

## **Eastern Iowa DX Association**

An ARRL affiliated club - Established 1975

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REDACTED

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I can't believe that it's June already.

Our condolences to AL KØVM who lost his XYL.

Joe, WØIW has resigned as vice president, the club is looking for a replacement. Joe thanks for your contributions to the club.

Terry WØAWL continues to sell items from WB8ZRL's estate, he has a table reserved for the CVARC hamfest. Terry will need help manning the table.

DAYTON: Val drove me to
Dayton, it appears that she
wants to go next year, I don't
know if I can behave two years
in a row. I spent a fair amount of
time in the forums, W3LPL's
presentation on 6 meter DX
propagation was quite
interesting. His antenna height
recommendation is 30 to 50 feet
and no higher than 70 feet. The

QRM

Club Officers:

President:

Gayle Lawson, KØFLY

Vice President:

**VACANT** 

Secretary:

George Cooley, NG7A

Treasurer:

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Repeater Committee:

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Repeater: NØDX/R

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DX forum featured a very interesting presentation from TZ4AM, the pictures reminded of my wonderful (NOT) trips to western Africa.

June is here and the 6 meter DX season has started, I've worked 5 and confirmed 4 new entities the first week of June. During the VHF contest 6 meters opened to JA, I worked 14 JAs.

There have been several DXpeditions on the air, the VU4 was an ATNO.

Thanks to the committee members who perform behind the scenes to keep the club running.

The next club meeting is July 22, the program is 50 Years of the NCDXA presented by WØGJ. The meeting will be held at Mercy Cancer Center (yes live meeting). The doors will open at 6:30 PM. Masks will be required.





Facebook El

# Musings from the lunatic fringe

Summer is finally here and I hope everyone finds time to get on the air. There have been some pretty good days on 10 and 6 meters. I'm looking forward to improving conditions for the next ARRL 10m contest.

The Collins ARC put on a very good Field Day operation. Hopefully there's a repeat next year. It had me thinking of my first in 1977. It was a lot hotter and smudging of the log sheets was a problem.



This is my first time using the Yaesu FTdx-101. Very nice radio.

Be sure to check out the club news. We have another new member and there's a leadership opportunity open to you (VP).

Keep those cards and letters coming. The newsletter is as good as you make it.

#### Club News and Administrative Items

## Vice President Opening

Joe, WØIW has resigned as vice president, the club is looking for a replacement.

Contact Gayle if you're interested.

Thank you Joe!

# New member

Phil McMillan K9ZK

Welcome!

# **NEXT MEETING**

July 22, 2022

Mercy Medical Center

(Yes, an in-person meeting - Masks are required)
Social Hour 6:30 PM
Meeting & Program 7:30 PM

Meeting and location information here

Program: Glenn will talk about NCDXA 50th anniversary



#### **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-checkersearch

## Member Spotlight

# **Barry Buelow**



Since I'm old now, I'll have to write about when I was young!

I've held the following callsigns over the years:

WNØRJT 1967

WAØRJT

KH6HOY 1971

WØIY

AH6RJT USAF MARS 1970

#### **Operations**

Al6AIR: I operated '6AIR from Hickam MARS station 1970-1973 running LOTS of phone patches to SEA. I worked in the crypto maintenance shop on 2nd or 3rd shift. If there was no work (most of the time) I'd go to the MARS station and run on 14.832 with SEA. I mostly enjoyed running patches, but had a few sad cases too.

#### **DXina**

In the early 1970s, the bands were HOT. From my dipole on 8th floor of an apartment I could work lots of good DX. On most days, 10m was open to JA.

#### Contesting

Rod KØDAS and I were part of the USAF MARS group that ran Field Day from Bellows AF Station. It is on the eastern shore of Oahu. We put up a Rhombic pointed at the US mainland. Four full waves on 20m on each leg. Then we ran a wire over the sand out to the water and threw it in for ground. Always had pileups on 40-10. For 75m, we put up a 3 el wire Yagi. Got lots of good signal reports! Those were the good old days!

I've run the CQWW Phone from the Tripler Army Medical Center MARS station. I'm sure many of you have seen Tripler, located well above Pearl Harbor. It used to have a well equipped station with a TH6.

I also operated CQWW from USMC Camp Smith MARS Station. We ran mulit-multi with an S-line and KW on each band and a Drake for 160m. At the start of the contest, I was set down on 10m and told to run JA's. It was an INSANE pileup. One of the Navy chiefs spoke Japanese and came over, told the crowd to call by number JA1, JA2... That worked amazingly well. This was long before computers and logging was by pencil. How did anyone get the right score?

