

TORC newsletter

Ninth edition

81 members

as of 2021-04-02



Photo by Chris Seger



Photo by
John Payton

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FOR SALE

PURPOSE of this newsletter

Greetings All,

I am pleased to announce that the Tortolita Radio Club is now officially an ARRL Affiliated Club. Affiliated clubs engage in furthering the work of the ARRL promoting and enhancing the amateur radio community.

ToRC is being recognized as a club with sound basics and a thriving active membership, a club that quickly went from an idea early September 2020 to a robust 77 member club. Active club? The groups.io reflector shows just how active, varied, and knowledgeable is our membership.

Gaining affiliation required a fair degree of paperwork including Articles of Association, Initial Club Report on number of members, officers, club roster, description of club activities, and a constitution.

Tom Kravec W8TK took this upon himself, beginning months ago, to assemble all that, then shepherd it through the several layers of ARRL. When Tom submitted the paperwork there were 45 members. When affiliation was granted ToRC was up to 77. All thanks to Tom.

Check us out! <http://www.arrl.org/Groups/view/tortolita-radio-club-1/type:club>

Tortolita Radio Club -- Now an affiliated club of the ARRL. That's saying something!

**73, Paul K7AZT
President Tortolita Radio Club**

CLUB OFFICERS

President (K7AZT Paul Seger)



Vice President (W8TK TOM Kravek)



**Secretary (W7HD Ron Herring)
& Newsletter Editor**



Treasurer (AE9Q Dave Dostie)



GROUPS.IO

They click the address ToRC+subscribe@groups.io or copy and paste that address and send an email. They have to get an account - really simple. It only takes a minute.

Once they ask to join I will accept them and off we go.

Send members here: <https://groups.io/g/ToRC>

Courtesy of Portage County Amateur Radio Service, Inc. (PCARS) The RADIOGRAM April 2021

TORTOLITA RADIO CLUB

Serving the Greater Tucson Area



Q CODES FOR CURRENT TIMES

New Q Codes for Current Times	
QLD	I am locked down.
QUA	I am quarantined.
QPD	I am in the middle of a pandemic.
QTP	I have toilet paper. Want to trade for a new car?
QHG	I need a hug.
QSH	I am sheltering at home.
QHS	I have hand sanitizer. Want to trade for two new cars?
QSD	I am observing social distancing.
QCV!	I hate Coronavirus.
QWH	Wash your Hands
QWH?	Did you Wash your Hands?
QSS	Stay Safe

QTS I have toilet paper AND hand sanitizer. Want to trade for IC-7300 or FT-991A?

QTSM I have toilet paper, hand sanitizer & N95 masks!
 Will trade for ICOM IC-7610 - !
 NO low balling!

QSS & 73

Courtesy of Portage County Amateur Radio Service, Inc. (PCARS) The RADIOGRAM April 2021

As Hams, we have a responsibility to ensure our activities; especially out in the field, do not damage ourselves, others, or property.

Therefore, please carry a properly rated (class C - electrical)(or an ABC for general use) fire extinguisher with you on outings, as you should have in your home & garage.

Know Your Fire Extinguishers

You are not required to put the fire out – but if you attempt to extinguish a fire then you need to know your fire

extinguishers. **Only attempt to put a fire out if you have a clear exit from the room or**

area. Do not turn your back on a fire and keep your exit from the room open or area and accessible at all times.

Extinguishers will work for approximately 30 seconds – if you have not put the fire out in that time leave the area immediately. Once you leave a burning room, do not re-enter.

Close the door to a room with a fire and leave the door unlocked; the fire department will need to enter. If you know the type of fire and contents of the room, please advise the Fire Department personnel.

KNOW YOUR FIRE EXTINGUISHERS

TYPE OF EXTINGUISHER		TYPE OF FIRE			RANGE	HOW TO OPERATE
		A ORDINARY COMBUSTIBLES - wood - paper - cloth, etc.	B FLAMMABLE LIQUIDS - gasoline - paints (oil based) - oils, etc.	C ELECTRICAL EQUIPMENT - motors - switches		
WATER		NO	NO	NO	9m to 12m	Place foot on footrest, pump handle and direct stream at base of flame.
		NO	NO	NO	9m to 12m	
CO ₂		NO			1m to 1.5m	Direct discharge at base of flames in a sweeping motion, then direct it gradually forward or at remaining material that is burning.
HALON				2.5m to 4.5m		
DRY CHEMICAL		NO			1.5m to 6m	
				5m to 7.5m		

NOTE:
All extinguishers require annual servicing or servicing after use.

Types of Fires:

There are three types of fires listed on the above diagram; not all extinguishers can be used on each type of fires.

Type A fires are the ordinary combustible materials such as wood, paper, cloth, etc...

