

# **Eastern Iowa DX Association**

An ARRL affiliated club - Established 1975

# In this issue July 2018

President's Message

Club News

Member Spotlight

### DX News

Jerry's solution to slow DX

### **Featured Articles**

- Jurassic Journal A look back in time
- Effective DXing with FT-8
- FT-8 Love it or hate it

### Member News

- Dayton 2018
- If it's worth doing...

Logbook

CQ Test

## President's Propagation, Pontifications and Prognostics



Joe Hungate K8OM

On August 4th and 5th the ARRL Midwest Division Convention will be hosted by the Cedar Valley Amateur Radio Club (CVARC) at the Linn County Fairgrounds near Central City, Iowa. CVARC is also promoting this as the 1st Annual Midwest STEM TechFest.

This ARRL Convention and TechFest should attract a lot of hams from the Midwest area and also bring in a lot of technically Iowa QSO Party

### **QRM**

• ARRL Midwest Convention

Club Officers:
<a href="President:">President:</a>
Joe Hungate K80M

Vice President:
Rick Hadley WØFG

Secretary:
David Christ KØLUM

<u>Treasurer:</u>
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



View this email in your browser

oriented non-amateur individuals. The Techfest will be replacing the annual CVARC Hamfest that has been held at the Teamsters Hall in Cedar Rapids for many years.

EIDXA will have a booth in the main exhibit hall and this will be a great opportunity for our club to introduce ourselves to potential new club members. The exposure to potentially hundreds of new members is quite exciting and we need to capitalize on this opportunity to its fullest. As you are well aware, our membership needs the influx of new / younger DX and contest operators to help us grow and maintain the excellent support we provide to DXpeditions.

There at least two very simple things you can do to support EIDXA at the upcoming ARRL Convention and Techfest:

- 1. Volunteer to spend a couple of hours during the event in the EIDXA booth and talk to visitors that come to our booth. Just let them know what we are all about and invite them to consider joining our club. In other words.... "Talk Up EIDXA". You don't need to be an expert on DX'ing, Contesting or EIDXA. Just do what all hams naturally do and talk to your fellow amateurs.
- 2. Bring a friend / potential new member by our booth and introduce them. I'm sure you'll run into several people that are already at the convention so just bring them by to say "HI".

  This convention / techfest has all of the earmarks of being a great event with a large turnout.

With your support we can also make this a great event for EIDXA. Hope to see as many EIDXA members as possible at the convention.

73, Joe - K8OM

# Musings from the lunatic fringe

I've been going 100 mph since April and it's already July. Before you know it, we'll be into harvest season again. With my station QRT while I update the lightning protection system, I feel out of touch. Talking to others though, DX seems a bit slow.

I was hoping we'd have a normal "spring" and would have had the lightning protection project done by now. I'm close... Pictures later in the newsletter.

I've taken a new job (still at Collins) - With Rick's (NØYY) retirement, I agreed to take over his role. Lots of travel to DC, Montreal and Brussels. Operating time will suffer somewhat, but I can still put together the newsletter.

There are two "lowa" events not to miss: The lowa QSO party in September and our local hamfest (August) is the ARRL Midwest convention. It's sure to be a great event.

More info here for the hamfest.

Enjoy your summer!

### Club News and Administrative Items

## Minutes of the EIDXA meeting October 14, 2016

Minutes of the April 13, 2017 EIDXA meeting

Joe, K8OM called the meeting to order at 7:30 PM.

There were 54 persons in attendance.

Introductions were made all around.

Motion to accept the January minutes was made and accepted. Minutes can be read on the EIDXA web page.

Treasurer's report was given. Essentially no change in finances since the January meeting.

Tom, WB8ZRL made a motion to contribute \$100 to Club Log. Approved by voice vote.

Juerg, NØPP, Rodney, ADØEH and Jim, WGØU were accepted as new members, congratulations.

DX cluster report: Tom, WB8ZRL reported that the cluster is operating well on a new computer.

Web Page: Craig, KØCF reports that the web page is updated weekly and operating well.

Repeater committee: Steve, NUØP is head of the repeater committee and the trustee license has been transferred from Joe, WØMJN to him

A picture of our club banner was shown from 3B7A.

Jim, NOØB, presented Elmer awards to Rich, W3ACO and Craig, KØCF.

There was a discussion of club participation at the ARRL Midwest convention in Central City Aug 4 and 5. For information contact Bob, NØYWB.

There was a discussion of next meeting venue to be held at the Rockwell Collins facility, and visit the radio museum.

