

Happy
New Year
2026

THE SIGNAL

NEWSLETTER OF THE BELLA VISTA AREA RADIO CLUB

Arkansas' Largest Amateur Radio Club

- Christmas & Awards Banquet Recap
- **ATTENTION: January Club Meeting Date Change**
- 2026 BVRC CW Academy Registration Now Open
- In Memoriam – KG5MWG
- Community Outreach Team – Candy Cane Run
- The 2026 ARRL America250 Worked All States Award
- BVRC Club Station Update
- Newcomers – BVRC Has Your Back
- End Fed Half Wave vs. Dipole
- DXCC Den – Callsignology

Special
2025 BVRC
Christmas & Awards
Banquet Issue



January 2026

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

(Repeater Nets)

(Contesting, Operating, Special Events)

BVRC Twin Linked Repeaters:

Bella Vista: 147.255 +600 khz offset, pl 162.2

Springdale: 444.100 + 5 MHz offset, pl 162.2

Website: www.bellavistaradioclub.org



*The Largest Amateur Radio Club
In Arkansas!*

**Serving members in northwest Arkansas,
southwest Missouri, & northeast Oklahoma**



WEEKLY NETS:

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

BVRC HAM 101 NET

Mondays @ 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 103.5

BVRC SOCIAL JUNCTION NET

Sundays @ 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 103.5

BVRC SLOW SCAN TV NET

("The Slow Scan Show")

Fridays @ 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



NEXT BVRC MONTHLY MEETING

THURSDAY, JANUARY 8, 2026 @ 7PM
ARKANSAS LAW ENFORCEMENT TRAINING ACADEMY
3424 S. DOWNUM ROAD
SPRINGDALE, AR

January Meeting Information

HAM 101 Workshop, 6pm preceding monthly meeting – The Workshop kicks off 2026 with BVRC's Jay Bromley – W5JAY as workshop moderator. Jay will be discussing the very interesting topic of "Tips and Techniques For Better Station Performance". Jay is another of our club's authorities on many aspects of operating and will be supplying intriguing and important information for this month's Workshop. Be sure and be there!

BVRC January meeting, 7pm – To begin our new year of 2026, BVRC welcomes Frank Howell – K4FMH from Ridgeland, MS. Frank is Professor Emeritus at Mississippi State University and Adjunct Professor at Emory University. He has been an avid SWL and antenna builder since he was 8 years old. Frank has many other educational accolades and is a life member of ARRL. He has been involved with several amateur radio clubs throughout the southeastern United States and has also been involved with commercial broadcast station constructions. He is a presenter on the ICQ podcast, as well as co-host of other radio programs on standard broadcast stations in TN and ME. Frank will be presenting a compelling program on "HF Rigs – Price and Satisfaction Studies". Frank has researched this topic for many years and is well versed on this subject. His presentation will be jam-packed with important information, especially for those presently in the market for radio equipment.

DON'T MISS OUT AND SEE YOU THEN!

ATTENTION!



Due to the first Thursday in January of 2026 falling on New Year's Day, the BVRC January 2026 meeting will be held on the

SECOND THURSDAY
January 8, 2026

Please make a note of this date change in your calendar

73 and see you then!

BOARD MEMBERS



APPOINTED OFFICERS

President

Jan Hagan - WB5JAN

wb5jan@arri.net

Vice President

Kathy Bromley - WQ5T

skbwq5t@outlook.com

Secretary

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grannysharr@gmail.com

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Marc Whittlesey - WØKYZ

almarc11@yahoo.com

Technical Officer

Tem Moore - N5KWL

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N5BVA Trustee

Roger Dickey - KJ4QIS

dickeyr@gmail.com

Member At Large & Public Information Officer

Tom Northfell - W5XNA

w5xna@arri.net

Education & Elmer 911 Committee

Chair: Vinson Carter - WV5C

vinsoncarter@gmail.com

Nets Committee

Chair: Dana Widboom - KI5TGY

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Membership Committee

Chair: Tom Northfell - W5XNA

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Social Media &
Community Outreach Committee

Chair: Alex Smith - KI5EQK

ki5eqk@gmail.com

W5NX Trustee

Jay Bromley - W5JAY

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Webmaster

Roger Dickey - KJ4QIS

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VE Testing Committee

Chair: Don Banta - K5DB

arsk5db@gmail.com

Newsletter Editor

Don Banta - K5DB

arsk5db@gmail.com

WELCOME TO BVRC 2026!

Our club has many exciting activities and events planned for the year ahead. However, it's nice to look back on the successful year we had this past year with the growth of our Community Service efforts, the development of our W5NX Club Station and several fun events and activities, now including five BVRC nets on HF, VHF and UHF.



BVRC participated in this year's Maker Faire at the Fayetteville Public Library held Saturday, September 6, 2025. The event touts that it "brings together creators, innovators, and DIY enthusiasts to showcase their projects, share ideas, and show us all what the future can be." The club visited with over 100 people who stopped by our booth. Here is a link to the story published on the ARRL's website regarding BVRC's participation in the Maker Faire: [Arkansas Club Shares Ham Radio at Maker Faire](#).



A year of planning and hard work by BVRC and the University of Arkansas Radio Club culminated in a direct ISS contact via amateur radio on Monday, March 31st, at 1:05 (CDT). The ISS pass over NW Arkansas lasted approximately 10 minutes, and several Springdale School District students had the opportunity to ask questions of astronaut Nichole Ayers – KJ5GWI (at left) aboard the space station as she operated with the official ISS call sign NA1SS.



BVRC members from all over northwest Arkansas, the Arkansas River Valley, northeast Oklahoma, and southwest Missouri made their way to Metfield Park in Bella Vista for another excitement and fun-packed Field Day 2025 on June 28-29. Mother Nature did provide a small amount of excitement twice for about 30 minutes on Friday evening during antenna raising and on Saturday evening with 30-40 mph winds and heavy rain, but it did not dampen the spirits of our Field Day operation at all. On the contrary, the (once again) excellent evening meal provided by our Hospitality Director Bill KG5ZCI, assisted by Rebecca-N5REB and Alex-KI5EQK offset Mother Nature's antics.



Yes, 2025 was quite a year for BVRC. But just wait, 2026 should prove to be another exciting and fun year for you, our members!

