

HAM DATES:

INDIAN RIVER CO.

September 5, 12, 19, 26, 2021
Treasure Coast Ragchew / Traders
Net 8:00pm 146.775 (-) (107.2)

September 6, 13, 20, 27, 2021
Emergency Net 7:30pm
146.640 (-) (107.2)

September 7, 14, 21, 28, 2021
Indian River Co. ARES NET
7:30pm, 145.130 (-) (107.2)

September 9, 2021
Vero Beach ARC Meeting 7:30pm
Indian River Emergency Services
4225 43rd Ave, Vero Beach

September 23, 2021
Indian River Co. ARES meeting
7:00pm 145.130 (-) (107.2)

ST LUCIE CO.

September 1, 2021
St. Lucie Co. ARES NET, 7:30pm,
147.240 MHz (+) (107.2)

September 15, 2021
St. Lucie Co. ARES, 7:30 pm
SLC EOC, 15305 Midway Rd, Ft.
Pierce.

September 7, 14, 21, 28, 2021
Ft. Pierce ARC Rag chew, Tech,
Traders NET 8pm, 147.345 (+)
(107.2), Echolink: 2004 (W4AKH-R)

September 8, 2021
Ft. Pierce ARC Meeting, 7:30pm,
IRSC, Building R, Room 130

September 2, 9, 16, 23, 30, 2021
Port St. Lucie ARA Weekly net
7:30pm, 146.955 (-) (107.2)

September 22, 2021
Port St. Lucie ARA meeting 7:30pm
(ZOOM Meeting) (request login)

MARTIN CO.

September 6, 13, 20, 27, 2021
MCARA Rag chew net 8:00pm,
145.150 MHz (-) (107.2)

September 9, 2021
MCARA ARES, 7:00pm MC EOC
800 SE Monterey Rd, Stuart

September 23, 2021
MCARA Meeting, 7:00pm, Stuart
PD, 830 SE Martin Luther King Jr
Blvd, Stuart

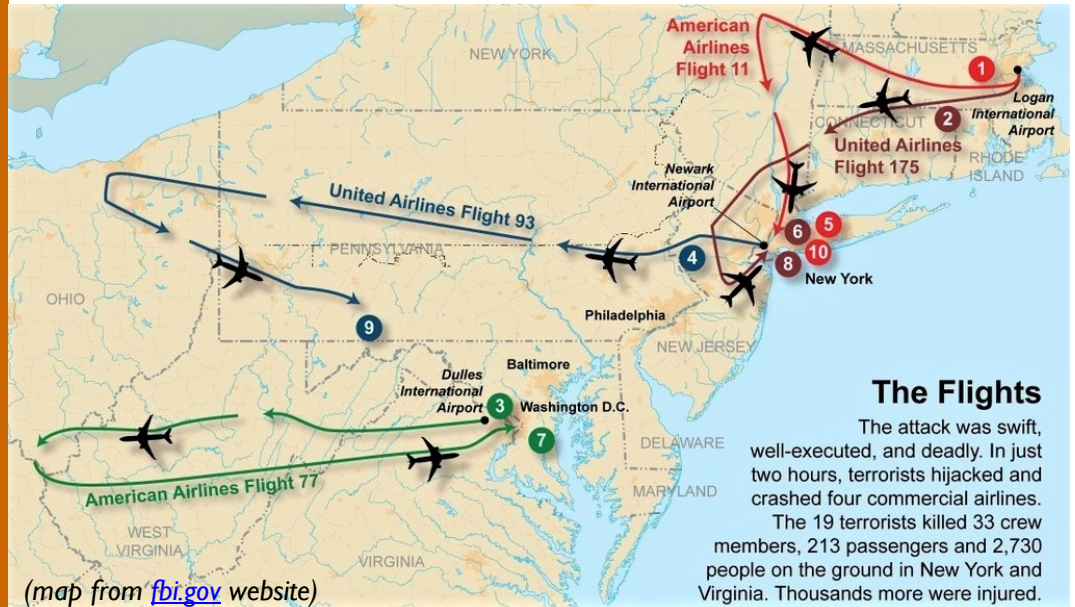
([Blue](#) underlined text are links to
club / organization websites)

Treasure Coast Ham News

VOLUME 2, ISSUE 9

SEPTEMBER 2021

The 9/11 Terrorist Attacks - May We Never Forget



About the map: Each hijacked flight is shown in a different color. Circled numbers indicate the sequence of events on 9/11. Additional information on 9/11 observances is included on page 19 of this newsletter. (A larger and more detailed version of this map is available on the [FBI website](#).)

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From the Publishers

My fellow publisher and I are both Volunteer Examiners. Sometimes I ask our test takers how they came to amateur radio. Some say a father, grandfather, relative or friend was a ham. Others say they were introduced to ham radio in high school or college. Still others say they read about it and thought it was a fun hobby. Whatever the reason, we are happy that they made it to the point of taking a test and hopefully passing. Most do!

At 11 years old I built a crystal radio. The magic of how a germanium diode, coil, variable capacitor, crystal ear phones, and a piece of wire for an antenna could receive an AM signal was mystifying. In junior high school I took an electronics class. The curriculum included basic radio. Our library had an old ARRL Handbook that they were giving away. I grabbed it and read every page. Although I didn't understand all that much, things slowly began to come into focus. In 1967 I became Novice and was off on a lifelong curiosity quest and hobby. Now some 50+ years later I still get excited learning new ham radio things.

A hallmark of early hams was the ability to build and maintain their radio equipment. In those days technical and practical knowledge of how radios work was part and parcel to being an amateur radio operator.

Today, not every ham has the same perspective for

our hobby as we did starting out. Most hams buy rather than build their radios. The inside a modern HF/VHF/UHF radio can be daunting, but aren't you just a little inquisitive as to what's under the hood? And how about programming a radio? Some hams won't even attempt to understand manual programming, instead relying on radio vendor software, RT systems, Chirp, etc.

Maybe the thirst we had years ago to learn all things ham radio just doesn't fit with today's operators. After all how do we keep up with the technological changes?

Another area where ham radio seems to be waning is public service. Ham radio's motto is still, "**When all else fails.**" Yet today, more and more emergency management doctrines say they have all the resiliency they need. "*You guys are redundant, we can handle any situation.*" Really?

So what do we need to do as hams?

- ◆ Don't quit learning. Grow your knowledge. Don't stove pipe yourself to one type of ham radio.
- ◆ Become a ham radio teacher. Teach more than the test. Share your practical knowledge as well.
- ◆ Join a club and get involved. Attend club meetings.
- ◆ Join/rejoin your county ARES organization. Brush up on emergency communication skills. Learn Winlink.
- ◆ Try to operate using as many modes as you can. FT-8 is fun, but there is a much bigger operating world.
- ◆ Be an Elmer to a middle or high school, or to a friend or neighbor. Show them what ham radio is all about.

73, TCHamNews



The [Amateur Radio Emergency Service](#) (ARES) is an ARRL public service program.

The National Hurricane Center is still predicting an above average season. How prepared are you? If you are deployed to a shelter or temporary operating position, are you radio ready?



Every deployed ham should make sure their radio power cord is equipped with Powerpole connectors and cables. They are a standard for emergency communications power sources. They provide bullet proof positive and negative connections to a power supply or battery. Powerpoles insure no reverse polarity issues and provide

common DC connections.

Your radio "go-kit" should include:

- . Dual band VHF/UHF radio with antenna
- . Assorted RF/audio connectors/adaptors
- . Coaxial cables (short & long jumpers)
- . Alkaline/rechargeable radio battery packs
- . Tool kit with multi-meter, soldering iron, solder, electrical and duct tape
- . 12vdc, 10-12 amp power supply
- . 120-volt extension cords, plug strips
- . Deep cycle or gel-cell battery & charger
- . VHF/UHF SWR/Power meter
- . Flashlight and spare batteries
- . ARES ID card, relevant government IDs
- . Phone lists & contact information
- . ARES emergency plan info & logbook
- . Winlink computer & TNC/sound card interface if using a VHF/UHF radio
- . Cell phone & USB charger

Treasure Coast ARES Emergency Coordinators

[Martin County](#)
[Steve Marshall, WW4RX](#)

[St Lucie County](#)
[Paul Horner, W4ISZ](#)

[Indian River County](#)
[Bud Holman, WA4ASJ](#)

**Get involved, volunteer,
and be a part of your
county ARES.**

VE License Testing Update



If your club is testing, please let us know the location, date and examination results

VE Session at Ft. Pierce Ham Fest

A VE license examination session was held on Saturday, August 14, 2021 in conjunction with the Fort Pierce Hamfest. The Hamfest and exam session were held at the Indian River State College main campus in Fort Pierce.

While attendance at the Ham Fest was robust, the VE team was disappointed that no candidates showed up at the exam session.

We would be remiss if we did not extend thanks to the Volunteer Examiners who committed their time to serve at this exam session.

Bob Pearsall, W4RJP
Paul Horner, W4ISZ
Jess Porter, W4DNS

No further license exam sessions have been scheduled at this time due of the difficulty finding a facility willing to host us because of the continuing COVID-19 situation.

Watch for future exam session announcements via email and in this newsletter. Meanwhile, if you know someone looking to take an exam, please notify one of the local contacts listed below.

Local License Exam Contacts

Vero Beach ARC
Bud L. Holman
(772) 559-3342
budholman@earthlink.net

Ft. Pierce ARC
Jess Porter
w4dns@arrl.net

Port St. Lucie ARA
Robert Brown
(772) 201-5485
brownpsl@comcast.net

\$35 FCC Processing Fee on Hold

As of this date, the fee to take a license exam remains at \$15. The \$35 processing fee for new and upgraded licenses announced earlier this year by the FCC remains on hold. A recent announcement by the ARRL VEC indicates the effective date for the new fee will be sometime in 2022.

Recent FCC Rule Changes

Email address required. Effective June 29, 2021, all applications filed with the FCC by current licensees or new license candidates must include an email address where the applicant can receive FCC correspondence. More info is available on this [ARRL webpage](#).

FCC Registration Number required. As of May 20, 2021, all license exam candidates are required to include an FCC Registration Number (FRN) on the license application form 605. Social Security numbers will no longer be accepted.

