

THE SIGNAL



Newsletter
of the
Bella Vista Radio Club



VOL. 3, NO. 1 APRIL 2020

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

WEEKLY NETS:

3830 kHz Roundtable - Sundays @ 4 pm

147.255 Repeater Net - Wednesdays @ 8 pm

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

Features In This Issue:

- * ELMER 9-1-1 Operational !
- * New BVRC Net Control Stations
- * BVRC Forums Now Available!
- * Reminder – ARRL Rookie Roundup
- * BVRC Attends Russellville Hamfest
- * Ham Radio History – The Vibroplex “Bug”
- * BVRC Accelerated Technician Class
- * The LoG Antenna
- * Becoming a Ham Radio Master
- * Amateur Radio Amplifiers

**BVRC
OFFICERS****President**

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W5XNA

w5xna@arrl.net**Vice - President**

Don Banta

K5DB

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Ron Evans

K5XK

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Tem Moore

N5KWL

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Glenn Kilpatrick

WB5L

wb5l@arrl.net**APPOINTED
OFFICERS****Emergency Communications**

Open

ELMER 9-1-1

Paul Dixon

K5YH

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Don Cooper

KC7DC

kc7dc@arrl.net**2-Meter Net Coordinator**

Chris Deibler

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Glenn Kilpatrick

WB5L

wb5l@arrl.net**SIGNAL Editor**

Don Banta

K5DB

arsk5db@gmail.com**NEXT BVRC
MONTHLY MEETING****THURSDAY - APRIL 2, 2020 - 7 PM****HIGHLAND CHRISTIAN CHURCH****1500 FOREST HILLS BLVD.****BELLA VISTA, AR****APRIL MEETING**

Due to the Coronavirus outbreak, the April BVRC meeting is cancelled.....

A determination as to whether the May meeting will be convened, will be determined by the BVRC Board toward the latter part of April.

All BVRC members will be notified via e-mail on any updates as we progress through the current situation.

Attention New Hams in BVRC !!!

ELMER

9-1-1



ELMER 9-1-1 Chair, Paul Dixon – K5YH, is pleased to announce that the program *is now in place and operational!*

BVRC now has 35 experienced operators enrolled in ELMER 9-1-1 to assist new hams with questions and issues they might have.

These volunteer Elmers span years of experience in ham radio from antennas to technical issues to emergency communications, and more. Many of them are at the weekly BVRC Saturday breakfast in Bella Vista and the monthly BVRC meetings where you can discuss with them any topic that you are needing help with, in person.

However, if something crops-up and you need help fairly quickly, or you're unable to attend one of the weekly breakfasts or monthly meetings, you can obtain assistance via the BVRC website ELMER 9-1-1 tab:

www.bellavistaradioclub.org/elmer-911/

Here, you can complete and submit an online form, and someone will respond to you via e-mail with help and advice shortly thereafter.

Be sure and avail yourself to this valuable service when/if you need it. The Elmers are here for you. They know what it's like to be in a predicament and unsure of what to do when you're new to the hobby. They are here to help you... just as their Elmer helped them.

If you're unsure about something, get some help! ELMER 9-1-1 !

DIGICOMM CAFÉ HIGHLIGHTS BVRC MARCH MEETING

BVRC was graced with the presence of Denny Johnson – K5DCC from Omaha, AR (Boone County) for the March meeting, as Denny shared with the club his passionate aspect of the amateur radio hobby, “Enjoying Amateur Radio With Purpose”.



As a teenager, Denny was in an electronics class and the instructor (who was also a ham) told them, “If you display to me that you’re REALLY interested in learning about amateur radio, I’ll help you get your Novice license.” Denny did, and the instructor did.

Denny started operating at the school club station, and graduated up to a Drake TR-4 transceiver with a Mosley TA-33 for his home station. He then moved-up to a Kenwood TS-520.

But with the advent of new generations coming into the hobby, Denny says he realized that “...Amateur radio is MORE than just a hobby. Other avenues and techniques are needed to get today’s younger generation interested in our great avocation.”

In the early computer days when the Mac came out, Denny began his own QSL printing business, using a computer instead of a standard printing press. He then launched one of the crown jewel creations of his ham radio experience: DigiComm Café. Denny says it is basically a “Facebook for hams”, generally offering them more privacy than the standard Facebook page. He placed DCC on a Zello platform used by many businesses. DCC then partnered with the International Radio Network. As the years have passed, hundreds of hams and non-hams alike participate in the DCC system. Denny is also associated with YACHT (Young Amateur Control Hams Team) and the Ham Nuggets Net.



He also has a podcast called “Radio On The Rocks” within DCC. Denny’s current passion is to use DCC to appeal to all persons, and especially the younger generation. To get involved, all you have to do is go to: www.digicommcave.com. Thanks Denny for a great and out-of-the-ordinary presentation!

BVRC President Tom-W5XNA presents Denny-K5DCC with the BVRC Certificate of Appreciation

Year #3 Begins for THE SIGNAL



I would like to take this opportunity to thank BURC for the privilege they accorded me two years ago to become Editor of the club's first official newsletter.

We now begin our 3rd year in assembling each month for you – our esteemed members – a newsletter that hopefully brings useful information to you, some entertainment, and perhaps a grin from time to time. For this anniversary issue as we begin Volume 3, we have jam-packed it for you with extra features and informational articles.

Thanks so very much to the many of you who have sent e-mails to me and given me on-air 'kudos' advising how much you enjoy The Signal. We sincerely appreciate your kind words.

However!!! – The most exciting aspect of this project for me is always when a Club member submits material to include in an issue. Club members enjoy nothing better than to read stories and articles authored by other club members! Please feel free to send me any ham radio write-up that you would like to share..... anytime!

As we begin our 3rd year, we will endeavor to maintain quality features and stories for you about our great club and our great hobby.

Vy 73! – Don, K5DB



From The Desk Of The President

Several members of BVRC recently attended the Russellville Hamfest. The hamfest included the *Arkansas DX Association* quarterly meeting and *ARRL Delta Division Conference*.

There were approximately 50 in attendance for the Delta Division Conference. During the conference, ARRL President, Rick Roderick (K5UR) asked the participants in the room to raise their hands if they were 20 years of age or younger. Not surprisingly, not a hand was raised. The questioning continued with 30 and 40. It was not until he reached 50 that hands were raised and then there were only 3 responses.

A similar question was asked about Elmering. In the past year, how many new hams did you personally bring into the hobby? Again, the number of hands raised were extremely few in number.

