



Eastern Iowa DX Association

An ARRL affiliated club - Established 1975

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April 2023

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President's Propagation, Pontifications and Prognostics

The last several months have been exciting from a DX perspective. First we get number 3 on the most wanted list, Crozet FT8WW followed by number 2, Bouvet 3YØJ. Congratulations to the EIDXA members who worked one or both entities. I worked Crozet the second day of operation on two bands, but I could not complete a QSO with Bouvet. I thought Bouvet would be easiest to work of the two due to multi operators, Yagi antennas, and power; boy was I wrong, the amplifiers and gain antennas never made it ashore. I would find 3YØJ's signal, then the dark side (See below) would kick in, I would lose them in the noise. Looking back at the operations, both Thierry at FT8WW and the 3YØJ Team performed admirably.

Logbook

CQ Test

QRM

- Balloons - a few facts
- Too much time on my hands

On the darker side were the deliberate QRMers, the frequency police sending "UP" to the LID transmitting on the DX frequency, the spoof squad sending "599 TU" trying to fool the same idiot into leaving, and finally the inconsiderate LIDs that tuned up on the DX's transmit frequency.

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Gayle Lawson, KØFLY

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I watched in disbelief the video of the 3YØJ team members in the water, wearing floatation suits being pulled onto shore with a rope. My first thought was "You have got to be kidding". My second thought was, "how is the last man on shore going to get off the island". With one tent, no chairs or tables, and the weather, it is no wonder that the team voted to leave when a good weather window came rather than bring an amplifier, larger generator, and fuel on the island to stay longer.

Since Bouvet has a very hostile environment, several EIDXA members are questioning why the ARRL keeps it on the DXCC list. Two attempts one landing, and a cumulative total of over a million dollars spent for 18.6K QSOs. During the upcoming EIDXA meeting, the subject of keeping Bouvet on the ARRL DXCC list will be discussed. All we need is for someone to lose their life or require emergency evacuation to give government agencies another reason to reject landing permits. I don't want to see Bouvet deleted but I also don't want to see anyone injured down there either.



I like Rod's idea of for select dangerous entities, permit operation from a ship as long as the ship is within 12NM of the island (territorial waters).

Several club members worked HD8M on six meters using FT-8, It looks like the magic band is beginning to open for the spring and summer season. I'm looking forward to meeting everyone at the next meeting and hearing Glenn's latest presentation.

Gayle KØFLY

Musings from the lunatic fringe

Bob WØGXA

Goals

goal

/gōl/

noun

the object of a person's ambition or effort; an aim or desired result.

I'll kick off this edition with a thank you to Adam AEØDX for his inputs to the newsletter (plus I'm going to use him as an example). It's nice to see someone go through the hobby trying new things. I've had a few private emails from other members who also enjoy watching his journey.

When I'm asked, I always talk about how broad the hobby is. There are many areas where people can explore. For many of us, ham radio has led to careers in electronics because we found a corner of the hobby where we could experiment with things that interest us.

Some day, Adam might find those elements with some lasting appeal (like CW!) but for now he's got an open mind and some enthusiasm to experiment and explore what the hobby has to offer.

Over time, your interests may change as well.

To illustrate, in my case, antennas, CW and contesting have consistently been areas of interest. This might be considered heresy but once I got 5BDXCC, my tolerance for working in a pileup to gain one more country dropped precipitously. I learned a lot as I worked

through each band but, now, whether I add country #284 or fill a band slot is of little interest. What interests me now is DXCC on 160m and dabbling on 6m because I will learn a lot about propagation characteristics and antenna performance on these bands. At my present rate, I'll achieve DXCC-160 when I turn 109!

I've seen less than civil debates break out on a couple of hot topic areas lately. Recently, on a different email list, a heated discussion broke out about working FT8WW. Even though the moderators shut them down quickly, it got me thinking about individual goals in this hobby. The instigator went on an ugly rant about how "if you need the country you have to work them on any mode possible (FT8 in this case)". He was responding to others who were commenting that he (FT8WW) wasn't on CW often enough.

I saw similar rants about 3YØJ as people objected to hams filling band slots, which presumably took away opportunities for those needing them as an ATNO.

It served as a reminder to me that we all approach the hobby differently with different goals in mind.

This is one of the longest newsletters in a very long time, thanks to the contributions from many of you. We also have a new member (KØKT) who provided me with a lot of great content. Additionally, there's a lot to say about 3YØJ :-). So grab a drink and enjoy.

As always, thanks for the content. Keep those cards and letters coming.

Bob

Club News and Administrative Items

Minutes from the prior meeting can be found [here](#).

Tower Climbers

In case you're looking for help with tower/antenna work this year, a couple resources were provided by club members. Send any updates

to Bob.

Steve Rhodes
3523 County Rd. 625
East Foosland, IL 61845
Ph. 217-899-3821

According to Rod: When someone calls, tell him that Byron Tucci, K9MBS, Bloomington, IL recommended him. Byron has hired him on several occasions and says "He does twice the work and with perfection."

Jay Nabholz, KCØAKJ
ph 319-474-2367
kc0akj@arrl.net

Jay is right up the road in Brandon, IA - Ed.

NEXT MEETING

May 12, 2023

Social Hour 6:30 PM

Meeting & Program 7:30 PM

Meeting and location information [here](#)

Program: "WHAT IS A REAL HAM" by Glenn Johnson WØGJ



Card Checkers

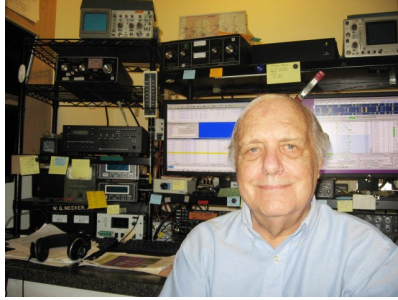
We have club members who can check your QSL cards

- Glenn, WØGJ
- Mike, NA9Q

Contact info can be found here:

<http://www.arrl.org/dxcc-card-checker-search>

Member Spotlight



Bill Meeker, KØKT

I grew up near the New Jersey shore in a small town called Rumson. My earliest recollection of playing with a radio was one weekend, when I was perhaps six years old, family members gathered to help clean out an old house in which my father's recently deceased great aunt had lived for many years. To keep me busy and out of the way I was given an old radio and some hand tools with the suggestion that I dismantle the radio. I think that I probably destroyed a lovely old Atwater-Kent breadboard.

Every year our municipality would have "junk week" during which they would pick up any junk people wanted to throw out. One person's junk is another person's treasure. I acquired old radios and TV sets and learned that by swapping out bad tubes, I could get some of the radios working again. The others gave me parts for my collection. My father helped me string a long-wire antenna in the attic for my large 1930s console broadcast band radio. I spent many cold winter nights listening to far-away broadcast stations. My parents encouraged this behavior sometimes telling their friends and neighbors, when I was within earshot, that "radio must be in his genes." More on that later.

As a Boy Scout I learned the Morse code and wanted to earn the radio merit badge. The merit badge booklet showed how to build a one-tube regenerative short wave receiver. With encouragement and a little financial support from my parents I was able to build the radio, opening a completely new world for me. I was fascinated by stations like WWV, VOA, BBC, HCJB, and Radio Moscow, not to mention lots of strange buzzes, tones, and voices. I spent hours listening to hams on 40 and 80 meters. I knew that is where I wanted to go. My father worked in New York City, a couple of blocks from the famed "Radio Row" on Cortland Street. One day he brought home copies of the ARRL License Manual and Handbook, which I read so many times that they literally fell apart. I took my visual knowledge of the Morse code and learned to copy CW by hams and W1AW. I was ready to be a ham but for a long time did not know where to go to take my novice test. I did not know any hams. During the summer of 1963 my mother learned about a course, sponsored by the Garden State Amateur

Radio Association, a few towns away. The course was half over, but, due to my previous self-studying, jumped in and passing the novice test at the last meeting. As a reward for passing, my parents bought me an old National NC-173 receiver and a 3710 kHz crystal. I used my collection of TV parts to build a 6L6 transmitter for 40 and 80 meters. I ordered a Gotham V-80 vertical antenna (impressed by the DX claims in their QST advertising---if you are too young to remember, try Google Image to see some of them) and installed it outside the window of my second-floor bedroom (the ad said "Radials not required" so there weren't any) and waited for the ticket to arrive.

C. R. Leutz, is a name that will be familiar to anyone who has studied the radios of the 1920's. C.R. (as he was called) was my grandfather. He was born in 1898 and left home before finishing high school to work in the rapidly-developing area of radio communications. I have a copy of his "License to Radio Operator, Amateur First Class" issued by the US Department of Commerce and Labor on August 12, 1913. His code speed was noted as 6 wpm and his operating and adjustment skills and general knowledge of regulations was noted as "Excellent." I also have his License to Radio Operator, Commercial First Grade" issued by the Department of Commerce, Bureau of Navigation is dated May 25, 1915 and his code speed was noted to be 23 wpm. But it seems that C.R.'s interest was not in operating. C.R. was, for a time, an assistant to Paul Godley at the American Marconi company. Godley, as has been well documented, was a famed early receiver designer and amateur DXer who was a leader in the hugely successful early transatlantic DX tests conducted by amateurs in December 1921.