Important - You must obtain your FRN prior to arriving at an examination session.

An FCC video provides instructions on obtaining an FRN. [You can view it here.](#)

Technician Exam Question Pool

The current technician exam question pool expires on June 30, 2022. A new question pool will become effective on July 1, 2022.

Attention Club VE Teams

Please keep us updated on your VE activities. Notify us when your club schedules a session, and keep us apprised of the results of your sessions. Send your information to tchamnews@gmail.com.

PSYCHOLOGY OF THE QRMer by Jim Millner, WB2REM

[Jim's original CQ article was published in 2013. Jim has provided an update addendum at the end of the article.]

Have you ever been in a radio conversation only to have someone throw a carrier on you or make a rude comment without identifying? I know I have, and with increasing frequency. I have been an amateur radio operator for over fifty years and during that time, I have observed a gradual decline in good operating habits and procedures, which may also mirror the general decline in civility that we've seen among the public at large in recent years.

So, what and who is a QRMer? By definition, QRM is interference caused by man and a QRMer (pronounced by some as "Quarmer") is a person who demonstrates these attributes while operating. This behavior can be seen as either unintentional or intentional in nature with the latter fitting into the category of malicious interference. Once we understand why the QRMer interferes with us, it should be easier to address his/her behavior in a more positive manner. I believe the deterioration in behavior among hams has its roots in a number of arenas. These include:

- Intolerance of divergent views
- A general lack of operating experience
- Feelings of station inferiority
- Group diffused inappropriate behavior
- Operating under the influence
- Acts by truly emotionally sick individuals



Unintentional QRM

Unintentional interference can be found in many forms. For example, it could come from a station operating close to another's frequency. Likewise, when two hams unknowingly share a frequency in a state of ionospheric transition, they may find themselves suddenly in competition with each other. In this instance, the stations need to become aware of what has happened and politely agree to change frequency.

Very loud stations, although within normal frequency bandwidth, can create the perception of splattering across the band. The affected station, whose receiver may be overloaded, may blame the stronger station for the interference. This can sometimes be corrected by turning off the receiver's noise blanker and/or pre-amplifier.

Nets with established frequencies of operation can also create interference to QSOs already in progress. A net may not assume ownership of a frequency. However, in cases like this, if you politely explain that a net is scheduled to come up on frequency, the stations in conversation will likely respond positively and move. The worst thing that can be done is to proceed with the net, pretending the other stations in QSO do not exist. This is bound to create animosity and lead to possible intentional interference to the net.

Contest participants may also precipitate predictable unintentional QRM and generate anger from non-contesters who are affected by competition for a frequency. The demand for frequency spectrum is greatest during these times, which can result in overcrowding and frayed tempers. Contesters sometimes forget that the frequency used is not exclusive to them and that non-contest stations have the right to operate within the same spectrum. Stations that are not involved in the contest activities might want to find less active frequencies in order to avoid confrontation. The WAAC bands (30, 17 and 12 meters) may be a good refuge during contest weekends, since virtually all contest sponsors exclude these bands from competition.

Intentional QRM

Malicious or intentional interference first appeared in a very noticeable form in the 1990s. With the appearance of FCC Counsel Riley Hollingsworth on the scene in 2000, the FCC began to crack down on violators.

(continued on page 5)

Psychology of a QRMer *(continued from page 4)*

The active citing and prosecution of offenders for intentional interference and rule violation resulted in a reduction of malicious interference. However, malicious interference has returned again in recent years in the form of cursing, singing, carrier-throwing, and other rude and generally obnoxious behavior.

[CQ Ed. Note: The perception of increased FCC enforcement during Riley's tenure resulted in a general improvement in on-air behavior. Riley's retirement coincided with changes in FCC privacy practices that resulted in fewer public notices regarding enforcement actions and the perception of reduced enforcement activities, even though there was actually very little change. But the perception of reduced enforcement has resulted in a broader deterioration in on-air behavior. -W2VU]

Stations operating from rare DX entities are also prime targets for intentional interference, especially if they employ the common and generally recommended practice of transmitting and listening on different frequencies. The wider the frequency "split" that is chosen by the DX operation (occasionally up to 20 kHz), the more likely it is that interference will occur to ongoing QSOs. This type of operation and associated interference tends to create anger and animosity toward the DX station as well as producing a higher likelihood of retaliation by stations affected by the interference. DX stations, whenever possible, should scan the frequency or frequencies on which they will be listening for availability, before announcing the split.

Very loud stations seem to attract QRMers. I can only speculate that this is because less powerful stations feel intimidated by their presence or that they are just heard by more people, which in turn attracts more listeners. One way of addressing the problem is to make people who are listening feel comfortable about breaking into a conversation if they so desire.

When stations engage in discussions of controversial topics such as politics or religion, it can incite stations who may be monitoring on the frequency and inadvertently provoke an emotional reaction. This can put the normally passive listener on the defensive and possibly lead to disruptive and illegal transmissions.

Substance use/abuse has affected all aspects of society. Unfortunately, station owners sometime encounter malicious interference from those who have lost their inhibitions through alcohol and/or other drugs. The only way to address these individuals is to ignore them. As would be surmised, engaging in fruitful conversation with

someone inebriated would not be productive.

Underlying Factors

As a licensed psychologist of 35 years, I have come in contact with many personality types. I feel that many of the operators creating malicious interference are psychologically troubled individuals. The behavior we observe from QRMers, for the most part, is not driven by us, but by the overall mental health of the offending operator. Most of us could agree that people who willfully interfere have a need for attention and recognition. These operators tend to employ displaced aggression, which is anger directed onto others rather than onto the actual source of their frustration, all the while acting out with somewhat infantile behavior. These hams tend to rationalize their behaviors by thinking that others believe the same way they do and they may project their negative self-image onto others. The overuse of defense mechanisms by such individuals tends to create anxiety and emotional turmoil.

Inappropriate group behavior is created by a diffused sense of responsibility. Some troubling hotspots of QRM where cursing, insults, and poor operating procedures occur are self-perpetuated by a "monkey-see, monkey-do" attitude. There is a feeling that if someone else can get away with the behavior, so can I. It's useful to avoid these frequencies to lessen their impact and reduce the size of the audience these people are so desperately seeking.

What You Can Do

How can you make your ham radio experience more pleasurable? You can avoid the frequencies that promote toxic, provocative and attention-getting behavior. Like children, these stations crave attention. If they are denied this attention, they will feel unrewarded and often will leave the frequency. If someone chooses to QRM you, ignore them. Challenging them just lets them know that they have gotten to you and reinforces their resolve to continue. In the worst-case scenario, when the offending station is transmitting, announce a change in frequency and move.

Are you seeing yourself in the mirror here? At times, stress and anger affects all of us. When it gets bad, turn off your radio! Recognize your feelings before they get you in trouble and address the malcontent in an appropriate arena. Amateur radio is a great hobby which provides most of us with a positive life outlet. Let's not ruin it with self-defeating behavior that diminishes the quality of our hobby.

(continued on page 6)

Addendum to Psychology of a QRMer

Jim Millner, WB2REM

[August, 2021 Update: My original article entitled "The Psychology of the QRMer" was written in 2013. At the time I was truly concerned about the behavior of operators on the bands and tried to identify their motivation in interfering with ongoing QSO's. I was asked by **Treasure Coast Ham News** to update this article and give my opinion on the current state of Amateur Radio's on air behavior.]

I am happy to say, for the most part, there has been improvement since this article was first published in CQ Magazine. You would think that the political fighting and turbulence in the world would translate into bad on air behavior. I can say from my experience that does not seem to be true.

One might ask, what has changed? Is it the threat of enforcement by the FCC started by Riley Hollinsworth, the migration to other modes of operation such as FT8 or self enforcement by the newly designated Volunteer Monitors? This is not to say that intentional interference doesn't occur for the same reasons mentioned in the article. Some of the major problematic frequencies such as 7.200 MHz and similar have been cleaned up by enforcement of the FCC, as well as major disruptive players having been removed from the airways. This has sent a message to the overall Amateur community that if you want to play you will eventually have to pay.

I cannot speak for 80 meter SSB, since I no longer visit that portion of the band. I believe it has been lost to an Amateur/CB mentality and thus I no longer consider it a part of the frequency allocation I chose to operate.

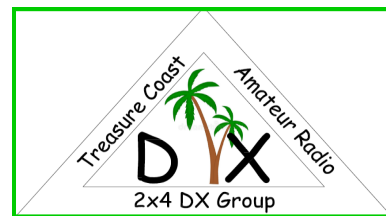
In summary, yes there has been improvement in FCC enforcement and with the new Volunteer Monitor program in place, with Riley Hollingsworth in charge. I think we can anticipate continued reduction in intentional interference and a more pleasant atmosphere to operate on bands free of QRMer's. 73, Jim, WB2REM

Jim, WB2REM was first licensed in 1963 as WN2LLA and received WB2REM in 1965. Jim has operated in many countries including: Anguilla, Belize, Costa Rica, Cuba (Havana), Cyprus, Galapagos Islands, Guantanamo Bay, Nicaragua, Rostov-On-Don (USSR), Tahiti, Tortola, Turks and Caicos Islands, and also operated 4UIITU from the ITU, Geneva, Switzerland.

He conducted a SAREX contact for the Lawrence Township Public Schools, spoke to the MIR Space Station when it was in space, the Space Shuttle and the International Space Station. Jim has published over 20 articles in CQ and QST magazines.

In 2021 Jim and the 7163 Group created **The Ham Radio Hunger Games**. The object was to locate and book COVID-19 vaccinations for fellow hams, their families, friends and anyone else who asked for help. Scheduling coordination was via amateur radio frequencies.

Jim's next scheduled DXpedition is [HD8M](#), Galapagos Islands in March 2022. Stay tuned.



Have an interest in contacting hams in remote lands? Want to sharpen your DX operating skills? Unsure about HF propagation? Not sure about QSLing and LoTW confirmations? Do you want to earn a DXCC, WAC, CQ, or one of a multitude of other awards and need help?

Treasure Coast Ham News has received emails from hams around the region asking about the 2x4 DX Group and when meetings might resume. Because of COVID-19 the group suspended in-person meetings early in 2020.