73!
Jan – WB5JAN

MEMBERSHIP RENEWAL



A reminder for everyone wanting to keep their BVRC memberships current for the coming year and have not yet done so, the deadline for dues is March 31. The dues are \$15.00 per year (\$1.25 a month). If you have any immediate licensed family members living with you at your home domicile, you can include them as a Family Membership *at no extra charge*. You can renew your membership using any of these options:

- Personal check or money order to the BVRC Treasurer, Marc – WØKYZ via regular mail, payable to:

Marc Whittlesey
1 Radcliffe Drive
Bella Vista, AR 72714

- Via PayPal by using Marc's e-mail address: almarc11@yahoo.com. After entering \$ amount, in the next section marked *What is this for?*, enter "BVRC membership renewal"
- Pay in person at a BVRC monthly meeting

Also note: If you are 73 years of age or older you now qualify for BVRC's Lifetime Membership. Contact Marc at the above e-mail address and when you advise him that you have reached your 73rd birthday, your membership in BVRC from that time forward is FREE. You will also receive a handsome BVRC Lifetime Member certificate suitable for framing.

The BVRC membership form and other essential information is included on the BVRC website club membership page. To view the page, click [here](#).

THANKS FOR YOUR CONTINUED SUPPORT!



BVRC Monthly Programs Needed

Would you like to present an amateur radio-related program at a club meeting? Or would you like to suggest an interesting topic for a presentation? Contact:

**Don – K5DB: arsk5db@gmail.com
or any Club officer (see page 6 of this issue)**

BVRC Christmas and Awards Banquet 2025



The Bella Vista area Radio Club experienced a record busting attendance for its annual Christmas and Awards Banquet for 2025 as over 120 BVRC members arrived at the ALETA complex in Springdale for a gala evening of great food, fun, ham radio fellowship and door prizes.

Speaking of door prizes, BVRC surpassed all previous banquets with over 25 prizes being given away. All the great festivities, coupled with the unveiling of BVRC's annual awards, provided for a spectacular evening.



**Jacob Smith – KI5YDZ
and XYL MacKenzie**



**The Biazio Family (right to left):
Jerry-W5JDB, XYL Jami,
Ryan-K5HEX, and XYL Rylee**



**Bob Winkle – N3AZZ
and XYL Carol – W5CDW**



**Jon Williams – K5DVT enjoys an eyeball QSO with
Serenity Biggs – W3SIX along with Jon's mom,
Carol – KF5OQF**



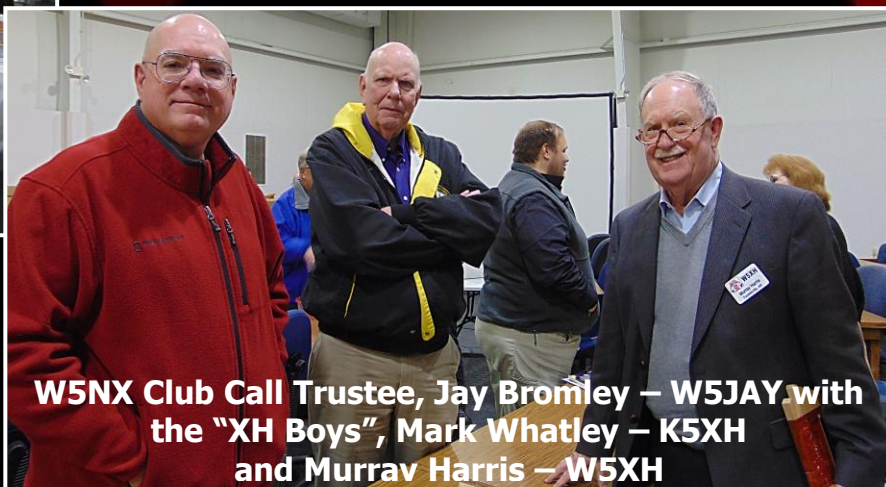
The Banquet enjoyed a return performance of Christmas favorites by the Hope Quartet



John Robinson – W5HB and XYL Kim – KD5TVX
(John & Kim are BVRC's official supplier of club name badges, caps, and other great accessories)



Another great year of fare featuring Giraldi's lasagna and a multitude of delectable desserts



W5NX Club Call Trustee, Jay Bromley – W5JAY with the "XH Boys", Mark Whatley – K5XH and Murrav Harris – W5XH

The Awards Presentations

Rookie of the Year

Serenity Biggs – W3SIX



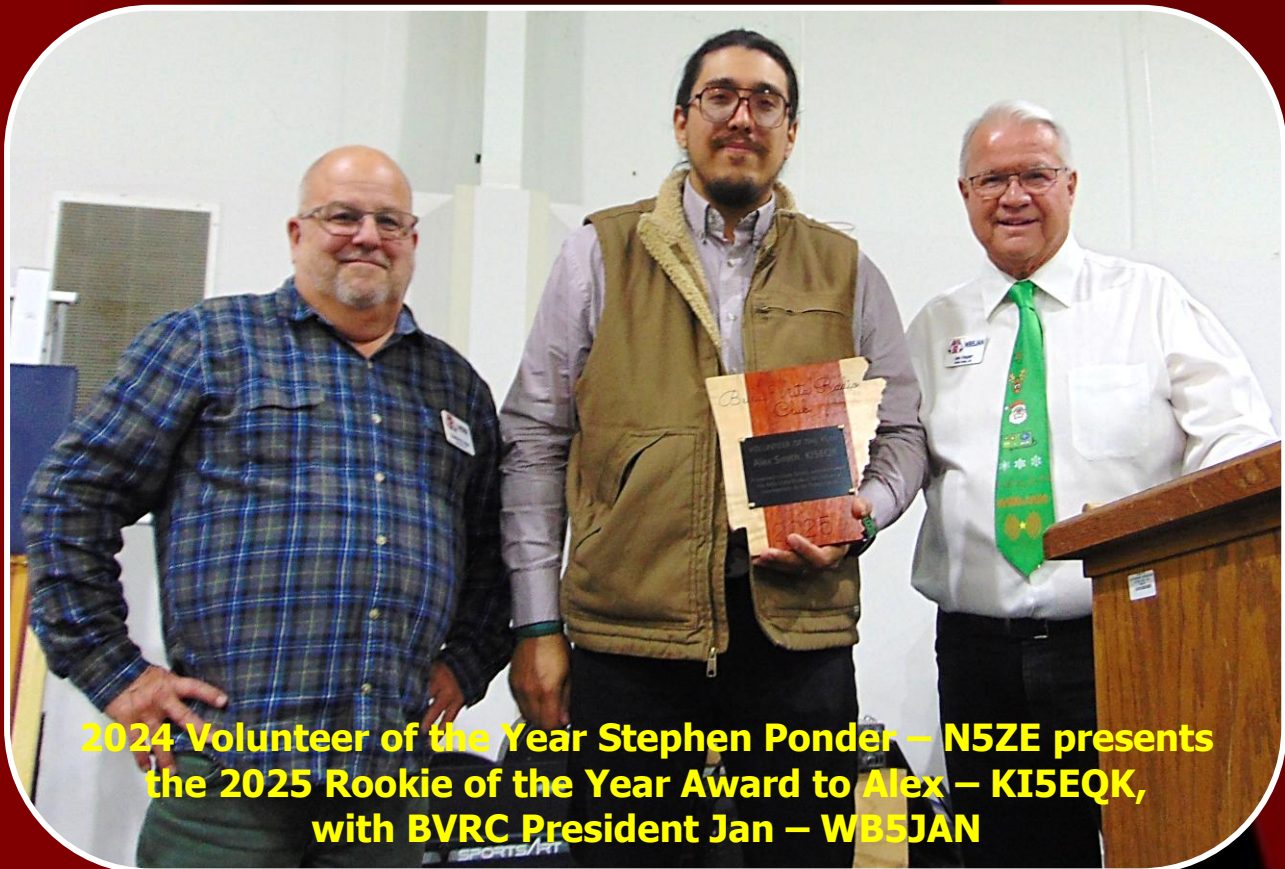
2024 Rookie of the Year Michael Kemper – W5KMK presents the 2025 Rookie of the Year Award to Serenity – W3SIX, with BVRC President Jan Hagan – W5JAN

