

## 432 AND ABOVE EME NEWS DECEMBER 2023 VOL 52 #8

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**INTERNATIONAL EME MEETING 2024 IN TRENTON, NJ: [www.EME2024TRENTON.org](http://www.EME2024TRENTON.org)**

**VERY BEST SEASONS GREETINGS FOR A WONDERFUL NEW YEAR FROM ALL ON 70 CM & UP EME TO ALL**

**CONDITIONS:** We want to send our best Holiday wishes and those expressed in the reports of this newsletter (NL) but not included to conserve space. We hope it has been a wonderful time for all of you.

**There is also good news from the ITU. The 1298-1300 plan allowing EME to continue on 1296 has been approved – see FINAL section.**

The ARRL EME Contest attracted record participation. **OK1DFC** continued his success from the Oct weekend (WE) on 1296 to amass a *never before* score of 204x72 for 1,468,800 points! In the CW only class **G3LTF** has the highest reported 23 cm score with 70x30. CW is very much alive on 1296! On 432 NC1I may be at the top with 79x? QSOs [worked in one WE]. I (K2UYH) have again the highest reported score with 71x45.

**AWARDS:** **PA3FXB** has received his official 1296 DXCC Certificate #10; while **JA6AHB** has achieved 1296 DXCC in Nov to add to his 70 cm DXCC completed last year. His last additions were 4W8X, CT9/EA8DBM and HG5BMU. These last 3 QSOs still need to be confirmed. Toshio is the oldest EMEer in JA. [TNX to JH1KRC for this info].



Christmas for Jan (PA3FXB) with 1296 DXCC #10

**DXPEDITIONS:** There is very little to report. **N1V** and **W2HRO** are preparing to return to Hi on 10-16 March with operation on 902, 1296, 2304 and 10 GHz. Continuing operation by **PJ4MM** from Bonaire on 432 and **PJ2BR** from Curacao on 1296 is expected. The **4W8X** dxpediton to Timor-Leste was successful on both 23 and over a more limited period on 70 cm. Reports indicate a good number of contest QSOs. A post dxpediton report has not yet been received. The **CT9/EA8DBM** dxpediton on Madeira island was also successful with a good number of QSOs made. See the report in this NL.



CT9/EA8DBM 1.8 m folding dish on Madeira island

**DUBUS CONTEST 2024:** There are some important changes to the EU EME Contest sponsored by DUBUS and the REF. In the future for convenience we will refer to it as the "EU Contest" rather than "DUBUS". The major change is that most contest legs will last one day (Sunday) rather than the whole WE. The exception will be the 1296 leg (also known as the VK3UN Memorial Contest) that will remain 2 days. The 10 GHz and Up leg will be split into 2 separate

legs; one is for 10 GHz on Sunday and the other for 24 GHz on Saturday. **The first leg will be for 432 on Sunday 18 Feb.** A list of all the dates and rules is by the end of this NL. We recommend that the open Saturdays be used for band activity days.

**SSB FUNTESTs 2024: The fun is not over! The 26th 1296 SSB Funtest (also the F5SE Memorial Contest) will be on Sunday 11 Feb from 0000 to 2400.** The DEC is low, but the path loss is at its lowest – ideal for SSB. The hours are reasonable too. (We propose the day before be used as a 23 cm Activity day). **The 13 cm SSB Funtest will be later on Saturday 13 April.** The day before the 13 cm leg of Dubus Contest. (The Funtest day could be also used as a 13 cm Activity Day. This can fit with Funtest concept and might warm things up for the Dubus CW event). The Funtest Events are intended to be fun. You do not need to transmit on SSB to participate. CW to SSB and vice-verse exchanges are encouraged and count for points. (Only one QSO between stations is allowed, i.e., you cannot work a station SSB to SSB and SSB to CW for extra points). Scoring is contact points x number of two letter Grid Sectors (IO, JM, FN, EM ...) x 100. SSB to SSB contacts count as 2 points. SSB to CW (or CW to SSB) count as 1 point. The exchange is your Sector (IO, JM, etc.). Only the 2 sector letters need to be sent and copied by EME. The exchange of signal reports and/or 4-character grids is optional and not required. Operation may be by single or multiple operators from one location. No distinction for scoring will be made. This is a **Funtest** and meant to be similar to an activity event – the goal is to have fun. Communication on Loggers (HB9Q) is OK - ["TU FB QSO", "GM..", "73", etc. is OK]. Logs should be sent to the 432 and Up EME NL by email to [alkatz@tcnj.edu](mailto:alkatz@tcnj.edu) ASAP after the end of the contests. (All logs for contest awards should have been received within *about* a month following the contest). The top scoring station on each band will receive an attractively framed certificate that will be presented at the next International EME Conference (Trenton 2024). Last year activity on 13 cm was quite low. To improve turnout, we have move it sync with the Dubus WE. If you have equipment for 13 cm, please come on for the Funtest. **13 cm is an ideal band for SSB EME.**

## **REPORTS:**

**BV3CE:** Tom [tom33638998@yahoo.com.tw](mailto:tom33638998@yahoo.com.tw) was QRV on 432 during ARRL EME Contest in Nov – I added on 25/26 Nov NC1I, K4EME, DL7APV, UR3VKC, UA5Y, PI9CAM, S57Q and N1AV. All using Q65B. I ended with a total of 23x17 for 39,100 points, which is much better than last year with only 12 QSOs

**CT9/EA8DBM:** Alex (EA8DBM) [ly3num@gmail.com](mailto:ly3num@gmail.com) was QRV on 23 cm from Madeira Island from 19 to 27 Nov – I used a 1.8 m folding dish with reflective material made of fabric and a 200 SSPA. I made 65 initials and 85 QSOs, but I had difficulty working smaller stations. I contacted using Q65C on 20 Nov OK1DFC (18DB/18EB), OK1KIR (20DB/19DB), UA3PTW (18DB/19DB), RA4HL (23DB/20DB), ON4AOI (24DB/23DB), SM6CKU

(24DB/19DB), RD4D (22DB/19DB), OT7K (24DB/29DB), PA9RX (24DB/20DB), G0LBK (27DB/22DB), IQ2DB (27DB/25DB), DF3RU (24DB/20DB), PA0BAT (30DB/20DB), EA8EDBM [home station] (+0DB/+04DB), YO2LAM (24DB/26DB) and G4CCH (22DB/17DB) - problems with RX began at an EL > 30 degs, and at AZ > 215 degs was blocked by a tree and had no chance to work North America (NA); on 21 Nov I had problem with tracking due to overcast skys and also tree blockage, found Moon for OK1UGA (22DB/22DB), PA3DZL (26DB/23DB), DK4RC (20DB/16DB), IK2DDR (23DB/23DB), SP5GDM (29DB/23DB), OK1IL (25DB/22DB), PA0TBR (31DB/24DB), OH2DG (20DB/18DB), ZS6JON (27DB/22DB), ZS4TX (25DB/21DB), ES3RF (26DB/23DB) – called 5 hours for the QSO, NC1I (15DB/16DB), K5DN (24DB/20DB) and KB2SA (24DB/25DB); on 22 Nov moved dish for a better shot to NA but was delayed by WX for only K2UYH (21DB/17DB); on 23 Nov in the morning kept dish in same position for K5DOG (24DB/24DB), N6NU (22DB/24DB), VE6TA (20DB/21DB), W7JW (27DB/25DB), KD5FZX (16DB/16DB) and N0CTR (23DB/24DB); on 23 Nov in afternoon moved dish back to original position but also found tracking error of about 9 degs that when corrected greatly improved my results for AA6I (29DB/27DB), N0OY (22DB/15DB), DJ2DY (33DB/26DB), IK3COJ (25DB/23DB), G4YTL (28DB/25DB), YO2LAM (24DB/25DB), HB9Q (9DB/14DB), PE1LWT (28DB/25DB), UA9YLU (27DB/23DB) and F1RJ (30DB/23DB); on 24 Nov moved dish to more western window for JA6AHB (24DB/22DB), EA8DBM [my Home station operated remotely] (25DB/27DB), PA3FXB (25DB/22DB) and LZ1DX (23DB/22DB); on 25 Nov in ARRL EME Contest with dish in same location for OK1DFC (17DB/18DB), OK2DL (20DB/22DB), KD5FZX (22DB/23DB), N6RZJ (28DB/26DB), KB2SA (23DB/25DB), VE6TA (22DB/25DB), N6NU (24DB/29DB), K3WM (21DB/24DB), DF3RU (23DB/20DB), IK3COJ (23DB/21DB), DL4DTU (22DB/22DB), RA4HL (24DB/15DB), DL8FBD (30DB/26DB), PI9CAM (12DB/8DB), DK3WG (26DB/25DB), DL7UDA (27DB/21DB) and SM6CKU (20DB/16DB); on 26 Nov 2nd day of contest for K5DN (23DB/21DB), G0LBK (26DB/20DB), KA1GT (27DB/27DB), NC1I (17DB/17DB), W2ZQ (28DB/25DB), N5TM (26DB/28DB), K3WM (21DB/23DB), W5AFY (25DB/20DB), N0CTR (24DB/23DB), K5QE (28DB/24DB), UA5Y (23DB/24DB), DL6SH (24DB/19DB), OK2ULQ (25DB/25DB), SK0CT (23DB/15DB), SP5GDM (26DB/21DB), IQ2DB (25DB/26DB) and PA3FXB (26DB/21DB). I was active in the evening after the contest, but apparently no one had any strength left. Thus, the expedition was over. Despite the pointing problems, we still supplied 65 initials and many contest QSOs and mults. We missed some QSOs due to QRM. I had expected that everyone would be especially careful with a dxpedition station. All logs are downloaded to LOTW. Paper QSL cards are being printed and will be available in a couple of months. Any comments and suggestions will be appreciated. Special thanks for technical and financial support to LY2IJ, UA3ATQ, OK1IL, PA3FXB and JA6AHB. More information on this and future dxpeditions can be

