

HAM DATES:

INDIAN RIVER CO.

Feb 2, 9, 16, 23, 2021
Indian River Co. ARES NET 7:30pm,
145.130 (107.2) repeater

Feb 6, 2021
Digital University, 9am-12pm
Donald McDonald Campground

Feb 7, 14, 21, 28, 2021
Treasure Coast Ragchew/Traders
Net 8:00pm 146.775 repeater

Feb 11, 2021
Vero Beach ARC Meeting, 7:30pm
Italian American Civic Associates

Feb 25, 2021
Indian River Co. ARES, meeting
7:00pm 145.130 repeater

ST LUCIE CO.

Feb 2, 9, 16, 23, 2021
Ft. Pierce ARC Rag chew, Tech,
Traders NET 8pm, 147.345
Repeater (107.2), Echolink: 2004
(W4AKH-R)

Feb 3, 2021
St. Lucie Co. ARES NET, 7:30pm,
147.240 MHz (107.2) repeater

Feb 4, 11, 18, 25, 2021
Port St. Lucie ARA Rag chew, Trad-
ers, Tech NET 7:30pm, 146.955 MHz
(107.2)

Feb 10, 2021
Ft. Pierce ARC, 7:30pm, ZOOM
(<https://fparc.org> for details)

Feb 17, 2021
St. Lucie Co. ARES, 7:30 pm, Meets
on the air, 147.240 repeater (107.2)

Feb 24, 2021
Port St Lucie Amateur Radio Assoc.
ZOOM meeting (request login)

MARTIN CO.

Feb 1, 8, 15, 22, 2021
Rag chew net 7:30pm, 145.150 MHz
(107.2)

Feb 11, 2021
MCARA ARES, 8:00pm MC EOC
800 SE Monterey Rd, Stuart

Feb 25, 2021
MCARA Meeting, 7:00pm Stuart
Police Dept., 830 SE Martin Luther
King Blvd, Stuart

Treasure Coast Ham News

VOLUME 2, ISSUE 2

FEBRUARY 2021



Stuart Hamfest 2021 (Cancelled)



Many of us hoped by early 2021 we would see an end to COVID-19 and things would get back to normal. Ham clubs would resume meetings and hamfests would once again be held. However, all too soon cancellations resumed. Dayton and Charlotte cancelled. Orlando became an online virtual event similar to the QSO Today Ham Expo. Locally, MCARA cancelled the Stuart Hamfest. But all is not lost. Vero Beach ARC will hold its first ever Treasure Coast Outdoor Hamfest and Ft. Pierce is still scheduled. Check inside for details.

INSIDE THIS ISSUE: FROM THE PUBLISHERS * ARES * VE LICENSE TESTING UPDATE * FCC NEWS * UPCOMING 2021 HAMFESTS * HAM RADIO TRIVIA * QSO WITH SPECIAL EVENT STATIONS * BOB OLSON, KCOKAC (SK) * THE FRUGAL HAM RADIO OPERATOR * SHORT TAKES * LISTENING TO SPY BROADCASTS * QRP ARCI NEWS * TREASURE COAST HAM DOCTORS * HELP REQUEST * FT8 OPERATING TIP * RAMBLINGS OF AN ANTENNA ALCHEMIST * DX TIPS FROM BRUCE, W8HW * DXCC HONOR ROLL * DX NEWS * SPECIAL EVENT STATIONS * HAM HUMOR * WE NEED YOU * QSL CARDS

From the Publishers

If you are an ARRL member or participate in social media or forums, you probably saw the following:

ARRL Statement of the Purpose of Amateur Radio

For over 100 years amateur radio and [ARRL – the National Association for Amateur Radio](#)® – have stood for the development of the science and art of communications, public service, and the enhancement of international goodwill. Amateur Radio's long history and service to the public has solidified the well-earned reputation that "Amateur Radio saves lives."

Amateur Radio Operators, due to their history of public service, their training, and the requirement that they be licensed by the FCC have earned their status as a component of critical communications infrastructure and as a reliable resource "when all else fails."

Amateur Radio is about development of communications and responsible public service. Its misuse is inconsistent with its history of service and its statutory charter. ARRL does not support its misuse for purposes inconsistent with these values and purposes."

Early on many of us learned the important role we could play in disasters and public service. We worked closely with our local emergency management staff and trained hard for such events on a regular basis. We felt proud when we read newspaper articles and heard first hand accounts from fellow amateurs who were deployed. With our ability to rapidly respond through RACES and ARES, federal, state and local governments relied on hams to perform communication roles in times of emergency.

Our communication methods are reliable. We do not need complex radio systems or technology. Simplicity is our key. It has worked time and time again. However, much changed after September 11th, 2001. The public

safely communications infrastructure failed badly. The human side of disaster response also failed, incapable of responding to multi-jurisdictional events. A major effort between the government and private sector commenced to fix those issues. After almost 20 years the efforts continue to this day.

Somewhere along the way ham radio seems to have lost favor with emergency management. Did we not keep up with radio technology? Hardly. Today, ham radio can use some of the best communications technology available. Our ARES credentialing includes much of the same FEMA training emergency managers require of their staff. The ARRL EC-001 emergency communications course provides a solid foundation that every ARES/RACES communicator should have.

So how do we fit in today's changing disaster response world?

Please share your thoughts with us at tchamnews@gmail.com.
73, TC Ham News



The [Amateur Radio Emergency Service](#) (ARES) is a public service communication program of the ARRL. Over many years and following many natural disasters, ARES

volunteers stepped up and provided valuable community services.

Are you using ARES Connect to record your activities? Concerned by the low adoption rate of ARES Connect reporting software two years after its introduction, ARRL's Director of Emergency Management (DEM) Paul Gilbert, KE5ZW, instituted a review of the application by surveying Section Managers and Section Emergency Coordinators around the

country. At the same time, discussions between ARRL and the ARES Connect software vendor made it clear that ARRL's evolving needs for an emcomm/public service reporting package are not aligned with the vendor's future plans for the product. ARRL President Roderick, K5UR, concurred with DEM Gilbert's decision to discontinue the use of ARES Connect and seek development of a new reporting software package more tailored to the needs of ARES.

All ARRL Sections that have been using ARES Connect should plan to transition to the ARES Form 4 for reporting until a replacement system is identified. For more information please read the latest ARRL [ARES Newsletter](#).

Treasure Coast ARES Coordinators

Martin County:
Emergency Coordinator
[Steve Marshall, WW4RX](#)

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

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

Get involved and be a part of ARES.



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

VE License Testing Update

BREAKING NEWS - A special Amateur Radio License Examination Session has been scheduled for **Saturday, February 20, 2021 at 9:00 AM**. Testing for all three license levels will be available.

The session will take place at the Buffalo Chop-house restaurant located at 918 SW Gatlin Blvd in Port Saint Lucie.

The restaurant is located on the south side of Gatlin Blvd, just west of the Port Saint Lucie Blvd intersection. It is directly across the street from the Aldi's grocery store on Gatlin Blvd.