The group was previously meeting on the 2nd and 4th Wednesday of each month at St. Andrew Lutheran Church in Port St. Lucie. Unfortunately, that venue is no longer available. The group is asking for your input and help in finding a new location where the group can meet on a monthly basis? We are also interested in your opinion as to the best time and day of week to hold in-person meetings? Please share your ideas, thoughts and opinions about reinvigorating the 2X4 DX Group by emailing us at tchamnews@gmail.com.

With Solar Cycle 25 starting to come alive, we could very well have interesting worldwide propagation in the coming months and years.

Help us get the 2x4 DX Group reactivated! Please consider joining the group. All are always welcome. No one is ever considered a visitor.

Upcoming Hamfests

FLORIDA

10/8-9/2021 - [56th Annual Melbourne Hamfest](#)

Location: Melbourne, FL
 Sponsor: Platinum Coast Amateur Radio Society (PCARS)

12/10/2021 - [Tampa Bay Hamfest, ARRL West Central Florida Section Convention](#)

Location: Plant City, FL
 Type: ARRL Convention
 Sponsor: Florida Gulf Coast Amateur Radio Council
 Website: <http://www.fgcars.org/>

Don't forget Hamcation 2022 <https://www.hamcation.com>

REGIONAL

09/03/2021 - 09/05/2021

[Shelby Hamfest, ARRL North Carolina Section Convention](#)

Location: Shelby, NC
 Website: <http://www.shelbyhamfest.org>



OCTOBER 8-9, 2021 56th Annual Melbourne Hamfest and 2021 ARRL Florida State Convention

Melbourne City Auditorium, 625 East Hibiscus Blvd.

Hamfest Hours: Friday, 1pm-7pm and Saturday, 9am-3pm. Setup for Vendors and Tailgaters: Friday, 9am-1pm, Saturday 7am-9am.

Tickets: Adult Admission is \$10 for both days. No charge for children 12 and under. **We recommend that you purchase tickets on-line. They will not be mailed.** Tickets will be available at the "WILL CALL" window at the Hamfest beginning at 1 pm on Friday, and 9 am on Saturday. Tickets may be purchased at the Hamfest. To purchase advance tickets for Admission, Booths, and Tailgating fill out the requested forms and remit to PCARS. You will be directed to Paypal for payment and confirmation. Or, you can mail in the completed form along with a check.

Tailgating: \$15 per space. This year you can reserve a particular parking spot. The parking area layout is linked from the tailgate reservation form. Otherwise, you will be assigned a parking place at arrival. Note that admission tickets are also required.

Contact Us

Email: <mailto:hamfest@pcars.org>
 Postal Mail: PCARS Hamfest, P.O. Box 1004, Melbourne, FL 32902-1004

Ham Radio Trivia

Answer to last month's question:

It's summertime. Vacation and travel are on everyone's mind, including ours. So we thought it appropriate that distant lands be the topic of last issue's trivia question, but of course with a ham radio twist. Let's see how you did.

July-August Trivia Question

Question:
 We know North Korea (P5) and Bouvet Island (3Y/B) are at the top of the DXCC most wanted

list. The United States is at the bottom of the list, making it the most popular DXCC entity. Which country is the second most popular after the United States?

- A. France
- B. Venezuela
- C. Canada
- D. Italy

The correct answer is **D - Italy.**

September Trivia Question

It is still summertime, so let's continue our travel theme - ham radio style of course. (This month's question comes from QRZ.com.)

Per the ARRL DXCC program, which of the following amateur radio license prefixes is not located in Africa.

- A. 5N
- B. EA9
- C. 8P
- D. ZS

Bonus question: Can you name the countries / entities that own these prefixes?

(We will reveal the answers next month.)

(Have a good trivia question? Send it to us at: tchamnews@gmail.com.)

"Brush up on your radio knowledge, skills and trivia."

2021 Fort Pierce Hamfest - Recap



Congratulations to the Fort Pierce Amateur Radio Club for organizing and pulling off a great Hamfest despite threats from the Covid-19 pandemic and tropical storm Fred.

Fortunately, the impacts were minimal and overall attendance was robust.

Door prizes, seminars, refreshments, a VE exam session, and vendor tables insured there was something for everyone. ARRL was represented and card checking was available for DX chasers.

Robert Blauvelt, AJ4LJ, won the grand prize, an ICOM ID-5100A 2m/70cm transceiver.

The 36 vendor tables were packed full of goodies, and with attendees eager for deals, overall sales were reported to be brisk. Very few items went home with the same owner they arrived with.



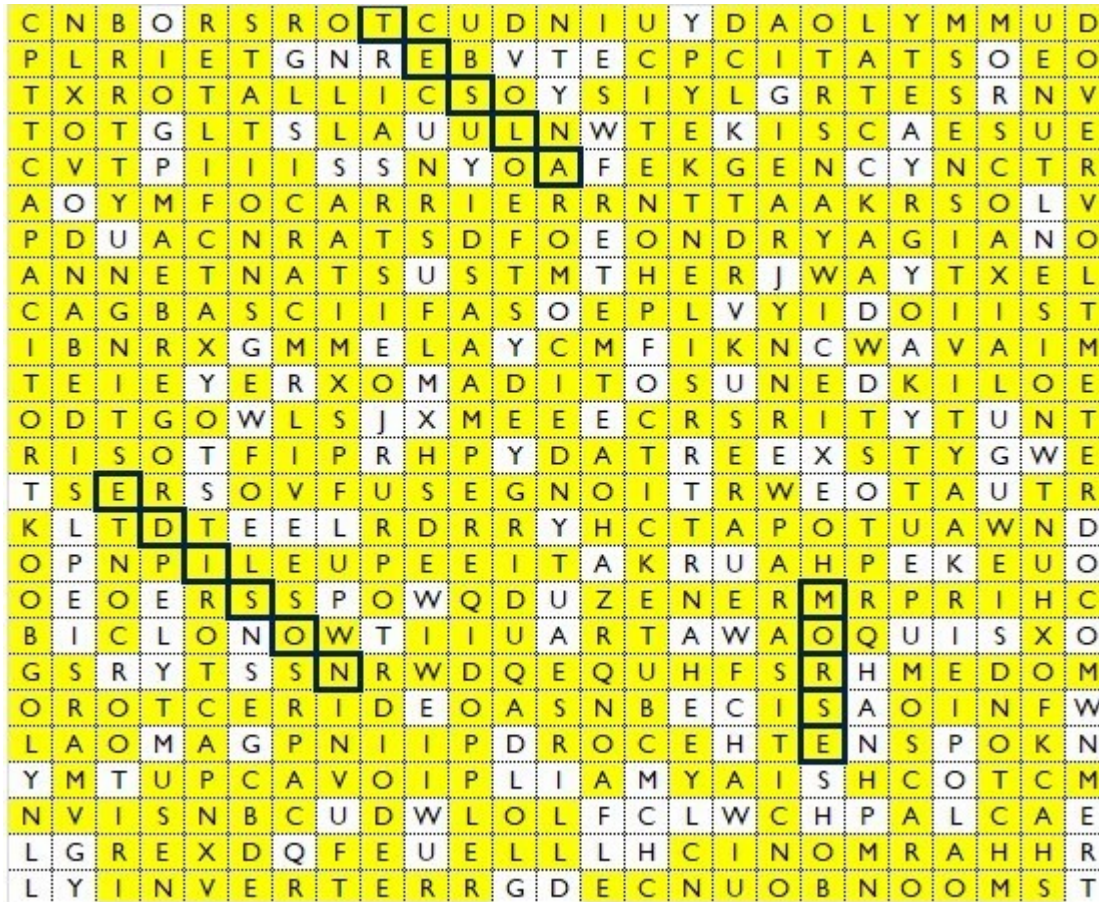
ARRL representatives Jeff Beals, WA4AW, and Mickey Baker, N4MB, presented the Fort Pierce Amateur Radio Club with an award for 50 years of service.

The award was accepted by president John, KK4SHF, and Jesse, W4DNS, an original charter member of the club. A photo of the award presentation appears in this newsletter's Club News section on page 23.

TC Ham News congratulates Fort Pierce Amateur Radio Club on receiving the 50 Year Service Award. We also salute them for putting on a great Hamfest!

July-August Ham Radio Word Search - Solution

How did you do? One hundred radio words and phrases were hidden in the grid. Three famous last names were also hidden in the grid but not included on the word list. When completed, you should have used all the letters highlighted in yellow. The names are outlined.



- | | | | | | |
|-----------|------------|-----------|--------------|-------------|-----------|
| AMPERE | COIL | FINAL | MARS | QRP | TEST |
| ANTENNA | CONTESTING | FOXHUNT | MODEM | QRZ | TICKET |
| APRS | CTCSS | FREQUENCY | MOONBOUNCE | QSO | TOWER |
| ARES | DIODE | FUSE | NOISE | RADIO | TUNE |
| ARRL | DIPOLE | GAIN | NOTCH | RIG | UHF |
| ASCII | DIRECTOR | GRID | NVIS | ROGER | UPLINK |
| AUTOPATCH | DISH | GROUND | OHM | RTTY | USB |
| BANDWIDTH | DOPPLER | HAM | OPTOISOLATOR | SCAN | VFO |
| BEACON | DSTAR | HARMONIC | OSCAR | SENSITIVITY | VOIP |
| BEAM | DUMMY LOAD | HEAT SINK | OSCILLATOR | SHACK | VOLTMETER |
| BNC | DUPLEX | HERTZ | OVER | SIDEBAND | VOX |
| CALL | DXER | IMPEDANCE | PACTOR | SILENT KEY | WATT |
| CAPACITOR | EMF | INDUCTOR | PARASITIC | SKYWARN | XMIT |
| CARRIER | EMISSIONS | INVERTER | PHONETIC | SSTV | YAGI |
| CHIRP | FADE | IRLP | PILEUP | STATIC | ZENER |
| COAXIAL | FCC | KILO | POWER | STATION | |
| CODE | FILTER | LOGBOOK | PTT | SWR | |

How to Spot a Counterfeit Baofeng BF-F8HP Radio

[I own two Baofeng radios. A UV-5R was acquired in 2015 for a business trip to Eastern Europe and a RD-5R to learn about DMR. At a hamfest in 2015 a vendor was selling Baofeng UV-5R radios for \$75. Reading the radio's specifications, the UV-5R looked perfect for my travel purposes. After hearing about DMR radios at my county ARES meetings, I decided to venture into that world. Programming the UV-5R via CHIRP was easy. The software provided for DMR programming was crude, but once I understood code plugs the RD-5R also programmed easily. Both radios have operated flawlessly for me. Several years ago I began seeing the Baofeng radios selling at much reduced prices. While these radios "looked" to be genuine, they seemed to suffer from a variety of issues including inability to be computer programmed and firmware glitches. It made me wonder what had happened. The following article is from the Baofeng Tech website.]

