

# THE SIGNAL



## Newsletter of the Bella Vista area Radio Club *ARKANSAS' LARGEST AMATEUR RADIO CLUB*

- September Program – COAX 101
- Announcing – BVRC Social Junction Roundtable
- BVRC Club Station Update
- BVRC Assists Share & Care Golf Tournament
- BVRC Participates in Makers Faire
- BVRC Assists in Summer Sizzlin' Run
- Announcing – Arkansas DX Association Annual Conference to be Held at ALETA
- Experiementer's Corner –  
Experiments With 2-Meter Antennas
- Repeater Use and Etiquette
- The Best Antenna for the Job
- Get to Know Your Ham Bands
- DXCC Den – Fernando de Noronha



October 2025

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

## **WEEKLY NETS:**

**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 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 BVRC MONTHLY MEETING



THURSDAY, OCTOBER 2, 2025 @ 7PM  
ARKANSAS LAW ENFORCEMENT TRAINING ACADEMY  
3424 S. DOWNUM ROAD  
SPRINGDALE, AR

## October Meeting Information

HAM 101 Workshop, 6pm preceding monthly meeting – One of our distant members will be the moderator for the October workshop, as Allen Risler – KE5FAR from Harrison will cover the topic “Experimenting with HF Antennas”. One of Allen’s favorite ham radio past times is examining different antennas for different uses. Join us for a good educational program on HF antennas.

BVRC October meeting, 7pm – While Allen is with us, he will also be the featured speaker for our main October meeting. Allen has become very interested and active in the Parks On The Air program, and will be sharing his hints, tips, and experiences from recent POTA activations. Be sure and attend this enjoyable and educational presentation by Allen.



KE5FAR POTA Station

**SEE YOU THEN!**



## BOARD MEMBERS



## APPOINTED OFFICERS

### President

Jan Hagan - WB5JAN  
[wb5jan@arri.net](mailto:wb5jan@arri.net)

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### Member At Large & Public Information Officer

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Nets Committee  
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# From the Desk of the President

## **AND NOW FOR SOMETHING DIFFERENT..... PARKS ON THE AIR VIA YOUR VHF, UHF RADIO**

Back in the early 1970's I was first introduced to two-way radio communications, as many of my generation were, by CB radio.

As a boy I was always fascinated by how invisible radio waves could bring music and sports right into my transistor radio that I could hold in my hand. Later, when I discovered that I could not only listen, but talk and communicate over these same radio waves, I was hooked. Later, when the CB phenomenon hit, I was all in.

One of the fun aspects of our CB operations in those days was to see how far you could communicate with another CB operator (without using "skip" as we called long range propagation). We discovered that if we could drive our CB equipped vehicles to a high point, our signal would extend farther.

So, in the inland mountains of San Diego County lies Mount Palomar, famous for the huge, Hale 200-inch historic telescope and observatory. At night, I would drive my cool surfer van, outfitted with a Robyn 23 channel CB radio and a bottom coil antenna drilled into the roof, to the top of Palomar Mountain. From an overlook at 6000 feet, I would contact my buddies about 45 miles way down in San Diego. Wow, what DX! What fun! And, of course, I was a popular contact as CBers throughout San Diego wanted to make this incredibly long-distance contact with me.

Fast forward a few decades and I still enjoy making portable communications contacts through Parks on the Air. I have enjoyed operating my portable HF kit from the beaches of San Diego to Devil's Tower in Wyoming to beautiful Virginia Beach in Virginia.



Now, as a throwback to my CB operations, I propose a fun activity for new technician class operators (as well as all other licensed operators). Participate in POTA and activate a park using UHF or VHF simplex operations from a park at high elevation. For those of us in Northwest Arkansas, I suggest Mount Magazine, POTA park US-1104. At 2,753 feet, Mount Magazine is Arkansas' highest point.

The key to a successful activation on UHF/VHF – send out the word ahead of time that you will be activating on the POTA website, on Facebook ham radio groups, and through your other social networks. I suggest using the 2-meter simplex calling frequency, 146.520. You too may well enjoy the same thrill I enjoyed several decades ago on top of Palomar Mountain!

73, Jan, WB5JAN



**THE LARGEST AMATEUR RADIO  
CLUB IN ARKANSAS!**

*You're a part of it!*

*Thanks for your support!*

*Get involved in club activities!*





# Members Enjoy Great Program on Coax During September Meeting



It was once again almost SRO for the BVRC September 2025 meeting, as members were treated to an outstanding program on “Coax 101” by BVRC member Mark Whatley – K5XH. This was an encore to the program Mark gave to the club a couple of years ago but with the influx of so many new members, there were many requests for Mark to share his considerable knowledge on the topic to benefit our newcomers.



Mark began his presentation with the origins and history of coax. The need and development for a quality cable that could successfully and more efficiently carry a RF signal, began when the telegraph lines of the mid-1800s began experiencing problems.

Mark share that Oliver Heaviside did not literally invent coax cable, but he did develop two theories – the Vector Calculus and the Telegrapher's Equation – that eventually gave rise to the development and evolution of the coax type we know today.

As most of us know, coax transfers the RF signal from the radio to the antenna. And there are many, many diverse types of coax factors (loss ratio, velocity factor, etc.) that figure-in in determining the right coax for the



job. Mark also illustrated the plethora of coax connectors and adapters that hams fortunately have in today's world to help them in achieving the right type of connection they need to accomplish.

Mark then shared a very interesting point of coax history. – All new radios of today are all rated to operate with 50Ω (ohm) coax. Where did this rating come from and why this particular rating?



Mark – K5XH

Mark said that answer to that question unfolded the mid-1900s when the issue of different ratings for different applications came into play:

From the signal source to the antenna over long distances, 70 Ω coax was acceptable.  
From the signal source to the antenna over short distances, 30 Ω coax was acceptable.  
So over time, the manufacturers found a happy medium at 50 Ω.

He also said that coax is not the *only* way to transfer signal from the radio to the antenna. Other methods such as ladder line, twisted pair, and waveguide can also be used.

Mark also listed the factors to be considered in choosing the right type of coax:

- |   |                        |
|---|------------------------|
| ◆ Characteristic impedance (in Ohms)    | ◆ Installation factors |
| ◆ Attenuation (db per length)           | ◆ Bend Radius          |
| ◆ Power handling capability (Watts)     | ◆ Environment          |
| ◆ Velocity Factor (% of speed of light) | ◆ Cost                 |

Mark then brought to light a sub-topic that may not be known to many hams. – There are not two, *but three* conductors at RF frequencies along a coax transmission line: 1) the outer surface of the center conductor, 2) the inner surface of the shield, and 3) the conductor that is many times unknown to hams, *the outer surface of the shield*. Reflected stray RF can come back down to the radio via the outer shield surface from a phenomenon known as “skin effect”. This stray RF is commonly known as RFI (Radio Frequency Interference). It can cause problems in the shack, or even throughout the home in some instances, but can be alleviated by using the correct type of toroid and/or ferrite bead. (See article in the February 2023 Signal, page 25.)

Mark, thanks so very much once again for the great and informative program on the characteristics of coax. You gave many newcomers to the hobby, as well as possibly some of the veteran club members, some valuable information and food-for-thought to take home with them!



**The BVRC Board and Leadership Team is pleased to announce a brand new operational opportunity for all licensed ladies and kids. –**

## **The BVRC Social Junction Roundtable**

Beginning on **Saturday, October 4**, the inaugural session of the Social Junction Roundtable will be held. All YLs, XYLs, and children are invited to join in for a fun and merry on-air experience!

The Roundtable will be held on the NW Arkansas Skywarn Link Repeater System, the same system used by the HAM 101 Net. (Frequencies and pl tones on page 2 of this issue of The Signal.)

Male operators can join but with limitations, as the Roundtable is primarily for women and children.

Unlicensed children can operate during the Roundtable, provided a licensed control operator supervises them. ( FCC Rules Part 97.3(a)(1) )

**Day and Time:** Saturdays at 10:00 AM

**Start Date:** October 4th, 2025

**Frequency:** Weekly, every Saturday

For more information, contact Serenity Biggs-W3SIX:  
[serenity@six3.engineering](mailto:serenity@six3.engineering)

BVRC VE REPORT  
From Don Banta – K5DB  
BVRC VE Coordinator  
September 2025



## *Congratulations!*

Luke Buzzard – N5LRB – Bella Vista – New General!

Chris Gallenstein – KJ5MMQ – Bentonville – New General!

Austin Moreton – Call Pending – Seligman, MO – New Technician!

Russell Moreton – Call Pending – Seligman, MO – New Technician!

Drake Rush – Call Pending – Gentry – New Technician!