found at <https://ea8dbm.substack.com/>; along with info on signing up for my EME [dxpedition] blog.

**DJ3JJ:** Andreas [dj3jj@gmx.net](mailto:dj3jj@gmx.net) reports on his 23 cm activity in the final leg of the ARRL Contest – before the contest, I finished a new 2 x 2 MRF6S9160 PA, but not have time to finish the driver. With just my TS2000X as a driver, I was able to get about 350 W out of the SSPA in the shack. The loss from the shack to the Antenna is about 1.5 dB. With this arrangement, I was able to complete a score on **CW only** of 18X10 for 18,000 points. This is my best contest result thus far. QSO'd were DF3RU, OK2DL (excellent signal), SP6JLW, K0PRT, OK1DFC, OZ4MM, IK3MAC, G4CCH, SP9VFD, OZ6OL for an initial (#), SA6BUN, DL4DTU, DL6SH, SK0CT (#), SP6ITF, HB9Q, PI9CAM and G3LTF. CWNr were WA9FWD, XE1XA, JH1KRC and LX1DB.

**DL0SHF:** Chris (DF9CY) [df9cy@web.de](mailto:df9cy@web.de) was able to put the DK7LJ's club station on the Moon on 1296 for the Oct ARRL Contest WE, but not without difficulties -- After a long absence, I wanted to be QRV in a BIG way this year, but Murphy struck more than a single time. It took me a while to get the remote operation running from my home to DL0SHF. I normally experience quite a lot of dropouts, as my internet connection is poor. I was only able to run the first part of my Moon passes due to unexpected commitments. Nevertheless, things then went well. I made 54 contacts and one DUP the 1<sup>st</sup> WE on CW and Q65C60 and Q65B30. (The latter seems not to be meant for old people, Hi, as the QSOs go by fast)! Worked on 28/29 Nov using Q65 were HG5BMU, PE1LWT, ON4LX, GM0PJD, DK1KW, EA1IW, OK2ULQ, JS6UJS, LA3PNA, G7TZZ, DF3RU, OE3JPC, IQ0RM, PA0TBR, 9H1BN, OM4XA, IK3COJ, DL3WDG, UA6AH, YO2LAM, OH3MCK, ES3RF, OH3DP, VK3NFI, VK3VJP, DL1SUZ, G0HIK, OZ9KY, PA3FXB, SP5GDM, YU1SAN, PA3JRK, DK0TE, OM4XA, JJ3JHP, IK3COJ, RX3DR, OK1USW, UA9FAD, SP3YDE, OH1LRY, OK1DFC, OK2DL and DL7UDA; and using CW were UA5Y, JA6XED, SM3BYA, DL4DTU, OK2PE, SP6ITF, SP6JLW, OZ4MM, FR5DN, SM5DGX and DL1AT. Some were small stations with only one yagi and 50 W or less. I was very happy to give out a few initials. I planned to be active again for the 2nd WE, but it did not work out - Covid19 struck, and I was not able to do anything.

The DL0SHF station (9.5 m solid dish with 1 kW on TX) is heavily used for Radio Astronomy and arrangements must be made when it is used for EME. I am planning to be QRV in 2024 and attend the EME2024 Conference in Aug.



**DL0SHF 9.7 m dish used on 1296**

**EA4URG:** Iban (EB3FRN) [icardona@gmail.com](mailto:icardona@gmail.com) sends news of an EA 10 GHz EME Demonstration Event that is looking for skeds -- On 16 and 17 of Feb in Guadarrama there will be an EA and CT Microwave Meeting. This year EA3HMJ will put on the air a portable 3 cm EME station using a 90 cm dish and 40 W with very good tracking. The station will use the callsign EA4URG and make a special QSL for the event. Please send to [ea3hmj@gmail.com](mailto:ea3hmj@gmail.com) requests for skeds. We will also be on HB9Q during the event.



**EA3HMJ's 3 cm Portable EME Demo Station**

**F6ETI:** Philippe [f6eti@wanadoo.fr](mailto:f6eti@wanadoo.fr) discusses his operation in the ARRL Contest -- After finding a poor turnout for the ARI Autumn Contest, and it not being possible to operate in the Oct part of the ARRL Contest WE, I was finally able to participate in the Nov. I thought I would be able to catch up a little from the previous month, but that wasn't the case; I missed a lot of regulars! Operating only on 1296 CW, in all 19 QSOs made including 3 new stations during the Nov WE – all on random only. QSO'd were OK2DL, IK3MAC, G3LTF, SK0CT for initial #105, JH1KRC #106, PI9CAM, SP6ITF, HB9Q, IW2FZR, DF3RU, G4CCH, SP9VFD, SP6JLW, OK1DFC, CT1FGW, KL6M, CT1DMK #107 and G0LBK. My rig was 3.05 m dish, 300 W and 0.35 dB NF LNA at my septum feed.

**G3LTF:** Peter's [g3ltf@btinternet.com](mailto:g3ltf@btinternet.com) main activity in Nov was the final leg of the ARRL Contest -- I was QRV on 23 Nov on 9 cm and worked using CW OK1KIR, OH2DG, PA0PLY for initial #79 and PA3DZL. Then in the Contest on 1296 using CW worked on 25 Nov K5DN, WA9FWD, S59DCD, WA6PY, VE6TA, NQ7B, G4RGK and VE6BGT; and on 26 Nov F6ETI, 4W8X for initial #539 and DXCC 84 – a excellent signal from Seb, SM6CKU, PI9CAM, JH1KRC, IQ2DB, HB9Q, SP7EXY, F6KRK, OK1DFC, ZS6JON, OH1LRY, CT1DMK - good to work Luis again after a long time, RA4HL, G4ALH #540, IK5VLS, PA2DW, W2ZQ, K3WM, OZ4MM, DL7UDA, WB8HRW, KL6M, G4CCH, F5JWF, LX1DB, OK1IL, DJ3JJ, LA1TN, DL3WDG #541, CT1FGW, SK0CT, G4YTL, W3SZ #542 and AA4MD.

I added 39 to my first leg score to give a total of 70 x 30. There were a lot of stations who would have been useful multipliers, and who I have previously worked on CW, but never came on that mode, at least while I was QRV. I heard KA6U (559) but never found him calling CQ. My total claimed score for 23, 13, 9 and 6 cm is 646,600 points. The WX was quite kind, i.e. no really strong winds! And the hours were much more civilized than for the previous leg. I hope to be on 9 cm on 28 Dec.

**G4RFR:** Julian (G3YGF) [Julian@ygf.org.uk](mailto:Julian@ygf.org.uk) reports on the FRARS club's recent Moon activity -- It has been a poor month for Moon windows, but on 23 Nov we had two more QSOs on 3.4 GHz with PA3DZL (10DB/22DB) and OK1KIR (6DB/18DB). At the time our TX was acting up and we couldn't hear any echoes. We hoped we had it fixed and were QRV again on Wednesday 20 Dec, first on 10 GHz with 200 W and then later on 3.4 GHz with 40 W. All was OK on 3 cm, but 9 cm had problems and no QSOs were made.