Type B fires are flammable liquid fires such as gasoline, paints and solvents, alcohols, acetone, etc.. this includes grease fires while cooking & BBQ-ing...

Type C fires are electrical fires.

Water Extinguishers

Water extinguishers are good for Type A Fires only. Type A fires are wood, paper or cloth fires. **You cannot use a water extinguisher for a Type B fire,(flammable liquids),** as flammable liquids are lighter than water and will float on the surface of the water. This will simply aid in the spread of the fire. **You cannot use a water extinguisher on a Type C fire, (electrical fire),** because you run the risk of receiving an electrical shock. Water is an electrical conductor so as the water spreads out, the chance of electrocution increases.

CO2 Extinguishers:

A CO2 extinguisher is not a good choice for a Type A fire, (wood, paper, cloth), because of the force of the CO2 gas being expelled from the extinguisher. When this type of extinguisher is used on a wood, paper or cloth fire, the burning items are blown around the room by the force of the CO2 gas, thereby aiding the spread of the fire. Secondly, a Type A fire will usually reignite as soon as the CO2 gas dissipates.

The CO2 extinguisher works well on a flammable liquids or an electrical fire – Types B or C fires. They work well on an electrical fire in that they do not leave a messy residue on delicate electrical equipment such as a dry chemical extinguishers would. The CO2 displaces the oxygen at the surface of the fire, effectively smothering the fire. However, the fire can re ignite once the CO2 gas dissipates if the ignition source has not been removed.

A CO2 extinguisher has a wide nozzle that locks into place. Do not hold onto the nozzle when firing the extinguisher, this nozzle will get very cold as the CO2 gas is expelled; CO2 gas has a temperature of minus 66C. If you are holding onto the nozzle you will receive a cold burn.

Dry Chemical Extinguishers:

The multipurpose Dry Chemical Extinguisher for a Type A,B,C fire is what you will find is most common. These extinguishers have the most range of compatibility with items found in a home or office and are good for most types of fires. A Type BC fire extinguishers contain sodium or potassium bicarbonate and a Type ABC fire extinguishers contain ammonium phosphate. They have an advantage over CO2 extinguishers in that they leave a blanket of non-flammable material on the extinguished material which reduces the likelihood of re ignition. However, they make quite a mess and the fine powder will irritate the throat and lungs.

The contents of these cylinders can pack down over time and when a person goes to use them they may not fire. If this happens, turn the cylinder over and rap it sharply on the top to loosen the compacted powder inside. Then try firing the cylinder again. If the cylinder will not fire - leave the area immediately.

All fire extinguishers have fire ratings stamped on them. You should familiarize yourself with this rating. For example, a dry chemical cylinder may have 2A, 10 BC stamped on it; this means that the contents of the cylinder are enough to fight 2 square meters of a Type A fire or 10 square meters of a Type B or C fire. Higher numbers mean more firefighting power.

**Remember - if you cannot extinguish the fire within 30 seconds
- get yourself out!**

**Your safety and the safety of others is more
important than fighting the fire!**

73 - John - N7GHZ

U.S. Navy certified & experienced Aviation Firefighter

P.S. To this day, I cannot pass a fire extinguisher & not look at its gauge to ensure it is properly charged & in the green zone!

KD7RPP SK

Former ARRL Teachers Institute instructor Miguel Enriquez, KD7RPP, of Tucson, Arizona, died on February 7 as a result of COVID-19. His death came just 3 weeks after that of his wife, Wendy, also COVID-19 victim. Miguel was 72 years old. His wife was 68.

Between 2001 and 2008, Miguel Enriquez taught sessions of the introductory TI-1 course in Arizona. A February 14 *Arizona Daily Star* [feature](#), "How Tucson Schools are Helping Kids, Staff Cope with COVID-19 Deaths," includes a photo of Miguel Enriquez when he was conducting an amateur radio demonstration in 2006 at Pueblo High School, where he taught mathematics.



"He is a fitting example of our teachers who have braved the pandemic to continue to teach our youth," said Frank Karnauskas, N1UW, AMSAT Vice President-Development.

In the socalsota groups.io SOTA group, K6CPR provided some interesting background on how the SOTA article in Outside Magazine came to be:

As promised, here is the story behind the story...