Directions: From Port Saint Lucie Blvd turn west onto Gatlin Blvd. Then make an immediate left at the first street, which is SW Brighton St. Then turn left at the first driveway into the small strip mall.

From I-95 get off at the Gatlin Blvd exit and head east for roughly two miles. Watch for the Aldi's grocery on your right and make a right turn onto SW

Brighton St. Then turn left at the first driveway into the strip mall.

Because of social distancing requirements available seats may be limited. If you plan to participate in this session, **please RSVP so we can be sure to have a seat available for you.**

RSVP to Bob Brown at brownpsl@comcast.net.

Walkups for this examination session will be accepted as long as space is available, but we encourage you to RSVP if at all possible.

We will conduct the examination session in compliance with all social distancing and governmental guidelines in effect as of the scheduled exam date. So please be prepared and bring along a face-mask.

For additional information contact Bob Brown, VE Liaison at 772-201-5485 or brownpsl@comcast.net

Another testing opportunity is available in February.

The Vero Beach Amateur Radio Club is offering license testing at the Treasure Coast Ham Fest on February 13, 2021.

Potential candidates are requested to contact the club to schedule an exam. See details elsewhere in this newsletter.

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

73,
Bob, AI4RB
VE liaison, PSLARA

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.

FCC Proposes New Amateur Radio Application Fees of \$35

The FCC agreed with ARRL and commenters that a proposed \$50 fee for certain amateur radio applications was "too high to account for the minimal staff [FCC] involvement in these applications." In a Report and Order (R&O), released on December 29, the FCC reduced the proposed fee to \$35 for a new license application, a special temporary authority (STA) request, a rule waiver request, a license renewal application, and a vanity call sign application. All fees are per application. Administrative updates, such as a change of mailing or email address, are exempt.

ARRL filed comments opposing the FCC's \$50 application fee and [urged its members](#) to follow suit.

As the FCC noted in its R&O, although some commenters supported the pro-

posed \$50 fee as reasonable and fair, ARRL and many individual commenters argued that there was no cost-based justification for application fees in the Amateur Radio Service. The fee proposal was in a Notice of Proposed Rulemaking (NPRM) in MD Docket 20-270, adopted to implement portions of the "Repack Airwaves Yielding Better Access for Users of Modern Services Act" of 2018 -- the so-called "[Ray Baum's Act](#)."

"After reviewing the record, including the extensive comments filed by amateur radio licensees and based on our revised analysis of the cost of processing mostly automated processes discussed in our methodology section, we adopt a \$35 application fee, a lower application fee than the Commission proposed in the NPRM for personal li-

censes, in recognition of the fact that the application process is mostly automated," the FCC said in the R&O. "We adopt the proposal from the NPRM to assess no additional application fee for minor modifications or administrative updates, which also are highly automated."

The FCC turned away the arguments of some commenters including that amateur radio licensees should be exempt from fees because of their public service contribution during emergencies and disasters.

"[We] are very much aware of these laudable and important services amateur radio licensees provide to the American public," the FCC said, but noted that specific exemptions provided under Section 8 of the so-called "Ray Baum's Act" requiring the FCC to as-

sess the fees do not apply to amateur radio personal licenses. "Emergency communications, for example, are voluntary and are not required by our rules," the FCC noted. "[W]hile the value of the amateur service to the public as a voluntary noncommercial communications service, particularly with respect to providing emergency communications, is one of the underlying principles of the amateur service, the amateur service is not an emergency radio service."

The Act requires that the FCC switch from a Congressionally mandated fee structure to a cost-based system of assessment. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees. The effective date of the fee schedule has not been established. Read [more](#).

(from the ARRL Letter)

FCC to Require Email Address with Applications and on File

Effective on June 29, 2021, amateur radio licensees and candidates must provide the FCC with an email address on all applications. If no email address is included, the FCC may dismiss the application as "defective." The FCC has already begun strongly encouraging applicants to provide an email address and will email a link to an official electronic copy of the license once it's granted.

Many amateurs provide an email to the FCC, but now it will become a requirement. Under Section 97.21 of the new rules, as amended, the

holder of a valid amateur radio station license "must apply to the FCC for a modification of the license grant as necessary to show the correct mailing and email address, licensee name, club name, license trustee name, or license custodian name." For a club or military recreation station license, the application must be presented in document form to a club station call sign administrator who must submit the information to the FCC in an electronic batch file. Under new Section 97.23, as amended, each license must show the grantee's correct name, mailing address, and email address. "The email address must

be an address where the grantee can receive electronic correspondence," the revised rule will state. "Revocation of the station license or suspension of the operator license may result when correspondence from the FCC is returned as undeliverable because the grantee failed to provide the correct email address."

Licensees can log into the [ULS License Manager System](#) with their FRN and password to update their FCC license record, including adding an email address. Read [more](#).

(from the ARRL Letter)

Upcoming 2021 Florida Hamfests

02/13/2021 - 02/14/2021

[Online - Orlando HamCation Special Edition 2021](#)

Location: Orlando, FL

Type: ARRL Convention

Sponsor: Orlando Amateur Radio Club

Website: <http://www.hamcation.com>

02/13/2021

[Treasure Coast Ham Fest](#)

Location: Indian River Co. Fairgrounds

Type: Local ham fest

Sponsor: Vero Beach Amateur Radio Club

Website:

<http://www.treasurecoasthamfest.com/>

08/14/2021 (tentative)

[Ft Pierce Hamfest](#)

Location: Indian River State College

3209 Virginia Avenue Fort Pierce, FL

34945

Type: Local hamfest

Sponsor: Ft. Pierce Amateur Radio Club

Website:

<https://fparc.org>

FIRST ANNUAL TREASURE COAST HAM FEST

FEBRUARY 13, 2021 8am to 4pm

Indian River County Fair Grounds, 7955 58th Ave, Vero Beach, FL 32967.

Located on the Central East Coast of Florida where I-95 crosses SR-60.

Vero Beach is situated on I-95 almost perfectly between Miami & Orlando.

FREE GENERAL ADMISSION

\$5 TAILGATING FOR SELLERS (1ST COME, 1ST SERVE)

Free general admission includes one free raffle ticket for licensed hams.

Payment Type Accepted: Cash, Credit Card, PayPal.

COVID INFO: Masks required at all times. Social distancing required.

No camping allowed.

RAFFLE TICKETS: \$1 each, 6 for \$5, 25 for \$20 (Must be present to win.

No shipping.)

PRIZES: Shark Antenna HF Hamstick, CompacTenna 2-Antennas, Buytwo-wayradio.com, I-Ham I-GMRS Radio, Ham Radio Prep Free Class Coupons,

Ham Radio Outlet Gift Card, N9SAB Tim Ortiz Antennas

GAMES for PRIZES: Morse Decode, Antenna Line Throw, VHF Fox Hunt (Bring your own antenna & radio)

FORUMS: DMR-10:00a, DStar-11:30a, ELAD/SDR-1:00p, Winlink-2:30p

TALK IN: 146.640 Analog PL 107.2, DSTAR - WA4TCD Repeater 145.400,

DStar REF 078C, DMR - KJ4YZI Repeater 444.300 offset +5 CCI, Talk

Group Treasure Coast 31123

VE TESTING SESSIONS: 10:00am & 2:00pm, Please [CONTACT US](#) in

advance if you will be taking a test.