Janelle Smiley – Call Pending – Fayetteville – New Technician!

Doyle Smith – Call Pending – Goshen – New Technician!

**Next month's exam sessions:**

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

**For exam session instructions  
and to register for an exam session,  
go to the TESTING tab on the BVRC website:**

**<https://bellavistaradioclub.org/testing/>**





The biggest event for the Bella Vista Radio Club since its inception – the construction of its own permanent club station – is now coming into actual fruition. It's always exciting to see plans and diagrams on paper turn into physical realizations! On September 9, the bottom section of tower was set in the hole which had already been measured, dug, and prepped. The hole was then prepped to receive the concrete pour for the base.

The hole was reinforced with steel rebar rods in a “cage” configuration to give the base stability and strength. A length of 4-double aught wire was also installed providing the ground for the tower. A temporary bracket was also installed to totally prevent the tower from moving during the concrete pour.

On September 11, the pour was made with no issues. The tower hole rubble will be removed soon, but the BVRC club station tower is now ready for its journey upward. A HUGE word of thanks to the team members, along with project leader Chuck-KM5G and co-leader Stan-K5GO, and engineering input and planning from Marc-WØKYZ for what is going to result in an excellent tower installation. Below are photos from this important stage of the project.





## BVRC Public Service Communications Team



## Assists in Share & Care Golf Tournament



Four BVRC members performed public service communication assistance with the recently held Share and Care Golf Tournament on Sept. 3<sup>rd</sup> and 4<sup>th</sup> at Dogwood and Kingswood golf courses in Bella Vista.

The team consisted of team leader Alex Smith-KI5EQK along with members Lanna Gage-N5ALG, Chris Johnson-KE4EIF, and Bob Quinn-KB5YFH. The team had very nice weather conditions to serve this major event for charity.

The team performed many duties including constantly traversing the course to ensure sponsors had everything they needed, monitor ice levels and help restock when needed, provide golf cart rides to, or guide attendees to, the restrooms, relay messages and updates between volunteers, team leads, and staff, and generally touring the course in the event of any type of difficulty or possible emergencies.

A huge THANKS to these four stellar hams in putting on a GREAT public relations exhibition for the event and for BVRC!



Alex – KI5EQK



Golf carts ready to go



Lanna – N5ALG



# Maker Faire® NWA

## BVRC Participation in Maker Faire '25 Big Success

From James Bennett – KA5DVS

The Northwest Arkansas (NWA) Maker Faire was held on Saturday September 6, 2025, at the Fayetteville Public Library. This is the fourth time they have held this event in Fayetteville.

We were contacted a few months back by the organizers of the local Maker Faire held here in Fayetteville, AR regarding participation of our club to share information on Ham Radio.



BVRC booth at Maker Faire 2025

In preparing for this event, I made announcements at the monthly BVRC meeting and several BVRC members volunteered to help in planning, supplying equipment, and other needs as well as staffing the booth. These included myself, Tom Northfell-W5XNA, Ryan Biazo-K5HEX, John Robinson-W5HB, Jan Hagan-WB5JAN and Kathy Long who helped set up and staff the booth as well and other club members who assisted included Sharron Edmondson-KC5SKY and Alex Smith-KI5EQK.

We estimate that over 100 people visited our booth, and most were familiar or at the very least curious about ham radio. However, we also heard a few comments such as: "Is anyone still doing ham radio?" and "I thought this was only used by truckers years ago" so there is a bit of an information gap on ham radio within the Maker community, and this is mirrored by the surprisingly low number of hams familiar with the Maker movement.

Maker Faires are an outstanding venue for presenting ham radio and for ham clubs to engage with the maker community, one that is filled with technically oriented folks who love tinkering, hacking and building.



Faire attendees learn how to solder



A father and his small daughter discover the world of CW at the BVRC booth



# BVRC Public Service Team Aids 'Summer Sizzler Run'

It was a busy period for the Bella Vista area Radio Club's public service communications teams during the first week of September. First, a team assisted with the Share & Care Golf Tournament during two weekdays (page 12), then another team supplied assistance on Saturday for the Summer Sizzler 5k/10k/15k Run at Walker Park in Fayetteville.

The public service comm team for this event consisted of team leader Alex Smith-KI5EQK, Nathan Spears-KEØVPI, and Michael Kemper-W5KMK. Michael manned Aid Station-1 & Race Central as Net Control, Nathan manned Aid Station-2, and Alex served as Rover.

The team made a fine showing for our hobby and club as they relayed information from the second aid station to race central, assisted in keeping runners on the course, ensured signage was undisturbed, investigated potential disturbances on the course, and assisted in maintaining general safety for the event. Hats off to these members for a stellar job!



Team Leader  
Alex-KI5EQK



Michael  
W5KMK



Nathan-KEØVPI

**ATTENTION BVRC MEMBERS INTERESTED IN PUBLIC SERVICE COMMUNICATIONS!** – If you are attracted to serving and assisting in public events where quality communication is needed, sign up today with BVRC's Public Service Comm Team!

For more information, contact Team Lead Alex-KI5EQK at: [ki5eqk@gmail.com](mailto:ki5eqk@gmail.com)



# EQUIPMENT CORNER

## For Sale – Mercury IIIS amplifier



Mercury IIIS solid state 1200W 160 - 6 meter amplifier. Bought new, fully assembled from KM3KM in September 2023. Very little use and never near full output. Includes switched power cords for both 240 and 120 VAC and original shipping box. Paid \$2950, would accept best offer over \$2600. Local sale preferred, but if you know someone out of the area, would consider it.

Cannot use it at my new QTH. If you are serious about purchasing at that price it could be tested at your or another local QTH.

Terry – W5NBJ

Rogers, AR

E-mail: [terryg2nt@yahoo.com](mailto:terryg2nt@yahoo.com)

Phone: 612 – 865 – 7636

**Attention all BVRC DXer members  
and other members interested in DXing!!!  
Make plans to attend the**



## **2025 Annual Conference**

**Saturday, Nov. 8, 9am – 4pm**

**Arkansas Law Enforcement Training Academy  
3424 South Downum Road  
Springdale, AR**

A super special treat is in store for all BVRC members and NW Arkansas hams this fall, when the Arkansas DX Association will convene its annual conference right here in northwest Arkansas, and at BVRC's meeting home! The ADXA is a statewide organization, devoted entirely to the exciting area of DXing in amateur radio. ADXA holds 4 meetings throughout the year with the first three meetings occurring in the spring, summer, and fall quarters, culminating with its exciting and outstanding annual convention each November.

The ADXA rotates its conference venue each year at different locations around the state and this year this impressive event will be held "right here in our own back yard"! (Even if DX may not be that interesting to you, or if you're considering getting started with DXing, don't miss this conference!)

The Arkansas DX Association was formed on June 29, 1967, and has enjoyed a large, statewide following through the decades. Since its beginning, the ADXA has continued to exist and grow and is the premiere, and only, DX club and 100% ARRL membership Affiliated Club in Arkansas.

The hallmark of the annual conference is the speakers. – ADXA members share a plethora of topics designed to help newcomers and veterans alike to improve their DXing skills, along with good station operation and maintenance. Hams from all points in Arkansas will be attending. Anyone can benefit from this conference.

The highlight of the ADXA Annual Conference is always the guest speaker. In past conferences, hams from all over the United States that are big names in the DX world have traveled to Arkansas as the conference's guest speaker and main presentation.

*BVRC will be assisting with venue preparations and heartily welcomes the ADXA!*





## ADXA ANNUAL CONFERENCE SPECIAL GUEST SPEAKER

Contester, Innovator,  
& DXpeditioner Extraordinaire

# Gregg Marco – W6IZT



Gregg has activated or operated from over 20 DXCC countries including 3D2Y (Rotuma Is.), VP6A (Pitcairn Is.), JWØA (Svalbard), K1N (Navassa Is.), HKØNA (Malpelo Is.), K5D (Desecheo Is.), and got so close to Bouvet Island he could see it and smell it, but the effort of that 2018 DXpedition had to be aborted. Gregg resides in Morganton, GA. See his QRZ page!

Gregg is one of the inventors of the Rig In Box (RIB) technology that has opened access to DX entities previously restricted. One of Gregg's presentations during the conference will be on

NexGenRiB2 and he will actually bring a RIB with him for us to see! Most recently he is leading the PJ6Y Saba Island youth led Dxpediton and "Young Hams-The Future of Dxpeditoning". You can see one of his recent interviews [here](#).

