, fellowshipping with other club members, and just enjoying the "world of Field Day", the time will fly, and you'll have a ball!

SPECIAL NOTE – The BVRC VE Testing Team will once again be on hand to conduct a special Field Day VE test session for all those wishing to test for their first ham license or license upgrade. The test session will be held at 2 pm on Saturday, June 22.

If you plan to participate this year and would like to lend a helping hand when the fourth weekend in June rolls around, contact Field Day Coordinator Tom – W5XNA

at: w5xna@arrl.net



FIELD DAY:

Urban Myths & Legends

Each year, a sort of "fever" sets-in before and during the annual ARRL Field Day event. The excitement also causes some of the oddest assumptions to occur:

FAQ's:

Who sponsors the amateur radio Field Day?

Field Day is organized and sponsored by the American Radio Relay League, a national membership association for amateur radio operators.

When is Field Day and how long does it last?

Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and ending at 2100 UTC Sunday. If you set-up before the start of the event, your end time is 1800 UTC Sunday, a 24-hour duration.

Why is the general public allowed to operate amateur radio transceivers during Field Day?

They aren't. – Only operators who are licensed in the amateur radio service are allowed to serve as control operator of any radio at Field Day within the privileges of their individual license. However, the public are honored guests and are certainly allowed to manipulate the radio controls under the watchful eye of their GOTA (Get On The Air) coach who is the control operator of that radio.

DEBUNKING THE MYTHS

"There is no 15-minute-on-band rule for Field Day."

TRUE. – When posed this question, the ARRL responded with several comments including:

- "The rule requiring a station to stay on a band for 15 minutes once it has made a contact was removed long ago."
- "Don't fall into the trap of trying to impose generally accepted contest rules on Field Day. Field Day is an operating event that traditional contesting rules don't necessarily apply to."
- "Bear in mind that 90% of the Field Day participants have no clue what a 15-minute or 6-band change rule is about. To them, they try 10-meter SSB, they make a couple of local QSOs, then discover that 10-meters isn't open. Is there really a valid reason for making them stare at the transmitter for 15 minutes before moving to another band?" Essentially the message is: Relax It's Field Day.....not Sweepstakes."

"The FCC allows exceptions to its rules for Field Day."

MYTH - FALSE (YOU'VE GOT TO BE KIDDING. - OF COURSE NOT.) - FCC rules Part 97 apply 24/7, all year long.

"Field Day operators inherit the frequency privileges of the call sign trustee and/or licensee."

MYTH - FALSE – FCC rules are not exempted for Field Day.

• From Section §97.3.13 – "Control operator: An amateur operator designated by the licensee of a station to be responsible for the transmissions from that station to assure compliance with the FCC Rules." Field Day Operators are Control Operators of the station they are sitting in front of.

• Sub-paragraph 'b' – "A station may only be operated in the manner and to the extent permitted by the privileges authorized for the class of operator license

held by the control operator.'

In other words, each control operator can only operate on frequencies they are personally licensed for. You don't inherit Extra privileges if you are a General working at any station, *unless the at-your-side control operator of your station is an Extra and is watching over you*. So, to address the next statement.......

"I am a Technician and operating the radio while the person running the log is an Extra so I can use Extra Frequencies."

TRUE – SURE, WHY NOT. - Just agree between the two of you that the logger is the control operator, but that you will be operating the radio. He/she is there to keep you in compliance with FCC rules and Extra Class privileges by monitoring your operation. However - if this Extra Class logger gets up to take a break, *you are obligated to NOT transmit outside your license class privileges* until he/she gets back.

"The ARRL Field Day rules don't talk about "Control Operators".

MYTH - FALSE. – ARRL Field Day Rule 4.1.1.3 – "As per FCC rules, a station must have a valid control operator present if operating beyond the license privileges of the participant using the station."

"During Field Day, the Control Operator must sign portable by appending /P to the call sign for CW or Digital, or say 'Portable' after the call on SSB."

MYTH - FALSE. - This rule was changed over thirty years ago. You do not need to sign as portable for Field Day.

"I brought the radio, and I am an Extra. So, <u>ALL</u> operators, Extra or not, have Extra privileges."