In December 2019 Scott WA9STI activated San Gabriel Peak. While Scott was there he left a SOTA business card in the peak cache. Now fast forward to MLK Day, January 2020 - my XYL and I hiked up to San Gabriel Peak, thinking not many people would be up there on a cold winter day, plus there was snow on the upper parts of the hike. We got up there and had the peak to ourselves... so i thought. Anyways we had no cell service and my handheld rx was getting killed by all of the RF from Mt. Wilson and Mt. Lukens, so I couldn't spot. I set up an EFLW and tried busting into some QSOs on 20 & 40, but then the crowds showed up so I took my antenna down. (Lesson Learned: Don't activate a small popular peak on a national holiday!) Several people asked what I was doing and I spoke to them in between trying to make some QSOs on 2 meters. My XYL was being very patient and she was handling the job as PR person the best she could. (My HF gear was on the bench and that was generating a lot of questions). So this one very interested guy pulls Scott's card out of the peak cache and asks if I am Scott. I told him no but that I knew Scott. The guy took a picture of Scott's card and put it back in the cache. The guy was Chase Brush, the author of the Outside Magazine SOTA article.

Chase emailed Scott and asked about SOTA. Scott had Chase to his house where he gave him a ham radio crash course. He taught him about RF propagation, the difference between HF and VHF, the difference between 500 watts and QRP, CW, SSB, and FM simplex. Scott made some chaser contacts so Chase could hear how SOTA worked. On 2/20/20 Chase tagged along with Scott to a Krakta Ridge activation, which was not an easy hike in the snow. Scott made 43 contacts on CW, SSB and 2 Meters. Scott had Chase do some of the CQs and give back the signal reports. Chase worked AH6V in Hawaii on 17M SSB and spoke with him for several minutes. He was quite impressed with the low power setup and only 28' of wire in the air was allowing this magic to happen.

Chase was also very interested in the outdoor aspect, how the hobby was encouraging people to get outside and explore remote places. He wanted to know what the internal motivations of SOTA enthusiasts were, how they started and what keeps them going. Scott told me that Chase wanted to be put in contact with others active in the community that had logged lots of SOTA time, and accompany them on their activations.

So through Scott's help, Chase found himself in Colorado with Bob K0NR and Joyce K0JJW, Steve WG0AT, Brad WA6MM, Paula K9IR, and Mike KE5AKL, some of the best in the business. Chase had a fantastic introduction and immersion to the world of ham radio and SOTA. He wrote an excellent article that is sure to draw many others into ham radio and SOTA.

So writers write, and editors edit... None of this would have happened, except for Scott leaving his SOTA business card in the San Gabriel Peak cache. I was only the guy that said I wasn't Scott when asked, and that could have been any one of us. Scott really grabbed the bull by the horns and helped get all of this going. So writers write, and editors edit and the article is excellent. Scott's part was not included, but he certainly deserves a lot of credit, at least within our SOTA groups!

Way to be a great Positive Ambassador of ham radio and SOTA, Scott!

Ron, K6CPR

Excellent article, especially <https://wmplota.org>

73 de W8TK

QSO Today Virtual Ham Expo Experiences Technical Issues, On-Demand Access Opens

The [QSO Today Virtual Ham Expo](#) attracted thousands of participants over the March 13 - 14 weekend. Taking a different tack than it did for its inaugural event last August, the expo leveraged the capabilities of two virtual event platforms to increase interaction among attendees, speakers, and exhibitors. All did not go smoothly, however.



"Unfortunately, we had many technical issues with the Airmeeet presentations and the integration of the vFairs and Airmeeet platforms," expo chairman Eric Guth, 4Z1UG/WA6IGR, explained afterward in a message to participants. All recorded presentations are available for attendees during the expo's 30-day on-demand access period, which ends April 16.

ARRL, a QSO Today Virtual Ham Expo partner, enjoyed virtual visits from attendees to its two exhibits. One included staff representatives for Member Services, Radiosport, ARRL Field Day, and Field Services. The other exhibit highlighted the expertise of ARRL Laboratory personnel, who offered technical and practical advice to those stopping by. On the team were Senior Test Engineer Bob Allison, WB1GCM, who streamed from



inside the Lab's screen room where *QST* "Product Review" testing is conducted, and RFI Engineer Paul Cianciolo, W1VLF, who helped participants deal with pesky noise and interference issues. W1AW Station Manager Joe Carcia, NJ1Q, conducted virtual tours of the Hiram Percy Maxim Memorial Station all weekend.



All told, [16 staff members](#) worked in rotating shifts at ARRL Headquarters, greeting visitors through livestreaming video and audio. Several members of the ARRL Board of Directors were on the platform too.

CEO David Minster, NA2AA, delivered the event's keynote address. Minster, who arrived in the midst of the COVID-19 pandemic last year, said ARRL would become a bigger player in the digital age.

"A major part of the digital transformation at ARRL has to do with taking our excellence in content development and editing, and bringing it to video," Minster said. "You are seeing more activity from us on YouTube, the Learning Network (webinar series), and then later this year the launch of our Learning Center." Video, Minster pointed out, is always available and easy to pause and refer back to.



Amateur radio manufacturers and vendors including FlexRadio, Elecraft, Connect Systems, and Quicksilver Radio Products welcomed visitors and answered their questions on a one-to-one basis.

