



432 AND ABOVE EME NEWS

MARCH 2026

Volume 55 Number 3

<https://EME.RADIO>

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News, Contests and DXpeditions

News

2026 EME Conference

Things are moving ahead for the conference. The Registration has closed. For those who have already registered, please see the Report from Rainer EA8DMF below for further information.

2.4 & 5.7 GHz Wi-Fi Interference

With the last 2.3 and 5.7 GHz DUBUS-REF contest activity, there have been many reports of Wi-Fi interference. In January's NL there was discussion of filters for 2.4 GHz to help mitigate the noise. Even the T7 Dxpediton was seriously impaired with QRN on 5.7 GHz and yet some stations are reporting no problems?

Personally I have recently upgraded my filters on both bands and carefully selected their location and preamp gains and devices for best IP3. I am using low sidelobe feedhorns and even a shielding fence on my 3 m PF dish. On 5.7 GHz where I do not have a high IP3 preamp I still have some noise but for CW, a noise blanker does handle it pretty well. I think we need to identify best practices so that we can continue to use these bands successfully.

Please share your experience with this problem.

23 cm Feedhorn / Dish work

There continues to be a lot of work being done by KB2SA and others to improve and reduce the size of feedhorns being used for 23 cm. Bill KB2SA has designed a patch feed that will produce circular polarization without a hybrid or scalar ring and yet achieve "best in class" illumination efficiencies. Hopefully at some point this work will provide

some practical solutions. This work combined with the emergence of the "Cooker" dishes has resulted in a tremendous increase in 23 cm activity.

24, 47 & 76 GHz EME Activity

There has been some good 24 GHz activity spurred by the T7/IW2BNA Dxpediton who have worked at least 11 stations. There were some preliminary plans for a 24 GHz activity day in April. Also June 13th is the 24 GHz CW/SSB contest (logger use allowed). With the spring weather starting to appear in many places I would expect the activity to increase as for many it is a fair weather activity.

I know that this past weekend there has been some 47 GHz & 76 GHz activity and that will increase as time goes on.

Contests

DUBUS-REF

The 23 cm DUBUS-REF CW contest - VK3UM memorial will be on Saturday April 18th & Sunday April 19th. The rules for the 2026 DUBUS-REF contest are on the website <http://www.marsport.org.uk/dubus/EMERestContest2026.pdf>

Funtests

The final episode of the 2026 Funtests is on March 28 for 23 cm. A new entry class has been created this year to encourage CW stations to work cross mode with SSB stations. More info is in the December 2025 newsletter: <https://eme.radio/432-and-above-newsletter/432-and-above-2025-12> after the station reports.

DXpeditions

ZL7 Chatham Island & ZL1 New Zealand

Alex EA8DBM continues his travels and the next destination was Chatham Island. He planned to be active from March 21st to 26th, 2026; unfortunately his oversized luggage did not arrive, so this operation is cancelled.

Alex ZL1/LY3UM has gotten on the air from ZL, he used a small borrowed dish from Nathan, ZL1NJR to start on March 23rd, and then his dish turned up which he has been using on March 24th. He will be on until April 1st.

Check for updates at:

<https://ea8dbm.substack.com/p/zlly3um-from-rf72>

CY0S Sable Island

CY0S team member Lee, WW2DX, is hard at work on 23 cm EME from Sable Island and the operation is expected to continue until March 30/31, 2026.

T7 San Marino

The Dxpediton to T7 San Marino with 23 cm to 24 GHz being executed by Adelio IZ2DJP & Walter IW2BNA seems to have been a resounding success. They have experienced QRN from Wi-Fi on 6 cm that has limited their success there. They have QSO'd at least 11 stations on 24 GHz!

They seem to be able to rapidly change bands and I am sure their lessons learned will provide others with good information for future DXpeditions.

9J2EME

From 28 March 2026 until 1 April 2026, The Ribbetjies EME Team: Bernie ZS4TX, John ZS6JON, Paul ZS6NK and Lins PA3CMC, plans to be active from KH22 in Zambia. Activity is planned on the following bands:

6 m: 8el 6M8GJ

2 m: 2 x 18el 2M18XXX

70 cm: 2 x 28 el 432-9WL

23 cm: 70 el YU1CF

Modes: Q65, JT65 and CW upon request. They will be on HB9Q logger and N0UK logger.

EME Activation of Andorra – C3

ON7EQ Jean-Jacques and EA8DBM Alex are teaming up to be QRV in EME from the Principality of Andorra on 70 cm, 23 cm and 13 cm during the weekend of August 08-09 2026, in collaboration with the 'Unió de Radiaficionats Andorrans'. The Call sign is expected to be C37EME operating from locator JN02SK.

During the 2 moon transits, with favourable degradation, declination, and moon at its perigee, they will look out for DX to VK, JA, NA, SA, KH6 ...

Confirmation of the plans are to follow in March/April, after which details will be announced ... but you can already circle in pencil these dates into the agenda!

For your information, the last known EME activity from C3 on 70 cm was in 2009, and on 23 cm in 2005.

Contributions are welcome via Paypal to info@pa3cmc.nl. Your support will be highly appreciated. Contributors will automatically receive a paper QSL card and LOTW confirmation after the expedition. More details will be on the 9J2EME QRZ page.

Articles and Announcements

Don't miss the articles and announcements that follow this month's station reports.

2026 EME Conference

EA8DMF Rainer

I am trying to arrange something of a tour for the Loro Parque on 28/05/2026. The two other spouse tours will stay as planned.

See <https://eme2026.moonbounce.info/Tour.html>

I am still waiting for some answers regarding the choice of starter and main course for lunch on Friday. This only applies to conference participants.

The catering is online now:

<https://eme2026.moonbounce.info/Gastro.html>

4Z5LV Alex

On 28 Feb and 1 Mar - I tried to listen to 13 cm EME, with nil results, despite that there were real big guns on the band. I was badly prepared for these activities (and current conditions here does not allow to make it much better), so I did not make Sun noise measurements before I started to SWL.

I changed a lot of things in real time, including OCXO replacement + LNA tuning.

Today I was able to test Sun Noise / Cold Sky and found that my AZ was 4 degrees off (to the west), and my elevation was 3 degrees low, so I missed the Moon all the time. Now I get ~7.2 / -7.3 dB Sun to Cold Sky on my 1.8 m dish.

Finally, after azimuth and elevation offset correction, I was able to RX strong signals from G4CCH (-13) and even stronger OE9ERC (-6) Q65 signals. Thanks to Howard and Eric for the help with my RX testing.

Now I am working hard on the PA amplifier, it seems that I need to get more power from my 2320 MHz driver (it was tuned for QO-100 work 2400 MHz, so lower power on 2320 MHz). Meanwhile the maximum that I can get from my Spectrian is 31 W, so I need to find the missing 3 dB of signal.

