



432 AND ABOVE EME NEWS

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Editor Peter Blair G3LTF
 Associate Editor Matěj Petrzilka OK1TEH
 Production Assistance Frank NC1I & Bob W1QA
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NEWS, CONTESTS AND DXPEDITIONS

Our thanks to all contributors for their co-operation with our difficult production schedule for this issue.

We were all saddened again last month by the loss of another great contributor to EME technology, DXpeditions and radio astronomy, our old friend Jean-Jacques (JJ), F1EHN. Hervé, F5HRY has written a lovely tribute to him, which follows.

With the extended gap since the last Newsletter there are reports covering the 2nd and 3rd ARRL contests and the ARI Autumn contest plus four DXpeditions, so it's been a busy autumn.

The second ARRL microwave contest saw a little more activity on the 13, 9 and 6 cm bands but again most activity was on 3cm digital with some really interesting results from small dish stations, see ON4CDU for example. On 24GHz OK1KIR made 3 CW QSOs.

The ARI contest attracted a lot of activity on 70 and 23cm but also on 3cm. A higher number of Italian stations were on, last year some really bad weather kept their participation low. The scoring system rewards CW operation (x4 points) and the entry process via excel is refreshingly simple.

It looks as if there was higher activity on 70cm than on 23cm in the 3rd, ARRL contest, but on 23cm OK1DFC made 139 QSOs. Several reports mention the low numbers on CW compared to earlier years and some of this is probably attributable to the way the ARRL announced its last-minute rule changes.

It is in all our interests to have a good number of entries into contests and so I have put together a "how to" summary for this year's ARRL, with the help of Joe, K1JT, and this has been seen by Bart Jahnke at ARRL.

DXpedition News

DXpeditions on 70cm by KB7Q to Hawaii, ZS4TX and ZS6JON to Lesotho were both a great success, see reports below. KA6U activated 6 states on 70cm during the ARRL 3rd leg. Alex EA8DBM on 23cm activated 9 countries across Europe this summer, he now plans to operate from 9 countries across the Caribbean and has already been to the US and British Virgin Islands.

Because I was barely able to hear Alex on the European trip, and thus not able to work him on CW, I was interested to see this comment on his blog for September 27th:

"I've finally figured out the cause of the antenna degradation. It turns out the cable that holds the antenna sheet on the flexible fiberglass tubes had stretched over time. This caused the dish's diameter to shift from 2.4 to 2.6 meters, altering both the focus and curvature. As a result, during my last expedition, I lost about 3 dB in performance."

Might be a good point to check for other users of foldable dishes. (note -3dB due to dish error at 23cm will be about -9dB at 13cm)

Max M5MHJ has announced 432MHz operation from San Thome S9Z from November 11th to 20th using a 16LFA yagi, EME2-434 Antennas-Amplifier LNA, IC9700 and 1kW, details will be on HB9Q (*I'd advise taking a narrow band 432 filter as well Max. Ed*)

Alex EA8DBM Caribbean Operations
<https://ea8dbm.substack.com>

Oct 28-31	V2/EA8DBM
Nov 1-3	PJ7/EA8DBM
Nov 4-9	PJ5/EA8DBM
Nov 10-13	FS/EA8DBM
Nov 14-18	FJ/EA8DBM
Nov 19-24	KP4/EA8DBM

F1EHN JJ SK

Jean Jacques Maintoux, F1EHN, passed away on September 19th 2024 after a long struggle against a brain tumor.

Born in 1957, licensed in 1976, Jean Jacques had dedicated his free lifetime to amateur radio (mostly EME), and amateur radio astronomy.

As a member of the F6KSX group, he led several 144-432 MHz EME expeditions in the 80's-90's, such as C30BVA, TK4EME, CU8EME and GJ/F6KSX, with 4x17 on 2m and 16x21 on 70cm.

In 1993 he built one of the first 10 GHz EME station in France, using a 3.30m dish and a 50W TWTA. This dish was also used for 23cm EME, especially during contest events.

In the 90's, he participated in the activity on 23cm and 13cm from the huge Nancay radio telescope, the last one being TM8EME in 1998.

Meanwhile, he developed the first version of his famous "EME system" freeware, together with a tracking interface board, which is still in use in many stations over the world.

He attended several EME conferences, and was part of the organization of the one held in Paris in 1998.

Probably feeling that EME would become a PC-to-PC party (Jean Jacques was not a CW operator, but he loved listening to EME signals and his own echoes), he decided – around 2007 – to switch to amateur radio astronomy, together with a local club and the Nancay RA station, helped in that way also by my father who was a professional radio astronomer. The 3.30m dish was used mostly to detect the 21cm hydrogen radiation of our galaxy. Results were outstanding for such a small antenna!

As a professional, before retiring, Jean Jacques was an RF engineer in the Thales group, involved in radars.

He was a very kind man, always helping and giving good advice. He was my amateur radio "professor".

RIP my friend.

Hervé F5HRY



Figure 1- GJ/F6KSX 1991 F1EHN centre



Figure 2- CU8EME 1990 F1EHN second on the left



Figure 3- C30BVA 1998 F1EHN on the left

7P8Z Lesotho DXpedition 18-20 Oct 2024

After several months of planning, Bernie, ZS4TX and John, ZS6JON, set off on the 18th of October 2024 to activate 7P8Z from the Kingdom of Lesotho on 70CM EME [Earth Moon Earth] plus a LEO satellite operation.

We arrived at Molengoane Lodge At 11:00 and immediately set out assembling the stations comprising of 2 x M29WL 70CM yagis horizontally stacked and the ZS6JON SATPAK-1 antenna system.

Both the EME and SAT station were ready by 14:00 on 18 October and John made his first contacts via the FM repeater on the International Space Station [ISS]. Although the SATPAK-1 is a fixed antenna system, signals from the ISS were already audible at around

2 degrees elevation. Due to the mountainous terrain, signals from some of the LEO satellite passes disappeared early, but most of the time stations were still workable down to around 2 degrees elevation.

On the 19th of October more stations were worked on SO-50 and RS-44 with 5/9 signals. With the current SAT activity in South Africa and surrounding countries it is possible to have a pileup of stations calling you when operating from a rare entity or grid.

A Total of 12 x ZS Stations were worked on 3 x Different Satellites. 3B8FA was also heard on RS-44 but was unable to make a contact with us.

On moonrise at 18:00 we started with a CW sked with KL6M in Alaska. With our luck the moonrise direction was exactly on the highest point of the mountain range towards our East. The very visible full moon only cleared the ridge at 3.5 degrees elevation and immediately KL6M was heard in the headphones calling us. We quickly exchanged reports with Mike in the standard EME CW format and logged our first EME QSO!

As CW is rarely used on 70CM EME nowadays, this was a memorable contact for both station operators.

After the CW QSO we tuned to the Digital section of the band and was immediately greeted with the familiar Q65 sounds on the speaker.

The log filled up quickly with massive Digital Q65B-60 signals arriving at our small 2 x 9WL Yagi station. Faraday rotation was a huge challenge causing us to run outside often to manually change polarity of the antennas.

The Faraday rotation on 70CM is usually very slow but due to disturbed solar conditions, this time was completely different.

A VHF/UHF expedition, especially EME, to an unknown location, always carries the risk of having too much RF interference on the site that you cannot receive the very weak EME level signals. Bernie has operated from Molengoane Lodge on 6M and 2M EME a few times and fortunately this time the local noise levels were also within limits.

The staff at Molengoane Lodge has hosted several international Ham Radio expeditions and events and is 100% HAM friendly. Feel free to book with them anytime that you want to visit Lesotho. They are located halfway between Maseru and the Katse Dam.

This Station in Lesotho was also a test of the equipment and antenna setup for Bernie's planned 70CM expedition to Angola in the first half of 2025. The details for this expedition will be available in a few months. The only addition to the equipment that is need is a way to rotate the antennas from the operating position to counter Faraday without having to go outside and risk being eaten or bitten. We are currently working on such an option to be added to the station.

After a tiring but enjoyable weekend we were very happy with the results on both the SAT and EME operation.



Figure 4- 7P8Z Moonrise 20 Oct 2024

7P8Z QSO Summary:

TROPO

AF: 4

EME

AS: 3

EU: 44

SA: 1

NA: 14

OC: 1

Total: 67

This is an excellent result for only 2 moon passes on 70CM. It is great to see that the 70CM activity has picked up from previous years.