Guth apologized for the poor experience many participants had in accessing and navigating the event.



"I attempted to integrate a number of systems together in order to make a better user experience," he explained. "It was a noble idea, because I wanted the convention like last August, with the lounge tables of Airmeet to make it more interactive. We failed on this platform for many of you. I am very sorry."

"One of the things that we've stressed in all of our communications is that the QSO Today Virtual Ham Expo team is committed to constantly learning and improving what we do," Guth said in a statement. "Virtual conventions of this magnitude are new territory. We believe that there's a place for a virtual ham expo to serve the needs of the very large amateur radio community, especially those that don't attend in-person national or regional events (or even local events). We are committed to making that happen."

The expo announced on Wednesday, March 17, that 80 presentations had already been added to the platform [for on-demand viewing](#).

Contest Calendar May 2021

Tom Kravec W8TK

With apologies to Alfred Lord Tennyson, who certainly must have been a ham:

“In Spring a young man’s fancy lightly turns to FIELD DAY”

ARRL Field Day is June 26-27 this year. FD2020 was different from usual due to the coronavirus, and we adapted. Many members found that doing a solitary FD effort was better than the big group operation. FD became a learning experience, with each participant doing his own planning and execution rather than just showing up at a group site and operating a radio. While we can see the light at the end of the virus tunnel, FD 2021 is probably not yet time to gather in large groups. I have fingers crossed for 2022, but I suspect many will choose solitary operation even after the pandemic subsides.

So it’s time to plan. First, read the rules (arrl.org/field-day) which are the same as last year’s except for 150 watt limit on class 1D and 1E stations. Next, using the rules as a guide, decide which class you will operate. I was 1D last year, will be 1E this year. Then you have to decide whether you will be at home or out in the field. While parks are nice for FD, most are not open 24 hours and most do not permit generators. Your back yard still qualifies as “out in the field” as long as you don’t use your permanent antennas or supports during FD. Take your radio, power supply (or battery) and accessories out on the patio, toss up an antenna, and put the whole affair on the air to make sure it will all work when the hammer drops at 11 AM on June 26.

Contests for May 2021:

May 1-2 is 7th Call Area QSO Party (7QP). This has become a really busy one and since we live in the 7th call area, we are the hunted, not the hunters. Lots of activity on all modes. New this year: 2 points for phone contact, 3 point for CW contact, 4 points for digital contact. I’m not sure the FT modes can handle the exchange, which is RS(T) plus 5 letter state/county code. For example if you operate from Pima County, your exchange will be: 599 AZPMA. Find a complete list and rules at: <http://7qp.org>

Also May 1-2: Indiana, Delaware (with 2 counties!) and New England QSO parties. You can operate all 3 at the same time if you use N1MM Logger. Check the N1MM website on how to do it.

May 29-30: CQ WW WPX CW contest. This is a major contest and not for the faint of heart. If you’re unsure of your Morse speed, you might not enjoy this one. But it’s everybody working everybody regardless of QTH so there’s lots of stations to work.

Rules: www.cqwpx.com/rules.htm

73 de W8TK

TIPS, TRICKS AND LINKS

How to Get a Graphical Device Manager for Linux

- There are endless Linux command-line utilities that show the details of your computer's hardware. HardInfo displays all that information in an easy graphical interface. It's like Windows Device Manager for Linux.

Why the Xfce desktop is reminiscent of early Linux desktops, but with a modern sensibility

- Jack Wallen gives the latest version of the Xfce desktop a spin and kicks any foregone conclusions to the curb.

Linux 101: How to give users sudo privileges on Ubuntu and Red Hat-based Linux distributions

- New Linux admins need to know how to give and take sudo privileges from users. Jack Wallen shows you how on both Ubuntu- and Red Hat-based Linux distributions.

How to Use "Here Documents" in Bash on Linux

- The strangely named "here documents" let you use input/out redirection inside Bash scripts on Linux. They're a great way to automate commands you need to run on a remote computer.

On Friday, March 26, 2021, 10:49:57 PM EDT, K7DWI Art <k7dwicn82@gmail.com> wrote:

Hi everybody,

I finally put the 7-Year Study on Sporadic E Propagation I did on YouTube.

The study was done with all your help from 2005-2011.

Sorry ... It's a little long (1 Hour).

It is easier to do this in public than on YouTube.

The audio is loud the first 2 syllables of each new slide.

Enjoy. I will entertain questions, but I ask you Email them directly to me.

73 Art Jackson K7DWI

Link:

<https://youtu.be/XCZFmQchTxI>

From fellow Propnet member Art. Ron W7HD

Everything You Need to Know About the Facebook Data Breach

- The personal data of 533 million Facebook users leaked online. That's a large percentage of the world's population, so you should check to see if your account or phone number was affected. We'll show you so you can protect yourself.

