Eastern Iowa DX Association

An ARRL affiliated club - Established 1975

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Well time is flying by, Bouvet, Crozet, Dayton/Xenia 2013, and Field Day are in the history books, and we are now into the 6 meter DX season. I have been waiting for a big 6 meter EU or SE Asia FT-8 opening, they are a lot of fun when they occur.

During the last EIDXA meeting Glenn WØGJ, gave the attendees a wonderful presentation “What is a Real Ham” as well as pictures of the Sable Island operation, Bouvet, and Crozet. Glenn also gave us an update on the NCDXF Rig In a Box (RIB) project. The RIB was tested on Duce Island this month with all of the operators running the radios via the internet from their home operating positions. We may be seeing the development of future DX-peditions. Thanks Glenn.

Terry WØAWL has sold more off WA8ZRL’s estate at Xenia, and Gary KØGT has the Titan amp operating using parts borrowed from NØNI.

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Gayle Lawson, KØFLY

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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

Craig, KØCF continues to enhance the EIDXA web site. Craig has found a way to easily update the “PROPAGATION” section so that we can see daily, weekly and Monthly numbers and trends. Thanks Craig.

Gayle, KØFLY

Musings from the lunatic fringe

Bob WØGXA

I hope you all got a chance to get out and do some portable operating during Field Day. Other than a thunderstorm-enforced break on Saturday evening, it was a pretty good weekend to be out.

I set up a couple of beverages for the joint CVARC and Collins ARC Field Day event. I was slated to do a lot of overnight operation on 80m. It was a new experience getting the ground rods and fence posts installed, given how little rain we've had, but we got it done. The antennas worked well, so it was worth the effort.

Field Day is not a contest, so you expect to learn a few things about setting up portable operations. Ours was no exception. After the

storm, I returned at midnight for a shift and found I could hear very well on 40m with my beverages but no one could hear me on transmit. Additionally, received signal strength was greater on the beverages compared to the delta loops. A quick inspection of the antenna yielded no obvious cause, so I stayed on 80m all night.

In the light of day, we found out that someone had connected the feedlines backwards on the band switch for the array of 40-15 meter antennas and I was essentially "transmitting into a grounded capacitor". The radio tuner was fine with it. Go figure.

It's a short newsletter this time around. I think everyone is quite busy with summer activities.

Keep those cards and letters coming.

Bob

Club News and Administrative Items

Minutes of the EIDXA meetings are on the website, www.eidxa.org

NEXT MEETING

TBD

Watch the email reflector for further announcements

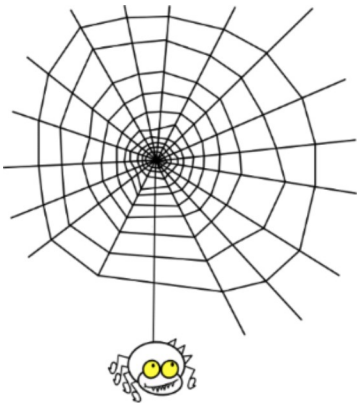
Card Checkers

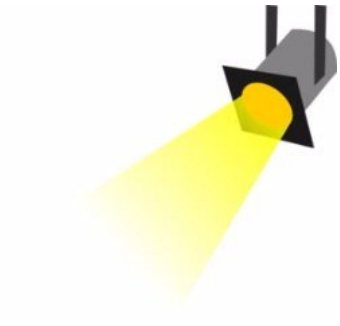
We have club members who can check your QSL cards

- Glenn, WØGJ
- Mike, NA9Q

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

Member Spotlight





Nothing to report this month. If you haven't been featured in the newsletter, let me know. We'd love to do a story.

DX News

Feature Articles

New hams

On April 24th, the UIARC/ICARC hosted its semesterly VE session on campus at Van Allen Hall. We had 5 taking the exams (3 from UIARC and 2 walk-ins.) Four of the five claimed their initial ticket into the hobby, and one (walk-in) upgraded from Tech to General.

For the academic year, WØIO has produced 5 new hams into the hobby. Thanks to the efforts of club president Zach (KEØYKK) along with Austin (KØXAS) who led the semester long courses. Austin was one of the ARRL VE's who presided over the session tonight.

The photo below shows 4 of the 5 club members who received their ticket this academic year, and Volunteer Instructor/Part time club secretary/Volunteer Examiner, Austin (far right). Not pictured is Nicholas, KD9WFR, who received his tech license during the Fall semester.

All new club members received pre-programed Boafeng's HT's which were donated by WØIO alum, Bob Lee, WØGXA. We can't wait to hear them on the air.