MYTH - FALSE. - Privileges travel with the control operator....not the owner of the radio.

"The ARRL rule 7.3.13.2.2 which states 'To qualify for the GOTA bonus, there must be a designated GOTA coach present and supervising the GOTA station at all times it is being operated,' means one and only one person can be the GOTA coach for the entire Field Day."

MYTH – FALSE. – The wording of the rule does not suggest one single person as GOTA coach, only that there always be a coach supervising the GOTA station when it is operating. Nonetheless, some folks read it as one person. To clarify this issue, the ARRL stated, "There can be multiple GOTA coaches but there must be at least one present at the station at all times it is in operation. Additionally, and of course, the operator must stay in compliance with the GOTA coach's license class privileges."



The largest and fastest growing amateur radio club in Arkansas..... We're glad you're a part of it! -

Thank You!!!

BVRC GENERAL LICENSE CLASS STARTING SOON SIGN-UP TODAY!



Bella Vista area Radio Club is pleased to announce the Summer 2024 General amateur radio license classes! **Enrollment is open and ongoing!**

GENERAL License Class

(If you recently passed your Technician exam and wish to upgrade, this class is for you!)

Note: You must already hold a current and valid Technician Class amateur radio license to enroll in this class.

CLASS DATES: Saturday & Sunday, July 13-14 and Saturday & Sunday, July 20-21, 2024

CLASS LOCATION:

Arkansas Law Enforcement Training Academy (ALETA) 3424 S. Downum Road Springdale, AR 72762

CLASS SCHEDULE:

4 classes on 2 weekends:

9:00am - 12:00pm Morning Session

12:00pm - 12:30pm Lunch Break

12:30pm – 3:30pm Afternoon Session



COST: The class is free, but you will need the accompanying license manual. (Normally \$32.95) — You can order from: <u>ARRL</u>, <u>MAIN TRADING</u>, or <u>DX ENGINEERING</u>. (Have your manual in hand no later than one week from the first class.)

TESTING: A special General exam test session will be given at the end of the July 21 class.

INSTRUCTOR: BVRC past president and BVRC webmaster Glenn Kilpatrick – WB5L

ENROLLMENT: The enrollment period of this class is now open! To complete the enrollment form, click **HERE** When the page opens, scroll down to view and complete the form.

FOR ANY QUESTIONS OR ADDITIONAL INFORMATION: Contact Glenn – WB5L at: wb5l@arrl.net

BVRC VE REPORT

FROM DON COOPER — KC7DC BVRC VE COORDINATOR MAY 11, 2024





Congratulationsl

Charles Ramer – KJ5FDT – New General!

Ian Taylor – KJ5GJO – New Technician and General!

Terry Fitzgerald – KJ5GIR – New Technician!

Daniel Johnson – KJ5GLN – New Technician!

Kris Henderson – KJ5GIZ – New Technician!

Jeffrey Majors – KJ5GTI – New Technician!

Charlotte Johnson – KJ5GLB – New Technician!

Ralph Singleton – KJ5GJJ – New Technician!

Mark Gunderman – KJ5GLO – New Technician!

Next month's test sessions:

- June 8, 10 am Shiloh Museum, 118 W. Johnson Ave, Springdale
- June 8, 2 pm Bella Vista Public Library, 11 Dickens Place, Bella Vista

BVRC Multi-Operator Team Wins Annual ARRL SSB Sweepstakes





The annual ARRL Sweepstakes occurs each year in November, the first weekend being the CW Sweepstakes contest and the third weekend, the SSB (phone) contest. The ARRL Sweepstakes began in 1933, thus celebrating the event's 90th anniversary in 2023. It takes about 5 months to compile the hundreds of entry submissions for the event.

The results from the 2023 running were just recently released and a group of BVRC contesting operators debuted in the 90th running of Sweepstakes Phone with the club's new contest callsign – W5NX – by winning both the ARRL Arkansas Section and Delta Division (the Delta Division is comprised of 4 ARRL sections: Arkansas, Louisiana, Mississippi, and Tennessee).