After the break, Glenn, WØGJ, gave a presentation of the adventures and experiences of the "failed" DXpedition to Bouvet Island. An excellent presentation with good humor. We are all grateful for their safe return.

...and Jim NOØB had a couple of surprises...



Craig KØCF receives his Elmer award



Rich W3ACO receives his Elmer award

# **NEXT MEETING**

# Friday July 13

6:30PM

Rockwell Collins

Bldg 120, South entrance (see map)

### PRE-REGISTRATION REQUIRED

#### From Joe:

The next EIDXA club meeting will be held July 13 at the Collins Radio Museum. Here's additional information on the meeting and how to get to building 120.

- If you are planning on attending the meeting please email me
   (radiojoe\_k8om@msn.com) and let me know so I can add you to
   the list for a Rockwell Collins visitor badge. I must turn this list
   into Rockwell Collins Security a day or two before our tour so
   please don't wait until the last minute
- A government issued photo ID (drivers license is fine) must be presented when picking up your visitor badge
- Please meet at building 120 entrance (see map) between 6:30 p.m. and 7:15 p.m. to pick up your badge and be escorted to building 120 cafeteria by a Collins Radio Museum tour guide
- The radio museum tours will start promptly at 7:30 p.m.
- There is no audio / visual equipment in the cafeteria so we won't be having a normal business meeting. If needed, we can discuss any last minute business that may come up at 7:15 p.m.
- The cafeteria won't be open for food service but there are a few vending machines where you can purchase something to drink.
   There are also restrooms in the cafeteria.
- Absolutely at no time can a visitor leave the museum area or museum tour with out being escorted by a tour guide or Rockwell Collins employee!
- Photographs and / or video may be taken within the radio museum

The map below should help you locate building 120 and the correct entrance

- Building 120 is located on the east side of C Avenue between Collins Road (to the south) and Blairs Ferry Road (to the north)
- Rockwell Collins has posted signs directing visitors to the various buildings so just look for signs directing you to building 120

 The entrance we must use is on the south side of building 120 as shown on the map and there is ample parking on that side of the building

That's about it. If you have any questions or if additional information is needed please let me know.

The Collins Radio Museum organization and Rockwell Collins have been extremely cooperative and gracious in allowing EIDXA to tour the radio museum for our July club meeting!

Here is the link to the Collins Radio Museum website that has a lot of very interesting information and history on Collins Radio: <a href="http://rockwellcollinsmuseum.org">http://rockwellcollinsmuseum.org</a>





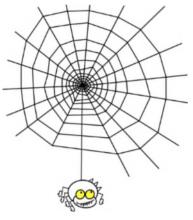
### **Card Checkers**

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-checkersearch

# Member Spotlight

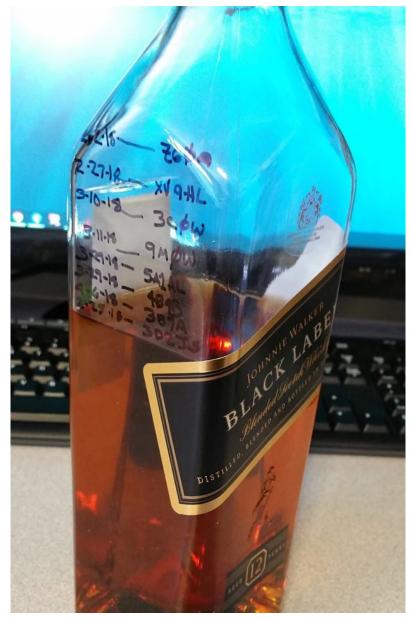




Nothing to report this month. If you haven't been featured in the newsletter, let me know. We'd love to do a story.

# DX News

Jerry's solution when DX is slow...



Jerry, WWØE, has found a way to keep up the pursuit of new DX...

Below is an email sent out on the SMC refelctor with some tips on working DX with FT8. Enjoy - Ed.