- Additional DX Topics & Speakers
- Noon Luncheon
- DXCC Card Checking
- ADXA Awards
- Door Prizes

***Registration information is  
forthcoming, but mark your  
calendar now to attend  
this unique experience!***

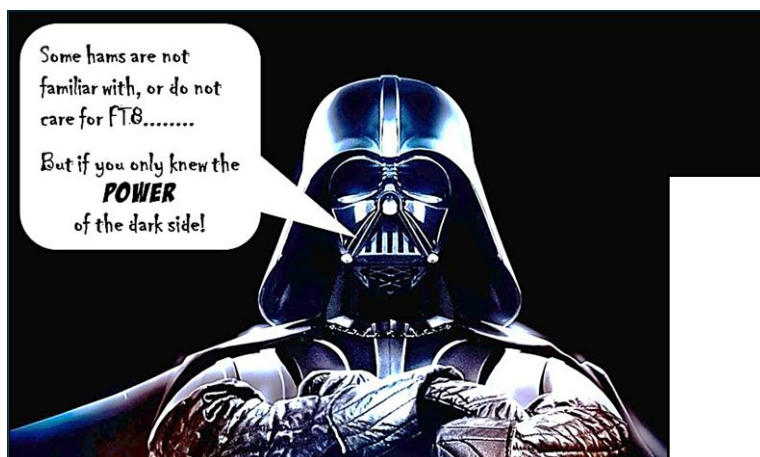


***Read all about it!.....***

***Welcome new  
members of BVRC!***

Charles Rakes – KI5AZ – Bentonville  
Dirk Anderson – N5PEF – Springdale  
Robert Johnson – KJ5MRV – Rogers  
Greg Merrell – K5TYJ – Fayetteville  
Drake Rush – Call Pending – Gentry  
Doyle Smith – Call Pending – Goshen

*Ham Chuckles*





# BVRC CW ACADEMY GRADUATES 4<sup>TH</sup> CLASS



2025 CW Academy graduates, from Left to Right: Mark Sutherland-K5DXR, Nate Stevens-KF5RPK, Jacob Smith-KI5YDZ, Jonathan Pinto-KJ5HFG, Kris Henderson-KJ5GIZ, and Don Banta-K5DB instructor/coach

## BVRC MEMBERS – AVAIL YOURSELF TO THE WEALTH OF INFORMATION ON BVRC'S GREAT WEBSITE!

Roger Dickey – KJ4QIS, BVRC Webmaster

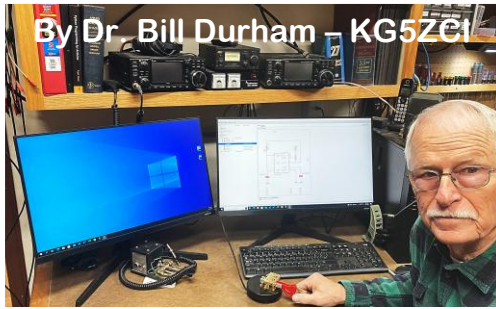


- ✳ **BVRC MEETING INFO**
- ✳ **NEWSLETTER ARCHIVES**
- ✳ **VE TESTING INFO**
- ✳ **AREA EVENT CALENDAR**
- ✳ **AREA NET INFO**

- ✳ **DX INFO**
- ✳ **CONTEST INFO**
- ✳ **CLUB NEWS & EVENTS INFO**
- ✳ **ELMER 9-1-1 HELP**
- ✳ **CLUB MISSION**

# EXPERIMENTER'S CORNER

By Dr. Bill Durham – KG5ZC1

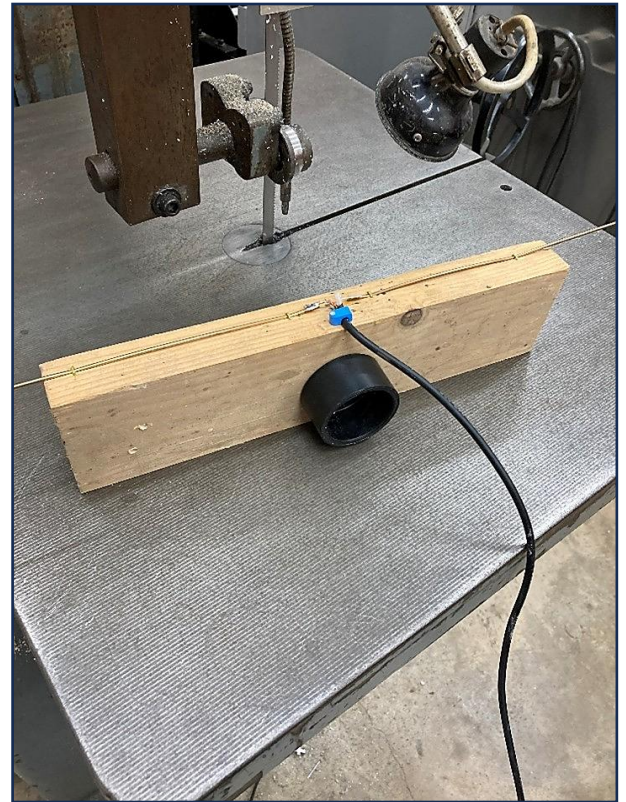


This Month's Topic:

## Experiments With 2-Meter Antennas

Last month I described my tests of the 3-element Yagi used in the fox hunt during Field Day. During the testing several other features became of interest, and the following is a description of what I found.

I started with the construction of a half wave dipole (at right) which is a basic standard for comparison. Construction was very straightforward. I cut two brazing rods into 20" pieces. This initial length was determined from a fundamental formula  $.485/\text{frequency}$ , which can be found in almost any book on antenna design. A half-wave dipole should have a total length of one half the operating wavelength. The formula takes care of the problem of converting all the measurements into useful units and gives you the answer in feet. There are a few other minor details incorporated as well. I stapled the two pieces onto a short piece of wood with about 1" gap and soldered a piece of RG58 coax with a BNC connector on the far end.



All my experiments were done on the same setup as described last month. Basically, the antennas were held about 77" inches off the ground on a piece of 1.5" PVC pipe which has held in a machinists rotary table. I adjusted the lengths of the brazing rods with the help of an antenna analyzer. I clipped off a total of about 1.7" of each to bring the SWR to 1.0 at 146 MHz.



I did two measurements with the Fox transmitter (146.5 MHz) 127 ft away and 73" high. In all cases the antenna was fixed and parallel to the ground (horizontal). In the first experiment, the transmitter was held in a horizontal orientation and I used a spectrum analyzer to measure the field strength. In this orientation the signal strength was -60.5 db, when I oriented the transmitter vertically the strength dropped to -70 db. This result was expected but I did not really appreciate the large magnitude of the difference. This resulted prompted me to take another look at the 3-element Yagi. In this case horizontal to vertical gave a signal strength of -65 db and horizontal to horizontal gave -53 db, a significant improvement.



When I first got my license, I built a ground plane antenna to work the net (at left). The antenna worked very well, although I had to do some serious machining to get an antenna that was robust enough to stay outside. Some of the published designs are too fragile for extended stays outdoors. My first attempt broke when I tried to raise it up. The SWR of this antenna is 1.0 at 146 MHz and gave a signal strength of -57 db. The numbers reflect the actual performance on the net.

The next experiment took a bit longer. I wanted to see what would happen if I extended the Fox hunter antenna to a 6 element Yagi. The plan was to follow the basic design using more PVC fittings. I looked up dimensions for a 6-element Yagi in the ARRL Antenna Book. I found a collection of designs called the "Cheap Yagi", 3, 4, and 6 element. I noted that the dimensions of the 3-element were very close to the fox hunter design and so I just used the 6-element dimensions.

A photo of the 6-element antenna is shown on the following page.





Below is a comparison of the Fox hunter 3-element design and on the right is the 6-element antenna. Although there is a bit of scatter in the data, the measurements clearly show that the beamwidth of the 6-element Yagi is smaller than the 3-element. For example, at 40 degrees there is only a 2 db decrease in signal strength with the 3-element but a nearly 10 db decline with the 6-element antenna. However, it is not enough to make me want to carry around the 6-element during a fox hunt.

Angle	Signal Strength	Angle	Signal Strength
0	-58	0	-60
10	-57	20	-63
20	-57	40	-69
40	-60	60	-75
60	-63	80	-80
80	-65	-20	-63
100	-65	-40	-74
120	-65	-80	-75
-60	-71		
-70	-80		

That's it for this month. See you next month for Experimenter's Corner.

73 – Bill, KG5ZCI

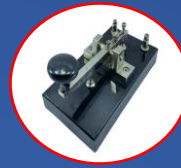
## BVRC HAS NEW TOWER CLIMBER!