The winning multi-operator team was comprised of Kathy Bromley – WQ5T, Dennis Tune – W9DCT (now W5DM), Dana Hill – W5DGH, Robert Hill – K5NZV, and Don Banta – K5DB.

They scored 968 QSOs and worked all 85 ARRL sections in the U.S. and Canada (when you work all the sections, it is termed a 'clean sweep') which are counted as multipliers. They tallied a final score of 164,560 points. This garnered them top honors in the Multi-Operator, Single Transmitter, High Power category in Arkansas and the Delta Division. Nationally, their efforts rewarded them with a nationwide 17th place finish out of 57 stations in the MO,ST,HP category. In all categories, they scored 63rd place in the nation out of 1,450 entries. They hope to improve on their score for the 2024 Phone Sweepstakes.





Welcome New BVRC Members!

Shaun Bayless – W9GTR – Springdale Scott Zemke – K5TOT – Fayetteville Curtis Willoughby – KAØVBA - Bella Vista Jerry Bell – KD5UHF – Bentonville Michael Reynolds – NO6O – Fayetteville Clayton Jennings – N5WTC – Rogers Richard Crouse - KFØODI - Jackson, MO Randy Moll – KJ5FNU – Gentry Ian Taylor – KJ5GJO – Combs, AR Charlotte Johnson – KJ5GLB – Fayetteville Ralph Singleton – KJ5GJJ – Prairie Grove Daniel Johnson – KJ5GLN – Fayetteville Terry Fitzgerald – KJ5GIR – Bella Vista Jeffrey Majors – KJ5GTI – Rogers J.L. Pearce, Sr. – KD5HBO - Rogers

Attention all newcomers to amateur radio and the Bella Vista area Radio Club!

HAM 101 WORKSHOP

Each month before BVRC's regular monthly meeting at 7:00 pm, we offer a unique benefit for all new hams —

The HAM 101 Workshop

HAM 101 Workshop is a special meeting that convenes at 6:00 pm, one hour before the regular monthly meeting, just for you. Each month, one of our veteran hams moderates the meeting with a topic, followed by a Q&A session on any and all topics of amateur radio. It is a wonderful time of discussion, learning, fellowship, and fun. If you're new to our hobby, these meetings are geared for you. Bring your questions and we'll see you there!

TIME: 6pm, before each regular BVRC monthly meeting at 7

PLACE: Arkansas Law Enforcement Training Academy (ALETA) 3424 S. Downum Road

Springdale, AR



Reviving an exciting amateur radio adventure after a 10 year absence, the Bella Vista area Radio Club of northwest Arkansas took to the tracks as we activated our annual Train Mobile event on Saturday, April 20, 2024 with the special event callsign N5T. We operated the all-day event on the excursion train of the Arkansas and Missouri Railroad that runs from Springdale down to Van Buren in the Arkansas River Valley and returning to Springdale.

Our train mobile station was simplistic, although setting up a successful operational antenna was a challenge as we had to deal with an extraordinary RF/electrical field in dealing with the railcar and the engine. We also had to design an antenna mount and bracket that would enable us to change bands as well as raise and lower the antenna as the excursion train passes through a 125-foot tunnel. Bill Durham – KG5ZCI, who has his own machine shop, devised an outstanding mount and bracket and it worked perfectly with our mobile antennas. (THANKS BILL!) We had an excellent attendance as we filled Car-107. We used the club's Yaesu FT-991A for the transceiver, operating SSB and CW on 20- and 40-meters.

The train passes through the Boston range of the Ozarks on its trek to the river valley and back to northwest Arkansas. In addition to passing through the tunnel, it also crosses three trestles, one of which is 125' feet above the valley floor. With an Extra class holder as control operator, this enabled everyone to operate and especially gave our new Technician license holders the thrill of not only operating HF, but also the excitement of activating a train mobile station which is rare on the bands.

Some of the highlights of the day's event were three father/son teams and a mother/son team present, as well as many newcomers to the club having a load of fun for the first time on HF operation. We were also honored with our "ham radio conductor". Joe Dunn – WA5JD not only coordinated the event, but was our conductor for the day. Before retiring, Joe served as a conductor for the AMRR for 10 years along with his XYL Shirleen-KF5DUG, who served as a hostess.

