Eastern Iowa DX Association

An ARRL affiliated club - Established 1975

In this issue

October 2019

President's Propagation, Pontifications and Prognostics

ATNO

I do not often get a chance to work an All Time New One. Sure, there are a lot of new band entities that can keep me busy and it is fun to work one. But, what about a new mode? How often do you get a chance to do that?

Imagine my excitement last Saturday when I made my first FT8 contact giving me a new all time mode, new mode-entity and new band-mode-entity! Probably not a big deal but it was fun and it allows me to slide into a few comments on FT8—a topic being discussed a lot these

---

Club Officers:

President:
Jim Spencer WØSR

Vice President:
Rick Hadley WØFG

Secretary:

days. There are not many “first time modes” in ones ham-lifetime. I made my first CW contact in 1953, my first AM contact in 1954, my first SSB contact in 1956 and my first FM and RTTY HF contacts in the early 80s. I’ve had enough trouble working everything on CW and SSB but I’m going to give FT8 a try. For one thing it gives me another list to fill and we need goals to keep our interest up. My main reason though is to use the FT8 technology to offset a little of the disadvantages of a small noisy city lot.

My thanks to Jason, NRØX. He set up an FT8 station outdoors at the EIDXA Picnic last Saturday. It was a good chance for those of us unfamiliar with FT8 to get some hands-on experience. One YL even managed to make her first amateur radio contact ever. I worked K7ZV in Oregon, an op I know and have visited his station. The QSO was on 20 m, using a CB vertical and 25 watts. Not bad.

Some have described operating FT8 as trading the op for a computer. And although that may be possible with some black-market software, that is not the way I experienced it. I actually had to click on the station each time I wanted to call. None of this rushing home

David Christ KØLUM

Treasurer:
Mike Nowack NA9Q

Repeater Committee:
Jason Joens NRØX

Membership Committee:
Jim Spencer WØSR
Tom Vavra WB8ZRL
Nelson Moyer KUØA

Packet Cluster:
WB8ZRL.no-ip.org:7300

Repeater: NØDX/R
144.59 / 145.19 (tone 192.8)

www.EIDXA.org

Web Master:
Craig Fastenow KØCF

Newsletter Editor:
Bob Lee WØGXA
rclee2266@gmail.com

Facebook EIDXA

There are many FT8 fans. On a non-contest weekend they say there are more FT8 operators than all the other modes. But not everyone is a fan and there is some real opposition to FT8 or at least using it within the current award system. It reminds me the transition from AM to SSB starting back in the 50s. They called us “Donald Duck’s” and the AMers, could be hostile at times. They did not like the sound and on an AM receiver with BFO, it didn’t sound that great. Some seemed from work stuff to see how many new ones your computer had worked. The operating experience I think would be much like working someone on CW using a code-reader and a memory keyer. Is that so bad? Don’t all answer at once.

(continued)

to be against progress and we know how that all turned out.

Right now, an FT8 contact is counted as a “digital” QSO along with RTTY and the other digital modes. It counts as a new entity on the Mixed standings and on the Honor Roll. Some are not happy about this at all and the ARRL Program & Service Committee is looking into it. Should it continue to count as it does now? Should a separate DXCC be set up for all digital modes or at least for the new technologies available now and the even more capable modes that will evolve in the future? What approach makes it fair to all? At this point it is hard to see a path that will make everyone happy.

Others think that real hams just don’t use FT8. Some would still say that about SSB! They just don’t like how you operate with a digital mode, especially FT8. They like the challenge of using their operating skills more directly. They like the flexibility of traditional modes which force you to control your signal in a pileup or allow you to add a comment in an exchange with a friend. Most of this group hasn’t liked or tried the other digital modes either. They are happy with what they have been doing for years and just want to keep doing it.

A lot of FT8 popularity has to be the technology used which allows for QSOs between stations where no other mode would work. They say you can work stations 20 db below the noise level and that is a lot! That is a huge plus for those on small lots or noisy environments or those that can’t afford a big station. Chasing good DX on 160, 80 or 6 now becomes possible for us little-guys. And it can really help the larger stations if they choose to use it.

The biggest opposition probably comes from the ops who are concerned about the competitive nature of award chasing and the recognition one may get from excelling. They feel the game has been changed on them and it has. Why should they have built huge stations and spent many years to get near the top of the heap on 160 meters, for example, only to have people catching up with a lot less effort and simpler stations? They think it is not fair and in some ways it isn’t.

Many activities in amateur radio turn out to not be so fair but we pursue them and have fun. That difference might start with the different budgets that can be allocated to building a station. Geographical location is terribly important—hill vs. valley and Iowa vs. Maine. If you are looking at winning a DX contest, the station location

makes a huge difference as it does for the Challenge Award, 5BWAZ, 5BDXCC and 160, 80 and 6 meter band awards. In the Midwest we understand this very well. I've tried to figure a method of handicapping these awards for years but I think it is impossible.

Enough rambling. FT8 is here to stay or be replaced by a new improved FT(x). Progress works that way. For me, I'm going to get on FT8 and see if it can help get me get closer to the 2500 mark on the Challenge Award. You should give it a try too. And, hopefully the ARRL will workout something that makes almost everyone happy.

73, Jim WØSR

Musings from the lunatic fringe

Bob WØGXA

I'm reminded from time to time on the great breadth of this hobby. It has certainly changed a lot since I was first licensed in 1976. It's hard to imagine someone can't find some part of the hobby to enjoy.

There is one lesser known aspect that can be quite rewarding: Being a club officer. A large part of this hobby is interacting with other hams; mostly on the air. I can guarantee you that being a club officer opens up new and interesting aspects because of the people you'll meet, whether it's fellow members or guest speakers. You never know, you might learn about some other aspects of the hobby you don't participate in today.