Left to Right: Paige Harper – KØPZH, Stephen Brugman – KFØMMB, Angela Baker – KFØMMD, Matthew Butler – KFØMLY and Austin (club secretary/instructor/VE) KØXAS.

Nicholas Natarajan – KD9WFR (not pictured)

Now we need to find ways to keep them interested.

-Gawain, President, University of Iowa ARC

A Gridpedition to EN67

Tom NYØV

Last Fall I upgraded my 6m yagi from a Directive Systems 5 element to an InnovAntenna 6 element LFA Max. With a spare 5 element yagi on hand I started thinking about making a “Gridpedition.” My criteria was pretty simple: the grid had to be reachable within a day’s drive, preferably less than 8 hours. The next question was where around Minnesota (EN33) is the “most needed” grid. I narrowed down my list to northern Minnesota and northern Michigan.

In Minnesota that would be grids EN18, 28, 38, as well as 47 and 48. In Michigan the grids of interest were EN67, 66, 76, and possibly 86. In the end, I decided on EN67 for its unique location. This grid is located on the far northern tip of the “upper peninsula” (U.P.) where the only land is in the lower west side of the grid. The rest of the grid is in Lake Superior. This is pictured below:

EN67 with the cursor on Copper Harbor, MI

Plan A:

My Plan A was to camp out at the Fort Wilkins State Par. I obtained a camping spot and a Michigan State Park entry sticker for June 14-16th well in advance. Even with 6 months advance reservations, the camp slots were already limited for a 3 night stay.

My plan was to use my Highlander to hold my Rohn Mast mounted to the trailer hitch. I made an antenna base holding/tilt fixture consisting of a DX Engineering vertical tilt assembly and a 2” mast welded onto a 2” hitch extension. For a rig, I had my Yaesu FT-991A, Samlex 1235 power supply, and a laptop for WSJTx. There was no guarantee of reliable internet connection in the camp, so I purchased a GPS “hockey puck” on Amazon and loaded the laptop with BktTime-Sync (www.maniaradio.it/en/bkttimesync.html)
See QST, Aug 2022, Page 51 for an article by Steve Ford, WB8IMY.

The Fort Wilkins S.P. website showed that the camp slot I reserved had power. But, not to take any chances, I also loaded up a Honda EU2000i generator and 5 gallons of non-oxygenated gas.

As you might imagine, once I loaded up the mast and boom on top of the Highlander, a bike on the back of the car, and then 5 elements, camp gear, food, generator, gas, and tools, the car was pretty much full. I began to feel better that my XYL decided not to go with me!

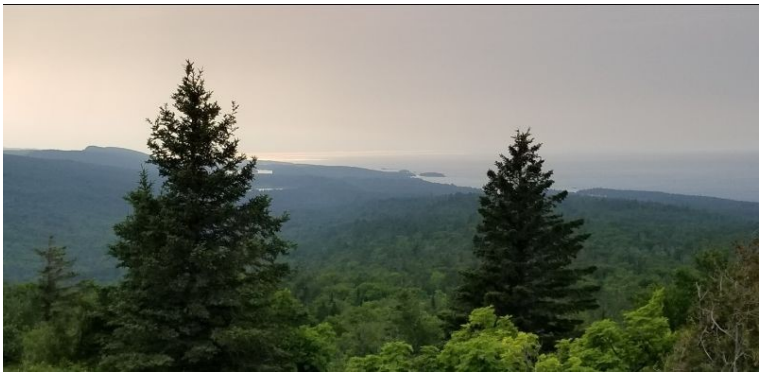
Plan B Gets Implemented

Driving up to the U.P. is a beautiful drive. From my QTH, it’s about 8 hours, plus losing an hour due to Michigan being on EST. Upon arrival at the end of US41 lies Copper Harbor. It’s a marina that is home to a ferry for those wishing to sail up to Isle Royal on the north side of Lake Superior. The town itself consists primarily of some motels, a gas station (with $4.20/ga gas), and a couple of nice bar and grill type restaurants. The summer is a tourist town with many off-road bikers and ATVers.

When I arrived at Fort Wilkins S.P. I got checked in and made my way to my campsite. Immediately it was obvious that Plan A was not going to work out too well. It was doable, but with all the trees and being

right at lake level, I had my doubts that I would have much success working out of there on 6 meters. So, I set up my 3 Sec (3 second set up) tent, threw my sleeping bag in, and jumped back in the car.
Plan B came about from a discussion with Bill Caldwell, NØLNO. He had been on vacation up to Copper Harbor and mentioned Mount Brockway. I found out from the DNR that it's only about 5 miles from my camp, but there is no power and you cannot camp overnight up there. Meaning: a) I needed the generator. ie GOOD! and b) I had to set up and tear down the antenna each day. ie BAD!