* * * *

The **BaoFeng BF-F8HP** has been an extremely popular entry-level amateur radio ever since its debut. Unfortunately, due to their popularity, there have been a huge influx of counterfeits and knock-off Baofeng BF-F8HPs. It is important to make an issue of these counterfeits as they are not assembled by BaoFeng and they are not FCC certified. They are inferior in build and performance, and they carry no distributor warranty.

How do you identify a counterfeit BF-F8HP?

First and foremost, when purchasing a BF-F8HP – verify the source. This is important and although we will document some differences between different types of counterfeits and a genuine BF-F8HP — counterfeiters will adapt and change their listings, or simply misrepresent their products (by using stock photos, or content that does not represent what they will actually ship to you).

COSMETICS:

Some counterfeits are completely different cosmetically, and the reseller will try to hide it. Their listings may be a mixture of genuine BF-F8HP photos along with photos of

the fake BF-F8HP they will send you. Some counterfeits have support bars along their speaker grill. The real BF-F8HP does not. Some counterfeiters will simply send a basic [UV-5R](#) with a BF-F8HP label applied to the radio.

PACKAGING:

Some counterfeiters will source generic batteries, user manuals, and boxes. A genuine BF-F8HP will be clearly advertised on the packaging. A genuine BF-F8HP user manual will actually refer to the radio as a "BF-F8HP" and will not be generic.

FIRMWARE:

The BF-F8HP uses its own unique firmware – You can check your firmware by using [CHIRP](#). Valid firmwares are: 5R-340A, N5R-340B and, HN5RV01.

These firmware numbers could be replicated by a counterfeiter and should not be solely relied on.

Most counterfeits use hacked firmware that may not have a third power level (L/M/H); or if they do, they will output the same power on both Medium and High settings.

HOW TO DEAL WITH A COUNTERFEIT:

We have personally dealt with hundreds of counterfeit listings and have had them removed from marketplaces. Unfortunately, most sites will not prohibit the counterfeiter from creating another listing. The most effective means to stop counterfeits is to buy direct from a [BTECH authorized distributor](#).

What happens if you have purchased a counterfeit?

You can help stop counterfeiters by requesting a charge-back from your payment processor and then reporting that illegitimate seller to the marketplace.

* * * *

Buying an inexpensive Chinese handheld can be a great way to get on the air. Make sure you know what you are buying. Do your own investigation. Talk with other hams. A bargain may not always be a bargain. 73, TCHN



The Frugal Ham Radio Operator

Handheld radios are great to use, but one issue is they don't always stand upright on a table. Sometimes they fall over, or worse tumble to the floor damaging the radio.

At a recent Ft. Pierce Amateur Radio Club meeting, Carl, W7RCW gave out "free" VHF/UHF handheld holders to club members. The holders are made of scrap oak wood from a kitchen remodel.



At Carl's initial offering I did not take one of the holders, letting other club members get one. Carl had a few left, so the second time he offered them at a club meeting, I did accept his kind offer.

As a frugalist, Carl's handheld holder is music to my ears. You can spend lots of money on plexiglass holders, but this is perfect for most handhelds. And what's better, it is made from recycled materials. Save the planet!

If you see Carl at a meeting or hamfest and received one of the holders, please let him know by saying thanks.

Mobile Rig Heats Up Operating Digital

As a frugalist, my base station rigs (TS-520S & IC-735) are not necessarily best for WSJT. The TS-520S drifts slightly. Fine for SSB, not so good for WSJT. My IC-735 with its keyer and added narrow filter, is my CW rig. That leaves me with my Yaesu FT-857D mobile transceiver.

The FT-857D is actually good for WSJT. Although 9 years old it has a User Defined digital mode that can be configured. It doesn't have a USB/soundcard interface, but a Signalink takes care of that. As a mobile rig it has a sizable RF heat sink. Its fan is fine for SSB, but not for WSJT.

I don't operate much above 35 watts, but occasionally I increase power to snag that rare DX. That is when the RF deck can get quite warm, or at times even hot. There are a few fan mods, but I did not want to dig inside. So what about using an external fan? One day in Walmart I spied a USB, rechargeable pancake fan. The fan can rotate to suit hot air flow. At \$8.99 it was worth a try.



It's amazing what the extra fan can do to pull the hot air away from the rig's RF deck. Now it is much cooler.

73, The Frugal Ham

Short Takes

Antenna Articles by L. B. Cebik, W4RNL

<http://www.antentop.org/w4rnl.001/radio.html>

WinLink Hybrid Network - Learn about a system that combines the best of Winlink's traditional internet RMS-CMS message forwarding and the fault-proof features of a completely stand-alone, radio-only message forwarding system.

<https://winlink.org/HybridNetwork>

Combination 3000 mA Power Bank / Solar Panel / Flashlight / USB Phone Charger

(Here's a low cost device that could prove useful.)

<https://www.goldmine-elec-products.com/prodinfo.asp?number=G23978>

Radio Society of Great Britain: Useful Practical Skills Video Library

<https://www.youtube.com/user/TheRSGB/videos>

Mast Load Calculator

<https://dxengineering.com/mastloadestimator>

Finding and killing QRM in the home with ferrite toroids & snap-ons

<https://www.youtube.com/watch?v=QQzmMOjvFfc&t=329s>

See an interesting web site? Share it. Send link to: tchamnews@gmail.com.

Update on Donn, WY5I

Treasure Coast Ham News is pleased to report that Donn, WY5I, is now at home and continuing his recover from successful surgery.

We are also pleased to report the recent nuptials of Donn and his long-time friend Alice Conover. Congratulations Alice and Donn, and best wishes for future health and happiness.

73, TCHN team

Treasure Coast Ham Doctors

FT8 - Logging Frustrations



Question: I'm a beginner with WSJT-X and FT8 operating. I have the process down fairly well, except when it comes to logging. I log to LoTW and eQSL. LoTW is not an issue. But when I check my eQSL account I frequently find claimed contacts in my Inbox that are not in my log. This is becoming frustrating. What gives? Help please!

Answer: We hear you loud and clear. The doctors also use both LoTW and eQSL. We share your frustration with claimed QSOs in eQSL that are not in our logs.

The cause is a simple one. You (and we) are operating in a **purist** style, meaning we do not log the FT8 contact until we see or send a 73 or RR73 packet.

We find some stations take a less pure approach. They log the contact after receiving and sending signal reports, regardless of whether or not they see a 73 or RR73 response. We've even seen extreme cases where the station responds to our CQ call, but never replies to our subsequent signal report. Yet they still log the contact. I guess their logic is something like, "I saw your CQ and responded. I then saw your signal report, which is enough to consider the contact a success."

The easy solution in eQSL is to reject the QSL and indicate the reason as "Not in my log." We'll share more ideas in a future column. Happy DXing!
73, the doctors



BOUVET ISLAND DXPEDITION UPDATES



The Intrepid-DX Group has decided not to pursue a Bouvet Island DXpedition and is looking for another sought after DXpedition location. Meanwhile, a group under the [LA7GIA / LA7THA / LB1QI](#) triumvirate is planning a November 2022 DXpedition to Bouvet Island.

According to team leaders a contract is signed with a vessel having a proven track record and experienced polar crew to transport them to Bouvet Island. The vessel is the [MARAMA](#). With the signing of the vessel contract they immediately started fundraising. The group has assembled a team of 12 operators. They plan to spend 20 days around Bouvet Island. The QTH at Bouvetøya will be Cape Fie at the South East part of the island, the only feasible part of the island where a DXpedition can safely set-up the camp on rocky ground. They need a wide area of 150 x 800 ft to setup the camp and antenna farm. They will not locate on a glacier.

Still another radio amateur Dom Grzyb, 3Z9DX is planning another DXpedition to Bouvet Island in late 2021, using the call sign [3Y0J](#). This is his second attempt to reach the island after the first attempt was not successful in March 2019.

Let's hope these Bouvet Island DXpeditions succeed.

FT8 / WSJT-X Operating Tip

About the Waterfall Display in WSJT-X

Some FT-8 operators have asked if the coverage range, size and/or resolution of the WSJT-X waterfall display can be changed.

The short answer is "Yes." However, there are tradeoffs between settings. As you increase coverage range, you decrease resolution.

It is easy to increase the coverage (or frequency range) displayed on the waterfall. Simply increase the BINS/PIXEL setting from its' default setting of 2 to a higher

number. I have it set to 4, which gives me a 3,500 Hertz view on my monitor. The optimum setting will vary based on the resolution of your PC or monitor. Don't be afraid to experiment. Just note your original settings so you can return to them if necessary.

One other suggestion, make sure the Receiver Bandwidth setting in WSJT-X is equal to or greater than the receiver filter settings of your rig. This setting can be adjusted in the Settings menu - Advanced tab of WSJT-X.

Have a question or operating tip to share with the ham community? Send to tchamnews@gmail.com.

Ramblings of an Antenna Alchemist



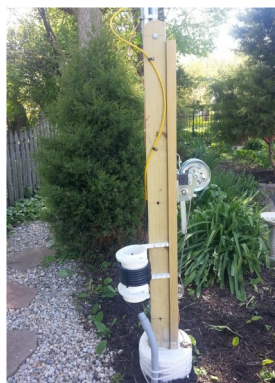
As I was preparing the rebuilt GAP Challenger for its rise from the ashes, I began to think about lifting the 31-1/2 foot vertical antenna up in the air and into a pipe 2 feet above the ground. If it needed a little adjusting, taking it out of the pipe and then putting it back in, maybe several times, was going to be tiring. While I could do that 20 years ago, I was not so sure now.