If you aren't ready for an officer position, volunteer to put together the program for one of the meetings. Either arrange a visitor or maybe you have some personal ham radio experiences to share.

As I write this, I'm mid-way through a 10 day business trip to Montreal. Being a newsletter editor is about the only thing I can do for the club considering I spend about 100 nights per year in hotels.

Take a chance and volunteer!

Club News and Administrative Items

Minutes of the EIDXA meeting July 19, 2019

EIDXA met July 19, 2019 at the Hall-Perrine Cancer Center, Mercy Hospital, Cedar Rapids.

Jim, WØSR opened the meeting at 7:00 PM with the 24 hams in attendance giving their calls.

Minutes of the April meeting can be found in the July newsletter.

Mike, NA9Q gave the treasurers report. No signficant activity lately beyond the partial refund of our contribution to the 3YØZ DXpedition.

Accepted into membership were Bob Ward KØSRL and George Cooley, NG7A.

Rod KØDAS volunteered to be the AV expert to help presenters use the AV equipment at meetings.

No requests from eligable DXpeditions.

Sam, KØAFN has EIDXA logo caps for sale. $25 each of which $5 goes to EIDXA

Picnic at NRØX scheduled for Sep 14 with Sep 21 as a rain date. Not discussed but usual format is a pot luck with grilled meat provided.

A motion was made and passed to make a donation of $100/year to the Hall-Perrine Hope Fund in appreciation of our use of their facilities.

Rich W3ACO volunteered to be on a nomination committee. More members needed.

It was suggested we need a program committee. Volunteers welcome.

A reminder to all to pay outstanding dues. Dues for 2020 will be due at the October meeting.

After a break a video of a 3C1L and 3CØL Dxpedition was shown.

David Christ KØLUM, Secretary

NEXT MEETING

October 18, 2019

FT8 by KØVM

Social Hour 6:30 PM
Meeting & Program 7:30 PM
Meeting and location information here

Card Checkers

We have three club members who can check your QSL cards

- Tom, WB8ZRL
- Glenn, WØGJ
- Mike, NA9Q

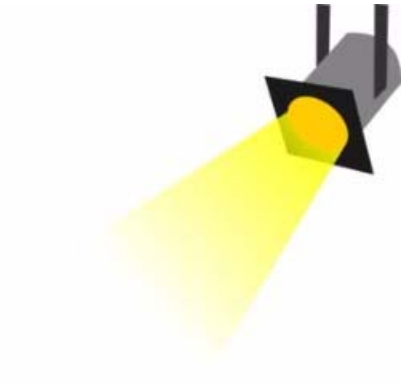
Contact info can be found here: http://www.arrl.org/dxcc-card-checker-search

---

Member Spotlight

George Cooley

NG7A



Since getting my ticket in 1981, I've enjoyed all aspects of our wonderful hobby, always learning new things from others and finding ways to give back to the community. A life member of ARRL, I've stayed active in local clubs across the country, wherever my work has taken me. Since being re-bitten by the bug recently, I've enjoyed DXpeditions, contesting, DXing, building kits, digital modes, VHF, SOTA, public service, technical presentations, and blogging about my endless antenna experiments.

At 8 years old, I was introduced to the original digital mode by building a telegraph with electromagnets that pulled down a tin plate when a homemade switch connected current from a pair of dry cells. A transistor radio kit followed, and I was pretty much hooked on radio when my grandfather gave me a pair of walkie talkies. By age 11 I had acquired many better models, and had the whole neighborhood experimenting with "range tests." My older cousin took notice and introduced me to ham radio and Morse Code lessons.

Around that time my Dad switched careers to become an international short wave broadcaster at Voice of America. Improving antennas to better receive programs through my grandparent's Hallicrafters short wave tube radio filled my summers and honed my love for radio and electronics. Besides math and physics, I took Radio TV servicing in High School.

While studying Electrical Engineering with an emphasis on Advanced Microwave Techniques, I was fortunate to intern with the Army's Radar Simulation and Instrumentation Laboratory. There I attended my first Field Day and, with the encouragement of elmers, finally passed the Morse Code test and earned my amateur radio ticket. During that time, I also earned my private/commercial/instrument pilot licenses and instructor ratings, followed by an ATP with jet ratings. Fixing the old analog flight simulators helped offset the flying costs.

With my work in RF design and aviation, I've been fortunate to make my hobby also my career. At UPS-AT, together with my design team (many of them HAMS), we developed the world's first FAA certified WAAS GPS capable of guiding airplanes to within 200 feet of the ground. Using GPS, we pioneered Automatic Dependent Surveillance Broadcast (ADS-B), which has made aviation safer, and was awarded the Collier trophy in 2007.

My friends and family joke that little has changed since I was a kid, except for the price of the radios. While my HAM activity has ebbed and flowed over the years, in 2007 I got re-bit by the bug, after my XYL encouraged me to get back into the hobby by threatening to throw away the tribander that was hogging up space in the garage. Shortly thereafter she surprised me for Valentines Day by getting her ticket. Many of our younger friends followed suit, and we've enjoyed combining a variety of outdoor activities such as skiing, camping, hiking and biking with radio. One of our favorites is Summits on the Air (SOTA) using CW. During our first activation, when a little boy asked "what is that man doing", the father replied "he's like R2D2 talking to C3PO!" Based on the kid's reaction, CW made his day :) It's great to have the Eastern Iowa DX Association with like minded members close by and I look forward to participating with the group.

73, George NG7A

George has a nice web page at: http://www.ng7a.com/Welcome.html

---

DX News

Tom Jefferson Greenstamps

by Tom Vavra WB8ZRL

A few newsletters ago, WØGXA had an article about the poor quality for the greenstamps we send for QSL cards. His source in Europe (OM2VL) told him later the $2 bills would work just fine. I have collected a couple dozen of them and will have them at the club meeting for anyone wishing to use them for QSLs.