How to Avoid Spam Robocalls with "Verified Calls" on Android

- Spam calls might be the worst thing about carrying a phone in your pocket every day. Thankfully, there are tools to help with this. We'll show you how to set up "Verified Calls" on your Android phone using one of Google's own apps.

Technical Achievement

Tamitha Skov, WX6SWW, is well-known as the Space Weather Woman. Calling her "a real space pioneer," the Awards Committee said those who have seen her space weather forecasting shows will agree that she is energetic and excited about her work.

A credentialed space weather forecaster, Skov's forecasting work is widely known on social media and has been featured in publications and on TV. Her weekly space weather video podcasts are frequently featured on www.qrz.com.

Skov said she specifically got her ham license in 2018 to better understand and serve the needs of the amateur radio community.

Professionally, Skov is a research scientist for The Aerospace Corporation.

She also teaches the art of space weather forecasting to meteorologists at Millersville University and is working with ARRL and HamSCI to create educational materials.



Courtesy of Portage County Amateur Radio Service, Inc. (PCARS) The RADIOGRAM April 2021

FROM OUR MEMBERS

On Mar 20, 2021, at 5:52 PM, Ron K7RJ <ronk7rj@gmail.com> wrote:

I used to have a TS700. I used it as my main SSB rig on 2 meters for years. Although it works on FM, it isn't a great FM "repeater" rig because it doesn't do repeater offsets in the 145MHz segment. But, we at ToRC don't do repeaters HI HI

I tried to find the Molex part number for the connector, but I found a cable onEbay that, while a bit overpriced, it would get you on the air:

<https://www.ebay.com/itm/120vac-Kenwood-TS-600-or-TS-700-or-Similar-Radio-Replacement-Power-Cord/303144031930?hash=item4694cad6ba:g:ENEAAOSwnhJbpotm>

Good luck. Hope to see you on the air soon.

73 Ron K7RJ

The 4-pin Jones Connector used on the TS700 uses two pins for AC Input and the other two pins for DC input.

I own a TS 700 SP and can tell you which pins are what if you like.

The connector you need is a 4-pin Female JONES connector. They are all over eBay and the cheapest ones are from China (sorry for the bad word).

Bob KA7VPR

Yes, but Jones connectors are or were ubiquitous here in the U.S. back in the 70's, 80's & earlier... They were used a lot in audio gear.

Try some of the electronics surplus stores; Like Gateway Electronics in St. Louis. Back in the day, when we had actual surplus stores, I remember seeing them at Electronic City. Hmmm, they may have them at Elliot's Electronics.

A word of warning, though they have that backshell clamp - install a rubber grommet in the backshell! This will help protect from fraying cable & shorts!!!

A shorted 120 VAC line is no fun, especially if you grab it!

Come to think of it Bob, you said it's a 4 pin...

Does it even have a GREEN safety ground when connected to an AC line?

N7GHZ

No safety ground and it is insanely easy to plug the 120 volt plug into the 12VDC pins. They are keyed and you can't fully plug them in, but from what I remember, you could mistakenly push the connector in far enough to make contact with the wrong pins. There is good reason they abandoned these connectors.

KA7VPR

The much maligned \$25 "beginner" VHF/UHF handheld (H/T) has been worked over & is now FCC compliant.

Dave Casler - KE0OG on his youtube channel "Ask Dave" - presents a video demonstrating that the former UV-5R is **now renamed the GT-5R**.

Here's the video link: <https://youtu.be/1JyM8oNtoaE>

The main points are these...

A) The GT-5R will now ONLY transmit on the ham bands - 144-148 & 420-450 MHz. So it cannot interfere with public service channels! The RX frequencies remain the same.

B) Dave demonstrates with his spectrum analyzer that his original UV-5R fails the spurious tests; the new GT-5R has no spurious emissions at all !

C) And perhaps most important to users... they improved the manual! It's now written by English speakers, is move helpful... AND... includes a section on how to use Chirp to program the radio.

N7GHZ John

I'd be curious to hear if they increased the performance of the receiver.

a) About five years ago I did an A/B comparison between the UV5r and FT-270r, both using a 3-element yagi. We were on Pistol Hill contacting various stations around the Tucson valley. The Baofeng receiver's performance was simply abysmal, not able to adequately copy simplex stations in town, which the FT-270r copied full quieting.

b) Last fall I tried using a Baofeng UV-5r to copy the ISS SSTV images, again using an 3-element yagi. The performance again was nothing less than pathetic, not hearing the ISS when it was at 70 deg elevation. The FT-270r copied the ISS with no problem.