From Dale Locander – W5DSL: Brandon Gage-W5BNL and his XYL, Lanna-N5ALG, stopped by the other day as I had some stuff for them to pick up. And Lanna surprised me by bringing her brand-new climbing harness and fall-arrest lanyard with her! She practiced hooking up and climbing up and down my tower several times so she could get the feel of tower safety and made sure everything worked properly in preparation for when she is needed to help with any future tower work. Brandon and I had a ball observing her. My tower is 33 feet tall that is optimal for the particular hex beam that I have, but it worked really great for her.





# ANNOUNCING THE 5<sup>TH</sup> ANNUAL BVRC CW ROUNDUP!!!



**Date: Thursday, October 9, 2025**  
**Time Period: 7pm – 8:30 pm local time (0000-0130Z, October 10)**  
**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 only (log calls of participating stations you heard)

**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 a QSO with K5XYZ whose signal is readable, their signal strength is registering a ‘7’ on your S-meter and their signal tone is good. Your [example] callsign is W5ABC, you live in Bentonville, and your name is Albert. You would then send something like:

**K5XYZ DE W5ABC (K5XYZ this is W5ABC) BT (break)**

**RST IS 579 B 579 B BT**

**QTH IS BENTONVILLE, AR BENTONVILLE, AR BT**

**NAME IS ALBERT ALBERT 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 if desired, after which the contact would end with something like:

**TNX FER QSO (thanks for the QSO)**

**GL ES 73 (Good luck and best wishes)**

**K5XYZ DE W5ABC SK (end of contact)**



**Description of event:** **This 1½ -hour event is not a contest.** Rather, it is a celebration of our area newcomers new to CW, returners to the mode of CW, and listeners. Also, it is an invitation to our veteran CW operators to enjoy helping the newcomers in making live, on-air CW contacts. There are no points scored, and no results or standings posted. **You do NOT have to be a member of BVRC to participate.**

A handsome certificate will be issued to each participant submitting a log entry from the event. (See above)

To qualify for a certificate, send logs *no later than Saturday, October 18*, 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 Cabrillo file: [call].log



## Repeater Use & Etiquette

*Many new hams have recently joined BVRC but have approached using the club's repeaters and other area repeaters with a sense of trepidation, not knowing what to say, how to make a contact (QSO), or how to check-in to a repeater net. We hope the below guidelines will help you 'get on the air':*

As a general rule, use the same common courtesy when in conversation with someone face to face, and as if children were present. It's much the same on a repeater, with a few caveats.

When accessing the repeater(s) – after ensuring you have set the proper frequencies, offsets, and PL tones – LISTEN for a few seconds and then LISTEN again to ensure the repeater is not already in use. "Kerchunking" or dead keying the repeater is *not necessary* and just adds to the wear of repeater components.

When keying up a repeater, pause 2 seconds before speaking. For instance, if the repeater is not in use and you want to announce your availability for a conversation, press your mic button, wait 2 seconds, then say "(Your call sign), listening (or monitoring)." If others are listening and want to engage you in a contact, they will respond with their call sign and a possible greeting. *You do not call "CQ" on a repeater.*

If you would like to call a specific station, key the repeater again waiting a couple of seconds, then say his/her call sign followed by your call sign, e.g., "K5ABC from W5XYZ." Wait a reasonable amount of time and if no response, repeat the call you just made. If there is no response and you want to let others know you're available, then say "(Your call) listening (or monitoring)." If you don't want to remain on the repeater, then say "(Your call), clear," which clears you from the repeater.

When in conversation, be mindful of the timer which stops the repeater transmitter after 2-3 minutes. During a contact and after completion of your thought, release the mic and the repeater will send a 'courtesy tone.' This is an indicator for the other party to wait 2-3 seconds before continuing their side of the conversation. This pause allows anyone with emergency traffic or others wanting to join the QSO to interrupt briefly. When the repeater is busy, you and your party should move to a simplex frequency, if possible. This frees the repeater for others to use.

On a linked repeater system, this 2 second pause also allows all the repeaters on the system to synchronize with each other. By not doing so, the first portion of your transmission will be cut off.

As indicated, the 2 second pause also allows anyone needing to report an emergency to break-in and say "Emergency," or "Emergency Traffic," and wait for a response. The use of the word "Break" should NEVER be used unless in an emergency. And not all would understand why you are trying to get a response from someone on the repeater. Emergency traffic (or communications) on the repeater should normally be handled by the first to respond, and supported by any others that may be on frequency to assist by making phone calls, text messages, etc.

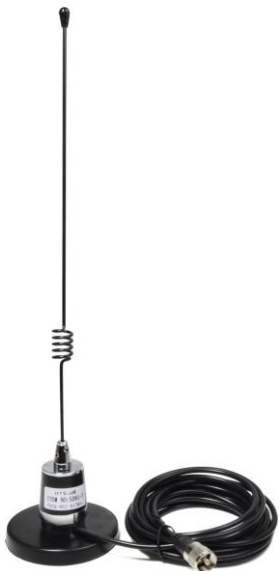


# The Best Antenna for the Job

(Reprinted with permission from ARRL On The Air magazine, December 2020, ©ARRL)



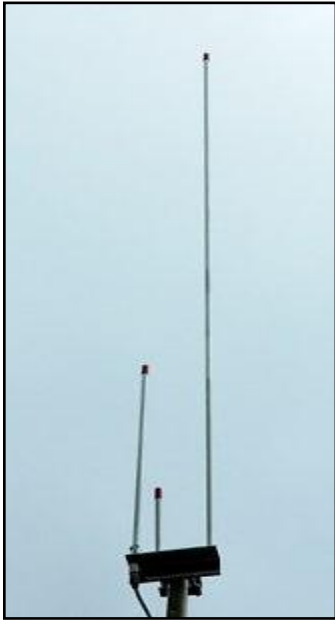
*There is no such thing as a single antenna that's perfect for every station. Choosing an antenna depends on what you want to do with your station, how much money you want to spend, and any restrictions you may encounter with your property. Here's a walk-through of what antenna types are best for certain types of operating.*



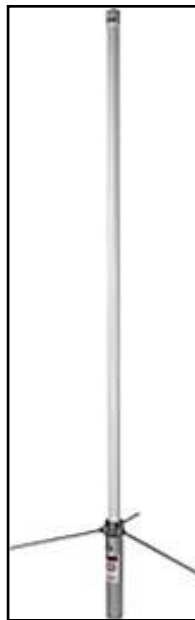
**Figure 1: A dual-band VHF/UHF mobile antenna.**

**VHF/UHF Mobile Operating** – The best choice is a dual-band VHF/UHF mobile antenna (Figure 1), even if you don't yet own a dual-band radio. You may buy a dual-band transceiver someday, so it makes sense to plan for that possibility now. Some mobile antennas use powerful magnets to secure themselves to your vehicle. While these are certainly convenient because they are easy to mount and dismount, you may enjoy better range from a larger model that attaches to your trunk lid or bumper. Larger antennas in this application tend to concentrate your transmit and receive energy in a slightly more focused pattern, which will help you communicate over greater distances.

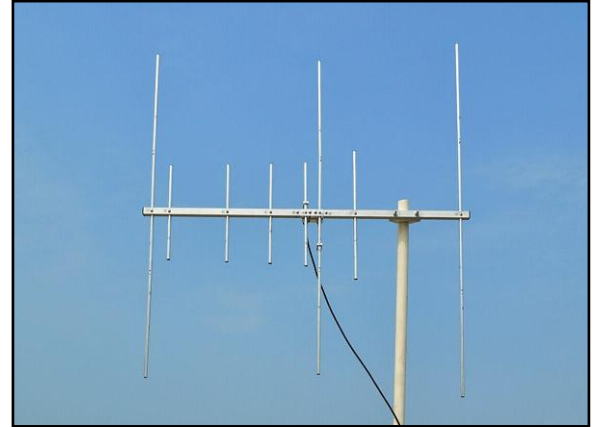
**VHF/UHF Home Operating** – If you want to send and receive in all directions at once, an omni-directional antenna such as a J-pole (Figure 2) or ground plane is best. While J-poles are popular, you may find that a ground plane antenna (Figure 3) offers somewhat better range. You can purchase either single or dual-band models of both antennas.