# Effectively working DX with FT8

The little check boxes mean obscure things in WSJT-X FT8 Mode:

 The "Tx even/first" check box doesn't really do much unless you are calling CQ. There is a tradition among VHFer's that the westmost station transmits on the even intervals (1st and 3rd) and the

- eastern station on the odd intervals. This is left over from analogmode meteor-scatter and EME schedule protocols. It doesn't really matter on FT8 unless you are working a schedule with someone. When you double click on a station to call them, FT8 figures out the correct sequence transparently.
- The "Call 1st" checkbox, if checked, automatically calls the first station decoded after you call CQ. If the DX station has this checkbox set, he will call the first station he decodes in a pileup, too. The subtlety with this checkbox is that FT8 appears to decode from the bottom of the band up (although this isn't documented). Calling the DX on the bottom of the band will get you decoded first in a pileup.
- The "Hold Tx Freq" box:

#### Rant on//

This checkbox is the root of all evil. Leave it unchecked and you will always transmit on the called station's frequency. That will put you exactly on top of every other noobie on the mode that didn't check the box and is calling the same station. Not checking this box will cause your friends to shun you at hamfests by going across the aisle when they see you coming. They will call you "Lid" and "Good Buddie" to your face at club meetings. There will even be dark mutterings behind your back besmirching you and casting aspersions on your operating skills. Just check the box... You don't need the humiliation!

Split operation is the heart of FT8. WSJT-X decodes every station that it hears and puts the results (if you don't have the CQ only box checked) up in the "Band Activity" window. Any time your call or the call of the station in the "DX Call" dialog box is decoded it will show up in the "RX Frequency" window. This means that you, or the station calling you, don't have to be on the same frequency, or even stay on the same frequency during the QSO. You, or the other station, can roam the band and you won't notice the difference. Often, when the other station seems plenty loud but is not decoding you, you are likely being QRM'ed and often just sliding your xmit frequency a bit will complete the QSO. There is no benefit gained by calling close to the other station's transmit frequency. There is a lot of benefit from not being QRM'ed, so when you come up on a band, listen for a couple of cycles before shift-clicking on a blank spot on the waterfall to set your transmit frequency.

There are some configuration setting that you should pay attention too as well. They are in the "File/Setting" tab:

 On the General tab, check "Double-click on call sets Tx enable" and "Disable TX after sending 73". Make sure you have the full 6-digit grid identifier filled in, so PSK Reported can accurately locate you on the map. Checking "Show DXCC Entity and worked before status will color-code the receive windows with station

- worked status. It's handy.
- On the "Radio" tab, set split operation to "Rig" or "Fake it". "Rig" uses you VFO-B to transmit on. "Fake it" transmits on your VFO-A. There will be a lot of thrashing and beeping every time you transmit, as WSJT-X alters your RF transmit frequency to modulate your rig in the audio "sweet spot". This avoids issues with audio harmonics and transmit equalization. Run "CAT" PTT, "Rear/Data" Transmit audio source, and "Data/Pkt" mode, if possible.
- On the audio Tab, check both "Remember Power Settings By Band" boxes. This saves a lot of repetitive control-fiddling.
- On the reporting tab, "Prompt me to log QSO" seems to work the smoothest. Be sure to check the "Enable PSK Reporter spotting" so you show up on the PSK Reporter map.
- On the "Frequencies" tab, putting in your antennas on a band-byband basis will display them in the station info bubble in PSK Reporter.

Turn off your speech processor and keep your drive in the "ALC OK" Zone on the rig.

The mysterious "DT" column in the receive windows stands for "Differential Time". This is a measure of how much different your computer clock is from the other station's clock in seconds. FT8 will tolerate a couple of seconds of DT, but will not decode if it is more. If you look down the decode window and see a lot of DT's over +/- .3 seconds, you should calibrate your computer clock. Microsoft's autoclock-adjust isn't good enough. Download and install MeinbergNTP and forget about it.

WSJT-X V1.9.1 is current, as of a couple of days ago. You will need it to run FT8 DXpedition mode when KH1 comes up soon...

73, Ted K9IMM

# FT-8 - Love it or hate it Joe K8OM

Love it hate it, FT8 has made this years E-skip season a blast on 6 meters! If you've ever worked E-skip on 6 meters you're quite aware that you can have some great propagation for a couple of minutes and then its gone for minutes, hours or days. If the E-skip spot light is on you then you can work some pretty good DX but if its not then forget it.

No matter how great of an antenna you have or if your running a gazillion watts but if your not in the propagation spotlight you won't make any QSOs.

It seems the east coast, Florida and Texas have been blessed with receiving the best E-skip propagation so far this year. Stations in those states have been working Europe almost daily. They have also had openings to Israel, Kuwait, Western Sahara, Cape Verde and Mali. As far as I can tell, the Midwest of the US hasn't been quite so lucky.

Give 6 meter FT8 a try..... you never know what may pop up. Here are a few DX stations I've been able to work with a simple 5 element yagi at 40 feet running 80 watts output (occasionally kick the amplifier on):

XE2JS, CT1ILT, EA4EJR, VP9I, WP4AZT, YV5JLO, PZ5RA, EA8DBM, EA9VQ, HI8DL, HI8CSS, OA4TT, F4HER, GW7SMV, EA2XR, CU3AN, JA9SJI, 4U1WB and VE1SKY.