The BVRC 2025 Rookie of the Year recipient is Serenity Biggs – W3SIX. Serenity demonstrated outstanding growth in operating excellence and club participation. She was one of the leading operators at BVRC's 2025 Field Day and has taken the reigns as a Net Control Operator for the Ham 101 Net. She has also been the driving force in starting the Social Junction Net, focusing on our women and children members.

Congratulations, Serenity!

Volunteer of the Year

Alex Smith – KI5EQK



2024 Volunteer of the Year Stephen Ponder – N5ZE presents the 2025 Rookie of the Year Award to Alex – KI5EQK, with BVRC President Jan – WB5JAN

The BVRC 2025 Volunteer of the Year Award is presented to Alex Smith – KI5EQK. Alex has taken the Bella Vista Radio Club's culture of volunteerism to the highest level by the generous giving of his time and talent to assist club members and support the goals and activities of the club. Alex has taken on the new BVRC initiative this year of providing public service to other non-profit organizations throughout Northwest Arkansas. He has also become one of our HAM 101 Net's newest Net Control Operators. Of course, Alex is always at the ready as part of the all-important Food and Beverage Committee On behalf of the Board and membership of BVRC, *thank you Alex and congratulations!*

Presenter of the Year

Dr. Murray Harris – W5XH

&

Dr. Vinson Carter – WV5C

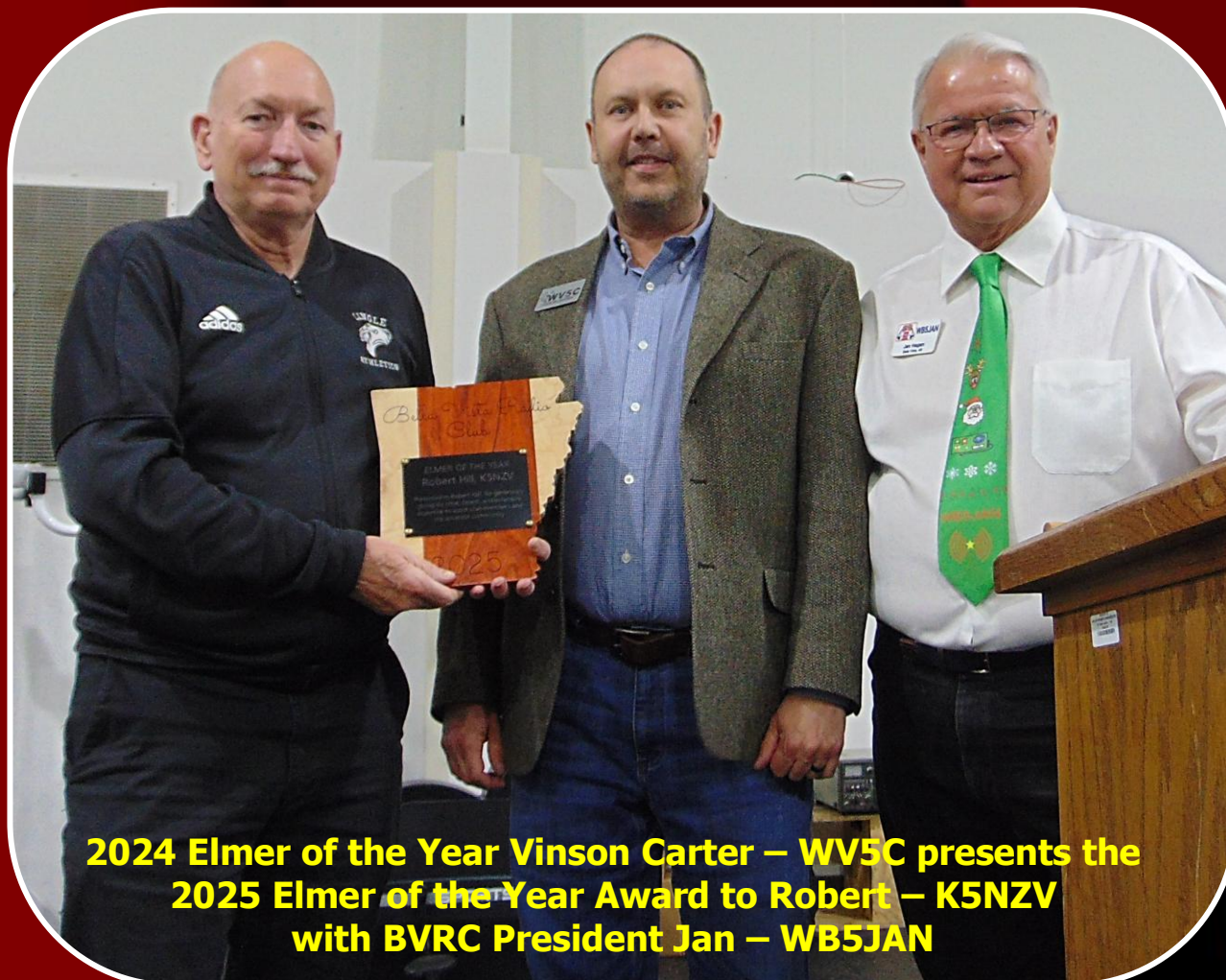


2024 Presenter of the Year James Bennett – KA5DVS presents the 2025 Presenter of the Year Award to Vinson – WV5C and Murray – W5XH with BVRRC President Jan – WB5JAN

The 2025 Presenter of the Year Award goes to Murray – W5XH and Vinson – WVC for their outstanding BVRRC presentation, “Contacting the International Space Station”. Their outstanding presentation was engaging, informative, and extremely well presented. The story of how the Springdale Public Schools came to be approved for a contact with the ISS, as well as the training of the students for making the contact and the development of the infrastructure needed for the contact, was dramatic to say the least. They had us on the edge of our seats! On behalf of the Board and membership of BVRRC, *thank you Murray and Vinson and congratulations!*

