Eastern Iowa DXer

October 2013

EIDXA club members Jason Joens, KDØMND and WØGJ, Glenn Johnson have been chosen to represent Iowa as WIAW/Ø during the W1ØØAW ARRL Centennial in 2014 !! The ARRL Centennial QSO Party is a year-long operating event that celebrates hams making contacts. In the end you will have accumulated points, worked new stations and made new friends all over the world. W1AW will be on the air from every state and most territories. This is the first ARRL-sponsored operating event where every member is worth at least one point, so work as many points as you can during 2014! Earn awards based upon points, working all states or working W1AW portable in every state and territory. This is an on-the-air event like no other.

Priceless

Official Newsletter of the Eastern Iowa DX Association

NØDX

Established 1975

Eastern Iowa DXer

An affiliated club of the American Radio Relay League

October 2013

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Club Officers:

President:	Craig Fastenow	KØCF	**Packet Cluster:**	**WB8ZRL**
Vice President:	Jerry Rappel	WWØE	147.51, 144.91, WB8ZRL.no-ip.org:7300	
Secretary Treasurer:	Richard Haendel	W3ACO		
Repeater Committee:	Al Groff	KØVM	**Repeater:**	**NØDX/R**
	Joe Finkstein	WØMJN	144.59 / 145.19 (tone 192.8)	
Membership Committee:	Jim Spencer	WØSR		
	Tom Vavra	WB8ZRL		
	Nelson Moyer	KUØA		
Web Master Extraordinaire:	Jason Joens	KDØMND		

Next EIDXA meeting:
Friday November 1et, 7:30 PM -*TO BE ANNOUNCED.* Campus of Kirkwood Community College, Cedar Rapids.

No user-serviceable parts inside

The Eastern Iowa Dxer

www.eidxa.org

October 2013 - Contents

EIDXA

I hope you enjoy this newsletter. The views expressed in the EIDXA newsletter do not necessarily reflect those of the Eastern Iowa DX Association, or the editor. All newsletter contributions, comments and suggestions are welcome at WWØE@q.com.

Thanks in advance for your newsletter input.

~ WWØE ~

President's Propagation, Pronouncements & Pontification

IDXA President Craig Fastenow, KØCF

October has arrived, and with it fall DX propagation and contest season. The first big contest of autumn was last weekend – CQ Worldwide RTTY. Did any of you work it? I had thought I might, but never did get the radio turned on. October also brings the fall meeting of EIDXA, which means that (horror of horrors!) it is time for election of officers for the next year. That makes this a good time to reflect on what each of us can do to make our club better and stronger. What can you do to help? Things that come to mind include accepting a leadership position in the club, offering to present a program, or writing an article for the newsletter. There are lots of interesting programs and articles out there just waiting for a burst of creativity on your part to bring them to life! What can you share to help others improve their techniques, skills or equipment setup for DXing and contesting? How about sharing your ham radio biography?

I should note that we are planning on having the October meeting a little late - the first of November - to accommodate our program, Craig Thompson, K9CT. Craig will be a part of the Wake Island DXpedition, which on its original schedule required that we meet no earlier than November 1. The Government shutdown has put that DXpedition on hold. Craig was planning on speaking to us about interesting aspects of his Contest superstation in Trivoli, Illinois (near Peoria), followed by highlights of the Wake DXpedition. Depending on scheduling, these plans may change. Stay tuned for further details as events unfold.

In looking over the contest calendar for the next two months, I was very pleasantly surprised to find that the CQ Worldwide CW contest falls the weekend *before* Thanksgiving this year! Yay! I should be able to actually participate this year. All too often our daughters, their husbands and our granddaughters are here for Thanksgiving. While we love to have them visit, a houseful of company is *not* conducive to effective contest operation! With this rare scheduling anomaly, I hope a lot of you can get on for the CQ WW CW. It is a fun contest, very easy to work, even if you are not the world's most proficient CW operator, because the exchange is simply RST plus CQ Zone, e.g. "5NN 4". N1MM, WriteLog and most other contest loggers automatically pre-fill all this information for you. So all you have to do is decipher the other guy's callsign and work him! If you use the "search and pounce" method rather than trying to "run", this is easy and fun and will likely help you improve your CW skills.

We had a great time at the EIDXA picnic last Saturday. We had a great turnout, despite the rainy weather. The NRØX garage accommodated all of us. It was really great to see the new radio shack, too. I was especially impressed with KØVM's new Flex Radio. That is a really sweet box. I had always thought that I preferred a box with real knobs for a radio, but this has almost made me change my mind! If you haven't seen one in operation, you really should give Al a call, visit his shack and take it for a spin.

I will send an email to the group as the meeting approaches with final details. I assume at this point that we will be meeting in the Iowa Hall meeting rooms again. I hope to see all of you at the meeting! It will be a great program by K9CT, and he promises to finish in time for us to be able to get pizza afterwards.

73 and good DX!

Craig, KØCF

CLUB MEETING

Next meeting is Friday November 1st, 2013. 7:30 PM. Speaker: Craig Thompson, K9CT.

UPDATE: Craig was planning on speaking to us about interesting aspects of his Contest superstation in Trivoli, Illinois (near Peoria), followed by highlights of the Wake DXpedition. Depending on scheduling, these plans may change. Stay tuned for further details about the meeting and room number as events unfold.

Due to the U.S. Government shutdown, the Wake Island K9W DXpedition is now on hold pending a revised schedule. We will announce new dates for the DXpedition as soon as possible. Thank you for your patience and understanding. The K9W Wake Management Team- More information to follow ...

"Now that's DX"

EIDXA Vice-President Jerry Rappel, WWØE

It's the end of Summer, the Autumnal Equinox has occurred, this is one of the best times of the year for DX openings. Even some e-region propagation has been known to occur this time of the year. Will Cycle 24 will pick up some energy at this time also ?

Next we can expect improving night time conditions on 60, 90, and 120 meters, for those of us who like to log the remaining exotic regional tropical band stations. Especially during those few hours before local sunrise. Also with this increase in geomagnetic activity, DX'ing the AM Broadcast band is starting to imorove. Turn on your radio.

In January 2014 the Eastern Iowa DX Association celebrates it's 35th newsletter anniversary, any ideas on how to acknowledge this event, or how about a special pizza get together somewhere?

January 2014

35 Years of EIDXA Newsletters.

My newest patio/portable radio.

Nothing on the HF bands tonight? It's Fall, time to sit on the patio and log some tropical band stations on my PL600, made by Tecsun, the same company that makes brand name radios, such as Grundig, Eton, etc. The Tecsun PL600 is an AM/FM/LW shortwave radio with SSB. The frequency range is 100-29999 kHz, without gaps, and a bandwidth selector (wide/narrow, 4/6 kHz). It has excellent reception with high sensitivity and selectivity. So what are the tropical bands? These include the 60, 90 and 120 meter bands on shortwave. In the Tropical Zone between the Tropic of Cancer on 23 degrees north and the Tropic of Capricorn on 23 degrees south.