Obviously, we all need to step up our efforts to bring new people into our hobby (especially YLs and the youth), retain those that get licensed, and encourage more participation on the bands. On one slide at the presentation titled, *How to Get Them Active and Keep'em*, the top four responses to a survey rated on a scale of importance were:

- Help getting started on the air (44%)
- Other hams who share interest (36%)
- Help from mentor - Elmer (32%)
- Active radio club (27%)

Rick then issued a challenge to us at the meeting and I am extending a challenge to our membership as well. In this calendar year, I would like to encourage each of us to consider:

- *Bringing at least one new person into the hobby.*
 - Get them licensed AND on the air
 - Invite a guest to a BVRC meeting
 - Invite guests to Field Day
 - Ask interested parties to drop by your shack when the bands are busy with contests or special events
 - Help program a radio, put up an antenna, recommend equipment, etc.
- *Finding a ham that is not an ARRL member and:*
 - Ask them why
 - Show them how being a member of ARRL is important for *their* growth and amateur radio
 - Give them a few of your back issues of *QST* and talk about some of the articles that you found interesting and/or helpful

- *Being an Elmer for at least one new or prospective ham*
 - Think about the qualities that make for a great Elmer, then:
 - Be a participant in the Elmer 911! Program
 - Help program a radio, put up an antenna, recommend equipment, etc.

We are licensed and on the air because of Elmers who helped make that happen. It's now our turn to "Pay it Forward." Good luck with the challenge! I hope to see you at the next BVRC meeting and hear you on the air!

73,
Tom – W5XNA



BVRC ACCELERATED TECHNICIAN CLASS ANNOUNCEMENT

BVRC had such a large and successful Technician License class in 2019, that we are convening another one for 2020! This will be an accelerated class, meaning that in a weekend, a non-licensed person can start from 'scratch' and walk out of the classroom with their first amateur radio license. Be sure and tell all your interested family and friends to not miss this event! The class is FREE! There is a \$15.00 testing fee for the exam at the end of the class. *To sign-up, e-mail Tom-W5XNA at: w5xna@arrl.net.*

WHEN: Saturday & Sunday, April 25th & 26th, 2020

WHERE: Siloam Springs Fire Station #1

1450 Cheri Whitlock Drive (Also AR Hwy-43)

Siloam Springs, AR

INSTRUCTOR: John Nordlund – AB5FU

Exam given at end of class on Sunday. Be sure and bring a photo ID and \$15.00 for the test fee (cash preferred – we cannot process debit/credit cards).

Note!!! – This class is tentative, due to the current Coronavirus issue. For now, the class will be held, but a final determination will be made as the class date nears.



BVRC EMERGENCY COMMUNICATIONS CHAIRPERSON NEEDED

Paul Blomgren – KC7DQY has advised the BVRC board of his need to resign from the Emergency Communications Chair position. If you have a fervent desire and knowledge in emergency communications and would like to apply your talents to this position, BVRC would be happy to have you. Anyone that would be interested in this department chair position, please contact any member of the BVRC board, whose contact information appears on page two of this issue of The Signal.

BVRC CLUB ACCESSORIES!

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

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



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

K5OY – New member Steve is radiating ‘stealthy RF’ from his antenna-restricted neighborhood in north Bentonville. When not engaged in investments at the Sugar Creek ARVEST, Steve enjoys contesting, currently exploring membership in [CW Ops](#).

AF5YM – Steve’s health issues continue over in Newton County. In preparation for a potential QTH downsize, Steve is experimenting with a ‘homebrew’ bottom-loaded 18’ vertical for 75 Meters, focusing on the 3830 Roundtable frequency.

WØKYZ – Condolences to Marc & Alice on the passing of Marc’s dad, Donald, at age 96. Dr. Whittlesev was an Army Air Force pilot in the Pacific theatre during WW-II and was an avid pilot in civilian life after the war. He was an optometrist in Iowa until retiring to Bella Vista.

WBØAUQ – A thank you note from Bob and Rosalee: “Your kind and thoughtful expression of sympathy and prayers are deeply appreciated and help us through these difficult times following the loss of our son, Kevin.” (KBØDON-Silent Key; Kevin had a fatal fall at his home in Lawrence, KS)

K5DVT – Jon has the makings for a 6 Meter FM Repeater, if someone would like to tackle the project. Jon has many of the parts, and some ideas on its potential location, but is busy with his first year of classes @ the U of A, in pre-engineering. Contact [Jon](#) for info.

K5SAW & KCØDX – Steve and Ed have been experimenting with a novel 15 ft by 15 ft “[LoG](#) on the Ground” HF antenna.

KI5HTX – New YL ham Clara, 16-year-old daughter of Jere, KI5FPD (and niece of Vinson, K5VCA), tinkered with Morse Code at a recent Ozark Wireless Society gathering, and was able to tap-out several characters on a Code Practice Oscillator & hand key at the conclusion of the meeting!

KI5IGD – Kudos to new member Gary in Bella Vista, who passed his Technician exam in February, joined the Club at the March meeting, and already has his General class license.

K5DB – Don, using the Razorback Contest Club call W5YO/M, experienced his best year ever in the recent Oklahoma QSO Party. He travelled 615 miles, activated 21 Oklahoma counties, and made 1,215 QSOs. He says the propagation this year was the best he has ever seen for the OKQP.

KI5FPA, K5VCA, W5HB, & W5XNA – Thanks to Dennis, Vinson, John & Tom for joining the rotation of weekly Net Control Stations. Altogether, there are ten (10) different NCS’s for the Wednesday night 147.255 2M Net at 8, the Wide Area Net on the NWA Link System at 9, and the HF 3830 Roundtable on Sunday afternoons at 4pm. New or seasoned hams, join us on the air!

Timely comment overheard from one of many locals now working remotely from home – “Since many of us are going to be prevented from wasting a bunch of time out of the house, this is a good opportunity to flex your ham muscles and GET ON THE AIR!”

Send your news and activity reports to k5xk@bellavistaradioclub.org !



By Ron Evans – K5XK
Public Information Officer

NEW NET CONTROL STATIONS FOR BVRC NETS!!!

Bella Vista Radio Club welcomes several new Net Controllers for our sponsored nets!