But, when I summited Mount Brockway, I was not disappointed. The summit sits 726ft above Lake Superior and has a fairly large parking lot where I could back in and set up with the antenna and generator out of traffic…of which there was very little anyway.



The view from Mount Brockway looking south-westerly towards Duluth.

Having settled on Plan B, I was pretty confident that my 100watts to the 5 ele yagi was going to be able to satisfy the Fred Fish Memorial Award (FFMA) chasers…as long as 6m propagation was there.

Mt Brockway sign showing the location of the summit at the top of the peninsula.

Working Conditions

An unexpected aspect of this Gridpedition was the working conditions. I was now going to be sitting in the back seat of my Highlander all day with a laptop on my lap and a generator humming along. On the positive side, I had food and water as well as a public out house with a beautiful view in the afternoons…it was like field day arriving early.
Another unexpected working condition was that in the morning the temperature was hovering around 40 to 42 degrees with a wind chill

around 35 degrees. Up on the mountain, it was even windier. Therefore, the building of the antenna each morning was pretty cold on the hands. Each morning till afternoon there was fog. But finally each day it warmed up into the mid 50's. Each evening I broke down the antenna and went into Copper Harbor for a meal and an "807."

Assembly of the 5 element yagi morning ritual.

In the back left seat with the FT-991A to my right. (backward selfie)

Operating the 6m Band

I had a texting link with Bill, NØLNO to get the MSK144 and FT8 set up and make sure I was off and running. Bill was my first QSO. Each day I would start out on MSK144 on 50.260 and when that mode played out, I would switch to FT8 on 50.313. I had a list of four guys that had emailed me to ask specifics about my operation as they needed EN67 for FFMA. One was Lee, KY7M who needs only two more grids and EN67 was one of them!

Antenna deployed and generator running.

Most of the QSO's would be to the south and southeast. I was working grids DL, EM, and EN with regularity. I had several Colorado DM grids right down the I-25 corridor. However, there were not that many FN to the northeast. Ditto for the southwest as I had no QSO's with CA, NV, UT, or AZ. That's just the way the propagation rolls on 6m! Within 10 QSO's I had one of the four who needed EN67 in the log: W5AJ in DM82. Later in the day I heard KY7M and sent -9 but that was all we managed. He couldn't decode my report. For the next day and a half we made a sked to meet up on 50.303 so we made sure we had a clear QRG. But, no joy. I also had KC4HW on my watch list, but no joy with him either. Six meters can be very frustrating on both ends! I did finally work WB4JPG in EN71 for a "new one" for him. There were probably others who worked a "new one", but they had not contacted me beforehand. On the afternoon of the second day I had an opening to the northwest and made QSO's in the CN, DN, and DO grids.

At the end of the two day operation I had worked 154 into the log and had another 22 where we just could not complete the QSO due to conditions. Running with 500 watts could possibly have made the difference. That change would also mean a bigger generator, a trailer (or pickup truck) etc to go along with having more "stuff" along. In the end, the 100watts was good enough to work KH6HI in BL01! He was booming in with a +5 signal. I also saw KH7TV, but he didn't call me. He later emailed saying he didn't know what FFMA was at the time.

I think there is still a lot of demand out there for EN67, so I am not discounting a return trip up to Mount Brockway. I think next time I will opt for a hotel room, and maybe that amplifier!

Tom, NYØV

Fighting Power Line Noise...and Winning!

By Tom, NYØV

Reprinted with permission
The Grayline Report TCDXA

I have (had) a strong (S-7) level of noise to the SW on 50.313. This really sucked as several VK/ZL and 3D2AG have been spotted lately! I found that the signal was strongest on 49mHz and about 3MHz wide noise. 49mHz is an RC control part 15 frequency, but with this strong of a signal, I had my doubts that the source was an RC model transmitter.

I used my FT991A on a battery and a 2m whip in my car to find the noise to be loudest 1/2mi down our road. I then put on the 3 element Arrow yagi and isolated it to a power pole.

I called MiEnergy and within 3 hours (awesome!) they were at my door saying they cleaned all the contacts and ground on the pole and didn't find anything. I took them down to the shack and showed them that they had not found the root cause....as they could now see on the radio.

At that point I volunteered to take the mobile 991A set up down with them to the pole. At the pole they went back up and one-by-one isolated the arrestors. Boom. Signal went away. They replaced both lightning arrestors. Problem solved!