This was to give them as safe area where they are not supposed to be disturbed by strong international broadcasters. Those low powered domestic radio stations are broadcasting mostly in their local languages. With plenty of Latin American music, and those unique identification announcements from those colorful announcers voices vibrating with ***re-verb***, ***"está es Ecos del Torbws, San Christobal".***

The technical standard of a large part of the transmitters on the tropical bands is very poor. In more developed countries they are being replaced by FM-networks and it is likely that this trend will continue downwards and the stations will all have left around 2015 or so. We are approaching the end of an era of domestic broadcasting on the tropical bands!

However, you can still hunt from the 300 plus domestic stations on the tropical bands, before it is too late. So do not give up your tropical band DX-ing! It is just a matter of turning on your rig and tuning in to these frequencies at the right times.

So the time to listen is now, you haven't heard anything on your radio quite like the tropical band stations. Last time I checked there were still signals emanating on those bands. Recent logs: 3240 - Radio Swaziland, 4985 - Voz Christiana, Peru, 3350 - Radio Exterior Espana, Costa Rica, 4055 - Radio Verdad, Guatemala. Give it a try. Turn on your radio.

Icom 551D 50 MHz all-mode.

Every once in a while a great radio becomes available, and every once in a while the right person becomes the new owner of that radio. This rig was found in pristine condition, with the following add - ons included, IC-EX106 FM unit, IC-EX107 VOX unit, and IC-EX108 Pass Band tuning unit - (this really is an IF shift, but it helps with interference), original manual, and board layout diagram/schematic, etc. With my vision problem, the 551D is easier for me to work with than my previous 706. No multilevel menu trees, or sub menus. With my hearing loss, when not wearing head phones, my Dual brand center channel speaker, allows the voice range of the 551D to be predominant. The RIT makes it enjoyable on CW also. Yeah, it's about 30 years old, but it suits me just fine. I like simple.

GUD DX everyone - *Jerry, WHØE*

ONLINE HAM RADIO LOG STATISTICS

Yan, XV4Y, runs as Web page called "QScope" http://www.qscope.org/. QScope.org is an online appli-cation that provides statistics and charts from HAM Radio logs. While some features are designed with contesting in mind, most of the statistics will be useful for DXers and DXpeditions. You just import your ADIF 2 or Cabrillo logs into QScope database and then browse the statistic and charts pages. The application allows for exporting your results in PDF and to share the web links to the charts you produced with your friends.

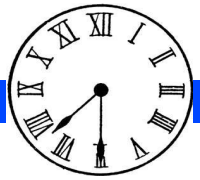
QScope permits you to create as many containers as you want and import as many logs as you need into them, so you can classify or aggregate the data the way you want. QScope offers informations like:

- Number of QSOs, Operating Time
- Unique callsigns worked, unique DXCCs entities, CQ and ITU Zones
- Average and Maximum QSO Rates over periods of 10, 30 and 60 minutes
- Activity Map showing which band, mode, operating position was more productive during a contest.
- Charts with number of QSOs per unique callsign, band, mode or operator
- Charts with number of Points per unique callsign, band, mode or operator
- Charts with number of QSOs per CQ and ITU Zones

Charts showing hour by hour, the Number of QSOs and Points, Number of new CQ and new ITU Zones worked, Number of new DXCC entities and new Prefixes worked.

- Charts with Operating Time per band, mode or operator with parameter for pause duration.
- Charts showing minute by minute how much was your QSO Rate for your whole log, per operator or per band, with parameter for the sample duration from 5 minutes to 60 minutes
- Charts with Maximum QSO Rates per band, mode or operator with parameter for the sample duration from 5 minutes to 60 minutes

More features and statistics are planned to be included in future versions. Suggestions are welcome. Registration and access to the website are free.



Minutes

Secretary/Treasurer *Richard Haendal,* W3ACO

EIDXA minutes of the Minutes of the EIDXA meeting July 12th. 2013.

Minutes of July 12th meeting of the EIDXA meeting was called to order at 7:30 PM by our President Craig, KØCF.

29 hams answered the CQ call.

There was a discussion of contributions to three upcoming DXpeditions,

Juan Fernandez Island, XRØZR, #64 on the DX list, Banaba Island, T33A, #43 on the list and Bangladesh, S2, #56 on the list. All three DXpeditions will operate on 160M through 10 meters. All three will be during the month of November. The club voted to contribute $100 to each of them.
Rich, W3ACO will send money via his Paypal account.

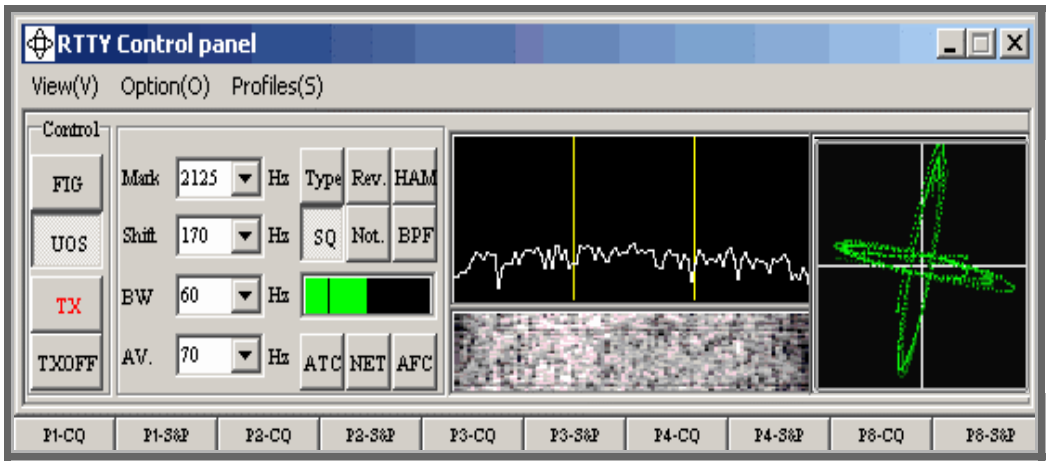
The summer picnic will be held at NRØX farm in Martelle, Iowa on September 28th. Start time is around 3 PM. Bring your own beer and chairs. Brats will be on the grill around 5 PM.

The October meeting has been moved to November 1st. Our planned speaker, Craig Thompson, K9CT, will just be coming back from the Wake Island Dxpedition and we need to give time to get organized. This date may revised further, Stay tuned to the reflector.

Rich W3ACO gave a presentation on antenna modeling and use of the EZNEC analysis software program. Many questions were asked. I hope that folks learned a little about patterns, the effect of antenna height and propagation over seawater.