F2CT Guy

Here is some about my activity on 3 cm EME.

Unfortunately I couldn't be QRV on 6 cm during the 6 cm DUBUS-REF contest due to high level QRL!!!

I was on 3 cm on Sunday and work the following:

- T7/IW2BNA in Q65D60 ; -15/-13
- T7/IW2BNA in CW ; O/559 ; O/559
- NJ6D / FM42 new state AZ
- W3TI/FN20

I must check my setup which is driven on 144 MHz by an IC9700 with an external GPSDO, but some friends told me about drift! So I must verify if the trouble was from the IC9700 or from my 10 GHz transverter.

My apologies for that trouble!!!

Ed Note: Guy's signal wandered back and forth considerably during a 60 second sequence and WSJT would not reliably decode his -5 signal.

G3LTF Peter

After a few minor problems were fixed I was ready for the start of the 13 cm DUBUS-REF CW/SSB contest at 00:00 Feb 28th working SP3XBO,OK1KIR, W5LUA (x band), VE6TA, WA6PY (x band), OH2DG, G4CCH, VE6TA (better signal, now 579). On the next pass I worked PA3DZL, SP6JLW, JJ1NNJ (x band), SP9VFD, PA0PLY, OH1LRY, F5JWF, DF3RU, CT1DMK, OM6AA and SV3AAF for a total of 18 QSOs. I heard and called IK2RTI. I measured 20 dB of sun noise, SF147, and 1 dB moon noise.

Next day, 1st March, I started at 17:30 for the 13 cm Funtest. I worked G4CCH, DF3RU and PA3DZL 2-way SSB and then JJ1NNJ x band CW-SSB. Next I was called on SSB by F1RJ # 168 and finally worked CT1DMK and OE9ERC for a total of 7 SSB QSOs in the Funtest. I missed PI9RD, I copied him at the start but through the trees and thought I'd wait until his signal improved but then his PA failed! Pretty dumb operating on my side!

It's probably too early to draw any conclusions about any difference between vertical and horizontal alignment of the 9 element but it was noteworthy that with Frank around 1 dB down on power recently I still managed to decode him at -11 dB which matches his previous best.

I had one more decode today March 23 of, OZ7UV at -29 dB making it 4 this past month. I just decoded Svend with the antenna pointing being miles off the Moon. I also just had another QSO with Frank using 20 w and I had 5 dB of headroom. So 5 watts will work one day!!

G4RFR Team

The G4RFR EME system is undergoing a revamp, general clean-up and partial rebuild. It includes tidying up and repackaging various items of RF hardware, with the intention of eventually moving to an SDR based system.

Here we have John G0API using a pressure washer to clean more than two decades of accumulated dirt and old flaking paint off the dish.



G4RFR John G0API using pressure washer

G8RWG Niels

Following completion of a 10 GHz GaN PA using a CMPA801B025F device in February, my output power to the 1.2 m offset dish is now around 20 W. Details of the PA build are on my website: <https://g8rww.uk/articles/10-ghz-25w-gan-pa/>

On 2 March I managed to get the new PA on the feed tray for a short period of operation and completed QSOs with ON5TA -16/-17, OZ1LPR -2/-16, GW3KTH -19/-22 and IW2FZR -16/-18.

Good moon conditions and fine weather between 20 and 22 March were very productive and I managed to get 10 new initials in the log. I did have a few sequencer/IF switching problems at times and ended up having to bypass the splitter for the moon noise meter making it harder to see if the dish tracking had wandered off. I still need to tidy up the feed tray but the amplifier is performing well, with signal reports reflecting the improved output power.

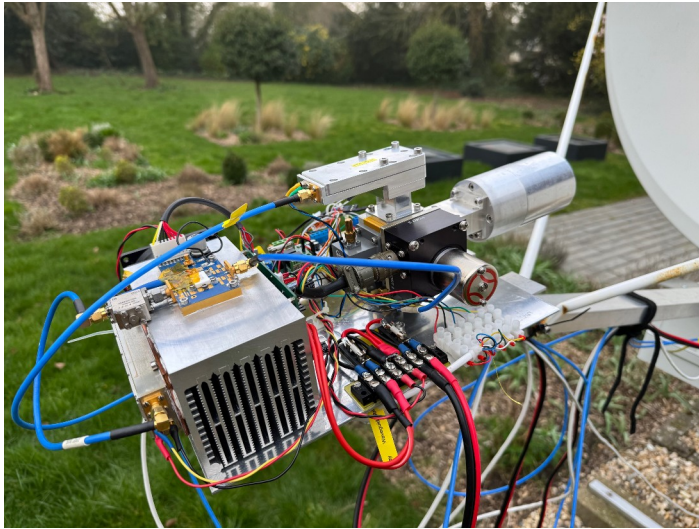


G4RFR Dish Cleanup Begins

20 March 2026 ON5TA -12/-15, I6YPK -22/-21

21 March 2026 DL4DTU -11/-12, W3TI -23/-21,
DJ7FJ -15/-18, YO2LAM -12/-22

22 March 2026 IW2FZR -16/-17, T7/IW2BNA -20/-21,
OM4XA -19/-18, IK3GHY -18/-18, SA6BUN -10/-14,
IK6CAK -10/-16, VE4MA -15/-17, PA3BYV -19/-21,
G4YTL -18/-19



G8RWG SSPA Feed Assembly

IZ0JNY Ivan

Work and optimizations for 24 GHz EME continue, a band that is proving to be increasingly interesting and, above all, more and more active.

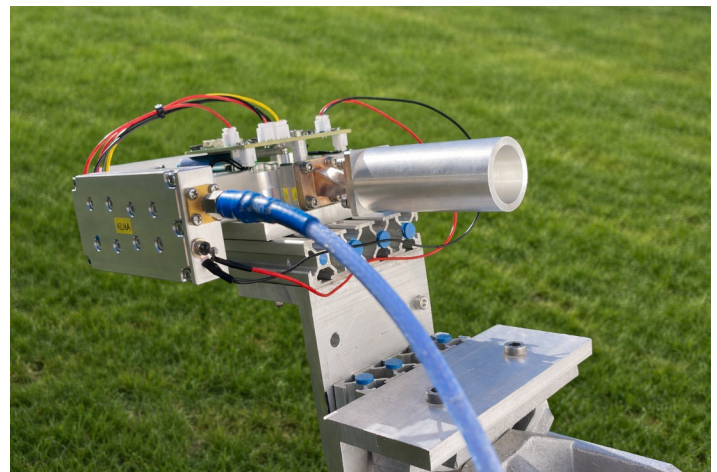
I designed and simulated a W2IMU-style feed optimized for an f/D of 0.7, with a WR-42 waveguide flange output. I aimed to minimize spillover by targeting a feed with less pronounced sidelobes. Practical tests confirmed good results: in terms of S/N I gained about 1 dB, and in terms of GND/CS about 0.8 dB. With my CAS-120 dish I can measure around 12 dB of Sun noise, which I consider very satisfying.