Curt / K7ZOO

I also enjoy receiving and sending QSL cards. While the number of cards I now receive has fallen off significantly, a new QSL card experience has surfaced. Sometimes I receive an email shortly after a QSO. I reply. A QSL card then follows. I send one of mine in return. As a result, I experience a stronger personal connection with these fellow members of our hobby. Additionally, I now use one of the free internet programs to make my own QSL cards. This has added an additional unexpected pleasure. It is wonderful to see how our hobby changes in such positive ways as the years pass.

K7NSW Richard Schmidt

My perspective is a little different. I'm a contester. I usually make > 2,000 contacts in a contest weekend. While my callsign is far from a "rare one", I used to be swamped by hundreds of QSL cards via the QSL bureau in the year following the contest. Most were from DL and JA, and postage is not cheap for direct mail response to overseas addresses. A few years ago I changed my policy. I no longer reply to bureau cards and I have instructed my ARRL bureau card manager to discard any cards bound for W8TK. My QRZ.com page spells this policy out plainly. It also says I will respond to a direct mail request if accompanied by a self-addressed envelope, and I don't ask for "green stamps" (US dollar bills) to cover postage. Now that I get only half a dozen requests after a big contest, I don't mind buying a stamp and returning my QSL card to each request, foreign or domestic. Requests without a self-addressed envelope go unanswered.

You should detail your own policy on QSLing on your QRZ.com page. Yes, you do have one, and you can edit it. State whether you will respond to direct mail cards, whether you want an envelope, whether you want postage stamps (for US contacts), whether you will accept bureau cards. It's easy and avoids disappointment for your contacts.

73 de W8TK



**This arrived in the mail here Saturday. Hangs on my wall now. 73 de W8TK
ARRL Club Charter is Official!**

How good are your Power Pole contacts?

My Kenwood TS590-SG 'full power' 100W meter indication is usually just left of (below) the one in '100 watts'. I had low power some months ago which was corrected by reseating the RIGrunner connectors between the power supply and rig. I was happy with what I thought was full power. The owners' manual does not say exactly where full power should be on the meter.

I recently operated another TS-590. It's 100W meter indication was within the '100W' symbol, not left of it. Maybe my rig still isn't putting out full power?

Today I put a dot of Sanchem NO-OX-ID contact grease on the Power Pole connectors at the RIGrunner. My TS-590 power meter is now above the right hand zero in '100W', two or three meter squares higher than it was. A significant improvement. I don't recall it had ever been that high.

Contact loss occurs slowly over time. Easy to not recognize, like a light slowly dimming, until you walk past a new light bulb and realize how dim your own had become. Operating another rig was my 'walk past the new bulb.' Easily fixed, but first you have to recognize it.

73, Paul
K7AZT

Thanks goes out to Thomas, N1SPY for this April advertisement



Just for Fun

An old lady handed her bank card to the teller and said "I would like to withdraw \$10." The teller told her, "For withdrawals less than \$100, please use the ATM."

The old lady wanted to know why? The teller returned her bank card and irritably told her "These are the rules, please leave if there is no further matter. There is a line of customers behind you."

The old lady remained silent for a few seconds and handed her card back to the teller and said "Please help me withdraw all the money I have." The teller was astonished when she checked the account balance. She nodded her head, leaned down and respectfully told her "You have \$1,300,000 in your account, but the bank doesn't have that much cash currently. Could you make an appointment and come back again tomorrow?"

The old lady then asked how much she could withdraw immediately. The teller told her any amount up to \$3000. "Well please let me have \$3000 now." The teller kindly handed \$3000 very friendly and with a smile.

The old lady put \$10 in her purse and asked the teller to deposit \$2,990 back into her account.

The moral of this story is.... Don't be difficult with old people. They have spent a lifetime learning certain skills!

An oldie, but still a goodie!

Everyone can use a little "grammar" update now and then, so here's yours for today..

Is it "complete," "finished," or "completely finished?"

No English dictionary has been able to adequately explain the difference between these two words - "Complete" or "Finished."

In a recent linguistic competition held in London and attended by, supposedly, the best in the world, Samdar Balgobin, a Guyanese man, was the clear winner with a standing ovation which lasted over 5 minutes.

The final question was: 'How do you explain the difference between COMPLETE and FINISHED in a way that is easy to understand? Some people say there is no difference between COMPLETE and FINISHED.'

Here is his astute answer:

"When you marry the right woman, you are COMPLETE. When you marry the wrong woman, you are FINISHED. And when the right one catches you with the wrong one, you are COMPLETELY FINISHED!"