Rich W3ACO

RTTY Corner - Jerry Rappel WWØE



The latest DX digi-doings

- ✗ Jerry WWØE: 9XØZM (**Yes!**), FO/KHØPR, UNØLL, 9AØW, EMØI, COØTU, GIØBQX, DZØESA,T4ØHE, RDØA, UCØA, JW/DO6XX, JW/DL2JR, 3B8CF, E79D, RV1C, UT2G, 5K3RF, 3Z5W, W6E, DD1JN, FK8GX, TF3PPN, TF2R, 5W1SA, UA3QNS, SP3HLM, CK3NOO, IIØIAML - (Italian Navy ship radio station, Sardinia).

- ✗ Glen KØJGH: SU9VB, EU7A, FO/KHØPR.

- ✗ Tom NYØV: RA2FF, ZA/IZ4JMA, ZA/UA4WHX, S51MA, A61ZX, LY6Ø5W, OHYØ/PA2A, R9MT, YB4IR, TF3PPN, FP/KV1J, UT2G, 9M6XRO.

- ✗ Joe K8OM: FG8OJ, 3B9EME.

Thanks for the RTTY logs guys.

EIDXA NEWS

KH9 WAKE ISLAND (Update).

Due to the U.S. Government shutdown, the Wake Island K9W DXpedition is now on hold pending a revised schedule.
We will announce new dates for the DXpedition as soon as possible.
Thank you for your patience and understanding.
The K9W Wake Management Team.

Spotlight

KØJGH

Glen Kesselring, KØJGH
(DX'er extraordinaire) !

I have held an amateur extra class license since January 1984. DX operating have been from the following countries: Canal Zone, Hawaii, Canada, Mexico and France. I've also operated contest style from Bahamas, Jamaica, Bonaire, Madeira and Monaco. A big "bucket list" for me was being one of the K5D Desecheo Island operators. Other contests have been: winning Low Power Phone Sweepstakes in 1963, 1978, 1979, 1980, 1982 and Iowa Multi-CW in 1988. I've also participated in several 160-meter contests as a part of a multi-op station and as a guest operator at the W0AIH contest station. In September of 2010 XYL Pam and I drove Route 66 from Chicago to Santa Monica with the call sign of W6S as a rover in the Rt 66 on the Air event. A really great trip.

My radio awards include:

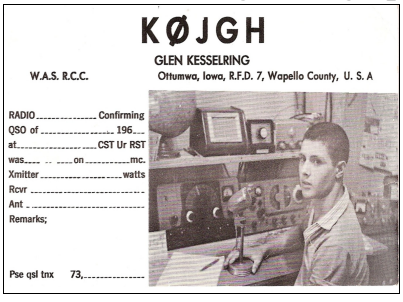
TOP of HONOR ROLL Mixed and Phone. (Short P5 on CW), Honor Roll Phone and CW, DXCC 160 meters, DXCC RTTY, Worked All Continents, Worked All States, Worked All States via satellite, 5 Band DXCC. Other recognition: DXCC Challenge, ARRL Diamond Challenge 2012 and 50 year member of ARRL.

I have been involved with DX club activity as a long time member of the Eastern Iowa DX Association and have served as president twice. I have been involved over 30 years in the local radio club in Ottumwa serving as past president and as current secretary/treasurer. Other local involvement includes the Red Cross and serving as Emergency Coordinator for Wapello County.

Personal history:

I am semi-retired from the insurance industry. I spent 6 year's a substitute teacher in our local school system and continue servicing a few crop insurance contracts. Prior to the 25 year career as an insurance agent for Farm Bureau Insurance Company I was an instructor at a local community college in the field of Agriculture Sales and Service. I received a B.S. degree in Agriculture in 1969. Pam and I married that year. Pam later licensed as NØICF. We have a married daughter (NØVTE not active), a married son (K1KD contester and DXer) and three granddaughters.

The QTH is on our family farm near Ottumwa, Iowa, which we farmed for eight years. My father and I both were licensed hams while I was growing up. In 1961, at 14 years of age, I first became a ham radio operator. In the early years I was involved in DXing and contesting.



Here is my ham radio story:

I believe it was about June 9, 1961 on our farm near Ottumwa, Iowa. The time of day was about 11 AM and the day was hot....but that's Iowa. I was a boy of fourteen years, wearing only shorts and work boots. It was time that the mail had arrived and I was anxious each day since my dad and I were waiting for our ham radio licenses to arrive. I walked the 500 feet out to our mailbox, open the door and .... Oh boy, the return said FCC and there were two envelopes. With the mail in hand, I ran to the house and then on passed it to the north east field where my dad Paul was cultivating corn. He most times would not like to be interrupted when in the field, but this was an exception. I still can remember that summer day in June of 1961 when a father and a son entered into a hobby and a lifetime of common interest. I think I have learn in life that admiration and bonding comes from the coupling of two person's spirits while experiencing something new to both for the first time. I believe that this is what builds marriages, holds war buddies together for generations and helps to bond family relationships as the one my dad and myself have had. We learned about radio together, each Elmering the other. Dad would help me with the theory and math.

I excelled at Morse code. Together we up-graded. Dad to advanced and I to extra. My mother has shared that when she would make a complaint about my staying up all night chasing DX, dad would simply reply that at least they knew where I was and I wasn't out drinking beer. Also, I would say there has never been any pregnant Heathkit radios due to over heated drivers in the middle of a pileup. When I went off to college my parents kept in touch with me via schedules on 75 meters. Many statewide hams began to know Paul from his activity as a net control station and traffic handler on the Iowa 75 meter Net. Much of my interest had turn to contests and DX, so when I would check in on the Iowa frequencies and signed my call of KØJGH, the usual response was ..."oh yes, that's KØJGH … Paul's kid." Over the next few years my work took me farther from Iowa but we still maintained our schedules on the Iowa Net. I guess maybe we had more people listening to those conversations back then since I was more than once surprised at some picnic to have some regular from the net ask how my son or daughter was doing or "so how's Pam these days?" Sure seemed like they knew a lot about my family.

Fast forward to the births of our two children. The first a daughter and 3 years later a son. Our daughters introduction to radio came only as an HT and (before cellphones) the Iowa City repeater for sporadic QSO's while attending U of Iowa. Kara found music in her ears but not so much CW. Son Grant did license at 10 and had his extra class at 13. He is 3 short of Top of Honor Roll and avid contester living in Rochester, MN. It was great for a father/son adventure when Grant was along on the Desecheo Island expedition.

Thanks to Jerry WWØE for asking me to spot light this month. I also would close with a big thanks to the EIDXA club as we must have some of the best talent and operators of any ham club going. Stay well and ham it up!

Revisiting the W7IUV Preamplifier, v.2

Nelson P. Moyer, KUØA

Success on topband demands the use of low gain receive only antennas, and low gain receive antennas require a preamplifier. While several commercial preamps are available, construction of a preamp is a simple and enjoyable project that will cost less than a commercial counterpart and improve your topband totals.

Larry Molitor, W7IUV, designed a preamplifier for 80-160 meters loosely based upon a circuit published in one of the ARRL Handbooks several years ago. He recently revisited the design and made substantial improvements, including introduction of surface mount technology as an optional construction method. Details of the W7IUV preamp are found at http://w7iuv.com/preamp60/preamp_r60.pdf , including circuit diagram, parts list, and photos of the transformer windings. The W7IUV preamp has the highest gain of any circuit available either commercially or built from parts, and it has a stellar reputation for reliability, whether installed at the antenna or in the shack.

