

432 AND ABOVE EME NEWS MAY 2023 VOL 52 #3

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CONDITIONS: There is much to report this month: Two contest results, dxpedition news, awards, and some sad news as well. In the VK3UM Memorial REF-DUBUS 1296 EME CW Contest **OK2DL** is the top scorer again with 83x67; a very encouraging almost 20% increase over last year! The turn out for the 10 GHz and up contest was also encouraging. **OK1KIR** has the top contest total of 36x33 received thus far. It is also a significant increase over last year. However as in 2022, there were no 24 GHz contacts reported. **The only contest remaining is the DUBUS 6 cm CW EME Contest weekend on 15/16 July. Based on comments in the reports, it should also attract a nice turnout.**

NC1I have been awarded 70 cm DXCC #12 (the second in NA).

There is also a new 432 World Distance Record set when ZS4TX in (KG30bx) QSO'd NH6Y in (BL10ts) of 19,054.1 km. This QSO exceeds the old distance record of 18,972 km set by G3SEK and ZL3AAD in 1989, which has lasted an incredible 34 years! See World record list at <https://www.ok2kkw.com/dxrecords.htm#432>. Congratulations Bernie bernie@mafrica.co.za & Tom worth@maui.net.



ZS4TX's 70 cm 4 x 2 yagi array with rotatable pole

KA6U completed his spring State roving dxpedition in a spectacularly! Peter put > 25 States on 70 and 23 cm EME this season and has now covered > 30,000 miles during his roving. See the detail in his report later in this newsletter (NL). **W5AFY completed WAS on 1296 and W2HRO on 70 cm this past month. Also N9LHS XYL of N9HF and N9HF worked their 50th State on 1296 in May. Linda is very likely the first YL to achieve WAS on 1296. She did it in less than a year! All TNX in major part to KA6U!**

Coming up is the OJ0EME dxpedition to Market Reef (JP90nh) on 2 thru 3 cm from 18 and 24 June by DL4DTU, DG5CST and DK4RC. See their report in this NL. (This will be the last 1296 from OJ0)!

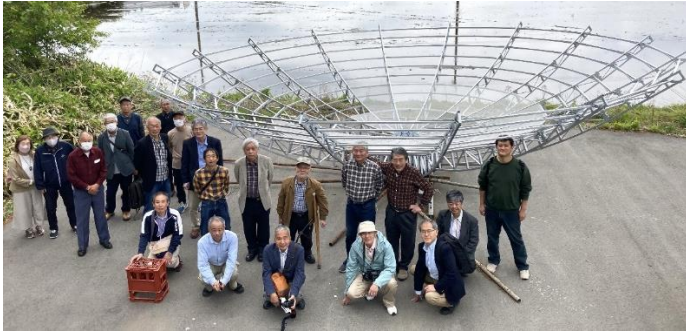
MORE SAD NEWS – We recently heard that Lee, K5FF passed away on May 3rd. She was in her 90's. Lee was married to Fred, W5FF, and was an outstanding EMEer in her own right. Lee had WAS on 50, 144, 220, and 432. She shared a 30' dish with Fred at their home in northern NM. Lee was an advocate for the 222 band back in the days before we (region 2) lost the bottom 2 MHz and it was still called 220. She published a 220 NL to help increase interest and activity in the band. She was a real EME pioneer and will be greatly missed by all who knew her. RIP Dear Lee.



K5FF receiving ARRL Award

REPORTS:

JH1KRC: Michael qq363gud@voice.ocn.ne.jp reports on the 11th JA-EME National Meeting in Nasushiobara, on 13 & 14 May -- After the COVID-19 pandemic, our national meeting was postponed; and has finally held again in the northern JA1-Tokyo area with 40 attendees including XYL's, and five local volunteers, who transported by car attendees from the nearest Shinkansen super express train station. [This report continues at the end of this NL].