Paper QSL's are handled by PA3CMC. Contributors received immediate LotW confirmation.

73 and see you from the next one.



Figure 5 - 7P8Z moon direction AZ=22 EL=37

DK3WG Jurg dk3wg@darc.de

DK3WG (JO72GI) reports new stations worked in September:

70cm Q65-B – W4YTB

23cm Q65-C – Z3/EA8DBM (DXCC #91), LB6B, PA1PS, W4ATC, IZ4VSS and G0HIK

DL1SUZ Uwe

In the first leg of 23cm-ARRL I made 56 digital qso's and 1 cw-qso (KL6M).

In October I made some new initials:

15.oct.: CT1FU(#256)

16.oct.: LB6B (#257)

17.oct.: DM2CFH (#258)

18.oct.: W3TI(#259); VP2V/LY3UM (#260); NY1V(#261);
KD5CHG(#262); AA65C(#263)

19.oct.: SV1CAL(#264); BA7NQ(#265);

20.oct.: K5N(#266); PI4Z(#267)

F2CT Guy f2ct@wannadoo.fr

F2CT reports amazing activity on 10GHz during the ARRL EME contest in September 21/22:

I choose 10GHz in tribute to my friend Jean Jacques F1EHN who passed away on September 19th.

I never heard so much stations on 10GHz EME, I think around 70! I made 26 QSOs in this weekend

The Q65D60 mode makes QSOs possible with stations using 10W and 80cm dish!

Only 7 QSO in CW over both weekends!!

Closest station: René F6BKB/JN02 at 277km from my home QTH!!! Longest DX: VK7ZBX/QE37 at 17484km!

I hope to be QRV on 70cm for the next legs with 1kW in 8x14 YU1CF H/V

F6ETI Philippe

I operated in the first part of the ARRL EME 1296 MHz in CW (obsolete analog mode) from the new and future location in Dordogne. Located in JN05OB, my new site is particularly quiet and clean, no radio pollution, and although the sun does not rise very high in this season, the Sun Cold Sky ratio was measured at more than 15 dB with an SFI at 162. The continuum mode of SDR Console is really great.

Working conditions: 300 W in the septum feed, 3 meter dish, VLNA23 0.37 dB NF. TX IC-202, RX TRansfox or Airspy HF+, SDR Console or HDSDR, transverter 144MHz /1296 MHz SGLab.

I made only 14 QSOs, only one US station: DG5CST, SP9VFD, OH1LRY, RA4HL, CT1DMK, LZ2US, OK2DL, OZ6OL, IZ1BPN, KL6M, G0LBK, IK3MAC, OK1DFC, JJ3JHP (more than 45 minutes to make the QSO, remarkable energy, others give up after one or two attempts). CW activity was low.

(Philippe points to the rule changes and the confusion about sending reports and locator as a reason for many stations to stay away especially CW operators.)

G3LTF Peter

The weather was much calmer for the ARRL microwave second leg but the activity on the bands I operate, 13-6cm was very low compared to previous years.

In the first leg I was only able to operate on 6cm.

On 21st September on 13cm I worked on CW, WA6PY (cross band), G4CCH, IK3COJ, VE6TA, KU4XO (cross band) #161 OK1DFC, OH1LRY, DL1SUZ and G4RFR #162. (Seven stations, in 2023 it was 15)

After moon-set I put the 9cm system in the dish and next day, 22nd, I worked G4CCH, VE6TA and OK1DFC (in 2023 was 5)

After moon-set I changed the system to 6cm for the final pass and worked OK1DFC adding 1 more to my 6cm score to make it 7 (In 2023 it was 16). I noticed that many of the regulars on these bands were absent. The hours were not very friendly for us oldies and that can't be helped but the excess path loss was low and so signals were strong, 6cm conditions seemed particularly good on the last pass.

In the ARI contest on September 28th I worked, on 23cm CW, DL4DTU, UA9FAD, IK3COJ, IK2DDR, ON5GS, OK2PE, IK5VLS, G0LBK, IK1FJI, K0PRT ssb, CT1FGW ssb, SP7EXY, K5DOG, F4KLO ssb, G4CCH ssb, ON5GS ssb, DL1AT, FX1A ssb (special contest call of F4KLO, see QRZ.com) IK3MAC, PA3FXB, N5TM, and SM5DGX. I tried ssb with IONAA on ssb but couldn't complete, we have worked before but with moon closer. The ARI contest is extremely easy to enter with their simple spread sheet format and CW QSOs are scored at 4x digital so with 5 Italian QSOs I scored 800 points.

G4CCH Howard

Prior to the contest I managed to work Alex KP2/EA8DBM US Virgin Is on Q65 and again as VP2V/LY3UM British Virgin Is.

In the contest, I found CW activity to be low, especially in the first stint. The second stint was a bit better, but not like previous years. There was a lot of activity on Q65

Couldn't get on for the 2nd evening due to the wind gusting 45mph (70 km/h) here.

I made 39 QSO's, 27 on CW and 12 on Q65. Made 2 x Initials on Q65 with OZ9KY and BA7NQ. All of the Q65 stations apart from HG5BMU were easily strong enough to work on CW.



Figure 6 - F1EHN 3.3m dish + 21cm astronomy feed

G4RFR - FRARS Club Station

Julian G3YGF, writes:

G4RFR worked in the ARRL contest on 3 bands, 13, 6 and 3 cm.

On the 20th Sept we got the 200W TWT going again - it turned out to be a simple power supply problem caused by an unexpected voltage drop in the mains surge protector - the PSU confused us for some time by showing Cathode Overvoltage trips! It is all ok now, but it has made us think about having another TWT as a backup.

Some TWTs / fans require a 3-phase 400Hz supply which may put people off, but it can be fairly easily supplied using a "Scott-T transformer" arrangement which uses two ordinary 50Hz transformers driven in Quadrature at 400Hz by a stereo audio PA, to make 200V 3-phase 400Hz. The fans are very powerful, but noisy! We are also making a Dummy Load for testing TWT PSUs.

Before the contest, we did a 10GHz test with OZ1FF and got -08/-01. Then in the contest, on the 21st we worked GI7UGV -14/-4, OZ1FF -4/+0, PA1OKZ -15/-5, ON5TA -7/+1, GW3TKH -12/-4, G4HSK -18/-3, W3SZ -18/-3, IW2BNA -13/-3, KM0T -6/-2, WA3RGQ -16/-7, G4YTL -12/-0, OH2DG -11/-9, PE1CKK -13/-2, ON4CDU -15/-5, W2HRO -18/-8, CX2SC -12/-3, KN0WS -19/-10, I6YPK -16/-4, IZ0JNY -19/-8, were heard by LU8ENU -/-9, HB9Q -5/-0, IK6CAK -11/-0, PA7JB -5/+1, IW2FZR -9/-1, F2CT -9/-7, IK0HWJ -3/+1, PA0JOZ -17/-5.

Then we switched to 2320MHz, working VE6TA -10/-13, G3LTF 579/549, G4CCH 579/559.

On the second pass on the 22nd, on 5760MHz we heard R5AN -17/-, and worked OK1DFC -11/-14.

Then on 10GHz we worked BD4SY -11/-3, OK1DFC -4/+7 (we had not suddenly increased power, he uses reduced bandwidth noise reduction!), heard DL0SHF -1/-, worked YO8RHI-14/-5, K5DOG -18/-6, OZ7Z -16/-9, SA6BUN -6/+1.

There was more activity to be had on 2304MHz, but we could not receive there - we must include provision for split working next year.

Unfortunately, the 3.4GHz was put out of action by the torrential downpours overnight.

On 2nd Oct, we worked GI7UGV -19/-10, and KM0T -7/-3. The moon position/timing is rather poor for us in the next month or two.

K7ULS Mike White

Mike sends us some pictures from UT working W6TCP with his single 432 MHz 9 wavelength vertical and 250 watts.