History of superhetrodyne receivers can be found at <http://antiqueradios.com/superhet> (a reprint of an earlier article "The Legacies of Edwin Howard Armstrong" published in the Proceedings of the Radio Club of America, Nov. 1990, Vol.64 no.3). On page 33 of the December 1922 issue of QST (back issues of QST are available to ARRL members online) is an article by Godley, 2ZE, describing his preference for the new superhetrodyne design that they used in the December 1921 transatlantic tests. In the same issue, on page 11 is an article by C.R. Leutz, (no amateur call given) "Notes on a Super-Hetrodyne" giving details of a superhetrodyne that he had designed. On page 113 is an advertisement for C.R.'s company (Experimental Information Service) that sold superhetrodyne blueprints and kits. RCA held the Armstrong superhetrodyne patent but, would not provide licenses to C.R., as RCA was doing research into commercialization of the concept. The problem with the early superhetrodynes was that there were too many controls to make a viable commercial product. The 1921 Leutz design had 21 controls. The Leutz 1923 design was much simpler to operate. In 1924 RCA was ready to go into production with its own simple model and filed suits and injunctions to shut down C.R.'s kit business. Leutz (later Golden-Leutz) went on to

sell high-end multi-stage TRF receivers until 1931 when they were forced out of business by the failing economy of the Great Depression and the rise of the superheterodyne. Dozens of antique radios go on sale every week at Ebay. Leutz radios are rare. I have only seen two go up for auction on Ebay in the 20 years that I was looking. I was lucky enough to successfully bid on one of his 1926 Pliodyne-6 models.

In 1963, after I had passed my novice exam, C.R. came on his annual visit to NJ. I was proud of my modest station and was anxious to show it off. When C.R. saw my setup he mumbled some polite words of approval, but was quick to add "If you are thinking of making a career in this area, you should also have something on the side like chicken farming." His comment was forever engraved in my mind. From my family I heard that C.R. remained bitter about the demise of his company during the depression. I also heard that while he was a brilliant engineer, his business sense was not as sharp. He finished his career as an engineer, doing radar and missile research for the U.S. Navy at the Johns Hopkins Applied Physics Laboratory. Unfortunately he passed away in 1964, shortly after he retired. I never got to know him well.

Finally, 6 weeks after taking my novice exam, my ticket (WN2KTO) arrived. With great excitement, I attempted to make a QSO. I could hear my own signal, but after hours stretching into days, I could not get anyone to answer me. I was getting discouraged. My father (who knew little beyond basic electricity, but was very supportive) came to the rescue by bringing home a second-hand Johnson Adventurer (50 watt transmitter with an 807 final). It was not long before I had my first QSO in the log---another novice about five miles away. I recall my hands were shaking so much that I could hardly send or write down what was being sent to me. QSOs, however, were difficult for me until I purchased a 40-meter crystal and replaced the vertical with a 40-meter dipole in the back yard. For 80 meters, I found that shorting the braid to the center conductor I could do better than the vertical (the robust pi network of the Adventurer was able to tune to any antenna that I plugged in). I was working exciting DX---places like Florida, Iowa, and Ontario. I then learned that I could load my 40-meter dipole on 15 meters. There was not much activity on the band, but when it did open (we were coming out of a sunspot minimum) I was able to add more distant stations to my WAS list. I was also hearing European AM stations in the 15-meter novice band. If one was close to my frequency (I had only one crystal that would let me operate on 15), I would sometimes try to call them on CW. One Saturday morning in late March 1964 I was trying this and I received a CW reply from DL3LL and we had a nice QSO, in spite of the fact that my hands were shaking again (I later learned that DL3LL was near to the top of the DXCC honor role). I had been bitten by the DX bug.

In the summer of 1964 I took the bus to New York City to visit the FCC offices and pass my General class exam and afterwards spent a few hours wondering around Radio Row, picking up a Heathkit VF-1 VFO and collecting parts for planned projects. By fall my General license (WB2KTO) arrived in the mail.

I was not working too much DX until the fall when a young DXer (a few years older than me) that I had met on 2 meter phone (2 meters was the only band where novices could work phone) offered to give me a home-brew extremely heavy 3 element 15-meter Yagi (made of steel pipe). I mounted it on the roof of our house at perhaps 18 feet above the ground. What a difference! With my little 50 watts I was able to work a large amount of exciting DX, especially in Europe and Africa. I even broke a few big pileups. Not being able to afford one of the modern SSB transceivers I also built (mostly from old TV parts) a plate modulator (described in my ARRL Handbook) for my Johnson Adventurer and was able to work DX on 15 meter AM (by that time most of the activity on 20 meters had switched to SSB, but there was still plenty of AM activity on 15). It was difficult to tune SSB stations on the old NC 173, but I was able to trade it in and use my summer grass-cutting money to buy a Drake 2B.

Most of the real DX action (especially the DXpeditions being conducted by the likes of Gus Browning, the Colvins, Don Miller and others) was focused on 20 meters. In the Spring of 1965 I traded my monoband 15 meter Yagi for a 2-element trapped Telrex tribander (the pricy Telrex antennas seemed like the gold standard in the 1960's) and in August (I had about 70 countries worked at that point) I got a good deal on a National NCX-3 (only 3 bands, 80, 40, and 20 meters) transceiver. My Adventurer kept me on 15. AM stations were disappearing rapidly, but by zero-beating carefully, I could usually get SSB DX stations to answer my AM calls. The 2-element tribander, however, felt like a big step down. I could work DX but was not breaking any pileups, often had to stand in line for a long time (sometimes until I was the last one calling and even then I might not get a response), and I could not even hear the DXpeditions in the South Pacific and East Asia. I began to think about how to get more dBs of gain into my circuit.

In the late fall of 1965 I acquired a half-built pair-of-813s linear and started talking to my father about the possibility of putting up a "little tower." In the early spring of 1966 my father and one of his friends and I used a block and tackle arrangement to pull up a 50 foot tower (it had a hinged base) and then installed some guy wires. It was my job to do the top-of-tower work. My father was very nervous and so was I until I had been up and down a few times. Soon we had mounted a new Hy-Gain 204BA on top of the tower. I also installed inverted Vs for 40 and 80. See Figure 1.



Figure 1 WB2KTO's HyGain 204BA at 50 feet with inverted Vs for 40 and 80 1968-1978.

About the same time (after another trip to radio row) I completed construction of my linear. To change bands with the 813 linear, I had to open a trap door on the top and exchange plug in coils. A newly-released Heathkit HD-10 electronic keyer replaced my home-brew sideswipper, greatly improving the sound of my fist. Now, focusing on 20 meters, with some night-time excursions to the low bands, I was in DX business.

I have been strongly influenced by the series of articles "Station Design for DX" by W3AFM, that appeared in QST in the September-December 1966 issues of QST (and still a good read). I also developed my strong attraction to CW DX contests both because I could often find new countries that were easy to work and because they enabled me to increase my CW proficiency.

My country totals at the ends of 1966, 1967, and 1968 were 176, 235, and 242, respectively. In the fall of 1968 I left for college (where I studied business, followed by graduate school where I earned degrees in Operations Research and Administrative and Engineering Systems) and my DX activity would be only during sporadic visits to my parent's home, climbing to 279 countries by the end of 1972. The equipment at my parent's home (see Figure 2) remained the same until 1978 when I moved my tower and the 204BA to Iowa.



Figure 2 WB2KTO's National NX-3 transceiver, Drake 2B receiver and hambrew pair-of-813s linear 1968-1978.

Karen (now KA0IOR), my college sweetheart, and I got married and moved to Iowa in the summer of 1975. In early 1977 we purchased a house on a small (3/4 acre) lot on the top of a hill (remembering the wise advice of W3AFM). Subsequently we acquired an adjacent 3/4 acre ("the field") to allow more room for future antennas. I received my new call (KØKT) and was back on the 40 and 15 with a 40 meter inverted V (apex only 25 feet, however) and my barefoot NCX-3/2B combination.

I received an invitation to visit Bell Laboratories for 10 weeks in the summer of 1978 to work in the area of telecommunications reliability (a visit that I repeated for 15 summers in a row). The Bell Labs location was only 15 miles from my parent's home in NJ. Bell Labs did not pay much (I was told that visitors came to Bell Labs for the honor), but by living with my parents I was not only able to operate my station all summer but I also made enough extra money to justify the purchase of a new Drake TR-7 transceiver and a Heathkit SB-220 linear, as I deemed the old plug-in-coil 813 linear to be too unsafe for a sane person to use. At the end of the summer my brother (who was visiting my parents from California) helped me take down my antennas in NJ and on his way home brought them out to Iowa on his truck and spent a couple days helping me get everything back up, pretty much just as they had been in NJ. I was finally on the air in IA.

With fond memories of my early successes on 15 meters, I also installed a HyGain DB-1015A three-element trapped duobander (10 and 15) just above the eaves of our house, with a 20-foot mast coming to ground so that the antenna could be rotated with a lever on the mast. It was a disappointment. After saving a few more dollars, I ordered a 5-element 15 meter monobander to replace the DB-1015A and noticed an immediate important improvement in performance. The

DB-1015A was turned into a 3-element 10-meter monobander which was attached to my tower at the 20-foot level and able to be rotated about 100 degrees, again with a lever on the mast that extended to the ground.

In 1979 I purchased a copy of the “new Revised Edition” of 80 Meter DXing by ON4UN (the precursor to John’s Low-Band DXing books published by ARRL) and started dreaming about having a gain antenna for transmitting and a low noise receive antenna on 80 meters (where my country count was not growing rapidly). Encouraged by what I had learned from W3AFM and ON4UN I decided to give a vertical another chance and ordered a Butternut HF2V for 40 and 80 meters and installed it in “the field.” Being more knowledgeable by then, I used all of the scrap wire that I could find to put down a large number of radials. I could switch between the vertical and the inverted Vs and in many cases noted big differences on certain paths. My “DX-Edge” gray-line display was always in sight on top of my transceiver (see Figure 3). My fondness for the challenging low bands grew. In 1988 the TR-7 was replaced by a Kenwood TS-940S (giving me access to 160 and the WARC bands). The 160-meter modification was added to the HF2V.