After some thought, a light bulb went off in my old head. What about using some sort of tilt mount?



So off to the Internet I went to investigate. Many designs were available. The GAP quick tilt-over mount was very simple and probably fine, but what if I moved to a bigger vertical? Would the mount work? Looked too flimsy to me. Plus Gap's product delivery has been erratic of late.

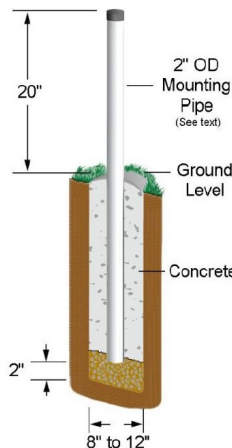
More investigation ensued. I learned about homemade mounts made with 2X6 wood boards. The design used a boat trailer winch and pulleys to raise and lower the antenna. I searched for plans, but all I could find were pictures and vague references to Internet posts and books. I probably could have figured out how to build the mount, but plans would certainly have been better.



In my Internet travels I found several metal tilt mounts that also used boat trailer winches. Winches are definitely a help when raising and

lowering. In the end I settled on a DX Engineering Omni-Tilt Mount. Looked perfect for my needs and appeared very well made.

The Omni-Tilt Mount is built from 1/8" stainless steel. It can handle 1-1/2 to 2-1/2 inch pipe. The mount includes a set of double V clamps for pipe mounting. All parts are stainless steel, but I would use anti-seize compound just the same on the bolts.



When using a tilt mount is to anchor it to a pipe. A 1-1/2" galvanized water pipe with its 1.9" OD will work. Water pipe can usually be found at the big box home improvement stores. The pipe should be set in the ground at a depth of 30 inches. Make sure you concrete the water pipe in the hole.

I'm always looking at antenna designs to try. One of the best tools available for antenna modeling is the EZNEC application written by Roy Lewallen, W7EL. Roy's program has been the mainstay of antenna alchemists for years. If you have never used EZNEC, I recommend you give it a try. The ARRL also has an excellent antenna modeling book.

Now the good news, or sad news for some. After 31 years of producing antenna modeling software Roy is retiring. Beginning Jan. 1, 2022, Roy is making EZNEC Pro/2 a free application. All support will stop on that date. No further development or enhancements will be made. EZNEC Pro/2 is very powerful and should be in every alchemists toolbox. Happy retirement, Roy!

73, The Antenna Alchemist



DXing: The Science, Art and Mystery of HF... by Bruce, W8HW

[Editor's note: This is part 7 of a series by Bruce, W8HW, our DXpert. This month Bruce offers tips to improve your HF antenna's performance. Previous articles in the series can be found in the newsletter archives located on the [PSLARA web site](#). Look in the Ham Newsletters section.]

Disclaimer: Everything explained today can be found in the ARRL handbook and various chapters of other publications and books. We are just putting the information in one place for you. Yes, I have been lucky enough to either read or listen to experts who have shared their knowledge with many of us. And yes, I have "hands on" experience with most of what you will read today. That is how I learned much of its value. Testing is key. Testing of these principals is explained later in this article in the paragraph entitled "How to test your antenna designs."

Your best antenna is dependent on a number of factors, including land size, land restrictions, pocket book, mounting assets (trees, buddy poles, towers, etc.), style of operating, range needs and more. Because everyone's situation is different, the antenna choice best for your ham buddy may not be the best choice for you. We will try to answer the frequently heard question, "Why does this antenna work for other people, but not for me?"

We will attack the topic from all angles so that you may make the best choice for your situation and avoid pitfalls. Making the best choice before you start your antenna project will not only save you money, but will save you frustration and ultimately, will improve your antenna performance. Making critical decisions after the antenna is up doesn't help much, but this is what often happens. We want to help you avoid this situation.

Last time, we discussed the importance of controlling the "vertical angle of radiation" (aka: take off angle). We also explained WHY you want to control the vertical angle of radiation. This month we will explore HOW to control the vertical angle of radiation - often at little or no cost.

Be sure you understand the difference between vertical polarized antennas and antenna vertical angle of radiation. If you are not clear about the difference, refer to the discussion on pages 14 and 15 of the [July-August newsletter](#).

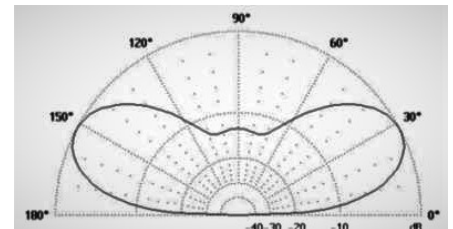
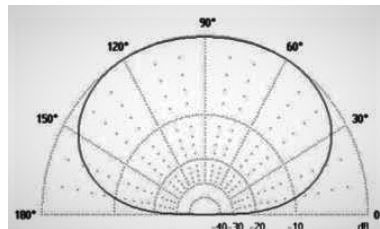
To set the point and learning perspective, we ask a question: How can two identical 40-meter (horizontally polarized) dipole antennas / feed-line systems with the same low SWR (VSWR) have very different angles of radiation and provide very different results?

While one antenna talks to the world, the other can only reach a few states. How could that be? What would make this huge difference? If this important difference in performance is not controlled by SWR or antenna design, then what does control it?

Understanding the answers to these questions is the "key" to building a better antenna system. This article will help you answer the questions, so that you may improve your own antenna performance. Again this information can be found in many publications including the ARRL handbook, but it will be scattered over many chapters and books.

The difference is frequently overlooked even though it is often at little or no cost. It's amazing that often the best answers are free! Careful consideration before installation will make a world of difference in antenna performance. Why antenna information is not more often shared at club meetings is unfortunate.

See the radiation charts below. The left will provide acceptable short range communications or NVIS (Near Vertical Incidence Skywave), but will not provide consistent (if any) long range or overseas coverage. The same antenna on the right has a better angle of radiation at about 28 degrees, making it a good antenna for overseas communications.



The difference between the two antennas is huge. Remember, this example uses the same horizontal dipole antenna and both measure a low SWR. What is the difference? Knowing the answer will put you in control.

(continued on page 15)

DXing: The Science, Art and Mystery of HF *(continued from page 14)*

How to control your vertical angle of radiation.

VSWR is not the answer. To manage this you have two choices and they could not be more different. In fact, they are opposite.

To understand this, lets cover the basics. Most hams are not aware of this important fact that vertical angle of radiation is handled much differently when using horizontal polarized antennas versus vertical polarized antennas. Be truthful with yourself, were you aware of the science involved in this fact? If not, then read that statement again. It may not be your fault, perhaps your Elmer's or clubs have never explained this? If not, then I urge you to encourage your club to help members understand what makes antennas work well, and the values of height and/or polarization in antenna choices. Controlling these factors can mean the difference between a well working antenna and a poor performing one. The information is FREE and free is good. Let's explore the contrasting difference now.

Polarization differences: Did you know that Horizontal polarized antennas change vertical angle of radiation only with height of the antenna, not with antenna design. The opposite is true with Vertical antennas. With vertical antennas Vertical angle of Radiation is controlled by proper design and placement of the high current points, not by height. Sounds complicated, it is not. We will cover both polarizations and the differences. Most verticals naturally have a low angle of radiation, however some are better than others. We will show you "the Good, the Bad and the Ugly" of both horizontals and verticals and how you can manage this differences.

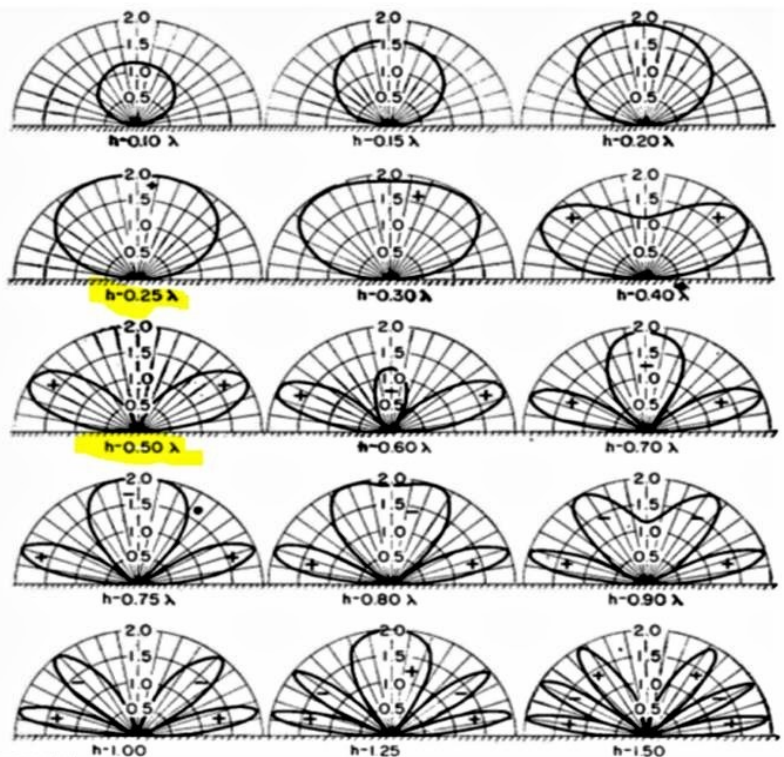
Horizontal polarized antennas. See the drawing nearby. What you are looking at is the same horizontal dipole mounted at many different heights. All 15 images are the same antenna with the same perfectly low SWR. Science tells us that SWR or antenna style does not affect the important issue of height.

Notice the two yellow highlights. I am sure you recognize part of this from the previous drawing. One yellow) antenna is mounted at 1/4 (0.25) wavelength. Just below it, also in yellow, is a figure of the antenna mounted

higher at 1/2 (0.50) wavelength.

Because you have a limit on height, I will save you time by converting wavelength to feet along with offering antenna choice suggestions. Notice also that any horizontal antenna mounted less than 0.40 wavelength sends most of your signal straight up into "outer space" where hams don't exist, and almost no signal low or toward the horizon where other hams are located.