We made a nominal amount of QSOs, although the propagation was considerably dampened by a CME which was, of course, a large negative impact on our operating day. Overall, however, the event was a tremendous success with everyone operating who wished to do so, the great train lunch and, of course, great club member fellowship. We hope lasting memories resulted from the event, and we intend on making the train mobile an annual event along with the excitement of giving out QSOs from a train.

Here is a pictorial of some of the participants from our train mobile event:













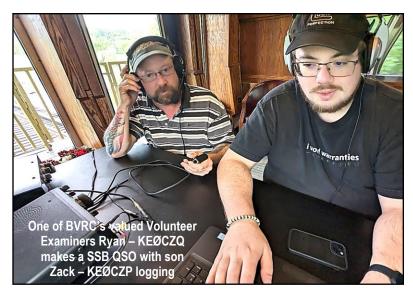


























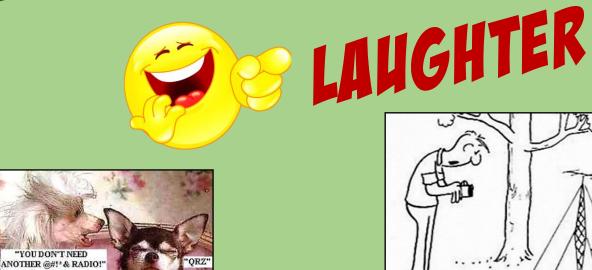








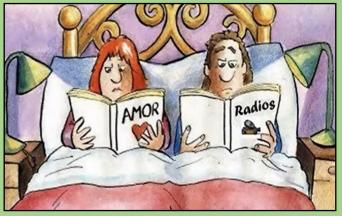
Before starting for home, the N5T group gathers for a photo at the end of a memorable day.





"Congratulations! You just made the down payment on a brand new SDR!







One of our BVRC valued members, San Hutson – K5YY will be moving out of the area in the near future and is selling much of his station equipment. San is a 65+ year ham and has acquired very nice components over the years. All items include the original user manuals and some include extras. All the items are in like new condition, and are priced to sell (well below E-bay and Amazon asking prices). ASKING PRICES ARE FIRM.

If interested in any of the items contact San at: sanfordhutson@gmail.com



COMPLETE ICOM STATION PACKAGE

IC-7600 transceiver, power supply, desk microphone, and matching speaker - \$1000.00.

(Transceiver alone is presently selling for \$1250-1500 on E-bay, so you are getting the p/s, mic, and speaker for free. This unit also has a custom dust cover. *Sold as package only.*)

TEN-TEC Titan III 1500w Amplifier

160-10m legal limit amplifier. Uses two 4-CX800A tetrode tubes. (Tubes alone selling for \$400 each on E-bay.) Comes with custom cover.

\$1200.00







Nye Viking 3KW Antenna Tuner

Clean. Comes with original user manual.



Cost new: \$2500.00

Selling for \$500.00



Palstar AT4K 2.5KW Antenna Tuner

Clean. Comes with original user manual.

Currently selling new for \$1395.00

Selling for \$500.00



25 amp continuous, 35 amp peak. Heavy duty heat sink.

Currently selling on vendor websites from \$370-400

Selling for \$125.00



Astron RS-70M Power Supply

57 amp continuous, 70 amp peak. Run two transceivers off this single power supply.

Currently selling on Amazon from \$550-600.

Selling for \$225.00



JRC NVA-88 Console Speaker

Great audio for your transceiver.

Currently selling used on E-bay from \$170-200.

Selling for \$50.00





Beginner's Dream Package

- Icom IC-2100H single band 2-meter transceiver with original hand mic, power cable, and mobile bracket.
- Astron RS-12A power supply.

Radio selling on E-bay for \$150. Power supply new cost is \$170.

Selling for \$100.00. (Sold as package only.)

(If you have a radio related item to buy, sell, or trade, we will be happy to list it for you in the 'Equipment Corner' of The Signal. Send your item information and/or pictures to Don-K5DB, arsk5db@gmail.com. Items must be received by the 10th of each month to be included in that month's publication.)