COMMERCIAL SPACES: Use [CONTACT US](#) for rates.

Ham Radio Trivia

Answer to last month's question:

Last month's trivia question featured a challenge associated with electronic technology, more specifically antenna related vocabulary. How well did you do?

Question: Which word from the list below is not associated with antenna technology?

- A. Somersault
- B. Batwing
- C. Turnstile
- D. Butterfly

The correct answer is:

"A. Somersault"

A Turnstile is two dipole antennas mounted at right angles and fed with a phase difference of 90 degrees.

The Batwing is sometimes called a super turnstile. It is often used in television broadcasting.

The Butterfly is a two-dimensional (flat) biconical antenna.

And Somersaults belong in the gym, not in amateur radio!

For more info about antenna types

refer to this [Wikipedia article](#).

February Trivia Question

Let's change the subject this month and try something a bit more obscure. See if we can figure out this amateur radio operator's former day job.

Question:

Stephen Aug, W3DEF, was the former business correspondent for what TV show?

- A. CBS This Morning
- B. Shark Tank
- C. Good Morning America
- D. Fox News Primetime

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

"Brush up on your radio knowledge and skills."

Do you QSO with Special Event Stations?

I don't know about you, but I strive to make successful QSOs with Special Event stations whenever I spot one on the air. Let's talk a bit about Special Event Stations.

Special Event Stations are amateur stations celebrating a Special Event of some type. The Special Event could be a dedication of some kind, an anniversary celebration, a sporting event, such as the Olympics, or just about anything else worthy of a celebration. National holidays are a common type of Special Event.



One example of a Special Event is the 13 Colonies Event celebrated in the United States each year around the July 4th holiday. For this event there is one Special Event station operating in each of the 13 original colonies.

Another Special Event celebrated last year was the 75th anniversary of the end of World War II. Special Event stations throughout the world operated during 2020 to celebrate various milestones on the march toward cessation of hostilities and the signing of the truce aboard the USS Missouri that officially ended the war.

Special Event stations are often granted temporary use of a distinctive, call sign for a limited period of time. These special call signs are issued by the governing authority of the country where the station in-

tends to operate.



Domestic Special Event Calls

In the United States Special Event stations are frequently assigned 1x1 (one-by-one) calls, making them easy to recognize when operating. Special Event calls are valid only for a limited period of time, which may be a single date, or perhaps a week or month, or even up to a year depending on the type of event and its significance. Some 1x1 stations in this writer's log for 2020 include: K2D, K2G, K2H, K2K, K2L (13 Colonies Event), and W6C, W6H, W6N, W6P (Route 66 on the Air Special Event).



Foreign Special Event Call Signs

Call signs assigned by other countries can often be recognized by their structure. The prefix and numeric digit of the call usually fits the ITU standard assigned to the country. The call's suffix may appear "normal," or it may provide a clue that it is a Special Event call. Some non-normal suffixes I've seen in recent months include COVID, ANNIV, WWII, and others. It's obvious these suffixes have some meaning. Here are a few foreign Special Event stations with which this

writer has QSOed recently: XR33M, TM20XMAS, PI75VERON, DQ100SL, OP20FENIKS and 6Y6STAYHOME.

Recognizing Foreign Special Event Calls

So how can you tell when a "normal" looking call is a special event station? The answer is simple. Very often you can't tell just by looking at the call sign. One clue that this writer has noticed is that foreign Special Event calls frequently contain two or more numeric digits in the call. Every one of the example calls above match this characteristic.

Unfortunately, not all foreign Special Event calls contain multiple digits, and some standard calls also contain multiple digits. So what is the secret to spotting "normal looking" special event stations? Fortunately, the answer is simple. But it involves a bit of effort. Look up the call on QRZ.com.

The biography on the call's QRZ page will tell you all about the station. And if it is a Special Event station the page will often provide information about the event. It may even point you to a web site where you can find additional details.

QSO with VE1ZA

Here's an example of a data mode



Halifax, Nova Scotia, Canada

QSO this writer had recently on 17 meters. A station was calling CQ with the call sign VE1ZA. On the surface, this looked like a normal eastern

Canadian call. I replied and we completed a normal QSL, exchanging signal reports and sending 73's.

(continued on page 7)

(continued from page 6)

I logged the QSO and then did something I do every time I log a QSO. I looked up the call on QRZ.com. The [QRZ page](#) indicated VEI ZA was the operator of Special Event station VCIE, which was on the air back in 2015 to commemorate the 98th anniversary of the Great Halifax Explosion, which killed 2,000 people and injured 6,000 others.

The QRZ.com page pointed me to a Wikipedia article, which told the complete story of the Great Explosion, which occurred in Halifax Harbor on December 6, 1917. I found the story to be a fascinating piece of little known World War I history. You can view the article [here](#). So what is the bottom line? Simply stated, VEI ZA was not a Special Event station. But had I not done what I do after every QSO, which is to look up the call on QRZ.com, I would have missed out on learning a most interesting tidbit of World War I history.

In Conclusion

I am in the habit of looking up the [QRZ page](#) of every contact that hits my log, regardless of standard call or special event call. Sometimes, like the VEI ZA example just discussed, I learn something fascinating, even from non-Special Event stations.

I would encourage other amateur operators to do the same. As you log your QSO's get into the habit of looking up your contact's QRZ page. Many will have a blank biography page, but others, including Special Event calls, often contain interesting stories. It only takes a few seconds to look up a page, and reading the store behind the just completed QSO may add to your enjoyment of amateur radio, just as it does for me.

Happy Operating!

Bob Olson KCOKAC (SK)



Bob was born on September 10, 1935 and passed away peacefully on December 28, 2020 at his home in Fort Pierce, Florida after a short illness.

Bob thoroughly enjoyed life and seemed to find humor in every situation. He was confirmed in a Lutheran church in Minneapolis, Minnesota and attended Lakewood Park United Methodist Church in later life.



Bob loved being a boat Captain, a school bus driver, and a ham radio operator; but most of all he loved spending time with his family. Bob was born at the Fort Snelling Army Hospital in Minneapolis on September 10, 1935. He graduated from Chisago Lakes High School and served in the US Navy.

Bob married Kay Fuglie in 1961. He graduated from Dunwoody College of Technology with a degree in Welding. While he worked in various industries in the 1960's, sons Mark and Scott were born. The family joined the Peace Corps and were sent to industrial colleges in Malaysia and Swaziland. Upon returning to Minnesota, Bob became a Welding Instructor at Dunwoody. After Mark joined the Air Force, Bob, Kay and Scott went to Honduras where Bob and Kay taught at a vocational school in Yoro. Then Bob and Kay went to Zambia to work for Habitat for Humanity. And they weren't done yet! Bob and Kay next went to Saudi Arabia as teachers before returning to Minnesota to own and operate an elder care home.