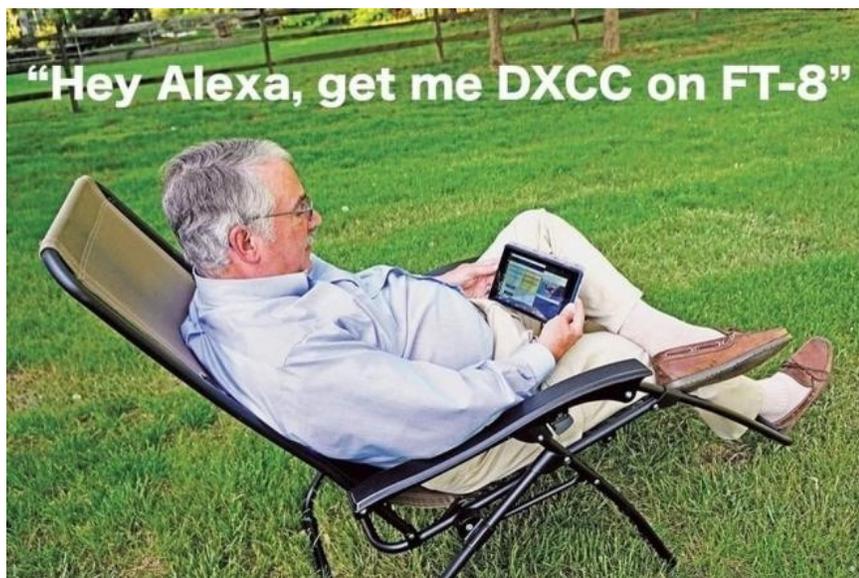
He won a trip around the world and a case of 25 year old Scotch!

2021

1918



Portage County Amateur Radio Service, Inc. (PCARS) The RADIOGRAM



From ARRL newsletter 4/1/2021

FT8 Accounts for Nearly Two-Thirds of HF Activity

Since zooming to prominence after its debut in mid-2017, the popular FT8 digital protocol has become the mode of choice for some 60% of HF operators, according to Club Log's latest [activity report](#) compiled by Michael Wells, G7VJR. FT8 is one of the protocols in the [WSJT-X](#) suite of free programs. Wells says FT8 activity level sits at nearly 85% on 6 meters. The dramatic FT8 upswing has come at the expense of phone, CW, RTTY, PSK, and other modes. Over the same period, the number of FT8 contacts logged each year per active call sign has continued to climb to about 60% between 2015 and 2021, with the most dramatic increase being nearly 29% in the past year. The use of all other modes has continued to flutter downward since the advent of FT8, which occupies vastly less spectrum than the more traditional ham radio operating modes. (Click for larger image.)

Between 2015 and 2020, the number of contacts logged per day by Club Log users has trended steadily upward, regardless of mode. The report draws on data of more than 84,000 logs uploaded to the Club Log site -- some 730 million contacts in all.



Wells reported that in 2015, the "typical call sign" logged 620 CW contacts, 558 SSB contacts, and 372 data (digital) contacts. Five years later, the statistics were 500, 300, and 1,700, respectively.

ARRL's Logbook of The World (LoTW) does not typically report this level of detail as far as mode usage is concerned, but the statistics available certainly confirm FT8's increasing popularity. The rocketing usage of FT8 over the past few years may be demonstrated most dramatically by a comparison in contacts-by-mode statistics between March 2017 and March 2018, when FT8 contact numbers in the hundreds shot to some 2.6 million contacts by the following year -- an increase of nearly 1 million percent.

From mid-2019 to mid-2020, FT8 usage appears to have slumped slightly to 50% before climbing back to 60%. FT8 usage peaked at just over 65% in late 2020 and has held steady at 60 - 65% since.

The same period saw SSB usage dip by 15%, CW activity by 10%, and RTTY by 29%. Introduced later, FT4, the contest mode of FT8, also showed an initial fast upward trajectory, before steadying at 5 - 8%.

Named after its developers, Steven Franke, K9AN, and Joe Taylor, K1JT, FT8 indicates the mode's eight-frequency shift-keying format. Tones are spaced at 6.25 Hz, and an FT8 signal occupies just 50 Hz.

73 de W8TK

Heathkit: an inside view

When the Heath article ran in the Jan 2021 Collins Arc newsletter, Ron Herring W7HD, a long time employee, commented about some of the ways by which the company remained competitive and maintained innovation. If you wanted a kit, you just filled out a form in the morning promising to keep it for a year and critique the manual. It would be ready at the door when you left for the day.

Ron got a complete Heath SB-line station that way. We asked Ron to share his story and more insights.

After the Air Force, Ron started at Heathkit as a repair technician, where he learned a lot about customers. For instance when a monitor scope came in for repair that blew fuses, the builder had done a great job inserting and soldering the components on all the circuit boards. However, none of the the leads were clipped and brushed against the cabinet! That was an eye-opener for sure and the instruction manual was modified to instruct the builder to clip the leads close to the circuit board. The lesson: never assume they will do anything.