The well guarded secret is revealed. As should be evident, to work the stations overseas more often, you must install your horizontal antenna at a 1/2 (0.50) wavelength or greater height in order to obtain the needed lower angle of radiation. These figures are your friend. Make a copy for future reference when choosing or designing your next antenna system.



How high is a 1/2 (0.50) Wavelength? It is different for each band. After viewing the table on the next page it will be clear there are some bands where achieving 0.50 wavelength height is impossible because of your land or other restrictions. If the required height is too much for your desired bands, then you may wish to consider a ground mounted vertical antenna for those bands.

(continued on page 16)

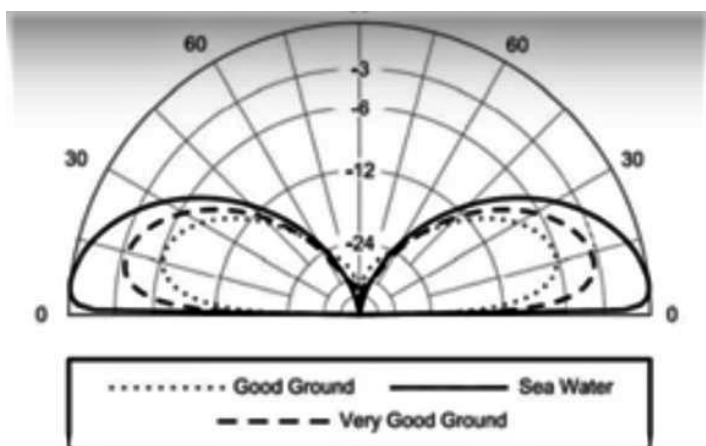
DXing: The Science, Art and Mystery of HF *(continued from page 15)*

This table shows height in feet by band for a horizontal dipole mounted $\frac{1}{2}$ (0.50) wavelength above ground.

10m	17 feet high or greater
12m	21 feet high or greater
15m	24 feet high or greater
17m	29 feet high or greater
20m	33 feet high or greater
40m	66 feet high or greater
80m	132 feet high or greater

Ground conductivity and water tables can affect the height figures noted in the above table. Most of Southern Florida soil exhibits around 8 milliSiemens (mS) of conductivity per meter. (Per <https://en.wiktionary.org/wiki/millisiemens>.) The chart below illustrates this point.

Sea water is assumed to be 500 mS per meter. Testing your ground conductivity (if needed) is not too difficult and can be done with a antenna D.O.G. Construct-



ing an antenna D.O.G. is simple. I have made three of them using parts from home. Your radio club leaders may want to construct one and test member's land as a club field project. It would make for a fun project for all.

About vertical antennas. Verticals do not require much land space (being vertical). And, they can be ground mounted so they do not require additional mounting height. When mounted on the ground, verticals naturally have a good low angle of radiation, giving you great overseas communications. Verticals can be easy and cheap to home-brew with amazing results. More on that later.

The tradeoff, or drawback of verticals, is a reduc-

tion in short range communications because of the lower angle of radiation, causing your signal to reflect further away. Understanding the tradeoffs becomes a must.

I have done a lot of work with different home brew designs and found many surprising facts about verticals. Depending on design, a ground radial system may be required for best performance. There is significant difference between minimal ground (Rocky terrain), good ground (soil), very good ground (marsh) and best ground (sea water). Refer to the previous diagram.

Home brew verticals can be made from wire that is strung to the top of a tree or other non-conductive mounting. Ground radials may be required. Either above ground radials or buried radials will work. Above ground radial systems is a topic within itself and will take more space than is available in this article.

How do you get to the top of trees? I use a home brew antenna gun that I made from PVC to shoot line (halyard) over the top of tall trees. The gun uses electrical triggering for best (non-jerking) accuracy. I have shown this antenna gun at several talks. If you are interested in information on how to homebrew one, let the editors know and we will do an article on it. An antenna gun could make a great club project for your membership to build and then use for member antennas.

Grounding system for vertical antennas can be either above or below ground, and can be resonate or non-resonate. I have used them all.

So which is best? First we must understand the basics, RF grounding is much different from grounding for lightning protection. Some of the methods used for best lightning protection can in some cases reduce vertical antenna performance.

For example: Nix the grounding rod, as it puts your RF energy into the ground, where the energy is converted to heat and lost, rather than adding to your signal. The loss equals one-half, or 50%, of your power. The reason is because the antenna system thinks the ground rod is half of your antenna. A well designed counterpoise can turn that lost power into radiated power, thus improving your antenna system even more. That's one more reason to home brew your antennas and other equipment.

(continued on page 17)

DXing: The Science, Art and Mystery of HF *(continued from page 16)*

On the other hand, even poorly designed grounding that wastes 50% of your power is much better than an antenna focusing 95% of your power into outer space. The last time I checked, no one has a QSL card from the planet Neptune.

In upcoming articles we will discuss ways to manage your counterpoise. The nice thing about homebrew is that you can easily change the parts of your homebrew antenna, including the counterpoise, into something that now radiates. Even if you don't bother, 50% aimed for low angle of radiation is still far better than 95% focused straight up toward the stars.

There are two most common myths about vertical antennas. Myth #1 is that noise levels are higher using vertical antennas vs. horizontal antennas. Myth #2 is that a vertical antenna is an omnidirectional dummy load.

Let's be clear, proper design will overcome both of these issues. I suspect that the last myth comes from hams using vertical antennas for short range or stateside communications and / or installing poorly design RF grounding systems. As previously noted, verticals often are not the best short range performers. Most of these problems can be solved by following basic guidelines.

If done poorly verticals can be a sad flop. But if done correctly they can be top long-range performers. The choice is yours. We all know that as with all things, people who are successful with vertical antennas will use them; however those who are not successful will condemn them. Life seems to provide us with no exception to that rule. That is why it is important to test your antenna design, evaluate your test results and then make any necessary changes before you install it.

How can you test antenna designs? Without testing you can't be sure of the antenna design. The real test is in pileups, either in DXing or contesting. I have had much success with home brew verticals and have proven the designs with high DX counts. The ARRL DX Challenge report confirms that my DX count is in the top 1% of the top 1% worldwide while residing on a small 80 x 125 foot Port Saint Lucie lot. The point is that verticals can work well even with small lots or restricted land. Do not limit your success because of myths that come from people who are unable to break through the pileups. Remember, that is where the majority of myths originate.

To summarize, horizontals can make great antennas. But if for of any reason you can't go high enough with your horizontal antenna, then a vertical antenna may be the perfect solution. In this article we explained how to lower the vertical angle of radiation on a horizontal antenna. We also introduced the merits of vertical antennas where lot size limitations make horizontal antennas impractical.

In the next article of this series we will explain how to control the vertical angle of radiation on a vertical antenna and offer some tips on how to make your vertical antenna work even better.

Horizontals can make great antennas. But if limitations prevent you from going high enough with your horizontal antenna, then be sure to read the part 8 of this series in next month's newsletter.

73, Bruce, W8HW

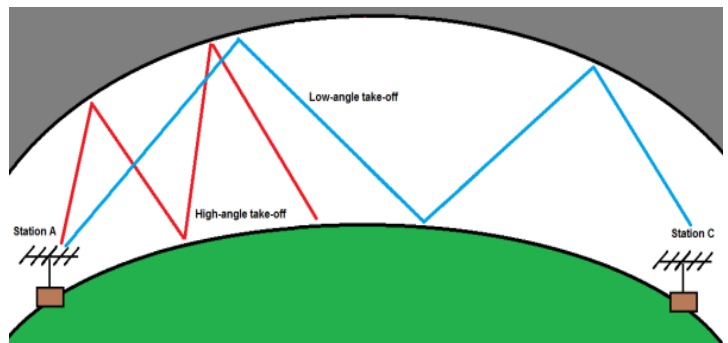
Home Brew - Don't buy it - Build it and learn how it works.

Man-made relay systems can fail or be hacked, but HF keeps on working.

Failure is not the opposite of success. Failure creates both success and total failure. Those who fail and continue the quest will find success. Those who fail and quit will justify their failure with myths.

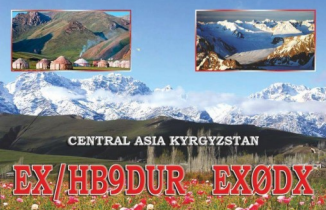
You can contact Bruce directly at w8hw@comcast.net.

Comments about this story? Send to: tchamnews@gmail.com.





TK/DJØTP



From the weekly **ARRL DX Bulletin** and other sources.
([bulletin archive](#))

DX OPPORTUNITIES

CAPE VERDE, D4. Paco, EA7KNT will be active as EA7KNT/D4 or D4ASL from Sal Island (AF-086) from August 23 to September 5.

CORSICA, TK. Frans, DJØTP is now active as TK/DJØTP from Linguizetta until September 14. QSL via LoTW or via the Bureau.

KYRGYZSTAN, EX. Andrea, HB9DUR is active as EXØDX from Bishkek. The length of his stay is unknown. Activity will be as time permits on various HF bands. QSL via his home call sign, LoTW, ClubLog's OQRS or eQSL.

DODECANESE, SV5. Also, Reiner, DL2AAZ will be active as SV5/DL2AAZ from Rhodes (EU-001) from September 5 to 19. Activity will be holiday style on 40 to 10 meters and the QO-100 satellite, using CW and SSB. QSL via DL2AAZ, direct or via the Bureau.

TONGA, A3. Masa, JAØRQV is active as A35JP from Nuku'alofa, Tongatapu Island (OC-049) until early November. Activity is on 80 to 6 meters using CW, SSB and FT8. QSL via LoTW and ClubLog, direct or via the bureau to his home call.

TANZANIA, 5H. Gab, HA3JB will be QRV as 5HIIP from September 17 to 29. Activity will be on 160 to 10 meters using CW, SSB, RTTY and FT8. He also plans to participate in the CQWW DX RTTY Contest. QSL via HA3JB or ClubLog's OQRS.

GUINEA-BISSAU, J5. The Italian DXpedition Team will be QRV from October 9 to 22, using the call signs J5T on CW, SSB and RTTY and J5HKT on FT8. Activity will be on 160 to 10 meters. QSL via I2YSB direct, OQRS or LoTW.