For anyone interested, I include below a link to my website where you can download the project files in .stp format and the mechanical drawings to reproduce it.

I recommend using one of the online CNC services; I had mine machined in 6061 aluminum by JLCCNC at a very reasonable cost (around 80 euros):

<https://www.iz0jny.it/24ghz-feedhorn-w2imu/>

The feed had its "first light" on March 21th, 2026, when I completed 24 GHz EME QSO with Walter IW2BNA and Adelio IZ2DJP during their "Repubblica di San Marino" EME activation (T7/IW2BNA, Sent: -17, Rcvd: -15), as well as an initial QSO with Jac PA3DZL (Sent: -15, Rcvd: -14).



IZ0JNY 24 GHz Feed

JJ1NNJ Koichi

I participated in the 70 cm part of the DUBUS and REF CW EME CONTEST on January 31st. I worked 3 stations on CW running only 50 W, G3LTF RO/M, OH1LRY RO/O # 137 and UA3PTW RO/O. I received a lot of QRZs but I was able to make contact completely. Thanks to all the stations.

On February 28th I participated in the 13 cm part of the DUBUS-REF contest. I worked 7 stations on CW, OK1KIR (579/569), OH2DG (559/449), G4CCH(569/579), PA3DZL(569/559), DF3RU(559/559), OH1LRY(559/589) and G3LTF(569/579). Six QSOs were using 2400/2320 MHz and OK1KIR was with 2400 MHz only.

Then on March 1st during the 13 cm SSB Funtest, I contacted 4 stations G4CCH 44 QM /579 IO, G3LTF 44 QM /589 IO, DF3RU 44 QM /559 JN and PA3DZL 44 QM /559 JO. All QSO were CW x SSB and 2400 MHz TX / 2320 MHz RX.

Other QSOs were made with CT1DMK #36 on CW, PA0PLY and G4CCH on Q65-60C.

It was a very fun weekend! I might have been able to QSO via SSB-SSB, but it was the middle of the night, so I couldn't speak loudly. Thank you to all the stations that listened to the 2400 MHz band.

I was temporarily set up for 6 cm receiving on my 3 m dish. I got 9.2 dB of sun noise and 0.3 dB of moon noise. These values did not meet expectations.

I tried receiving during the 6 cm part DUBUS-REF contest on 21st Mar. and received 9 stations: UA3PTW, OH2DG, OH1LRY, SP6JLW, SA6BUN, OH3LWP, G3LTF, OZ1LPR and JA6XED.

I feel that the receive levels are low by 4-5 dB. I suspect the converter loss is significant and I will try to improve the system.

KD2XN Phil

Since my last NL submission, I've completed an additional 21 23 cm EME QSOs including DXCC #24 – HI3/LY3UM using a 2.3 m mesh dish with 180 W at the feed.

Contacts as follows; KG0D (-21/-22), W5AFY (-18/-22) 30B, OZ5TG (-17/-18) 30B, OE9ERC (+00/-11) 30B, HI3/LY3UM (-22/-24) DXCC #24, OH3LWP (-11/-20), SP5DGM (-18/-18), OZ5TG (-19/-8), K6EME (-19/-22), PA1PS (-17/-19) 30B, AA4MD (-17/-16), OK1KIR (-5/-8) 30B, DC1RDB (-23/-23), ES3RF (-12/-17), VE4SA (-13/-13), W1AW/KH6 (-14/-19). Q65-60C except as noted.

Since my last submission, I've also had the unenviable task of replacing the azimuth drive motor on my Alfa SPID RAS/HR. Yes, replacement can be done in situ!! I will be documenting the process on myqrz.com page - <https://www.qrz.com/db/KD2XN>. Until then if anyone has any questions about the process, please email me via qrz.com.

Note that Bob, KA1GT has documentation on replacing the elevation drive motor. Please refer to: https://bobatkings.com/radio/SPID_BIG_RAS.html

I will be QRV with 600 W later this spring. I am waiting for warmer weather here in upstate New York and a length of LDF5-50A.

See you on the moon!

KL6M Mike

So far 2026 has been a terrible year for me for EME. In early December we had RAIN and temperatures above freezing, and my feed winch got soaked and the NEXT DAY the temperature dropped to -15 C.

I had issues here with my polarity rotator during 70 cm DUBUS-REF in January and only worked UA3PTW, VE6TA, W5ZN # 569/569 and VE4MA.

My feed winch was frozen until one day in February when it got above freezing long enough for me to get the 70 cm feed mounted. It promptly dropped to negative teens again and was frozen until last Saturday for the DUBUS-REF 6 cm contest.

Then an operator error struck and I over-stressed my winch cable and it broke and the feed support came crashing down, but it had a somewhat soft landing and buried itself in a snowbank. I thought I would be off the Moon until spring, but WL4M, a young, fearless certified climber came over and bailed me out.

So I should finally be ok for the next DUBUS-REF contest events.



KL6M Dish Repair Work

N0AKC Charlie

I was active on 13 cm on the weekend of March 1st and worked G4CCH, K5DOG, SP9VFD, VE4MA, VE6TA & DF3RU. This past week I put the 23 cm feedhorn back on the dish to try and work the CY0S DXpedition and successfully completed with them at 0133 on March 23.

I also worked a number of other new initials during March 20-23 including KV4J, KV7E, HG5BMU, OZ9AAR and VE4SA. KV7E (OR) was state #28 for me on the band, while HG5DMU, OZ9AAR & CY0S were all new DXCC entities.

I'm still trying to get all the problems resolved with my 432 EME system, but getting close to being back on the air with it. I'm busy cooking maple syrup at the moment, so that's consuming most of my time right now.

I am still slowly working to put together an EME system for 10 GHz, which I hope to have on the air later this year. Just need more time and \$\$ to finish it!

N1AV Jay

I have not been on the air much due to several outstanding health issues and a few shack maintenance issues that I had to address. I have been spending time collecting gear to get on 9 and 6 cm EME. I should be operational in the next few months, assuming I can make a decision on the dish to use.

I did however get on the March 22nd pass on 23 cm and 3 cm. My 23 cm system has had an azimuth issue that I feared was a broken relay, but it turned out to be bad wiring at some point along the 82 foot run from the controller to the rotor. After testing the rotor I pulled a new cable through the conduit and checked sun tracking before MR. It looked good now and I was able to work a few new ones for initials, grids and DXCC.

T7/IW2BNA -21/-20, HG5BMU -16/-3,
CY0S -21/-21 (now in the radome).

Then I flipped to 3 cm and worked a few for new grids and DXCC: T7/IW2BNA -19/-19, SA6BUN -13/-11,
IK6CAK -11/-15, PA3BYV -24/-22.