Bob had grown up on the Mississippi River building boats with his Dad, Albert. He worked as a "river rat" pushing barges up and down the river. Later, when not traveling around the world, Bob operated the stern wheel dinner boats in St. Paul, which he thoroughly enjoyed. He also piloted eco-tour boats in Fort Pierce, Florida beginning in 2002 when he and Kay relocated to Florida to be near their sons. They provided foster care to many children in their new home. In Florida, Bob returned to other interests from long-ago, including joining a ham radio club and working as a part-time school bus driver, where he enjoyed watching the students grow and mature. He received a lifetime achievement award from the American Welding Society in 2017.

(Like many local hams, I was mesmerized by Bob's life of service. I most remember the twinkle in his eye when he talked about his life. RIP, Bob. You will be missed!)

The Frugal Ham Radio Operator

Ok, have you figured out what we can do with the “free” plastic hangers?



Simple enough.... They make great antenna center connectors and window ladder line holders when operating portable. Dipoles, verticals, end feds, inverted Vs, delta loops. You name it. Some are stronger than others. I have found 16 to 22 gauge stranded hookup wire can be used. For the feedline RG-8x, RG-58 or equivalent works fine. Some shapes (right side hanger in picture) also support Win-

dow ladder line.

Schedule 40 PVC is a great item for the frugal ham. There is no shortage of info on the Internet about using PVC. Some of my favorites are below.



The one on the left is for wire antennas and the right for Hamstick style whips.



Here's another version for a Hamstick vertical.

The only part not found in

a home improvement store was the SO-239. I always keep a supply of them on hand.

Now, I am not saying the store bought antenna connectors are bad, but keeping with my frugal ways, most are just too expensive for me to consider.



Four years ago I bought a Ten-Tec connector called the Acro-Bat. You name it and this antenna connector could do it, or so the hamfest marketing guy said. Nice connector, but needed some work including a different way to hold it

together. The screws included were replaced with SS bolts & nuts. I always replace all zinc hardware with stainless steel when permanently mounting.

A good source of outdoor boxes, etc is the Restore store. These places are a wealth of items. I was in Restore one day last year and found BNC panel connectors. These were not cheap Chinese ones you find at hamfests. Rather, they were Amphenol high quality. How much? \$.25 each. Walked away a happy frugalist that day!



Now, what do you think you can do with these?

Short Takes

Gary Frost, a professor at University of North Carolina (Chapel Hill) wrote a review of the book *Ham Radio's Technical Culture* by Kristen Haring. Cambridge, MA. Published by M.I.T. Press, 2007.

<https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=4669645>

Is your workbench or garage cluttered with junk? The repeater-builder.com

web site has a picture of a pile of electronic junk. There is a cat in the junk pile. See if you can find it. Click below to view or download the picture. (We will provide the location in the next issue.)

<http://www.repeater-builder.com/humor/pix/find-the-cat.jpg>

Icom has announced forthcoming firmware upgrades for several models

of HF radios, including the IC-7300, which is a favorite of many Treasure Coast hams. The announcement is available here: <https://www.icomjapan.com/news/3208/>

Carl Luetzelschwab, K9LA, Propagation Expert

Check out Carl's recent propagation talk at the Madison DX Club. [Madison DX Club - YouTube](#)

Everything You Need to Know about USB and Serial Interfaces is the title of a presentation prepared by N6TV for presentation at the 2020 Dayton Hamvention. You can view it here: [USB and Serial Interfaces](#)

(If you see an article that may be of interest to other hams, please share it. Send the URL to: tchamnews@gmail.com.)

Listening to Spy Broadcasts *(from the writings of Matthew Gault)*

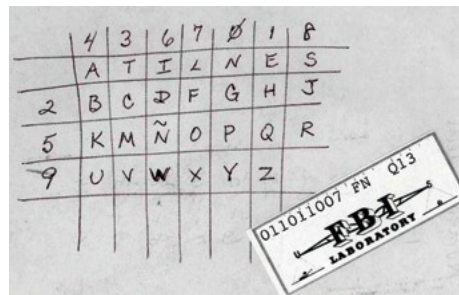
[Intro: “Some say we are products of our parents. I guess that was my case. My mother was an avid worldwide stamp collector. My dad collected coins & paper money, some from WW2 as his unit moved around Europe during and after the war. Both were interested in world geography. We had a shortwave radio and would listen to radio stations from around the world. When tuning various frequencies, we would hear stations using voice. Most were international broadcasters, however some others would repeat numbers, words and phrases over and over again in various languages. Mom knew Spanish and French and dad knew German, but while they understood the languages, what was said did not make sense. We also heard Morse code. None of us knew much code, so those stations we passed by. My interest in learning Morse code was encouraged and eventually led to ham radio.”]

“In 1969 I joined the Navy. In boot camp after taking a battery of exams including a simple Morse code test, I was approached about joining the Naval Security Group as a communications technician. I asked what I would be doing? I was told work with sophisticated communications equipment. After seven months of basic and advanced schools, there I sat at my R390A receiver intercept position searching for communication targets. Turning the R390’s tuning dial I heard an interesting station sending coded CW groups...”]

Hidden among the squeal and whine of the little used shortwave radio bands, mysterious stations broadcast unbreakable code. Yosemite Sam threatens to blow the listener to smithereens before switching to a different frequency. An upbeat woman delivers nonsensical strings

of numbers in Mandarin. A repeating broadcast of a nursery rhyme breaks only for a child to read numbers in German. These are the numbers stations — radio stations on shortwave that broadcast some sort of repetitive noise followed by strings of numbers. Amateurs first identified the stations after World War II, but back then, no one was sure of their purpose.

That hasn’t stopped anyone from speculating. A popular theory is that the broadcasts are used to transmit coded messages to spies and the mili-



tary. Shortwave is easy to broadcast globally, hard to trace and free of commercial traffic. Spies or military personnel tune to a frequency at an appointed time and use a [one-time pad](#) to decrypt the message. The spy then destroys the pad and goes about his or her mission. Anyone else listening hears a random string of numbers with no context.

Listening to numbers stations was once the hobby of a small margin of the population. Only those with shortwave radios and patience to tune them reaped the benefits of the strange broadcasts.

Now—thanks to the Internet—anyone can listen. The University of Twente in the Netherlands maintains a web-based shortwave radio [anyone](#)

[can access here](#). The interface is simple. Just input the frequency you want in the box below the graphic. To get an idea of what frequencies to check out, head over to [Priyom.org](#) — an international group researching intelligence and military communications via shortwave radio. The site maintains a schedule of active shortwave stations and catalogs interesting activity.

The Buzzer

Tune the dial to the 4 megahertz band and you might hear a repetitive buzzing noise. This obnoxious station goes by the call sign UVB-76, but shortwave aficionados call it The Buzzer. The Buzzer has been blaring that tone since the early 1980s. On occasion, the buzzing stops and a voice comes on and reads [numbers and letters in Russian](#). The speculation is that The Buzzer has something to do with Russian military operations or intelligence, but that’s never been confirmed.