Figure 7 - K7ULS 70cm antennas

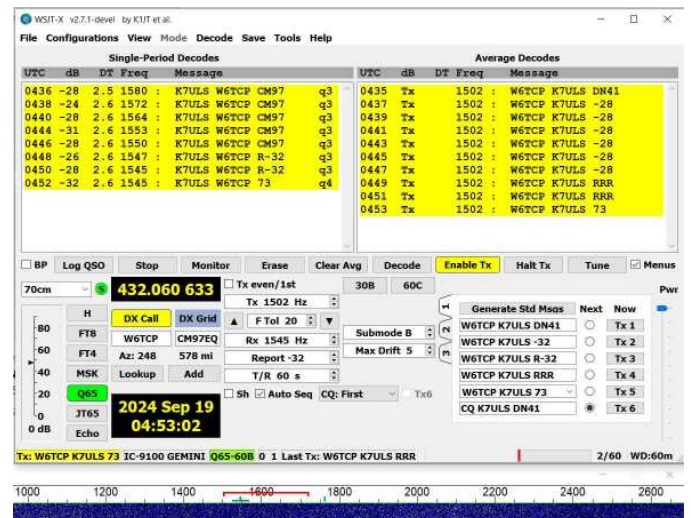


Figure 8 - K7ULS - W6TCP

KB7Q Gene geneshea@gmail.com

The 70cm Hawaii EME operation in late September worked out fine despite challenging conditions. With my single 9w Yagi and 400 watt station I worked 20 folks. PA3DZL worked me for his State #46. Logged were UA3PTW, NC1I, K5DOG, UT6UG, W5ZN, DL1VPL, PA3DZL, UT5DL, SM4GGC, GD0TEP, PA0BAT, OK1VUM, ON4AOI, W6TCP, PA2V, DG5CST, DK4RC, K1WHS, EA5CJ, VK4EME. LoTW up-to-date. I'll leave my amp with KH6FA who has 2x 9w Yagis so he can get on.



Figure 9 - KB7Q moonrise at KH6 BK29

KH6FA (BK29) is active on 23cm now, and has worked over 30 stations already, he has 300W to a 2.4m foldable dish.

KD5CHG Matt mnlanese@gmail.com

KD5CHG Reports a successful contest weekend after being off the air for a year due to upgrades.

I installed my 3.2-meter TVRO dish and a KL6M Septum feed I built and in what is fairly typical around here had zero time to test so just winged it. Fortunately, all the calculations for focal length were close enough and the feed was tuned well. My initial test before the contest on the 17th was very promising with 20 stations worked and 12 new initials. Nothing smoked and I really couldn't ask for a better result considering the haste in which it was all cobbled together.

The first day of the contest was good with 21 stations and 5 initials. I have a lot to learn to be more efficient, I feel like I missed 5 or more contacts because of jumping around but it was really cool to see all the big stations on the waterfall of PowerSDR and alot more fun than staring at the logger waiting as was the case with the smaller dish.

Day 2 of the contest yielded very similar results. I tried a CW QSO with Sebastian DG5CST but my setup was too clumsy for CW and I apologize to him for wasting time. The simplest mode turned out to be harder because of key problems, audio delay of sidetone and SDR settings. I'll have that fixed next time.

All in all a successful weekend of good weather and no big problems. Next steps here are to upgrade the power to something in the 250 watts range up from 125 watts and finalize the dish install. Thanks for a great Newsletter and look forward to seeing folks off the moon soon!



Figure 10 - KD5CHG dish

KL6M Mike

Normally my screen is lit up with CW signals when I finally get moon in the contest but this time, only 2 signals. I thought something must be broken.

Then I tuned up the band and saw this:

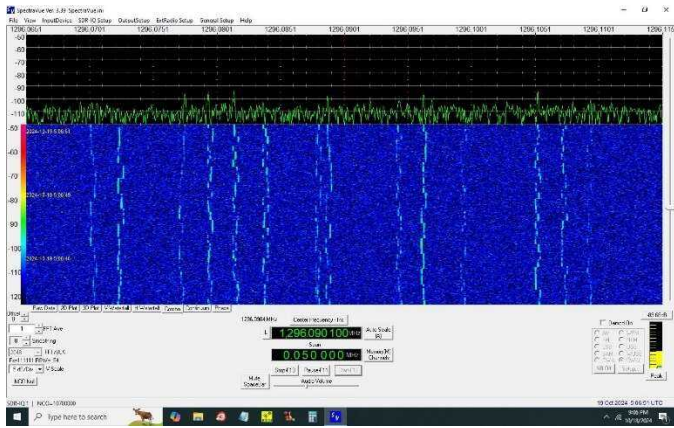


Figure 11 - KL6M 23cm SpectraVue

But things picked up after while, and I ended with 47 for the weekend, 4 new ones. Contrast this with 62 in 2022 first WE, and 60 in 2021. In 2021 I had 92 total on 23cm for both WE. Highlight for this weekend was 7P8Z (precontest) on 432 CW. He had 2 yagis and operating out of his pickup truck. I used my automatic polarity rotator. Worked fantastic. We probably would not have made it without pol rotation. But he had a good signal even though only 5 degrees elevation on both ends.

NC1I Frank frank@NC1I.COM

I was not very active in October and unfortunately our annual fall holiday trip coincided with this year's ARRL EME contest. I only worked one station (DL5BBH) before we prepared to leave for Maine. DL5BBH turned out to be my 70 cm EME digital initial #700.

As of late October, I am uncertain if I can be QRV for the final weekend of the contest. If I am available, I will try and devote significant time to both 23cm & 70cm, especially if W1QA is able to join me.

I was able to add a few new countries in October. 7P8Z had an outstanding signal on 70cm for a new DXCC. They were doing a great job and working many stations. Congratulations and thanks to Bernie and John!

On 23cm I was able to complete with Alex EA8DBM in KP2 and VP2V, both new countries for me. Alex had his challenges but persevered and provided many ops with a new DXCC entity. Thanks Alex! Hopefully, many stations can get him in the log from many of his remaining planned Caribbean stops.

I have included a screenshot sent to me from Zdenek OK1DFC. This image was taken during one of our recent 23cm QSO's. Note the signal reports of +11 and +15. Even though some of the strong decode numbers may be a bit suspect it is a clear indication of how well Zdenek's system is working.

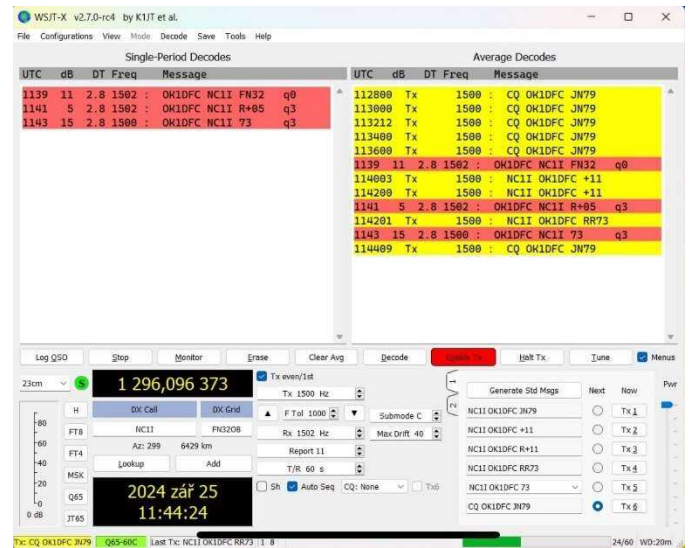


Figure 12 - NC1I + OK1DFC QSO

UTC	dB	DT	Freq	Message
1139	11	2.8 1502	:	OK1DFC NC1I FN32
1141	5	2.8 1502	:	OK1DFC NC1I R+05
1143	15	2.8 1500	:	OK1DFC NC1I 73

Figure 13 - NC1I + OK1DFC QSO snip

OK1DFC Zdenek

After exchanging several emails with the ARRL EME Contest Manager, I decided to try to do my best. After the misery of the last round, I didn't have high hopes and relied mainly on the 10368 MHz band, where activity was great last round too, only WiFi interference didn't allow me to make more contacts. Learning from last time, I turned the antennas on the WiFi site in the village and alternately transmitted with full power on 13, 6 and 3cm. I think especially 13cm didn't like the technology, but that's fate. When the contest started, the bands were silent. I think I'll apply for a beacon license and make a proper beacon to keep the band permanently occupied because it's probably the only way I'll be able to broadcast in the future. For the contest this time I finished separate control of the two antennas and built two separate sites as well. So I went out in parallel on 13cm and 6cm to start the contest.