FOR SALE:

GENERAC IX 2000 2 KW Portable Generator/Inverter

I purchased this generator new in 2016 to use for the National Parks On The Air event. Since then I have only used it about 12-15 times. It is in like new condition and runs great. I have now decided to upgrade, and am placing this one for sale. Comes with user manual, new replacement spark plug, and oil fill funnel.

Paid \$700 new, asking \$350.

If interested, contact Don-K5DB at: arsk5db@gmail.com.









Choosing A Transceiver For the HF Bands From Don-K5DB

The Bella Vista area Radio Club has seen a huge influx of new members joining our great club, acquiring their Technician license and getting on the air. We have also seen them go deeper into the hobby by passing their General (and Amateur Extra) exam, thus giving them the privileges of operating on the HF bands.

Possessing the introductory Technician license is a terrific way to get started in amateur radio. Basically, you can operate on the local area repeaters, learn "how to talk" on the air by familiarizing yourself with the format and protocol, and have a lot of fun in doing so. However, if you want to enlarge your ham radio experience by operating on the HF bands, you are relatively restricted to the privileges that your Technician license affords you. — You can operate on several bands with the CW (Morse code) mode but to do that, you must either learn the code or use some type of code reader/sender software. You can operate phone (SSB) in a small segment of 10-meters, but you are not allowed to operate the digital mode of FT-8 with your Technician license.

However, by upgrading your license and passing your General exam, you will now have operating privileges on hundreds and hundreds of **HF frequencies** that will really open-up the ham radio world to you, and the fun and experience you will have will be exponentially multiplied.

And speaking of that General license and if you are interested in upgrading, you have your chance coming up very soon. – Instructor Glenn-WB5L will be conducting BVRC's 2024 **General license class** this July! A brief description of the class is on page 7 of this issue of The Signal. If you want more detailed information on the class, go to the General class information page on the BVRC website, by clicking here.

And while we're on the subject, here's a suggestion for our Technician newcomers. – Be sure and attend the BVRC Field Day on June 22-23. At that event, you can give operating on HF a test drive! With a General or Amateur Extra class control operator sitting beside you, you CAN operate the frequencies that you can't with your Technician license, with the club's callsign. If you discover operating HF is fun and appealing to you, you can then enroll in Glenn's General class that will begin just a couple of weeks after Field Day!

So for all our future General license class holders and our current holders as well, if you've just recently

acquired your General ticket, you're probably in the planning stages of setting-up an HF station in your shack. In case you haven't as yet answered the question "What kind of radio should I use?", hopefully you'll find this article informational and helpful for you:

Before we get into radios, let me first relate to you an ESPECIALLY IMPORTANT point: **The most important element of your station is** not your transceiver. – <u>It's your antenna</u>. To newer hams, radios are cool looking and antennas seem more of an ugly nuisance. Experienced hams know that antennas are just as sexy and beautiful as radios, and <u>they are essential</u>. As the saying goes, "If ya can't hear 'em, ya can't work 'em." *Your station is only as good as your antenna*.



So after you get your antenna situation figured-out, you can then move on to that question of "What kind of radio do I need?"

Ok......here's the raw truth about radios. Every HF transceiver manufactured by a major company today will allow you to make contacts, whether you purchase a new one or a used one (if you go with used, make sure the unit works whether you purchase it from a fellow ham or from a dealer/vendor).



So, the real questions to ask yourself are these:

 What is it I want to do with my radio? Your goals and objectives will probably vary from making casual contacts, net operations and message handling, HF emergency operation, contesting, and DXing.

- How much would I need to spend?
- Do I have space limitations for my shack? Transceivers of today vary widely in size from small, lightweight units up to larger and heavier units.
- What other accessories do I need or want, and how much will they cost? Think about microphones, earphones, CW keys, paddles, electronic keyers, digital interfaces and/or sound cards, power supplies, and antenna tuners.
- What's my budget?
- Consistent with my goals and my budget, should I buy a new radio or a used one?





One of the biggest differences between lower level and upper end radios lies in their interference fighting abilities. (I'm talking about on-air interference...not RFI, Radio Frequency Interference, the type of interference from nearby poorly shielded motors, compressors, welding machines, power transformers, etc.)