As a test to see if anyone read these reports, I have A QUESTION for the group!

I am very close to getting on 9 and 6 cm EME. I want to be content competitive, but I don't expect to be the loudest station on the band. I am looking to make relatively quick QSOs on 9 and 6 cm, digital modes primary focus, however I will want to chase CW as well. (TX 50 W on 6 cm, 100 W on 9 cm). All electronics to be tower mounted.

I currently have two choices for a dish.

1. 2.4 m TVRO C band dish. (Light weight and can turn with SPID or slew drive)
2. 3.7 m (12') Paracclipse C band dish. (MUCH heavier, will need slew drive and a LOT of counter weight).

I fully realize that there is a "small" population on both bands compared to 3 cm or 23 cm, so I am looking to maximize effort in relation to the population.

Which dish would you all choose?

NC1I Frank

The following initials were added on 70 cm since my report last month:

BI8SCC (19dB/21dB) 8 x 19-elements and 75 watts,
 PJ4GR (28dB/21dB) 1 x 22-elements and 75-watts,
 BA4QNR (22dB/19dB) 4 x 16-elements and 75-watts,
 BA4TGI (19dB/12dB) 4 X ? elements and 75-watts,
 BD1BGB (23dB/19dB) 1 x 15-elements and 75-watts,
 KC1WAY (28dB/29dB) 1 x 15-elements and 35-watts, &
 G4BAO (27dB/23dB) 1 x 23-elements and 60-watts at
 John's moonset.

I believe it was the first ever 70cm EME QSO for all of these stations. I am amazed at all of the activity from China. Also of note were several QSOs with Nic G3YEG while he was running his 9-element Yagi (in the attic) and 20-watts.

The following initials were added on 23 cm:

WI0JK (13dB/8dB) 2.4-meters 150-watts for his first 23 cm EME QSO, CY0S (13dB/8dB) for DXCC #119,
 VK2CMP/ (10dB/14dB) 2.4-meter 300-watts,
 T7/IW2BWA (12dB/15dB) 1.8-meter 150-watts,
 OZ9AAR (+6dB/+5dB) 4.8 meter and 400-watts (Carsten had a best of +8!), ON4BCB (+4dB/+00dB) 4.9-meter and 1000-watts. Of note was a QSO with John G4BAO while he was using a 44-element Yagi at moonset.

OH3LWP Ari

There was a lot of activity 20-23/03/2026 with DUBUS-REF 5760 MHz EME contest and several DXpeditions all taking place during the same weekend.

I participated in the DUBUS-REF 5760 MHz EME contest 21/03/2026 with following QSOs completed: UA3PTW, SA6BUN, OH1LRY, JA6XED, SP6JLW, OZ1LPR, IK0HWJ, G3LTF, SM6PGP, and WA6PY. I heard and called PA0PLY, OE9ERC, and SP3XBO but did not complete QSOs.

I worked several new initials and new DXCC in the 23/2/2026 to 23/3/2026 time window as below:

New 23 cm initials:

26/02/2026 LU1HKO digital
 20/03/2026 CY0S digital (also new DXCC)
 22/03/2026 BV3CE digital (also new DXCC), T7/IW2BNA digital (also new DXCC), OZ9AAR digital

New 13 cm initials:

23/03/2026 T7/IW2BNA digital/CW (also new DXCC)

New 6 cm initials:

21/03/2026 JA6XED CW, SM6PGP CW
 22/03/2026 G4DDK digital

New 3 cm initials:

20/03/2026 T7/IW2BNA digital (also new DXCC)
 23/03/2026 PA3BYW digital

OK1KIR Vlada & Tonda

During the last week of February we were active for several days on 24 GHz testing new LNA (KLNA for previous DB6NT).

On Feb 25 we worked with Q65-60E
 at 16:56 IZ2DJP -14/-12 (B-13/B-11),
 at 17:06 IZ0JNY -14/-17 and on Feb27
 at 15:46 again IZ2DJP -16/-12 (B-15/B-11).

Several trials with IK6CAK (OF dish 2.4 m) but only 2 W power failed regardless Mauro decoded us at SNR up to -11 dB. Further tests with YO8RHI (PF dish 2.2 m) were again unsuccessful and at that time even both ways. After that 24 GHz was removed and swapped for 13 cm.

Next day on Sat, Feb28 we participated in the DUBUS-REF EME Contest on 13 cm and collected 20 CW QSOs. We made only one JA (JJ1NNJ), three NA stations (W5LUA, VE6TA, and WA6PY) and the remaining 17 stations were from the EU. Unfortunately, no new CW initials were made.

However, on the evening of February 28 we made two new initials with Q65-60C. At 20:16 G4BRK -26/-22 as #126 working with only 40 W into a linear feed in a 1.5 m dish and at 20:45 G4SDG -10/-11 (PF dish 2.2 m / 100 W) as #127.

Then we closed 13 cm and installed 3 cm to support the demonstration of EME on 3 cm provided by Chuck, NJ6D at TechFest in New Mexico. NJ6D used a 1 m OF dish, 10 W with coaxial switch. We measured MN 3.2 dB and worked him quite easily with Q65-60D on Mar1 at 00:08 -20/-10 (B-19/B-2) as #281. Chuck probably did not measure SNR in the standard 2500 Hz bandwidth or used another type of audio processing as we cannot provide such signal strength if measured in 2.5 kHz band with only 45 W. Chuck plans to improve his 3 cm rig to 50 W power with WG switch and potentially drive through western US states. After that we took a break to gain power and free time for the announced expeditions on March end.

On Fri, Mar20 started looking for the CY0S expedition to Sable Island on 23 cm with a 1.5 m cooker dish and 200 W operated by WW2DX. We worked CY0S with Q65-60C at 14:15 -12/-11 as #666, new DXCC and 1st QSO CY0-OK on 23 cm. Later at 15:33 we worked with Q65-30B KD2XN -8/-5 as #667.

Next was MW expedition to San Marino on 13, 6, 3 and 1.2 cm bands with PF dish 1.8 m. Based on requests they started on Mar21 with 1.2 cm and 14 W power. We worked T7/IW2BNA with Q65-60E at 08:11 -16/-10 as #60 and 1st T7-OK 24 GHz QSO. Shortly after we added JA8ERE -10/-9 as #61.

Then we swapped to 6 cm for the DUBUS-REF EME CW Contest. However, Wi-Fi interference again did not allow acceptable CW operation. Therefore we worked with Q65-60D only at 11:12 T7/IW2BNA -17/-14 (B-14/B-10) as #77 and 1st T7-OK 6 cm QSO. They used 20 W SSPA.