The activity on 13cm was not worth anything, in total I made only 3 more QSOs for the whole weekend until the end of the contest. Also, the start on 6cm was not great, only one QSO. So I changed the band to 3cm. There the traffic was very good. I was calling stations on the band and giving the occasional challenge. I made 10 contacts from the start of the contest until the moon set. I went to sleep for the whole orbit from Saturday to Sunday. The 9cm and 6cm band dead again, I changed to 3cm and occasionally checked 13cm where there was nothing to do. There was very decent activity on 3cm. Among other things, there were several new initials and two new DXCC countries to the collection. Except for the 3cm band, activity was very low. The 13cm and 6cm bands are probably due to the monster interference from WiFi and 3400 MHz is a very little used and cleared band, so activity was very low there. We'll see what the October and November rounds of the ARRL EME contest will bring in the 50 - 1296 MHz bands.

In all, I made over 100 QSOs on all bands, but many were dupe because both CW and Q65 QSOs are made and only one QSO is valid. So there were 77 valid contest QSOs.

So all in all, after the contest:

2320 MHz = 25 QSOs
 3400 MHz = 4 QSOs
 5760 MHz = 6 QSOs
 10368 MHz = 42 QSOs



Figure 14 - OK1DFC 8m + 2.4m offset dishes for 13-3 cm

ARRL 3rd part 50-1296 MHz

After a relatively decent run in the microwave part of the ARRL 2024 contest in August and September, I chose the 1296 MHz band this time. This decision was prompted by the idea of participating in the Sigle-op - Multi-Band category this year. I already have QSOs in the 10-5.6-3.4 and 2.3 GHz bands. So for this weekend the choice fell on 23cm and the November weekend I will be QRV on 432 MHz.

Also, I actually started this weekend on 432 MHz because there was a 7P8 QRV dispatch just on the 432 MHz band so I didn't want to lose that contact. As soon as I did 7P8 at midnight UTC, I switched to 1296 MHz. When I appeared on the band, the band was already full. So I started using the Q-map to find and call stations.

To start with, I chose stations with Q65-30B traffic since the periods are only 30 seconds and everything goes by so fast. The log was filling up so I occasionally jumped to the CW band and picked stations there as well. I didn't prepare anything special for the contest this time, I used the equipment I use for normal operation. The weather was good, it wasn't windy and at times it was completely clear, so the moon was shining like a fisheye.

I was surprised by the large number of new station-initials I made during the contest. After the contest was over, a total of 20 init JT and 2 init CW. In total 139 QSOs were made over the weekend. The multipliers are big squares, which I haven't calculated yet because no logbook can do it so I have to do it manually. But it's 10 less QSOs than I had last year in 2023.

The rare contact was with Alex VP2V/LY3UM and KH6FA. The big activity this time was again from the USA. Umbrella antennas from Paul W2HRO and SSPA from Jim W6PQL are doing wonders and stations are growing like mushrooms after rain. This time 2 stations from Australia, 2 stations from Japan, no one from South America.

From Africa John and Bernie, ZS6JON and ZS4TX were on the 7P8 expedition and QRV only 432 MHz, no one else is currently on the upper bands. I lasted the whole weekend, only the last part on Sunday from moonrise to the end of the contest was quite an ordeal. This part brought only 2 more QSOs. That's roughly what happened for me during the contest. November will be the final 4th round so I'll be looking forward to any 432 MHz contacts. I'm good if you have 10 or more elements and about 100W of power. Coordination on EME chat HB9Q. From OK I recorded OK2DL, OK2PE, OK2ULQ, OK1IL, OK1UGA on the band. Looking forward to see all of you in last part of ARRL.

OK1KIR Vlada

OK1KIR_EME operation during Sep-Oct 2024

On Fri, Sep 20 before 2nd part of ARRL Contest we planned to catch the 23cm Z3/EA8DBM expedition, but we were already too late. So, at least we worked Q65-60C with PA9GHZ -10/-9 as new #584 and then nice Q65-60C QSO B-19/B-19 DB with PA3DZL/p when Jac tested his new small demo station with only 110W and 23 el Tonna Yagi placed on the balcony. It is the smallest set-up we worked with on 23cm.

In the contest we concentrated only on 24GHz due to time constraints. On Sat, Sep 21 we made in CW QSOs with SP6JLW, WA6PY and SP3XBO as #36. In the trial with IZ0JNY (1m/20W) unfortunately no signals found on both sides. On Sun, Sep 22 during the morning minimum of spread we repeated with SP3XBO (549/539). Per, DK7LJ switched on the 24G DL0SHF beacon and we received at -1 DB level at its QRO (120W). No one else appeared on the band, so the contest result is only 3x3 all in CW.

On Sep 25 in the sked we worked Q65-60E on 24GHz with IZ2DJP #57 and mix #73. Adelio used 1.8 m prime focus dish and 10 W power. After that we swapped to 23cm and with Q65-60C worked new initials KH6FA (new BK field and mix fields #90), NY1V #, IU1MES #, DF2VJ # and PA2GWA #.

In ARI contest on 3cm we worked CW with OZ1LPR, ON5TA, DL4DTU, SA6BUN, OK2AQ, OH2DG, IW2FZR and IK0HWJ. Further with Q65-60D worked IW2BNA

#261, ON5TA, IZ2DJP, IW2FZR, GW3TKH, W3SZ, OZ1LPR, SA6BUN, W2HRO #262, I6YPK, CX2SC, PA3CSG, OK2AQ, K5DOG, VK7ZBX, DL4DTU, OH2DG, ON4CDU, IK0HWJ, PE1MMP #263, PA0OKZ #264 (mix #344) and PA0HRK. MN checked around 3dB and DL0SHF beacon was -2 to -1.

On Oct 15 on 23cm we worked Q65-60C with CT1FO, UA9FAD, UA4LCF #590, KP2/EA8DBM #591, W3TI #592 and IU4MES.

On Oct 17 we suffered again from troubles in cooperation of WSJT with TS790 and worked only with expedition VP2V/LY3UM #593 as 1st VP2V-OK 23cm QSO.

On Oct23 on 23cm we worked Q65-60C with VP2MBM on Montserrat Isl. as #594 (mix #889). It is our DXCC #132 on 23 cm.

OK1TEH Matej

It's a long time since I last wrote to the NL. Many things have changed and many close friends passed away. I was happy to join EME Conference in Trenton for my first ever trip to USA and find many new friends there, more I had nice time with Sally Katz and her great and kind daughter Alisha. I guess Al would be very proud and happy about the Conference and I must say big thanks to W2HRO and his team, hats off guys. I'm quite busy at my job but when I have more free time I'll have to write some longer story as well as about the visitation of Diana site, because it deserve it.

Related to ARRL EME Contest I was QRV 70cm only with my poor short 23el dk7zb yagi 5,7m long and had lot of fun. I worked 17 QSOs: UA3PTW, DL1VPL #170, PA3DZL, W5LUA, OZ9AAR #171, VK2CMP, HB9Q, DF3RU, GD0TEP, K4EME, PA2V, W5ZN, EA5CJ, VK4EME, PA2CHR, SM4GGC, ON7EQ #172. I also decoded 7K3LGC, S56P however I didn't get even single signal from 7P8 expedition, well maybe next time.

Related to the contest I'm still not so happy with Q65 on 70cm compared to JT65. When you are big gun and operating from birdie-less QTH, you are able to work a miracles however running Q65 from noisy city with small RIG isn't so easy, especially related to WSJT-X and it's waterfall. When signal got down below about -23dB, it's very hard to find a trace where to click (lot of stations on 70 don't use CFOM because of older tropo rigs) and so the WSJT 10's SpecJT is still far better for me.

Of course something different would be on 23cm and higher where Q65 is big step forward of course. And frankly said I still miss my beloved CW operation. (*dont we all...Ed*)

Well I'm really interested in the 2nd leg of ARRL contest, hopefully the Faraday's lock will be with us hi.

73 & thanks for QSOs, patience and all tests.

OK2PE Karel ok2pe@kkb.cz

OK2PE's report from the ARRL contest 23cm CW: The contest started at a disadvantage for me. The moon climbed above the trees at 01 UTC. I got up honestly, but everyone on the band was on digi mods. No one on CW. I worked there for two hours, but not a single QSO. Then the moon was over 250° and that was the end of it for me. So I packed it in and went back to sleep. But I couldn't do much more.