**G4RFR** dish used on 3 and 9 cm

**GM0ICF:** Bill [Bill.Ward@uws.ac.uk](mailto:Bill.Ward@uws.ac.uk) made his 1<sup>st</sup> EME QSO after the ARRL Contest on 432 -- I have been intrigued with EME for thirty years. During the Nov ARRL Contest, I tried my new 435 MHz satellite 4 x 10 el yagi array on the Moon, and could not believe how strong some of the signals were. I heard HB9Q, UA5Y and PA2V on Q65B. After setting up for TX a few days later, I QSO'd DL7APV (7DB/22DB) with 20 W for my first EME QSO on Q65B! I have a 400 W PA and will optimize my antenna to make a few more QSOs. However, I can feel another antenna construction project coming up! Look for me off the Moon.

**HB9Q:** Dan [dan@hb9q.ch](mailto:dan@hb9q.ch) had announced that HB9 stations will lose the use of 3400 at the end of this year -- In the meantime I continue to have requests for HB9 before my license expires. I'm now at mixed initial #99\*. I plan to run my 10 m dish and 100 W one last time on 28 Dec. My window is from 0500 to 0815. [See last NL for more info].

**IQ2DB:** Alessandro (I2SVA) [i2sva@i2sva.it](mailto:i2sva@i2sva.it) reports on his group's ARRL Contest 1296 results -- Our score is for the Nov leg only, since we missed the Oct leg. We ended with 112 QSO x 51 Mults (36 DXCC, 11 USA, 4 VE prov and 7 new initials). It could have been much more considering the high level of activity and the very crowded band. There were signals up to 1296.150, mainly during the Saturday pass. We tried to use 30B as much as possible to speed up our QSO rate; we did 30% of our DIGI QSOs using 30B (29 QSO out of 97). Out of the 97 DIGI contacts, 89 were received with reports of better than (20DB); and we know that 30B works can decode even at lower signal levels (22..23DB). This means that at least 90% of our QSOs could have been done in 30B mode with less frustration and more time for search and CW! Mode 30B should be definitively adopted as a standard on 23 cm, moving to 60C and 120D to work small stations! IQ2DB became active in Oct 2021 and today we are up to mixed Initial #319\*, 62 DXCC and WAS 25. We are actively looking for new countries to reach DXCC, our next goal!

**K5QE:** Marshall [k5qe@k5qe.com](mailto:k5qe@k5qe.com) sends news of his group's multiband score in the ARRL EME Contest -- We worked on 432 76x41, on 902 4x4 and on 1296 116x46; we also did well on 50 with 40x30, 144 149x70 and 222 14x13 for 8,139,600 points. A big addition for us this time was a new 6 m antenna with 4 x 6M7JHV yagis.

**K7ATN:** Etienne [climb2ski@gmail.com](mailto:climb2ski@gmail.com) operated from his home in OR during the EME Contest -- It's a delight to look up at the Moon and be amazed I can bounce signals off of it. I am in my backyard keeping my feedlines short with my portable setup. Fortunately, I had clear skies for easy visual aiming for both weekends. Although chilly under the open sky, the nice conditions enabled me to double my 70 cm Contest QSO count to 8, and half were initials. Added were W7JW, K5QE, PA2CHR and K4EME.

**K8ZR:** Tony [WA8RJF@ARRL.net](mailto:WA8RJF@ARRL.net) writes this past year was the most productive since becoming QRV on 1296 EME in 2008 -- I worked over 250 QSOs with 105 mixed initials. And a CW QSO was also made. I added 39 stations during the two WEs of the ARRL Contest using Q65C with PA2DW, WA3RGQ, W3SZ, OK1KKD, VE4SA and SP3YDE mixed initials. The plan is continue to be as active in 2024 as 2023 and though I don't want to disturb the current set-up, I am anxious to become QRV again on 902, 2304 and 3400 using Q65 and CW. Also in the plans is 10 GHz with a 1.8 m dish. I hope to be QRV on 28/29/30 Dec on 9 cm.

**KB2SA:** *Kurious George* [curiousgmonk@gmail.com](mailto:curiousgmonk@gmail.com) had great success in the ARRL Contest -- With a 2-3 hour window from San Diego, CA to the EU folks, I managed 18 US states, 23 DXCC, and 3 VE mults and 95 digital QSOs for a raw score of 418,000 points. This is very close to my 2022 results. Equipment here is 1.9 m mesh wire dish with 900 W @ the feed. Most of my QSOs were obtained by CQs using Q65-30B and 60C. Others were obtained by watching the logger. A handful were found using QMAP. My wish is for a longer EU window in 2024.

**N0OY:** Pete [petesias@yahoo.com](mailto:petesias@yahoo.com) is now fully QRV on 3 cm EME with a 1.8 m offset dish permanently mounted at my hilltop [location in EM18ct, KS](#) -- My mount was designed to allow for 0 deg elevation to be workable for terrestrial contacts. I am running 30 W and a 0.6 dB NF LNA. Since my first initial contact with W5LUA, I have had QSOs with OZ1LPR, GI7UGV, UR3VKC, F6BKB, CX2SC, F5VKO, LZ4OC, IZ4BFA, IK0HWJ, IW2FRZ and K2UYH. I am also QRV on 23 cm CW and digital with my 28' dish.



Shot east from N0OY 1.8 m dish used on 3 cm

**NC1I:** Frank [frank@NC1I.COM](mailto:frank@NC1I.COM) sends his report for Nov and early Dec -- We did not put much effort into the ARRL Contest this year. During the Nov WE we focused on getting my new 23 cm dish mounted; so we were not QRV at all on 23 or 70 cm. During the Dec WE, we were QRV for less than half our available moon-time. I found conditions extremely good on 70 cm. NA activity was surprisingly good. We had some tracking issues on 23 cm that made conditions harder to evaluate. EU activity was adversely affected by the difficult local Moon times. By the time the moon reached about 15-degs el here, many EU stations had shut down for the night. We ended up with 79 QSOs on 70 and 81 on 23 cm. I have not counted the multipliers yet. All operating was done remotely with W1QA operating 23 cm from his home and NC1I operating 70 cm from home. 70 cm initials\* since last month include W5ZN (4 x 25 el yagis & 1 kW), AG4W (2 x 11 el yagis & 400 W), JA0RWF (1 x 15 -el yagis & 50 W), JG2XWH (4 x 20 el yagis & 50 W), IW4BLG (4 x 16 el yagis & 50 W), UD2F (1 x 26 el yagis & 40 W) for DXCC 102 Kaliningrad, IW0RNA (4 x 16 el yagis & 100 W), E73CV (single 13 el yagi & 35 W) for his 1st 70 cm EME QSO, VA3MW (single 26 el yagi & 170 W), IU4FKR (4 x 20-el yagis & 1 kW) and PJ4MM (2 x 38 el yagi & 700 W) DXCC 103 Bonaire. My digital initial total is now {#618}. 23 cm initials\* include CX9BT (3 m dish & 150 W), CT9/EA8DBM (1.8 m dish & 200 W), JJ3JHP (4.5 m dish & 500 W), RX3DR (3 m dish & 150 W), DL3WDG (2.4 m dish & 100 W), W3IPA (1.8 m dish & 25 W), K5WO (1.5 m dish & 250 W), OH3MCK (4 x 67 el yagis & 150 W), F8DBY (1 x 67el yagis & 50 W), F4KLO (10 m dish & ? W), IW3ROW

(1.9 m dish & 150 W), and UA1OEJ (4 x 24 el yagis & 250 W on horiz only). This brings my my mixed initial total to #527\*.

**OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) sends his report for the final leg of the ARRL Contest on 1296 -- I ended with 204 QSOs and 72 mults for 1,468,800 points. After the Nov part of the Contest, when I made 150 QSOs, I was expecting a sleepy WE with minimal new stations. I regretted all the more not having a completed SSPA for the 432 band, as I have for 23 cm and 13 cm. However, during the first pass of the contest from start on Saturday to 1st moonset, I added only 9 contacts. The most interesting was with Madeira, CT9/EA8DBM. Then during the 2nd moonpass, I added 34 more stations. By then I was starting to approach the 200 contact mark, which I thought was an impossible goal. In the final pass before the end of the contest on Sunday, I managed to find 14 more stations and thus exceeded 200 contacts! Mr. Murphy took this time off and everything worked throughout the contest without the slightest problem. Overall, the activity on 23 cm was very high. I have 238 QSOs in my log. The difference in this number is that I worked some stations both on Q65 and CW and so the number of contacts is higher overall than the contest QSOs. An example would be the QSO with the Timor-Leste dxpedition 4W8X. So overall I have 72 multipliers, 44 of which are DXCC and the rest WAS multipliers in the US and Canadian provinces. The score stopped at 1,468,800 points after the contest after checking the log for double QSOs and multipliers. So a significant increase in activity after last year's score of 1.1 million points. Interestingly, I made contacts in 24 US states during this contest, which was virtually impossible just a few years ago. Activity thanks to the "umbrella" antennas from W2HRO and amplifiers from W6PQL is on the rise in the US. Finally, a hearty thanks to everyone for calling in. I'll look forward to more opportunities to make contacts in 2024. Activity in OK today on the 23 cm band is world class. 9 OK stations are active on 1296.

**OK1IL:** Ivan [ivankait@netscape.net](mailto:ivankait@netscape.net) writes on his ARRL Contest participation on 1296 -- This year, I decided to do better in the EME Contest. The Oct leg was interrupted by problems with my rotor motor. The final leg, happily, was relatively successful. My log is now uploaded and shows a score of 352,800 points based on 83 digi and 2 CW QSOs. My CW activity is limited by my poor keying. Since Oct, I added initials with LA3PNA, PA0TBR, RX3DR and 4W8X for DXCC 80. During the contest, I added initials with DL3WDG, DF7KB, F4KLO, IN3FCK, CX9BT, WA3GFZ and DL7AIG. I tried to work CT9/EA8DBM, but similarly to OJ0 I wasn't able to decode him. (OJ0 was not a problem because I had already worked OJ0EME). It was strange because it should not have been a problem. I had to switch off my station because of pouring rain. After rain stopped, I powered up again and amazingly, and there was Alex (22DB) easily decoded for DXCC 81. After I worked him, he disappeared again. I do not understand why? [Possibly Moon tracking -- see Alex's report].

**OK1KIR:** Vlada [vlada.masek@volny.cz](mailto:vlada.masek@volny.cz) and Tonda send news on their late Nov EME – We looked for the 4W8X dxpedition. On Saturday 18 Nov a 70 cm QSO was not possible as all the time they were below our horizon; however, we worked on 1296 using Q65C on Sunday 19 Nov at 1340 4W8X (11DB/7DB) for digital initial {#547}, mixed DXCC 129\* and PI field; on Monday 20 Nov at 1513 CT9/EA8DBM (19DB/20DB) {#548}; and on 70 cm with Q65B on Tuesday 21 Nov at 1428 4W8X (19DB/17DB) for digital {#344} a new DXCC 133\* and PI field, 1518 GD0TEP (9DB/18DB) {#345}, 1534 OM4EX (22DB/25DB) {#346} and mixed DXCC 134\*, 1542 SP2WRH (19DB/22DB) {#347}, 1548 GW4ZHI (17DB/16DB), 1602 F6GRB (18DB/18DB), 1631 UR3VKC (14DB/9DB) {#348} and 1648 S57Q (12DB/9DB) {#349} and mixed initial #701\*. We worked on 9 cm on Thursday 23 Nov using Q65C at 1552 PA0PLY (12DB/12DB) for digital initial {#51}, 1700 DL1SUZ (12DB/15DB), 1752 PE1CKK (11DB/18DB) {#52} and 1826 G4RFR (19DB/6DB) {#53}; and using CW at 1639 G3LTF (569/569), 1806 PA0PLY (449/529) for initial #92 and 1854 PE1CKK (559/559) #93 and for mixed initial #109\*. In the last part of ARRL EME contest, we were QRV only during the Sat/Sun moonpass on 23 cm. We worked on Saturday 25 Nov using CW at 1556 4W8X (559/569) for initial #517 and CW DXCC 88 and 2011 OK2PE (569/589); on Sunday 26 Nov using CW at 0404 DL3WDG (O/O) #518 and 0425 W3SZ (O/O) #519; then switching to Q65C at 1437 OE5VRL (11DB/11DB) for digital initial {#549}, 1542 4W8X (6DB/7DB), 1736 JA4UMN (16DB/12DB) {#550}, 1816 F4KLO (+1DB/0DB) {#551}, 1842 HG5BMU (15DB/13DB) {#552}, 1922 F8DBY (20DB/19DB) {#553}, 1948 G0HIK (16DB/12DB) {#554}, 2141 DK4RC (+2DB/0DB), 2201 W3SZ (9DB/7DB) {#555}, 2212 CX9BT (15DB/20DB) {#556} and 2322 W3IPA (24DB/18DB) {#557}; on Monday 27 Nov after contest end using Q65C at 0052 W3HZU (10DB/3DB), 0150 W4HTB (12DB/17DB) {#558}, 0154 KB2SA (3DB/4DB), 0158 K5QE (5DB/7DB), 0214 W2ZQ (5DB/4DB), 0220 CX2SC (9DB/7DB), 0226 WA3GFZ (17DB/15DB) and 0244 K8ZR (10DB/6DB) {#559} and #853\*. Several times we also searched the band 1298 - 1300 but found no ham-radio signal.

**OK1TEH:** Matej [ok1tehlist@seznam.cz](mailto:ok1tehlist@seznam.cz) was on 432 again during final WE of the ARRL EME Contest -- I was using my small single 23 el yagi and hoping to add to my 23 contacts from Oct. This WE was far more friendly for EU-EU horz to horz pol stations (despite dense snowing and Aurora on Saturday). I logged NC1I (13DB), PA2V (20DB), N1AV (32DB) (best 29DB) for AZ State and mixed initial (#\*), UA5Y (24DB), S56P (24DB), PA3DZL (27DB), PI9CAM (17DB), G4RGK (26DB), W5ZN (25DB) for AR State and (#\*), OE3JPC (24DB), EA5CJ (24DB), SM3LBN (26DB) (#\*), S57Q, OH2DG (19DB), DM9EE (24DB), DL5FN (23DB), DF3RU (23DB), UT5DL (26DB) and K4EME (22DB). My total for the contest is 30 QSOs and 21 mults (after quick overview), which is much better than I expected. I saw but did not complete with UA3PTW, VK4EME, W7MEM, AA6IE, UB4UAA, OZ1SKY, DL9KR. While I was logged at HB9Q chat for both full weekends, it was interesting to check out which rare DXCC or interesting stations were logged or reported. I noticed 9K2YM,

VP8EME, 4J6D, 4O6AH, YG3EMH, E70W, BH7XWF, BI1QGX, OM4EX, JR0WYF, UD2F and XQ3SA were around at one time or another.

**OK2AQ:** Mirek [mirek@kasals.com](mailto:mirek@kasals.com) reports on his 70 cm activity – During the final WE of the ARRL Contest there was high solar activity. This time, I operated on 70 cm from the comfort of my permanent QTH. I made 10 QSOs using Q65B, including three initials with W7JW, K5QE and OH2DG. The increased number of sunspots and frequent CMEs caused a strong geomagnetic storm accompanied by an Aurora. The Faraday rotation was constantly changing and was often non-reciprocal, i.e. it was necessary to TX with one polarization and RX with another. It was very interesting to observe these effects. My on-line log can be found at C:\Users\Mirek\1\_Skola\es\files\EME\LOG\EME\_LOG\_432M.htm1.

**PA2V:** Peter [pa2v@advipe.nl](mailto:pa2v@advipe.nl) sends news on his end of Nov/Contest and early Dec 70 cm successes – I QSO'd on 21 Nov 4W8X for mixed initial #354\* and a new DXCC, UR3VKC, SP2WRH #355\* and ZS4TX, on 25 Nov (ARRL Contest) LU8ENU, W5ZN #356, N0AKC, OK1TEH, IZ2DJP, K0DSP, VK2CMP, PI9CAM, VK4EME, S57Q, UB4UAA, JF6CTK, UD2F #357, UR3VKC, DJ8MS #358, DL1VPL, SM3LBN, G4RGK, S56P, K7ULS, GW4ZHI and partial with XQ3SA due to the Spid elevation controller problem – my start was delayed a bit due to high winds; on 26 Nov (problem fixed) DL2ALY #359, W7JW and W7MEM - conditions did not match those of Saturday. I saw N7GP with good signals but no QSO. In the contest I ended with 23 QSOs and 6 initials. In Dec I added initials with IU4FKR - his first 70 cm EME QSO and PJ4MM in Bonaire, also his first QSO on 432. [No news on his 3 cm effort].