For the BVRC weekly 2-meter Net, we welcome Dennis Lightbourn – KI5FPA. Dennis will be joining the NCS rotation for this net with BVRC 2-Meter Net Coordinator Chris – KG5SZQ, along with NCS's Alan – KEØQFO, Steve – K5SAW, and Glenn – WB5L. *Welcome Dennis!*

For the Wide-Area-Net, we welcome new Net Controllers John Robinson – W5HB, Vinson Carter – K5VCA, and BVRC President Tom Northfell – W5XNA. They will join the NCS rotation with Ron-K5XK and Don-K5DB. *Welcome John, Vinson, and Tom!*

All these new NCSs are fine operators, and you will enjoy hearing them each week.

We welcome all these new Net Control Station operators, and sincerely thank them for stepping forward in helping promote our club nets and BVRC.



Welcome to the newest, regular monthly department of The Signal! Since we are just beginning with this new department, there is only one week to report for this month. But we will have all 4 weeks of each month to report, starting with the May issue.

BVRC Weekly 2-Meter Net

March 18, 2020

Net Control Station:

Alan – KEØQFO

Check-ins:

Sheila – KØETA
Sean – KDØULQ
Faith – KI5EQL
John – AB5UN
Ryan – KEØCZQ
Ed – KCØDX
John – W5HB
Wayne – K5UNX
Bonner – KI5DUV
Don – K5DB

BVRC Wide Area Net

March 18, 2020

Net Control Station:

Tom – W5XNA

Check-ins:

Jon – K5DVT
Vinson – K5VCA
Jon – K5XNA
Alan – KEØQFO
Sheila – KØETA
Susan – KI5CXH
Molly – KI5EQO
Bonner – KI5DUV
John – W5HB
Shane – W5ZQI
Glenn – WB5L
Dennis – N5XMZ
Mark – K5DXR
Bill – KG5ZCI
Don – K5DB

BVRC MEMBERS ATTEND 2020 RUSSELLVILLE HAMFEST



A large contingency of BVRC members helped represent the NW Arkansas ham populace by attending the 2020 Russellville, AR hamfest sponsored by the Arkansas River Valley Amateur Radio Foundation, Inc.

As with previous years for the hamfest, the 2020 edition did not disappoint. The flea market was well represented by hams from all corners of the area, many different vendor booths (two of which were BVRC's own John Robinson-W5HB and his XYL Kim-KD5TVX from Winslow, along with James Bennett-KA5DVS from Fayetteville), and great programs were presented including DMR, DXing, and the ARRL.

This year, the hamfest was blessed with the appearance and presence of ARRL Arkansas Section Manager Jay Ferguson – N5LKE, ARRL Delta Division Director David Norris – K5UZ, and fellow Arkansan and ARRL President Rick Roderick – K5UR. ARRL 'royalty' was out in force! It was great to see them again!

The Russellville hamfest has grown into one of the larger hamfests in the state and takes place each 1st Saturday in March. If you've never attended, mark your calendar for next year and don't miss it!



**ARRL President
Rick Roderick –
K5UR, conducts a
segment of the
ARRL Forum**

Arkansas DX Association President (and past ARRL President) Joel Harrison – W5ZN, conducts the business meeting with avid DXers of the ADXA. (A splendid program was also given by Bill Priakos-W5SJ.)



A few of the many BVRc members pause for a photo with ARRL Delta Division Director David Norris-K5UZ (4th from left). From left to right: Tom Northfell-W5XNA, Paul Dixon-K5YH, John Bryant-N5SU, David, Jon Holbert-K5XNA, Steve Norris-W5KI, Tem Moore-N5KWL, Mark Whatley-K5XH, Stan Ross-K5VR, Don Banta-K5DB, and Nick Kennedy-WA5BDU.

BVRC FORUMS NOW OPERATIONAL ON BVRC WEBSITE!

A big thanks to webmaster Glenn – WB5L for the phenomenal job he has done in vastly improving the BVRC website. On the Home Page, you will now see MANY tabs with areas of interest that you can avail yourself to. BE SURE AND CHECK THEM OUT!

One of the newest tabs is a feature and service that could be very beneficial for you. It is the far-right tab entitled "FORUMS". Be sure and sign-up for these! You will be able to read the posts from other operators concerning technical issues, operating, events, and many other areas, as well as being able to post your views and information.

To sign-up, go to the main page and click the FORUMS tab:



Before registering, click RULES and be sure and familiarize yourself with those:



After reading the rules, begin your registration, by clicking "Register":



Board rules

These rules are disclosed to clarify the various responsibilities of all community members here on BVRC Forum. They shall be adhered to by everyone to ensure that our board runs smoothly and provides a fun and productive experience for all of our community members and visitors.

1. Welcome to the Bella Vista Club Forums.
Anyone with the link can look at all the posts.

This Forum Board is for the Bella Vista Radio Club Members and Guests.
In order to obtain posting privileges, you must be an Amateur Radio Operator.
Your user name should be a valid Amateur Radio Callsign. **This will be checked.**

A guest user is someone we have personal knowledge of, thereby allowing access.
If you are a club member and want access, just let us know.

For now, All POSTS from users will also need approval. This may change, we will see....

The Management #

At the bottom of the next page, click the tab "I AGREE TO THESE TERMS":

Records of membership can be used as they lead to you being immediately and permanently banned; that information is not shared with other members. Forum is deemed required by law. The IP address of all posts are recorded to aid in enforcing these conditions. You agree that "BVRC Forum" have the right to remove, edit, move or close any topic at any time should we see fit. As a user you agree to any information you have entered to being stored in a database. While this information will not be disclosed to any third party without your consent, neither "BVRC Forum" nor phpBB shall be held responsible for any hacking attempt that may lead to the data being compromised.

☒ I agree to these terms

☐ I do not agree to these terms

[BVRC Main Page](#) < [BVRC Forum Index](#)

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On the next page, BVRC FORUM – REGISTRATION, enter your Username (must be your callsign), Password, and the remaining fields. Then click SUBMIT.

[BVRC Main Page](#) < [BVRC Forum Index](#)

BVRC Forum - Registration

Please note that you will need to enter a valid email address before your account is activated. The administrator will review your account and if approved you will receive an email at the address you specified.

Username:

Username must be between 4 characters and 8 characters long and use only letter or number characters.

Email address:

Password:

Password must be at least 6 characters long, must contain letters in mixed case and must contain numbers.

Confirm password:

Language:

British English ▼

My timezone:

UTC-06:00 - 01 Mar 2020, 08:28 ▼

America/Chicago ▼

CONFIRMATION OF REGISTRATION

To prevent automated registrations the board requires you to enter a confirmation code. The code is displayed in the image you should see below. If you are visually impaired or cannot otherwise read this code please contact the Board Administrator.