Elmer of the Year

Robert Hill – K5NZV



2024 Elmer of the Year Vinson Carter – WV5C presents the 2025 Elmer of the Year Award to Robert – K5NZV with BVRC President Jan – WB5JAN

The 2025 Elmer of the Year Award recipient is Robert – K5NZV for his outstanding service in supporting club operations and generously giving his time, talent, and extensive expertise to assist and advise club members and the amateur community. Robert founded and leads KA5LMS – the Lingle Middle School Amateur Radio Club, a unique club dedicated to engaging and educating young students in the exciting world of amateur radio. Robert is an avid and accomplished Parks on the Air enthusiast and has shared his expertise in a presentation at one of our monthly meetings. He has mentored many members about how to get started in Parks On the Air by conducting park activations. Robert also serves as the BVRC North VE Team Lead for the club testing program at the Bella Vista Library. On behalf of the Board and membership of BVRC, *thank you Robert and congratulations!*

Special Service Award

**Chuck Korzendorfer – KM5G, Stan Stockton – K5G0,
Gregg Harrison – K5GKH, Dennis Tune – W5DM, Don
Banta – K5DB, and Clint Scrivner – ALETA Director.**



BVRC Vice-President Joe Hott-W5AEN and BVRC President Jan Hagan-WB5JAN present the 2025 Special Service Awards to Dennis-W5DM, Don-K5DB, and Gregg-K5GKH (Chuck-KM5G, Stan-K5GO, and Clint were unable to be present for the awards)

Special Service Awards were Presented with honor to these six individuals in recognition of their extraordinary service to the Bella Vista Radio Club and the amateur radio community. During the past two years, BVRC has worked toward the goal of establishing a permanent BVRC Club Station for the benefit of all members. During this time, more than twenty people have made significant contributions of time, talent, and energy towards the accomplishment of that goal. However, the club wishes to especially recognize these six members whose efforts and contributions have been crucial towards the success of that goal.

These gentlemen have truly demonstrated the trait of a “servant’s heart” through their significant and vital contributions. On behalf of the board and membership of BVRC, *thank you all from all of us and congratulations!*

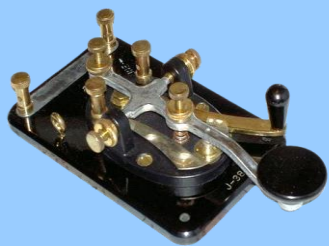
The 2025 BVRC Ham of the Year

Stephen Ponder – N5ZE



**2024 BVRC Ham of the Year Jon Williams – K5DVT presents
the 2025 Ham of the Year Award to Stephen – N5ZE (left)
with BVRC President Jan – WB5JAN**

The 2025 Ham of the Year Award goes to Stephen – N5ZE, who has given the gift of his time, talent, and resources to serve as a shining example of BVRC's culture of welcoming support for the club and all its members. As a past recipient of BVRC's Volunteer of the Year, Stephen is always giving his time to support the club's meeting logistics and event set ups. He has also demonstrated his thirst for knowledge in several aspects of our amateur radio hobby that makes him a wonderful example for our members. Venturing into digital radio operations with FT8 as well as working with morse code, Stephen, in his relatively short time in the hobby, has acquired not only the Worked All States Award, but also the coveted DXCC Award from the American Radio Relay League. In short, Stephen is an accomplished and well-rounded amateur radio operator who strives to improve his skills while also working for the benefit of our club members. On behalf of the Board and membership of BVRC, *thank you Stephen and congratulations!*



BVRC CW ACADEMY STARTS APRIL 7 !



The 5th BVRC CW Academy will begin Monday, April 7, 2025! If you are interested in learning and adding Morse code to your amateur radio experience, if you enjoy a classroom atmosphere, and if you would like to join other beginning students in a fun and relaxed atmosphere in learning the code, here is a “well ahead of time” heads-up for you to sign-up for the classes.

DESCRIPTION:

Event – Bella Vista area Radio Club CW Academy

Location – Arkansas Law Enforcement Training Academy (ALET), Springdale

Instructor/Coach – Don Banta – K5DB

Class Schedule – Classes will be held every two weeks on Tuesday evenings.
There will be 10 class sessions: April 7, April 21, May 5,
May 19, June 2, June 16, June 30, July 7, July 21, and August 4.
(A virtual class orientation will be held Monday, March 17.)

Homework – There will be homework assignments for each class.

Class Times – 6:30pm to 8:30pm

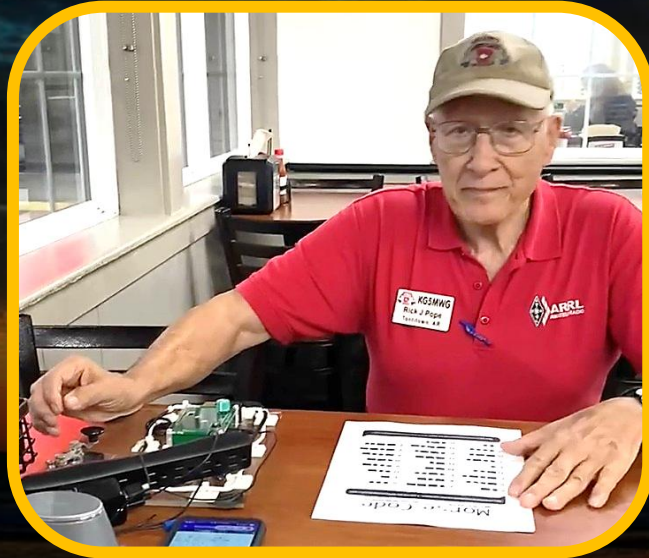
Class Objective – At the completion of the course, students will be able to send and receive all letters, numbers, most used punctuation marks, and prosigns at 5 words per minute. A handsome Certificate of Completion will be awarded to each student passing the final CW test and completing the course.

Equipment information – **YOU DO NOT HAVE TO PURCHASE A KEY OR OSCILLATOR!**
Keys and oscillators will be provided free of charge on a loan-out basis for the duration of the class. Paper and pen are all you need to supply.

The class will consist of 8 students, so seating is limited.....sign-up today!

To sign-up – Contact Don at: arsk5db@gmail.com

It is with deep regret we record the passing of one of our esteemed members:



In Memoriam

**Rick Pope
KG5MWG**

Rick Pope – KG5MWG, became a Silent Key on November 27, 2025. He passed away in Fayetteville, Arkansas at the age of 80.

Rick served his country with honor in the United States Navy, an experience that shaped his sense of duty and deepened his appreciation for camaraderie and service.

Rick was first licensed in 2016 and retained his original call sign, KG5MWG. He then upgraded to General in January of 2020.