I'm assuming Tom is acting as a currency exchange, not a charity - Ed.

Cluster Report

I was asked at the picnic about the DX stations logging onto the cluster. Below are the stations that have logged on during the first three weeks of September. Most of them multiple times.

Tom WB8ZRL

2E0ENE K4BBN KR5OG PE0SSB W5YUL
4X6FK K4KR KV4GA PE1NJN W5ZZ
AA4LB K4VL KX4U PY2ECM W7OK
AF5AA K8EB M0AOV R2PJ W8SCC
AI6OI K8OM M0VBD R9SR WA2HYO
AK4O K9HKS M0ZXT RA4HQM WB0WIV
BG7NRG KA9CFD MI0ADX RD3TCD WB2JCC
CT1AKD KB1FDA N0DFF SM0WRA WB8ZRL
EA5HBT KB1ROO N0LWF SM1WRA WB9O
EA7IEZ KB3BYW N4ARM SP7WT WB9ZPY
G0UIL KB8CR N4RWT UT4UFU WC4R
G4BBY KC2CWT N5NET VA3KGB WD4OHM
GI0WLW KC4JD N5SDO VE1GPY WD5ADC
HB9BUN KD2RBM NO0B VE2TPI WO2D
IZ7LDG KE0KZ NR0X W0AWL WW5NX
K0CF KE5ETN NS1O W0FG WW7DX
K0FA KE7WRX NX9G W0MJN YB2WA
K0VM KE9NS OM2JU W2EQX YB8MAN
K2GC KF5OUZ ON4EM W4TTY ZS6SKY
K3BDM KK4TDT ON6PH W5ADB

Sporadic E propagation

With sunspots such as they are, might be useful information for the ARRL 10m contest in December.

https://youtu.be/dlDotvDnqEU

Feature Articles

George's Surprise

A paraset radio replica

Most every EIDXA member has learned that when George, WØPPF- strides into the club room carrying something in a heavy cardboard box, we are all in for a treat!

In another time in another war, one would probably be shot on the spot for being found with the contents of THIS box.

Georges' Paraset was designed to be dropped by parachute to Resistance Forces in Europe.

It consists of a 4-watt crystal-controlled CW transmitter and separate tunable CW receiver contained in one beautiful hand-crafted and finished wooden box.

It is a faithful reproduction of the units used during WW-2.

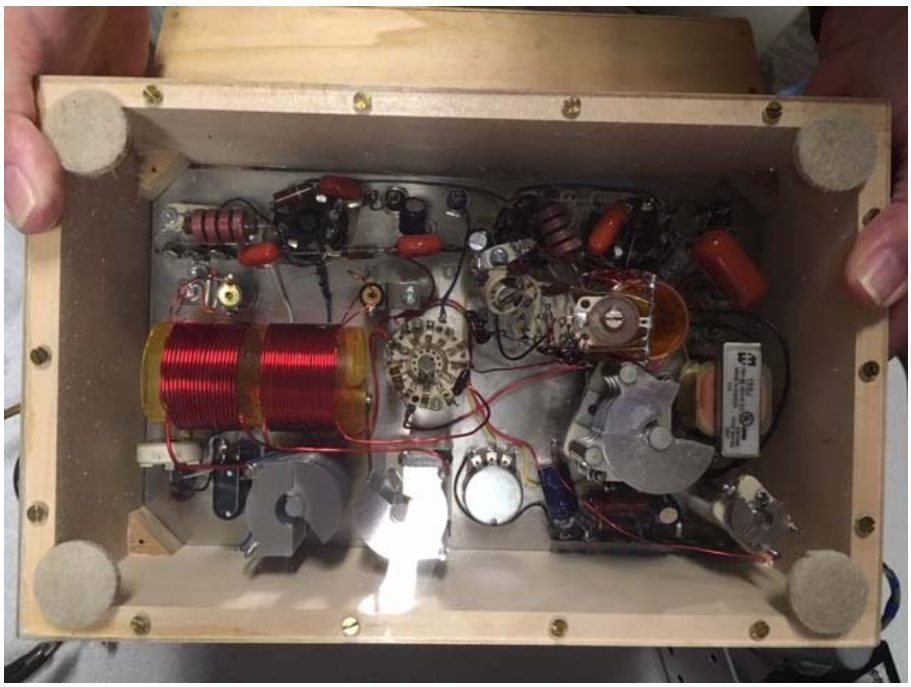
The tubes require around 130 volts DC plus 6 volts for the filaments. George also built and demonstrated three power supplies that would likely have seen service with this type of radio. A buddy in an Iowa City club gave George a working 6-volt vibrator from which he designed one supply. Another used a small 6 volt DC motor to charge batteries.

Just 4 watts and a simple wire antenna proved to be adequate for reliable communications between England and Resistance Forces, and did not make a big noise that would be able for RDF detection.

QRP helped win the war!

Thank you, George, for another wonderful surprise at the July 19 meeting!

Submitted by Jim WØNB - Ed.



The Paraset is a work of art to those who live our hobby, and George is the gifted artist

George explains the challenge in acquiring, or constructing, every component of this historical working model

George explains that when no charged batteries or house current was available, his hand-cranked generator, made from a 6 volt DC motor could get the station on the air or charge a storage battery

Well done George! - Ed.

Jurassic Journal

- A look back in time -

Tom Vavra WB8ZRL

The last quarter of 1999

Conditions for the last three months of 1999 were quite good.

Solar flux averages for each month were 164.8, 191.5, and 169.8.

ZK3 ZK3DX, ZK3CW and ZK3YL on Tokelau were activated by six operators including SMØAGD (Erik Sjolund), who continues to travel and work the deserving.