Confirmation code:

TEM7XM4

Refresh confirmation code

Enter the code exactly as it appears. All letters are case insensitive.

[BVRC Main Page](#) < [BVRC Forum Index](#)

[Contact us](#) [Delete cookies](#) All times are UTC-06:00

You will then receive an e-mail advising you that your submission has been received and will be reviewed for approval. Upon approval, you will receive a follow-up e-mail advising that you have been approved and you can then login to the forums.

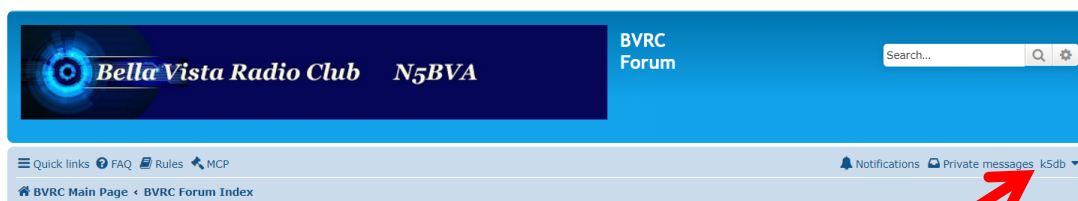
After being approved, and when you login the first time, once again click the FORUMS tab from the BVRC home page. Then when you are taken to the BVRC Forum page, click "Login":



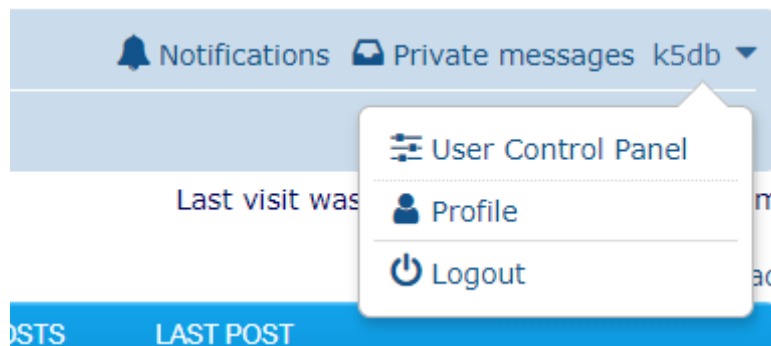
You will be taken to the login page where you will login:

The screenshot shows the login and registration page of the BVRC Forum. The top header and navigation bar are identical to the previous screenshot. Below the navigation bar, the 'Login' section is active, displaying a form with 'Username:' and 'Password:' input fields, a 'Login' button, and links for 'I forgot my password', 'Remember me', and 'Hide my online status this session'. Below the login section is the 'REGISTER' section, which includes a paragraph of text explaining the registration process and a 'Register' button. The footer contains a breadcrumb trail and links for 'Contact us', 'Delete cookies', and 'All times are UTC-06:00'.

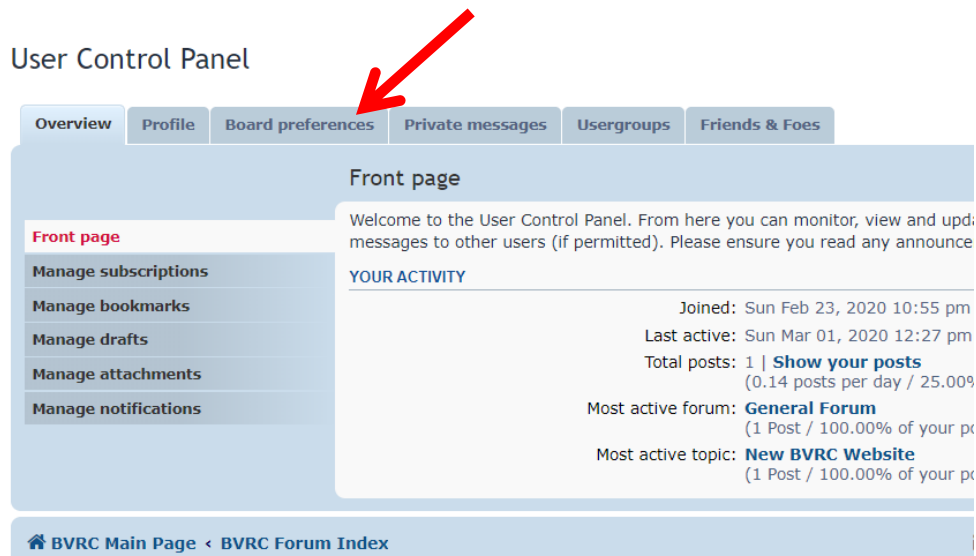
After logging-in, you will then be taken to this screen. If your callsign appears in the upper right corner, that will be a confirmation that you are now logged-in to the Forums (such as I logged-in with K5DB):



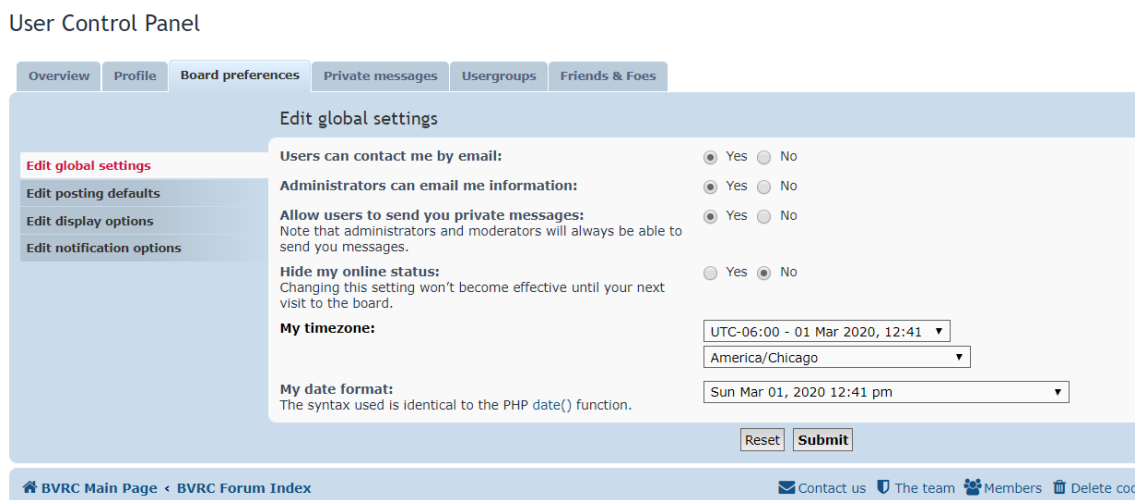
Click the down arrow by your callsign and you will see a drop-down menu. Click USER CONTROL PANEL:



Then, click the tab for BOARD PREFERENCES:



You will then see the below screen, with 4 option tabs on the left. Go down through the tabs, and you can set-up your options on how you would like to be contacted, when/if you want to be notified on the Forums page or by e-mail, and other options to set your preferences:



Amateur Radio Operators – Severe Weather Heroes?