He first became interested in ham radio when he was 15. He didn't pursue an amateur license until 2016, when he joined ARCUA (the Amateur Radio Club of the University of Arkansas). Rick loved the amateur radio fraternity and camaraderie and was an active member in numerous amateur radio clubs in the NW Arkansas area. He loved recruiting new hams, and to pursue that objective setup many amateur radio and ARRL exhibits throughout NW Arkansas. Most of Rick's equipment came from his son-in-law, Dale – N3DJO.

Rick was active on the repeater nets, with Special Event Stations, and was a mainstay at many BVRC Field Days. He was a dedicated attender of BVRC monthly meetings and was always willing to help with any task the club needed. He also was a graduate of the 2nd BVRC CW Academy class, in which his Morse code sending and receiving performance was very good. Rick also maintained probably the most robust ham radio event calendar in the region.

It has been a great pleasure to have Rick in the BVRC family and he will be missed. RIP, Rick.

BVRC Community Outreach Team Participates in Candy Cane Foot Race

The BVRC Community Outreach Team added to their outstanding 2025 resumé, as they concluded the year in providing public service communications for the Candy Cane Race in December. It was a chilly day, but our great team braved the elements to furnish the race with excellent communication assistance.

Thanks team!!!!!!!!!!!!



AN ISOPROPYL ALCOHOL SPRAYER

By Dick Weir – N8HG

I often find myself needing to quickly clean parts with isopropyl alcohol. But, the hassle of fetching the isopropyl alcohol bottle, opening it, and then looking for a small container to pour it in before cleaning the part takes a longer time than I prefer. If you have that same problem, here is a quick fix: take a small spray bottle and repurpose it.

I had an old 5-fluid ounce antiseptic spray bottle that I was about to toss into the recycling bin. It dawned on me that I had a use for this bottle. So, I peeled off the label, cleaned it of its former contents, and re-labeled it. I generated the new label in PowerPoint and taped it on (see photo at left). Now, whenever I need to clean a part, I reach for the spray bottle for an instant cleaning. This has saved me a lot of time and frustration and given me more opportunity to be on the air.



From



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ARRL Celebrates Semiquincentennial with America250 WAS Award

During 2026, ARRL will celebrate the semiquincentennial of the U.S. by holding a year-long America250 Worked All States (WAS) Award operating event.

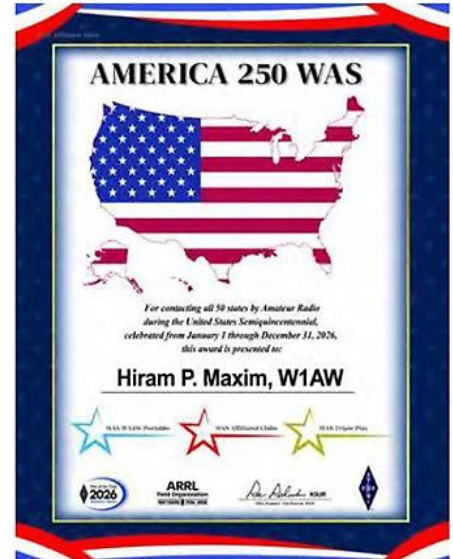
To seek the America250 WAS Award, contacts must be uploaded to and confirmed within Logbook of the World® (LotW®). The award is a for-purchase WAS certificate suitable for framing.

For this operating event, ARRL will provide a listing of all W1AW/portable stations, who will operate for 7 days from a Wednesday through the following Tuesday for two separate weeks in the year, an early week and a late week. A few weeks will be listed as non-W1AW/portable weeks due to contests and ARRL Field Day.

Endorsements

There will also be endorsements available that add to your working 50 states, including:

- WAS by contacting W1AW/portable stations
- WAS by contacting ARRL Affiliated Club stations
- WAS Triple Play by contacting all states on all three modes (phone/CW/digital)



**Earn the America250 WAS Award
certificate in 2026**

Operating Etiquette

Use of the W1AW call sign is a privilege, and W1AW/portable stations should show best practices and courtesy when operating. Operators must operate using the privileges granted only by their personal license class serving as a control operator (or within the operator privileges of the highest-class control operator present and observing operations).

While the object of the America250 WAS event is to hand out as many contacts with W1AW/portable states as possible, on as many bands and modes as possible, all operators are encouraged to explain celebrating America's 250th anniversary with the ARRL America250 Award to the degree that your operating time allows.

Bands

Activity is encouraged on bands (including WARC bands) from 2200 meters LF through all of HF, through all of VHF/UHF/SHF, and through all of the microwave bands including via light (but excluding 60 meters). While all three modes (phone/CW/digital) are allowed, please balance CW and phone activations against the ease of just making digital contacts.

QSLs

There are no planned QSL cards for any of the W1AW/portable America250 operating event stations during this event. All W1AW/portable contacts will be confirmed via LotW. Stations who contact W1AW at ARRL HQ can upload such contacts to LotW and/or send QSL cards (with SASE) to W1AW, 225 Main St., Newington CT 06111 – for contacts made directly with the W1AW Hiram Percy Maxim Memorial Station.

Applications

Applications for the America250 WAS Award can be made via LotW once a minimum of 50 state QSO confirmations appear in LotW for contacts made in 2026. To apply within LotW, look at your usual LotW WAS page summaries, which will show your progress toward the America250 Award, then when applying in LotW, the usual WAS Award processing fees will be displayed for the America250 certificate and shipping.

After the initial America250 Award certificates are issued, endorsements can be sought. These will be supplied as America250 endorsement stickers to apply to your America250 Award certificate.

Contact awards@arrl.org with any questions.



The BVRC Club Station Task Force once again convened on Saturday, December 20, implementing steps in the final station construction phase. The work involved checking each section of the coax from the tower to the station radio for SWR and integrity of the connectors. It was found that the main coax from the beam antenna down to the bottom of the tower was sound with good SWR, and the main line from inside the building at the tower location to inside the room of the station was also sound with good SWR. However, there was an issue found with the integrity of the jumper coax connectors. Wiggling the connectors caused the SWR to fluctuate from very good to very bad. The result of all the testing and analysis that day determined the jumper coax sections will have to be remade with better, more expensive connectors that require a special tool to install correctly. This corrective procedure will be conducted soon.

Stay tuned for station construction updates.



Joshua Bishop – KG5DVJ – Fayetteville
John Mason – KJ5IDY – Gassville, AR
Chuck Foley – W5CJF – Fort Smith





NEWCOMERS: BVRC Is Here For You!