FY Baldur, DJ6SI, another active traveler, was active as FY/DJ6SI from French Guiana. Most contacts were CW.

KH5 Palmyra was activated by KH5/DL5RBK for only a few days.

T30 West Kiribati was busy for a month by DLs signing T3ØY & T3ØCW.

FO0/a Koji, JK7TKE active as FOØKOJ from the Austral Islands for about two weeks.

A35 DJ4SO and DJ7RJ signed A35SO and A35ZL from Tonga.

HV4 HV4NAC was a special event station from the Vatican.

FP TO5DX was active from St-Pierre-Miquelon.

T33 The DLs continued their travels, this time to Banaba Island. They used the same suffixes signing T33Y & T33CW.

3V8 Hrane, YT1AD, was worked signing 3V8BB on 10cw as he warmed up for the CQWW SSB Contest.

10 meter qsos are pretty rare these days. The month of October 1999 had the following from 10m in my log: ZK3CW, KH5/DL5RBH, A35SO,
5C8M, T33Y and 3V8BB.

JD1 JD1BIC/JD1, Shiro, was active from Minami Torishima, favoring CW.

XX9 There are only a handful of QSOs that you make that you remember for some special reason. This is one of those. On the morning after the day I finished the 80M 4 SQ, the first QSO was XX9TRR. Thank you Pertti, OH2PM. Needless to say, I was pleased.

9M6/s 9M6OO logged 21K QSOs from Spratly. My log did not have the QTH so one more to count for the Challenge is a pleasant surprise.

ZD8 Glenn, K6NA, was worked warming up for the CQWW CW contest signing ZD8A.

T32 Paul WC5P (T32BE), Bob N5RG (T32BO) and Lee N5PO (T32PO) were on Christmas Island, East Kiribati primarily to participate in the CQWW CW DX Contest as T32PO.

XU7 Andy, G4ZVJ made some 18000 CW QSOs (3825 during the CQWW CW Contest) on all bands as XU7AAV during his two week DXpedition.

KH4 KH4/W4ZYV was one of several DXers operating from Midway.

9N 9N7UD gave me a 339 report, but it was a new one on 40M. Many thanks to NYØV for the alert.

OK OK2RZ was a casual QSO on 10 SSB. I noted in the log that he was 59+35DB. I wonder if I will see such conditions again.

The last few days of 1999 I worked some special event stations: BT2000, M2000A, and ER2000C. We were all waiting to see what would happen as the clock ticked over to Y2K.

The fall quarter of 2009

Solar conditions in the fall of 2009 were sure different than those ten years earlier. The months average solar flux was 72.3, 73.6, and 76.8.

FT5/g FT5GA was on Glorioso and made some 30K QSOs. I logged him on 40M but they did not log me. I'm still looking for FT/G on 40.

KH4 The team for the K4M expedition to Midway Island included 9V1YC, AA4NN, DJ9ZB, I8NHJ, K6TD, K9CT, KH7U, N1DG, N4PN, N4XP, N6HC, N7CQQ, ND2T, W6KK, W6OSP, W8GEX, WA7NB and WB4JTT. They logged 60K QSOs in 7 days. They may have been one of the first DXpeditions to use OQRS.

FO/M TX5SPM was on Marquesas, by a team of SPs.

4U1UN 4U1UN was active for 7 days on all bands and modes with a large team of operators (F4EGD, F5CWU, G3SXW, JK3GAD, K2DO, K2LE, K2QI, KA2D, KA2RTD, LA4OFA, LA5IIA, N2GA, N2UN, N2YBB, NN1N, OHØXX, OH2BH, OH2NB, OH6LI, PY5EG, UA9AB, W2VQ and WQ2N). Antennas and security access to the building were heavily restricted and limited to operation to 8 AM through midnight local time. Night operation was allowed during the CQWW SSB contest.

YJ YJØCCC was a DXPedition to Vanuatu by VK2CCC. He emphasised CW on the low bands

FO/C TX3A, was a DXpedition by the team of AA7JV and HA7RY to Chesterfield Islands. The operated 4 weeks and put 36K QSOs into their log. Emphasis was on the low bands.

9L VooDoo Contest Group operators Ned/AA7A, Nick/G3RWF, Fred/G4BWP, Bud/N7CW and Gary/ZL2IFB went to Sierra Leone to operate 9L5A in the CQWW DX CW Contest. Outside the contest G3RWF used his 9L1NH call and AA7A his 9L7NS call.

3V DF1LON, DJ7IK, DJ8NK, DJ9CB and DL9USA were active as 3V3S from Sousse, Tunisia for 10 days including an entry in the CQWW DX CW Contest. They operated from the premises of 3V8SS, making 16K QSOs.

EY This is another one of those never to be forgotten QSOs. Nodir, EY8MM was spotted and worked on 80M. An hour later he was on Top Band. It took a bit longer, and he struggled with my call, but I have the QSL

confirming both contacts.

160M Good conditions, lots of activity, and the many unworked entities made for good times on Top Band.

A New 160m Antenna

by Tom Vinson NY0V

I was discussing 160m with Tim, N0TB. I had received my DXCC using my Inverted Vee but I expressed my concern that getting up to 200 would probably mean a better antenna system. Tim suggested that I try a vertical for the lower angle of radiation. We wondered if I could load my LM-470 telescoping tower since the sections aren't bolted together. He told me of a reverse feed system that was designed by N4KG (SK). That afternoon Tim emailed me an article written by N4KG* describing a reverse feed, elevated ground plane for 160 (and 80m). In that article his antenna system consisted of two stacked yagis on a 75' tower (figure below). That system was not quite a 72' tower with 5' of mast and a SteppIR on top, but I decided to give it a try anyway!