Yosemite Sam

The cranky gunslinger from old Bugs Bunny cartoons began screaming across the shortwave bands around 2004. He’s hard to pinpoint because he moves, but you can typically find him at 3700 kHz or 6500 kHz. Every broadcast begins with a millisecond-long [compressed data burst](#) followed by a sound clip of Yosemite Sam. The data burst and sound clip then moves to a higher frequency. This broadcast is repeated over a two minute period before receding back into the darkness.

To date (2015), no one has decoded the data burst. Estimates trace the signal’s origin to somewhere in the
Continued on page 10)

Listening to Spy Broadcasts

(continued from page 9)

deserts of New Mexico. Here's a [clip of the oddity](#).

Cold War legacy

It's tempting to think of the numbers stations as a somewhat romantic relic of the past; forgotten radio transmitters blaring out strange messages for persons unknown.

But that's false. Yosemite Sam didn't get started until 2004. And the Buzz-er's most recently coded broadcast occurred on July 10.

The numbers stations are still very much in use. Just ask Cuba.

In the late 1990s, the FBI busted a [group of Cuban spies](#) known as the Wasp's Network. The five Cuban intelligence officers received messages from back home via a shortwave radio station transmitting numbers.

The coded messages were a large part of the FBI's court case. It was the *only* time the government publicly acknowledged the existence and purpose of the numbers stations.

So remember as you're listening to the repetitive buzz coming from Russia, or a woman reading numbers in a foreign language ... these messages are meant for *someone*. You aren't the only one listening.

You can follow Matthew Gault on Twitter at [@mjgault](#).

Do you have a story to tell about ham radio or how you became involved? Do consider sharing it.

Please submit to:
tchamnews@gmail.com

QRP ARCI News

From the QRP ARCI President

Greetings QRP enthusiasts

By now we have all heard the disappointing news that the Dayton Hamvention has been canceled. Since our Four Days in May convention piggybacks on the Hamvention, we have no choice but to also cancel our physical gathering. We will, however, host a virtual convention, in which we will share streaming video of our presentations. We have an excellent list of presenters and topics, and you will not want to miss a moment of them! Even though we share the disappointment of missing the chance to gather in Fairborn, we do anticipate the chance to gather in a virtual community.

Details will be shared when they are made available. I look forward to this event, and to better times in 2022.

David W. Cripe, NM0S
President, QRP ARCI
NM0S Electronics
<https://sites.google.com/nm0s.com/home/>

QRP ARCI Contests

What would you like to see for the 2021 Contest Calendar? Any interest in SSB, digital modes (FT4/FT8/RTTY/Others) shorter contests, longer contests?

Send in your ideas on contest feedback to contest@qrparci.org

The 2021 contest dates have been updated on the website. Contests are held throughout the year. Spend a few minutes or a few hours making contacts with members and non-members around the world. Please visit www.qrpcontest.com to submit your scores after the contest.

CONTESTS

10 April 2021 - Spring QSO Party
24 May 2021 - Hoot Owl Sprint
11 July 2021 - Summer Homebrew Sprint
14 August 2021 - European Sprint
09 October 2021 - Fall QSO Party
02 December 2021 - Top Band Sprint
12 December 2021 - Holiday Spirits Sprint

All logging to be turned in via <https://qrptest.com>

Don't forget to check <http://qrptest.com> for other QRP contests.

QRP ARCI Has Its Own Email Reflector

The qrparci.groups.io reflector was brought online in 2019 and now over 670 members. It's a good place to ask questions about the club, find out what's happening in QRP contesting, and find a few ideas to help in your QRP operating. To join, just send an email to: qrpanci+subscribe@groups.io.

If your email address does not have your call sign embedded, send call in a separate email to Jim, W4QO at qrp@w4qo.com. Jim is our principal reflector moderator.

You can check it out (all posts are public) by going to: qrparci.groups.io. Be sure to sign up while you are there.

Treasure Coast Ham Doctors



Ask the FT8 Doctor

Calling CQ in WSJT-X

As with SSB and CW operation, in FT8 mode there are two basic ways to operate. You can either put your call out there by transmitting CQs, or you can monitor the band and respond to CQ calls you see on your computer screen. Here's a recent question asked by a new FT8 operator.

Question: I use WSJT-X for my FT8 operating. Almost every time I operate FT8 I notice an operator or two repeatedly calling CQ. They do it over and over, sometimes for ten minutes or more without letup, but never getting a reply. Are they do-

ing something wrong?

Answer: There is nothing wrong with operating this way, provided the operator is not interfering with anyone else's attempts to use the band. It is, however, an inefficient use of time and bandwidth.

When you want to call CQ, by all means go ahead and do so. If necessary, let your CQ call repeat 5 or 6 times. Someone who sees your call may be in the middle of a QSO with another station, and it may take up to three cycles for that station to complete the current call, after which he may respond to you.

If you don't get a reply after five, six or seven CQ calls, stop and take a break. Look at the WSJT waterfall display and check your transmit frequency. Perhaps another operator is transmitting on the same frequency and in the same odd/even time slot as your CQ calls. The interfering signal could explain why

your CQs did not receive a reply. In that case, move to a clear frequency and try calling CQ again.

Should you not observe any interference, try your CQ call again for another five or six cycles. If still no reply, take a break from calling CQ and try replying to CQ calls you see on WSJT's receive screen.

Should no one respond with a signal report you may want to check your radio and antenna to be sure you are putting out a signal. You don't need a lot of power or a fancy antenna to operate FT8. This operator regularly uses 20 watts or less and has successfully completed QSOs with stations all over the world.

If everything looks good but you are still not making contacts, you have three choices: keep trying, switch to another band, or give up and try again later when conditions may have improved.

Thanks for the question.

Becky (no call sign) is studying for the Technician license.

She needs assistance programming a BaoFeng BF-F8HP handheld radio.

We know a lot of area hams are experts on programming BaoFeng radios. Please reach out and offer assistance. Email Becky at beckyjol@comcast.net

Please help!

If you have a ham problem, please email tchamnews@gmail.com

FT8 Operating Tip

A useful tool for confirming your FT8 signal is leaving your antenna is [PSK Reporter](#). Select the band you are operating in and set the query line to "show signals sent by <your call sign> using FT8 over the last 30 minutes." Then click on the GO button. The display will update to show where your recent CQ calls

are being received.

This operator leaves PSK reporter running in the background whenever I am operating. It refreshes automatically every five minutes. If desired, I can click on the GO button at any time to get an immediate refresh. I find PSK Reporter a

useful tool for checking my signal.

Now go make some new FT8 contacts!

Have an FT8 Operating tip to share with the ham community? Send it to tchamnews@gmail.com.

Ramblings of an Antenna Alchemist



We hope our readers will participate in this column by submitting their practical experiences with antenna alchemy.

Many hams include a 5-watt VHF/UHF handheld in their radio cache. They may also include a 10, 25 or 50 watt mobile, or a 100 watt base radio as well. And sometimes, to avoid too many radios, hams buy an HF rig with VHF/UHF capability. With so many options, modes and capabilities it really is a “soup de jour” when it comes to VHF/UHF radios.