(From www.articlegarden.com)

Amateur radio is a hobby and has over 800,000 radio operators in the USA alone. The hobby is about communications and various ways of communicating via radio waves.

What most people do not know about the hobby and the people that are operators, is that they are one of the most used groups in a disaster situation.

The amateur radio community has networks set up all over the world that can be activated quickly if there is a disaster anywhere in the world. Amateurs worked weeks at the site of 9/11 in New York City and in New Orleans post-Hurricane Katrina, for example, side by side with rescue crews supplying communications.

When there is a disaster such as hurricanes or tornadoes or the likes of 9-1-1 then one of the first things to go away is the local communications. Phones and electricity go out, and the only thing left is amateur radio operators that can operate from a battery and a piece of wire for an antenna.



Many amateur operators are involved year after year with the hurricanes we experience here in the U.S. The amateurs have hurricane watch nets up all over the world just watching and reporting the advance of these storms. Once these storms pass,

the radio operators set up nets to pass traffic for rescue groups as well as passing health and welfare traffic to people trying to get in touch with relatives in the stricken area. It is always great to deliver a message to someone advising that their loved ones are ok.

Amateur radio operators are the eyes of the National Weather Service. If you do not believe that, then just ask someone that works for the weather service. Every National Weather Service office in the United States has amateur radio operators on duty any time that there are storms in the area. The weather service does have a radar, but the radar cannot see the storms like human eyes can. Amateur operators are indeed the on-ground eyes of the NWS.

Somewhere in this country there are amateur operators watching storms and reporting what they see to the National Weather Service almost any time of the day and night. These radio operators have been trained in storm watching so that they will be able to send reports that the weather service that can use immediately. From that point, the reported storm data goes out to weather radio and local radio and TV stations for broadcast to the public.

These amateur operators hardly ever receive any accolades, but they are always there when needed to warn the public of danger. ***The kicker to all this is that the operators BUY all their own radio equipment and give their time*** to keep the public safe – always doing the job in the background at no cost to the public.

As stated before, they usually get no recognition for their service or saving lives. Heroes? You bet.



The 2020 Arkansas QSO Party Is Just Around the Corner, May 9!

Join in on the fun & excitement !!!



Each year on the 2nd Saturday in May, the state of Arkansas takes center stage in the amateur radio world, as hams from all over the globe tune the bands to make a QSO with one of the fine hams in our great state.

Whether non-Arkansas stations are pursuing their Worked-All-States award, needing a particular county or counties, or just enjoying operating in our annual event, they know that Arkansas is a fairly rare state to be found and worked, no matter if they are a stateside or DX operator. So, they will be scanning the bands for Arkansas stations.

Each year The Razorback Contest Club is pleased to sponsor the lone event that spotlights Arkansas in the amateur radio world: The Annual Arkansas QSO Party. Year 'round, *RCC* is constantly working on "talking-up" the ARQP, keeping all national journals and major ham radio websites updated on our event, and maintaining the ARQP website.

Even though it *is technically* a contest, non-contesters return each year to enjoy meeting new friends while operating in our annual event, at their own pace and convenience. If you've never operated in an Arkansas QSO Party, give it a try this year! For returning participants.....see you on the bands!!!

NOTE: The Razorback Contest Club call – W5YO – will be one of the Co-Bonus Stations for this year's ARQP. The operation will occur at the home QTH of BVRC President Tom-W5XNA. Anyone who would be interested in helping and having a lot of fun operating the Bonus Station, please contact Tom and sign-up! You can reach Tom at : w5xna@arrl.net.

Get all the info you need at:
www.arkqp.com



**ATTENTION
NEW BVRC HAMS!
WE INVITE YOU TO PARTICIPATE
IN THE ARRL ROOKIE ROUNDUP, APRIL 19!**

The ARRL Rookie Roundup is a contest aimed at amateurs who have been licensed for three years or less – 2017, 2018, 2019, or 2020.

*This six-hour event is held three times per year:
April for SSB, August for RTTY, and December for CW.*

Several of the BVRC experienced operators will be opening-up their shacks to host this event. If you presently do not have HF privileges and/or do not have an HF station, you may operate from one of the experienced operator's shack locations and enjoy/learn the fun world of HF! You will also learn the fun of logging contacts. (The experienced operator will be there as an Elmer and control operator for you, but they are not allowed to operate or log.)

You will be using a callsign chosen by your control operator, but if your station wins in one of the categories, you will win a certificate with your callsign on it:



If you were first licensed in 2017, 2018, 2019, or 2020 – no matter which class amateur license you hold – you are eligible to participate!

Several new BVRC hams have already signed-up for this fun event!

Be the next to sign-up for Sunday afternoon, April 19!

Sign-up today by contacting:

Tom-W5XNA: w5xna@arrrl.net

Paul-K5YH: k5yh@arrrl.net

or

Glenn-WB5L: wb5l@arrrl.net

The "LoG" Antenna

By Ed McCarroll - KCØDX



My good friend, Steve - K5SAW, inspired me to build this fascinating antenna project. It's a 60-foot wire loop antenna that lays completely on the ground! Each side of the square loop is 15 feet long. I ran 60 feet of wire around my garden spot and attached it to the terminals on the box. I hooked up the coax and connected the ground loop to the ham rig and checked it out to see if this antenna would actually work laying entirely on the ground. This type of antenna is being used by many hams to eliminate noise while receiving signals. Most man-made noise is vertically

polarized and this ground loop, laying horizontally, eliminates the noise problem that is being generated from such things as LED streetlights and many other sources. Weak signals that could not be copied before can now be heard even when living in a high noise level location. After I plant everything in the garden, I will bury the wire. Nobody will even know it's there. Low profile. It will be invisible. It is fed with 50-ohm coax and loaded up using my MFJ-989D manual tuner. No balun is needed because the tuner works as an isolation transformer. The LOG antenna was designed for receive only using a balun but this way I can also transmit on lots of bands. It works great for medium wave broadcast band and shortwave reception too. I use the bypass position on the tuner for that. I was really pleased with the signal reports from all the guys on the 3830 Roundtable when I first tried it out Sunday afternoon, Feb. 23. Check out the ZL1BQD loop antennas video on YouTube: <https://www.youtube.com/watch?v=3-Y3GDMZYk0>. I would like to thank Steve for sharing this fascinating LoG (loop-on-the-ground) antenna info.