My brush with greatness came at the same time. Two Navy chiefs were set up to go to Kure Island for the contest. Then the Navy announced the annual tests for promotion were to be given the day after the contest. It would be career limiting to NOT take the test, so the chiefs couldn't go. As alternates, my good friend Gary KH6GMP and I were to go. We had KWM-2s and 30L1's in suitcases all set to go.

There was a C-130 from Hawaii to Midway twice a week (mail run). Kure had 2 helicopters, one of which would fly to Midway one day and return the next. The other helicopter was for rescue if necessary. The week before the contest, a helicopter took off from Kure Is., the engine sputtered and it came down in 3ft of water in the lagoon. No injuries. However, that killed my chance to be a (temporary) world famous DXpeditioner. I'm sure the KWM2 owners were happy to NOT have the rigs dipped in salt water! Here (click here) is a link to the CQWW results with mention of KH6HCM (Ho Chi Min) in the text. The 3.7M score easily won Oceana; it would have been #4 in US; and top 10 in the world Multi-Multi!

In recent (pre-Covid) years, I've enjoyed contesting at NØMA. It has the right amount of contesting and party atmosphere. Honestly, I would have expected more stations in Eastern lowa contesting.

I have a tower now (55ft tubular crankup) with a Sommer beam (German) for 20-15-12-10. It works very well, quite broadband, no traps. Next is to add a 6m beam on top. Bury some PVC tubing and a few more refinements. My wx station sensors are on top. I'm working on a WiFi remote for the rotor. Most of my efforts are into doing little projects with PCB's from China. It is alternately enjoyable and frustrating.

I also enjoy playing with VHF/UHF stuff.

Barry

#### **DX News**

### REDACTED

Don't ask me... ask Glenn :-) -Ed.

#### **Feature Articles**

## A new beam...

Adam, AEØDX

Installation of a Hex Beam for 20-6M - solving for a challenging lot and a tight supply of commercially-available "roof towers" I ended my new member intro in the last newsletter with planned next steps for my station - including adding a hex beam. Since there is already a vast breadth of literature on the radiation patterns and mechanical designs of the beams themselves, here I'll focus on the process of finding an appropriate site and designing and building a mounting system on a relatively difficult and compact city lot. This was a truly gratifying and educational project for me including many personal 'firsts.' I'm pleased to now be among the many happy ops using a K4KIO hex to chase DX and improve the SO-LP contesting experience.

#### The problem set

My house sits on a steeply-sloping lot and most of the property is heavily wooded. There is one conceivable location for a push-up mast or tower, and it has several drawbacks: (1) from that location - sharply downhill from the front elevation, 40-feet of height would be just barely enough to clear the roof toward the front of the house, (2) building a tower there would require removal of mature trees that provide essential shade for our main living area, and (3) it's square in the productive agricultural space of XYL Sarah's garden -AND-surrounded by buried gas, electric and cable utilities! All of these could

be solvable with unlimited time and money - I don't have either. Moreover, long-term maintainability and ease of access is a key requirement for me. I needed to find a mounting solution that:

- 1. Allows for most of the characteristic gain and front-to-back performance of a hex beam
- 2. Is easily accessible for routine inspections and repairs
- 3. Preserves the functioning of our home, garden and bank account

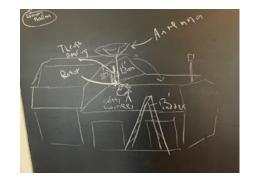
#### From the kitchen chalkboard to implementation

Given their relatively light weight, one popular mounting solution for hex beams is to use roof towers from the likes of Glen Martin (no longer in production) or W8IO (impacted by supply chain and demand issues). My maintainability requirement also led me to a strong preference for mounting on my garage roof, as opposed to the second story - the conventional location for a roof tower. Locating a traditional 4-foot or 8-foot roof tower over the garage struck me as counter intuitive, yet I knew there had to be a way. Then while daydreaming at my son's baseball practice, the idea was hatched ... maybe I could adapt a proven ground-based hexbeam mounting strategy for a wall-mounted application. The basic idea is:

- Mount a rotator on a homebrew metal bracket at the bottom of a length of 4" x 4" lumber
- Mount a thrust bearing on a similar custom bracket near the top, and use as much mast height and guying as needed to achieve the required Height Above Terrain

What if I could build such a tower base and affix it to the sidewall of the house, instead of into a deep concrete base on the ground? Would there be any way to bolt it securely to the house frame? How much structural reinforcement would be necessary? How would I even find the studs from the outside? Would this destroy the new siding?