**Figure 2: A dual-band J-pole antenna.**



**Figure 3: Ground plane dual-band antenna.**

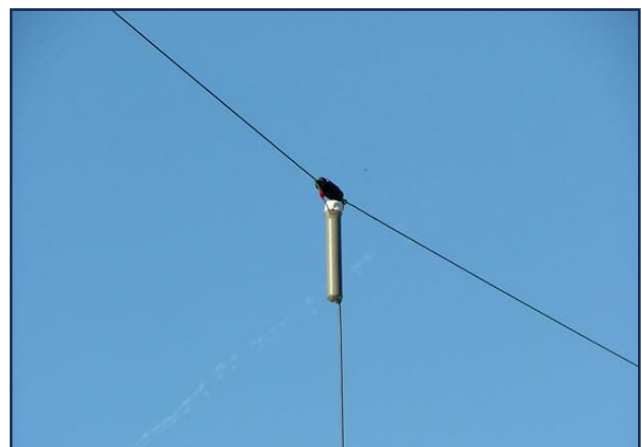


**Figure 4: a yagi antenna like this VHF/UHF model will focus your signal in a particular direction.**

However, if you want to concentrate your transmitting and receiving in a particular direction, you'll need a Yagi (beam), a *directional* antenna that behaves like a flashlight to focus your power in one direction. (See Figure 4.) Yagis come in many sizes. The longer the Yagi, the tighter its focus and the greater its range.

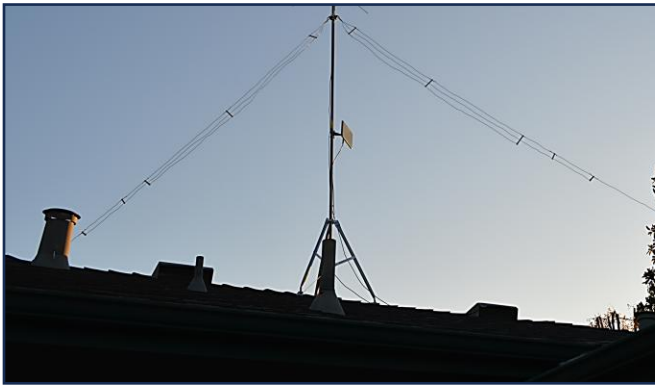
The issue with Yagis, however, is that unless you don't mind communicating in the same direction all the time, you'll need to install a *rotator* – an electric motor that will turn your Yagi in any direction you wish. Rotators can be pricey, especially the models you'll need if you are considering a longer, heavier Yagi.

**Casual HF at Home** – For casual HF operating, classic wire *dipole antennas* are hard to beat. Most hams start with a simple, inexpensive half-wave dipole, often referred to as a *center-fed dipole* because the antenna is constructed using two wires of equal length (or unequal length for an off-center fed) and the coaxial cable is connected in the center of the antenna.



**Figure 5: Dipole antenna in a flat-top configuration**





**Figure 6: Fan dipole antenna in an inverted-V configuration**



**Figure 7: Vertical antenna.**

A drawback to dipoles is, that on lower frequencies, these antennas can be quite long. A full-sized dipole antenna for the 40-meter band, for example, is about 66 feet long. There are limited-space versions that are shorter, but these compromise on performance. Choose full-sized models when possible. There is an old amateur radio adage that applies well to dipoles: As much wire as possible, as high as possible.

You often see dipole antennas strung horizontally between trees or posts (Figure 5), but this isn't a strict rule. You can, for example, support the center of a dipole on a post or mast and slope the "legs" of the antenna toward the ground like an upside-down "V" (inverted-V) as shown in Figure 6. You can also install a dipole antenna at an angle with one end on a high tree branch and the other end about 6 feet off the ground, known as a "sloper".

Dipole antennas work best when they are well above ground, around 40 to 60 feet. Dipoles will work at lower heights, but long-range performance will suffer.

If you don't have room for a long dipole, consider a vertical antenna (Figure 7). These antennas consist of metal tubes (or sometimes wires) that are mounted on posts at or near ground level. The lower the frequency the longer the tube (and the taller the antenna, of course). A full-sized vertical antenna for 40-meters is about 33 feet tall.

Verticals can perform well, especially at lower frequencies, and they require little room. You'll find them offered in single and multi-band models. However, they do require a system of wires known as radials. Radials for the "other side" of the antenna circuit and allow the antenna radiate signals efficiently. For maximum performance, you may need to bury or yard staple as many as 60 wires in, or on top of, your soil, each as long as your antenna is tall. You really aren't required to plant 60 radials; even a dozen will work. However, you'll find that more radials usually give better overall performance.

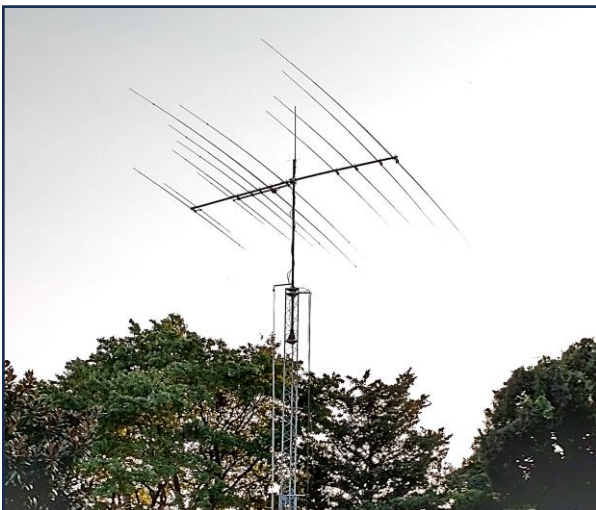
It is also possible to install a vertical with just a few radial wires elevated several feet above the ground. As you can imagine, these radials present tripping hazards for members of your household, which is why in-ground radials are more common...and safe.

You'll find some vertical antennas that claim not to require radials. In many cases, the models will not perform as well as traditional verticals with radials. Actually, there is no such thing. Verticals MUST radials.

You have probably seen advertisements for *end-fed antennas*. These designs rely on a single long wire with a matching device at its base. You can fit an end-fed antenna into almost any yard, but these antennas use the outer shield of the coax as a radial. This means you might end-up with unwanted RF energy inside your station, interfering with other equipment and even giving mild shocks. When it comes to performance, they are compromise designs that don't usually give the results you might hope for, but if you are dealing with space restrictions, they are a fairly decent antenna and worth considering.



**Figures 8 & 9: A HF beam antenna can offer outstanding performance for competitive operating, but these antennas are often large and expensive.**



**Competitive HF at Home** – For competitive HF hamming, such as contests or chasing long distance (DX) contacts, the gold standard is the Yagi (beam). (Figures 8 & 9) These can be either one that works on a single band, or on multiple bands. These are high performance antennas, but with a few exceptions they are large, heavy, and come with significant price tags. Plus, you'll need a heavy-duty rotator to turn on rooftops or towers. Erecting a tower on your property can cost hundreds – and possibly thousands – of dollars.

HF beams are serious instruments and aren't usually the first choices for new hams. That said, if money is no object, you'll never regret buying an HF beam. A well-installed beam can make even make a lower-class transceiver sound like a winner.

*Remember: Your antenna is the most vital component of your station.*



A vertical antenna can also be a competitive choice, particularly at lower frequencies. But to get maximum performance, you'll need more than one antenna working within a system known as a *phased array*. (Figure 10)



**Figure 10: Phased array**

A phased array requires more room on your property and can be complicated and expensive to install. On the low bands, however, phased arrays can create some of the strongest signals you'll hear. Best of all, their signal patterns can be electrically adjusted to aim in certain directions – all *without* rotators.

So, there you have it. – Good luck in making your decision(s) on selecting the antenna(s) that work for you.



## Avoiding Buyer's Remorse: *Don't Forget the Antenna*

Building your first station, whether in your car or in your home, is an exciting project. Assuming you have a limited budget (doesn't everyone?) for your first amateur radio station, there is an almost irresistible temptation to spend most of your money on the transceiver. After all, your enjoyment of amateur radio depends on the performance of your transceiver, doesn't it?

Let's take a step back for a moment...Imagine that you've just purchased an audio system for your home. You chose to spend most of your money on the gleaming amplifier. It was highly rated and seemed like an excellent choice. You didn't have a lot remaining to spend on the surround-sound speakers, but you decided that was okay, figuring that because an amplifier is the heart of any audio system, it deserves the lion's share of your investment.

So, you hook-up all the cables, and press the amplifier's power button. The sound from your wide-screen television comes blasting out of the speakers, but it sounds "tinny" and flat. You were prepared for thunderous bass notes, but what you're hearing is underwhelming to say the least.

Welcome to buyer's remorse. You sunk most of your money into the expensive amplifier, without realizing that the speakers are responsible for most of what you hear! With a limited budget, you should have spent most of your cash on the speakers rather than the amplifier.

THE SAME HOLDS TRUE FOR YOUR AMATEUR RADIO STATION.....Like an audio amplifier, the transceiver is a critical component to be sure, but *the antenna* is the device that is going to connect your station to the world. You could own the best transceiver money can buy, *but it is the quality of your antenna* that will determine how much enjoyment you get from it.