JA-EME National Meeting JH1KRC's new 7.8 m dish under construction was visited by attendees

DB6NT: Michael db6nt@gmx.de reports on the 10 GHz DUBUS Contest -- The WX conditions were good; and I was able to work the following stations on 3 cm using CW: OZ1LBR, JA1WQF, HB9BBD, F5IGK, OK1KIR, HB9BHU, IW2FZR, F2CT, PA3DZL, SP6JLW, F5JWF, DL4DTU, G4NNS, SM4DHN, UA5Y, OH1LRY, OH2DG, HB9Q, 9A5AA, JA4BLC, DG5CST, PA0BAT, OK2AQ, OK1DFC, VE4MA, K6MG and SM6PGP. I also heard DL0EF but did not work him. I ended with a score of 27x24, which was a personal record.

DK3WG: Jurg dk3wg@darcd.de reports on his April and May EME from (JO72gi) -- I worked new stations on 70 cm using Q65B in April with LZ4FR, ZB2BU for DXCC 146, KA6U in EN20, EN15 and DN22, and W6TCP; in May with KA6U in FM28, DL2ALY and GD0TEP; and on 23 cm using Q65C in April with KA6U in EN20, EN15 and DN22, DF7KB and DK4EE; and in May KA6U in FM28, IU4MES, YB2MDU for DXCC 79, KC2HFQ and K6RA.

DL1SUZ: Uwe dl1suz@t-online.de (JO53un) is now QRV on 9 cm -- I made my first contact 9 cm QSO on 1 June using Q65D with DL4DTU (17DB/17DB). He was testing the equipment for the upcoming OJ0EME expedition. I'm running a septum feed in my 3.2 m dish with a G4DDK 0.5 dB NF LNA and a Toshiba UM2683B SSPA modified in a DL7YC-style with about 50 W out. I'm looking for skeds on 9 cm.

F2CT: Guy f2ct@wanadoo.fr was QRV for the REF/DUBUS 10 GHz EME Contest -- On Saturday due to heavy rain, QSOs were very difficult with low QRK and distortion. From time to time, I lost my echoes and didn't receive any signals from the Moon. Sunday was better but with less activity, especially from the USA. Only K6MG was heard and worked. The best sigs were from OZ1LPR, SP6JLW,

PA3DZL and SM4DHN. Heard but not QSO'd were F5IGK, F5JWF and VE6TA. I ended with only 22 QSOs; less than last year's 27. I will on 5.7 GHz for the July party.

F5JWF: Philippe F5jwf@wanadoo.fr found the 1296 CW EME Contest weekend well attended -- I scored 29x28 with contacts to HB9Q, OZ4MM, PA3DZL, OK2DL, JH1KRC, G0LBK, G3LTF, LZ2US, OK1DFC, IK3MAC, SA6BUN, G4CCH, DH5CST, KL6M, SP9VFD, F6CGJ, OK1KKD, UA5Y, F5KUG, SP6ITF, OH1LRY, OZ6OL, RA4HL, K0PRT, K2UYH, WA9FWD, SM2CEW, DF3RU and K3WM. It was nice to for me to again contact KL6M in Alaska the long-way at moonrise. I used my 3.7 m dish with about 100 W. My SN/CS was 15.2 dB and GN/CS was 5.6 dB. I added, after the contest the contest a "circular choke" on my septum feed to improve illumination. This change gave me 1.1 dB more of solar noise; and therefore, I should copy the echoes and decode smaller signals more easily. In the 3 cm DUBUS Contest, the participation was also good; and for once, almost all CW stations. However, no US or Canadian stations were contacted. I made a total of 21x20 with OZ1LPR, SP6JLW, JA6WQF, HB9BBD, UA5Y, F5IGK, OK1KIR, IW2FZR, DB6NT, SM4DHN, HB9Q, PA3DZL, DL0EF, HB9BHU, G4NNS, JA4BLC, PA0BAT, OH1LRY, DG5CST and IK2RTI. Heard but not worked were 9A5AA and K6MG. I used on 3 cm my 3.7 m dish with 70 W. My SN/CS was 16.5 dB, GN/CS was 5.2 dB, and Moon/CS was 2.2 dB. Unfortunately, I was busy for 13 cm DUBUS weekend and not able to participate. This band is now degraded due to numerous WIFI hot spots appearing in my neighborhood and as a result crowded by birdies. I am wondering what I can do?