If you're new to BVRC and amateur radio, there are many of us who know EXACTLY what you're going through:

- What do I do now?
- How do I program my HT?
- How do I make a contact?
- What is FT8 all about?
- What's the best coax to use?
- What is APRS?
- What is a "hamfest"?
- What does "greyline" mean?
- What kind of radio should I get?
- Where can I find the repeater frequencies?
- Can I buy a decent HF radio on a budget?
- What kind of logging software should I use?
- What are these strange calls I'm hearing?
- Should I use just a single or dual band radio?
- What are the good ham radio apps?
- How do I ground my station?
- What kind of antenna should I use?
- I have high SWR – what can I do?
- How do I learn Morse code?
- How can I learn about propagation?
- How do I operate on a Net?
- What are radials?
- How do I become a Storm Spotter?
- What is UTC?

All of us have "been there and done that". That is why BVRC has several experienced hams that are here to guide and help you avoid some of the "walls" that you might run up against when learning the ins-and-outs of the hobby. And.....even if you're not new to ham radio but possibly in a quandary about something, *we're here for you too!* With BVRC, you have several resources that are available to you that will assist you in understanding what amateur radio is and how it works, and they're all out there waiting on your call for help!

- **ELMER 911** – This is an exclusive service for BVRC members, and in particular, our newcomers. You can pose a question 24/7 through ELMER 911. All you have to do is go to the ELMER 911 page on the BVRC website, then go to the ELMER 911 tab: <https://bellavistaradioclub.org/elmer-911/>. You will see a form that you can complete that describes your question or issue. Complete the form, then click "SEND". Our ELMER 911 Coordinator will then assign your question to one of our team of Elmers who will contact you via e-mail. You should get your answer in 12-24 hours, and sometimes sooner.
- **HAM 101 Workshops** – Just before each regular BVRC monthly meeting at 7:00 pm at the ALETA facility, come join us for the HAM 101 sessions, beginning at 6:00 pm. These sessions are designed specifically with newcomers in mind, so you can bring your questions, have those questions answered by our experienced Elmer (mentor) hams present, and also learn more about the hobby from the Q&As of other participating newcomers. We've had very good attendance on each BVRC meeting night. Our ELMER 911 feature is, of course, ultra-convenient. But if you'd rather enjoy the fun and excitement of in-person newcomer get-togethers, you can join-in with the monthly HAM 101 sessions, or you can join on-air newcomer gatherings each week on the BVRC HAM 101 Net. *And, of course, experienced hams are welcome to these sessions, anytime.*
- **BVRC HAM 101 Net** – Get your questions answered or issues resolved (as well as gaining on-air experience!) by joining us on our weekly HAM 101 Net. This net resembles the in-person HAM 101 monthly meetings, except it occurs on-air. A panel of Elmers will be on hand to field any questions or issues you might have. It's a fun on-air experience that you'll really enjoy and also learn net operation protocol in case you're unfamiliar with nets – a great learning experience! This net takes place on the WX5NAS Skywarn Link System. You can find the repeater that is closest to you and it's operating frequency, offset, and PL tone on page 3 of this newsletter. *Experienced hams are also encouraged to join us. You're welcome anytime!*

So, take advantage of these opportunities if you need help with something (experienced operators, too!) Send-in your question via the website, join us at the Ham 101 Workshop newcomer meetings, and check-in on the HAM 101 Net to ask questions and learn from other members' questions! BVRC has your back!

End Fed Half Wave and Dipole Antennas

Pros & Cons



BVRC continues to experience many new hams entering our great hobby as they pass their Technician license exam. They then continue to the next step of upgrading to General Class where they wish to explore the new plateau of going beyond 10 meters (in addition to their CW privileges on three other bands) which their Technician license allows and experience the thrill of all the other HF bands. At that time, they usually experience the quandary of which type of antenna to use. Two very popular types being used today are the End Fed Half Wave (EFHW) and the Half-Wave Dipole antenna. "What is the best antenna for me?" they end up asking themselves. Perhaps this short article will help in making that decision.....

A dipole antenna and an end-fed half-wave (EFHW) antenna are fundamentally similar in that both are half-wavelength resonant radiators, but they differ in their feed point and impedance characteristics. A standard dipole is center-fed, where the feedline connects at the midpoint of a half-wavelength wire, resulting in a relatively low input impedance of approximately 73 ohms due to high current and low voltage at the center. In contrast, an end-fed half-wave antenna is fed at one end, where the current is minimal and the voltage is maximal, leading to a very high input impedance, typically ranging from 2000 to 4000 ohms.

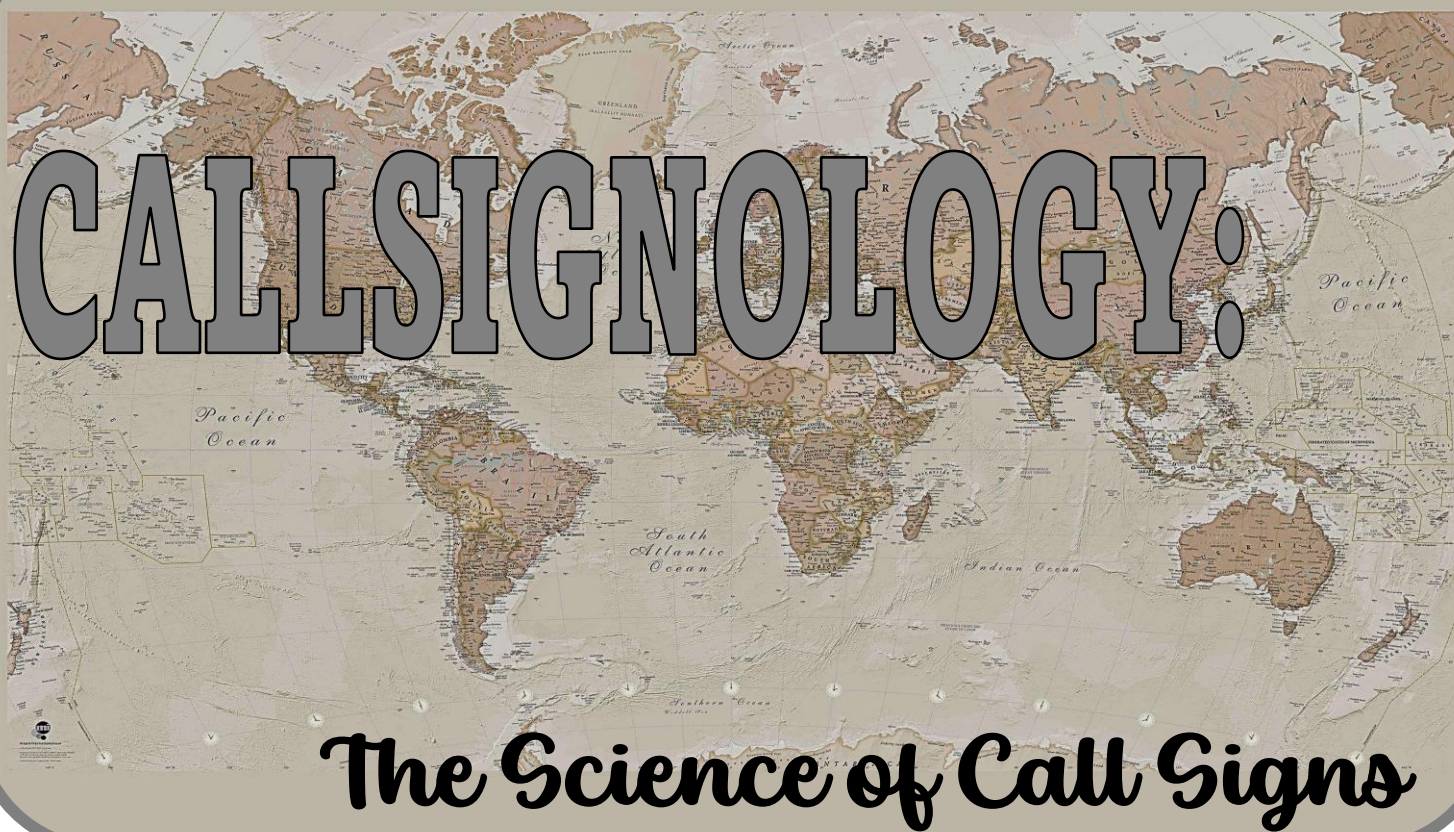
Because of this high impedance, an EFHW requires an impedance matching network—such as a 49:1 or 9:1 unun (unbalanced-to-unbalanced transformer) or a quarter-wavelength matching section—to transform the impedance down to a level compatible with standard 50-ohm coaxial feedlines. This matching section is often implemented as a $\lambda/4$ transmission line, shorted at one end and connected to the end of the half-wave radiator, with the feed point tapped near the shorted end to achieve a 50-ohm impedance. The J-pole antenna is a common example of this configuration, especially popular in VHF and UHF applications.