As a Communications Engineering Technician, Ron designed circuit boards and chassis. His first project was field-testing the SB-220 linear. It was initially tested by loading it up to 1500W

output and keying-down for a week into a dummy load, which had a stirring fan to keep the oil circulating in the 5-gallon dummy load. It survived unaltered.

Ron's station was all Heath amateur gear (SB-101, SB-301, SB- 220, HO-68, HW-100 and more).

The MWW-18 marine radiotelephone unit, which Ron helped design, had the first digital IF. It was the "go to" unit for the Great Lakes marine environment. Heath put several units out for evaluation on boats. When it came time to evaluate the results, it was difficult to convince the users to bring in the old units until Heath replaced the old units with a new ones. Users didn't want to give up the units that worked when no others would!

Cleaning fish guts and slime off the units was an interesting experience, but it did result in better sealing of the case.

Ron also designed test gear: a 1 ppm/yr frequency standard at 100 KHz using less than \$10 worth of parts that would run on a 9V battery for a month; it resulted in a patent!

The other: a receiver test unit to measure the front end of the SB-103 transceiver, which was exceeding a 129 dBm dynamic range. It was the Amplitude Switched Signal Source or ASSS for short: patented, and also low-cost.

Like many growing companies, Heath started hiring managers that lost touch and stifled innovation. The SB-103, a state-of-the-art transceiver, didn't make it into production because the product line manager decided it was TOO advanced. He only wanted kits based on other's designs! The SB-103 could listen while transmitting by switching the receiver on during the zero-crossing of the RF output with microwave PIN diodes, which the product line mgr also didn't like because it didn't have a relay. (It had a 100-watt solid-state final.) A relay to turn on the transmit LED was added to satisfy him.

He also didn't like that it ran on 12 VDC with 10W output. Originally it was 100% solid-state and ran 100W. A 3-tube final was added with a high-voltage supply. Circuit boards and chassis were made rugged for mobile operation. Dropping the unit shifted the frequency by only 50 Hz. Each circuit board was separated by a shield and all stages were AGC controlled to achieve the dynamic range.

This made the Product Line Manager complain that he couldn't tell the difference when listening to a strong station versus a weak signal. Oh darn, the AGC worked!

The product line manager's decision to not release the SB- 103 for production cost Heathkit many engineers and technicians, including Ron, Doyle Strandlund, Dar Evans, and several others. Heathkit went downhill from there.



[EDITOR: I got all 20.]

FOR SALE

I've looking to downsize/streamline my shack. I've got some items for sale. I'd like to sell them locally before I venture out to QRZ

Xiegu G90 with fan base and CE-19 interface. Bought in August works great, but doesn't get much use. \$425

TYT MD380 UHF DMR radio \$65

MMDVM hotspot pistar on raspberry pi-zero w \$50

Motorola 900mhz mtx9250 programmed for Tucson repeaters. \$25

Call or email for more pics or questions.

Ryan KI7RS 5203017621



FOR SALE: Yagi 1296 MHz 35-element linearly polarized

Assumed to be an M2 "23CM35" antenna. In good shape, removed from the University of Arizona rooftop on 3/31/21. Descriptions found at these links:

<https://www.m2inc.com/FG23CM35>

<https://www.dxengineering.com/parts/msq-23cm35>

DXE price \$327 + 8% tax + free shipping = \$353

Used price at 50% retail = \$176 (which seems high, and this is the older design)

Set price at \$150

This antenna is being sold for the benefit of the University of Arizona.

Contact Curt K7ZOO at k7zoo@arrl.net

This antenna can be picked up in central Tucson.

Thank you,

Curt / K7ZOO

K7UAZ Station Manager



PURPOSE

TORTOLITA RADIO CLUB TORC
A group of amateur radio operators aiming to just have fun
located south of the Tortolita mountains near Marana
Serving the greater northwest Tucson area and beyond.
<ul style="list-style-type: none"> • No formalities • No regular meetings - just occasional weekend outings • Occasional newsletters will cover items of interest to the group • NO DUES • No repeaters • Emphasis is on having fun • No bureaucracy



Newsletter editor: Ron Herring W7HD

Material in this newsletter is public domain and may be freely shared.

Credit may be given as follows: ***Courtesy of Tortolita Radio Club***

Your feedback and articles are very much wanted. Please feel free to email me with **suggestions and articles** at w7hd.torc@gmail.com ...

If you are contributing an article, please include a photo of yourself as an attachment. The members would really like to be able to recognize you if they see you out in public (should that ever happen).

The word *tortolita* means little dove and is used here as a reference to the Tortolita Mountains north of Tucson, AZ USA.

The flag photo is courtesy of Ron Herring W7HD and was taken from my front porch.