F6ETI: Philippe f6eti@wanadoo.fr sends info on his 1296 REF-DUBUS - VK3UM Memorial EME Contest activity -- The WX was poor for my normal portable EME operation with my dish during contests. Rain and gusts of wind kept upsetting the dish position until mid-afternoon on Sunday. Despite the problems, I managed a score of 23x22 including one SSB QSOs and 4 initials - all at random, of course. I worked on Saturday, 22 April KL6M, OK2DL, SP9VFD, IK3MAC, G3LTF, F6CGJ, SA6BUN, OH1LRY, SM6FHZ, DG5CST, PA3DZL, HB9Q, G4CCH, OK1DFC, G0LBK for my initial #100 and LZ2US; and on Sunday, 23 April OZ4MM, OH2DG, DK7LJ (SSB) #101, SM6CKU, K0PRT #102, IK2DDR #103 and K3WM #103. While, operating I was visited by F6DLA and able to promote EME. My station was 3 m dish, 300 W SSPA at septum feed, G4DDK 0.27 dB NF VLNA23. SN/CS was 13 dB at an SFI of 147. A video of my contest operation can be seen at https://youtu.be/UFH1I_er1I.

F8DO: Marius f8do@orange.fr (JN26if) has been active on 432 -- I have improved my 432 EME station with a new SSPA. I now have 400 W and cavity LNA at the feed point of 2 x 21 el yagis. Recent contacts were with W2HRO, K5DOG, DL1VPL, S57Q, W7JW, EA5CJ, NC1I, DL8DAU, DG5CST, AA5C, KU4XO, PA0BAT, JA6AHB, HG5BMU, JR7PJS, PA2V, DK3WG, DL7APV (6DB). Reports were good and contacts seem possible with any 4 yagis stations,

if Faraday cooperates. I am looking for a contact with South America (SA) to complete 432 WAC.

G3LTF: Peter's g3ltf@btinternet.com EME report for April/May follows – While preparing for the DUBUS 23 cm Contest on 21 May, I worked using CW, KA6U (EL87) #535 and PE1LWT. The next day in the contest, I worked KL6M, OZ4MM, SP9VFD, UA9FAD, DL7UDA, OK2DL, CT1EGW, UA5Y, SA6BUN, VK3NX, IK3COJ, IK2DDR, JH1KRC, SM6FHZ, F5JWF, HB9Q, LZ2US, OZ6OL, F6ETI, G4RGK, IK3MAC, SP6ITF, SP7EXY, G4CCH, G0LBK, ON5GS, PA3DZL, OK2PE, RA4HL, SM6PGP, ZS6JON, PE1LWT, OH1LRY, OH2DG, F6CGJ, S59DCD, OK1KKD, 9A5AA, F5KUG, K3WM, DL6SH, DG5CST, K0PRT, VE6TA, DL1AT, SM5DGX, OK1DFC, WA6PY, N5BF, NQ7B, K2UYH, F6KRK; and on 23 May continued with SP6GWN, DG5CST (SSB), OK2ULQ, SP7EXY (DUP), DK3T for initial #536, F2CT, SP3XBO, UA3PTW, SM6CKU, DF2VJ, DK3WG, WA9FWD, DJ3JJ, DF3RU, SM2CEW, LX1DB (SSB) and WB2BYP for a total of 67x55 - better than last year, but 10 QSOs below my all time best. Heard but not worked were VK2DJS, S56MN, I5YDI, VE3KRP, DU3T, G4YTL, PA3FXB, IK6EIW, XE1XA and K5QE. At the end of the month, I put my 23 cm feedback in the dish and worked using CW on 27 May SP6ITF and S59DCD, on 28 May I5YDI, on 29 May DL1AT and YB2MDU #537 and DXCC 82 with an excellent, easy to copy, signal on CW; and finally on 30 May IK1FJI and S59DCD.