Arcing occurred between two of the three components in this insulator. It was a significant source of noise until it was replaced by utility personnel.

We took a look at the arrestors and one of them had a crack and small hole at the bottom and the other had a deformed bottom seal. It looks like they took a lightning hit that had partially taken out some of the arrestor(s) to where at least one of them was arcing. This was a win-win situation for both me and MiEnergy. The guys told me that all they usually do is run their AM radio to find arcs. That is not much of a tool-set! I offered that If they had another situation where they could not find a noise/arc source to feel free to contact me. I figure having a good relationship with the power company is a good thing when you have power related noise issues.

Now bring on the VK/ZL/3D2 guys on 6m!

Member News

Field Day 2023

A few shots from the CVARC / CARC field day operation on the lawn of building 120 in Cedar Rapids.

It wouldn't be field day without having to do field repairs. Fixing the 40m beam for the phone station.

Guy, NØMMA trying to cut himself while Wyatt ACØRA looking on.

Bill, NØLNO doing something without a microphone.

Dave, WAØYDO operating with a straight key.

...and finally: This sums up the aftermath of a several hour game delay due to rain.

Thanks to all of the hams who organized and participated in the event.

Logbook

DX Challenge

Jim, NOØB reports that he is at 250 Mixed DXCC and his number is now 1223. He also reports a new one: FJ/K3TRM, St Barthelemy. *"I'm very much small potatoes, but I'm happy with how well I'm doing recently"*. Kudos Jim

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CQ Test

QRM

Solar Saturday at the Eastern Iowa Observatory and Learning Center

The Cedar Amateur Astronomers invite you to Solar Saturday on

July 22, 2023
3 to 6 p.m.

at the

Eastern Iowa Observatory & Learning Center (EIOLC)
1365 Ivanhoe Rd
Ely, IA 52227 (Click to see Map)

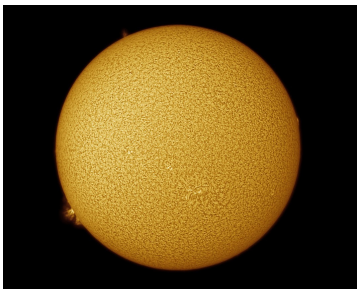
Cedar Amateur Astronomers (CCA) member Carl Bracken will shed some light on solar cycles and the increased solar activity we are experiencing during the current solar cycle at Solar Saturday on July 22. This annual event will begin at 3 p.m. with solar viewing outside and displays and interactive exhibits inside the learning center.

Solar Cycle 25
For over 400 years, humans have been observing and documenting solar activity and found that it rises and falls in roughly 11-year cycles. We are currently on the upswing in Solar Cycle 25, which has yet to peak.

For example, recently our Iowa night skies were graced with colorful, pulsating curtains of light called the aurora borealis–the northern lights. It's unusual for the northern lights to extend this far south, and it is especially rare for aurora borealis to be so bright on multiple occasions in Iowa already this spring.

The northern lights are directly tied to the Earth's magnetic field and how it reacts to charged particles directed toward Earth from solar flares and coronal mass ejections.

Presentation
In his presentation, Bracken will discuss the higher-than-normal solar activity projections for Solar Cycle 25, which, so far, have proven to be accurate. He will answer questions solar activity watchers have been asking: When will this cycle reach its maximum? How long will it last?



Bracken will discuss and chart sunspots as they rotate across the face of the sun in increasing numbers and intensity. He will provide high-resolution images from both terrestrial and orbiting platforms gathering information on our nearest star. The picture of the sun shown here

was taken by CCA member Jim Bonser.

Weather permitting, there will be live sun monitoring from telescopes equipped with special solar filters, allowing us the rare opportunity to look at the sun safely.

After Bracken's presentation, you are invited to further enjoy the telescopes and activities outdoors, along with free hot dogs and lemonade provided by Cedar Amateur Astronomers.

Solar Saturday, like all our public events, is free of charge and open to all ages. In addition, our younger guests will receive a free raffle ticket for our two grand prizes of a telescope and a pair of binoculars.

Although the presentation will be at a high school or above level, the observatory includes a number of interactive displays that will hold the attention of elementary school students as well as tours of the facility including the telescope domes. All ages will be able to look through the sun monitoring telescopes.

For more information on the Observatory and the Cedar Astronomers, check out the website at Cedar-Astronomers.org.

The Observatory and Cedar Astronomers are 100% operated by volunteers, and welcome new volunteers to perform a wide variety of tasks.

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