Performance-wise, under ideal conditions, both antennas exhibit similar radiation patterns, gain, and directivity when properly installed. However, practical deployment often affects their performance. EFHW antennas are frequently installed in vertical or steep inverted-V configurations, which can increase their pickup of vertically polarized noise compared to a horizontally deployed dipole. Additionally, the end-fed configuration may require a good counterpoise or RF choke near the feed point to prevent common-mode currents on the feedline, which can cause RF interference and reduce efficiency. (To use or not to use the counterpoise for an EFHW antenna has been an ongoing debate for years. If you choose an EFHW, try it with and without a counterpoise and compare.)

The choice between the two often comes down to installation constraints. A dipole requires two support points and a center feed, while an EFHW can be mounted with a single support point at one end, making it more convenient for limited space or single-pole installations. However, the EFHW's performance is more sensitive to nearby objects and ground conditions due to its high impedance and reliance on proper RF choking and counterpoise.

In summary, while both antennas are resonant half-wave structures, the dipole's center feed provides a naturally low impedance, whereas the end-fed version requires external matching and careful installation to achieve optimal performance but is, overall, a good antenna also. Thousands are presently in use.

Ultimately, the choice of which antenna to use is dependent upon the space available at the station location, terrain, feed point impedance, radiation pattern behavior across bands, environmental configuration, counterpoise quality, and installation height which significantly influence the performance of both EFHW and dipole antennas. Keep in mind when making the decision of which to use, the characteristics of each configuration presenting distinct trade-offs in terms of ease of deployment, noise susceptibility, and radiation efficiency.

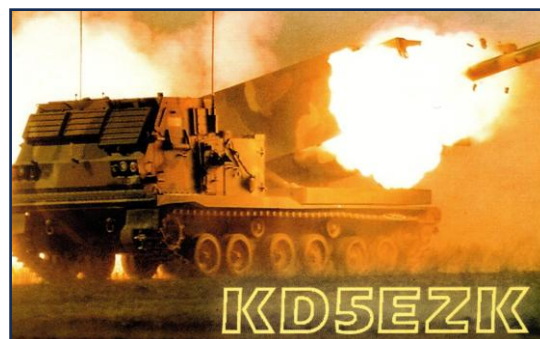


To begin our DX journeys for 2026, we are going to depart this month from touring rare and exotic DX entities and submit for your information an article concerning call signs. We have many new members who, with their Technician license, are discovering the fascinating world of DX especially on the 10-meter band, and those who have recently passed their General exam and who are enjoying the huge increase of HF privileges on all the HF bands. When first becoming familiar with DXing, the call signs of DX stations can be confusing, as DX call signs can be a “bowl of alphabet soup” with the many combinations of call sign prefixes.

Amateur radio call signs are in the international series and are issued by the ITU (International Telecommunications Union). They normally consist of a PREFIX which could be one or two letters, a NUMBER which usually denotes a geographical area, and a SUFFIX which consists of 1, 2, or 3 letters.

However, there are many exceptions to this format, especially when international call signs come into play. No matter what facet of HF amateur radio you enjoy (casual QSOs, state hunting, county hunting, DXing, POTA, etc.) it will probably be advantageous for you to understand the structure of callsigns. Doing so will keep you from becoming confused when a strange call sign comes your way. Let's take a look at how the international call sign system works:

In the United States, all callsigns begin with A, K, N, or W. The term "2x3 formatted callsign" means the callsign has a 2-letter prefix, a number, and a 3-letter suffix. It usually denotes the callsign that the licensee was issued when they acquired their first license. Example: KD5EZK. The same is true with older 1x3 callsigns, Example: W4RTE.



There are also vanity callsigns that are specially granted to holders of certain license classes, if the callsign is available and they choose to be issued those callsigns by the FCC to replace their current one. (When they upgrade they can also request a new sequential call sign, or retain their original callsign if they so choose.) An example of these would be Advanced Class license holders. The Advanced class exam has not been administered and the license not issued since its deletion in 2000, but these license holders of course still retain their full operating privileges and have 2x2 formatted callsigns. Example: KK7OF. (You can apply for a 2X2 callsign for a vanity call if it is available, but you must hold an Amateur Extra class license to do so.)

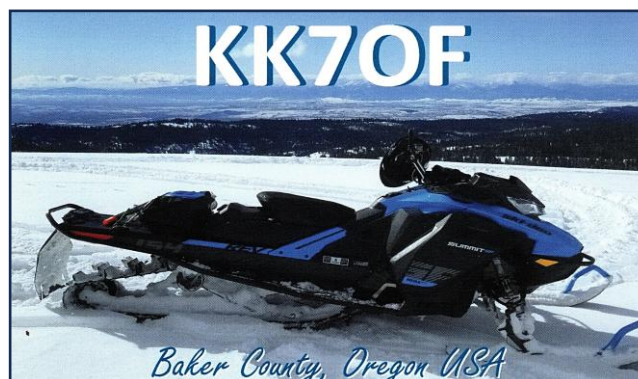
A vanity call sign card for W4RTE. It features a map of Alabama with a star indicating the location in Baldwin County. The text includes: W4RTE, Licensed 1950, JOHN H. EMBRY, 500 Spanish Fort Blvd, Apt 340, Spanish Fort, AL 36527-5012, Baldwin County. It also lists various awards: DXCC #5685, WAS #19905, OOTC #2864, OMISS #4653, USA - CA #1868, and 500 Award. A small diamond-shaped logo with the word "ARRL" is visible on the right.