G4NNS: Brian brian@brcg4nns.org was QRV for the 10 GHz and up CW/SSB weekend – The contest provided a good opportunity to put the gear back on the dish. It had been lying idle since 2021! I operated 3 cm with my 3.7 m Cassegrain dish and 18 W at the feed. I had a random contact with HB9BBD when testing before the contest followed by 16 QSOs x 14 mults in the contest. I finished up after the contest the following day with a sked to SM7FWZ. Contacts were HB9BHU, SP6JLW, HB9BBD, OK1KIR, IW2FZR, PA3DZL, DB6NT, OZ1LPR, HB9Q, OH2DG, F5JWF, F1IGK, UA5Y, VE4MA, WA6PY and SM4DHN. There were two getaways that I called. All in all it was a good session. On Sunday, I thought I'd try 24 GHz, and spent 5 hours trying to find all the gear and get it onto the dish, only to find no one there to work. I was receiving my echoes weakly and Sun noise was 12.5 dB, so at least the gear still works.

G4RGK: Dave zen70432@zen.co.uk reports on his participation in the VK3UM Memorial DUBUS 23 cm CW EME Contest -- This was my first 23 cm activity of 2023. The weather (WX) was good Saturday, and conditions good and everything worked the whole contest. I did have to QRT very early on Sunday due to a big electrical storm. QSO'd were on 22 April OK2DL, G4CCH, SP9VFD, G3LTF, HB9Q, SA6BUN, OK1DFC, IK3MAC, LZ2US, DG5CST, RA4HL, PA3DZL, K0PRT, F6CGJ, OZ4MM, SM6CKU, OH2DG, OK1KKD, ON5GS, SP6ITF and OZ6OL for a score of 21x20. [A fuller picture of the 1296 part of the DUBUS Contest can be found in the last NL]. I used my 4.6 m stressed dish with a DFC feed, DDK LNA and a 250 W SSPA.

JA4BLC: Yoshiro ja4blc@web-sanin.co.jp in May was QRV in the DUBUS 3 cm CW Contest weekend -- As my feed pol was set horz, I was QRV for EU window and not NA. [Some of the NA stations can switch pol]. I worked on 20 May OK1KIR (559/569) and JA1WQF (559/559) on 10450; and on 21 May IW2FZR (559/559) XB, SP6JLW (559/559), OH2DG (559/569), OZ1LPR (579/549) XB, DB6NT (559/559), JA8ERE (569/569) and F5JWF (559/559) XB for a score of 9x9. QSO'd before the contest was on 28 March G4RFR (439/579) for initial #51, and on 30 March OK2AQ (O/O) #52. I plan to be QRV in the DUBUS 6 cm Contest on 15/16 July.

K5QE: Marshall k5qe@k5qe.com will be watching the HB9Q reflector and spending most of his time on EME – I am QRV on EME from 6 m thru 1296. I have on 222 8 x 222 XP40 yagis (160 el H-pol and 160 el V-pol) and 1300 W; on 432 16 x 28 el H-pol and 4 x 28 el V-pol yagis with about 650 W; and on 1296 a 4.5 m dish with about 400 W. All my systems are completely independent of each other, so theoretically, I could run 5 different EME QSOs at the same time. I look forward to working everyone on EME, especially in the ARRL VHF contests [coming up on 10/12 June] and the ARRL EME Contest weekends in Oct and Nov.



K5QE 6 thru 1296 (including 222) EME antenna farm

K6MG: Gary ad6fp@lbachs.com was active for the DUBUS 10 GHz and up EME weekend – I used a 1.8 m offset dish and a 750 W TWTA. This resulted in me being a bit of an alligator. I apologize to the stations that I could tell were calling but just couldn't quite copy their callsigns. I wound up scoring 14x14. Stations worked were OZ1LPR, UA5Y, HB9BBD, OK1KIR, SM6PGP, SP6JLW, OH2DG, IW2FZR, DB6NT, VE4MA, F2CT and PA3DZL. Activity was very high and made for a fun weekend.