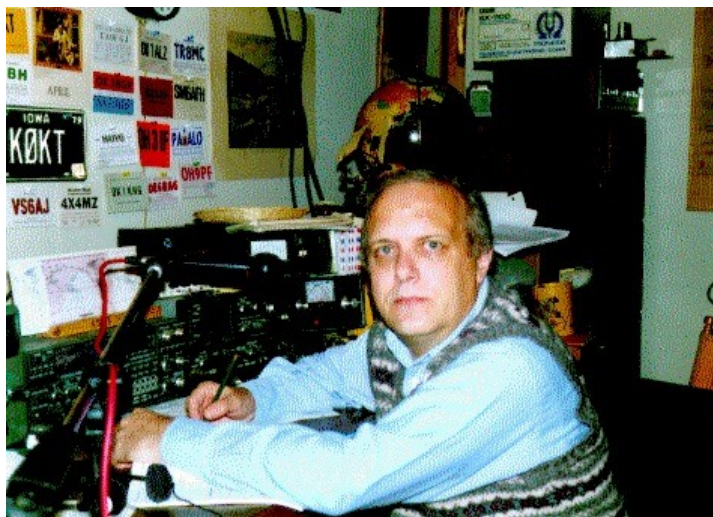


Figure 3 KØKT with his Kenwood TS940S and DX-Edge circa 1990

My country total gradually increased throughout the 1980s and into the early 1990s. I continued (as I do today) to be drawn toward CW contests and early morning DX on the low bands. My second most exciting contact of the 20th century (after my novice contact with DL3LL) was working VS6WV (in Hong Kong) on 80 meters just at sunrise in November 1993 (using the vertical). By 1993 I had worked all of the non-deleted countries except Yemen. Later I would miss Pratas and North Korea when they were activated, the two countries that I still need today. A combination of problems with my rotator and elsewhere on the tower and pressures in my job caused ham radio to take a back seat from 1993 to 2004. Only a handful of QSO were put into my log between 1992 and 1997 and then none until 2004.

Around 1995 I noticed orange splotches began to appear in various places of my tower. Rohn had been running an advertisement to the effect that if you can see corrosion on the outside of your tower, you need to worry about the inside. In a hasty act of safety for our house, I purchased a Sawsall and took down the tower (crashing it to the ground in a controlled manner) and cut it up for junk, vowing to get up a new and better tower soon. Sadly it took ten years, partially because Karen and I were busy with our jobs and raising a teen-aged daughter and partially because we were thinking of moving to a larger house with more land, but could not find what we wanted. Almost all new subdivisions had strict Common Covenants and Restrictions or CCRs. Karen, unlike me, did not want to buy a 40-acre farm far from civilization and without CCRs.

Then we got a break. The old farmstead (three acres of land), literally in our back yard, went on the market. We bought it and with the adjacent lot ("the field") Karen could design and build the new house she wanted and I could design and build a new antenna system. By 2004, our daughter was out of college we were ready to build. Karen worked with an architect to design the house and lined up a builder. I worked on antenna plans. In September 2004 we broke ground for the new house and I started working on the antenna permitting so that antennas could go up in the spring of 2005.

In a compromise with Karen, who wanted no guy wires in the yard, I decided to install an AN Wireless HD-70 self-supporting tower. This tower would have enough capacity for a large 40-meter Yagi and a trapless tribander. The farmstead had no CCRs and I had studied carefully the county's zoning ordinance. It was clear that I should have no problem getting a building permit for my tower. The county planner that I contacted, however, saw it differently. The county has a rather stringent set of rules for "commercial" (e.g., cell) towers. He said that I would have to go through the same conditional-use permit process wherein all residents within a 1/4 mile radius from my lot would be invited to attend. A quick count indicated that there were approximately 300 residences in that circle. I could see that having to go through that process would be risky.

I stopped talking to the county and started talking to WAØMIT (George, from Marshalltown, and an ARRL Volunteer Counselor) and to K1VR (Fred, a telecommunications lawyer and author of Antenna Zoning for the Radio Amateur, published by the ARRL). George started educating the county attorney about PRB-1 and Fred coached me in my development of a comprehensive bullet-proof permit application. Not wanting to have to repeat the process again in the future, I added my dream antenna, a 3-element vertical array for 80 meters, to the plans (there was not enough room for a 4-square). In early January George called with "good news." The county attorney said that I could put up my antennas (no permit was needed, just put

them up). Fred said “get it in writing.” After four weeks of waiting, the written assurance never arrived. In early February, Fred said I should submit my application for a permit and gave me precise instructions on how to do the submission (details, including a photo of me delivering the application in person---suggested by Fred---are in the second edition of Fred’s book). Two weeks later I had my permit in hand. The tower foundations were poured in April and the towers went up in early June. By July 5, 2005, thanks to much help from KIØQ, the antennas and feed lined had been installed and everything was operational.



Figure 4 KØKTs HD-70 tower with HF Yagi's on top and one of the elements of the 80-meter triangle array in the foreground.



Figure 5: KØKT doing some light maintenance at the 60-foot level of the HD-70.

I purchased an Orion 2, to have a rig that would talk to my computer and an Alpha 8100 linear to provide more power. The Orion 2 is now my backup and my main rig is a K3/P3 and last year I bought a KPA1500. I also added a few more antennas to my station including a homebrew switchable L-network so that I can load up one of the elements of my 80-meter array on 160, a DX Engineering 4-square receive antenna for 80 and 160, and a 30 meter 4-square. After a lot of experimentation, I was able to modify my 80-meter Array Solutions triangle array controller to fire in six directions (which I figure gives me about an extra 2 dB in the “between” directions). For 17, 12, or 6 meters I get along by using dedicated antenna tuners for each band. My operating focus has been on 80 and 160 meters where I have 237 and 302 entities, respectively, confirmed. I am above or approaching 300 entities confirmed on 40 to 10 meters but 6 meters my new frontier (only 4 entities confirmed). I just have to figure out how to get up a more effective antenna.

I am an active member of the Story County Amateur Radio Club

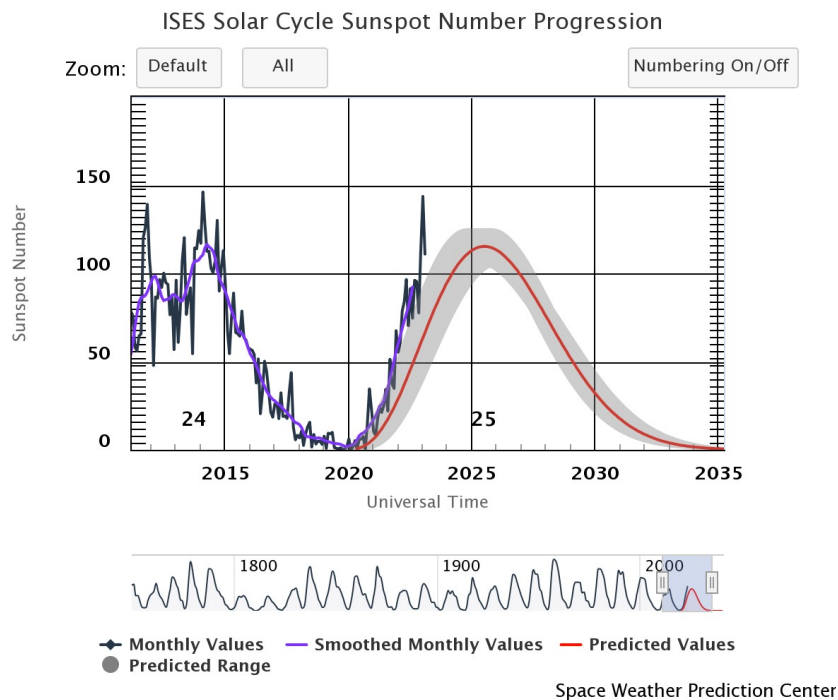
(SCARC), served as the VP/program chair for a number of years and was the Field Day captain six or seven times between 2006 and 2015. I also like to serve as a DX and contesting coach for SCARC members with less experience. My reason for contesting has generally been to add to the counts, but from 2005 to 2015 I was doing some semi-serious one-band efforts, especially on the low bands. Recently I have cut back there because, as I have aged, it takes too long to recover from staying up all night!

I used to travel quite a bit for my job and have visited more than 40 entities on all continents (except Antarctica) in the past 30 years, but I have never operated ham radio away from my home station, other than Field Day! Karen retired from elementary school teaching about 12 years ago. I will retire from my University position (where I have been a statistician specializing in engineering applications) in May 2003, giving me more time to work on many unfinished radio projects and to enjoy the coming increase in sunspots.

73, Bill

DX News

Cycle 25 is off to a strong start



2022 Year End Review



You can find the 2022 Year End Review [here](#) courtesy of W1JR.

Did they bring a knife to a gun fight?

suc·cess

/sək'ses/

noun

1. the accomplishment of an aim or purpose.

"there is a thin line between success and failure"

Oxford Dictionary

So, was 3YØJ a success?

There have been plenty of discussions on-line about if they were a success or not. I don't pretend to know the answer, nor do I question the determination of the individuals involved, but I do offer a few points to consider:

- There are difficult conditions on that part of the planet, and they were all well known in advance.
- They showed some ingenuity in getting on/off the island, but reading the detailed accounts suggests it was less than effective.
- Everyone got home safely - That counts for something but it didn't always appear to be a foregone conclusion
- They landed on the island and made some QSOs, making ~9000 hams happy (unique calls)
- They achieved ~10% of their QSO goal at 100% of the cost
- They may have motivated some hams to upgrade their antenna system

There are probably as many answers to this question as there are readers of this newsletter...informed by your own expectations.