Resuming in the evening at 20 UTC, by then there was a flurry and I made 15 QSOs. By 23 UTC, the moon was back up above 57°, my maximum elevation. Then it went down again, but only for half an hour over the morning. So I let it go. I needed to go to PA in the morning.

I left PA, returning home and resuming at 21 UTC. but the stations I hadn't worked were not there again. I only made 5 QSOs, and that was it. Only one new initial, OH1LRY. Everything worked without any problems. Conditions seemed better on Sunday than Saturday, but that's my feeling.

So that's about it. The stations I don't have yet will hopefully be QRV in the second leg.

OK2QA Mirek mirek@kasals.com

ARRL EME 2,3 GHz and up, second leg 10 GHz contest was held in good weather with good participation. New stations with small antennas of about 1 m and 20 W power are appearing all the time. If they have good tracking, LNA with waveguide relay and a good feed, a Q65 technique can be used to make contacts. I have made 22 QSOs with initials W2HRO, GI7UGV, IZ0JNY, DG5CST and JA8ERE crossband {#157}. In total I have 50 contest QSOs and 41 multipliers in both legs.

ARI EME Trophy Autumn 10 GHz took place one week after the ARRL contest. The weather was good again, no rain and the moon with only slightly less declination than the week before. However, both lunar windows

were characterized by large spreads mostly around 200 Hz. Only just after moonrise and before moonset did the spread drop to 100 Hz. These are very difficult conditions for CW. So while contest scoring favored CW contacts, there were only a few. In total I made 24 QSOs of which two were CW - OK1KIR and OZ1LPR. Total points 1260.

My Log is here:

https://www.radio.feec.vutbr.cz/esl/files/EME/LOG/EME_LOG_10G.htm

ON4CDU Hans on4cdu@skynet.be

I'm overwhelmed by the possibilities of making QSOs with my little station (Thanks to the WSJT development team!!) My station is 120 cm dish, 30 Watts output, DU3T preamp, homemade moontracker (Raspberry Pi 3 with touch screen). At this moment only QRV at 10 GHz.

25/08/2024

DL3WDG, HB9Q, OZ1LPR, VE3MA, ON5TA, KM0T, W3SZ, OK2AQ, DJ7FJ, PA0PLY, I4TTZ

21/09/2024

G4RFR, W3SZ, OZ1FF, PA3DZL, IK6CAK, OZ1LPR, DL3WDG, IW2FZR, HB9Q

22/09/2024

KM0T, OK1DFC, GW3TKH, LZ4OC, IK0HWJ, F6BKB, SA6BUN, PA3CSG, IW2FZR, KN0WS

29/09/2024

OZ1LPR, DL4DTU, ON5TA, OK1KIR, SA6BUN, OK2AQ, W3SZ

15/10/2024: IW2FZR, IZ2DJP

19/10/2024: I6YPK

20/10/2024: I6YPK, G4HSK



Figure 15 - ON4CDU dish



Figure 16 - ON4CDU Op Position

ON4TA Eric

During the ARRL EME microwave contest, I made a total of 43 QSO (CW+Q65) on 3 cm and 4 QSO on 6 cm. Activity was very high on 3 cm but seemed low on 6 cm. I missed quite a few stations because my Moon window is only abt 170°. I live in a very dense part of the city of Brussels and my 2.4m offset dish is at ground level.

I was running abt 30 W on 3 and 25W on 6 cm.

Activity was also very nice on 3 cm during the ARI contest, during which I made a total of 27 QSO (CW+Q65).

OZ9AAR Carsten chg@moonbounce.dk

My 70cm EME station is finally beginning to work closer to optimal now. I have (again) changed preamp, this time to a cavity preamp from WD5AGO. This seemed to have had a real impact!

The last couple of months I have been optimizing and measuring all kinds of things on my station. I measured a bit low on sun noise to begin with. I got a lot of help from some of the nice people on moon-net, and I think I have a better view of what needed optimizing etc.

I'm doing a PDF document on my journey; I will publish it once its ready.

During this journey, I also made a couple of software applications (SkyScanner and SimpleCalc), these are both available for download from my webpage, www.moonbounce.dk.

My plan was to "listen in" and work a few initials in the first leg of the ARRL contest Oct. 18/19.

However, I was overwhelmed by all the activity, and found myself deep into making QSO's :)

I managed 50 QSO's in the contest (60 in total for the weekend). Logged Peter KA6U in 6 different US states over 3 days, very nice operation!

Now I'm looking forward to the second half of the contest, hoping for more QSO's in the log!

Descriptions of my EME system, PA, various modules I developed for this, are described on my webpage also. (On HB9Q Carsten indicates he runs 4 x 32 ele and 390W at the feed – ed)



Figure 17 - OZ9AAR 70cm array

PA0PLY Jan

I am proposing another 6 cm activity moonpass from 00.00 to 24.00 on December 14th 2024 . So far I got notes from 13 stations are planning to be QRV including DU3T which will generate much more activity to get this new DXCC. If you plan to be QRV and you haven't already done so drop me a note.

Attached is an overview of the common windows to the east and west using www.eloranta.info

I was active during this contest mainly for hunting new stations. I made 39 QSO and 23 initials. Among them KH6FA, WW2DX, CE3VRT, OT7K, DK1KW, W2QK, K6FOD. All digi mode.

There was very little CW activity, I learned, but for digimode it was really like 20m.

At the moment I am working on my new system for 24GHz using a Wavelab module and RW1127 TWT

(see common window graphs later in this NL)

PA0TBR Ton pa0tbr@mubo.nl

There was more than enough activity to keep me busy on 23cm EME. First of all I was thrilled to work Alex EA8DBM during his DX-pedition to EA9, E7, 4O, LY, OY, T7, TK and Z3. Shortly thereafter he started his Caribbean trip of which KP2 and VP2 are already in the log. I certainly look forward to the next 7 entities he plans to visit and hope for Alex (and us) that all goes well.

I also had great fun during the ARI EME contest in September with 40 stations in the log and a score of 360 points. I only work digital, so I missed a lot of extra fun, not to mention points.

The ARRL EME October contest went very well. I worked a total of 60 stations in 23 countries. My dish is a 3.5m homemade, with 150W at the feed.

My view to the west is obstructed by a giant tree so I am very pleased with those results. I am still puzzled how some QSO's were possible at moon set.

A tip for users of DXKeeper which I use as my logbook. It is a fantastic tool, but it didn't support progress reporting (like DXCC, WAS, etc) for some EME bands, like 23cm. The developer, Dave AA6YQ, gave me a workaround. If you filter the Log Page Display with the expression `band = '23cm'` the reports give the results for 23cm, which is exactly what I was looking for. So simple life can be.



Figure 18 - PA0TBR dish

PA2V Peter PA2V@advipe.nl

Here my story from 1st Sept to 22nd October

The highlights in September were KB7Q from Hawaii and the ARI contest.

The KB7Q QSO was not easy with the continued Faraday rotation. During my QSO there was a thunderstorm and a lightning strike near my house making the earth leak switch trip. Luckily it was at the end of the QSO and RRR's were exchanged both sides.

The ARI contest saw some good activities. Better than the last years, even from NA, but again, conditions were affected by the Faraday rotation, which with my fixed H pol array is sometimes frustrating.

We have been busy for some time now getting the club station in IJmuiden on the air with EME.

First tests showed a much quieter location compared to my home station. The setup is in the harbour and very close to the North Sea. So, we have to make it solid and strong...

We use 4x 13 el YU1CF yagis and see good sun noise. Just before the ARRL contest weekend we were almost ready and try to test it.

It turned out we had an issue with the relay and preamp. This was solved on Friday October 18th and we were trying to get the station, PA6Y, on during the contest.

However just before the contest the rotor controller had RFI issues and overturned the AZ and damaged to the real encoder. We were not able to fix this on the Saturday during daylight and had to give up our plans for this contest leg.

We will soon have it repaired so look for PA6Y and PA9R operating that new station. We have 800 Watt at the antenna.

Before the rotor system gave up we worked on October 18th from the club station with VK2CMP, UA3PTW and PA3DZL.

From my home station I was able to work John and Bernie from 7P8. It ended my frustration from 2011 when I just started EME and I wasn't able to work them because of a burning coax relay and damaged amplifier.

