

10 April 2023

FIARC Meeting Minutes – 25 March 2023

Attendees:

N7NW – Hal Goodell	KI7CQM – Jim Braden	KJ7RVR – Jane Tollett
KJ7JCB – Paul Thorpe	KK7JEE – Keith Barnes	K7CRZ – Jeff Ferguson
AC7QN – Chuck Kemmer	KK7IVT – John Merryman	WA7KCK – Ken Rowley
KV7FOX – Kirsi Vivolin	WA7BRI – Robin Carter	W7JC – Jerry Cerny
N7BRR – Brian Hevly	W7EC – Brady Friedrich	

Thank you to **Gail Ferguson K1GCF** for providing the delicious cookies for the meeting.

1. Minutes from the February 25th meeting were unanimously approved.

2. Updates from Hal Goodell N7NW, President

- As a reminder, Winlink shows local time when you fill out the Template, but once the message is placed in the outbox and sent, the time converts to UTC time which is currently 7 hours ahead.
- Swap meet was a big success, lots of FIARC folks there attending/volunteering/buying. Thank you!
- The Aurora Borealis was visible a few nights ago – many sunspots from what was the largest geomagnetic storm in the past six years. This tends to flatten out and garble Morse code, voice transmission is OK but not digital. Hal contacted Colorado, and Alberta CA. Many HF frequencies were blacked out. Did get some bounce on 2 and 6 meters. As the storm eased in the North hemisphere, there was good propagation in the South hemisphere.
- Ken Rowley WA7KCK mentioned a website where you can check out sunspot activity.
<http://ve2xk.com/indice.html>
- **Attachment A** is some information from Hal on how to construct an antenna for contacting the ISS – International Space Station as well as the frequencies.
- Keith Barnes KK7JEE later wrote in that he uses the free version of My Aurora Forecast for sunspot activity, and the Sky Guide app for tracking satellites. This might be an activity for the FICRA Fair.
- Leases were signed for Gold and Tiger mountains, looking to install more repeaters.

3. Updates from Jim Braden KI7CQM, Vice-President

- The PEP-C (Peninsula Emergency Preparedness Coalition) Fair will be 4/22/2023 at the Gig Harbor High School, 5101 Rosedale St NW. For more information go to www.pep-c.org
- The FI Bridge is owned by the County who will be spending about \$7MM on improvements. So far there are no concrete plans for bridge replacement.
- If anyone is interested in being an emergency Ham radio contact during a disaster please let us (Jane) know. Current volunteers are listed in the Roster (**Attachment B**) so please check your listing.

4. Updates from Jane Tollett KJ7RVR, Secretary

- Again, please check your information in the attached Roster, send updates to Jane.
- Welcome new members: Carolyn Sawyer – KK7KIJ, and Linda Claar – KK7JJD

5. Brady Friedrich W7EC – PARET, Peninsula Team Emergency Coordinator

- ARES(Amateur Radio Emergency Services) is the official communications team employed by Pierce County and Washington State in a catastrophic event. This means that if we need resources we need to communicate through official channels, i.e., ARES at their EOC(Emergency Operations Center) which is for us would be PMACC(Peninsula Multi Agency Communications Center) which is at the Fire District 5 HQ Building which is 10222 Bujacich in Gig Harbor .
- PARET(Peninsula Amateur Radio Emergency Team) is one of five geographically aligned teams within District 5 Pierce County ARES, which supports Pierce County Emergency Management and other served agencies with Emergency Communications. PARET and Pierce County ARES have overlapping members. They are not mutually exclusive but do operate differently.
- **Appendix C** is a flow chart from Brady showing how ARES, PARET, and Fox Island interact.
- In an emergency, for ARES to deploy someone, that person must have background screening, a Washington Worker's Card, certain levels of training, etc. The reason is liability. This tends to dissuade people who are really interested in helping. We need to understand this liability issue.
- Many communities have local Emergency Communications networks (or EMCOMM) that are less official but still allow people to help. An example is our Fox Island Emergency Preparedness Net. Our request to have Hams designated as Emergency Contacts on our FIARC roster is a way for people to help who are not in ARES. Local help will be very important in a disaster.
- Again, ARES is divided into districts and teams. District 5 is all of Pierce County, and the Peninsula Team is everything North of the Narrows Bridge.
- Although resources are allocated in the event of an emergency, likely in a disaster such as an earthquake the bridge would be closed, and Fox Island would be independent.
- It is easy to join ARES, go to: <https://piercecountrysares.net/join-the-ares-team/> Joining ARES allows you access to the website and the ability to participate in ARES activities including nets and meetings. However, to be deployable, you still need to get a Washington Workers Card and additional training, testing and a background check. Joining is the first step.
- Brady gave an example that in Turkey during their recent earthquake, only Hams approved by the government were formally deployed. Many others could not be used as their expertise could not be verified by the government.
- So, how can that verification problem be solved? ARES has PTBs – Position Task Books (**Appendices D, E and F**) that are used for training and documentation. Once help is needed, your progress in the book is evaluated to determine where and how you can be deployed.
- Brady co-founded "Gig Harbor Now", a non-profit newsletter which is currently digital only. <https://www.gigharbornow.org/> The amount of community information there is amazing – including ARES Nets information - thank you Brady!
- PARET hosts a weekly net every Monday at 1900 hours (7pm) on the KA7EOC repeater (145.350 MHz / -600 kHz offset / 103.5 PL Tone) and meets in person and via Zoom the first Thursday of each month, also at 1900 hours (7pm).
- Finally, every 5th Saturday ARES conducts a drill – the next one will be 4/29/2023. Perhaps we should consider participating as a club activity.