I would not be shocked to learn that debates on this question are on-going in the halls of the major sponsoring organizations in anticipation of the next big "ask". I'm certain this story is far from over.

Bob WØGXA



Glenn gave me permission to snag a few shots off their website and facebook page. Comments are mine. - Ed.



When I first saw this I thought "I'm glad he doesn't need to float to the beach in his survival suit". Then I thought "I bet he's assigned to FT8 (one hand)."



The team



Glenn reports that they have some nice digs. Inside...

It's an amazingly tight house for as old as it is! Gale force winds driving rain, now snow - Horrible wx!!!!!! I'm glad to NOT be in a tent. Glad to have a hot shower and comfortable bunk where it is quiet. - Glenn



...and out...



...and some nosy neighbors.



I'd pay to ride this to a beach. Looks like fun.

Feature Articles

Issue #7 - For the Love of QRP

By Dave Jensen, W7DGJ

Reprinted with permission

I remember my college years in rural Athens, Ohio, and how I used to keep a little fishing kit in the car. It didn't qualify as a rod . . . it was just a few small pieces of bamboo that fit together and then collapsed back into a cardboard tube. While driving to school, this beautiful Ohio countryside would open in front of me like a postcard, and the thought would hit me to skip class and put a line in the water. It was a wonderful feeling to sit on the edge of a small stream and see what I could catch with a worm or beetle, and without any of the gear that I would normally have with me for a day of "serious" fishing.

To me, that feeling of sitting on the bank waiting to catch something with very limited resources is quite like the QRP experience.

Of course, I love high power operations. It's important for me to hear those "really big signal" comments, and to get 10-and-20-over reports. Signal reports like those are a terrific way to start out an afternoon of chasing DX. While the demand for more and more power diminishes when we reach legal limit, we still want our amps to have additional "headroom" to ensure as pure a signal as possible at 1500 watts. After recently buying a hot, new entry to the big linear amplifier market (to be reviewed in January) I realized that this kind of thinking is very far removed from the pure ham radio thought process of the QRP operator.

When I think of QRP, I remember seeing those Japanese Zen gardens, or what is known there as the "Karesansui." You will recall those beautifully manicured sand-and-stone gardens that inspire quiet thoughts and introspection. That's how I view QRP; it is quite the opposite of putting out 1500 watts and slugging away with the big boys and their big antennas. For years now I've been stuck in that world of big signals, fighting my way through pileups out of Arizona. But I did start my ham life back in the 60's with the QRP mentality . . . building small radios, sticking a wire out my bedroom window to receive, and finally when licensed – to jump in with my own shot in the dark to see what I could catch.



A Sudden Awakening

I had almost forgotten the joy I used to get out of QRP until a recent incident hit me on the side of the head. Not expecting to go QRP at any point soon, I was simply in my shack doing an intensive round of CW practice one evening. At the time, I was a student in the CW Academy, trying to move my speed into an advanced level and my instructor Tom (WA9CW) had me doing all kinds of alphabet scales and practice exchanges with my keyer. (I had a blast with the CW Academy and will tell you more about my experience in a future column dedicated to CW operations.)

Because I didn't have an oscillator handy, I had cranked up my IC-7300 audio and turned the RF down to zero output. I was just listening to myself practice, so I started doing all kinds of odd things . . . sending CW faster and faster for lines that I came up with in my head, doing the alphabet "scales," or sending select paragraphs off the back of a cereal box. Then, I switched to practicing a CQ repeatedly to see if I could get my call sign firmly entrenched at a dramatically higher speed than my norm. It was frustrating, of course, because I was really stretching and making a lot of mistakes with my code. But, I thought, "I'm just by myself in the shack and there's no one listening. So, no embarrassment."

That's when the weirdest thing happened. Someone came back to my CQ!

Wait a second, I thought. How could this be happening? I went back to the transceiver and checked to ensure that I was at zero power and that no RF was being generated. I checked my Daiwa to see if any power was escaping to my antenna and there was zero movement of the needle. But that guy on the other end of the CQ was in California a few hundred miles away, and he was clearly hearing me.

The first thing I did, of course, was to apologize for all the weird stuff I had been sending out, and then we had an enjoyable QSO with a

normal exchange of QTH and signal reports. When I got off that contact, I sat back and wondered just how much output the ICOM puts out when you have turned your power output setting to zero. Of course, the problem was that I should have switched over to the dummy load, as something was clearly sneaking past the finals. I didn't test it, but I'd guess it was on the order of 75 to 150 milliwatts or so. That's not much, but it was enough to get me a 579 RST from California that evening! I remembered later that my trusty little Zachtek WSPR transmitter reaches to Antarctica on a dipole, operating on only a fifth of one watt. (Read issue #2 for more on Zachtek).

Expectations are Everything in QRP

It's my belief that QRP can only be fun when you approach it with the right expectations. To illustrate this, I'll tell you how I burned through two radios in two years. This was all my fault, and with nothing to do with the radios of choice.

At the end of 2020, I purchased the ICOM IC-705, considering myself lucky to be one of the first USA owners of that hot little radio. And yet, within three months I had sold it and moved on. Why? Because I just couldn't adjust to the considerably lower power output and what that meant for sideband operations. Looking back on that radio, it was a darn good product. The IC-705 is built like a tank and the only real "con" was its lack of a tuner. If I were reviewing it here, which I am not, I would have given it an A for build quality, but my user experience was poor -- only due to having the wrong expectations.

My mistake was to try to use it like the IC-7300. I'd head out to a POTA park with my old buddy, Steve, and the little IC-705 just lacked the punch that Steve got with his 100w radio and big-as-a-toaster battery pack. I'd have 12 or 15 SSB contacts over an afternoon and W7DJ would walk away with 50 or 60. It was embarrassing.

I replaced it quickly with a Xiegu G-90 and twice the output power, but once again disappointment set in. The controls are miniature and can't be used with fat fingers or poor eyesight, and the filtering is just about non-existent. (But wow, what a tuner). I might have doubled my power output and made nearly twice as many SSB contacts, but I still wasn't "in tune" with the true QRP approach.

Finally, after my experience noted above with the unexpected QRP event on my IC-7300, I thought I'd just take my small radio out into the woods with some antennas and have fun. No pressure to compete with someone else and their big radio -- just me, my keyer, the squirrels, and 5 watts. And in that fall afternoon in the back country I had more fun than six POTA trips combined. I played around with three different antennas (a Precise RF mag loop, a Sotabeams Band Hopper II, and a Chameleon End-Fed) and made 40+ contacts on two

bands over the afternoon. One reason for the improvement was the fact that I wasn't sitting ten feet away from a 100w radio . . . the quiet of the outdoors and no other hams around allowed my little G90, even with its inherent flaws, to perform well.

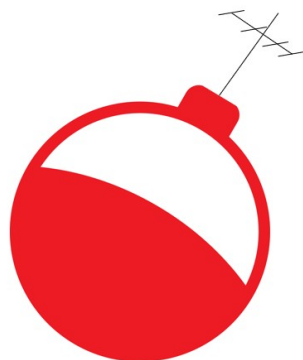
But the biggest reason for my improved numbers was that I was no longer "competing" with others. Instead, I had adopted the attitude of my former self, age 20, sitting on the side of that little stream in Ohio with a line in the water. And the fishin' was good! I had restored my love and respect for QRP operations, something I will never lose again.

73 for now,
Dave

PS - Always on the search for my dream radio, my next one could be the Mountaintopper MTR4B. It fits my new interest in QRP to a tee, but I have been unable (through phone calls, emails and credit cards) to get one to review here! If any T&E reader could help me connect with LNR Precision management, I could use the help. Forward a link to this column and who knows -- maybe my next radio review will be a Mountaintopper!

Please click [here](#) if you'd like to discuss this column with Dave and others on the QRZ forum

Dave writes a nice series of articles on QRZ.com. Check it out. This article can be found [here](#). - Ed.



A dispatch from the high seas

Jeff WØODS

In this episode...

Hacking a Derelict Marine Antenna

QRV or Bust

I work on a class of Government Owned, Contractor Operated (GOCO) cargo vessels called the WATSON class. These are 950 foot long, 64,000 ton vessels designed to warehouse and transport what

are called “pre-positioning supplies” for the US Government. The WATSON class is a category of LMSR – Large, Medium Speed Roll-on, roll off ships:

https://en.wikipedia.org/wiki/Watson-class_vehicle_cargo_ship

As property of Uncle Sam, it is not permissible to change any of the features of the ship, to include drilling of even the tiniest of holes. My amateur radio installation on prior ships has relied on passing RF through short, lossy lengths of RG-316 or RG-178 cable sandwiched between the rubber gaskets of doorway passages. This has been sufficient to get me on the air using a loaded, quasi-mobile commercial multi-band antenna called the “Super-Antenna”. It was clamped to a rain gutter, or “scupper”, opening just beyond a handrail on the uppermost accommodation deck. A standard CB-type clamp mount was used for the 3/8-24 antenna mount, with scrap rubber sheeting used to prevent scratching any of the precious marine-grade paint. For ground, a short #12 wire was secured to the scupper grate using a coarse metal screw.