Of course radios need antennas and again, there is no shortage of types to consider. Handheld radios typically come with a “rubber duck” style antenna. Given all the after market handheld antennas available and how many hams toss out the rubber duck that came with the radio in favor of an aftermarket, it makes me wonder why one is included at all.

Mobile antennas can be $1/4$, $1/2$, or even $5/8$ wavelength. Magnetic mounting is the generally accepted method, but I have used glass mounts as well as screw mounts with good success. Permanent mounting is also an option.

VHF/UHF base station antennas can either be dedicated VHF/UHF or combined with HF antennas. A recent look at what is available is overwhelming: verticals, yagis, log periodics, j-poles, loops, discons. A 2015 Nuts & Volts magazine included an article about using aluminum crutches for 6-meters. Now that is ingenuity!

So a ham buys a super duper antenna. The advertisement states 15dB gain and broadband. (Not sure how that works?) Anyway one Saturday morning up it goes on the house, pole, tower, tree, whatever. The ham gets on the local simplex frequency and asks for a signal report. A ham responds that his signal is pinning the S-meter and the audio is good. We are off to the races. A few days later the ham is back on the simplex frequency and asks for another signal report. This time however his signal is not as strong. What gives?

Several years ago SLC ARES conducted a simplex drill between the EOC and primary shelters. Most stations used high power mobile radios, but several had 5 watt handhelds. One ARES communicator used a handheld with a magnetic mount antenna instead of the handheld’s rubber duck antenna. From my location at Tradition Hospital his signal was very strong. Almost as strong as the higher power mobiles.

A variety of factors could have been at play. We were approximately 9 miles apart with no appreciable manmade or natural obstacles to speak of. Maybe it was just a good radio day, but I wanted to see if the path was a fluke or could the same results be obtained using propagation modeling.

Propagation modeling requires many factors to be considered including terrain, radio system type, antenna type and height, frequencies, coverage goals, etc.

Commercial modeling applications use very robust Irregular Terrain (Longley-Rice) propagation modeling and USGS or Shuttle Terrain Mapping (SRTM) elevation data. Radio Units (stations) can be placed via latitude/longitude. Individual radio unit performance can be modeled using power, sensitivity, antenna parameters, etc. Radio paths between units (base or mobile) can be modeled.

While commercial modeling applications can be very expensive, there are alternatives such as [Splat](#). It can give good VHF/UHF results.

The modeling application I like is [Radio Mobile](#). The application is written by a Canadian ham, Roger Coudé, VE2DBE. Radio Mobile is a commercial application, but Roger makes it available for free for non-commercial use. There are a number of “How Tos” available as well as a forum, but understanding this application takes time. [lan G3TVU \(SK\)](#) wrote several excellent tutorial books that made the learning process much easier for me. Try [Radio Mobile](#) and get ready for some modeling fun.

73 for now

DXING WITH BRUCE, W8HW

Advice Regarding DXCC Credit for QSL Cards Without a Signature.



Important QSL information for everyone. The above QSL card from a ham in S. Africa **has no DXCC value.** I don't need S. Africa, but if I did, the computer printed card wouldn't be counted by ARRL because it lacks an original signature. In all my years of DXing I only had ARRL accept one computer printed QSL card, and that was only after a prolonged battle. The DX station mailed it to me via regular mail and it did have an original signature on it.

Emailed QSL cards are fun to look at, but the ARRL will not count them - no exceptions. To clarify the point, while technically a signature is required, a card checker will usually overlook this if it is a commercially printed QSL card. In the case I noted above, it was a home computer printed card. It was first rejected by the ARRL, thus my argument about the original signature became important in finally getting it accepted by the ARRL.



W8HW ACHIEVES DXCC HONOR ROLL IN CW



Our congratulations to Bruce, W8HW, for recently achieving DXCC Honor Roll Status by completing and confirming CW QSOs with 331 different DXCC countries / entities.

To achieve DXCC Honor Roll recognition a ham must complete and prove QSOs with at least 331 of the

To be safe, I always sign the QSL cards I send to others so they will not run into any possible problems. You will want to do the same.

Again, a signature is a requirement. But since it is often forgotten the ARRL may overlook it on commercially printed cards. Most major DXpeditions apply a stamp to the card leaving no doubt. The stamp differs from one DXpedition to the next.

DX Operating Tips

DX tip #1... 1. Listen Listen Listen... for correct call sign. While that sounds simple, you would be surprised how often you will hear stations calling the wrong station, because they did not listen well. **Listen** for special instructions from the DX station. They may not answer you if you do not follow their instructions. **Listen** to determine if he is operating SPLIT frequency. The best way to embarrass yourself in front of the whole world is to call a major DX on his calling frequency. You will hear some not so nice comments from the serious DXers if you violate this instruction.

DX tip #2... Talk to other big DXers in your local area. They can often offer advice as to where and how to find the DX stations. Learn from others.

DX tip #3... If you know CW, use it. While it is true that I have over 20,000 FT-8 contacts (mostly DX), CW has been my best producer. The order to date is **CW, RTTY, SSB**. FT8 is charging hard, but has yet to give me something "new" that RTTY had not given to me first, long before FT-8 arrived on the scene.

DX tip #4... Always look for something "NEW". Often people work the same entity over and over on the same band/mode. Search for **NEW**. New entity, new entity band, new entity mode. Always search.

DX tip #5... The more bands and modes you can operate the better. It is very important and will result in much greater numbers. A very basic item often forgotten is that you have to work them on the band and mode they are operating. As simple as that sounds, most new DXers bypass this important tip. It is very important, more band and more modes. If you need help, get it. Any radio regardless of age will do all modes including Digital. Case in point... I operated Digital (RTTY) in early 1970 with an AM Heathkit DX60. It took some work, but it can be done. Don't let anything or anybody stop you.

73, Bruce, W8HW

340 currently active countries / entities in the ARRL DXCC list. Each QSO must be officially confirmed in Logbook of The World, or by QSL cards checked and verified by ARRL Card Checkers.

Bruce is one of the most prolific DXers on the Treasure Coast. This is his second DXCC Honor Roll recog-

nition. His first was for Mixed Mode, where he presently has 333 confirmed contacts.

Way to go Bruce! Congratulations!

Now go get those few remaining entities you are lacking for a perfect scorecard!



BERMUDA
PAISET PARSON
Tony Sides
VP9HK

CONFIRMING QSO WITH	DATE	TIME	MODE	UTL	MHz	NET	TEST	TIME	QSL
GB2C05	1	6	8E	1332	21	59			

QSL Manager
K1EPI, Fred Lucas
A WAMPY QSL

NORTH KOREA...
IT'S ANYWHERE YOU WANT IT TO BE!
P5/R0MEO

CONFIRMING PRIVATE QSO WITH	DATE	TIME	MODE	UTL	MHz	RST	MODE	TIME	QSL

ROMEO STUFFBUCKO
Box P7555
North Korea, Europe, Asia, Mid East
ZONE 24



HOKKAIDO JAPAN
JG019164Z
GL No. QN091WK
CQ-43 FTU-43 AS-078
JH8GEU

Confirming Our QSO

DATE	TIME	MODE	UTL	MHz	NET	TEST	TIME	QSL
09/Apr/12	1150	2W0DAA	559	13				CW

FT2000/FT1000
Yag: Zele Zele dele
Dai BB DX
Dai OH
Shiro Kituchi (Kiku) Tai Iai
aka, Minami-machi, Nise Town, Sorachi-gun, Hokkaido 979-0314 Japan
NR 547900

From the weekly
ARRL DX News-
letter and other
sources.)