Feedpoint



Corner of the square loop



Ham Radio History

THE VIBROPLEX BUG

BVRC has several members who are beginning to study Morse code, and many who have already completed different code courses and curriculums. If you really get hooked (as MANY of us have!) into the fun of using CW, and you think you may make it one of your main operational modes, enjoy this article on the history of the most famous code sending device in history. The original Vibroplex (still made today) is a semi-automatic keyer, meaning that it will make the "dits" automatically for you, but you must manually make the "dahs". Many of us started out with a straight key, then graduated to the "bug" (thousands of hams nationwide still use it!), then ended-up with a fully automatic keyer. There are several other companies who manufacture code keys and keyers, but Vibroplex was the pioneer in this sphere of the hobby. We hope that this article will encourage many who haven't as yet, to learn the code as a really fun mode for the HF bands, provide you with some useful information if/when you decide to invest in an semi-automatic or automatic keyer, and enjoy the history on how this device came to be.

Since Horace G. Martin made the first Vibroplex in 1904 or 1905, about 300,000 Vibroplexes have been made, and the Original model Vibroplex is still being made after more than 90 years. Vibroplexes were by far the most predominant bug on land line telegraph systems like Western Union, Postal Telegraph, the railroads, and hundreds of others. Beginning in the Twenties, commercial, military and amateur wireless operators began using Vibroplexes.

Production peaked in the Forties and Fifties along with the popularity of ham radio, but the Vibroplex Company is still making them.



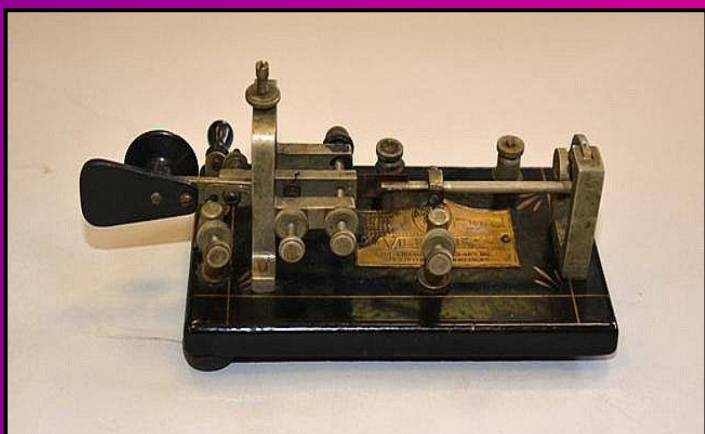
The telegraph key was invented in 1844 by Samuel Morse's associate, Alfred Vail, and was called the "Vail Correspondent". It was basically a switch with a knob mounted on a spring-loaded lever. The design evolved somewhat until the modern design was invented and patented by Jesse Bunnell in 1881. He called his key the "Triumph Key."

However, many telegraph operators who used a key for long periods of time developed a debilitating problem, which they called "glass arm." Today the same type of problem has a kindred name – "Repetitive Motion Disorder," or RMD. Carpal Tunnel Syndrome is one type of RMD.

In 1902, Horace G. Martin, a New York inventor, patented the first semi-automatic telegraph key, which he began to manufacture as the "Autoplex." Using a battery and coil like those in an electric bell,

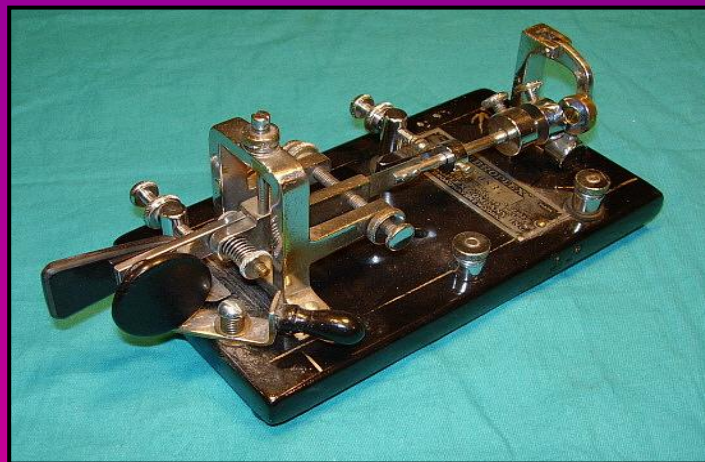
the Autoplex made endless strings of dots when the operator pushed a lever in one direction. Dashes were made manually by pushing the lever the other way. Since only dots were made automatically, the key was called a semi-automatic key. Unfortunately, the Autoplex required a separate battery and was probably fairly expensive.

Two years later, on May 7, 1904, Martin filed a patent for a completely mechanical semi-automatic key, which he named the "Vibroplex." The Vibroplex was based on a lever that rotated around a vertical pivot. Pushing a paddle mounted on one end of the lever to the right and holding it there caused a spring-mounted contact on the other end of the lever to vibrate against a stationary contact, making strings of dots. Dashes were made manually by pushing the lever to the left and releasing it.



Martin was probably not the sole inventor of the semi-automatic key. William O. Coffe of Cleveland patented a mechanical semi-automatic key with a vertical pendulum on January 11, 1904. He must not have sold many copies of his "Mecograph" with the vertical pendulum, because only one is known to exist today. However, he made and sold a number of Mecographs in several different versions with horizontal pendulums.

The Vibroplex did help telegraphers avoid RMD, but it also helped them send faster, which meant they earned more money, since telegraphers were generally paid by the word. Within about ten years, the Vibroplex and a number of clones made by others became very popular.



In those days a poor telegraph operator was called a "bug," and some operators bought a key from Vibroplex or a competitor and started using it without much practice. The result was poor sending, and the keys themselves became known as "bugs."



The Vibroplex Company has made a variety of bugs during its long history. Some models are unusual, some are scarce, and some are common. Several other manufacturers made clones and copies of Vibroplexes, some legal and some illegal. J. E. Albright ran the company for more than forty years, many of them spent in court defending his product.