Figure 1 - Author's portable loaded HF whip installed on a convenient scupper coaming

While this was sufficient to get on the air, the ERP left something to be desired. The deck onto which it was fastened was in the shadow of the "stack" and bridge superstructure for about 120 degrees around the antenna. In our anchorage at Saipan, the side in the clear was facing the large mountain between the ship and the US. Contact to the US were quite difficult and infrequent. Additionally, owing to the excellent ground and shortened antenna, the VSWR could not be brought under 3:1 on any band lower than 20m. (*Recall the Chicken Wire Experiments from a meeting years ago - When you improve your ground system, VSWR will rise due to improved efficiency - Ed.*)

Ships of this purpose are built to last, and the WATSON-class is no exception. The vessel I was on was about 25 years old and had gone through several retrofits of HF radio equipment. One of the more recent abandoned retrofits was a Furuno console featuring a 150 watt SSB/SITOR station. Most of the equipment for this installation remained in place but disconnected and out of official service. This included a beautiful 36 foot marine whip antenna and Furuno FS-1575 ATU coupled to it, tantalizingly mounted just above my clamp-on antenna, with the top of the whip easily clearing the superstructure. Could it be repurposed to mate with my Flex 6600 in my cabin below?

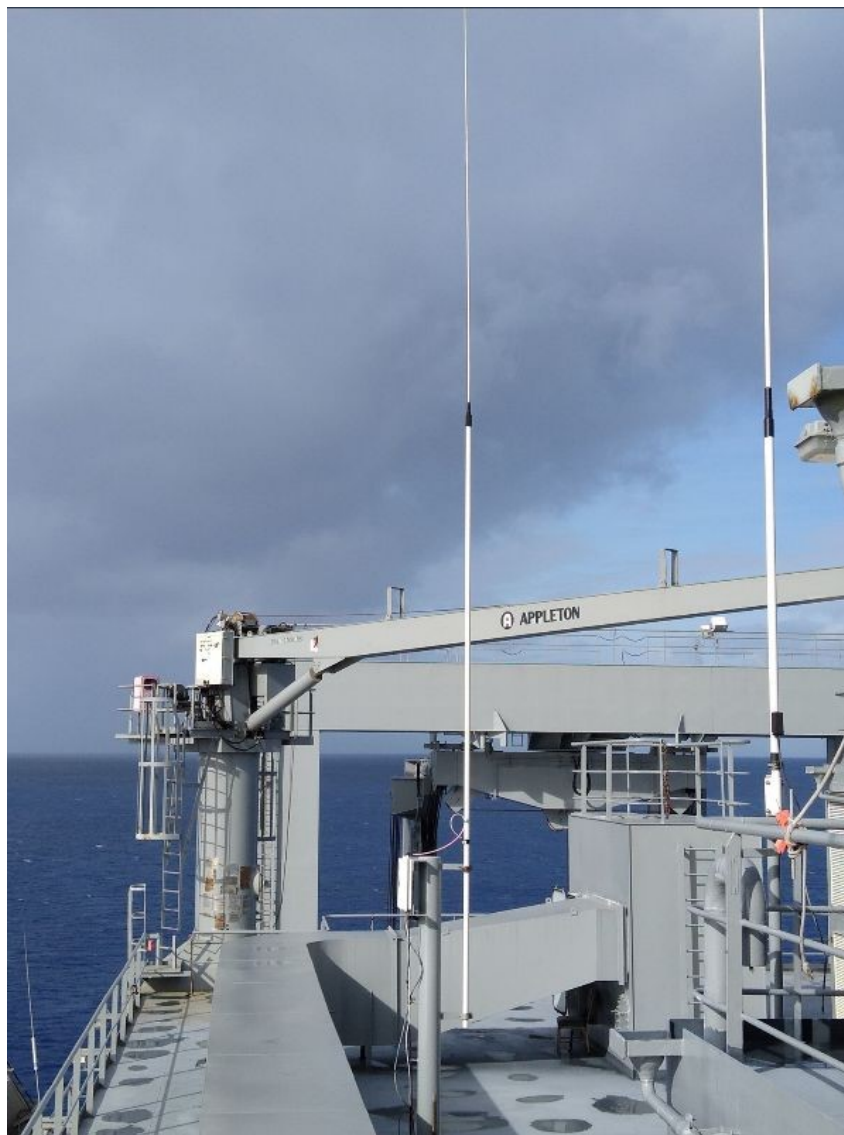


Figure 2 - Unused legacy Furuno tuner and HF whip. Mobile whip can be seen at lower left.

Two RF cables pierced the deck at the base of the antenna. On the top side of the deck, one of the cables was un-terminated and taped off. The other went into the Furuno ATU through a gland nut. Also present was a control cable for the tuner. All three went through separate pass-through tubes to somewhere below deck.

Measurements revealed that the pass-throughs entered above the ceiling of the 3rd Mate's cabin, just aft of my own. The 3rd mate happened to be a friend of mine, and permission was secured to take an exploratory peek into his overhead.

The expedition revealed that the three cables did indeed pass directly into the cabin below. They were easily accessed by popping up a panel on his drop-ceiling. All three had junctions within the ceiling of the cabin. RF connector junctions used PL-259 connectors and SO-239 barrels. A run of RG-58 was hastily tossed to the overhead of my cabin from the RF cable that went to the un-terminated line above.

It was later verified that this line was good, through simple DC continuity. It would be nice to have for future antenna runs, but the

real prize here was access to the 36' whip and coupler.

Documentation on the ship's servers regarding the coupler was scarce. There was a service manual still aboard for this installation that glossed over the coupler operation. Manuals on these vessels tend not to be the sort of deep technical manuals to which I had become accustomed while working on the design side. The supposition for these manuals is that one is directed to hook up wire A to wire B with the specified cable to make the unit work. Any deeper understanding was the domain of the shore tech.

Ultimately, a manual was downloaded from a somewhat sketchy site on the internet. This manual, a 30 MB PDF file downloaded S-L-O-W-L-Y over the ship's shared 1MBPS crew satellite connection overnight, held the key information. The tuner needed a few discrete control wires to function; none of them being a data bus. This was welcome news – it meant that it was certainly possible, with enough effort, to resurrect the tuner. The interface information is presented below:

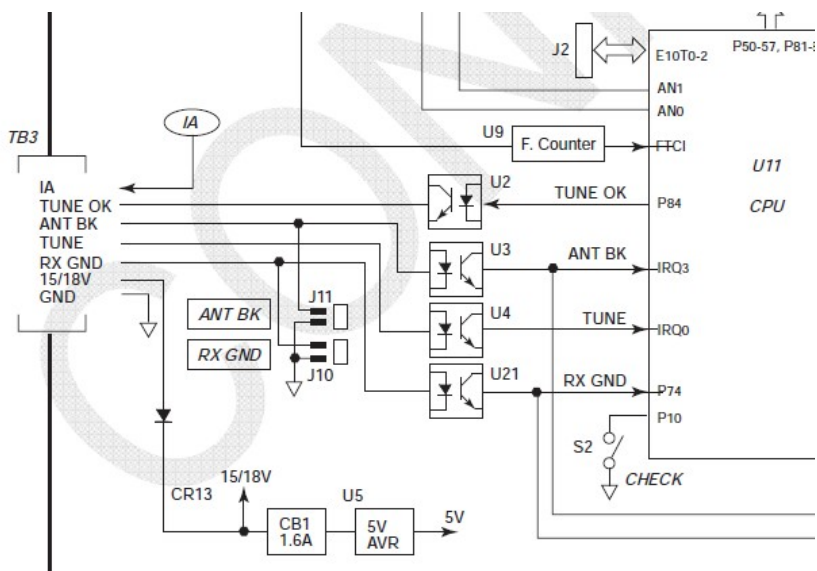


Figure 3 - Snippet of tuner manual showing logic interface

Note that logic levels, and whether the signals are active high or active low, is missing. The circuit description did describe the function of those lines.

IA Antenna Current Analog – an Output

TUNE OK Transitions high when the tune cycle is successfully completed – An Output

ANT BK Bypasses the ATU for receive – An Input

TUNE Initiate tuning cycle by momentarily asserting – An Input

RX GND Grounds the antenna at the antenna terminal for protection – An Input

15/18 DC Power Input

Simply knowing which of the lines were active was a large part of finding the ultimate solution. On the Transceiver side of the cable, ten conductors were connected. It turns out several were unused. They were found to be taped up inside the coupler case when the cover was removed for inspection. The silk screen on the PC board also matched the legend in the manual – another good sign.