### One final tip...

Always call lower in frequency than the station your trying to work is transmitting on. Usually lower the better but, of course, on a clear frequency. The reason is that the JTWS-X software decodes from the low end of the spectrum to the upper. You can observe this by looking at the "band activity" window and look at the frequency column. If the station your trying to work has "call first" selected the software will latch onto the first station successfully decoded which, at least in my experience, is the lowest in frequency. This has worked for me several times when there's a mess of guys calling him. If he doesn't have "call first" checked then it's a crap shoot and he's probably picking the strongest station. I've also noticed this when I've called CQ and a couple of stations reply. The software has always picked the lowest in frequency first and connected to him. I can't guarantee this is true 100% of the time but it works for me.

# **Feature Articles**

#### Jurassic Journal

 A look back in time -Tom Vavra WB8ZRL

### Twenty years ago, the summer of 1998

Seven Italian operators were active (160-2 metres, all modes) as 1AØKM from the Sovereign Military Order of Malta (SMOM) between

25 July and 3 August.

9K7POW was activated for three days to remember their prisoners of war (POWs) still being held in Iraq.

Roberto, EA4DX, activated 3D2DX/p from Rotuma. The upside was that he was very active for almost 3 weeks on many bands. The downside was no CW.

TL5A was PA3DZN, and was very active all summer, plus the next 5 months too. His log had almost 74K QSOs on all HF bands.

WØYG was active as A22/WØYG for two one week periods. Between those two weeks he operated as Z21/WØYG. Charlie was a professional wildlife photographer who handed out may low band QSOs while on his business trips. He was the DX Advisory Committee representitive from the Rocky Mountain Division for many years. And perhaps the most significant, he taught me a lot about working on towers.

For the first time ever, real time logging from an amateur radio DXpedition was available on a web site. The Prairie DX Group actived FP/N9PD from Miquelon Island between 26 August and 2 September. Contacts were posted within minutes to their web page.

H4Ø, Temotu Province, became an entity (I still want to say country). The ARRL Awards Committee accepted the recommendation of the ARRL DX Advisory Committee. The effective date was backdated to contacts made "beginning 23:59 UTC on 31 March, 1998 and after." They could not bring themselves to say "April 1st."

BV4FH (a member of a previous trip to Pratas Island, BV9P) announced that "they are very close to getting the OK to return during the fall of 1998. They did activate BQ9P. Many of us wish someone would activate Pratas again.

VQ9QM was on the air by Dale, W4QM. Chagos was so much easier to activate before the Navy tore down the club station.

Dominik, DL5EBE visited Monk Apollo, SV2ASP/A and guest operated for several weeks in September. I guess this was before guest operators in Mount Athos were not allowed. Or maybe no-one had complained yet.

Ten years ago, the Summer of 2008

The conditions were not very good. The Solar Flux Index ranged between 65 and 69. You cannot get much lower. The A-Index was between 0 and 29.

NQ7R, Tom Kramer, was active for two weeks signing C91TK. KØVSV was Tom's previous call when he lived in Muscatine. He was an EIDXA member.

David, GØOAB was active as ZC4DG for one week, mainly on 20M.

Didier, F5OGL, was aiming for an FR/G dxpedition in the Fall of 2008, but had to wait another year to activate FT5GA.

Tom, ZD7X, left St. Helena after eleven months. He made over 45,000 QSOs on all HF bands. We now work Tom as he signs KC0W portable at many of the semi-rare entities.

The first hint of permission to activate KP5, Desecheo, was announced. They activated K5D in February, with KØJGH and WØGJ as team members.

A survey was conducted by The "Golist, QSL Manager List" (remember them?) to determine the Top 5 QSL Managers. The top choice was W3HNK. No arguement there!

OJØB was active from the "damp and cold lighthouse" on Market Reef for one week in September. During the Scandinavian Activity Contests they used one station for the contest, and the other exclusively on 160, 30, 17 and 12 meters. I was pleased to log them on TB, but then NRØX burst my bubble when he told me he had not heard them acknowledge. So I got to chase them again. And log them again.