I have used the original version of the W7IUV preamp with good results since I first operated on 160 meters in 2003, and I was eager to try his 'new and improved' version, albeit using conventional components in lieu of surface mount technology. The purpose of this article is to show how easy it is to build this preamp, and to encourage those of you who have not yet ventured onto 160 meters to give it a try.

All of the parts are available from Mouser, and I have included Mouser part numbers to facilitate ordering parts. Mouser recently implemented a residential shipment option, charging just $4.99 for parts orders. While power plugs, RCA plugs, switches, LEDs, and project boxes are available from Radio Shack, you may wish to order these components from Mouser as well. I stripped two chassis mount RCA sockets during installation, suggesting that the quality of Radio Shack components is inferior to those your can get from Mouser. I purchased hardware components from the local Ace Hardware store.

I used a 1.75 in. square piece of perf-board with solder pads to lay out the parts so that I could use the leads for point-to-point wiring. Since the leads are not insulated, care must be taken to avoid crossed leads. To facilitate ground connections, I stripped 3 in. of 22 AWG solid wire and made a ground bus along two sides of the circuit board. Because of the danger of striping Radio Shack chassis parts, I couldn't tighten them as much as I prefer, so I hardwired the ground lugs of all chassis components together. This is not normally necessary for quality parts mounted using internal star washers.

The preamp requires shielding, and the only metal box in stock at the local Radio Shack was the 1.125 x 3 x 5.25 in. aluminum project box. This box is big enough for two circuit boards, so I built two separately controlled preamps. This configuration allows me to daisy-chain the preamps using a short jumper between the output of one and the input of the other for those rare occasions where the band is exceptionally quiet and the signals are exceedingly weak. Normally, the band is quite noisy at my location, due to power line noise, computer hash, plasma TVs, and all manner of other noise sources. Because of the high noise level, I've found that I can prevent receiver overload and hear better using variable amounts of attenuation provided by my K3. If you're going to locate your preamp at the antenna, a weatherproof box is essential. I installed my preamp in the shack, so I can use an antenna switch and several receiver antennas with one preamp.

Parts List

C1, C2, C3, C4, C7 - 0.1 µF 50 volt ceramic capacitor
(Mouser 140-50P5-103K-RC)

C5- 1.0 µF 50 volt tantalum capacitor
(Mouser 581-TAP105K050SCS)

C6 - 4.7 to 22 µF 50 volt tantalum capacitor
(Mouser 581-TAP475K050SCS)

R1 - 1000 ohm, ¼ watt, 1% tolerance, metal film resistor
(Mouser 271-1K-RC)

R2 - 680 ohm, ¼ watt, 1% tolerance, metal film resistor
(Mouser 271-680-RC)

R3 - 3.3K ohm, ¼ watt, 1% tolerance, metal film resistor
(Mouser 271-3.3K-RC)

R4 - 6.8 ohm, ¼ watt, 1% tolerance, metal film resistor
(Mouser 603-MFR50SFTE52-6R8)

R5 - 12 ohm, ¼ watt, 1% tolerance, metal film resistor
(Mouser 271-12-RC)

Q1 - 2N5109 transistor (Mouser 610-2N5109)

T1 - 5 turns bifilar on a Type 75 core, #28 magnet wire (Amidon FT50-75)

Hardware

#4 machine screws, ¾ in. long (4), (7/64 in. drill bit)
#4-40 nuts (8)
#4 flat washers (4)
#4 star washers (4)
#6 machine screw, ½ in. long (1), (9/64 in. drill bit)
#6 flat washer (2)
#6 star washer (1)
#6 lock washer (1)
#6 solder lug (1)
Transistor heat sink (1), (Mouser 532-323005B00)
Nylon spacers, ¼ in. (4) (Mouser 561-K4.25)
SPST toggle switch (1), (¼ in. drill bit)
LED (1), (3/16 in. drill bit)
12 VDC power plug (1)
12 VCD power socket (1), (7/16 in. hole)
RCA plugs, female (2), (1/4 in. drill bit)
Circuit board, 1 ¾ in. square perf board with or without solder pads (1)
Project box, aluminum, 2 1/8 in. x 3 in. x 5 ¼ in.

Transformer

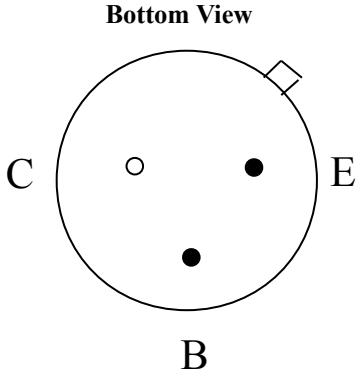
Use two wire colors. The transformer winding does not have to be bifilar as shown in the photograph on Larry's web site. Do not twist the wires. Pass wires through the core five times, then solder the two colors together for the center tap.

Schematic

The circuit diagram is shown on the web site. Make sure you're using the new version when ordering parts and wiring the circuit. The web page is copyrighted, so I can't include the circuit diagram or photos of the transformer in this article.