DX News

DX OPPORTUNITIES

TOGO, 5V. HB9EHD from Kara; 40 20m; FT8 (also QO-100); 100w; LOTW, QSL via HB9EHD (2USD & SA Envelope) Feb 11-20, 2021.

WAKE ISLAND, KH9. NL7RR/KH9; HF; SSB; start date unclear (Feb 15-28, 2021); operation to continue for 90 days. QSL via AL7JX.

CAYMAN ISLANDS, ZF2. K0BJ from Grand Cayman Island (IOTA NA-016); focus on WARC bands; mainly CW; LOTW, QSL via K0BJ Feb 21-Mar 5, 2021.

MONACO, 3A. F4FRL as 3A/F4FRL & F5RBB as 3A/F5RBB; 40-20m; SSB + digital; LOTW, QSL via eQSL. Feb 24-Mar 2, 2021.

SINT MAARTEN, PJ7. AA9A from IOTA NA-105 AS PJ7AA; 80-10m; CW SSB FT8; LOTW, QSL also OK via AA9A direct & Club Log OQRS. Feb 27-Mar 27, 2021

HALLEY RESEARCH STA. ANTARCTICA, VP8. Will, M0ZXA active as VP8DOI on HF Bands. Jan-Feb 2021.

GRAND CAYMAN ISLAND, ZF2. Bruce, K0BJ active as ZF2BJ, from Grand Cayman Island, Cayman Islands, IOTA NA - 016. Operate on HF Bands with focus on WARC Bands, CW. QSL via home call direct, bureau, LOTW. Feb 20-Mar 5, 2021.

BEAR ISLAND, JW. Erling, JW/LB2PG active again from Bear Island, IOTA EU - 027. He will operate on 80 - 20m. Feb-Jun 1, 2021.

JAN MAYEN ISLAND, JX2. Erik, LA2US active as JX2US from Jan Mayen Island, IOTA EU - 022. Operate on HF Bands, CW, FT8. Oct 2020 - Mar 2021.

NIGER, 5U. Adrien, F4IHM as 5UAIHM (not 5U4IHM). He will operate CW using a straight key on 20/40 meters. QSL via home call, direct, bureau. Probable operation is from Jan 7 - Feb 11, 2021.

DX SPECIAL EVENTS

NEW ZEALAND, ZL. Celebrating club's centenary, Radio Society of Christchurch (ZL3AC) active as ZL100RSC. QSL via operator's instructions. Throughout Feb 2021.

NETHERLANDS, PDI12. Roel, PD0YF as PDI12MKNN. The special callsign suffix stands for Meld Kamer Noord Nederland, Control Center Northern Netherlands, Drachten. European I12 (emergency services #) Day. QSL via bureau. Feb 11-14, 2021.

75TH ANNIVERSARY OF THE ISWL, GB75
The Special Event station GB75ISWL will operate from Walton on the Naze, in Essex, Herbie G6XOU. (WAB Square - TM22 - Eng-

land, IOTA EU-005, WLOTA 1841). Commemorating the 75th Anniversary of the formation of the "International Short Wave League" in 1946. The QSL Manager is Herbie G6XOU (QTNR). Direct QSL's are welcome via the Bureau, or via eQSL.cc. Further details are on <http://iswl.org.uk> or <https://www.QRZCO.com/call/GB75ISWL>. Throughout 2021.

200 YEARS FROM GREEK WAR OF INDEPENDENCE, SX. Nine multi-operator special event stations - namely SX1A, SX2A, SX3A, SX4A, SX5A (Dodecanese), SX6A, SX7A, SX8A & SX9A (Crete) active during the countdown to the 200th anniversary of the "Agonas" (the Struggle), the Greek Revolution of 1821 which led to the formation of modern Greece.

The countdown will start at -99 days to the actual celebration day (25 March 2021). Serial # appended to each special call sign.
25 Jan - 03 Feb
SX5A/59 to SX5A/50;
04 Feb - 13 Feb
SX4A/49 to SX4A/40;
14 Feb - 23 Feb
SX3A/39 to SX3A/30;
24 Feb - 05 Mar
SX2A/29 to SX2A/20; etc.

The serial numbers will be dropped only on 25 March. QSL via LoTW, ClubLog's OQRS, eQSL or direct to SV2GWY. An award will be available. For details see QRZ.com page for any of the special calls.

Domestic Special Event Stations

JYI Special Event Memorial Station 2021 Feb 1-Feb 28, 0000Z-2359Z. N9SES, Lake Station, IN. ArabQrz Club. 14.250 14.030 7.185 7.030. QSL: Ayman Azar, 2861 Decatur St, Lake Station, IN 46405. See website for stations from other countries. All HF/VHF/UHF, All Modes. Hamsphere Users can also participate in the event. www.n9ses.com/?page_id=18

Ground Hog Day Special Event, Feb 6, 0900Z-1500Z. K3HWJ, Punxsutawney, PA. Punxsutawney Amateur Radio Club. all modes, all bands. SASE for certificate: Stephen Waltman, KB3FPN, 37 Clark St., Brookville, PA 15825. www.punxclub.com

Shuttle Columbia Special Event Feb 6-Feb 7, 1400Z-2359Z. K5C, Nacogdoches, TX. Nacogdoches ARC. 7.216 14.260 21.350 28.350. QSL: Army Curtis, 167 CR 2093, Nacogdoches, TX 75965. All contacts will be confirmed via LOTW. <https://w5nac.com>

Commemorating Howard E. Anthony, Father of Heathkit Feb 7, 1200Z-2359Z. KD2FSI, Randolph, NJ. 21.300 14.300 7.300 3.900. QSL: David R. Hackett, 3 High Ridge Road, Randolph, NJ 07869. Starting in the morning

with 75 meter SSB, we will work our way up to the 40, 20, 15 and 10 meter bands and then back down again towards the evening. 73, Dave Hackett, KD2FSI, davehacett@cs.com, <https://www.facebook.com/dave.hackett.9085>.

George Washington's Birthday, Feb 13, 1400Z-2000Z. W4B, Boyhood home, Ferry Farm, VA. Fredericksburg, VA. Stafford Amateur Radio Association (SARA). 14.225 7.195 447.275. QSL: Stafford Amateur Radio Association (SARA), PO Box 6331, Fredericksburg, VA 22403. SASE required for return of a QSL card. <https://www.ws4va.org>.