The ARRL contest brought 36 QSOs with new initials PA3CMC, 7K3LGC, K1OR and KB0Z making an initials total of 387. Finally on the 21st October I worked KA6U in Tennessee for state #47.

So, it has been great two months for the hobby with many challenges, especially the week before the contest with a NATO exercise in the North Sea with loads of radar QRM and noise.

PA3DZL Jac

On 70cm I made 19 QSOs with 8 initials and 1 new DXCC

Initials :

K7KQA

DC1RDB

KB7Q from Hawaii new DXCC and STATE #46

KC3BVL

NH6Y also from Hawaii, a one day activity from BL10uu

7K3LGC

JF9RTX

W4YTB for initial # 400 mixed mode

On 23cm I made 2 QSOs with 2 initials:

Z3/EA8DBM

PE9GHZ from Clubstation PI4Z in JO11WM

On 10GHz I made 18 QSOs with 4 initials and 1 new DXCC

3 QSOs in CW with: F2CT, OZ1LPR and SP3XBO all others in Q65

Initials:

IZØJNY

W2HRO

ON4CDU

GI7UGV also for new DXCC

PJ4MM Martin martin@pj4mm.nl

I did not compete seriously this year, but was still able to make 10 QSOs on 70cm with my test setup for 70cm which consists of 2x M2 13 w/l yagis, far from optimally stacked, on a speaker tripod giving me a max elevation of about 30 degrees the first 2 hours after MR. I am using an HA8ET preamp on the wrong side of 20M Ecoflex15 coax, and about 700W output.

Even with this not so very optimal setup signals were very strong for some stations.

QSO's made with: 7P8Z, K4EME, OM4EX, ON7EQ, S56P, UA3PTW, UB4UAA, W4ZST, W5LUA and YL2GD.



Figure 19 - PJ4MM 70cm test setup

SM4GGC Stig sm4ggc@gmail.com

Here is my news regarding the ARRL EME contest on 70 cm 1 leg.

I was active for about 16 hours this weekend which resulted in 51 qso in q65 and 1 qso in JT65. New initials and squares were worked as the DX expedition to 7P8Z and KA6U.

Conditions seemed good most of the time and one or two yagi stations could be worked from my station. Looking forward to next weekend in November

My antennas are 4X26 el YU1CF for H-pol and SSPA with about 400W in antennas.

<https://www.qrz.com/db/sm4ggc>



Figure 20 - SM4GGC 4x26 array

VK2CMP Mick vk2cmp@optusnet.com.au

I worked both nights of the first leg of the 70cm ARRL contest and had a great time. The first night seemed to have a lot more stations and contacts than the 2nd night, not sure why? I put it down to wearing my Trenton T-shirt on the 1st night?

Before the contest I did some checks of the local QRM with the aim of optimising my filters in the RX chain.

I was pleased that my newly installed 10KW solar installation did not create any noise. It's a SMA brand and was picked because of the feedback from hams on MoonNet. I still have a huge drop off of my RX capability on MS (EU window) as my array points up a hill to lots of QRM sources and large trees. Below 10 degrees elevation my noise floor is 10 to 12 dB higher, and this means I cannot complete with smaller and low power stations below 10 degrees elevation (the very end of the window is when for some seem lots of station come on air so which means I miss out getting them in low QRM).

I had to work the contest without MAP65 and the Band map etc. as Map65 kept freezing which certainly slowed things down. Talking to Dave G4EEV he provided feedback that ground loops or disconnecting the SMA cables on the RSPduo sometimes does that. Interestingly after the contest I reseated the SMAs and yes now all OK. I plan to also connect the case to the station earth as this was the only box not earthed as well.

I was very happy to work 7P8Z in the Kingdom of Lesotho during the contest and my thanks goes to Bernie and John for the activation. I also worked a couple of single yagi stations and 13 Initials.

VK7ZBX Richard vk7zbx@gmail.com

I have been active a little in September on 10GHz EME.

For the ARRL EME contest I was able to set up my semi portable dish to optimise for moonrise and was able to work a couple of new stations for my log. I worked Mike KM0T and Steve K5DOG on the 1st day then relocated to the other side of my house to work moonset the next day. I was then able to work Charlie DL3WDG, Zdenek OK1DFC, Mauro I6CAK, Mirek OK2AQ, Jan PA0PLY, Jac PA3DZL and Guy F2CT making a total of 9 stations. Hardly a winning score but great fun for a single band and flew the VK flag on this band.

The following weekend I worked only 5 stations in the ARI EME contest. I was able to work Zhu BD4SY, Peter OZ1LPR, Mirek OK2AQ, OK1KIR and Bert DL4DTU. Not too many about in the wee small hours.

Finally, this week (16th October) I was happy to work Ivan IZ0JNY for the first time. I was great to work him as we are both small stations with only 20W of power.

The 3cm dish is 1.8M and it's a prime focus dish. It is an interesting dish as the feed is a shepherd's crook feed from WR75 waveguide so the equipment is safe and dry behind the dish. Plans are also afoot to become QRV on 70cm with 4 X 15 element LFA crossed yagis that I have here and also 23cm with a 2.4M prime focus mesh dish.

73 to all from Hobart.

W5ZN Joel w5znjoel@gmail.com

From Arkansas EM45 using 8xFO25 and 1KW:
Operated in the ARRL EME contest on 432 MHz.
Completed 45 QSO's, 2 initials and one new grid.

UA3PTW Dmitry

Dmitry was active on 70 and 23cm but only for activity and searching for new ones.. On 70cm he worked 11 new init / total 69 QSO , no one on CW despite many CQs, Conditions were very fine, all time Hpol -Hpol for EU and US. He copied the 7P8Z/KL6M sked with 7P8Z at 559. On 23cm he worked 5 new initials all Q65, no-one worked on CW as he was only looking for new stations.

W2HRO Paul

W2HRO was QRV from his home station in NJ FN20 for the first time during the ARRL EME contest 21-22 SEPT. The 10 GHz station is a 2.4m offset dish with 20w at the feed. A waveguide T/R switch and a 0.8 dB NF preamp with a w/g input were used.

Stations worked during the contest, all on Q65:
OZ1LPR, OZ1FF, PA0PLY, ON5TA, G4YTL, G4RFR, PA7JB, PA3DZL, PE1CKK, OK2AQ, HB9Q, DL3WDG, IW2FZR, F2CT, IK6CAK, OK1DFC, KM0T, YO8RHI, GW3TKH, IK0HWJ, LZ4OC, DL3WDG, W3SZ and SA6BUN.



Figure 21 - W2HRO 2.4m dish



Figure 22 - W2HRO 3cm feed

W2ZQ Delaware Valley Radio Association

(reported by Joe K1JT k1jt@arrl.net)

The accompanying photo shows our 4.6 m dish after being raised to its pedestal on September 29. We expect this refurbished dish to be usable up to 10 GHz. Initial evaluation and pointing tests will be made in the next few weeks.

We used our smaller 3 m dish (visible at left in the photo) for the first 50-1296 MHz weekend of the ARRL EME Contest, making 94 digital QSOs in 85 locators. Activity levels were good throughout the weekend:

as a typical example, the attached QMAP screenshot shows error-free decodes of 25 Q65 signals received from the Moon in a single minute, 0508 UTC on October 19.

We are pushing to have the 4.6 m dish ready for use by the November 16-17 contest weekend, so that we (and everyone else!) should be nearly 4 dB louder. We will look for CW QSOs then, as well.