6. Fox Hunt – Chuck Kemmer AC7QN

- Chuck showed his portable Yagi antenna. Very impressive – thank you Chuck. To make it takes only a few materials: PVC pipe, 1" wide metal tape measure(a 25' one makes 2 ½ antennas), driven element connected to coax, and some coax cable. Probably you will also need a connector from the Coax to your radio.
- Not all handhelds lend themselves to the Fox Hunt use of the antenna. You have to have a way of seeing the signal strength of the hidden transmitter. Most handhelds have a bar graph which shows signal strength. As you rotate the antenna around you can see the signal strength vary. You want to

point the antenna such that you get the strongest signal peak, which will be the direction towards the hidden transmitter. If the signal is too strong you will not be able to see a difference as you rotate the antenna. That is why you need an inline attenuator. As you adjust the attenuator, your signal will get weaker, and you will be able to rotate the antenna to peak up on the signal again. Now if your handheld does not have the signal strength bar graph, which the Baofengs do not, then you won't be able to see a visual of the signal strength.

- We decided it would be best if Chuck made up a dozen "Driven" sections (involves soldering) and brings them and the remainder of the parts to the meeting and we can work after the meeting to finish assembly. About 12 people indicated they were interested. We will ask everyone interested to bring their radios to the next meeting so we can see what adapters are needed – might need to order some - \$2 each perhaps.
- Here is a tentative schedule of getting ready so that we can escort non-Hams around at a Fox Hunt during the Fair, as very few of us have participated in a Fox Hunt besides Chuck.
 - April* – Workshop to build our Yagi Antennas after the meeting.
 - May* – Workshop after the meeting to practice using the Antennas with the receivers.
 - June* – Field Day, no meeting
 - July* – Have a practice hunt after the meeting.
 - August* – The Fair

7. Other Future Events

- ARRL Field Day – The Mike & Key ARC holds their Field Day event at Fort Flagler. Visitors are welcome to come and take part. Tacoma Radio Club hosted their Field Day last year at the Western State Hospital in Fort Steilacoom, visitors also welcome.
- Glenn Hansen KB7PKC asked if we should run a Field Day here at Fox Island. The idea was well-met but would need to steer clear of the Longest Day celebration that weekend at the NCC. We did not discuss this (item was from February meeting) but will keep on the agenda for April.
- Jeff Ferguson K7CRZ is training Jane and John Merryman KK7IVT on the GoKit on 3/31 and hopefully after that both Jane and John can also be trainers. The GoKit will also be set up at the PEP-C fair.

10. Next meeting

Saturday 22 April 2023, 10-11am. Social time 930-10a.

Respectfully Submitted,

JANE

EJ Tollett - KJ7RVR
970/531-1866

Attachments

- A – ISS Antenna and Contact Information
- ~~B – Current FIARC Roster~~
- C – PARET Flow Chart
- D – Radio Operator PTB
- E – Emergency Communicator PTB
- F – Homeland Security Auxiliary Communicator PTB
- G – How to Construct an HT Yagi

International Space Station

ARISS

What's the Frequency?