KA6U: Peter petervh@cisco.com sends his EME roving update -- I have completed my Spring roving trip. I traveled from FL as far west as WA State. I ran 23 and 70 cm EME from over 25 States. During my trip, I believe 10 additional operators completed WAS on 23 cm, and 3 completed on 70 cm. The total WAS count for 23 cm should now be close to 30, up from 3 two years ago! During my 30 day rove, I made 500+ QSOs. Many operators are now within a few

States of completing 23 cm and/or 70 cm WAS. Several operators are now also very close to 222 WAS. I activated 25 States, traveled ~9,000 miles (~15,000 km). My total miles on my roving vehicle, since July 2022 is 30,000. The longest traveled in one day was 16 hours - 1000 miles (3 times); 3000+ m mountain passes crossed was 3. Temperatures ranged from 15 deg F to 90 deg F (-10C to 32C). Operation in snow once. Many visits by the general public and a few Hams. The consensus view of what I was doing: "Trying to talk to aliens!" Nights with normal sleep pattern: 0 (average hours of sleep per day was maybe 5). Equipment issues was 3 - all repaired in the field. My favorite stop was an open range cattle ranch on OR/WA border. Average gasoline price this spring was \$3.50 per gallon compared to \$5.50 per gallon for diesel last summer. Typical time to set up both stations was 40 minutes (23 cm 15 mins and 70 cm 25 mins). Typical time to pack both stations was 30 minutes (when motivated). Times I had to relocate my site because of local noise was once. If you find any QSOs missing, please send me an email. The updated 2.4 m folding dish from Paul W2HRO worked exceptionally well. The only times when I had issues with 23 cm operations was during high wind events. Otherwise, 23 cm signals were the best on any of my trips. The two 70 cm 21H21V antennas worked very well. The switchable polarization was critical in many cases. In most cases the simultaneous operations on 23 cm and 70 cm worked well. At this time I don't have the next trip planned. Trips in Spring work well. The WX is cooler, roads emptier, hotel costs much lower. **[Incredible! Peter deserves a standing ovation].**



KA6U roving on the prairie on 70 and 23 cm

N1AV: Jay whereisjay@gmail.com is working on the microwave bands – I am collecting gear for 2.3, 3.4, 5 and 10 GHz EME. I hope to have stations up and running throughout the summer months. I have a 1.2 m dish for 6 and 3 cm and a 3 m dish for 13 and 9 cm. I am also **working out the details for another dxpedition to KH6 in March 2024.**

N5BF: Courtney courtney.duncan.n5bf@gmail.com sends news on his 23 cm EME in Feb thru May -- Since my last report, I have worked using QA65C **two new DXCCs**, PJ2T (19DB/25DB) Curacao for 57 and S59DCD (14DB/11DB) Slovenia 58; and other initials KA6U (19DB/22DB) #325* for MS State 45, KA6U (20DB/24DB) #326* for LA State 46, special event station CX1AA

(16B/16DB) #327* in Uruguay, K6RA (19DB/17DB) #328*, N0AKC (23DB/15DB) #329*, AB6A (23DB/21DB) #330*, IU0BTM (24DB/15DB) #331* - at long last!, IU4MES (21DB/22DB) #332*, DK4EE (18DB/14DB) #333*, KA6U (22DB/24DB) #334* in NE, NY1V (22DB/28DB) #335* and JS6UJS (23DB/11DB) #336*. I also randomly **tried to tailend BH1TSU without success.** In the Spring Italian ARI event, I had a nice mid-range score of 114 points with 15 digital and one CW QSO, and IQ2DB on digital and analog, and IK5VLS on digital. **During the DUBUS 1296 CW weekend,** I had no initials but some enjoyable QSOs around the world with what have now become old acquaintances **for score 21 x 20.** The first two QSOs were through trees to my west with big stations KL6M and K0PRT, my first analog successes in that difficult direction. On the second day, I had QSOs with smaller stations WA6PY and JH1KRC in the same tough part of the sky. The rest of the event was "clear sky" from my QTH. I added HB9Q, DG5CST, SP9VFD, OK1DFC, G4CCH, IK3MAC, OK2DL, WA9FWD, VE6TA, G3LTF, VE6BGT, K2UYH, SA6BUN, K3WM, OZ4MM, CT1FGW and PA3DZL. My best report was (589) sent to K0PRT, HB9Q and OZ4MM.