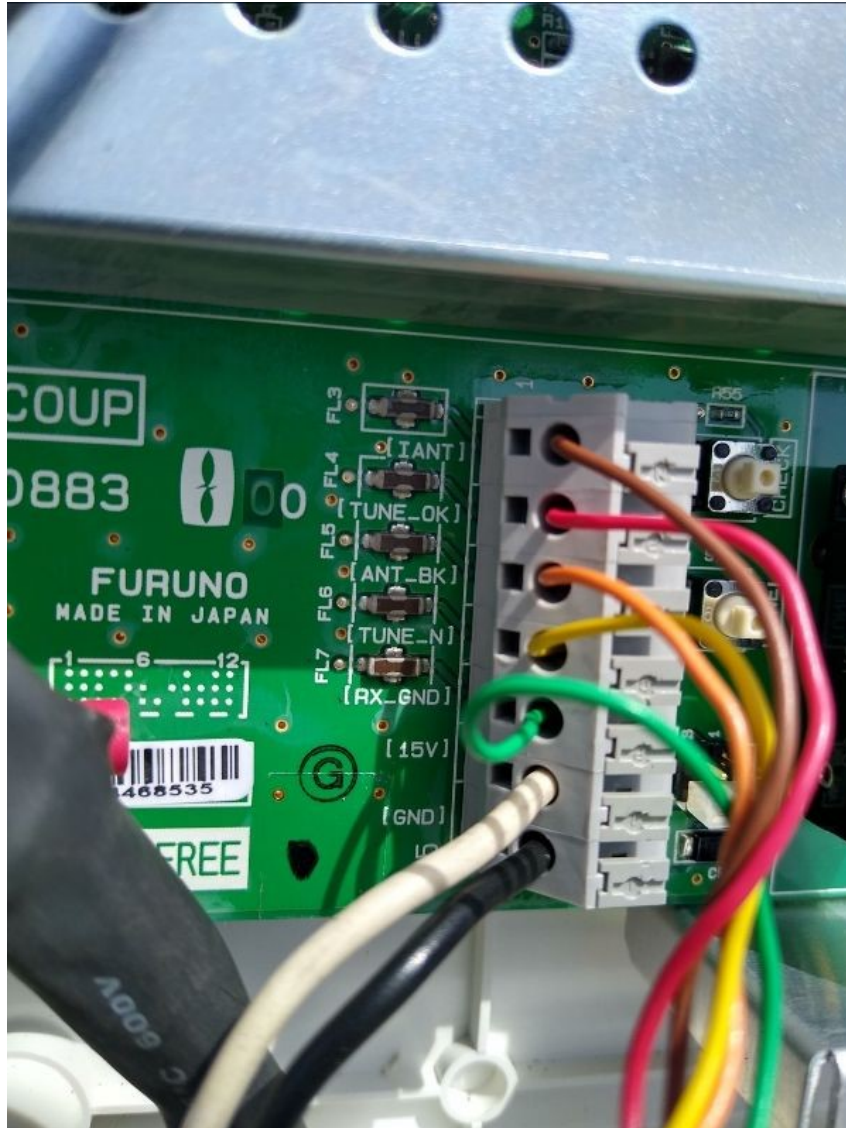


Figure 4 - ATU PCB close-up

Proceeding further would require that either RF brought above-deck or control logic brought below. The problem here was the expanse of solid steel deck separating the radio in my room from the antenna above. If this were a new install, the whole system would have been mocked up in a large enough space and the bugs worked out before installation. That's what made this project challenging, and ultimately so satisfying. In these circumstances, it was easier to bring the control logic to a friendly point below deck (i.e. my cabin) and keep the RF source below deck.

My best guess at this point was that the tuner would default to an operational mode if the lines were left to float. TUNE would have to be toggled, and TUNE OK would show when the radio had accomplished its task. That assumption was bolstered by the timing diagram in the manual showing the tune process (Figure 4).

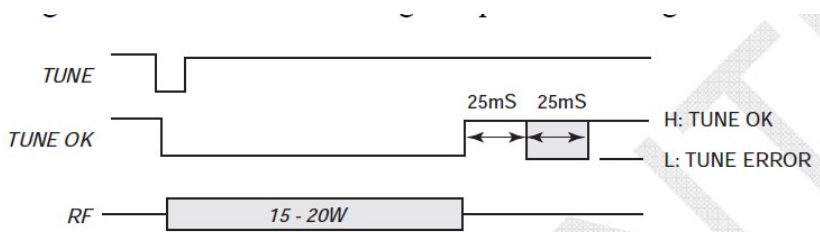


Fig. 7.9.2 TUNE Timing Chart

Figure 5 - TUNE Timing diagram from the Furuno manual

A second visit was arranged to the 3rd Mate's quarters to run the extra cabling for the tuner. The RF cable was easy to figure out. A section of RG-8M was available that was about the right length to stretch from the barrel connector in the Mate's room through the overhead, with enough slack to drop down onto my operating desk.

The control/power cable was less deterministic. With my choices limited to stock on hand in the Engine or Radio room, something balancing the need to run power, enough logic lines, be weatherproof, and also small enough in overall diameter to fit through the limited orifice opening of the tuner's gland nut was sought. Nothing completely satisfactory was found. The choices were standard CAT6 data cable with its tiny conductors, some 4-conductor shielded cable with 20 gauge wires, and half-inch diameter cable used for our Tank Level Indicators with four 18ga power lines, 8 data lines, and 2 pneumatic lines.

The 4-conductor was chosen, and an appropriate length cut off the reel in the Engine Room and brought above deck. The weatherproofing on the "stuffing tube" for the feed through was undone and the cable fed through from the top-side. Below-deck, in the 3rd mate's quarters, it was easy to grab and pull through to the overhead of my cabin. It was now possible to begin experimenting with the tuner interface and tickling lines to see what happened.

The first attempt was unsuccessful. 12 watts was applied to the tuner input on 40m and the TUNE line was momentarily grounded. No change in the radio's indicated SWR was noted, nor did the TUNE OK line transition high. It was disappointing. However, the prize loomed large, and this was a step closer.

Going further would mean having access to the two tuner logic lines that weren't yet brought out, ANT_BK and RX_GROUND.

Unfortunately, no more conductors were available in the cable. The solution was to supply power to the tuner through the original wiring up in the Radio room. This freed up 2 conductors for the two remaining logic lines. Shield was used as the common return. Power goodness was verified at the tuner following this re-configuration, and the experimenting resumed.

It was found through trial and error that grounding the ANT_BK and RX_GROUND signals, which when left to float were pulled to a logic high, was necessary to make the tuner operate in transmit mode. The initial control interface in my stateroom was a few wire nuts on the end of the stripped back cable. ANT_BK and RX_GROUND were wire-nutted to the shield. Another wire nut insulated the TUNE OK output line. TUNE was simply left open and was brushed across the shield when initiating a tuning cycle.

It worked beautifully. The Tuning power level on the Flex can be set to any value, so all bands were set up for 12 watts. Applying tune RF power and momentarily grounding the TUNE logic line by flicking the end of the TUNE wire to the shield resulted in tuner activation, verified by the radio SWR indicator changing as the tuner did its thing.

Ultimately, the VSWR settled down to some value below 2:1. The tuner had an internal frequency counter and memory, so once tuned, the last-good value was recalled almost instantly.

All bands from 160 to the lower part of 10m tuned up on the initial test. 80 and 160m would not take more than about 20 watts of power at first. This was eventually traced to a wire lug on the inside of the tuner that connected to the antenna output terminal. It had at some time become rotated due to excessive torque on the wing nut on the outside of the box. By bending the lug away, full power operation on 80m was restored. On 160m it would still only tolerate 60 watts – an acceptable level given the circumstances. The noise floor on 160 was fairly high and weak-signal operations there were out of the question.

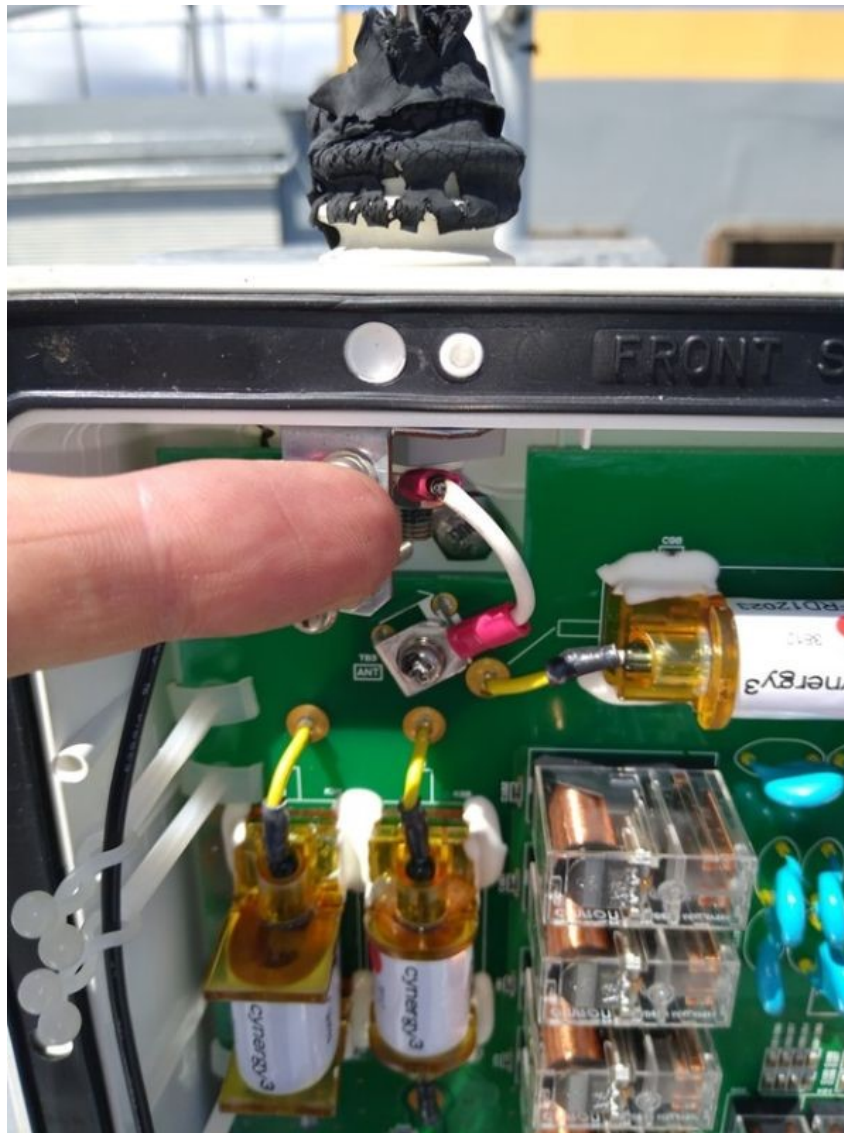


Figure 6 - Tuner antenna terminal showing evidence of arcing

The interface was ultimately refined to a standard electrical box with a toggle switch to ground the ANT_BK and RX_GROUND lines, and a hardware store doorbell as the TUNE button:



Figure 7 - Completed ATU Control Box

Overall, from conception to completion of the interface box, this project took four months to complete. Ship-board life is busy. We work 12 hours a day, 7 days a week, with occasional “half days” when we don’t work overtime and can take an afternoon off. All the substantial work on this project happened on my half-days when I could have gone ashore and done some exploration on Saipan, or simply done laundry and caught up on sleep.