Figure 24 - W2ZQ Dishes

UTC	Frq	Fsked	DT	dB	Q65-	Message
050800	78.617	77.8	2.66	-4	30B	CQ OK1UGA J080
050800	81.078	80.3	2.59	-17	30B	CQ YU1SAN RN03
050800	93.614	92.8	2.66	-12	30B	CQ LB6B JP20
050800	96.922	96.1	2.59	-11	30B	CQ WA3RGO EL97
050800	98.917	98.1	2.29	-13	30B	KNOWS OM4XA -21
050800	100.895	100.1	2.66	-12	30B	AB6A DF7KB -16
050800	104.812	104.0	2.59	0	30B	PA3FXB OK2DL RRR
050800	106.856	106.0	2.51	-11	30B	N1AV FIRJ R-10
050800	111.922	111.1	2.59	-2	30B	VA7MM OK1DFC +00
050800	113.855	113.0	2.06	-9	30B	CQ DL7UDA J062
050800	117.301	116.5	2.59	-12	30B	CQ SP3YDE J082
050800	121.909	121.1	2.66	-12	30B	CQ IQ2DB JN45
050800	61.918	61.1	3.38	-11	60C	CQ DK3WG J072
050800	69.482	68.7	0.53	-16	60C	PA0PLY W3S2 R-16
050800	76.897	76.1	2.62	-16	60C	YO2LAM CE3VRT -19
050800	87.605	86.8	2.62	-13	60C	HB9Q DL1SUZ R+01
050800	95.899	95.1	2.62	-6	60C	W2ZQ F4KLO RRR
050800	109.273	108.5	2.89	-5	30B	CQ RA4HL L043
050830	81.348	80.5	2.74	-15	30B	YU1SAN UA1ALD R049
050830	83.466	82.7	2.66	-11	30B	CQ VE4SA EN19
050830	100.921	100.1	2.66	-16	30B	DF7KB AB6A R-20
050830	104.817	104.0	2.51	-9	30B	OK2DL PA3FXB 73
050830	106.909	106.1	2.89	-12	30B	F1RJ N1AV RR73
050830	111.922	111.1	2.66	-13	30B	OK1DFC VA7MM R-06
050830	122.823	122.0	2.66	-20	30B	IQ2DB OZ9KY J057

1296.080 Monitor Erase Decode
 2024 Oct 21 19:47:38
 24 dB
 241019_0511.qm Rx: 24.6 0.0% Q65-60C 58.5 s 17/16 Save decoded

Figure 23 – W2ZQ 25 decodes in one minute 19 Oct 2024 0508 UTC

2024 EME Conference Presentations

Paul W2HRO reports that they have moved the 2024 EME Conference presentations to archive.org.

https://archive.org/details/eme_conference



Figure 25 - F1EHN C30BVA 70cm DXpedition

QRPP 1296 MHz Moonbounce is Possible

PA3DZL Jac

I built a *DEMO STATION* for 1296Mhz and want to use it for presentations at clubs or special events. Especially to introduce OM's to Moonbounce. Would be great to get more people active. It can be used for different bands like 70, 23 and 3cm.

It was a temporary setup on the roof terrace next to my shack. Especially for the weekend of 21st and 22nd of September.

Below is a description of the station and the results achieved.

- ANTENNA: 23 el. Tonna Yagi, boom length 1.75m, Gain 15.8dBd, Linear H pol.
- Below the yagi a box with 110W PE1RKI SSPA, N-switch and VHF Design Preamp 0.5dB NF
- Very short 50cm coax (RG213) from the dipole to the DowKey N-switch with Preamp and SSPA
- Box at the bottom 28Vdc PSU for SSPA (also some counterweight)
- RF Hamdesign Spid SPX-01 AZ and EL rotator, automatic tracking
- Transceiver: Icom IC-9700 + GPSDO lock + W6PQL Sequencer
- Modes used for these QSO's were: 1xQ65-30B, 2xQ65-120D and 14x Q65-60C

RESULTS:

Made 17 QSO's with 15 different stations/initials

- UA3PTW (5.8m) -21 Send / R-20 Received
 - SM5DGX (8m) R-18 Send / -22 Received (Q65-30B)
 - PY2BS (5.1m) R-22 Send / -23 Received
 - NC1I (6.1m) -16 Send / R-17 Received
 - G4CCH (5.4m) R-23 Send / -23 Received
 - DG5CST (10m) -14 Send / R-18 Received
 - RA4HL (4.5m) -22 Send / R-21 Received
 - KD5FZX (5m) R-16 Send / -21 Received
 - NC1I (6.1m) R-16 Send / -18 Received
 - OK2DL (6m) -20 Send / R-22 Received
 - PI9CAM (25m) R-15 Send / -14 Received
 - OK1KIR (6.1m) -20 Send / R-20 Received
 - ON4AOI (4.5m) R-23 Send / -23 Received
 - NC1I (6.1m) -16 Send / R-18 Received
 - HB9Q (10m) R-12 Send / -16 Received - **STRONGEST SIGNAL!!**
 - GØLBK (4) R-24 Send / -27 Received
 - KB2SA (1.9m) R-26 Send / -31 Received
- WORLD RECORD SMALL RIG EME
1.9m dish CP <> 23el. Yagi H-pol 1.75m boom

I was heard by these OM's, saw traces of some but could not decode:

- RW6HM (5m) -22
- UA9FAD (3m) -24
- ON4QQ (4m) -28
- DL1AT (3.06m) -27
- ON5GS (6m) -21
- PA3JRK (2.4m) -27

I heard these OM's but they could not hear me:

- SP5GDM (3.7m) -24
- XE1XA (5m) -23



Figure 26 - KB2SA optimised 1.9m dish

**ARRL DXCC EME Endorsement Proposal
Toshio JA6AHB**

I obtained DXCC 70cm in 2022 and DXCC 23cm this year, so I am attaching a photo of the latest certificate
For details, please see my homepage
<https://ja6ahb.com/>.



Figure 27 - PA3DZL 23el 1.75m 15.8 dBd setup

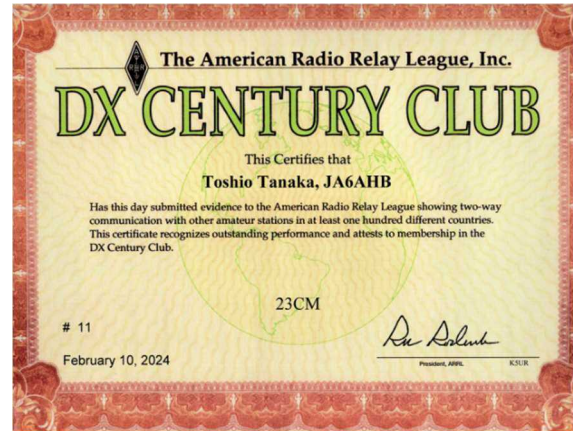


Figure 29 - JA6AHB 23cm DXCC diploma

I resumed the work of remaking the 3m TVRO dish to f/D=0.5, which had been stalled due to the application for the 23cm DXCC. Even during the work, I was able to work on June 2nd DL1SUZ (-19/-18) and on June 3rd PA0PLY (-15/-18). Currently, the SUN/CS is 9.5dB, but I am working hard in the hope of exceeding 10dB once the mirror repair is completed. See the photo. This is the last spurt at 92 years old!



Figure 28 - PA3DZL N coax switch + preamp



Figure 30 - JA6AHB dish repair

To commemorate the achievements of K2UYH, I would like "EME" to be featured as a special feature of "DXCC".

I had put aside the special feature of an EME DXCC for the time being, with the belief that the stronger the better, the more powerful the better, but I'm not convinced.

There is a special feature for satellite communication, but not for EME.

Satellite communication is exactly the same as a mountain repeater, except that the communication path is in space. The difference between EME and mountain reflection is the propagation path.

At a time when DXCC was unthinkable, EME was mistakenly lumped together with mountain reflection, but times have changed.

It is clear that the difference in the propagation path is in space, just like satellite communication, and this can be clearly proven by the delay (DT) and Doppler of the received signal, so I would like to see EME DXCC specially recognised at this time.