Then we reinstalled again 23 cm in a hope to make CY0S on CW, but WW2DX announced QRT for strong winds. So, on Sat, Mar21 we worked on 23 cm with Q65-60C only WI0JK -14/-19 as #668 and prepared the dish towards the East for a short window with Alex in ZL7/YL3UM.

Unfortunately, on Sun, Mar22 Alex announced terrible news to be without lost luggage.

So, we swapped again to 3 cm awaiting T7 expedition with 1.8 m dish and 20 W SSPA.

On Mar22 we worked with Q65-60D at 08:25 T7/IW2BNA -13(B-10)/-7 as #282 and new DXCC. Further at 09:15 worked IK3HAR -15/-10 as #283, 11:12 IK3GHY -10/-13 as #284, 11:29 PA3BYV -13/-10 as #285, W3TI -16/-10 as #286 and at 16:10 NJ6D -22(B-21)/-10(B-4) as #287. In between at 10:57 finally worked T7/IW2BNA on CW O/O as CW#158.

On Mon, Mar23 morning at our MR we worked on 23 cm at elevation only 3 deg with Q65-60C at 07:06 Alex as ZL/LY3UM -20/-22 from RF72 as #669.

Then we installed 13 cm and were awaiting T7 expedition (150 W SSPA into 1.8 m dish). At 09:43 finally worked with Q65-60C T7/IW2BNA -9/-11 as #128 and later at 10:59 T7/IW2BNA 549/559 as CW#209.

Having T7 expedition worked on all bands we reinstalled 23 cm to try CW with CY0S. Lee was unfortunately still busy with digi callers, but we were pleased to extent the bands worked with T7 expedition to five with 23 cm at 15:30 working with Q65-60C T7/IW2BNA -9/-11 as #670. We plan to be QRV on 23 cm also tomorrow on Mar24 to try to work CY0S with CW, when Lee gets time and can rearrange for CW operation.

ON4BCB Walter

On 22/03/2026 after a very long time I worked Carsten OZ9AAR in SSB with both 5x5 reports.

After the successful QSO I switched to CW but Carsten was too excited, so he was not able to QSO in CW :-). Then we made an easy digital one.

It was nice to work Carsten after such a long time and it was a sort of special "first" contact. We both use a 4.9 m dish and an OM6AA Septum feed. Many thanks Carsten for the QSO! After the QSO we had a toast for our QSO :-)



ON4BCB - OZ9AAR SSB QSO Celebration

OZ9AAR Carsten

Sunday March 22nd 2026 I finally got QRV again on 23 cm EME after a lot of hard work. I have been away for around 23 years so it was extremely nice to get back again.

40 minutes after the last screw was fastened in my feed and the last cables installed, I made my first QSO! Walter ON4BCB and I finished a very nice SSB QSO (55/55) with excellent signals! Walter and I are both using an OM6AA feedhorn so that was also a bonus. Walter has been very kind and helpful during my process of designing/producing my horn. Rasto OM6AA has also been extremely helpful during the process.

During the following approximately 6 hours, I finished a total of 57 QSOs (1 x SSB, 2 x CW and 54 Q65 (60C, 30B and 15A)). I had to stop at one point to go out to the dish and finish the sealing of connectors, collect tools and tidy things up :) I'm waiting for new QSL cards, once I receive them from the printer, I will send direct QSL out to everyone.

Some of the highlights were working some of the smaller stations (lots of "Cooker stations", a 70 element Yagi station, KB2SA and his 1 m dish, a 1.2 m dish etc.). As the icing on the cake, I also logged the CY0S and T7/IW2BNA expeditions.

I had a quick check of sun noise (14.5 dB), and more importantly, I could measure 0.21 dB of moon noise. Also checked the noise level increase by switching a 50 ohm load to the input of the LNA (+7.47 dB increase, actually this was measured with the moon as "cold", so it is probably 0.2 dB higher).

I also tested my own echoes a couple of times, in WSJT I saw +4.2 dB echoes, according to my SimpleCalc application, it should theoretically be +5.3 dB, so it's close but maybe there is something to optimize. Also did some mandatory SSB (link to YouTube video below) and CW echo tests :)

The PA system mounted at the dish also seems to work perfectly; I have (measured) 0.6 dB loss from the output of the PA to the TX port of the feedhorn.

All in all, I'm very satisfied with the results so far, will be doing some minor checks of the system over the coming days, and will also need to check if alignment of AZ/EL is perfect.

I will be doing a talk about my system at the EME2026 conference in Tenerife at the end of May; the title is "EME the hard way - Why make it simple when you can make it complicated".

My first SSB echoes: <https://youtu.be/kT7hguf0feM>

More info on my system here:

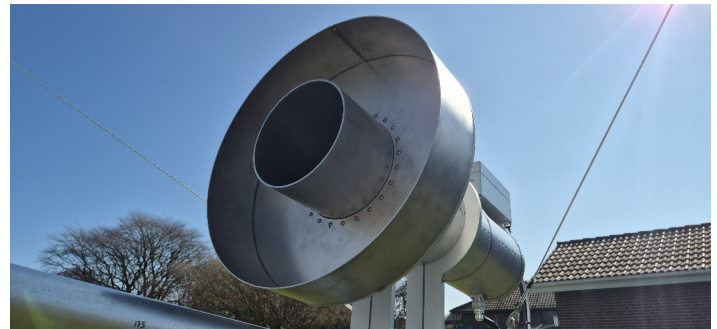
<https://www.moonbounce.dk/hamradio/ham-radio-current-systems/4.8m-eme-dish.html>



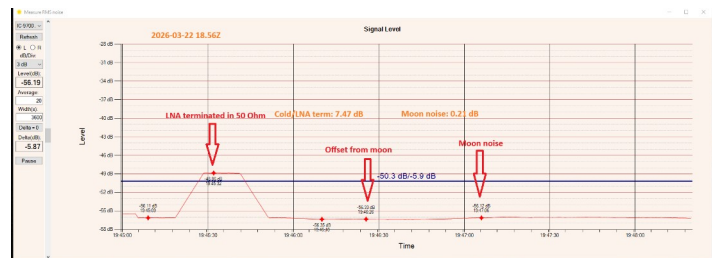
OZ9AAR Dish 1



OZ9AAR Dish 2



OZ9AAR Dish 3



OZ9AAR Moon Noise

PA0PLY Jan

I was not very active at the beginning of this year. The weather was not really contributing with lots of snow and freezing cold temperatures here.

On February 2nd I worked Terry BA7NQ on 3400 Mhz for the first PA-BA. I also worked Uwe DL1SUZ easily.

During the DUBUS 13 cm contest I was on the first moon pass to catch US-based stations. There was poor activity with only 3 stations worked over 4 hours: OK1KIR, W5LUA (for #93), G4CCH all in CW and W5LUA (-07/-15) in Digimode as well.