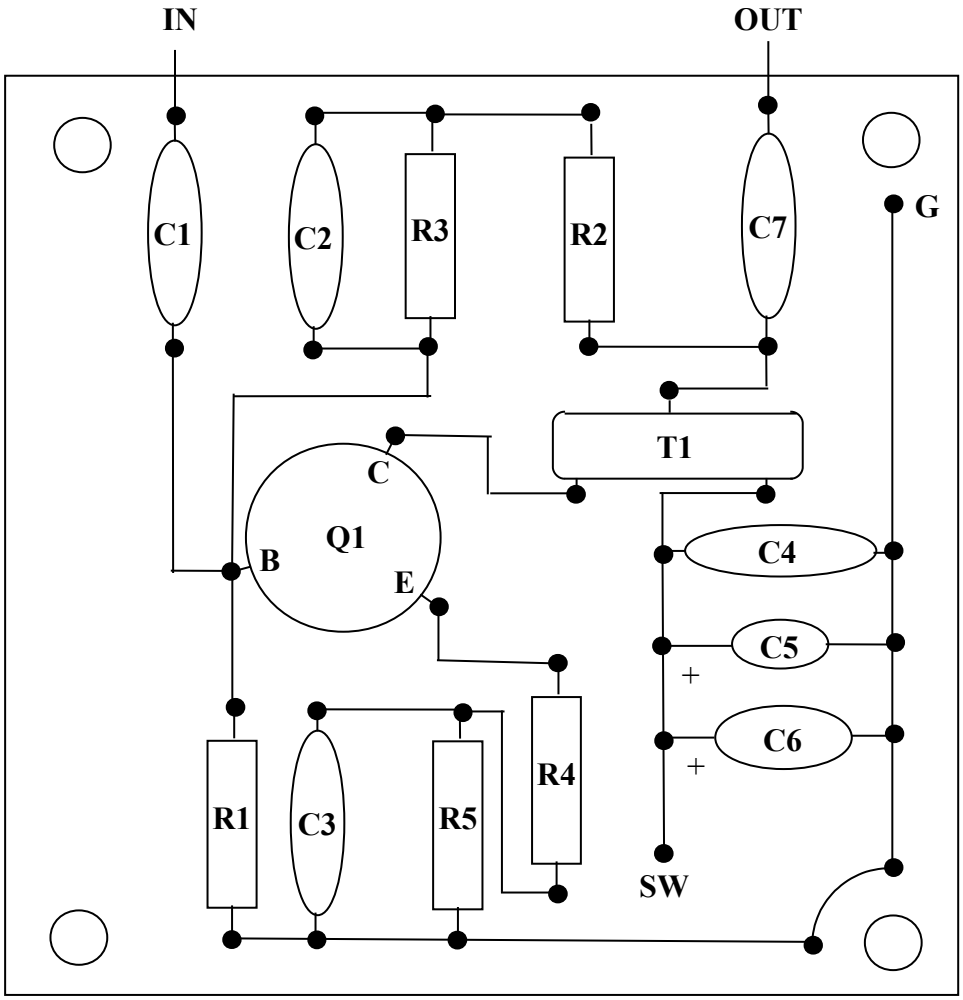
Transistor

The 2N5109 transistor requires a heat sink. Optimal voltage is 13 ± 0.6 VDC. More or less voltage degrades performance. The transistor leads are labeled below:

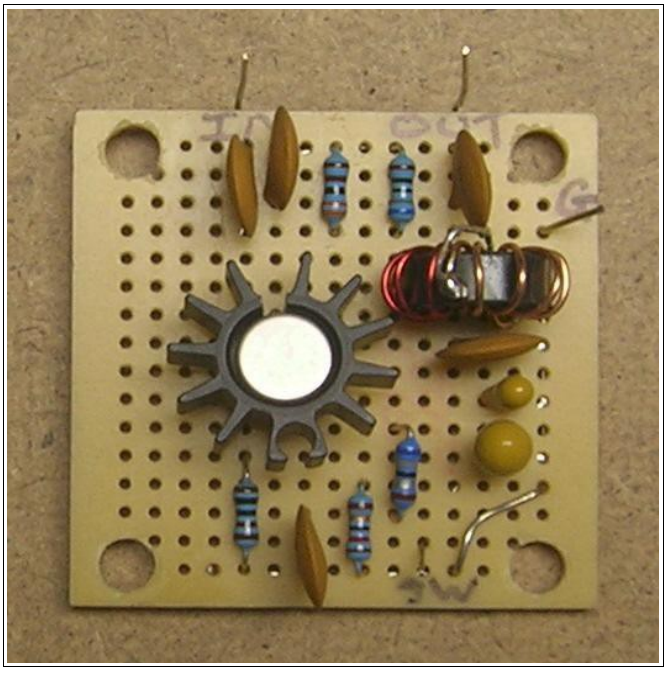


The heat sink has a very tight fit as supplied, so gently open it slightly with a flat-blade screw driver before slipping it over the transistor can.

Parts Layout

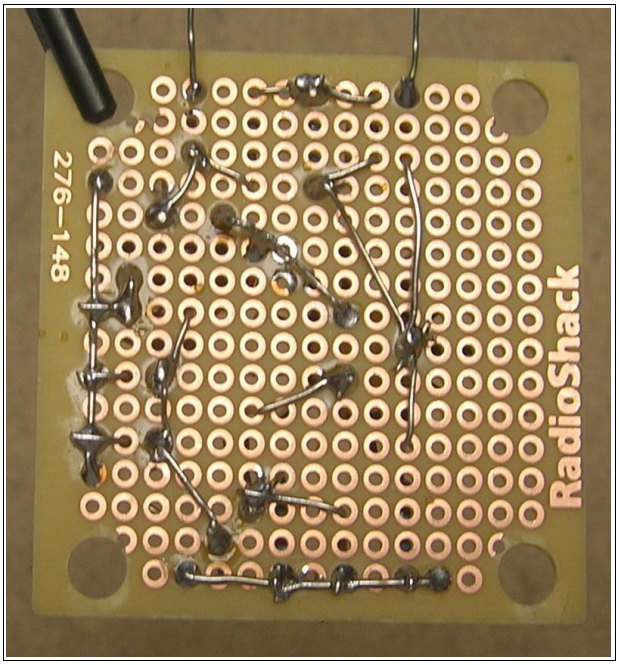


A photograph of the circuit board is show below:



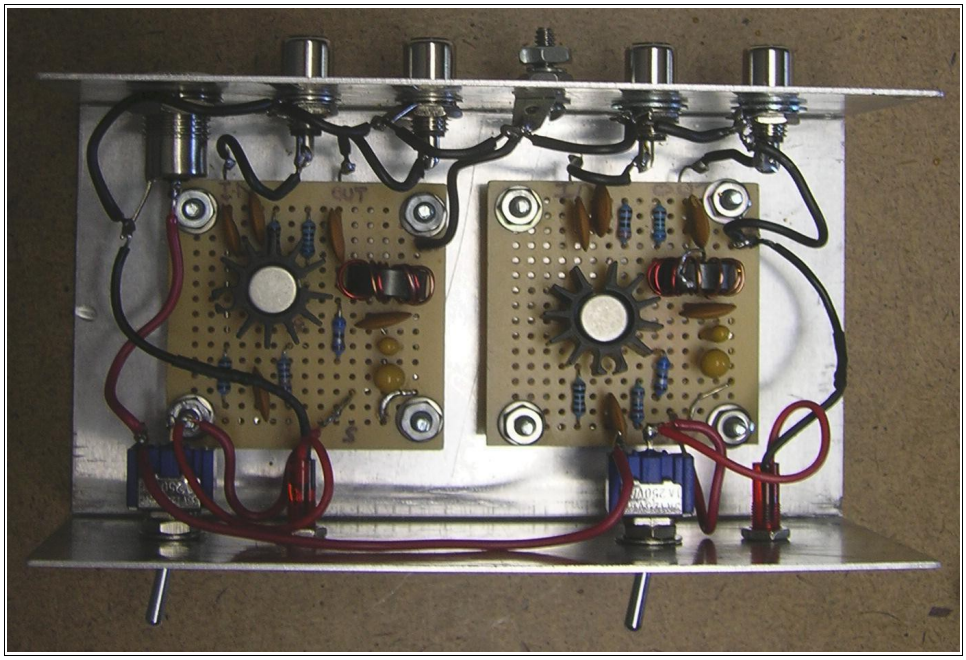
Wiring

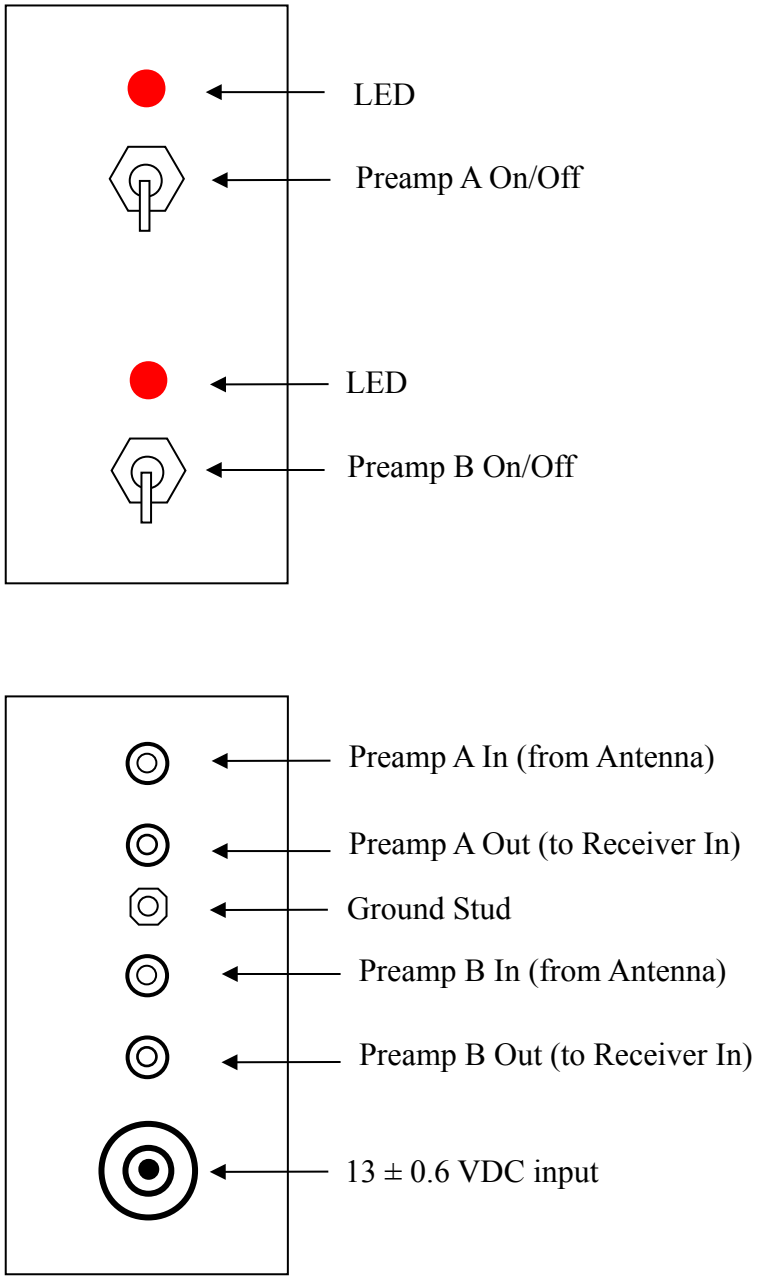
The bare wire running along the left side and bottom of the circuit board is the ground bus. Component leads were used for all circuit board connections as shown in the photograph.



Chassis

The location of chassis components is shown below:





The connections between the circuit board and chassis components are made with 22 AWG stranded wire. The left circuit board was wired first, and as is common for me with such construction projects, I made two minor miscalculations on the parts layout. The transformer center tap was located so that I had to use an insulated wire to cross over one component lead, and I didn't allow sufficient space for the heat sink when mounting the transistor. These errors were corrected on the circuit board to the right.

Performance

While I can't hear the difference between the revised version and the original version, Larry assures us that his instruments detect improvement. If my atmospheric and man-made noise levels were lower, perhaps I could hear the difference. Regardless, I'm very pleased with the performance of this preamp, and I encourage you to consider building one or more before the low band season starts in earnest.

Nelson Moyer, KUØA

Tower removal - SK - NCØO Tom Hise, July 1st, 2013.
EIDXA members "volunteering" their time for others!

Here are some pictures that were taken at NCØO's QTH, Shellsburg, IA. Jason and his ground crew were able to take down 2 vertical antennas plus one antenna and a 60 foot tower.

The peanut gallery, Gary Jim, Steve, and Arlo waiting for something to do.

Jason, checking his gear and getting ready to tackle the 60 foot Rohn tower.

Arlo WØLBK making sure that Tom doesn't get slip as the tower section is being lowered.

Gary KØGT, Tom WB8ZRL and Terry WØAWL taking their turn at lowering the Rohn 45 tower sections.

WØWP and WB8ZRL ready to help lower a tower section, with supervisor WØSR looking on.

It was hot, and the bugs were ready to make the day even tougher. Tom is taking a much needed break in the shade of the house.

Jason Going up the tower to hook up the tram line so the Mosley Pro 57A could be lowered.

Tom WB8ZRL Working to remove the Big Stepper 6-40 BiggIr III vertical.

The last section proved to be the hardest to remove. It took Gary, Tom, Terry, and Jason to finally get it on the ground.

Thanks to Terry WØAWL for the pictures.

Veteran DX QSL Manager W3HNK Marks 50 Years of Service

It's been 50 years since now-veteran QSL manager Joe Arcure, W3HNK, began serving as a QSL manager for DX stations, starting with ZE4JS (Southern Rhodesia, now Zimbabwe). Since then he has handled QSLing chores for more than 400 DX stations, and anyone with DX QSL cards likely has one in the collection that W3HNK handled. Licensed in 1956, W3HNK was bitten by the DX bug the following year and, as he puts it on his QRZ.com page, "was off in a world of DX chasing." He has operated from several spots in the Caribbean under various call signs. Joe says that after he signed aboard as QSL manager for ZE4JS, he "kept adding call signs through the latter part of the 1960s, all the 70s, 80s and 90s," and the rest is history. Although he retired in 1998, Joe remains "active with the paste boards," as he puts it. W3HNK is a member of the CQ DX Hall of Fame, class of 1979, and of the ARRL. Congratulations, Joe, and thanks for your service to the DX community! —*The Daily DX, QRZ.com*

Wayne Green passed away in a peaceful, painless transition from this life on Earth. An eternal optimist, and one who loved to share his never ending zest for life, he was a friend to many and will be missed greatly.
73, **W2NSD (Sept 3, 1922 - Sept 13, 2013)**

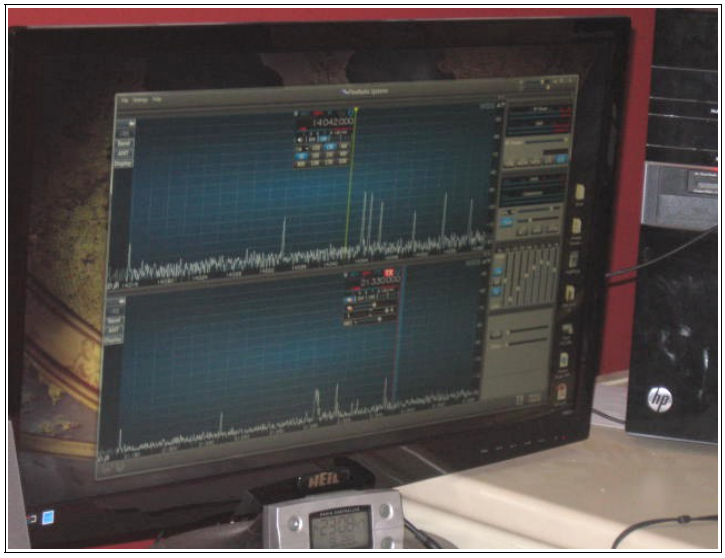
EIDXA Summer Picnic

A little wet but....