**PI9CAM:** Jan (PA3FXB) [jvm@netvisit.nl](mailto:jvm@netvisit.nl) reports that PI9CAM was active during the final part of the ARRL Contest on both 70 and 23 cm; and also now have equipment for 13 cm and a 9 cm station is ready for operation -- We plan to be QRV on Saturday 23 Dec concentrating on EME SSTV on 23 cm. Because EME SSTV is big fun, we started doing an 'end of the year EME SSTV party' last year. Because of the popularity of last year's event, we will do it again this year. We will TX several images to the Moon using MMSSTV in Martin 2 mode. There will be plenty of time to do other things such as CW, SSB and Q65. We are QRV on 70, 23 and 13 cm. We will be on HB9Q to coordinate. We encourage you to TX on SSTV yourself. We would like to see what the EME result of those images will be. EME SSTV is not easy, but we are always surprised to see how some modest stations are able to produce nice quality images off the Moon! [Unfortunately, this NL will arrive too late for this info to be fully useful – our apology. We have not yet received any info on the success of this event].

**SM4GGC:** Stig [stig.ake.larsson@gmail.com](mailto:stig.ake.larsson@gmail.com) reports on his ARRL Contest experiences during the last WE on 432 -- In the Oct Contest WE on Saturday, the polarization for EU-EU QSOs was Horz to Vert, which made operation difficult. Luckily, I have mounted my old 4 x 21 el Tonna yagis for V-

pol. I was active for 3 hours on Saturday evening, 3 hours on Sunday morning and 5 hours on Sunday evening. I managed to work 44 stations. In the final WE, I started on Saturday with strong Aurora conditions. Once again pol H-V. I was QRV on Saturday from moonrise to 0130 about 11 hours and on Sunday from moonrise to 2300 about 9 hours and worked 32 stations for a total of 76x43 and a preliminary score of 326,800 points. I am very satisfied and was also pleased to be able to work stations with only a single yagi. My antennas are 4 x 26 el YU1CF yagis for H-pol nested in 2 m and 6 m arrays, and 4 x 21 el old Tonna yagis for V-pol. I have a 600 W SSPA in the shack.

**SP9VFD:** Raf [sp9vfd@yahoo.com](mailto:sp9vfd@yahoo.com) writes on his **ARRL Contest Activity** -- This year I was active in EME Contest using my 6.4 m homebrew (HB) dish (f/d = 0.4). I operated only in the CW/SSB class on 13 cm and 23 cm. I operated pure random style without internet assist. My HB dish displayed excellent performance, even on 13 cm. In Aug, I had on 13 cm about 150 W at the feed. I can move the LO in my transverter to operate the entire 13 cm band. In Oct and Nov I made many CW QSOs, but only on 23 cm where I have about 400 W at my RA3AQ septum feed. My first impression after the contest was that that the CW activity was pretty good. Unfortunately, on 23 cm I'm now experiencing a lot of unknown wide band QRM, which can disturb my reception. I'm sorry if due this interference, I wasn't able to answer for your calls. On 13 cm I made 21 QSOs with K2UYH, VE4MA for an initial (#), VE6BGT (#), OM6AA, G4CCH, IK3COJ (#), HB9Q (#), VE6TA (#), W5LUA (#), KL6M, WA6PY, PI9CAM (#), DL4DTU (#), UA5Y (#), SP7DCS, SP6OPN, OK1DFC (#), OK2ULQ, G3LTF, OH1LRY and SP3XBO (#). On 23 cm I made 59 QSOs with SP6JLW, OK1DFC, FR5DN, DL1AT, OZ6OL, OZ4MM, SP6ITF, OK1KKD, IW2FZR, OH2DG, IK3COJ, OK2ULQ, SA6BUN, SP3YDE, OK2PE, G4CCH, G3LTF, F5KDK for an initial (#), IK3MAC, OK2DL, PA3FXB, DJ3JJ, WA9FWD, XE1XA (#), SP3XBO, IK5VLS, K3WM, G0LBK, WA6PY, VE6TA, UA5Y, NQ7B, DL4DTU, CT1FGW, SM3BYA (#), IK2DDR, SP7EXY, JH1KRC, YL2GD, DL6SH, OM4XA, SM5DGX, DL1SUZ (#), F6ETI, PI9CAM, VA7MM, VE6BGT, S59DCD, K5DOG (#), KL6M, DF3RU, F5JWF, DL7UDA, 4W8X (#), IQ2DB, LX1DB (#), SK0CT, CT1DMK (#) and RA4HL for a total of 80 QSO x 44 mults for a preliminary score of 352,000 points.

**TM1AB:** Marius (F8DO) [f8do@orange.fr](mailto:f8do@orange.fr) sends news from France – To celebrate the first amateur radio QSO across the Atlantic made by 8AB and 1MO back on 28 Nov 1923 (100 years ago), the special event call TM1AB was used for 432 EME. The following stations were contacted: PI9CAM, DK3WG, UA5Y, SM4GGC, DL7APV, HB9Q, PA2CHR, NC 1I, K2UYH, PA3DZL, S56P, SV8CS, G4RGK and SM3LBN.

**VA7MM:** Mark (VA7MM) and Toby (VE7CNF) [va7mm@telus.net](mailto:va7mm@telus.net) report on their team's **ARRL EME Contest EME operation** – We were active on 1296 for the two 50 thru 1296 WEs in multi operator (VA7MM, VE7CNF and VE7HRY) and mixed mode class. We wrapped up the event with 78 QSOs (10 CW and 68 digital) x 38 mults for

296,400 points. Nine of our contacts were initials, all using digital mode with W3SZ, K8ZR, N0AKC, CB3EW, 4W8X, LA3PNA, DL3WDG, YB2MDU and UN6PD. In 21 years of operation, we have 336 mixed initial contacts of which 156 are CW and 180 digital. VA7MM operates with an OZ9CR water cooled cavity amplifier, our power at the feed of our 3 m dish is 200 W. On receive, we have a 0.33 dB NF receive preamp with about 35 dB gain total in three stages. We are available for scheduled contacts by e-mail at anytime, e-mail to [va7mm@telus.net](mailto:va7mm@telus.net).

**VE3KRP:** Fast Eddie [eddie@tbaytel.net](mailto:eddie@tbaytel.net) writes on his status -- I have been QRT on EME for a several months due to the failure of my 23 cm transverter. I have ordered and received a new transverter from Q5 SIGNAL, which I will interface in the New Year. The rotator on my tower also seized up, but that will have to wait until spring along with the replacement of some damaged 35 year old coax that feeds my yagis. The grass is still green here with some warmer than usual temperatures. I hope to CU all off the Moon in 2024.

**VK2CMP:** Mick [vk2cmp@me.com](mailto:vk2cmp@me.com) writes about his efforts on 432 during the final WE of the **ARRL Contest** -- I was much better prepared this time. I started on Saturday night at 5.30 pm and finished 6 am LT on Monday morning. I worked the following initials AE6EQ, JO4KVP, JA4MVG, R1NW, DJ8MS, IZ2DJP, DL8GP, PI9CAM, N9HF, N0AKC, W5ZN and DK5SO and the following new DXCCs 9K2YM, GM0HBK and OM4EX. During the month I also worked GD0TEP for another new DXCC. I finished the contest with a score of 67x42 (25 DXCC and 17 US States) all using Q65B. This is my best score (claimed 281,400 pts) to date. I was going great guns until Monday am when my elevation got down to 10 degs and I could not work anymore stations. There were a number of stations trying that should have been easy copy, but my noise floor rises by 8 to 9 dB on MS and makes copy of only big guns possible. I have a similar issue on MR where I start having RX only above about 7 degs elevation. [This is to be expected due to the temperature of the ground vegetation and any other blockage]. I nearly had a CW QSO. OH2DG arranged a sked but I found him right on a birdie. I was able to copy him by switching pol. Unfortunately, my headphones and speaker were connected; the noise woke up my XYL. By the time I turned the speaker off and said good night to her, my PA had tripped and I missed the QSO. During the contest, I evaluated G4EEVs RSPduo EME software and was very pleased with the results. I used it with MAP65. It provided great coverage of the whole band. I had also planned to use Linrad but was not happy with the configuration. Thus, I used RSPduoEME to great effect. I also found N8CQ's EME Planner very helpful.