DUBUS-REF CW/SSB Contest 2025

70 cm SAT Feb 8 (24h) DL7APV Memorial
 13 cm SAT March 8 (24h)
 23 cm SAT+SUN Apr 5+6 (48h) ... VK3UM Memorial
 9 cm SAT May 3 (24h)
 1.2 cm SAT June 21 (24h)
 3 cm SUN Jun 22 (24h)..... K2UYH Memorial
 6 cm SAT Jul 19 (24h)

CW Initial List

<https://www.g4rgk.co.uk/Initials>

Sun & Extraterrestrial Noise List

http://www.ok2kkw.com/next/nl_k2uyh/sun_table.xls

DL0SHF Beacons – DK7LJ per@per-dudek.de

3cm 10368.025 MHz
 1.2cm 24048.025 MHz

EME Directory by Jan PA0PLY

<https://www.pa0ply.nl/directory.htm>

Newsletter Hosting Rein PA0ZN / W6SZ (SK)

<https://www.nitehawk.com/rasmit/eme70cm.html>

Newsletter Contacts

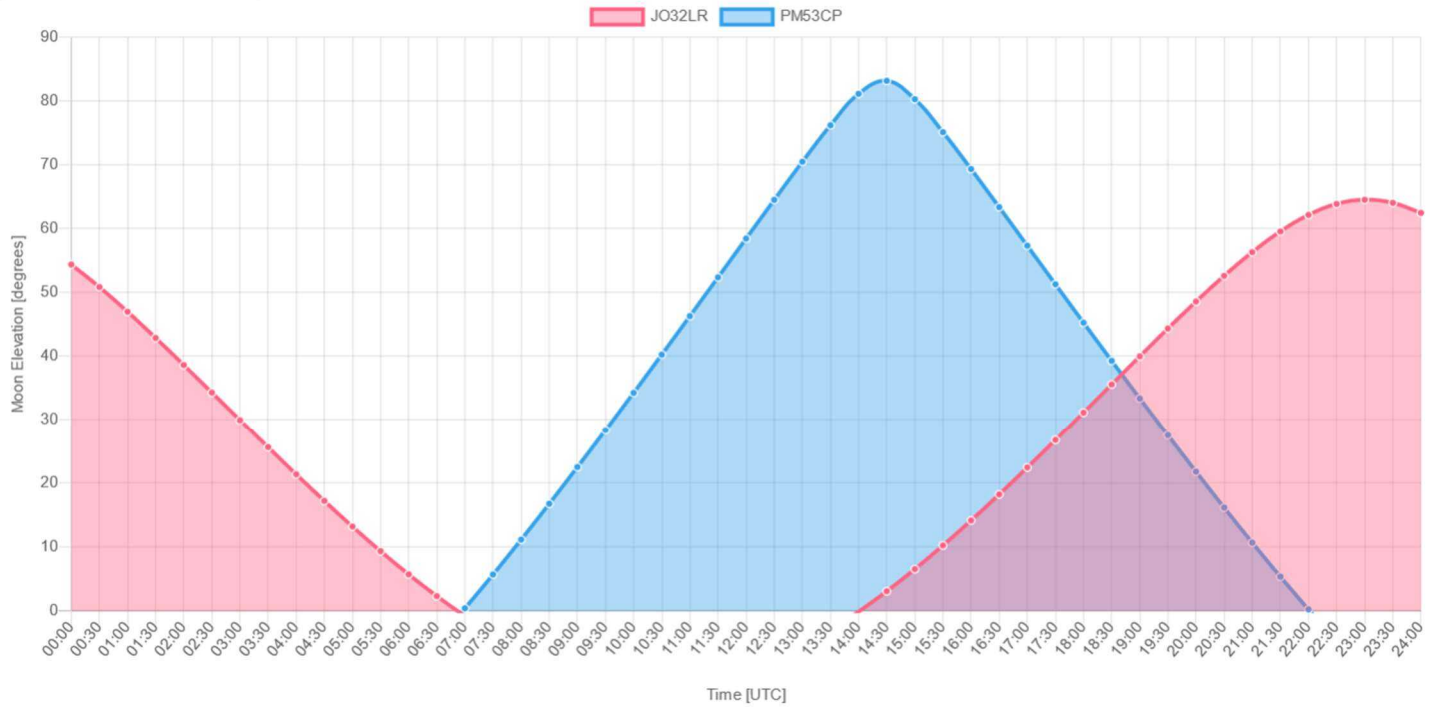
Peter G3LTF.....G3LTF@BTINTERNET.COM
 Matej OK1TEH....OK1TEH@SEZNAM.CZ
 Frank NC1I.....FRANK@NC1I.COM
 Bob W1QA.....EME@W1QA.COM

Please send newsletter contributions to Peter G3LTF

PA0PLY EU-AS window + EU-US window – 6cm on 14 Dec 2024

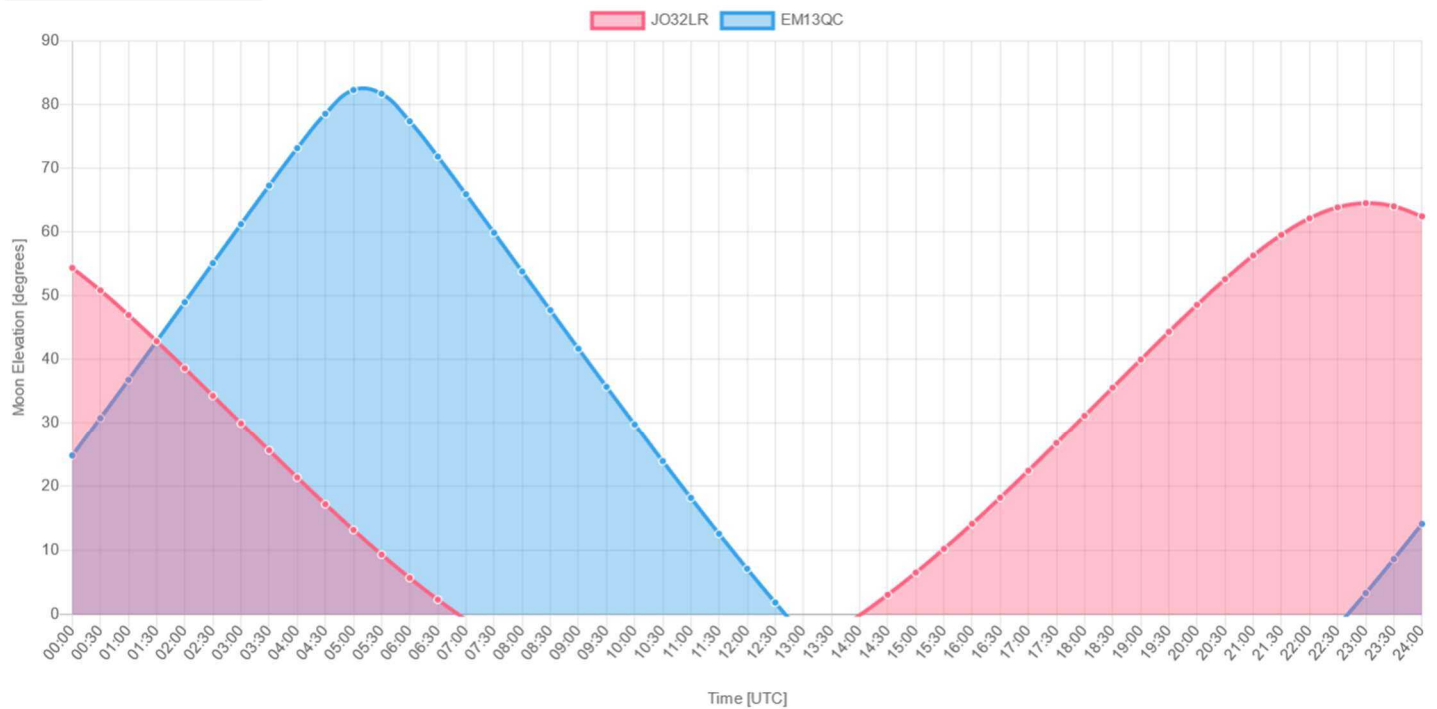
My Locator: DX Locator:

Date:



My Locator: DX Locator:

Date:



Entries for 2024 ARRL Contest

- 1) Digital or analogue, make your QSO as you have always done with whatever exchange you normally use. A locator does not have to be part of that exchange for the QSO and entry to be considered valid.
- 2) ARRL provides an easy-to-use web page for EME Contest log submission,
<https://contests.arrl.org/arrlemescoresubmission.php>.

The first sentence on this page reads "Use this form to submit your Cabrillo-formatted EME Contest log", but a few lines down it's made clear that you can also upload a standard ADIF-formatted log file. Starting with an ADIF log, the whole process takes about two minutes. You will receive an on-screen acknowledgment that your log was accepted, and a confirming email.

Handwritten paper logs are also accepted via standard mail, and pdf forms for this purpose are downloadable here

<http://www.arrl.org/files/file/Contest%20Forms/vuelog.pdf>.

- 3) In participant ADI file uploads to the contest entry site the submitter must declare in their entry what Grid Square was activated by them for each QSO.

When the log is received the ARRL will add the required locators of stations worked in the checking process. You do not HAVE to do that.

For paper logs the submitter must also declare what Grid Square was activated by them for each QSO. This can be done on the summary sheet.

<http://www.arrl.org/files/file/Contest%20Forms/emesum.txt>