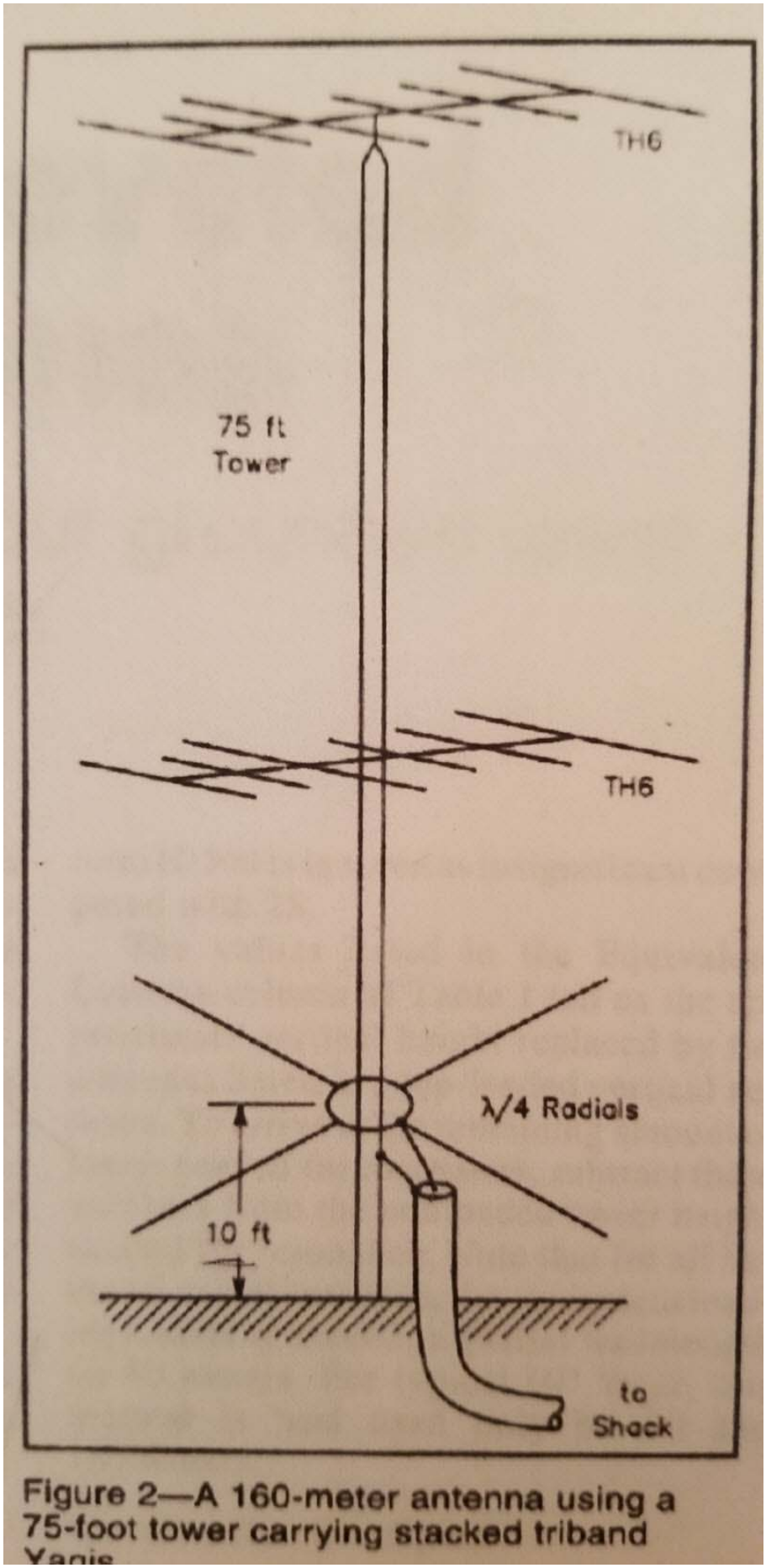


Figure 2—A 160-meter antenna using a 75-foot tower carrying stacked triband Yagis.

After reading through the article, I went to my ARRL Antenna Book and found that it mostly resembles an Omega Match without any capacitors! ON4UN's book Low Band DXing illustrates an Omega Match for a shunt fed tower. That has the two capacitors at the base. N4KG's shunt design has the advantage in that it doesn't require the capacitors and an enclosure out at the antenna.

The shield is attached to the tower about 10' up from the base. A match is made by moving the ground attachment up/down the tower leg until you get a match. It's mostly a trial and error process to find that attachment point. In addition there are four 135' radials that are fed with the center feed of the coax at that feed point, hence these are the elevated radials. It is a simple design but will it work with a telescoping tower?

The LM-470 has several stand-offs bolted to the tower through which control cables and coaxes hang vertically from the top of the tower all the way to the ground. I hunted around in the garage and found a spare one that I thought I could use for the clamping onto the tower and adding a feed point. I also found a spare aluminum plate that could be cut to a size to accommodate an SO239 connector and two holes to bolt it to the arm of the stand-off.

The next step was to figure out how to handle the center feed. For the center feed I decided to use a spare piece of PVC about a foot or so long that I had laying around and a couple of antenna insulators from an old dipole. I was a bit uncomfortable with using just a piece of copperweld wire from the SO239 to the four radials out at the end of the PVC. I decided to use a piece of insulated antenna wire as well as a ¼" piece of flexible plastic tubing. I found that I had some extra laying around that was used to run water to my furnace' humidifier. So far so good. I had managed to find all the parts I needed right in the junk pile! But I still did not have the radials.
For the radials I did need to purchase 550' of the DX Engineering insulated antenna wire, Dacron guy rope, and four insulators. With this, I was ready to assemble the new 160m antenna!