BVRC VE REPORT

March 14, 2020



Congratulations !!!

Stanly Selleck – Wheaton, MO – New Technician!

Gary Siefman – KI5IGD – Bella Vista – New General!

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

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



NEW BVRC MEMBERS!!!

Jon Holbert – K5XNA – Springdale

Gary Siefman – KI5IGD – Bella Vista

REMINDER: DON'T FORGET OUR VHF/UHF WEEKLY NETS!

BELLA VISTA RADIO CLUB WEEKLY 2-METER NET

The BVRC weekly 2-meter net meets each Wednesday evening at 8pm local time on 147.255 / pl tone 162.2. You do NOT have to be a BVRC member to participate. All licensed amateurs are welcome to join us for on-the-air fellowship and good discussions. This is an excellent way for all new hams to become accustomed to operating protocol and procedure, and gain experience in operating through a repeater. Join-in on the fun!

WIDE-AREA NET

The Wide-Area Net meets each Wednesday evening at 9pm local time on the NW Arkansas Linked System. All licensed operators in the NW Arkansas/SW Missouri/NE Oklahoma area have a standing invitation to join-in on great discussion topics, announcements of upcoming events, good ol' VHF/UHF fun, and sometimes very useful information on this Net. Hams from all over the area participate in this Net, and a good time is experienced by all each week. ***NEW HAMS ARE ESPECIALLY WELCOME!*** You can access the Linked System through any 1 of 8 repeaters!!! The list of the repeaters used in the Linked System can be found [here](#). See you then!



AMATEUR RADIO AMPLIFIERS



Many amateur radio operators consider using amplifiers at full legal power (1500 watts maximum in many countries) like shooting fish in a shallow creek at close range with a double-barreled shotgun! Where's the sport in that?

On the other hand, there are circumstances that justify using full legal power, or at least, higher power than most transceivers emit.

Those circumstances do not include casual DXing and most certainly not "local" rag chewing!

Here are some of the justifiable circumstances for using high RF power output:

Emergency Traffic Handling

One of the major reasons behind all the privileges that we enjoy as amateur radio operators is that at least some of us are expected to serve as volunteers to supply emergency communication services when disaster strikes.



Moonbounce (EME, Earth-Moon-Earth)

Some of the more technically inclined among us like to bounce VHF, UHF or SHF signals off the moon to reach other hams that are normally beyond normal range.

Of course, besides an amateur radio amplifier, one needs to have the space for the antenna arrays!



HF DX Contests

Many serious contesters will regularly use an amateur radio amplifier to "punch" through heavy QRM and/or QRN, while calling CQ thousands of times looking for contacts. If the other stations can't hear you, they can't answer you. Concerning contesting, you can operate at a lower power level if you wish, of course! You will, however, usually experience less contacts and the exchange you make with other stations may have to be repeated several times before the other station acknowledges your information due to running lower power. There are usually operating classes or divisions for # of transmitters, # of operators, and of course, power level. With an amplifier you will not experience the slower operating and QSO rate as, obviously, you have an easier signal to copy.

Amateur Radio Nets

There are nets (a meeting of several or many stations on one frequency) to be found on just about all the main HF ham bands (80,40,20,15, and 10 meters).

These nets serve many different purposes: Severe weather, hurricane, earthquake, and other natural disaster emergency nets, DX nets, county hunter nets, Worked-All-States nets, maritime mobile (ham stations on boats or ships) nets, informal nets, and so on.

No matter what the purpose of the Net is, the lifeblood of the Net is the NCS (Net Control Station). The NCS is the "traffic light" of the net – keeping structure and coordination within the net, while directing traffic and calls within the Net. It is not essential for an NCS to run an amplifier, but it is advantageous for the Net members to have a good NCS signal to copy easily.



Safety First!

Good operating practice is to use as little power as necessary to maintain a solid contact during a QSO. Amplifiers generate *lethal* high voltages. Extreme safety precautions are in order! *Make sure if you use an antenna tuner that it is rated to handle the output power of the amp!* And, be sure your transmitter is set for a *reasonable* bandwidth to avoid splattering.

Curious QSLs

From his nearly 50 years of operating and QSL card collecting, we asked BVRC member Stan Ross – K5VR to share a couple of his more memorable ones. Stan did not disappoint! Stan says, "In my 48.4 years of ham radio, I've tried most modes except EME, microwave, etc., but did get a thrill each time I made voice contact with the ISS, or used its digipeat function to work someone across the country on 2-meters. The DX bug has remained my main interest over the years and I have received some interesting cards, as I'm sure many others have. Probably as a teenager, getting a card from faraway places confirming a tough contact was always exciting. LOTW has replaced most of the "thrill" of getting a paper card, but the "instant" technology we enjoy nowadays is even more amazing to me. Working a remote island in the middle of nowhere and being able to check to see if you're in the log within minutes (or less) is truly amazing."

VKØIR-Heard Island – The Heard Island DXpedition of 1997 was very successful. The team logged 80,673 contacts in 13 days. Heard is owned by Australia. It is a barren volcanic, snow and ice-covered island in the extreme south Indian Ocean about 2/3 of the way from Madagascar to Antarctica. Heard Island is activated only about every 10-15 years due to the treacherous ocean and inhospitable climate. The last DXpedition to Heard was in 2016. If you ever have a chance to work it, don't miss the opportunity. Stan worked this group in 1997.



NA1SS-International Space Station – ARISS, Amateur Radio on the International Space Station, (ARISS) is operated in the amateur-satellite service, and a project sponsored by various entities and carried out by astronauts and cosmonauts on the ISS who also hold an amateur radio license. ARISS makes contacts with hams and schools worldwide allowing students the excitement of talking directly with crew members of the International Space Station. The station operates on 2-meters. Stan worked the ISS in 2005.

BECOMING A HAM RADIO MASTER



Your ham radio license is really a license to *study*. Take advantage of every learning opportunity, including learning from your mistakes. (You'll have plenty!) Each problem or goof is also a lesson. Masters got to be masters by starting as raw recruits just like you and then making one improvement at a time, day in and day out. You may think that ham radio veterans surely have stores of secret knowledge that took years and years to acquire — knowledge that makes them the masters of all they survey. Certainly, the veterans have experience and expertise, but they also rely on simple principles that work in many situations. You can use these ten principles, too:

Listen to everything

Masters get more out of listening and monitoring than anyone else because they've learned the value of doing it. Every minute you spend listening is a minute learning and a minute closer to becoming a master, whether it's as a net control, a top contest operator, setting up a balloon tracker, or just giving out directions to the club meeting. Listen and learn how.