The next moon pass I worked 13 stations in CW: OH1LRY, SP6JLW, PA3DZL, G4LTF, PE9GHZ (-15/-17), DF3RU, SP9FVD, JJ1NNJ, SP3XBO (-15/-14), F1RJ (-14/-13), PA3DZL (SSB), DF3RU (SSB) and CT1DMK.

I also heard G3LTF, G4CCH and CT1DMK in SSB but they were just too weak to understand their information.

More recently - it was an exciting weekend with a family visit from Murphy!

I installed my 6 cm gear in the dish on Thursday before the weekend and tested all with good echoes. On Saturday at moonrise I could not use the AZ-slow mode, where Murphy struck first. I quickly added a power resistor in the AZ motor line and fixed this issue temporarily.

I went back to the moon and found no-one nor my own echoes. I started Total Power to monitor moon noise but this program did not start up for some reason. I had RF power and could see my own beacon properly. I replaced the 6 cm gear with my 13 cm feed and tested correctly on echoes, so my pointing was reasonable. I went back to 6 cm then and tuned in to another "beacon", OZ1LPR. After some back and forward movements Peter was found.

The Elevation calibration was off by 1 Degree, %#@&. Afterwards I realised that this one degree was already known between moonrise and moonset. I did do the initial testing close to moonset; voila there was the issue as I started at moonrise.

After this debacle I could run my station as usual. I worked on random in CW: OZ1LPR, G3LTF, UA3PTW, OH1LRY, PA3DZL, G4CCH, SP6JLW, SP3XBO and SA6BUN. I lost OH3LWP in CW on 6 cm. I heard him well but his signals were jumping up and down. After sending my report it took a long time and I got 73s without a report. Talking to Ari the day after, he mentioned suffering from wind gusts, which kept him from keeping the dish on the moon properly.

It was amazing to learn that the spreading was quite high when the moon was full up giving aurora type of CW signals, while close to moonset with a spreading of 10 Hz; I heard "normal" CW signals.

In Digi-mode: T7/IW2BNA, YO8RHI, DJ7FJ, G4CCH, G4BAO, G4DDK, OE5VLR, CX2CS, and ON/PA0MHE for a total of 7 new initials.

After this weekend I reinstalled my 13 cm feed and worked T7/IW2BNA as well.

Then I did some service work on my dish: Replaced the boot for the 36 inch actuator and repaired the AZ-slew.

I Installed 23 cm and worked 3 new initials: T7/IW2BNA, BV2CE and CY0S.

SA5IKN Max

During March I was occasionally active on 10 GHz EME from home, and on Sunday 22 March I took the portable system out for the first time this year.

The original plan for this operation was to work the T7 DXpedition. However, I had already achieved this on Friday evening from home using the same portable setup (0.9 m dish, 27 W, 0.6 dB NF) installed on the balcony. Despite a partially obstructed take-off, I completed the contact without difficulty as a random QSO, with T7/IW2BNA calling CQ. This marked the first 10 GHz EME QSO between San Marino and Sweden.

Having logged T7/IW2BNA, the objective of the Sunday outing shifted to adding new initials and moving closer to 100 within one year of operating my small portable system. Conditions were sunny but very windy, so I set up a small tent to provide shelter during operation. Later, the wind contributed to a sudden visit from Mr. Murphy when my IF cable connection became intermittent. However, by that time the portable session was already a success.

I worked 10 stations in total, including four new initials and one new DXCC. The new initials were JA8ERE, IZ0JNY, PA3BYV, and SV3AAF.

The QSO with Ivan, IZ0JNY, using a 1.2 m dish, was especially notable. I have worked a number of 1.2 m and some 1.0 m stations with my 0.9 m dish, but only a few provide stable and consistent decodes in every period. Ivan's station is among these, making the contact straightforward.

Another notable QSO was with Petros SV3AAF. He experienced even stronger wind, which affected the stability of his antenna. The contact required many periods to complete, but we succeeded. I am grateful to Petros for his persistence in completing this difficult QSO.

My own echoes from the Moon were exceptional during the portable session, and when Michael SA6BUN requested a CW QSO, I realized that I had forgotten my CW key at home. SNR was indeed sufficient for a CW contact that day - next time!



SA5IKN portable 10 GHz EME operation

SP9VFD Rafael

Due to the harsh winter conditions we have faced this year, I couldn't participate in 1st leg of DUBUS-REF EME Contest. Sadly, I probably missed chances for some new 70 cm initials. The snow partially disappeared at the end of February, so I was able to put the 13 cm feed into my 6.4 m homemade dish.

I needed to replace the EL drive actuator, because of a totally broken internal main screw. It was probably caused due to the high snow load when I tried to move the dish elevation down. I obtained a new heavy-duty actuator dedicated to driving large solar panel panels. The good thing is that now I can move the dish very slowly and operate moon tracking much more precisely than before.

13 cm EME activity - Rig is a 640 cm HB dish, RA3AQ septum feed, WA6PY LNA, 160W SSPA, Kuhne TRV, IC-9700:

On February 28th I had CW QSOs with G3LTF, OK1KIR, G4CCH, OH1LRY, PA3DZL, SP3XBO, SP6JLW, SV3AAF, CT1DMK, PA0PLY, DF3RU, OH2DG, OE9ERC, OM6AA, and WA6PY.

On March 1st I had a nice random CW QSO with VE6TA and then Q65 QSOs with N0AKC, K5DOG, VE4MA, and KN2K.

6cm EME activity - Rig is a DU3T LNA, 35 W SSPA, Kuhne TRV, IC-9700, and a RF HAMDESIGN septum feed.

Unfortunately, my 640 cm HB dish has poor performance on 6 cm, probably due to slightly too big mesh holes. I noticed a lot of ground noise leaked through the mesh. Despite this I was able to make on March 21st CW QSOs with UA3PTW, G3LTF, OZ1LPR and then on March 22nd Q65 QSOs with OH3LWP and DJ7FJ.

I will be finishing my 3 m solid dish in the next few weeks so I hope it might be a better solution for future 6 cm / 3 cm EME operations.

I am going to be active on 23 cm in the DUBUS-REF Contest next month.



SP9VFD 6 cm 6.4 m and 3 m future dish



SP9VFD 13 cm 6.4 m dish



SP9VFD 6 cm rig



SP9VFD Operating Position

VE4MA Barry

I had wanted to operate in the DUBUS-REF 2.3 GHz CW contest on February 28th, but I promised to participate in a 10 GHz EME demonstration that NJ6D was conducting at a local VHF conference in New Mexico with his portable 1 m dish and 10 W. It was an easy QSO but Chuck had problems with his moon window which delayed the activity. Because of the low elevation in Europe, OZ1LPR, OH2DG participated first, then W5LUA and myself. With the moon window opening late on the 28th, the demonstration time used up the DUBUS contest window to EU for me.