Also, Feb 13-Feb 14, 0800Z-1400Z. K4US, Alexandria, VA. Mount Vernon Amateur Radio Club. 14.260 14.074 7.040. QSL: MVARC, P.O. Box 7234, Alexandria, VA 22307. Will be hosting a modified special event station to commemorate our first president's 289th birthday. Members will be operating remote stations due to COVID, including from the original grounds of the former plantation of George Washington and his wife, Martha Washington. k4us@mvarc.org.

Also, Feb 20-Feb 22, 2000Z-2000Z. WS7G, George, WA. Columbia Basin DX Club. 14.322

7.222 3.855. QSL: Brian Nielson, 11650 Road 1 SE, Moses Lake, WA 98837. Commemorating George Washington's Birthday from the city of George, Washington. In February of 2021, our special event station will operate Saturday, February 20th, from 2000 Zulu through Monday, February 22nd at 2000 Zulu. You can find us on 4.322/14.255, 7.222/7.260 & 3.855/3.960 plus/minus QRM. cbn.homestead.com/WS7G.HTML.

Pluto Special Event Feb 13-Feb 21, 0000Z-2359Z. W7P, Flagstaff, AZ. Northern Arizona DX Association. 14.290 21.290 7.290 14.090. Certificate & QSL: W7P Pluto Special Event, % Bob Wertz, NF7E, 6315 Townsend Winona Rd., Flagstaff, AZ 86004-1493. Discovery of PLUTO in 1930, by Clyde Tombaugh, at Lowell Observatory in Flagstaff, Arizona. Please note the frequencies will be + or- 10, as to not interfere with any nets operating during that time period. www.nadxa.com.

Ice-olation Station, Feb 13-Feb 15, 1400Z-2355Z. W0JH, Stillwater, MN. Ice-olation Station Stillwater, MN Amateur Radio Association. 21.360 14.260 7.260 3.860. Certificate: Shel Mann, N0DRX, 1618 Pine St West, Stillwater, MN 55082. We will have multiple stations sim-

ultaneously operating on different bands and different modes. Certificates will ONLY be sent via email in PDF format. (Send requests with standard QSL confirmation info via email to: ce2021@radioham.org). There is no need to send a QSL card. Info: W0JH at www.QRZ.com and www.radioham.org.

Raising Mt Suribachi Flag, Feb 13, 1700Z-2359Z. NI6IW, San Diego, CA. USS Midway (CV-41) Museum Ship. 7.250 14.320 14.070 (PSK31) DSTAR via PapaSystem repeaters. QSL: USS Midway CV-41 COMEDTRA NI6IW, 910 N Harbor Dr, San Diego, CA 92101. SASE please. www.qrz.com/db/ni6iw

17th Annual "Freeze Your Keys" Winter Operating Event, Feb 27, 1400Z-2200Z. W0EBB, Leavenworth, KS. Kickapoo QRP Amateur Radio Club. 14.058 7.035 14.325 7.240. QSL: Gary Auchard, 34058 167th Street, Leavenworth, KS 66048. SASE please for return QSL cards. w0mna74@gmail.com or www.qrz.com/db/w0ebb.

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

Ham Humor

(This month's humor comes from hamuniverse.com and other sources.)

Oops!

Q: What did the ham radio operator say when he fell off his tower and hit the ground?

A: This megahertz!

The First Ham

Q: Who was the first radio ham in history?

A: It was none other than George Washington. 'Tis true! When George was just a mere lad, his father came into the house and with an angry voice inquired, "Who chopped down my @#\$%^&*! Cherry Tree?"

George stood up and said, "I cannot tell a lie. I DIDIT, DAHDAH."

The Funeral

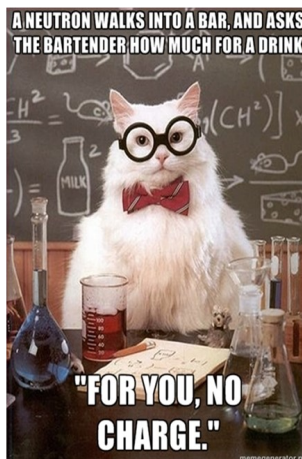
A hamfest was going on in a local park one day as a funeral procession was passing by. One old ham, looking at some old tube rigs sees the

procession, pauses, takes his hat off and stands silent for a few minutes.

The vendor of the table noticed and said to the old ham, "That's very honorable of you, most of us would not even have noticed, let alone took off our hats in respect".

"Well", said the old ham, "It's the least I could do. We were married for 47 years."

There are 10 types of people in this world: those who understand binary and those who don't.



TREASURE COAST HAM NEWS

The editors like to reserve the last couple of pages of *Treasure Coast Ham News* for 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. 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.

The QSL cards below show what can be done with minimal antennas and low power on CW, SSB or FT8. Don't let your radio and antenna situation be an impediment. Get on the air and enjoy the hobby!

Authentic QSL
eQSL.cc

GJ0KYZ

Paul Mahrer
Jersey
Channel Islands,
United Kingdom
FTU 27 CQ 14
Grid IN89WE
IOTA EU Q13

To: W4RJP Confirming 2-way FT8 QSO, Band: 40M
Date: November 25, 2020 Time: 08:57Z, RST: -13

WESTERN SAHARA
الجمهورية العربية
المحرورية الديمقراطية

Sahrawi Amateur Radio Union

SØ1WS

UR S

W5VYH

BRUCE H GIUNTA

ITU:7 CQ:4 Grid:EM44aw Lonoke County
400 HUNT DR
CABOT, AR 72023
USA

SKCC 6759T
ex. W6KLI, K1QDV
10-10:48613

To: W4RJP Confirming 2-way FT8 QSO,
Band: 40M
Date: October 9, 2020 Time: 20:54Z, RST:
-02

Radioklubi Nova Gorica
društvo
OKO

S50WAAD

WORLD
AUTISM
AWARENESS
DAY

AUTISM
awareness

To: AI4RB This confirms our 2-way FT8 QSO
Date: December 24, 2020 Time: 12:55 UTC
Band: 17M UR Sigs: -11

QSL cards
donated by:

NAVASSA ISLAND KC4NI

CONFIRMING QSO/S WITH:

Band MHz	Date 197	Time, GMT	RST	SSB 2X	CW 2X
1.8					
3.5					
7					
14					
21					
28					

NORTHERN CALIFORNIA DX FOUNDATION INC.
QSL to K2FT

ITU ZONE 17 GREETINGS FROM ICELAND CQ ZONE 40
„THE LAND OF ICE AND FIRE“

TF5B

Akureyri QTH LOC. IP05WQ IOTA EU-021 DIG 3711 10-X #3714
Brynjólfur Jónsson, Engimyrri 8, IS-600 Akureyri, Iceland

To: AI4RB This confirms our 2-way FT8 QSO
Date: January 1, 2021 Time: 13:29 UTC
Band: 17M UR Sigs: -24
FT8 Sent: -24 Rcvd: -04

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

QSL Concept
QSL Cards Printing for Less

TCHamNews wants to publish 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.)

TREASURE COAST HAM NEWS
IS PUBLISHED BY
B&B PARTNERS

WE CAN BE REACHED AT:
TCHAMNEWS@GMAIL.COM