Here are the worldwide frequencies for
Amateur Radio on the International Space Station

Crossband voice repeater

437.800 down / 145.990 up (PL 67.0 Hz)

Packet Radio - Currently APRS

145.825 up and down

Educational Contacts

145.800 down

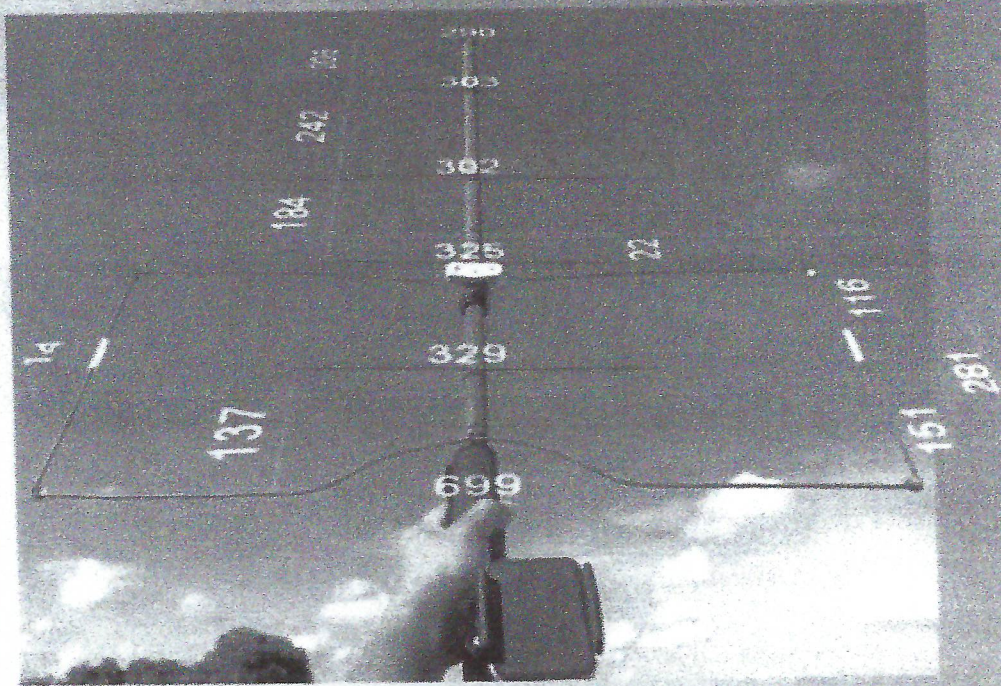


Facebook: ISS International Space Station Fan Group

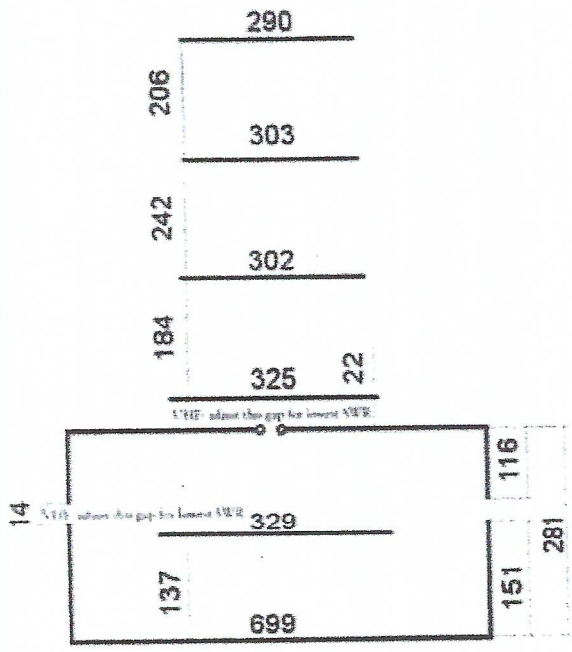
Webpage: <https://www.ariss.org>

Amateur Radio Satellites Web Page:

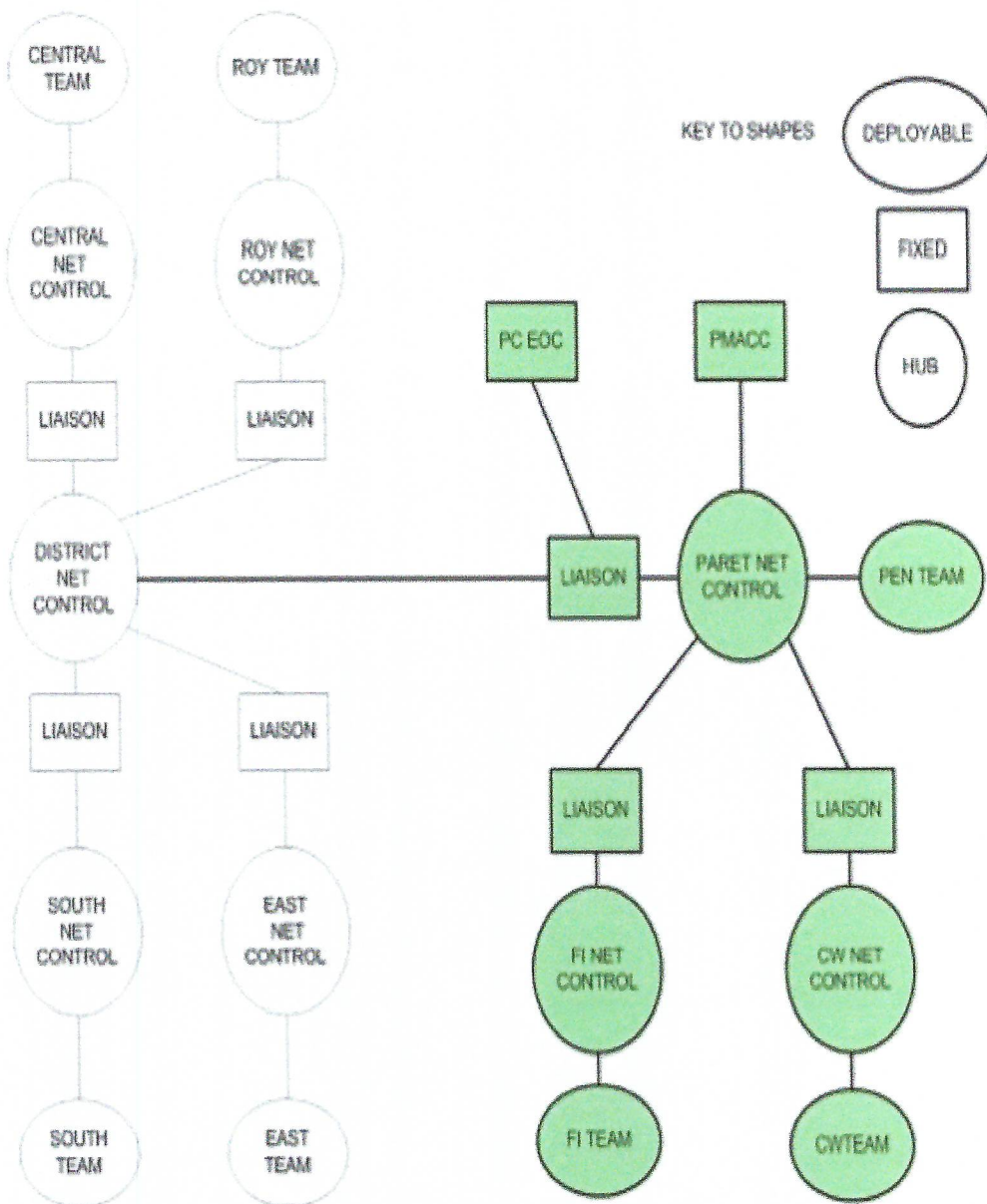
<https://www.n2yo.com/satellites/?c=18>



Moxon-Yagi Satellite Antenna by DU1AU (based LY3LP's design)