Most mariners retire to their rooms these days and watch movies or TV shows from collections on their hard drives. My entertainment is amateur radio – I love to scan the bands and answer CQs or call one myself. Some great conversations have come from this. Efforts like this one reap hours of benefit and satisfaction. It’s not easy, and that’s what makes it so much more satisfying.

Member News

Titan Missile Museum

I had the chance to visit the [Titan Missile museum](#) while my wife and I were in Tucson on vacation. It was well worth the effort to go on the underground tour.

Here is a link to a YouTube video about the antennas used on the complex. https://youtu.be/YnZvu_blzBU

Bob WØGXA



A Collins Discage antenna - No I didn't bring a rig to use it. The local clubs will use it during special events.



Titan Missile Museum

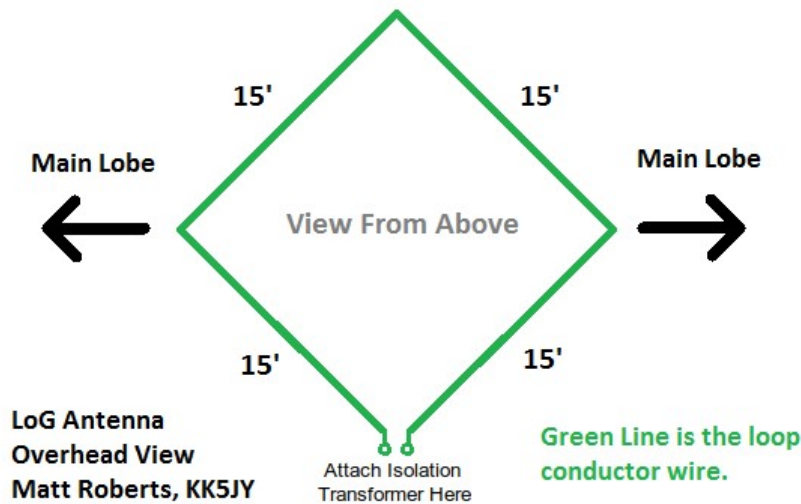
A New RX Loop Antenna on Ground

Tom, NYØV

In January with both the Crozet and Bouvet DXpeditions looming large, I decided I needed a better receiving antenna for 160 and 80m. My current 160m antenna is a reverse fed tower where the center conductor is run to four $\frac{1}{4}$ wavelength radials and the tower is the counterpoise. My 80m antenna is a simple Inverted Vee. These have worked pretty well, but I found have not been optimal for receiving.

I really didn't want to run 500 to 700 feet of wire through our woods for a set of beverages, and thought that maybe a K9AY would be satisfactory yet wouldn't take up much space. Then I read about Matt, KK5JY's Loop-on-Ground or LoG antenna. This caught my eye as it is a very simple antenna that doesn't take up much space and could be set up in a short amount of time.

Information about the KK5JY LoG can be viewed at:
www.kk5jy.net/LoG/ I pulled off the basic diagram of the antenna shown below:



As you can see, the antenna is a single loop of around 60ft of wire shaped in the form of a diamond. When fed from the corner (Home Plate), it provides two lobes off the side corners (First and third base.) You can also phase two of these antennas for additional directivity and gain. The only other items required are the isolation transformer, which can either be made or purchased commercially, and the RG-6 72 ohm coax feedline.

I went to my “old antenna” stash and found a 75’ piece of coated antenna wire and some RG-6 coax. To run the coax I had some help from Direct TV. Several years ago we cut the cable and went over-the-air TV and so I had a section of RG-6 left over from DTV that runs from the utility room to the outside of the house. All I had to do was hook the radio up to the piece in the utility room and then run another 24ft section from the house to the antenna. I purchased a commercially available isolation transformer from DX Engineering. Once I had all the pieces, it only took me 45 minutes to have it all put together and laid out on the ground.

Normally you could just “staple” this antenna to the ground and let the grass thatch over it. But, I live in Minnesota and there was 8” of snow on the frozen ground when I set it up. I figure I will take it down anyway in the Spring when 160 and 80m are not very good for DX. I merely laid the antenna out on the ground with the main lobes headed to Bouvet at 133/313 degrees. To hold each corner, I found some firewood logs and laid them on top of the wire. See picture:



With the logs in-place I now have what I call my Periodic “LoG” Antenna! The question is, of course, does it work?

Setting up the radio was a snap. The FTdx-101D has a menu item wherein I can select R3-T1 (Receive on output 3, Transmit on output 1.) I fired up on 80m and the very first DX I copied at our sunrise was DU3JH in the Philippines. We had an exchange of Sent -12, Received -5 on FT8. I was really happy that I was now hearing pretty well with the Rx antenna.

And by now we all know the rest of the story: Thierry on Crozet is only allowed to work on bands above 30m and Bouvet was only a two Tx set up with antennas for 30m-12m. But, there is still other DX on 160 and 80m and I am happy to report that I am working some of it now with this Loop on Ground antenna.

Submitted by Tom, NYØV

Logbook

Bob WØGXA - I managed a 15m CW QSO with WØODS/MM from somewhere in the western Pacific. He had a nice 539/QSB signal. I “think” he’s using a spare 36’ whip he found on the ship and his barefoot Flex.

I also managed to work CYØS on 160m (#53). I got up early one morning (4:30AM) and found them on the air. With the sun well up in Europe and the other LIDs still asleep, it was an easy grab.

Glen KØJGH - I needed FT8 Crozet, 3YØ Bouvet and XU Cambodia all on digital to make it to Digital Honor Roll. This has been a really good month for DX down here.

Sam, KØAFN - Highlights from the past three months of operating -

SSB: (20 Mtrs) VP8/SQ1SGB, LU1ZV, KC4USV, FT8WW,
WD5COV/mm [on way to Bouvet]; (10 Mtrs) ZD7CTO

CW:(30 Mtrs) 7R8CW; (20Mtrs)FT8WW,*DL6KVA/mm, *LI7GIA/mm,
*AB5AB/mm,*VE3LYC/mm (15 Mtrs) *KO8CSA/mm; (10 Mtrs) YJ0A,
BD1KV; [* on way to Bouvet]

RTTY: (10 Mtrs) V26OC, D4L, V55Y, ZD7BG

FT8: (30 Mtrs) BX8AAN/mm, FO5QB; (20 Mtrs) FT8WW, 3DA0AQ,
3D2USU,HD8M(ft4); (15 Mtrs) HD8M, ER3DX, D2UY, BX8AAN/mm,
(10 Mtrs) HD8M

I am new to FT8 since February 28th and I added FT8WW for a "new
one" 329/338.

A Big Winter On The Air

Jim, NOØB

Good propagation and more power supported a dramatic increase in my QSL count in the last couple of months. Having been almost silent for several years, more free time and renewed interest recently put me in the BIC (butt in chair) mode starting in December of 2022 and continuing to the present (March 23). The attached DXCC chart shows my count. I logged about 50 new countries in the last four months. My estimate is I've made over 2500 QSO's in that time. I use LoTW almost exclusively for QSL.

Account Status					
DXCC Award	New LoTW QSLs	LoTW QSLs in Process	DXCC Credits Awarded	Total (All)	Total (Current)
Mixed *	8	0	228	236	236
CW	0	0	34	34	34
Phone *	15	0	142	157	157
Digital *	11	0	198	209	209
160M	1	0	6	7	7
80M	5	0	91	96	96
40M *	7	0	150	157	157
30M *	6	0	137	143	143
20M *	12	0	162	174	174
17M *	5	0	123	128	128
15M *	8	0	124	132	132
12M *	22	0	100	122	122
10M *	34	0	107	141	141
6M	1	0	10	11	11
Challenge *	101	0	1010	---	1111

My equipment includes a Flex-6500 feeding an Elecraft KPA-1500 amplifier. The upgrade to the big amp, suggested by Craig KØCF, made a huge difference in my ability to contact marginal stations, I believe. The amp goes through an Antenna Genius 4O3A switch to my antennas.

W3ACO Rich has been a big influence on my selection of antennas. Based on his suggestion I have a 3-element SteppIR for 6m, 10m, 12, 15m, 17m and 20m. I modified the 6m elements based a recommendation from Rich. The Tashjian tower telescopes to 53 feet and the antenna is turned by a Yaesu 2800 rotator controlled by a Green Heron RT-21.

For 30m, I have a 2-element beam designed by W3ACO up about 55 feet on a Rohn 25 guyed tower. It uses a Ham IV rotator also managed by a Green Heron RT-21. 40M operations are through a JK402T turned by a Yaesu 2800 and mounted on a Rohn 45 fold-over. It's fed by 7/8" hardline and connects to a Green Heron RT-21.

Separate Inverted L antennas serve my 80m and 160m band needs. Rich W3ACO helped design both. The 80m has a switch Rich wired so it will work with FT8, CW and SSB. The 160m is an ugly, interim fix I rigged up until the weather improves and I feel like working outdoors some more. However, within only a short time of use I've already worked 45 states on low power and notched 8 DXCC entities.