### **Member News**

### Dayton 2018

Some pictures of our members, friends and other wierd people at the center of the nerd universe



Have they been drugged??? (photo SFØF)



The Radio Farm (photo SFØF)



Typical hamfest weather (photo: SFØF)

# "If it's worth doing, it's worth over-doing" Bob WØGXA

Those words from the sage Lawrence Robinson have been rattling around in my head for the past nine months since I started planning a lightning protection upgrade.

After the presentation by Dale Svetanoff, I had him do an analysis of my current system. The primary recommendation was to bury or shield my elevated coax cables.



New single-point ground unit

I gave a lot of thought to the single-point ground (SPG) unit at the house. It had to pass muster with my XYL and have sufficient capacity for my planned antenna configuration.

Six coax cables and two control cables enter the bottom. The coax enters into an inner aluminum box. Why? I wanted to minimize and possibility of coupling from the unprotected to protected side. As KCØODK was fond of saying - *If it's worth doing, it's worth over-doing.* 

In the upper left are two 8-line control cable suppressors. When I popped open the case of the unit on my tower, I realized I could make my own. They are transorbs in parallel with 0.1uF caps. Less than \$20 in parts.



Bottom view of box



The slot on the right is for the 6" wide copper strap that will be attached to the ground system



Laying out the conduit - 140' run



I could dig 20' per hour!



3" PVC going into the ground. Designed with two low spots and set into a gravel bed.



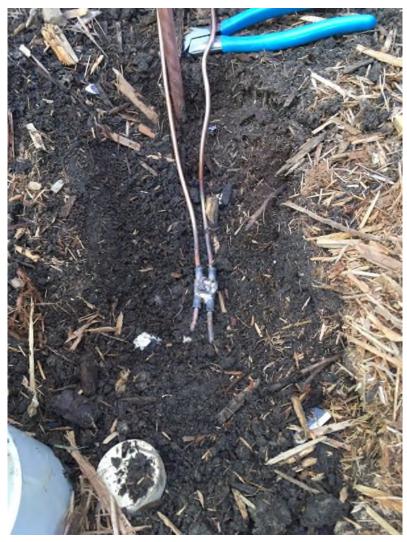
Taking a break. #4 of ~25??



Once you know the secret of lighting Cadwed oneshots, they are pretty slick



First 90' complete. 50' remain.



These 4-wire Cadwelds are handy for tying in the lightning panel and the house ground ring



Ground hooked up. 6" copper strap connected to ground rod, backed up by 4ga copper wire.



I made a tool to press the ground wire in a slit in the sod as I worked my way around the house. I'm sure this is easier to do in new construction before they backfill a foundation.



# Congratulations to: Craig, KØCF

If you're not aware of the requirements, they're pretty extensive. From CQs website:

This is the ultimate award for the prefix DXer. The requirements are 1000 prefixes in Mixed mode <u>and</u> 600 prefixes in SSB <u>and</u> 600 prefixes in CW plus all 6 continental endorsements, and the 5 non-WARC band endorsements (80-10 meters)

# Logbook

### Logs

### KØAFN;

RTTY- 3B7A, JT5DX, TJ2TT, ES5G CW- 3CØW, NP2J (160), JT1CO, XV1X, XW4XR, JW2US, H4ØD,C96RRC, C98RRC SSB- H44R, YJØAG, 3C0W, 7Q7EI, VP8LP, 4B4B

# **CQ** Test

# Contesting by Rick

Rick Heinrich NØYY

This column is QRT this quarter. Rick has sold his home in Marion

and has moved to southwest VA; sheep and all.



# 2018 Iowa QSO Party



Be sure to get on the air and support the Iowa QSO Party.

September 15, 9AM - 9PM local time.

New this year, FT8 is allowed.

Click here for the detailed rules. Hope to see you on the air.



Don't forget about WRTC. It's a short contest that's always fun.

Contest starts Saturday, July 15 at 12Z

Rules here

**Upcoming Contests:** 

Click here for upcoming contests

## Scores and Soapbox

From KØCF: I saw my call in CQ Magazine with the 2017 CQ WW CW contest results... in the "Golden Logs" sidebar! #3 world unassisted golden log. I am in a state of shock over that one - I've never done that before and most likely never will again. I'm not even that good of a CW op. Congratulations! - Ed.

## **QRM**



2018 ARRL Midwest Convention 1st Annual Midwest STEM TechFest

August 4 & 5, 2018 **Linn County Fairgrounds** 201 Central City Road, Central City, IA Just 17 miles North of Cedar Rapids

Not to be missed!

More info here







Copyright © 2018 EIDXA, All rights reserved.

Want to change how you receive these emails? You can update your preferences or unsubscribe from this list