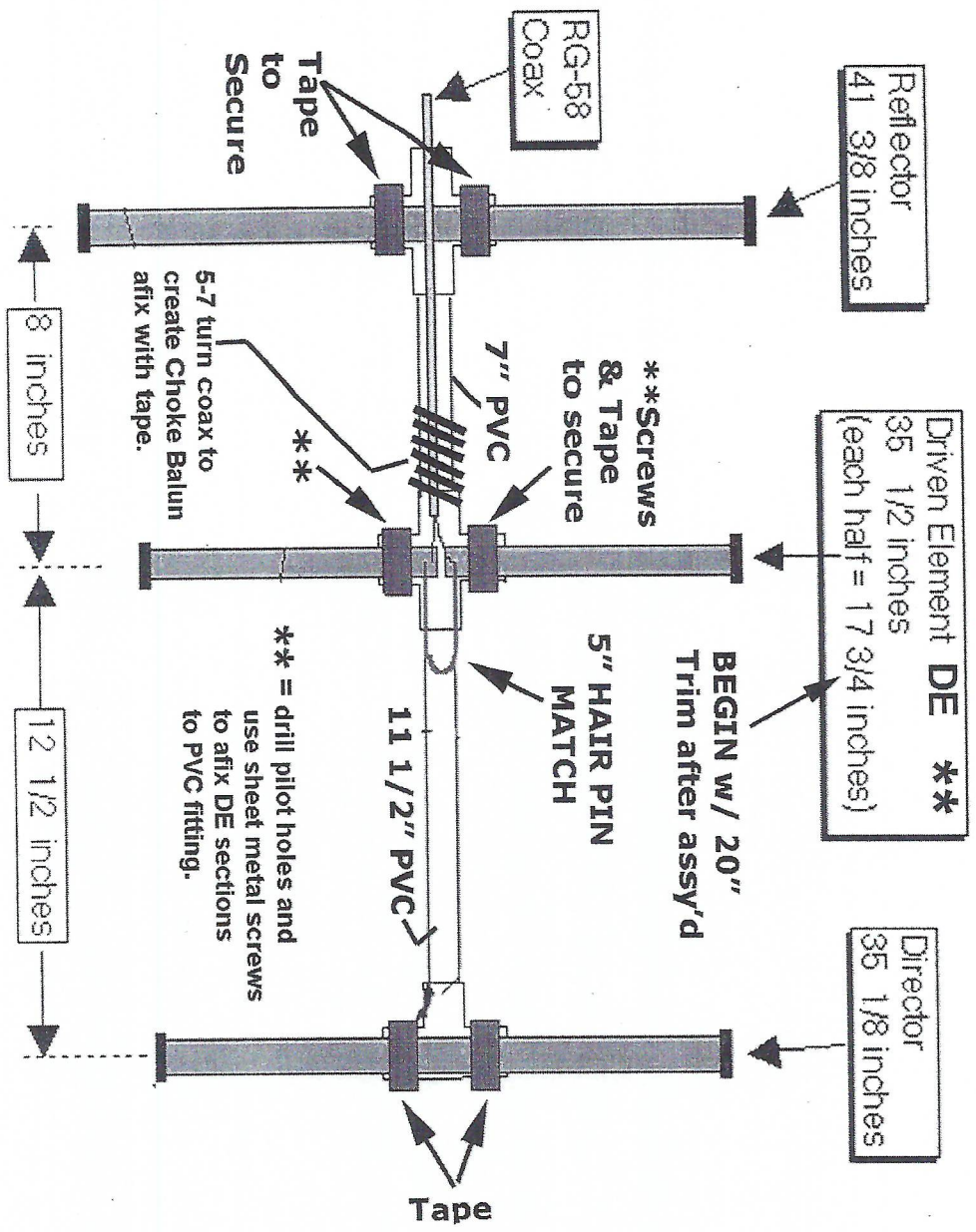


- Notes:
1. All measurements are in millimeters (mm).
 2. Use 3 mm copper or aluminum elements.
 3. Adjust the critical gaps for lowest SWR (adjust the 14 mm and 22 mm gaps as needed).
 4. Only the VHF elements (Moxon part) are connected to the feedline. The UHF element (325 mm) closest to the feedpoint is the UHF driven element. It is not connected to the feedline, but resonates only when the proper gap is achieved.
 5. The feedline connects directly to the radio (no diplexer/duplexer needed).
 6. Use translucent plastic insulator from an RG8 cable for the 14 mm Moxon gap
 7. Use non-metallic boom (wood or orange PVC pipe).
 8. The feedpoint gap is 10 mm.
 9. The antenna works with any dual-band UHF-VHF radio.
 10. For inquiries, email du1au@nightskyinfocus.com



9 - 11/17

**Radio Club of Tacoma's
TM Yagi Party 4/21/2018**



Suggested Construction Steps:

1. Glue up PVC boom - orient grooves in T & Xs

2. Cut 2 Driven Elements 20"
Remove Paint for solder
Drill Holes for screws
Tin with Solder
Drill and affix to it's X
Trim DE, not too short

3. Add Coax Feed Line
Quickly solder Hairpin Wire
Quickly Solder Coax
Tape to secure
Manage Choke Turns & Tape

4. Cut and tape down
Director and Reflector

5. Add PVC Pipe Handle
of choice

6. Ready to test SWR

WB2XOL
W/R2H01 Naamir Saa' <http://hhalanrine.net/wb2xol/mvriante/rdf/frana.htm>