In the assembly process I found that where the stand-off had to be attached was more than 10' off the ground. The reason for this being that if I attached it at 10', the telescoping section would collide with the U-bolts on the stand-off. That would mean that I would have to take down the stand-off every time I brought the antenna down. Noodling

on that problem for a while, I found that if I mounted it higher, like 15' up, that I could leave the stand-off bolted onto the tower and there would be no interference. What I didn't know is if I could achieve a match that high up the tower and only 57' of tower and 5' of mast for the vertical above the feed.

The feed assembly for the reverse feed and the insulators at the end of the PVC for the center fed radials.

Once I had the stand-off placed, I connected the radials and the coax. I raised the tower back up to full height and strung out the 4x135' radials in as close to the typical + pattern and about 10 to 12' off the ground. I was now ready to check out the new antenna on 160m!

When I got in the shack and hooked up the SWR meter I found that the antenna was resonant at 2.1MHz. My first reaction was “Oh man! It’s too short, just as I feared. Maybe it’s due to the telescoping tower! The SWR down at 1830KHz was over 3:1. As I was stewing over this data point I remembered that the SteppIR was in the element retracted mode. I don’t have the capacitive top hat out! I set the SWR bridge to 1830KHz and pushed the SteppIR’s controller to 7050KHz. (I have modified by SteppIR to have 2 elements on 40m). I sat there amazed to watch as the elements were extending the SWR was slowing dropping on 1830KHz. I was saying to myself “come on, keep going”. It did all the way down to 1:1. That SteppIR variable capacitive top hat for the antenna worked like a charm. The science works!

The next questions to be answered were: Can I hear well on it and will it radiate? To test it out I got on that evening and found the pile up on C5DL. I could hear him! And a few minutes later he was in the log. On the following morning grayline I found VI9NI on Norfolk Isd and one-called him. Happy with two new ones in the log I think this Fall should be a fun time on the 160m grayline!

* QST, June 1994, Simple, Effective, Elevated Ground-Plan Antennas, Page 46

Submitted by Tom, NYØV

The Mystery of a Spiking SWR

by Tom Vinson NY0V

This summer while I was on the air I started to have an issue with SWR. I would be transmitting with a low SWR displayed and all of a sudden the SWR would momentarily spike sending the rig into a quick “crowbar” of the power, shutting the PA down for high VSWR. Let the troubleshooting begin!

I began the trouble shooting process by bringing down the tower and tilting it over to ground level. My first step was to go to the end of the coax that drives the driven element of the Electronic Housing Unit (EHU) on the SteppIR. I placed a 50 ohm dummy load on the coax and went back to the shack to check it out. Outcome: Full forward

power, no reflected power! OK, coax looks good. It must be the EHU on the SteppIR.

At that point I pulled the fiberglass tubes off the EHU. This is not all that fun. I had taped the rubber boots with Scotch Super 88. That done, I saw that the elements were indeed retracted. I pulled the element tube inserts out and inspected them and they looked clear. Another trip to the shack and I measured the resistance on each pin on the DB plug of the SDA100 controller. All checked out. I then modified the controller to run the elements out to 4' to see if one or both copper tapes was not working. When I went outside the tape was extended to 4'. Great. Now what? Another trip back into the shack and I retracted the elements and shut down the controller power. By the way, on the SteppIR controllers OFF does *NOT* mean OFF OFF. SteppIR leaves about 4.5 volts on the stepper motors to keep them from drifting. If you have one of these always unplug the controller to ensure the controller is OFF OFF and the EHU's have no power.

Back out to the antenna as I now know that I have to pull the EHU. I unscrew the EHU from the boom and open it up. Viola! About tablespoon or so of water was in the EHU! I've never had that issue in over 10 years, but at least I've solved the issue…or so I thought. I have a spare driver EHU with the 40-6m loop length on-hand, so I swapped it out. I also dried out the original EHU on the work bench to replace the spare. In the meantime, I found a length of RG213 and did a roto-rooter on the fiberglass loops and drilled the weep holes clean just in case spiders had nested in the loops.

Thinking that I had found and fixed the issue, I put the antenna back together and brought it back to vertical, but still nested. I trounced back to the shack confident that my SWR would be great. It wasn't. This is where I say "What the?" Back out to the tower I go.

This time I decided to check the lightning arrestor. The arrestor looked good. My thinking is that maybe it had gone intermittent. I place the dummy load right after the lighting arrestor on the antenna side and go back to the shack. Perfect SWR! So it must be downstream of the arrestor. The next point is the antenna relay box. Perhaps the relay is bad. Connecting the dummy load to the relay box is a PITA. I seal up those connectors and it takes a while to get the coax seal off the top and then cut the tape loose. But, succeeding at that, I attach the dummy load and go back and forth to the shack checking the various relay actions. The SWR is great on all counts. That leaves one more

connection. Yup, the one at the EHU. I pull that connection and hooked up the dummy load…again. What's that about trying the same thing twice and expecting a different result? Back to the shack to check the SWR (again). No problem! Back to the tower where I decided to pull the Reflector element tube to see if those elements are working properly. I found that the elements were indeed retracted. I also ran the Reflector out 4' and the copper came out to 4' just like it should.

At this point my thinking changed to say what changes between when I have the antenna laying down and when it's up? The answer would be the coax and control cable loop so I can rotate the antenna. The problem HAS to be in that coax from the relay box to the driven element! Just to make sure, I put the antenna connector back on and raise the antenna to the nested position and checked the SWR. Yes! Bad SWR again.

I lowered the antenna again and pulled off the protective foam (hot water pipe foam tube to keep woodpeckers out!) Starting at the relay box I inspected the coax through the loop with no problem seen. So I kept going and stopped at the NN4ZZ Tilt-Plate. I had found the root cause!