**VK4CDI:** Phil [vk4cdi@gmail.com](mailto:vk4cdi@gmail.com) is again QRV on 1296 with a 3 m dish – I planned to be on for the Oct leg of the **ARRL Contest**, but came down with Covid. The final leg was much better yielding 53 QSOs over the 2 passes and 2 new DXCCs with OM4XA and 4W8X.

**W2ZQ:** Joe (K1JT) [joe@princeton.edu](mailto:joe@princeton.edu) reports that the Delaware Valley Radio Association (DVRA) Club entry combines results from home stations K2TXB on 2m (two long Yagis and 1 kW), W2HRO on 33 cm (3m dish and 300 W), W2ZQ on 23 cm (3 m dish and 450 W), and K2UYH on 70, 13, 9, 6, and 3 cm (8 m dish and various powers). Over the four contest weekends we finished with 101 x 59 on 2m, 71 x 45 on 70 cm, 5 x 4 on 33 cm, 127 x 52 on 23 cm, 6 x 6 on 13 cm, 3 x 2 on 9 cm, 6 x 6 on 6 cm, and 8 x 7 on 3 cm. It was a fun effort and our 13 operators included some enthusiastic newcomers to EME.

**W5ZN:** Joel [w5znjoel@gmail.com](mailto:w5znjoel@gmail.com) was QRV on 432 from AR (EM45) – I am now active on 432 EME with 4 x FO25 yagis (H-pol) and 1200 W with full elevation. By the end of year, I plan to have 4 x FO25 yagis (V-pol) as well to be able to switch polarity. I am available for skeds anytime. I am looking for the following states: HI, ND, NH, NM, NV, PA, RI, UT & VT.

**WA6PY:** Paul [pchominski@maxlinear.com](mailto:pchominski@maxlinear.com) was QRV in ARRL EME Contest as a CW only station. In the final 25-26 Nov part, I QSO'd on 432 only G0JLO. I was checking 432 from time to time, but I didn't hear any other stations, only my echoes. In the past, I was working over 10 station on CW by mainly calling CQ - including many 4 yagi stations. It would be nice to have again higher CW activity on 70 cm. On 1296, I QSO'd G3LTF, SP3XBO, VE6TA, SM3BYA, WA9FWD, VE6BGT, G4RGK, OK1KKD, W2ZQ, OK2DL, NQ7B, JH1KRC, VA7MM, VK5MC, SP9VFD, S59DCD, PI9CAM, CT1DMK, OK2ULQ, KL6M, IK5VLS and DL7UDA for a total of 22x17.

**W5AFY:** Dan [wb5afy@wb5afy.net](mailto:wb5afy@wb5afy.net) was only able to be active for a limited time on 23 cm for the final Contest WE – I managed 38 QSOs for a score of 70,000 points with 13 initials. New stations were W3SZ, CX9BT, LA3QNA, WA3GFZ, OK2ULQ, DL3WDG, UA4AAV, K5DN, OE5VRL, K5WO, OH1LRY, PI9CAM and CT9/EA8DBM. In Feb, I plan to be QRV on 23 cm for the Funtest; then I will swap feeds back to 33 cm to chase more new states on that band.

**K2UYH:** I (Al) [alkatz@tcnj.edu](mailto:alkatz@tcnj.edu) am almost back to where I was before my lightning disaster. After the Oct Contest weekend, I worked on getting QRV on 1296 again. I have put fixing my kw SSPA on the backburner but am QRV with about 500 W again. I worked on 23 cm using Q65C on 5 Nov N6RZJ (4DB/6DB) for mixed initial #762\*, on 18 Nov N5TM (6DB/9DB), on 22 Nov DF7KB (10DB/4DB) #763\* and CT9/EA8DBM (17DB/21DB) #764\*. I then switched back to 70 cm in prep for the final Contest WE and caught using Q65B on 24 Nov 9K2YM (25DB/25DB) for mixed initial #1111 and DXCC 141\* - had been looking for Yaser for a long time. As part of the W2ZQ contest team, I operated only 432; and because of ARRL rules had to use my own call. In the final ARRL WE, I QSO'd on 432 using Q65B unless noted on 25 Nov G0JLO (559/559) using CW during announced 70 cm CW time-period but found no other CW activity, 0054 W5ZN (15DB/12DB) #1112 OK, K0DSP (13DB/26DB) NE, W7MEM (21DB/16DB) ID, UA5Y (17DB/7DB), OM4EX (18DB/22DB) #1113, LU8ENU

(26DB/16DB), K5DOG (15DB/13DB) TX, N7GP (17DB/24DB) #1114 AZ, DL2ALY (22DB/17DB) #1115, K4EME (12DB/9DB) VA, N9HF (16DB/13DB) FL, N9LHS (25DB/12DB) #1116 FL, NC1I (4DB/5DB) MA, JS6UJS (26DB/17DB) DUP, JJ3JHP (15DB/12DB), JA4MVG #1117, VK2CMP (12DB/13DB), PI9CAM (8DB/10DB), UR3VKC (16DB/16DB) #1118, GW4ZHI (17DB/17DB) DUP, TM1AB (16DB/26DB) #1119, DL7APV, RD4FD (10DB/13DB) and OK2AQ (21DB/25DB), on 26 Nov at 0037 W7JF (8DB/13DB) MI, WC8RK (24DB/32DB) KY, K7KQA (15DB/29DB) WA, VE3GKT (21DB/21DB) #1120 and NH6Y (25DB/27DB) HI for a total of 71x45. My attempts to generate CW activity on 432 during the Nov WE failed. I heard and worked only 1 station around 0000 the first night (25 Nov) and none the 2nd - disappointing. The 1st moonset went well, and I was collecting QSOs to within a few degs of the horizon; however, the 2nd was bad with no new QSOs made. (I might as well have switched to 1296 to look for 4W8X out of the contest, but I wanted to give the contest my all). I also tried operation thru the trees for the final few contest hours but added no QSOs. After the contest I have been on 3 cm and added an initial #82\* with N0OY and the State of KS and N2END #83\*.

**LOGGER/NET NEWS: PJ4MM** is QRV from Bonaire 432 EME and has QSO'd 8 stations from Bonaire – [TNX PA2V for info]. **IU4FKR** is also now QRV on 432 EME – [TNX PA2V for info]. **DL3WDG** has a new 1296 PA built from a single Qorvo GaN device capable of 300 W; and was QRV with it during the Nov ARRL Contest. **KD7YZ** is now **NR4U** <NR4U@WINDSTREAM.NET> in KY.

**FOR SALE: BV3CE** has for sale several Sector Microwave 4 ports SM WR75 waveguide switches that have been never been used for 400USD + shipping. If interested contact Tom at [tom33638998@yahoo.com.tw](mailto:tom33638998@yahoo.com.tw). **DF6NA** has settled down in the Canary Islands. Rainer has a Holiday Apartment for rent in the north of Tenerife. See <http://ea8dmf.vhf-dx.net/VaAp.html>. **OK1FPC** still offers his cheap 10 GHz and 5.6 GHz and new 9 cm transverters as well as 4,5 W SSPAs for 10 GHz; prices on request but will be a good deal. If you are interested write to [ok1fpc@seznam.cz](mailto:ok1fpc@seznam.cz). Please let him know if you need an IF for 2 m or 70 cm. Alternatively you can write to [ok1tehlist@seznam.cz](mailto:ok1tehlist@seznam.cz). **OK1TEH** has for free pick-up a 3 m Al dish with robust ribs. It is the same type of dish as was used by OK1UWA for 24 GHz EME. **W2HRO** has a non-folding version of his stress dish. The dish is covered by 1/2" hex wire. The entire dish weighs 12 lbs and is nearly invisible. For more info on his dishes contact Paul at [paul@sub-lunar.com](mailto:paul@sub-lunar.com). **SM3BYA** has 9 cm gear built by WD5AGO for sale: VE4MA feed with septum polarizer (good f/d ≈ 0.35 - 0.40) and 0.46 dB NF LNA. Interested email Gudmund [SM3BYA@wannberg.net](mailto:SM3BYA@wannberg.net). **YU1CF** is offering high isolation relays for 70 cm: <https://antennas-amplifiers.com/70cm-cross-antenna-1200w-polarization-switch-h-v-rhcp/> and <https://antennas-amplifiers.com/2m-70cm-cross-antenna-polarization-switch-set/>. For 13 cm <https://antennas-amplifiers.com/product/13cm-antenna/13cm-dish-feed-antenna-13cm6/>

**FINAL:** The most important news this month is that the ITU has approved the use of 1298 to 1300 for QRO and 1299 to 1300 for EME. There are still details to be worked out, but this means that 1296 EME can continue indefinitely on 23 cm. PA2DW, G4SJH and the negotiating team deserve a BIG THANK YOU!