# GET TO KNOW YOUR HAM BANDS

By Mike Maynard – K4ICY

Let me take a moment to bring to light one of amateur radio's dirty little secrets – actually a sad condition of our hobby that just gets looked over or swept under the carpet: Are YOU a ham that is like the poor sap that buys a ticket to enter a major theme park only to spend the entire day sitting in the food court next to the lockers, haplessly missing all the fantastic rides and captivating shows? Are you the kind of awkward person to dress-up for that long-awaited single's dance only to stand next to the punch bowl the entire evening? I am speaking metaphorically about your on-air activity. - - - - -

You say “No”.....Are you sure?

My counsel here *is not* directed to the avid contester or DXer, *but to the newcomers of our proud hobby!* I think, upon closer examination, you hams know who you are. You were so excited ‘back when’ you passed your Technician's license and got your very own call sign, but what? You find yourself owning just an HT and maybe you check-in on that weekly repeater net once-in-a-while. There may still be hope! Maybe all you need is a good and willing Elmer.

The world of amateur radio is an exciting one just waiting to be explored and enjoyed! Its electromagnetic vistas are ever so vast and fruitful, with new people to befriend from all walks of life. There are modes and ways to communicate that you may have never imagined. You may already have the right license class privileges to go on, boldly exploring stranger lands by even stranger means – or most likely, as a ‘Tech’, you're only one examination away from passing, and being able to sample the “buffet of the ionosphere”. With all due respect to VHF/UHF operation, is there actually more to this hobby than a “ker-chunk” and a weekly check-in on a local repeater? You bet your \$40 Chinese HT there is!

Let me take you on a journey – one of shortwaves, dits and dahs, FT8, and “E-skip.” Listed here is a brief description of most of our federally-granted frequency bands – bands that each have their own character, needs for different technology and rules. Bands that have been allocated to us by the FCC for our own enjoyment, education pursuit, and final commitment to use in service for our society's safety. People through time have fought hard, even at great cost, to ensure that YOU, the amateur radio operator, have the right to “play radio,” because if you don't use it, perhaps there is some money-hungry corporation that can and will.









I don't expect anyone reading this to garner a full knowledge of our band plans and operating modes by this article alone. If you find anything of interest here that you would like to know more about, ask an "Elmer" in your club. Events like Field Day and Special Event Stations are designed for the express purpose to put YOU behind the wheel – maybe to experience your first HF contact to a foreign ham in another land altogether. They are your ham bands and modes to enjoy:



**70 centimeters**, commonly referred to as "440," is a UHF (Ultra High Frequency) band that has great value for emergency communications work. Many repeater systems are located here and often all you'll need to get on is a basic HT (hand talkie.) The use of 440 does not come without strings attached since hams are designated as "secondary" users on this band with power and/or use restrictions in some parts of the US, particularly near military bases. The small cost is worth it as 440 has added advantages that make it attractive for ARES (Amateur Radio Emergency Service) emergency communications use. For one, UHF signals better penetrate thick walls like the concrete and metal ones found in office buildings and hospital facilities. The 440 band is also less susceptible to atmospheric anomalies like solar flares and Sporadic-E, and with the help of interoperability networks (D-Star, DMR, C4FM, etc.) a ham's HT has world-wide voice and data connectivity at just the push of a button. All hams should strongly consider access to 70 centimeters when shopping around for HT's and mobile transceivers.

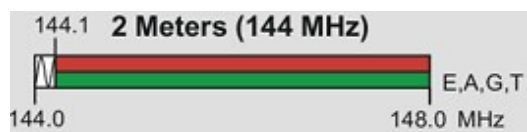
**KEY**

**Note:**  
CW operation is permitted throughout all amateur bands.  
MCW is authorized above 50.1 MHz, except for 144.0-144.1 and 219-220 MHz.  
Test transmissions are authorized above 51 MHz, except for 219-220 MHz

	= RTTY and data
	= phone and image
	= CW <i>only</i>
	= SSB phone
	= USB phone, CW, RTTY, and data
	= Fixed digital message forwarding systems <i>only</i>

**E** = Amateur Extra  
**A** = Advanced  
**G** = General  
**T** = Technician  
**N** = Novice

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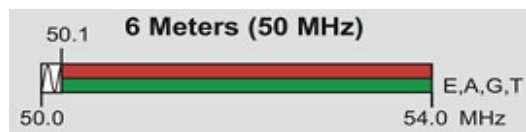


2 meters is really the 'go to' band for most hams and the vast majority of new hams start here first because all you need is an HT which will get you into many local repeaters. On this VHF (Very High Frequency) band, repeater operation (in FM mode) makes up the majority of activity, though you can use other modes in their respective designated areas of this band including CW, digital, and voice SSB. This band is known as the 'work horse' because most radio clubs host and monitor a flagship 2-meter repeater system that will get you connected to other hams in your area and even into adjacent counties. Unfortunately, either from a lack of interest or from inadequate mentoring many unfortunate hams may never feel the need to venture outside of this band. The "main" 2-

meter repeater and their HT is likely all they'll ever use. For those personally risking this sad fate, might I suggest reading on!

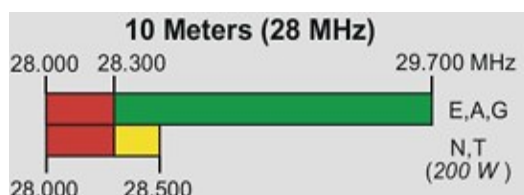
As far as signal propagation, 2-meter operation often shares the same Sporadic-E "magic" as 6 meters where stretches of 50 to 200 miles are possible. 2 meters penetrates walls well enough for most indoor work and is often the band of choice for emergency communications workers, as on-the-job volunteers will only supply 2-meter HT capability if a great need arises in the aftermath of a communications disaster.

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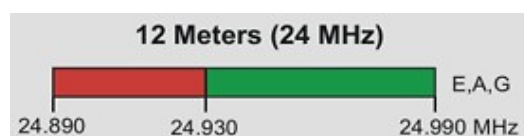
**6 meters** is like a perceivably dormant volcano: dead-quiet most of the time, but a sleeping giant that sometimes wakes without much warning to feed – it is a great VHF band where if conditions are right, you can do about anything that can be done on HF and sometimes better. 6 meters is called the "magic band" because of its mysterious and spurious nature – its ability on short notice to send signals halfway around the Earth. Solar activity has some to do with 6-meter openings, but this effect can mainly be ascribed to cases of "Sporadic-E." Sporadic-E is a special ionization of the Earth's atmosphere's E-layer allowing signals to propagate. Look for these openings around the solstices (June through July and around December.) Other forces of nature can have an effect on VHF openings such as auroral events, meteor-scatter, moon-bounce, thermal ducting, trans-equatorial and grey line propagation. Hams working on 6-meters are usually found using directional beam antennas such as Yagi's and log-periodic antennas, often radiating up to legal-limit power levels to bridge the distant gaps through the ether.





At 1.7 MHz wide, **10 meters** is the largest of the HF (High Frequency) bands - and also a vast and barren waste land when the sunspot cycle is at its minimum. Propagation is extremely erratic and ground wave range is only around 25 miles. A ham may wait years to use 10, but when the sun is active this band is the place to be! When propagation is good, expect world-wide DX communications of thousands of miles with only just a few watts! Openings to any part of the world are unpredictable, so hunting DX entities and QSL cards only adds to the excitement. By the way, 10 meters is the only HF band with a segment that allows hams with Tech licenses voice SSB operating privileges! (yellow section in above diagram)

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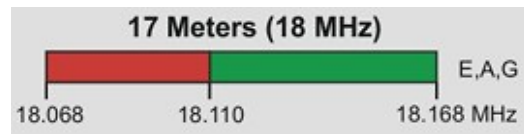


**12 meters** is very small band, but when sunspots are active this band is capable of very great DX distance with little power and meager equipment, making this a great band for mobile and DX operation. When the sunspot cycle is at its low expect only local communications.

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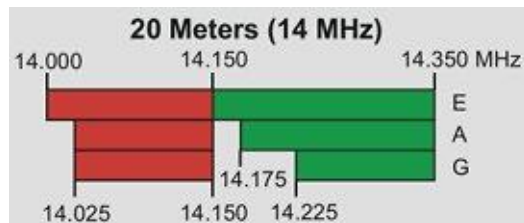


Like 17, **15 meters** is similar to 20 meters but is more influenced by sunspot activity. There's little to no nighttime activity and at the low-end of the sunspot cycle, the band is almost dead, but at the peak of the cycle, 15 meters can get you some great DX distances. Novice and Technician license holders also have CW privileges on this band. (sine wave area in diagram)



Band conditions are about the same as 20 meters. 17 meters has an appeal to mobile hams as it offers most of the same benefits as 20 but requires a smaller antenna and is a little quieter. This band is small like 30 but is segmented between CW/Digital (Red) and SSB (Green).