According to ON4UN's "Low-Band Dxing", I have room for improvement. Right now it's tuned for FT8 but I'll modify that for other modes later.

Logging is through DXLab Suite, which I've used for a few years but am still learning. It's immensely feature rich. (That means I don't understand it all.) Craig, KØCF, has been my patient and supportive mentor in learning DXLab. I credit AI, K0VM, with useful tips and hand holding as I relearn and develop my skills in WSJT-X for working FT8.

Glenn, WØGJ, has always answered my questions on QSL management, DXLab and Flex patiently and helpfully. In addition, many EIDXA members have contributed to my success through their discussions in quarterly meetings and at ROMEO lunches. Thanks to all.

WAZ finally fell to me when I worked Thailand in February. I have 40 WAZ Mixed and Digital, and 39 zones worked in 20m digital. Several others are in the mid-high thirties count.

I already had WAS in 17m, 20m, 30m, 40m and 80m. Improved propagation was the key, I believe, to quickly reaching WAS in 12m, 15m, and having two to go 10m. I'm so close to the states I need that I'm skipping over them, perhaps. 6M has 43 QSLs and 160m is sitting at 47.

Probably 99% of my contacts recently have been digital FT8. A few have been SSB. I've made no CW contacts in several years because I am incompetent in Morse. W3ACO is giving me tips on picking up essential CW skills. In addition, I have to confess that I'm not very good at and am uncomfortable in the rough-and-tumble of breaking through phone pile-ups.

It's become obvious already that there is less and less "low-hanging fruit" and one has to reach higher and further for QSLs. I might even have to learn CW.

My immediate goals are WAS in 6m and 160m and DXCC in 80m. I'd like to round out the WAZ if I can get anyone to talk to me from CQ02, CQ34 and CQ40. Beyond that, I work anyone I can.

A last minute update, Jim reports working Sudan on 30m FT8 (3/27)

CQ Test

Mark your calendars for Field Day June 24-25, 2023. Collins ARC and Cedar Valley ARC are planning a nice joint activity in Cedar Rapids.

QRM

Balloons

A few facts - Bob WØGXA



I've seen a lot of misinformation about airspace classification and access to airspace surrounding the "recent" flight of the infamous Chinese spy balloon. One of the things I do in my "day job" (day job = my retirement activities that someone pays me for) is to work with companies and the FAA on operations in higher airspace.

I read several articles where the Chinese claimed they were in "international airspace" over Montana because they were over 60,000'. Others claimed they were within their right to fly there because they were in "uncontrolled" airspace above 60,000'. Both of these are wrong.

A nation's sovereignty over airspace extends laterally to the boundaries of their territorial waters (~12nm off the coast). There is no definitive altitude delineating sovereign airspace from "space" but it is generally accepted to be the Kármán line roughly an altitude of 330,000'. Above this line, international treaties governing space operations apply. I say "generally" because some countries reserve the right to claim sovereignty at even higher altitudes. I won't name names.

Whether or not airspace is controlled or uncontrolled by ICAO definitions does not change the sovereignty a country has over their airspace. Not all countries will define or offer air traffic services in higher altitudes since most commercial air traffic flies below 55,000'. In the case of the US though, airspace above 60,000' is controlled

(class E).

Finally, free balloon operations are regulated by 14 CFR part 101. I'm pretty sure the Chinese weren't providing the notifications and position reports pursuant to sections 101.37 and 101.39.

From the department of

"Too much time on my hands"

and with apologies to Tommy Shaw, I present ChatGPT - Ed.

Adam AEØDX asked ChatGPT to write a poem about CW contesting and a song about FT8. Enjoy...

ChatGPT Poem

In the quiet of the midnight hour, When the world is still, and the mind does flower, The Morse code echoes, a language sublime, As CW contesters race against time.

Their fingers fly, their thoughts aflame, As they tap out their messages, with skill and aim, Their minds a blur, their hearts aglow, As they connect with others, row by row.

The rhythm flows, like a river deep, As they tap out their code, in the night so steep, Their signals strong, their voices clear, As they compete without a fear.

The contest rages, hour by hour, As the CW contesters show their power, Their passion fierce, their minds alight, As they chase their dreams, in the endless night.

For in this world of code and sound, Where messages fly, and hearts abound, CW contesting reigns supreme, A passion that forever will gleam.

FT8 Song

Sorry, you'll have to make up your own tune... Ed.

Verse 1: When I'm sitting at my station, I'm feeling kinda blue, I need a mode that's fast and strong, To get my signals through.

Chorus: FT8, oh FT8, You're the one that gets it done, With your blazing speed and error correction, I know my QSO's won.

Verse 2: In crowded bands and noisy times, You cut through like a knife, With just a whisper and a click, You bring my contacts to life.

Chorus: FT8, oh FT8, You're the one that gets it done, With your blazing speed and error correction, I know my QSO's won.

Verse 3: From DXpeditions to contesting, You always hold your own, With your unique frequency hopping, You're like a giant stepping stone.

Chorus: FT8, oh FT8, You're the one that gets it done, With your blazing speed and error correction, I know my QSO's won.

Verse 4: So when the bands are tough and rough, And conditions are so poor, I know I've got a secret weapon, That's worth fighting for.

Chorus: FT8, oh FT8, You're the one that gets it done, With your blazing speed and error correction, I know my QSO's won.

Arthur A. Collins Legacy Association

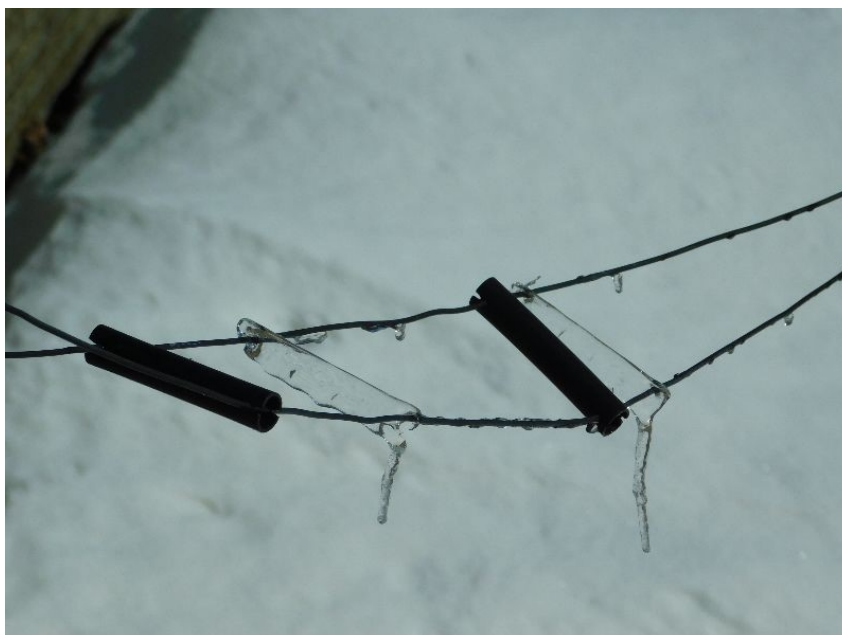
I was reminded recently of this site. It has a wealth of information on Art. You can find the site [here](#). Enjoy - Ed.



DXing without FT8

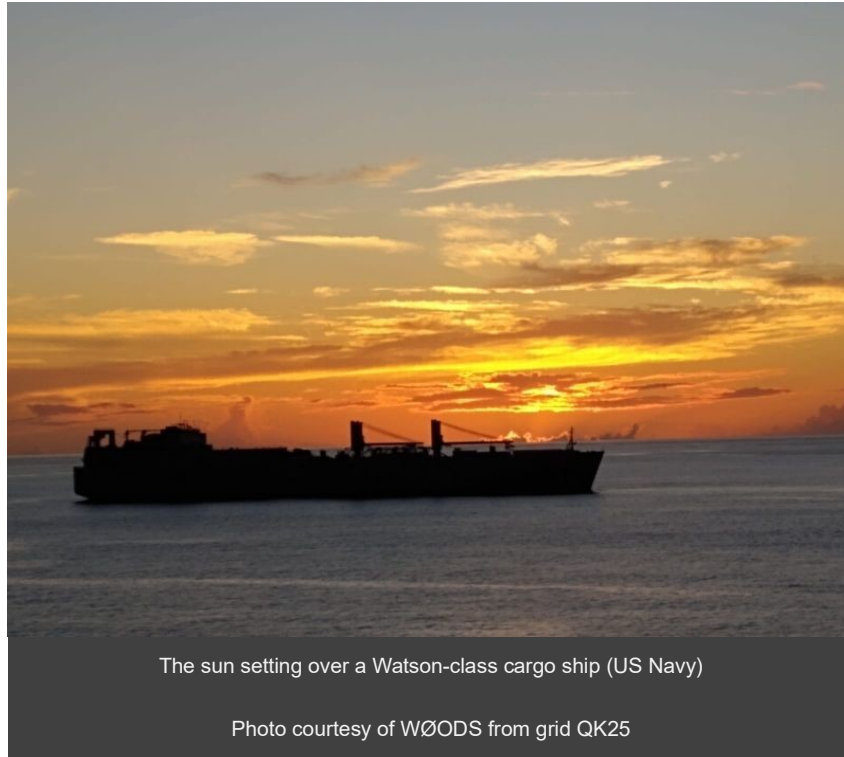
Parting thoughts

We'll close out this edition of the newsletter with a nod to the winter past and a reminder there are nicer places to be than in Iowa.



Crystal spreaders courtesy of John WØGN. John reports that antenna performance is OK but they don't tolerate heat too well.

And from our seafaring member...



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