NC1I: Frank frank@NC1I.COM has reached two milestones over the last few weeks -- On 23 cm, I passed the 500 mixed initial mark (#502*) at the end of May. **On 70 cm, I have been awarded DXCC #12 (#2 in NA).** My last four countries were Sable Island (CY0S) on 24 March, Gibraltar (ZB2BU) on 17 April, Montenegro (4O4A) on 22 April, and the Isle of Man (GD0TEP) also on 22 April. CY0S, 4O4A and GD0TEP all confirmed using LOTW; and in late May I received the QSL card for ZB2BU confirming my DXCC entity 100. W1QA and I have finally found some time to get back to setting my station up for remote operation. In April of 2021, my wife and I moved about 3 km away and this has had a significant impact on my operating time. Our son and daughter-in-law now own the home and property where my station is located, so I obviously still have access to the station, but it is not real convenient, especially during the middle of the night. The 70 cm remote project is nearly complete (will likely be completed by the second week of June) so starting in June most 70 cm QSO's will be made using remote operation. The 23 cm station remote project will follow; hopefully being completed by mid-summer. I'm still having preamp problems on 70 cm, which cost me about 2 dB of sensitivity at times but does not prevent me from operating. When the preamp is functioning properly, I measure 22 dB of Sun noise and when the preamp malfunctions sun noise drops to 20 dB. These measurements have been made with the SFI between 140 -180. Typically, the RX is fine for the first hour the station (preamp) is powered up.

OJ0EME: Norbert (DL4DTU) dl4dtu@gmx.net sends news that he, DG5CST and DK4RC will be putting Market Reef (JP90nh) on 2 thru 3 cm EME between 18 and 24 June. **They have the first and are told the last license for 1296 operation from OJ0!** Thus, this will be your only chance to add Market Reef to your 1296 DXCC count. They will use a 3 m dish on 70, 23 and 13 cm (on 2320 but can RX on all

bands) with respectively 500, 150 and 75 W; and a 1.8 m offset dish on 9, 6 and 3 cm with 60 W on these bands. They will operate on both Q65 and CW. 2 and 70 cm operation will be by request on HB9Q and N0UK; 17 June will be for setup and test, 18 June will be for 13 and 3 cm, 19 June for 23 and 3 cm, 20 June for 23 and 6 cm, 21 June 23 and 6 cm, 22 June for 70 and 9 cm, 23 June for 13 cm and TBD, and 24 June 23 and 3 cm. The 1.8 m offset dish is limited to AZ 85 to 270 degs. They will be on the HB9Q logger. See <https://dl4dtu.de> for more and last-minute details.

OK1IL: Ivan ivan@kaimann.cz planned to join the 1296 DUBUS Contest operating remotely – I am in Prague due to health issues and am operating my EME station in my country house remotely. Everything has worked well with WSJT-X in digital modes using the Internet and Teamviewer software. However, I had problems operating CW associated with the TR switching. I believe that I have located the cause of the failure and am now waiting for a replacement chip. However, I missed the CW Contest. I was able to add some digital initials using Q65C with IU4MES, YB2MDU for DXCC 74, S59DCD for DXCC 75 and N6RZJ.