The annual EIDXA Summer picnic was held on Saturday, September 28th. While it rained a bit, there were approximately 35 in attendance including some XYL's . We all enjoyed some good food and friendship. Thanks to everyone who attended, as well as those who cooked or brought something good to eat. That raspberry pie will keep be coming back every year.

Terry was once again the Brat Meister. Which was highly approved by everyone.

KØVM, Al Groff had his Flex 6500 on display in the newly remodeled NRØX shack.



Dozens of prizes were given away this year. I believe just about everyone left with one.

Special thanks to Karen Blamkenhagen, KØEGQ, Jason Joens, KDØMND, Terry Cellman, WØAWL and Jerry Rappel, WWØE for all their time.

Prizes donated by Universal Radio – thanks to Fred Osterman N8KEU. And to ARRL CQ, MFJ, Rich Heinrich, NØYY, and Terry Cellman, WØAWL.

A good time was had by all, see you again next year!

Feature Story

Recovering from a Close Lightning Strike

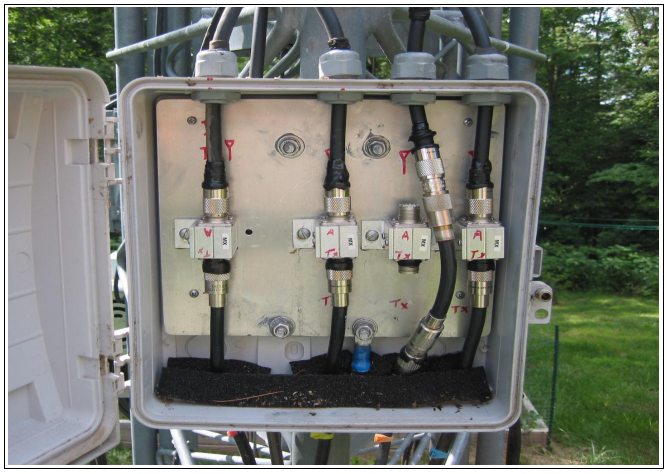
TomVinson, NYØV

I haven't been on the air for the last month or so. One day in July I walked into the shack to see what might be happening and was not hearing anything! It's not that there wasn't anything on the HF or 6m either! No, there was something amiss that day that I needed to track down.

As I started from the transceiver and working my way out it was apparent that the antenna connection to the 4 element SteppIR yagi was open. Now, if you have a simple dipole antenna with no balun that might be the case. Such is not the case with the driven element on the SteppIR. The Electronic Housing Unit (EHU) that holds the stepper motors and copper tape reels also has a toroidal balun in it. I should have seen the coax looking like a short. That was my second clue that I have a bigger problem ahead of me.

My antenna system was made to be easily brought down to the ground. The LM-470 is the old TriEx motorized tower. With the addition of the NN4ZZ "Tiltplate" one can lower the tower, tilt it over and the antenna stays horizontal all the way to the ground. So my next step was to just lower the antenna and disconnect the coax at the EHU and measure the continuity at the EHU RF connector. Yup, it looks shorted or OK due to the balun. Working back down to the DX Engineering antenna relay, I quickly checked to see if it was switching and it looked good. That's when I said to myself "self, it has to be the Polyphaser arrestor!" Well duh! I opened up the electrical box containing the Polyphaser and with a few checks, verified it was indeed open. Yea! With the addition of a double female bullet, I could hear the bands were indeed active. Problem solved? Ah, not quite.

Arrestor box at base of the tower. I have bypassed the open Polyphaser arrestor.



To fix a Polyphaser arrestor that is open, you can only replace it. I proceeded to drill a ½" hole in the back of my plastic electrical box, unscrewed the assembly and removed the arrestor. To replace that unit however, I decided to go with the Alpha Delta arrestor with the gas discharge plug. Should that plug blow it is easily replaced by unscrewing it from the top side and installing a new plug. At least easier and cheaper to replace than the entire Polyphaser arrestor. Just an aside, I do prefer the Polyphaser design, but due to the aforementioned cost and ease of repair and replace I decided to try the Alpha Delta approach.

I went back into the shack and thought I better check out the Yagi a bit further. The original SteppIR controller has a few design issues that we would not have done at Rockwell Collins! The original controller isn't really off when you turn it OFF. SteppIR keeps about 4v on the stepper motors to keep them from moving. So, even with the OFF button OFF, there is voltage on the output drivers. Further, if the outputs are shorted on the control cable, that short will take out the drivers. A bit more checking and yea verily, my controller was kaput.

SteppIR has a new controller and does not really want to support the old controllers. They now offer the new SDA100 controller and will "swap" out an old controller with the new SDA100 controller…for $250. Ouch! (Normally it's $480) There is also an option for the controller called the ALP card. The ALP is a new lightning protection card which effectively disconnects the output driver card and grounds the tune lines when it senses a spike. So, for another $170 (Ouch again!) I added the option so I wouldn't be buying a new driver board each time the outputs are shorted!

The new SDA100 with optional ALP card. The original controller on right (for the BigIR Vertical)

I wasn't done yet. If lightning had taken out an arrestor and the controller, I needed to check out the EHU's more than just the RF connection on the driven element. I had purchased the connector junction box ($198…Ouch!) when I first put up the yagi, so that makes it pretty easy to isolate each EHU by unplugging the connectors one by one. The resistance of each stepper motor is supposed to read around 20 ohms. There are two pairs of wires running to each motor or 4/EHU. In checking these, I found that one of the motors on Director #2 had an open. $#&%! Fortunately SteppIR can rebuild the EHU's…for about $185. (Ouch again!) But, a new one is a $400+.