I did get on 2.3 GHz EME early on the 29th for the activity period and worked SP9VFD, N0AKC, DF3RU, KN2K with a 5 foot solar cooker dish and then exchanged big signals with Grant VE6TA..... all within 1 hour. Those were the only stations that were active.

I spent a lot of time upgrading the 2.3 GHz system to incorporate additional BPFs and locate them earlier and redistribute the RF gain stages to minimize the impact of Wi-Fi interference. I think I needed to turn off some of the Wi-Fi sources in my QTH, which was something that I did for the 5.7 GHz section of the DUBUS – REF contest.

I also did an upgrade on the 5.7 GHz system, again to incorporate more BPFs in appropriate locations throughout the system. I still seemed to have a lot of QRN from Wi-Fi and then silenced several Internet routers and TV boxes, which helped. I still had some noise but with the use of noise blankers, the effect on CW signals was very small.

On March 21 on 5.7 GHz I was watching for the signals of T7/IW2BNA but only spotted DJ7FJ calling them at 15:05. His signal was only -23 and I am not sure if the use of the noise blanker helped or hindered digital signals. At 15:30 I did QSO OH1LRY 569/559, SA6BUN 559/559, G3LTF 569 Both, OZ1LPR 579/559, and finally G4CCH 559 both. I did see one station that I could not “decode” and I really tried everything! I did not see any other CW signals on the spectrum display so went QRT at about 16:45 and reconfigured for 10 GHz where there seemed to be a lot of activity.

At 17:23 I spotted T7/IW2BNA at -12 and exchanged -13s with him at 17:37. At 1745 I QSO'd IK3HAR -16 with his 1.2 m dish and 17 W, at 18:03 IK6CAK -5/-9, 1807 I6PYK -16/-14, 18:13 PA3BYV -14/-16, 18:19 EA1IW -13/-16, 18:29 HB9Q -7/-10.

On March 22 the weather forecast was for rain/freezing rain and snow so I stayed on 10 GHz as there was a lot of activity and many new stations. The bad weather really did not show up. At 16:43 G8RWG -17/-15 (1.2 m and 20 W!), at 16:53 I2CAK -4/-8, 16:54 SA6BUN -5/-7, 17:03 OZ1FF -8, 17:12 IK3GHY -11/-10, 17:18 SV3AAF -19/-15, 17:37 YO2LAM -6/-14 (200 W, 2.5 m), 17:55 OM4XA -14/-10, 18:03 F2CT -6 but his frequency was wandering (GPSDO problem) and decoding was sporadic, I saw N1AV at -13 before his PA died, at 18:21 OH3LWP -5/-8, at 1855 W3TI -15/-16.

I have not had time to repair my 24 GHz TWT power supply, but it is on the workbench and I will work on it right after getting the NL work done. Winter is still here and I still have 0.8 m of snow in the yard. I will hopefully be looking for the Artemis moon ship in early April.

VE4SA Shawn

My EME activity in March was focused on the 23 cm band during the 21st and 22nd weekend. Conditions were excellent, with cooperative weather and no equipment issues. It was nice to have an afternoon moon window.

I worked 15 stations, with 7 initials (LU1HKO, KV7E, ON4BCB, F5KUG, IZ8GGF, KD2XN and CYOS (WW2DX) on Sable Island. With my very narrow western window, I was able to work VK4CDI again. I was unsuccessful with BH1TSU, however I hope to try again during the next moon window.

I was able to see them on the spectrum, but no decodes, even monitoring Q65-120D. I have recorded 260 initials on 23 cm. Lot's of solar cooker activity which seems to have been a boost to growing the hobby.

VK2CMP Mick

A pretty quiet month on 70 cm, I did however manage two initials in working George VK4AMG and Zhang BI8SCC.

Now there are 3 of us in VK on 70 cm I'm hoping more Northern Hemisphere stations might stay up for us since we have now reached critical mass!

W3TI Andrew

What a fantastic weekend! I wasn't able to work CY0S yet, but I had plenty to keep me busy while I tried. All three bands worked well this weekend, and I was lucky enough to work the following:

10G: T7/IW2BNA (DXCC, initial), ON5TA, ON/PA0MHE (initial), PA3BYV (initial), PA3DZL (initial), UR3VKC (DXCC, initial), G8RWG (initial), F2CT, VE4MA, IK6CAK, IK3GHY, SA6BUN, OK1KIR (initial)

432: OK1VUM, PA3FWV, W5ZN, NC1I, DJ8MS (initial), OZ7UV (initial), DD0VF (initial), NC1I, PA3DRK (initial), OZ7UV, DD0VF, DL8DAU, UT6UG (DXCC, initial), ZS4TX (DXCC, initial)

1296: KG0D, IK7EZN, A71AW, AA4MD, ES3RF, SP5GDM, JA4LJB, KG0D, KH6FA, KB2SA, KV7E (initial), OE5VRL (initial), OK1UGA, K6FOD, NC1I, IK2DDR, SO5AZ, W1AW/KH6 (initial), VE4SA, W2LPL, DF3RU, RA2FGG, LA3EQ, RW9OG (initial), ON4AOI (initial), UA9FA (initial), OZ9AAR (initial), JS6UJS.

They just don't get better than this. Thanks all!



W3TI 432 Array by Day



W3TI 432 Array by Night

W5LUA AI

On February 28th during the 13 cm DUBUS-REF CW contest, I worked G3LTF crossband, WA6PY, PA0PLY crossband, G4CCH crossband, PA0PLY crossband using Q65-60C, VE6TA, and OK1KIR. Also on Feb 28th, I worked NJ6D on 3 cm, who was operating in DM65QC in NM.

On March 20th, I worked on 23 cm CY0S for a new DXCC. I then worked on March 21st T7/IW2BNA on 3 cm followed by IK3HAR.

I am also happy to report that on March 22nd, I worked T7/IW2BNA on 24 GHz for the first T7 – USA QSO on 24 GHz. My TWT power supply has been giving me some fits but I won't give up on it. Please contact me if you would like to sked. Email w5lua@sbcglobal.net

On March 23rd I did work T7/IW2BNA on 13 cm crossband. I hope to work Walter on 6 cm tomorrow.

W8TN Clark

I was last on-the-moon 19 weeks ago on 9-Nov-2025. It has taken that long to mostly recover from my "face plant" fall in the garage.

In an effort to work CY0S, I set up the station on my driveway on March 21 but CY0S was not on the air that day. I did still manage to make 9 QSOs (including 7 Initials and 1 new DXCC) over about a 5-1/2 hour period. This was my 6th Session of 23 cm EME.

I worked the following Initials: PE1LWT, W5AFY, IK2DDR, LU1HKO (DXCC #28), K6EME, K5DOG, and K6FOD. This brought my standings to: 104 QSOs – 28 DXCCs – 73 Grids – 87 Initials. The next day CY0S was on the air but I had too much wind to set up my Sub-Lunar folding dish. My fingers are crossed here for better weather on Tuesday!