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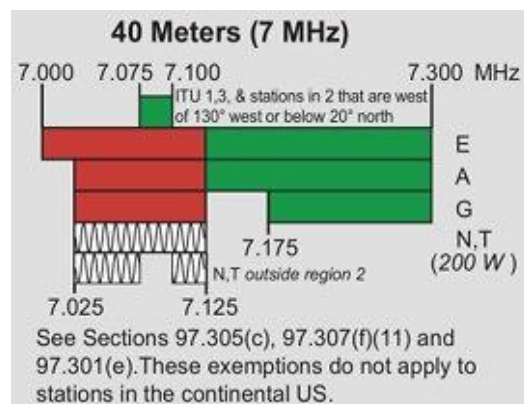
**20 meters** is usually where the serious DX'ers hang out! Daytime conditions here are as good as 40 meters at night. Worldwide communications are common all hours of the day when sunspots are up, but when they're not, the band can close-up shop in a hurry. Locally, line-of-sight to 50 miles is often possible but regional communications are generally unlikely and selective one-way propagation is often the case nationally, especially as nighttime approaches. This band has all the advantages of 40 meters, with the quieter nature of higher frequency bands making 20 meters a prime spot for digital modes such as PSK-31, FT8, SSTV and RTTY.

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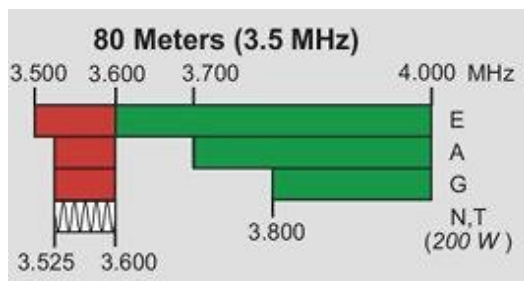
**30 meters** is a small band like 40 meters, but only CW and digital are allowed. You'll find no broadcast interference here and only a casual number of operators make 30 their abode...that is, until a contest or DXpedition starts up. Then, parking is at a premium! The band, like 20, has somewhat longer range than 40 meters and daytime distances of 1000 miles are common. Hams are, however, limited to only 200 watts PEP (peak envelope power) on this band and when conditions are bad, you might not hear any stations.



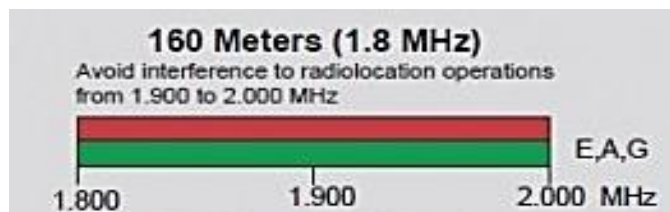


Every ham either loves or hates **40 meters**. Like a popular restaurant, it's always open somewhere but it's often crowded! A 65' dipole antenna will get you regional coverage in the summer daytime with likely distances of 300+ miles, with 500 or more in the winter. 1000+ miles are very common during summer nights with DX (intercontinental) communications more common in the winter. This band, especially 7.2 MHz and above, is also the roost for many gigantic million-watt shortwave broadcasters from countries outside of North America. Between these strongly interfering signals, a ham with a modest station can still often work some great DX, provided you find a spot. 40 meters is not very affected by sunspot activity and it's another great place to hold regional nets. Here, you'll also find a lot of CW and digital activity at the bottom of the band and literally ever spot filled with voice SSB at the top of the band.

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Conditions on 80 meters are close to what they are on 40 and tend to be pretty reliable day and night. It also isn't very susceptible to the effect of sunspots, and for those reasons is regarded as a "go to" place for HF-based nets and regular group activities. Emergency Communicators can place their 119' dipoles closer to the ground to get NVIS (Near Vertical Incidence Sky wave) communications on a more local and statewide level, but at night, the band can "go long" as propagation reaches out. Summer can bring a lot of atmospheric noise, but the quieter winter propagation can send your signals around the globe! Known as "The Watering Hole," expect to find a lot of established "locals groups 'rag chewing' in 'round tables'" using linear amplifiers – you'll find them warming up the ionosphere 'til the wee hours of the morning on frequencies that have been established for decades. Some you will find to be quite friendly, but others, not so much. Just use common courtesy and look around for a free spot to operate. As with several bands, the CW/Digital portion of the band is separate from the wideband modes of SSB (and even AM,) and access privileges are important to note, so if you wish to work some DX on 80, you might want to try for your Extra Class license.



Known as the "Top Band," because its wavelength is the largest, 160 meters sits just above the AM broadcast band and is really a MF (Medium Frequency) designation rather than HF. In fact, if your older analog AM radio has band edges that extend outside enough, you can often hear CW hams doing their thing. If you're thinking of 160, a dipole antenna for this band would have to be around 265' long, so you'll often find hams using loop antennas, or modified vertical antennas with an added loading element at the top called a "top hat." Band conditions and propagation on 160 are pretty similar to what you will find on the AM broadcast band, and not quite as much range as the 80-meter band. During the day, propagation is pretty much local, but at night you can expect greater distance. Summer nights bring good regional distances of a few hundred miles with a high amount of QRN (static) from nearby evening thunderstorms. However, in the winter you can expect a hop or two off the ionosphere at a few thousand miles with a quieter noise floor. You'll find a mixture of modes on 160 with CW, Digital and SSB co-habiting in the same space, just like the old days, and you must have a general license or higher.

Aside from a few bands not listed above, hams have access to microwave bands and even higher. Hams in other countries are often working with the (ITU) International Telecommunications Union to procure new band allocations and on the same token, working to also protect our current bands from unwanted interference. There are also hams with experimental grants that are even working with very-low frequencies, below the AM broadcast band.

By the way, every ham should have a chart! Please click [HERE](#) for the ARRL's band plan chart'

(From THE PRINTED CIRCUIT, newsletter of the Tallahassee (FL) Amateur Radio Society. Author: Mike Maynard – K4ICY)





## This month's featured country: Fernando de Noronha

**Primary Call Sign Prefix: PYØF**

Our DXCC travels this month bring us back to our home western hemisphere to the entity of Fernando de Noronha. Fernando de Noronha is an archipelago in the Atlantic Ocean, part of the state of Pernambuco, Brazil, and located about 220 miles off the northeast Brazilian coast. It consists of 21 islands and islets, extending over an area of 10 square miles. Only the main island is inhabited where the capital of Vila dos Remédios is located, with a population estimated at 3,101 in 2020. While most of the archipelago is relatively low-lying, the most distinguishing formation on Fernando de Noronha is Morro de Pico (above picture) which rises to 1,066 feet in elevation.

In 2001, UNESCO designated it as a World Heritage Site because of its importance as a feeding ground for tuna, sharks, sea turtles, and marine mammals.

The main island got its name from Fernão de Loronha, a prominent 16th-century Portuguese merchant of Lisbon who sponsored the expedition that discovered the island in 1503. The island was originally named Ilha de São João, but the informal name "Fernando de Noronha," derived from its discoverer, eventually replaced the official name. The name "Fernando de Noronha" is a common misspelling of "Loronha," the family name of the discoverer.

Traveling to Fernando de Noronha by air from the Brazilian cities of Natal or Recife takes about 30 minutes. Brazilian-made small ATR planes usually serve as the main transportation to the island and have limited on-board cargo space. Today, daily flights serve the island.

Wherever you go on the main island, Morro de Pico will follow you. It is the result of a volcanic eruption some 12 million years ago. The island also will greet you with excellent food and friendly people. Crystal clear waters and a fascinating landscape show nature at its best.

Today, Fernando de Noronha's economy depends on tourism, restricted by the limitations of its delicate ecosystem. In addition to the historical interest noted above, the archipelago has been the subject of the attention of various scientists dedicated to the study of its flora, fauna, geology, etc.

The beaches of Fernando de Noronha are promoted for tourism and recreational diving. The most popular ones include Baía do Sancho, Pig Bay, Dolphins Bay, Sueste Bay and Praia do Leão. Due to the South Equatorial Current that pushes warm water from Africa to the island, diving to depths of 95 to 130 feet) does not require a wetsuit. The visibility underwater can reach up to 165 feet.