GUINEA, 3X. Jean Philippe, F1TMY will sign 3X2021 during his upcoming visit, starting in mid-September. He will be on 160 to

6 meters and the QO-100 satellite. He will also be portable from Los Islands, IO-TA AF-051. QSL through Club Log.

ST. LUCIA, J6. Bill, K9HZ will be QRV as J68HZ from August 21 to November 8. Activity will be on the HF bands using CW, SSB and FT8. QSL direct to home call.

DX SPECIAL EVENT STATIONS

BRAZIL, PY. Mor, PT7ZT is QRV as ZW16ZT until September 5 in celebration of the XVI Paralympic Games held in Tokyo. Activity is on the HF bands using SSB and various digital modes. QSL direct to home call.

TRINIDAD AND TOBAGO, 9Y59. Members of the Trinidad and Tobago Amateur Radio Society will be active with special call sign 9Y59IND until September 12 to commemorate the 59th anniversary of the Independence of Trinidad and Tobago. Operations will be on various HF bands and modes. QSL is via LoTW only.

SPAIN, AN5. Pascual, EA5WO will be active with special call sign AN5WAR from September 1 to 30 to commemorate the 82nd anniversary of the beginning of World War II. Activity will be on various HF bands. QSL via LoTW or eQSL.

UNITED ARAB EMIRATES, A60. Members of the Emirates Amateur Radio Society (EARS) will activate special event station A60EXPO from September 1 to October 1 to promote World Expo 2020 in Dubai. QSL via EA7FTR.

HUNGARY, HG52. Members of the Budapest Radio Amateur Society will be active as HG52IEC until September 30 to celebrate the 52nd International Eucharistic Congress. QSL via eQSL only.

(Know of a coming DX station or Special Event? Please submit info to: tchamnews@gmail.com)



Special Event Stations



20th anniversary of the attack on the World Trade Center in New York City

Sep 10 0000Z - Sep 13 0300Z, **WA2NYC**, Staten Island, NY.

We remember the over twenty-nine hundred souls that were lost on that day.

Operating on 28.450 21.350 14.340 & 7.238 MHz. QSL: Wireless Association of New York City, 233 Wolverine Street, Staten Island, NY 10306. D-STAR Reflector **XLX020B** will be monitored at the top of the hour.

wa2nyc@yahoo.com

9/11 Audio Tapes

If you never heard them, [listen here](#) to the actual FDNY audio archives from the World Trade Center.

(From **ARRL** and other sources.)

Fly-IN / Cruise-IN

Sep 4, 1200Z-1900Z, W9EBN, Marion, IN. 14.180 MHz & DMR, Talk Group 31189, D-Star Ref 24B 146.790-(PL 141.3). Grant County Amateur Radio Club - W9EBN, ATTN: Fly-In / Cruise-In, P.O. Box 1786, Marion, IN 46952. Send a 9 inch x 12 inch (SASE) to receive a certificate.

www.grantarc.org

Return to Paradise

Sep 4-Sep 6, 1800Z-1800Z, K7RDG, Sierra Vista, AZ. 14.285, 7.225, 3.890, 14.070 MHz. Certificate: Cochise ARA, PO Box 1855, Sierra Vista, AZ 85636. Operating Voice, FT8 / FT4 / JS8Call from the Ghost Town of Paradise, AZ. WWW.K7RDG.ORG

Blue Ridge Bonanza

Sep 5, 1300Z-2100Z, W4CA, Roanoke, VA. Roanoke Valley Amateur Radio Club. 14.265, 7.265. QSL: Roanoke Valley ARC, P.O. Box 2002, Roanoke, VA 24009. Multiple stations / frequencies on 20/40 meters. Contact many stations during the event. Commemorating the beginning of construction of the Parkway in September, 1935, a 469 mile scenic road running along the spine of the Blue Ridge Mountains through Virginia and North Carolina. <https://blueridgebonanza.info>

Flight 93 20th Anniversary

Sep 11, 1200Z-2359Z, N3M, Stoystown, PA. Somerset County ARC and Nittany ARC. General portion of 20/40 meter phone bands. QSL: N3M c/o Nittany Amateur Radio Club, PO Box 614, State College, PA 16801. Operating from the Flight 93 National Memorial, commemorating the passengers and crew of Flight 93 whose heroic actions prevented a planned terrorist attack on the US Capitol. www.qrz.com/db/n3m

National POW MIA Recognition Day

Sep 11-Sep 19, 0000Z-2359Z, K4MIA, Loxahatchee, FL. PBSEC. 28.400, 18.150, 14.265, 7.195. QSL: Michael Bald, 6758 Hall Blvd, Loxahatchee, FL 33470. Observance of National POW / MIA Recognition Day, 9/17/21. The day is to honor our prisoners of war and those who are still missing in action. There will be sister stations K4MIA/1,

K4MIA/5, K4MIA/7 and K4MIA/8 in operation. Days listed above are primary operational days. Modes of operation: SSB, CW, FT8 and Satellite. See QRZ for additional information. You must send a SASE to get a returned QSL. www.qrz.com/db/k4mia

Route 66 On The Air

Sep 11-Sep 19, 0001Z-2359Z, W6JBT, San Bernardino, CA. 3.866, 7.266, 14.266, 28.466. Certificate & QSL: Citrus Belt Amateur Radio Club, PO Box 3788, San Bernardino, CA 92413. Come join the fun celebrating the road that built America. There will be 21 stations, two of them "rovers" operating in or around the major cities along Route 66 from Santa Monica, California to Chicago, Illinois. They will use 1 x 1 W6-prefix special event call signs.

www.w6jbt.org

80th Anniversary of Launch of the USS Massachusetts

Sep 18, 1000Z-1600Z, NE1PL, Fall River, MA. USTNR. 14.258. QSL: Rick Emord, 135 Wareham st, Middleboro, MA 02346. We will be on at least 20 and 40 meters. Phone, digital and CW are possible. Contact KB1TEE or NIUMJ for details, info, questions. www.ne1pl.org

International Talk Like A Pirate Day

Sep 18-Sep 19, 1300Z-2200Z, K9P, Danville, IN. Hendricks County Amateur Radio Society. 14.262, 7.212, 3.812. QSL: Tom Hansen, 410 W US Highway 40, Clayton, IN 46118-9307. Fun event, talk like a pirate. Know yer port (QTH) and yer ship's name.

Wyatt Earp Fest

Sep 20-Sep 25, 0100Z-0100Z, W0E, Lamar, MO. Kilowatt Amateur Radio Club. 14.250. QSL: Kilowatt ARC (K0KWC), 700 Hagny St., Lamar, MO 64759. kilowattarc@hotmail.com

Readers: Tell us about your special event QSOs. We will publish in a future edition. Please submit info to: tchamnews@gmail.com.

CW: Actually Getting on the Air (part 3)... by Bruce, W8HW

[Editor's note: In part 3 of this series, Bruce continues a discussion of CW shortcuts, a.k.a. "Code within the code." This month he talks about RST and Q-Codes.]

What do you do when the other station does not speak or understand English?

CW is meant to be international. This is good. It would be no fun to work DX if both sides did not understand each other. The good news is both hams can still carry on with a limited conversation using only RST and Q-codes. You can even pass emergency traffic or work DX as long as certain rules are followed by both hams.

Emergency traffic can be a burden with different languages. It is possible for one, or even both hams, to not understand the language of the message text or each other, but still pass the traffic - as long as they understand the instructions given in Q-codes.



Let's first discuss RST. We use RST to let the other station know if conditions and station signal will support the passing of traffic. So knowledge and proper use is essential.

RST stands for Readability, Signal, and Tone. A perfect report would be 599, or in cut CW 5NN. (Cut CW was discussed in part 2 of this series. See the [July-August](#) newsletter.)

RST definitions date from the year 1936. Discussed below are the modern definitions of the terms.

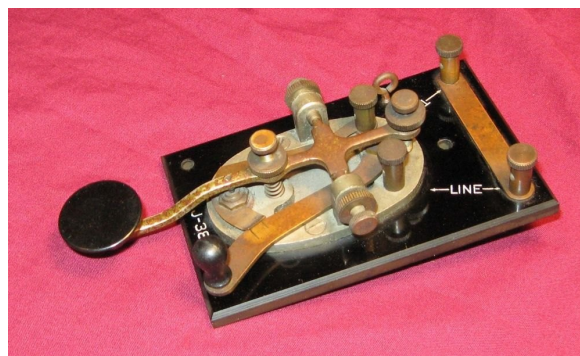
Readability (scale 1 to 5) is the readability of your signal with a "5" being perfect with no difficulty. This is similar to a voice operator saying you are Q5 copy. The read-

bility of a signal with a "1" is very poor and not capable of communicating effectively.

Signal (scale 1 to 9) represents the strength of the signal. The strongest signal is 9 and 1 is the lowest. No rule exists to connect signal strength to your S-meter, but many hams do and it is permissible as this report is only a judgment call on your part.

Tone definition (scale 1 to 9) dates back to 1936. In short, tone represents the purity (or perhaps quality) of the CW signal. A report of 9 indicates a CW signal of pleasing quality that is easy to listen to. Varying tone quality that becomes difficult to listen to or decode rates a lower score, with 1 representing the worst possible tone and a transmission that can barely be copied. Refer to the table on the following page for both the original 1936 definitions of tone and the modern day meanings.

Suffixes were historically added to indicate other signal properties. For example, an RST report might be sent as 599K to indicate a clear, strong signal but with bothersome key clicks. I have found that most modern day operators do not know, or use, the suffixes. Alas, this is a bit of history lost. Another table on the next page summarizes suffix codes.



Now let's briefly talk about Q-codes. Q-Codes offer a shorthand way to transmit a sentence either by voice or CW. Q-codes are most commonly used in conversational QSOs. They are generally avoided in traffic handling and in emergency situations unless both operators clearly understand their meanings.

Q-codes have different meanings if a "?" is at the end of the Q-code. For example: "QRT?" means "Shall I stop transmitting?" While "QRT" (without ?) is an instruction

(continued on page 21)

CW: Actually Getting on the Air (part 3) *(continued from page 20)*

to stop transmitting. "QSL?" asks "Did you copy?" "QSL" (without ?) says "Successful copy."