▶ **EME2024 Trenton** is now less than 8 months away! See [WWW.EME2024TRENTON.ORG](http://WWW.EME2024TRENTON.ORG). It's time to register for the conference (\$US125 includes Saturday Banquet), send in your talk and/or poster plans – we now have more than 20 speakers signed up, and complete your travel arrangements. The reservation link is up for the conference and hotel (Marriot Springhill Suites). We are also offering a separate one-day (Friday) EME101 Intro to EME (how to get started on EME) course for “Not Yet EMEers” – tell your friends. It is only \$50. Regular conference attendees can sit in on the course, but it is intended to get new people into EME. Info is also available on social media. There will be 3 local tours: Thursday to Thomas Edison National Historic Park, Friday to the Grounds for Sculpture, and Saturday a Super Outlet Shopping Extravaganza. Our next planning meeting will be on 11 Jan at 1700. Email K2UYH for the Zoom link. You are welcome to join in or just listen in, we need more volunteers.

9, 10 & 11 Aug 2024 at TCNJ



▶ **The 2024 Moon Calander** showing contests and important dates, the 2024 Moon Table showing Moon declination and distance, and the DUBUS list of EU Contest dates and rules follow.

▶ **F1EHN author of the Moon Tables** has a new website online at <https://f1ehn.org/> (same address as previously). JJ writes the Moon Ephemeris are still on the EME data page <https://f1ehn.org/index.php/eme-data/>. They are also at the end of this NL.

▶ **See F6ETI's Movie on ARRL EME Contest** at [https://youtu.be/B\\_VAWjAaJoA](https://youtu.be/B_VAWjAaJoA). It shows what 23 cm CW actually sounds like. G3LTF says take time to view this great video; and next time you are on 1296 connect an SDR to your IF somewhere and run SDRConsole V3. You will also be able to measure your Sun noise accurately as well. DJ3JJ also recommends watching a video of K0PRT in the ARRL Contest copying CW from his 2.5 m dish. See <https://www.youtube.com/watch?v=Znds56lVlAs>.

▶ **I5WBE writes for the full results of ARI EME Contests** (Spring, Autumn and Trophy 2023) see <http://www.eme2008.org/ari-eme/contest2023.html>

▶ **VK2CMP reports that the VK regulator, the ACMA, is in the process of making changes** to the license framework for Amateurs. There will be different classes of license starting in Feb. Those with high power special condition on their license will need to move to a completely separate license. EME ops will need two licenses (same call signs but twice the fees). My Special Condition expired in Oct and I am talking with the ACMA. They requested that I be the guinea pig and be the 1st Amateur to apply for a Scientific License for high power EME operations.

▶ **On 16/17 Feb in Guadarrama there will be an EA and CT Microwave Meeting.** EA3HMJ will demonstrate 3 cm EME and is looking for skeds. Email to [ea3hmj@gmail.com](mailto:ea3hmj@gmail.com).

▶ **We will be looking for you off the Moon in 2024.** We had a terrific time in the final WE of the ARRL EME Contest. Matej with his single yagi QRP station made more contest QSOs than he ever before. We are looking forward to the 1296 SSB Funtest on 11 Feb and the 432 activity on the weekend of 17/18 Feb with the CW EU Contest on Sunday. We hope you have a wonderful time on the Moon. **73 and Happy New Year, AI – K2UYH and Matej – OK1TEH**

# EUROPEAN EME CONTEST 2024

*sponsored by DUBUS and REF*

## CW / SSB only

The European EME contest is intended to encourage world-wide activity on moonbounce. Each different call prefix forms a multiplier. The 23cm part is the "VK3UM Memorial EME Contest". This contest is intended to promote random EME contacts and is in this way different from contests where contacts solicited via different channels like Internet chat forums, DX-clusters or other ways of communicating are allowed.

### 1. Contest Dates & Bands

Part	Date	QRG	Time	Duration	Weekday (UTC)
First Part	February 18	432 MHz	00 - 24 UTC	24h	Sunday
Second Part	March 17	3.4 GHz	00 - 24 UTC	24h	Sunday
Third Part	April 14	2.3 GHz	00 - 24 UTC	24h	Sunday
Fourth Part	May 11 & 12	1.2 GHz	00 - 24 UTC	48h	Saturday&Sunday
Fifth Part	June 8	24 GHz*	00 - 24 UTC	24h	Saturday
Sixth Part	June 9	10 GHz	00 - 24 UTC	24h	Sunday
Seventh Part	July 28	5.7 GHz	00 - 24 UTC	24h	Sunday

### 2. Sections and Awards

**QRP** 432MHz <400kW EIRP; 1296MHz <600kW EIRP but no separate QRP/QRO categories

**QRO** On 432 and 1296MHz, stations with EIRP equal to or greater than stated above

**CW/SSB** All QSOs in CW and/or SSB mode (just one of the QSOs counts) – no other modes

**MULTI** Multi-OP is >1 OP – but no separate category

Multi-OP and QRO/QRP be noted in the classifications. The multiband section contains parts 1, 2, 3, 4, 5, 6 and 7. Certificates are available as PDF on request by Email.

### 3. Rules

3.1 For the purpose of the contest only one scoring per valid QSO with the same station can be logged in each band.

3.2 During the European EME Contest dates & times, two way communication via the Earth-Moon-Earth path is the only type of communication allowed as a valid scoring contact.

3.3 During your moon window, **it is not allowed** to use other communications medium such as loggers, reflectors, chat forum or the internet or packet radio, in order to announce your CQ frequency, self spot, make skeds, exchange or discuss any QSO progress info, or confirm whether the QSO was valid or not. Your moon window is defined as 0 degrees elevation Moon rise to 0 degrees elevation Moon set. –

\*On 24 GHz it is allowed to use loggers and chatrooms any time to make skeds.

3.4 If stations participating in the Contest choose to use any form of communication in order to solicit contacts for themselves, they are only permitted to do so outside their moon window defined as in rule 3.3.

3.5 Stations participating in the Microwave bands (2.3GHz and above) are permitted, during times outside their moon window defined as in 3.3 above, to announce their time plan of proposed band segment activity, and their planned frequency and where they will be listening.