WD5AGO Tommy

I was active for the fall and winter on 432 MHz with an upgraded 8 x 15 element low noise (57k) HB Yagi array. All coaxial phasing before 48 in of LMR600 to each Yagi is completed in coaxial air lines. The LNA is my normal HB 2-Stage Cavity with 0.2 dB NF and +16 P1db. I am finally receiving CW echoes with 500 W.

However, in-band noise is very difficult to overcome (-65 dBm at 433 and 450 MHz). I am working on some large 3-inch Cavity filters to reduce those signals down a bit. As usual now, the setup is a temporary operation, outside, until spring before I take the array down and place it back in late fall. I will publish the filter info later at the CSVHF conference.

I worked during the ARRL contest in November 2025: VE6TA #109, and had a nice chat with old friend SM2CEW, and KD2LGX #110. For the 2026 DUBUS-REF contest in January signals were not good but I did work: UA3PTW, VE6TA, W5ZN #111, and heard very loud DL9KR (569), but could not catch Jan in time, and heard KL6M. I also worked VE6TA again the following week with much better signals. All signals were good; the problem is the QRM. With more testing this month, I hope to either find a solution or the RF source.



WD5AGO 70 cm Array



WD5AGO Closeup of Power Divider Harness

ZS6JON John

After many years of collecting bits and pieces for 3 cm, it all came together on Sunday afternoon 22nd March 2026 when at 1500 UTC I managed to complete my 1st 10 GHz EME with PA0BAT successfully.

I had done some sun noise and moon noise measurements on many previous occasions and all looked good. Each weekend when wanting to try a QSO we had incessant rain.

Being located in the Southern hemisphere, I quickly encountered the same challenges that Bruce PY2BS has with polarity change. Spatial offset currently only gives me 1.5 hrs of a window with Europe as I am fixed vertical polarity. I will follow in Bruce's footsteps in making the whole feed rotatable.

Many very generous Hams were instrumental in getting me this far, I would have not been able to do this without them. I would sincerely like to thank PA0BAT, PA3CMC, PA7JB, PE1CKK and PA3DZL and many more for helping me along and answering all my silly questions.

Now I am preparing for the 9J2EME expedition.

Remote Control & Telemetry System

PA0PLY Jan

The last couple of weeks I was working on a RS485 system to be able to monitor voltage and current of the power supplies as well as temperature and RF samples at my dish. The system I built is based on the work of Uwe DL1SUZ. Uwe made a presentation at GHz-Tagung 2025 Dorsten about this.

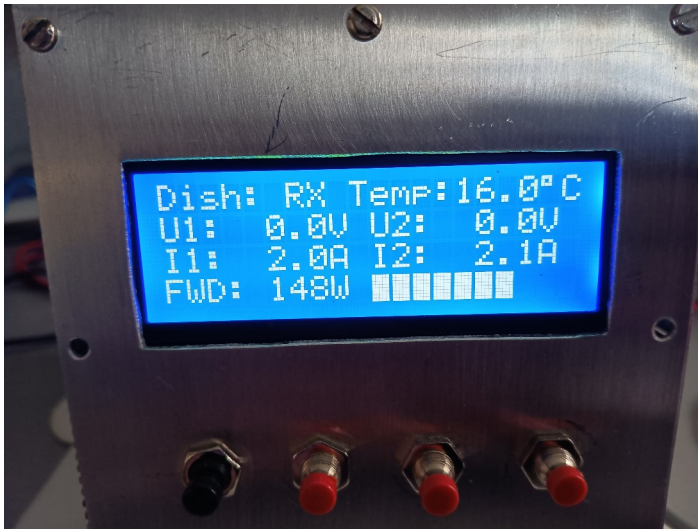
His system consists of a master unit with display and several slave units (one for each band).

The communication between slave and master is with RS485. The system uses an Arduino Nano in the slave unit and an Arduino Uno in the master unit. Each slave unit is configured for a frequency band and contains a specific set-up, like switches for band change for example.

The slave unit PCB contains also 4 digital inputs and outputs, for which the functionality can be defined in the software. The slave unit is built using a PCB from Uwe. He mentioned he will be prepared to produce them if sufficient inquiries come in.

I modified the system a bit and used only one slave unit. The slave unit is connected to a temperature probe DS18B20 and two current sensors type ACS-712-30 (30 Amp). I also use the RF sample input to give me some indication on the display.

This is a brief description, but I can make a more detailed one if this is of interest.



PAOPLY RS485 Master Station Display

Linear Actuator Boot Replacements

PAOPLY Jan

I have been searching for suppliers of rubber boots used to protect the shaft of linear actuators that are often used for EME antenna positioning. Suppliers in Europe and North America seem to be gone now that the “C band” satellite antennas are no longer commonly used. I finally was able to secure a supply of replacement boots from China at a reasonable cost.

I received the package of boots as shown in the picture below. It consists of two parts: One for the actuator arm and one for the actuator motor housing. I installed the boot and it looks nice again!

Ordering Details:

Rubber boots set Price USD 32 with a minimum order quantity of: 2 pieces. Price is exclusive of shipping.

Company name: Anhui Risesat Electronics. Ltd.

Contact: Balte at sales@risesat.com

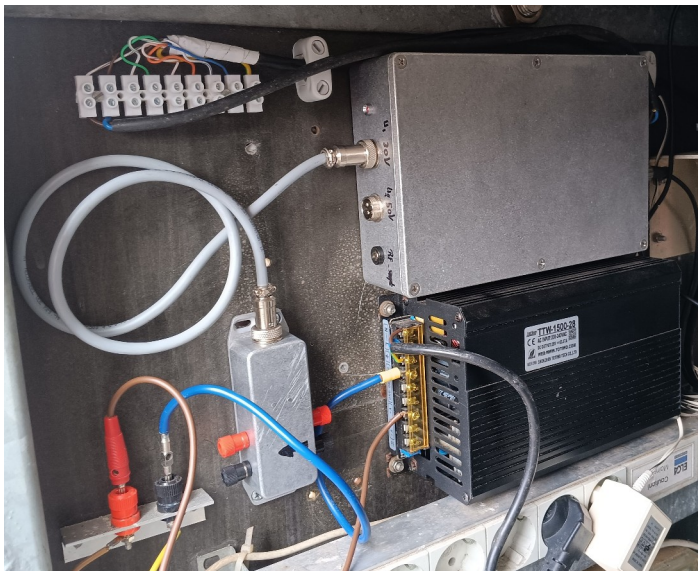


Figure 1: PAOPLY RS485 Slave Unit Behind Dish



PAOPLY Boot Order as Delivered



PAOPLY Replacement Boot Installed