To explain a bit, the NN4ZZ Tilt-Plate" is basically a big boom-to-mast hinge with the hinge across the top. One side of the hinge bolts to the mast, the other holds the yagi with 4 U bolts. This product works great in that keeps the yagi level as the tower is tilted over. Instead of working 12' up on a ladder to reach the antenna, this enables one to work on the antenna at waist level.

Mystery solved! The coax had shifted to where it laid in-between the

Tilt-Plate U bolts and the other side of the hinge. This LMR 400 flex had just enough resilience left after it was crimped to not arc when the tower was tilted over but arced when the antenna was vertical! A piece LMR400 flex and a couple of PL259's later (and well secured away from the U bolts!) and I had the antenna back in operation. Whew.

Submitted by Tom Vinson, NYØV

Member News

W9DXCC Convention

Three EIDXA hams, Glenn WØGJ, Rich W3ACO and Jim NOØB attended the 67th annual W9DXCC convention Friday and Saturday, September 13-14 at Pheasant Run Resort, St. Charles, IL. (That's why we couldn't make the picnic. We prayed for rain so the picnic would be delayed but the rain gods did not favor our appeals.)

Glenn gave a talk Friday in DX University on how to bust a pile-up. Glenn listed a number of well and lesser-known tips on how to be heard and answered by a DXpedition. The presentation featured Glenn's usual rapid-fire, humorous and well-illustrated delivery techniques while clearly listing salient points. Glenn's casual, engaging talk was well attended and frequently interrupted by laughter generated by his humorous but apt analogies.

Rich W3ACO won two, count them, two prizes, worth over $600. *Rich reports he won:*

1. *Daiwa SWR Power meter Model CN901-HP3 (3KW)*
2. *Array Solutions Power Master I Wattmeter/SWR meter with a 3KW coupler.*

Both are for sale.

Jim NOØB was happy to win a $50 gift certificate from DX Engineering. Since DX Engineering is on Jim's speed dial, he won't have any trouble circulating that money in the economy very quickly.

Whether it was a face-to-face QSO with old buddies, meeting new

ones, or learning better ways to work DX, all agreed it was a worthwhile event.

Submitted by NOØB *Thanks Jim - Ed.*

Logbook

Logs

NOØB - Jim : FT8 - JH6VXP Japan 6m, KH2L Guam 40m, 9U3TMM Burundi (ATNO) 40m

K8OM - Joe: FT8 - JH6VXP Japan 6m

Jim also reports he needs only zone (26) for WAZ - Ed.

CQ Test

Upcoming Contests:

California QSO Party
1600Z, Oct 5 to 2159Z, Oct 6
6-land stations are always loud in Iowa and they have plenty of activity. Good way to occupy some of your weekend.

There are also good QSO parties in AZ, NY and IL in October.

CQ Worldwide DX Contest, SSB
0000Z, Oct 26 to 2400Z, Oct 27
Excellent contest...

ARRL Sweepstakes Contest, CW
2100Z, Nov 2 to 0300Z, Nov 4

ARRL Sweepstakes Contest, SSB
2100Z, Nov 16 to 0300Z, Nov 18
Where's my broom?

ARRL 160-Meter Contest
2200Z, Dec 6 to 1600Z, Dec 8

ARRL 10-Meter Contest
0000Z, Dec 14 to 2400Z, Dec 15

ARRL Rookie Roundup, CW
1800Z-2359Z, Dec 22

RAC Winter Contest
0000Z-2359Z, Dec 28
Another good low-key contest where everyone works everyone

Stew Perry Topband Challenge
1500Z, Dec 28 to 1500Z, Dec 29

Scores and Soapbox

QRM

Morse code:
A staple in the Navy IW toolkit

PENSACOLA, Fla. (Nov. 3, 2015) Students learn Morse code while attending the first revised Basic Manual Morse Trainer (BMMT) course at the Center for Information Dominance (CID) Unit Corry Station. Morse code is just one tool that cryptologic technician (collection) Sailors use as members of the Navy's Information Warfare community to perform collection, analysis and reporting on communication signals. (U.S. Navy photo by Information Systems Technician 1st Class Kristin Carter/Released)

PENSACOLA, Fla. – The cryptologic technician (collection) (CTR) student cohort in the first revised Basic Manual Morse Trainer (BMMT) course wrapped up, Jan. 28, at the Center for Information Dominance (CID) Unit Corry Station.

The update included the latest Manual Morse software used by the Department of Defense and was tested out in a nine-week pilot course that concluded in September. The self-paced course provides basic instruction and practical application in the interception of Morse-type communications.

"Morse code continues to be an inexpensive and efficient means of communication for many states throughout the globe," said Senior Chief Cryptologic Technician (Collection) (IDW/NAC/SW/AW) Tony Gonzales, CTR rate training manager for CID headquarters. "Manual Morse operators here at Corry Station are learning a skill set that has stood the test of time. Many of our most senior CTRs began their

careers as Manual Morse operators.”

In the updated course, Sailors learn how to operate radio-receiving and associated computer-based equipment. From basic safeguards of security to communication procedures and systems theory to operation of communications equipment, the course teaches how to intercept Morse communications, as well as copy and send Morse code.

“There is something special about learning a skill that Sailors have been performing since World War II,” said Gonzales. “The connection between the past, present and future cryptologic technician (collection) is rarely seen in our line of work as technologies are forever changing."

Morse is just one tool that CTRs use as members of the Navy’s Information Warfare community to perform collection, analysis and reporting on communication signals.

"Morse code is not only used in military operations but also in commercial navigation,” said Cryptologic Technician (Collection) 1st Class (IDW/SW) Gabriel Albarran, the BMMT course supervisor. “Search and rescue, science navigations and weather status are frequently passed in automated Morse code.”