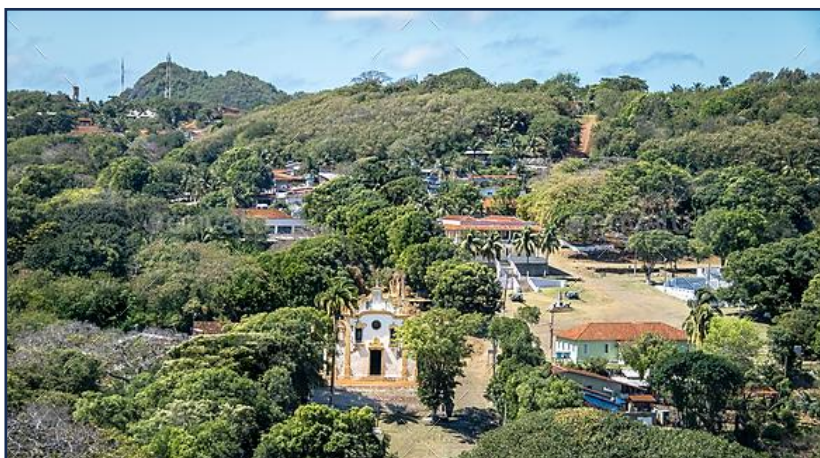
**Location of Fernando de Noronha**







Portions of the capital, Vila dos Remédios

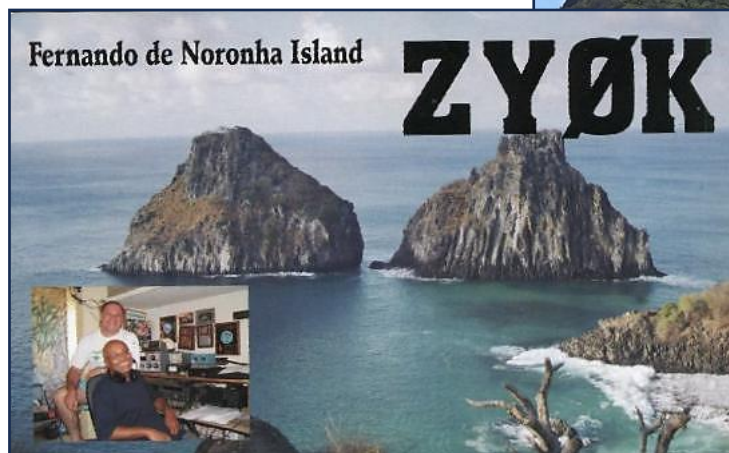
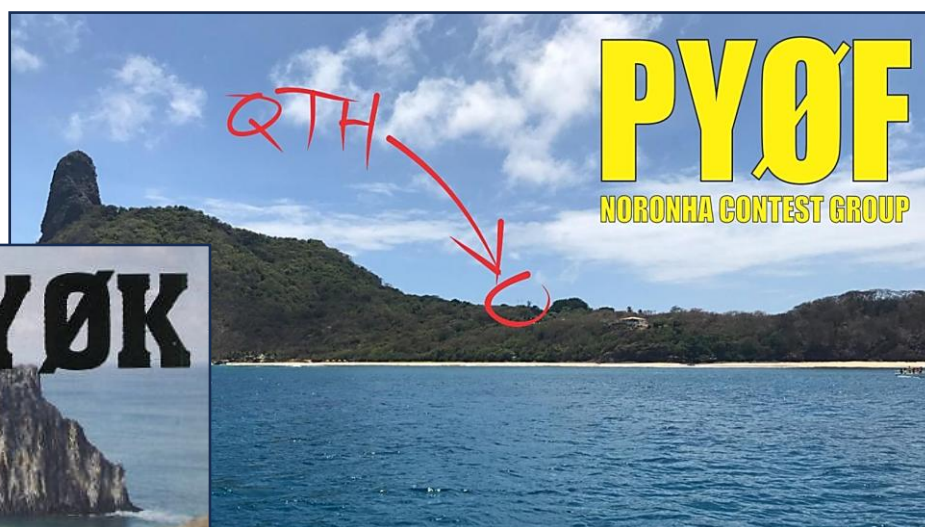


In the world of amateur radio, there are only about 30 or so native hams on Fernando de Noronha, therefore most of the time the entity is activated by visiting hams or small groups.

It currently ranks #142 on the Club Log Most Wanted List meaning it's not that rare of a country to be worked, although it is a handsome catch for DX newcomers. At times, it can also provide aggressive DXers with QSOs on various bands they need it for.

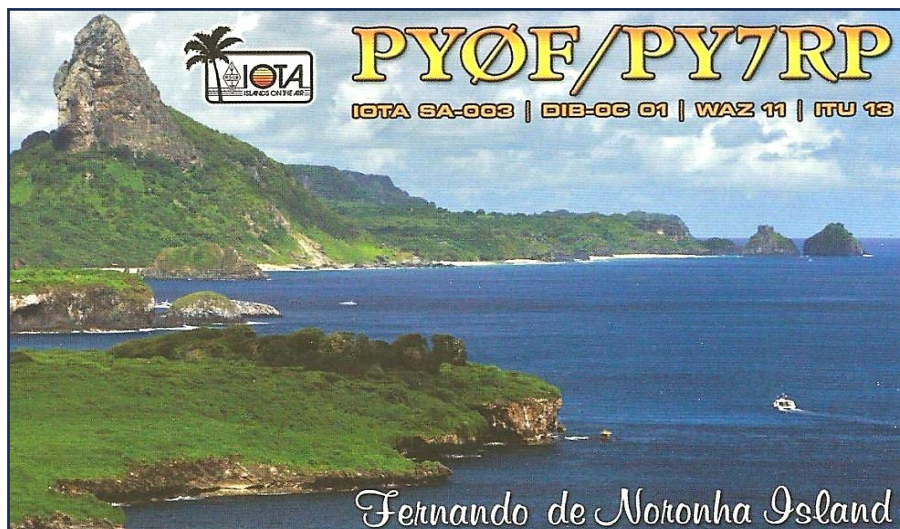
Fernando de Noronha's official call sign prefix is **PYØF**, although in the recent past the Brazilian telecommunications authority has granted vacationing hams or small DXpeditions the secondary prefixes of **PXØF** and **PWØF**.

Though not that rare, it is a notable location for amateur radio activations, primarily under the call sign **PYØF**, managed by the Noronha Contest Group. The island has a history of being activated for major international contests, such as the CQ World Wide DX SSB contest.



◀ QSL from a 2004 operation before call sign prefix change

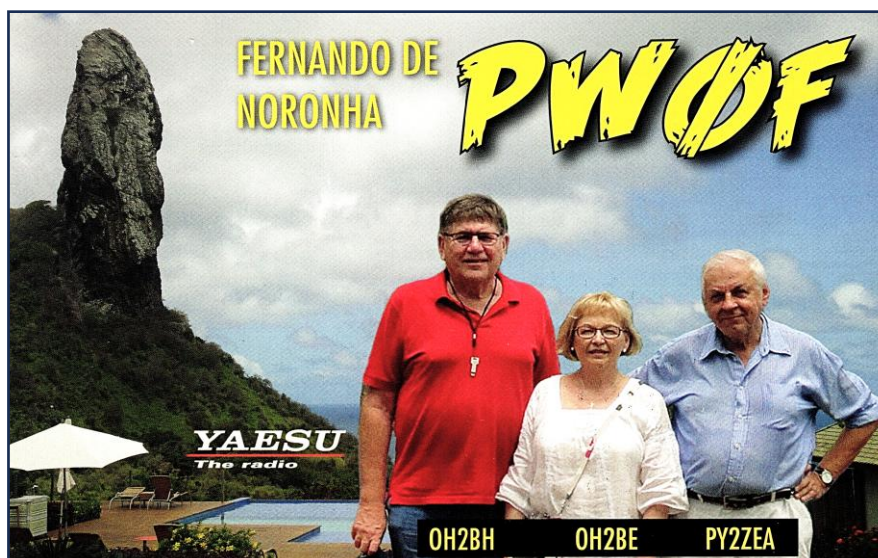




The call sign PYØF has been used for DXpeditions, including a notable activation from December 6 to December 10, 2012, by PYØF/PY7RP. In 2017, PXØF was used by Fabio – PP5BZ, during the CQ WW CW contest. Additionally, the island has been issued secondary call signs like PYØFRP in 2012 and PY7SC in 1958, indicating a long-standing amateur radio presence.

In 2015, I worked PWØF which was a 3-person team consisting of world renown DXer Martti Laine – OH2BH, his XYL Leena – OH2BE, and Ville Hiilesmaa – PY2ZEA, a native Norwegian who had moved to Brazil. Ville's original call sign was OH1QA and after retiring from Helsinki University Central Hospital he moved his family to Brazil but still returns to Finland from June to August.

If you haven't worked PYØF yet, keep an eye on the DX clusters and outlets for a future activation, as it does "pop up" occasionally. Have fun and GO WORK 'EM!



My PWØF QSL from 2015

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