In general, the more you pay, the more the radio will be capable and the more filtering it will possess to reject unwanted signals near your desired operating frequency, avoid signal interactions creating annoying interference, and eliminate noise of various types (ignition noise if you're going to operate mobile, lids who tune-up on the air either right on top of you or on frequencies close to you, etc.) and change the audio characteristics of stations you want to receive to make them easier to "copy" (to hear clearly and understand.)



Some radios, both entry level and advanced, come fairly stripped down but can have accessories added that will aid in interference reduction. So, it's important to know just what's built into any base radio you might buy and what it will cost to "beef" it up for better performance. Usually, that better performance is gained (for older models) by adding analog filters that serve to "narrow the doorway" to allow the desired signal you want to hear, while excluding adjacent signals that would otherwise cause interference. Again, that is for older radios.

The good news about today's modern radios is that they incorporate built-in digital signal processing (DSP) and do not require these filters for optimum performance. And, there are other radios that may employ both digital and analog filtering, the latter usually being optionally available at extra cost.

Most transceivers consist of a single box containing one transmitter and one receiver. The receiver may have two "VFOs", or tuning platforms. These allow the alternate monitoring of two different frequencies, which is particularly very useful in operations conducted by DXpedition stations in what is called "split" operation. (See the September 2023 Signal, page 25 for more info. Go to the Signal archives on BVRC website, "Newsletters" tab.)





dual receive radios are generally more expensive than single receive radios, so the question of budget again may be a determining factor for you.

Who are the biggest manufacturers of HF radios in the U.S. market today?

In no particular order, they include: ICOM, Yaesu, Kenwood, Elecraft, FlexRadio, and Alinco. All of these companies make quality products. All of their currently produced HF radios can be computer interfaced for varying degrees of radio control and logging (yes, another big topic), and all are multi-mode operation: Phone (SSB), CW, Digital, and AM. Almost all the HF radios from these manufacturers are capable of 100 watt output. A few have 200 watt output (more \$\$\$). Personally, I would advise newcomers to HF operation to avoid QRP (5 watts or less) or near QRP (10 watts or less) radios unless you have a real desire to run low power. Making contacts with these is great fun but can be quite challenging, and for the newcomer frustrating, especially with only a modest antenna.

P/S – Don't forget the hamfests! Sometimes you can find excellent buys on used transceivers, which many of BVRC's members have found.



Also, there are higher end radios that are capable of dual simultaneous reception, the ability to listen to two frequencies at once. Without going into a lot of detail, let me say that if your main goal is the serious pursuit of DX contacts with the ability to work rarely activated locations that generate huge on-air pileups, a radio capable of dual receive is likely to be what you'll eventually want. However, if you think you'll be more interested in casual contacts, casual DXing and contesting, dual receive is not necessary. Of course,







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 can 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 simply 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

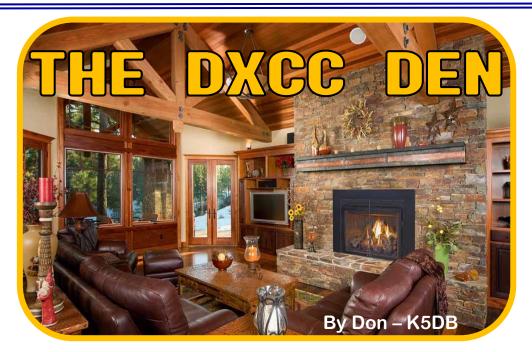
help. The list they developed literally offers a vast array of amateur radio knowledge from antennas to vintage equipment. They advise that there is no way to know how many people have used that site, but the club Facebook page manager says that he has been able to make many referrals to that page in 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 <u>do</u> 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, <u>none</u> of us are experts – we are all *amateurs*!

Chances are, you are 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!





Macquarie Island is an island in the southwestern Pacific Ocean, about halfway between New Zealand and Antarctica. Regionally part of Oceania and politically a part of Tasmania, Australia, since 1900, it became a Tasmanian State Reserve in 1978 and was inscribed as a UNESCO World Heritage Site in 1997. The island is home to the entire royal penguin population during their annual nesting season. The population of the base, constituting the island's only human inhabitants, usually varies from 20 to 40 people a year.