Sailors can take the course immediately following CTR "A" school or can be assigned as fleet returnees to the course as part of their transfer. The course is now offered to about 40 CTRs each year in the pay grades of E-1 through E-5.

“It’s a language,” said Cryptologic Technician (Collection) Seaman Mary Kaitlin McKeeby, who beat the course record set during the pilot by two days, finishing the self-paced course in 39 days. “If you have a knack for languages, (Morse code) is going to be easier to pick up.”

She stressed the importance of staying composed while learning Morse code and persisting through the lessons even when making a mistake.

Graduates receive NEC 9169 as a Morse code intercept operator and undergraduate college credit through the American Council on Education. They may also be eligible for selective re-enlistment bonuses in both zones A and B.

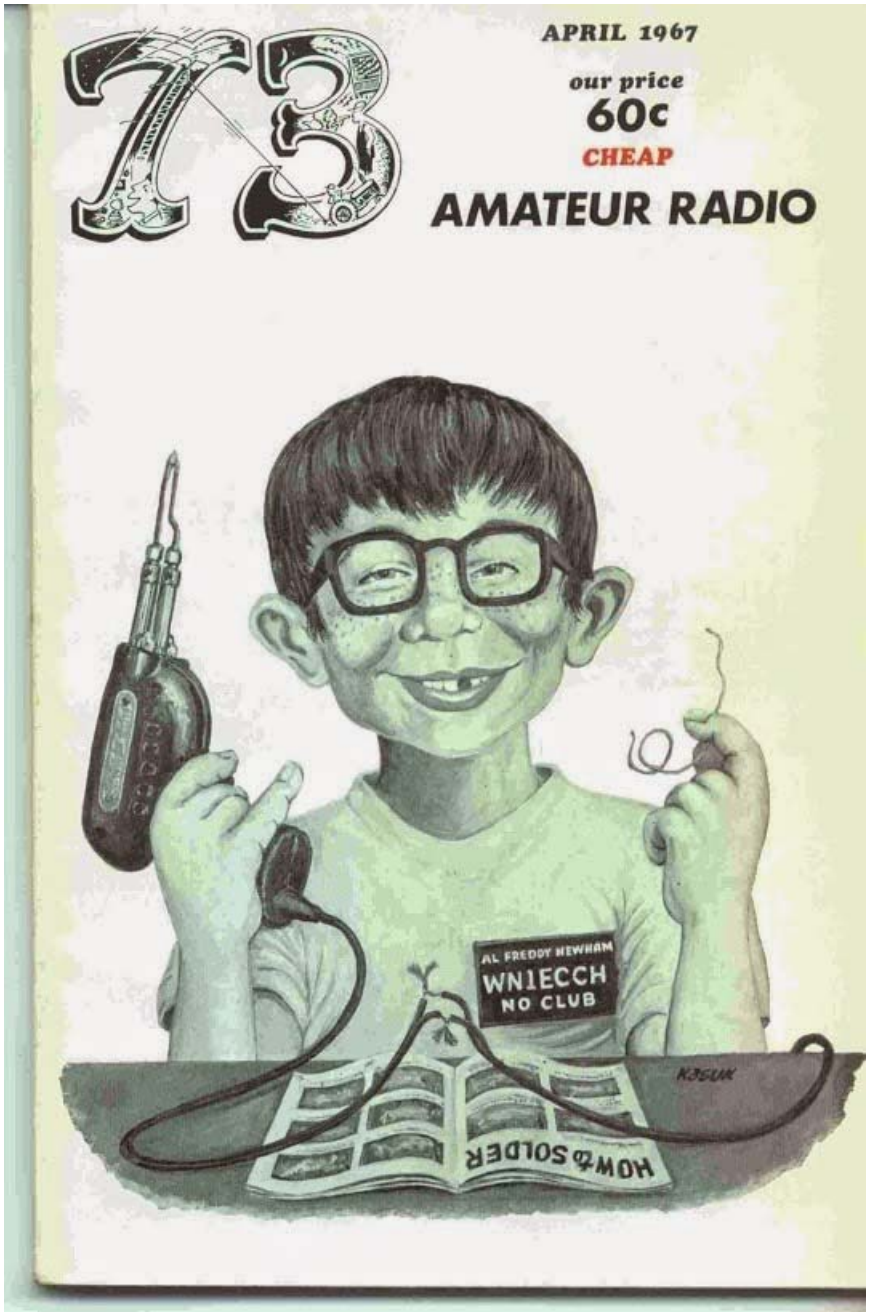
Morse code training has been taking place continuously at Naval Air Station Pensacola Corry Station since 2005, when the Navy moved the training back to Corry Station, in favor of cost and time savings by relocating the course with the cryptology “A” school. A long partnership with the Army providing the training came to an end at that time.

The Center for Information Dominance (CID) based at Corry Station in Pensacola, Florida, is the Navy's learning center that leads, manages and delivers Navy and joint forces training in information operations, information warfare, information technology, cryptology and intelligence.

With nearly 1,300 military, civilian and contracted staff members, CID provides training for approximately 22,000 members of the U.S. armed services and allied forces each year. CID oversees the development and administration of more than 200 courses at four commands, two detachments and 12 learning sites throughout the United States and Japan.

For more information on the Center for Information Dominance, visit http://www.netc.navy.mil/centers/ceninfodom/; facebook.com/CenterForInformationDominance/; and twitter.com/CenterInfoDom/.


WE'LL JUST PAINT A PRETTY WATERFALL RIGHT THERE...
6.070.00
HAM CRAZY.COM



RIP Mad Magazine
https://fortune.com/2019/07/04/mad-magazine-shutting-down/

Thank you

for the contributions to your newsletter
Bob