Many available Q-code lists are shortened versions and do not include Q-codes intended for traffic handling. Be sure to have the full list of all Q-codes available in your shack. For convenience some complete Q-code links are provided below.

73 es tu e e, Bruce, W8HW

---... ...-- -- .- -. -.- -.. -.-

Remember - When it comes to ham radio, CW is the key... Just add you.

Links:

List of Q-codes and more - <https://w5gad.org/wp-content/uploads/2016/04/Reference-Codes.pdf>

Another Q-code list - <https://quality2wayradios.com/store/q-codes-guide>

One more Q-code list - <https://www.qsl.net/w5www/qcode.html>

You can contact Bruce directly at w8hw@comcast.net.

Comments about this story? Send to: tchamnews@gmail.com.

Tone Codes

Value	1936 definition	modern definition
1	Extremely rough hissing note	Sixty cycle a.c or less, very rough and broad
2	Very rough a.c. note, no trace of musicality	Very rough a.c., very harsh and broad
3	Rough, low-pitched a.c. note, slightly musical	Rough a.c. tone, rectified but not filtered
4	Rather rough a.c. note, moderately musical	Rough note, some trace of filtering
5	Musically modulated note	Filtered rectified a.c. but strongly ripple-modulated
6	Modulated note, slight trace of whistle	Filtered tone, definite trace of ripple modulation
7	Near d.c. note, smooth ripple	Near pure tone, trace of ripple modulation
8	Good d.c. note, just a trace of ripple	Near perfect tone, slight trace of modulation
9	Purest d.c. note	Perfect tone, no trace of ripple or modulation of any kind

If there are other notable tonal qualities add one or more of the letters A-X, listed below, after the number.

Suffix Codes

Suffix code	Meaning
A	signal distorted by auroral propagation ^[10]
C	"chirp" (frequency shift when keying)
K	key clicks
M	signal distorted by multipath propagation
S	signal distorted by scatter propagation
X	stable frequency (crystal control)

Ham Humor



"A ham - pod?"
(from qrznow.com)

Ham 1 — Hey, I hear Old Megawatt is retiring from Ham Radio.
Ham 2 — Yeah, I've heard him say that many times before.
Ham 1 — I know. But this time it's true... the FCC said it!

Question: How much do dead batteries cost?
Answer: Nothing, they're free of charge.

You know you're a ham when...
A band opening is more important than a grand opening.
You hear a scraping sound when driving through parking garages.

Some Q-codes never made it to the official list. Here are a few that may be useful in appropriate situations. Don't forget, a Q-code can be either a statement or a question.

- QBA - My antenna is big!
- QBA? - How big is your antenna?
- QBO - Don't sit next to that guy in the meeting.
- QBO? - Buddy, can you spare some soap?
- QET - Phone home.
- QET? - Has anyone called me from another planet?
- QZZ - I fell asleep at the mike.
- QZZ? - Was that a 60Hz hum, or were you snoring?

HERMAN®



"You never heard of a ham operator before?"
(from newhams.info)



TREASURE COAST HAM NEWS

The editors like to reserve the last couple pages of **Treasure Coast Ham News** for you, the readers. With your help these pages will include:

For Sale Section – Have something to sell or trade? Send us a description and/or picture to have it listed in this section. Looking to buy something? Provide a description and we will print it.

QSL Card Section – Many hams enjoy viewing QSL cards, especially those with colorful pictures. Send us scans of your favorite QSL cards. Maybe the first card you ever received. Or perhaps your favorite card, or your personal card. We will include some in each issue as space permits.

The last few newsletter pages are yours. Help make them a success by submitting your photos, For Sale listings and QSL cards to tchamnews@gmail.com.

Want to be published? Treasure Coast Ham News invites you to write about your ham radio activities, kit building, DX operations, or any other amateur radio subject. You don't need to be a polished writer, or a writer at all for that matter. We will help you edit your work. While we don't pay for articles, you will receive a full byline. Please contact us at: tchamnews@gmail.com.

Coming in Future Newsletters

Articles planned for coming issues of *Treasure Coast Ham News* include:

- Hurricane season update
- The ins & outs of antenna launchers
- Build a C-Pole antenna for 20 meters
- FT-8 DXing with Hamstick style mobile antennas
- The return of Ham Radio History
- Ferrite Cores—what and how to use

Area Club News

Port St. Lucie Amateur Radio Association

Membership is open to all who have interest in amateur radio. You do not need to be a licensed amateur operator. An application form is available at pslara.com under the "Contact Us" tab. The club meets on the fourth Wednesday of each month at 7:30 p.m. Presently, meetings are held via ZOOM. See web site for details.

Fort Pierce Amateur Radio Club

FPARC is a general purpose club involved in all aspects of amateur radio. The club meets on the 2nd Wednesday of the month on the Main Campus of Indian River State College in Fort Pierce. See [web site](#) for details.

Congratulations to FPARC on receiving the ARRL 50 Year Service Award. (See story on page 8 and photo nearby.)

Vero Beach Amateur Radio Club

VBARC was formed November 1st, 1961 with just a handful of local hams. Today, it includes all of Indian River County, numbers over 100 members and continues to grow. From the beginning the club has worked with local government in emergency situations, and also with the Red Cross. In April 2017, VBARC was awarded the designation as an ARRL SPECIAL SERVICES CLUB, which is awarded to a club that goes above and beyond for their communities and for Amateur Radio. The Vero club truly defines what amateur radio is all about!

Martin County Amateur Radio Association

MCARA serves the Martin County, FL amateur radio community. They support county ECOMM through ARES. Activities include weekly Rag Chew Nets, ARES Nets and meetings, and monthly association meetings. The association sponsors the yearly Stuart Hamfest.



HAM RADIO EQUIPMENT FOR SALE

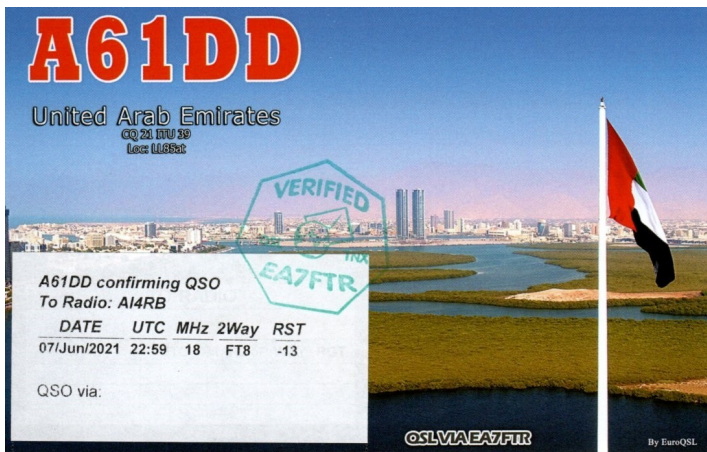
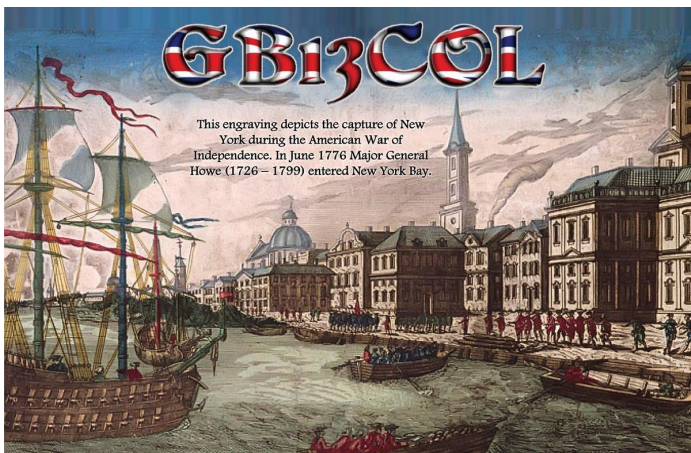
BY ORIGINAL OWNER - Create Extra Heavy Duty Antenna Rotator – Model RC5A-3 and preset control box. Includes mounting hardware and factory manual. Rated for antenna up to 20 sq. ft. Test/Demo cable included. See EHAM.NET Reviews for info. \$495.00 or OBO.

Contact BOB, W7MAE, (772) 444-5845, or email w7mae@aol.com

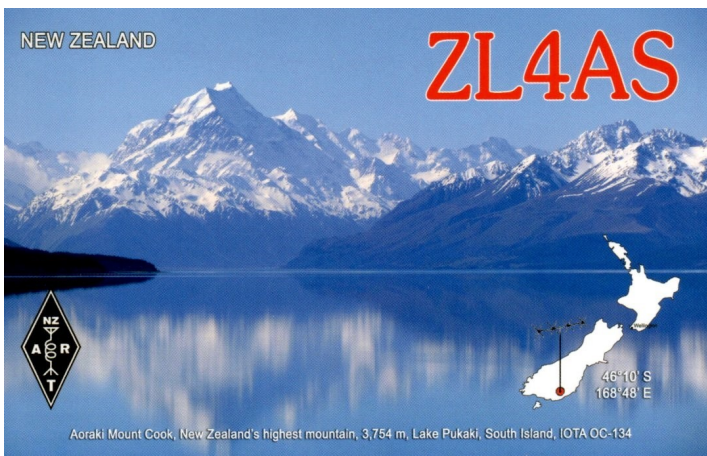
REPEATER — 220 MHz repeater system, rack mounted. Consists of VHF Engineering repeater, Mirage amplifier, microwave cavity and 50 amp power supply. Asking \$1,200 OBO. For details contact Andrew Jarrett, phone 305-505-5461, or email: serrano_51@icloud.com.



TCHamNews enjoys publishing QSL cards received by our local amateur radio community. If you have an interesting QSL card to share with your fellow hams, please send a scanned image (jpeg) to TCHamNews@gmail.com and we will include it in an upcoming issue. (If you send us a paper card, we will scan it and send the original back to you.)



(Above QSL cards from Bruce, WA3RHW)



QSL Cards Printing for Less

If you are considering QSL cards or need to refresh your old card, please discuss with Fabrice at QSL-Concept.com. Email: info@qslconcept.com, or Fabrice directly at fberton@bftechnicarts.com. Phone 604-729-6454.

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