Learn how it works

Operating a radio and building an efficient, effective station are much easier if you know how the equipment works. Even if you're not terribly tech-savvy, take the time to get familiar with the basics of electronics and how your equipment functions. You will be much more effective if you learn the effects of controls and their adjustments. Learn how to make simple repairs to keep your station on the air.

Follow the protocol

Use the expected terms and give information in the form and order in which it is expected. When calling another station, follow "Gift Tag Order – To then from:" Start with that station's call sign to alert that operator, then give your call once or twice as necessary. Use the recommended phonetics that others in your group prefer. In a competition, exchange your information in the same order published by the sponsor.

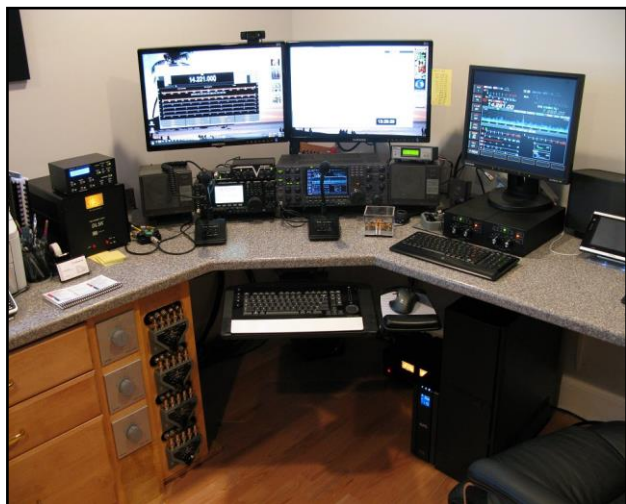
Keep your axe sharp

When asked what he would do if he had eight hours to cut down a tree, Abe Lincoln replied that he would spend the first six hours sharpening his axe. If you have battery-powered equipment, be sure that the batteries are charged and fresh. Make sure fuel for a generator is fresh. Lay out your "go kit" from time to time so that you are sure it's all there when you need it. Test your station's basic operation from time to time on all bands and modes. Keep your equipment and skills sharp. When they're needed on the air, you'll be ready.

Practice to make perfect

Even a sharp axe gets dull if it isn't used. Get on the air regularly, keeping in touch with conditions. An experienced operator knows what stations are active, from where, and when, as well as when important nets and on-the-air events take place. Even if you know the procedures by heart, check in to your local net each week. Take advantage of contests or special events to





exercise your skills and make sure your equipment is working.

Make operating your radio station a natural and comfortable activity by keeping yourself in shape with regular radio exercise.

Pay attention to detail

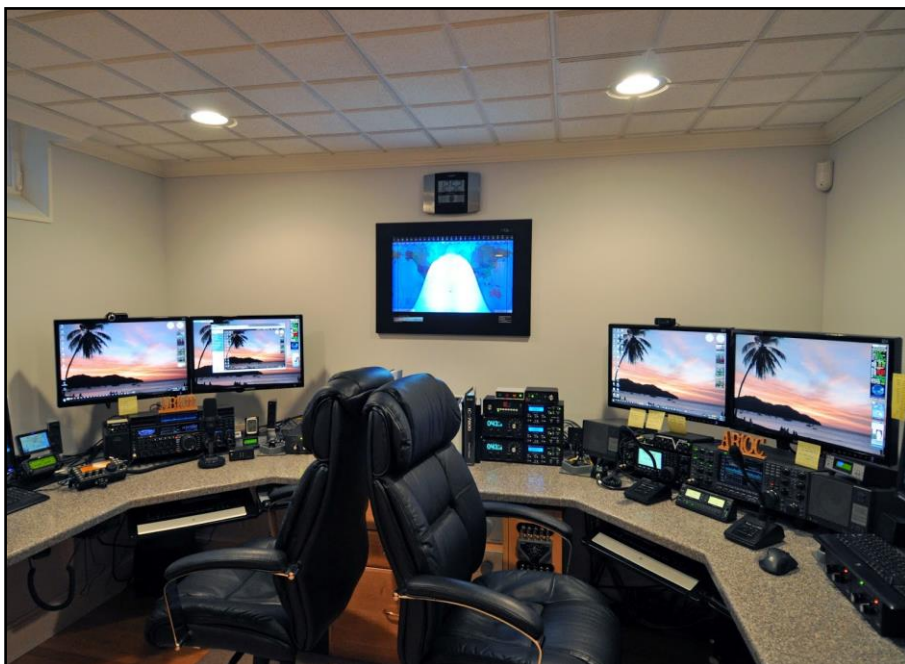
Masters know that the little things are what make the difference between 100 percent and 90 percent performance — or even between being on the air and off the air. The most expensive station isn't worth a nickel if it doesn't work properly when you need it. Waterproofing that connector completely or having your CQ sound just right, really pays off in the long run. Masters are on the radio for the long run.

Know what you don't know

Take a tip from Mark Twain, who warned, "It's what you know for sure that just ain't so." If you get something wrong, don't be too proud to admit it. Find out the right way; track down the correct fact. People make their worst mistakes by ignoring the truth.

Maintain radio discipline

When you are performing public service, whether in an emergency or not, practice your radio discipline: Know and follow the rules of the operation, follow the instructions of a net control station, transmit only when authorized and necessary, use plain language, and pay attention so you are ready to respond. Strive to make your operating crisp and clear so that anyone can understand.



Make small improvements continuously

Any improvement in the path between stations should not be neglected. Anything that makes your signal easier to understand — 1 dB (decibel) less noise received, 1 dB better audio quality, 1 dB stronger transmitted signal — makes the contact easier. Make your station and yourself better in small, regular steps and you'll get a lot more out of ham radio!

Help others and accept help from others

Sooner or later, you will encounter operators needing assistance. If they ask for help, offer your services. They may not be aware there is a problem, such as with poor audio, a distorted signal, or erratic operation. New operators may not know the right way or time to call another station. Before informing them of the problem, ask yourself how you would want to learn about a problem with your station. When describing the problem, be polite and be as clear as you can in your description.

When other operators tell you that you have a problem, don't get mad or embarrassed. Thank them for bringing the problem to your attention and make them feel good about helping you. Ask them to help you troubleshoot. *Ham radio is all about helping each other, on and off the air.*

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