3.6 Stations deviating from the rules are not eligible to submit logs for the European EME Contest.

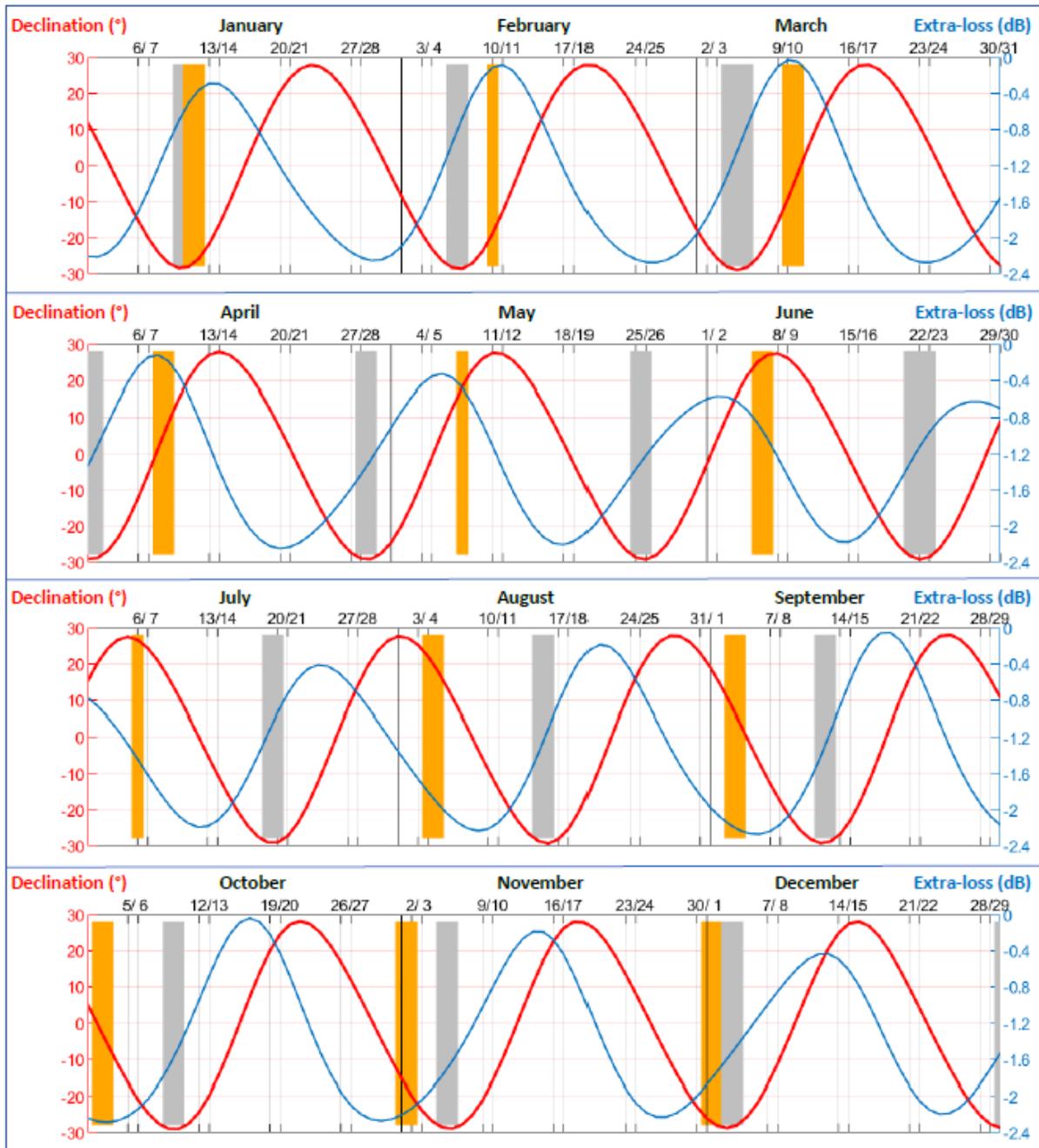
Lunar weekend calendar 2024 Compiled by DL7APV

2400_Sat/ 0000 Sun	Decl <sup>o</sup>	Loss/dB	Sun offset <sup>o</sup>	Temp K	contest dates & meetings	Comments
Jan 06/07	-20,2	-1,1	61	40		Day(AM)
Jan 13/14	-16,5	+0	-38	30		Day(PM)
Jan 20/21	+24,2	-1,1	-123	35	<a href="#">ARRL VHF Tropo</a>	Day(PM)
Jan 27/28	+13,4	-1,9	151	20		Night
Feb 03/04	-23,2	-1,2	80	40		Day(AM)
Feb 10/11	-12,9	+0,2	-19	25	Sunday 1296 SSB Funtest	Sun close
Feb 17/18	+26,3	-1,2	-106	45	Sunday 432 leg EU CW EME Contest	Day(PM)
Feb 24/25	+9,6	-2,0	171	20		Night
Mar 02/03	-25,8	-1,2	99	60	<a href="#">Eu VHF/UHF Tropo</a>	Day(AM)
Mar 09/10	-9,3	+0,3	1	25		Sun noise
Mar 16/17	+27,5	-1,1	-89	45	Sunday 9 cm leg EU CW EME Contest	Day(PM)
Mar 23/24	+5,5	-2,0	-170	20		Night
Mar 30/31	-27,9	-1,2	116	120		Moon in south
Apr 06/07	-5,5	+0,2	22	25	ARI spring contest	Sun close
Apr 13/14	+27,8	-1,1	-71	40	Saturday 13 cm SSB Funtest & Sunday 13 CM leg EU CW EME Contest	Day(PM)
Apr 20/21	+7,2	-1,9	-150	25		Night
Apr 27/28	-29,1	-1,1	132	60		Night
May 04/05	-1,1	+0	41	25		Day(AM)
May 11/12	+27,2	-1,1	-53	30	1296 leg EU CW EME Contest – 2 days	Day(PM)
May 18/19	-2,7	-1,9	-129	30	<a href="#">Xenia HAMvention</a>	Day(PM)
May 25/26	-29,3	-0,9	149	180		Night
June 01/02	+3,9	-0,2	60	25	<a href="#">EU 23&amp;up Tropo</a>	Day(AM)
June 08/09	+26,1	-1,1	-34	30	Saturday 24 GHz leg, Sunday 10 GHz leg EU CW EME Contest & Tropo Cont	Day(PM)
June 15/16	-6,7	-1,8	-109	30		Day(PM)
June 22/23	-28,6	-0,6	166	70		Night
June 29/30	+9,1	-0,4	78	25		Day(AM)
July 06/07	+24,4	-1,3	-16	20	<a href="#">Eu VHF/UHF Tropo</a>	Sun noise
July 13/14	-10,5	-1,8	-88	30		Day(PM)
July 20/21	-27,3	-0,4	-176	45		Night
July 27/28	+14,1	-0,4	95	30	Sunday 6 cm leg EU CW EME Contest	Day(AM)
Aug 03/04	+22	-1,5	3	20		Sun noise
Aug 10/11	-14,2	-1,8	-68	30	20 <sup>th</sup> EME conference NJ	Day(PM)
Aug 17/18	-25,4	-0,3	-158	35		Night
Aug 24/25	+18,5	-0,3	113	35	<a href="#">ARRL EME 13cm&amp;up</a>	Day(AM)
Sept 00/01	+19,1	-1,7	21	15	RU Contest 23m&3cm	Sun close
Sept 07/08	-17,8	-1,8	-48	35	<a href="#">Eu VHF Tropo</a>	Day(PM)
Sept 14/15	-23	-0,3	-139	30	<a href="#">ARRL VHF Tropo</a>	Night
Sept 21/22	+21,9	-0,2	131	35	<a href="#">ARRL EME 13cm&amp;up</a>	Night
Sept 28/29	+15,7	-1,8	40	20	ARI autumn contest	Day(AM)
Oct 05/06	-21,3	-1,8	-28	40	<a href="#">Eu UHF Tropo</a>	Sun close
Oct 12/13	-20	-0,4	-120	30		Day(PM)
Oct 19/20	+24,4	-0,1	150	35	<a href="#">ARRL EME 6m-23cm</a>	Night
Oct 26/27	+11,9	-1,8	59	20		Day(AM)
Nov 02/03	-23,9	-1,7	-11	40	<a href="#">Eu VHF CW Tropo</a>	Sun noise
Nov 09/10	-16	-0,5	-101	30		Day(PM)
Nov 16/17	+26,1	-0,1	169	40	<a href="#">ARRL EME 6m-23cm</a>	Night
Nov 23/24	+8	-1,8	79	20		Day(AM)
Dec 00/01	-26,2	-1,6	7	60		Sun noise
Dec 07/08	-11,3	-0,5	-83	25		Day(PM)
Dec 14/15	+27,3	-0,3	-173	45		Night
Dec 21/22	+4	-1,7	99	20	Xmas	Day(AM)
Dec 28/29	-27,4	-1,4	94	120	HNY	Moon in sou

High positive Declination shows that the moon transit is in the northern hemisphere, red negative Decl indicates a southern transit of the moon. Loss in dB indicates the extra losses due to the different distance earth-moon, best case at perigee is +0,3dB and worst case at apogee 2dB.

The background TEMPeratue indicates the losses caused by the noise from objects behind/near the moon. Coldest value on 432 is 15K and when the moon is in front of our galactical centre this value can be up to 200K. This can cause up to 8dB extra losses on RX at a good station.

## MOON EPHEMERIS OVERVIEW FOR THE YEAR 2024, BY JJ F1EHN



- Vertical grey bars show the days where the sky temp is high and could degrade the system temperature.
- Vertical orange bars show the days where the moon is close to the sun (<math><10^\circ</math>). Near the new moon dates.
- Extra-loss is the range extra-loss in dB compared to the minimum pathloss at Moon perigee
- The WE dates are displayed at the top of ephemeris graph. The declination is plotted as red curve and extra-loss as blue curve.
- Computations were done with EME System V7 – Planner module. Data printed by F1EHN.  
<http://www.f1ehn.org>