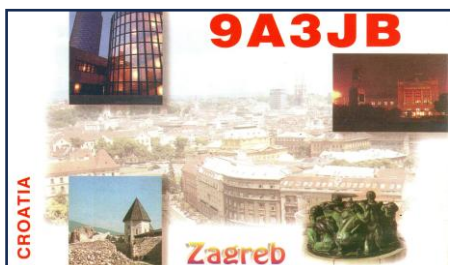
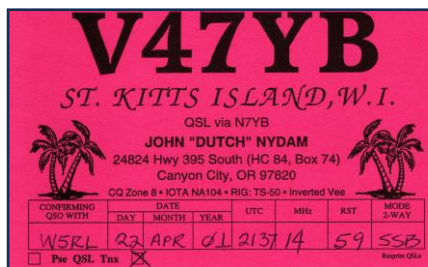
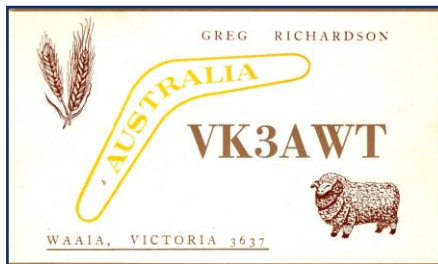
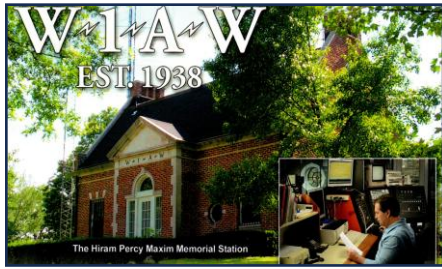
W4RTE
Licensed 1950
JOHN H. EMBRY
500 Spanish Fort Blvd, Apt 340
Spanish Fort, AL 36527-5012
Baldwin County

Alabama

DXCC #5685 • WAS #19905
OOTC #2864 • OMISS #4653
USA - CA #1868
500 Award

ARRL





Another example would be the specially formatted callsigns issued only to Amateur Extra class license holders, which would be either a 1x2, 2x1, or Alpha-2x2 callsign. Examples: W1AW, NF7D, AB10C.

With the advent of the Vanity callsign program in 1994, operators can now apply for a callsign of their choosing to replace their current callsign – provided the desired callsign is available – and it corresponds with their current class of license. Also, both U.S. and foreign callsigns, no matter what the format, can be followed by a further suffix after the normal callsign to indicate the station is operating under special conditions: /P for portable, /M for mobile, /MM for maritime mobile, or /AM for aeronautical mobile.

HOWEVER!!! – This formatting changes outside the U.S.

For example, in Australia and its other sovereignties, call signs are structured only with a 2-letter prefix – VK, VI, or VJ – a number (which identifies the geographical area), and a 2 or 3 letter suffix. The number following the prefix is normally a single number (0 to 9). Examples: VK3AWT. VK4EJ.

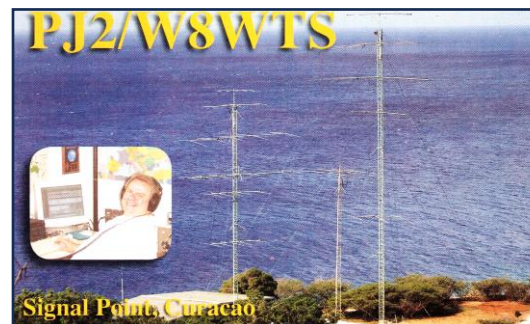
Some countries' prefixes, such as the Caribbean island country of St. Kitts, consist of a letter followed by a number. Hence, in the example St. Kitts callsign V47YB – the prefix is V4, the number (usually geographic area) is 7, and the suffix is YB.

Others may start with a reverse-type format – a number followed by a letter, such as Croatia in which the prefix is 9A. Example: 9A3JB.

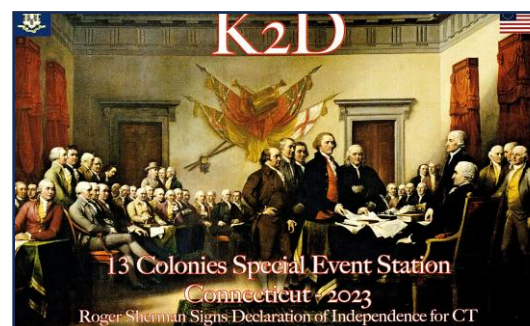
When operating with reciprocal agreements under the jurisdiction of a foreign government, an identifying station prepends the call sign with the country prefix and number of the district/territory from which the operation is occurring.

For example, I worked a U.S. licensed amateur operating from Curacao using this type of callsign format. Curacao's prefix is PJ2. So, he used the callsign PJ2/W8WTS. (Example on the following page.)

Occasionally, international special call signs are issued in the amateur radio service for temporary use to commemorate special events. For example, Haiti's prefix is HH. A normal callsign from Haiti is usually the prefix, a number, and a 2-letter suffix. However, in November 2022, the Radio Club d'Haiti was issued a Special Event callsign to commemorate the final battle of the Haitian Revolution in which the slave Haitian army defeated the French army on November 18, 1803. This battle gained Haiti its independence from France. The Special Event callsign that was used was, of course, HH18NOV. In case you're wondering.....yes, I did get credit for Haiti on 3 bands that I worked this special event station on.



In the United States, special event stations occur quite often during all times of the year and commemorate, celebrate, or denote events, places of interest, historical commemorations, etc., on a local, regional or national level. Special event station callsigns are in the 1x1 format, a letter, number, and letter. Example: K2D (One of the 13 Colonies Special Event stations.)



These are just a few examples of the many types of call signs and call sign prefix/suffix combinations that exist out there nationally and internationally.

The more you operate the HF bands, the more you will get a knack in understanding them. As we said earlier, it may seem like "alphabet soup" at first but the more you operate, the more you will develop the knowledge to differentiate these callsigns, where these stations are, that there is structure and order to each call sign you hear on the air, and the less confusing it will be for you.

A good website showing all the international callsign prefixes and other valuable information can be found at the ARRL URL:

<http://www.arrl.org/international-call-sign-series>

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