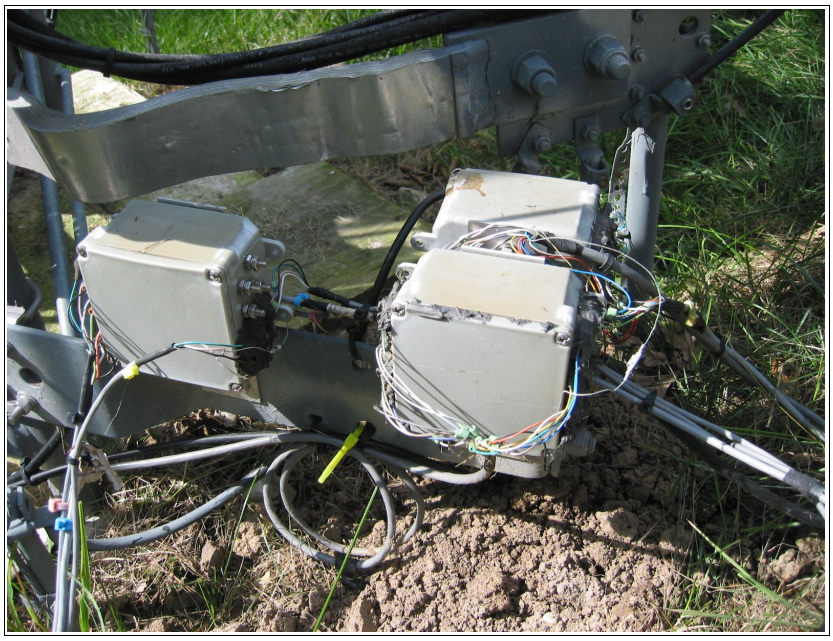
The SteppIR yagi nested at 23'. Note the bucket where Director #2 should be. That bucket contains two bricks to balance the beam while the EHU is out for repair!

All evidence seems to indicate that I had a close lightning strike. The cost to get back to square one was around $710 with the shipping costs included. You may be thinking that I had not taken steps to protect against lightning. I don't believe so! Here are steps I have taken to protect my house and station from lightning. I hope this list helps fellow EIDXA'rs in thinking through what protection you have at your QTH:

1) DXE antenna relay at the top of the tower that disconnects and grounds center pin.
2) Coax shields grounded at the top of tower and at the base.
3) Polyphaser/Alpha Delta arrestors on each coax, attached to tower base.
4) 4 Tower ground spikes all tied together.
5) Heavy ground wire from tower to house electrical box and station ground.
6) Line filters (MOV's) on all SteppIR control lines, antenna relay, and rotor cable lines.
7) All coax shields grounded in shack with copper feed-through bar.
8) Alpha Delta coax switch with center to ground switching.

9) Each piece of station equipment grounded individually to a wall mounted ground bar, tied to the home ground. ie not daisy chained.
10) I retract the SteppIR elements to the "home" position to reduce the electrical "footprint" when thunderstorms are headed my way.
11) MOV's are installed on the house Mains. (Electric company will do this for about $150)
12) Double heavy ground wires in the ground under the foundation running the perimeter of the house up to the house electrical breaker box.

Array Solutions line filters to handle control line spikes. Filters are mounted on a solid ¼" copper bar, bolted to the tower. In the background is the ½" main ground buss bar to the tower. Black cable at top right runs to the house breaker panel electrical box.

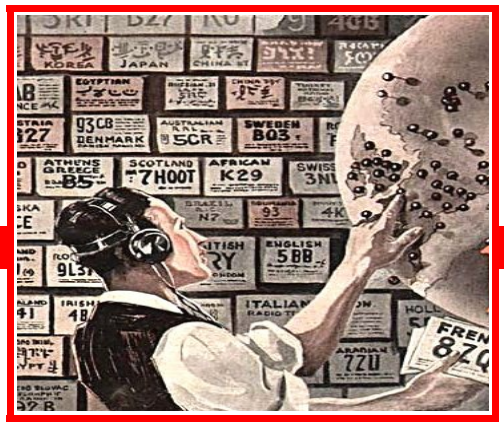


To lose just an arrestor and a motor winding in an EHU is not too bad. Through this experience I have found that the original controller was a weak spot! Hopefully that shortcoming has been mitigated with the purchase of the optional ALP card in the new SDA100 controller. Otherwise, in my opinion the protection was successful in that none of it came into the house! Yes, losing $700+ bucks hurts, but it could have been much, much worse had I not utilized known lightning mitigation techniques.

If any of you have other suggestions that you have found successful in combating lightning that I could implement, please contact me at ny0v@arrr.net or share it with the rest of us on the EIDXA reflector.

Tom, NYØV

PSE QSL



None submitted this month ?

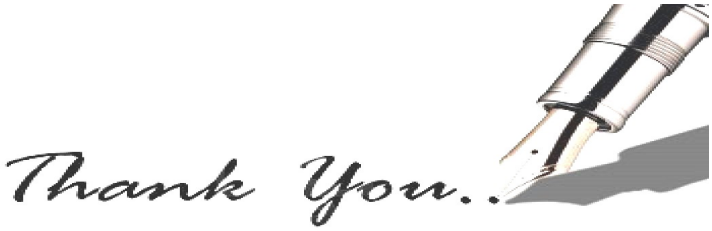
November meeting, election of officers ... per Craig's Propagation - that makes this a good time to reflect on what each of us can do to make our club better and stronger. What can you do to help? Things that come to mind include accepting a leadership position in the club, offering to present a program, or writing an article for the newsletter. There are lots of interesting programs and articles out there just waiting for a burst of creativity on your part to bring them to life! What can you share to help others improve their techniques. This is OUR club !

January 2014 Newsletter:

35 Years of EIDXA Newsletters.

The climbing adventures of Jason Joens, KDØMND in PJ2 land.

Bob's Great Antenna Project - *For a few days in the early fall of 2013 Bob Lee, WØGXA undertook a task to mount a few stones of aluminum and steel on top of a 100 year old windmill tower. The purpose of this endeavor remains a mystery.*



Thanks to all the club members who contributed to this newsletter. Jerry WWDE

DXCC Card Checking Is As Close as EIDXA

The club has another QSL card checker WØGJ, Glenn Johnson. If you look on the ARRL web site under searching for a checker, he shows up with a Calmar, IA address, but a MN phone number. If you look in the master list, he is still listed in MN.

EIDXA members can get their DX QSL cards checked for DXCC credit from the following club members:

• ARRL Midwest Division Vice Director, and EIDXA member, Cliff Ahrens KØCA attends EIDXA meetings as his schedule permits. You may also send your cards to him by surface mail. Contact Cliff via e-mail for more information and/or to make arrangements to check your cards: KØCA @arrl.net or cliff.ahrens@gmail.com.

EIDXA member Tom Vavra WB8ZRL. Tom is able to check any cards for DXCC. In addition he can check cards for WAS, WAC, and VUCC. Contact Tom via e-mail for more information and/or to make arrangements to checkyour cards: wb8zrl@arrl.net.

EIDXA member Mike Nowack NA9Q. Mike attends EIDXA meetings as his schedule permits. Contact Mike via e-mail for more information and/or to make arrangements to check your cards: **na9q@arrl.net**.

2013 EIDXA Meeting& Events Schedule

Look for this information on the club web-page ***www.eidxa.org***. Meeting information on the web site is up to date to ensure everyone has timely access to the information between newsletters.

Next EIDXA meeting:
Friday November 1st, 7:30PM.
☆ Campus of Kirkwood Community College, Cedar Rapids.
Program: Too be announced

Established 1975