My first action was to draw it up on the kitchen chalkboard and pitch the idea to Sarah (original drawing pictured at right). One of her top concerns was keeping me off of the roof - so you'll note the safety harness and new 12' ladder in the drawing. From that drawing I made more detailed plans, and within a few days convinced myself of the viability and began procuring materials. For the beam itself, I elected to go with a kit from K4KIO, all of the mounting materials were purchased from local hardware and big box stores. It was time to begin construction.



#### Construction and Testing







A detailed play-by-play is beyond the scope of this article - feel free to contact me if you're curious or may consider a similar project and I'll be glad to share more. The basic approach was to get all of the structural, grounding and cabling provisions done and tested before assembling the antenna itself - i.e. I saved the most fun parts for last. All-in-all, given my relatively limited mechanical and electrical background the project was challenging, rewarding and full of firsts and new additions to the QTH including:

- Installation of a new safety harness system for comfortable and routine roof access
- First time using and cutting aluminum angle stock and a new carbide-tip saw blade!
- First time drilling through structural aluminum new-to-me drill press and techniques
- Addition of structural reinforcement to the house frame from inside the attic into which the 'mini tower' is secured
- Yet another new ground rod bonded to the station grounding network (six total now)
- Of course a long rotator cable and feedline from the lower-level station up to the antenna, with lightning protection for both
- First time renting my own scissor lift to the great amusement of my XYL and kids

I used a RigExpert AA-35 Zoom to check out the antenna on the ground and it was just perfect. No adjustments needed. I zoomed into individual bands, and out again, repeated the tests near the feed point once the antenna was up - and at several connection points upstream - all were great!

#### On-air performance

Final installation was completed on Friday, May 27 with several hours to spare before the start of CQ WW WPX CW, I even had time for dinner with the family. As the contest started I was struck by the improvement in received signal levels and SNR as well as my ability to complete S&P QSOs on the first call. My basis for comparison was the variety of tree-suspended dipoles and an EFHW I'd used previously. Working WPX on the K4KIO hex beam brought a confirmation from BA4TB - my first China QSO, 3D2AG on 10M at 10PM local time - an otherwise 'dead' band, and my first time making more than 500 QSOs in a single weekend part time effort since starting out last year. The next day, I enjoyed a 20M SSB QSO with "Tad" JH1HDT with my morning coffee and it was off to the races from there. All-in-all, I'm very pleased with the ratio of Gain / Cost+Maintenance of the hex beam, and it's really ramped up the fun factor here at AEØDX.



Adam AEØDX

## **Member News**

# **New 5BDXCC!**

All QSOs were made using a vertical working against my mobile home roof or a 20m extended double zepp (pre 1981), a zig-zag end fed wire (on a corner lot with high noise level 2009-2018) or center fed 80m dipole (2020 -2022) . I managed to make it just in time to apply below S/N 10K.

John WØGN

## Congratulations John! - Ed.



# EIDXA at Dayton 2022



Rick Heinrich's (NØYY) better side - Photo credit WØAWL

# Photos from Frank WØQC



Frank, WØQC (center) met with the 3YØJ team



Traffic



Random people



More random people



Getting around your HOA



# Remnants of Hara Arena

Photos courtesy WØQC



Greetings

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K9ZK

# Field Day 2022

A few shots of various FD activities...

#### W9XG

The River Bend Wireless Operators Club W9XG was hosted at the Rock Island EMA facility located in Milan, II, running class 4F

We used wire antennas strung high in the trees available on-site

We even had time for whiteys ice cream and brats and hot dogs

Thank you Frank, W0QC - Ed.



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**WØCXX**Courtesy Adam AEØDX



Adam AEØDX, Mike ACØPB and Gregg Lind KCØSKM



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#### Glamour shot of the SSB station



NG7A running the CW station. The radio belongs to Barry WØIY (FTdx-101)  $\,$ 



A guest from CRPD (KE0ZOT) shown with Adam and Gregg

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NG7A explaining to Liz Mathis what happens when you connect an antenna to a light pole equipped with LED bulbs.





GOTA Station in action



Good night all...

# Logbook CQ Test

Upcoming Contests:

Scores and Soapbox

QRM







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