Frederick Hasselborough, an Australian, discovered the uninhabited island on July 11, 1810, while looking for new sealing grounds. He claimed Macquarie Island for Britain and annexed it to the colony of New South Wales in 1810. The island was named for Colonel Lachlan Macquarie, Governor of New South Wales from 1810 to 1821. Hasselborough reported a wreck "of ancient design", has given rise to which



Location of Macquarie Island

speculation that the island may have been visited before by Polynesians or others.

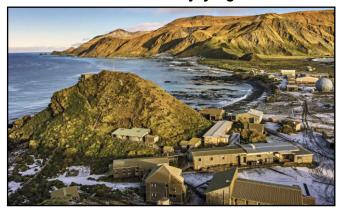
On December 23, 2004, an earthquake measuring 8.1 on the moment magnitude scale rocked the island but caused no severe damage. Geoscience Australia issued a Tsunami Inundation Advice for Macquarie Island Station. The paper indicated that a tsunami caused by a local earthquake could occur with no warning, and could inundate the isthmus and its existing station. Such a tsunami would likely affect other parts of the coastline and field huts located close to the shore. According to several papers, an earthquake capable of causing a tsunami of that significance is a considerable risk.

In September 2016, the Australian Antarctic Division said it would close its research station on the island in 2017. However, shortly afterwards, the Australian government responded to widespread backlash by announcing funding to upgrade ageing infrastructure and continue existing operations.

Macquarie Island is about 21 miles long and 3 miles wide, with an area of 149 sq. mi). The island consists of plateaus at north and south ends, each 490–660 ft. elevation, joined by a low, narrow isthmus. The high points include Mount Elder on the north-east coastal ridge at 1,263 ft., and Mounts Hamilton and Fletcher in the south at 1,345. The island is almost equidistant between the island of Tasmania and the Antarctic continent's Anderson Peninsula, about 930 miles to either point.



Part of a walrus herd enjoying the rare sun



Australian National Antarctic Research Station

Macquarie Island's climate is moderated by the sea, and all months have an average temperature above freezing; although snow is common between June and October, and may even occur in summer. Due to its cold summers, the island has a Tundra climate.

Average daily maximum temperatures range from 40.8 °F in July to 47.8 °F in January. Precipitation occurs fairly evenly throughout the year and averages 1,002.1 39.45 in annually. Macquarie Island is one of the cloudiest places on Earth with an annual average of only 862 hours of sunshine (similar to Tórshavn in the Faroe Islands). Annually, there is an average of 289.4 cloudy days and just 3.5 clear days.

Amateur radio wise, Macquarie is very rare. It currently ranks on the Club Log Most Wanted DX List at #14. This is mainly due to Macquarie not having a resident amateur operator. Since the populace of the island is mainly research teams who work several months shifts at the Macquarie Island Antarctic Research Base, the only time you'll be able to work it is when one of the research teams visiting there has a licensed operator as one of the members. Sometimes more than one operator may be present, but not very often. When this does occur, the operators are usually on a 'holiday style' operation, only being able to get on the air in their spare time (work before play!).

Needless to say, whenever a VKØM station does hit the airwaves, no matter what time of day or night, dedicated hams eagerly scan the airwaves for the rare station and hope their efforts are rewarded with a successful contact with Macquarie.



Macquarie's climate is tundra

Over the past two decades there have only been a handful of approved amateur operations from Macquarie, the most recents being VKØMM in 2000, in 2011 using the callsigns VKØTH and VKØKEV (both being a departure from the usual VKØM prefix), VKØMM again in 2015, VKØAI in 2019, and VKØMQ in 2022.



Royal penguins are unique to Macquarie Island and are only one of two breeds found there



There has been no word of any planned operations from Macquarie in the near future. All we can do is wait and hope that another researcher with an amateur license and radio gear will be on a research team visiting there. In the meantime, keep an eye on the DX websites for any future announcements on this scarce and

My only Macquarie QSL from a SSB QSO in 2000 ▶

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elusive DX entity. It will be a great trophy to add to your DXCC worked countries list.