OK1KIR: Vlada vlada.masek@volny.cz and Tonda send news on their April-May results -- On 70 cm using Q65B, we worked on 17 April at 0751 the ZB2BU (23DB/23DB) for mixed initial #694* and the 1st ZB-OK 70 cm QSO. During the 23 cm Memorial CW EME Contest, we worked on 22 April at 1018 OK2AQ (559/569), 1244 ZS6JON (549/559), 1250 9A5AA (559/579), 1255 IK2DDR (559/599), 1258 UA9FAD (559/579), 1301 OK2DL (599/599) and 1618 K0PRT (55/57) using SSB; and on 23 April at 0830 DK7LJ (58/55) and 1016 DK3T (569/579) for mixed initial #818*; and a contest total of 9x8. Out of the contest using Q65C, we added on 22 April at 0941 BH1TSU (17DB/10DB), 0947 IK2TIF (20DB/5DB), 1014 OK2AQ (10DB/9DB), 1038 DJ7FJ (6DB/4DB), 1044 YL2FZ (22DB/19DB), 1339 IU4MES (13DB/15DB) #816*, 1430 LU8ENU (8DB/17DB) and 1930 AB6A (28DB/15DB) #817*. When testing equipment before the 3 cm contest on Friday, 19 May we installed our 24 GHz rig and worked with Q65E at 1128 PE1CKK (15DB/15DB) for mixed initial #66* at the max predicted spread of 500 Hz. After switching to 3 cm, we worked using Q65D at 1227 again PE1CKK (9DB/9DB) for mixed initial #321* and later on at 1252 CS2GUR (13DB/6DB). The Moon noise measured 2.9 dB. In 3 cm DUBUS CW Contest, we worked on 20 May at 0528 UA5Y (569/579), 0534 SP6JLW (599/589), 0538 OH2DG (579/579), 0542 HB9BBD (569/579), 0559 JA1WQF (559/569), 0612 F2CT (549/559), 0635 IW2FZR (559/559). 0642 OZ1LPR (589/579), 0654 9A5AA (559/579). 0702 PA3DZL (569/579), 0717 HB9BHU (569/569), 0735 DL4DTU (549/569), 0743 OK2AQ (559/569), 0804 JA4BLC (569/559), 0822 F5IGK (559/559), 0830 DB6NT (579/569), 0846 OH1RLY (559/559), 0922 F5JWF (569/579), 0934 G4NNS (559/579), 0956 SM4DHN (589/569), 1010 SM6PGP (559/559) for mixed initial #322*, 1127 DJ7FJ (559/559), 1134 OK1DFC (569/569), 1208 HB9Q (559/559), 1258 IK0HWJ (569/569), 1306 DL0EF

(569/559), 1431 VE4MA (559/559), 1552 WA6PY (569/569) and 1634 K6MG (579/529) #323* - big spreading during day was very tiring for CW operation; and on 21 May at 0653 JA8ERE (569/559), 0801 DG5CST (569/579), 0922 PA0BAT (569/569), 1342 IK2RTI (569/569), 1444 WA9FWD (549/439), 1513 UR3VKC (O/O), 1633 WA9FWD (549/449) DUP and 1741 SM7FWZ (559/569) for a contest total of 36x33. Added off of the contest using Q65D on 20 May were at 1833 OK1DFC (8DB/+3DB). No initials were found on the Q65 scene. On Tuesday, 23 May on 23 cm I QSO'd with Q65C at 0630 YB2MDU (7DB/9DB) #819*, 1st 23 cm YB-OK QSO and OI field. On 29 May, we succeeded also with CW at 1334 YB2MDU (559/559).

OK2AQ: Mirek mirek@kasals.com writes on his recent activities on 23 and 3 cm EME -- We arrived at my rural QTH on Wednesday before the REF/DUBUS 23 cm Contest. On Thursday with nice WX, I installed my EME hardware and calibrated the antenna. On Friday after moonrise, I made my 1st CW QSO with HB9Q followed by 15 Q65C contacts including initials with SM6CKU, DJ7FJ, CX2SC, K5LA and K8ZR. In the DUBUS Contest I made 6 CW QSOs with HB9Q, OK1KIR, DG5CST, OK2DL, OZ4MM and OK1DFC. It turned out that tuning to the opposite station during CW "blind" (I can't see my own echo) is not trivial with AD-PLUTO. In fact, it is necessary to link the calculated value for Doppler compensation with the corresponding frequencies of the RX NF filter, TX keying tone and frequency in WSJT-X. There were also a number of digi stations on the band, so we managed to extend the initials with QSO to IN3FCK, N5TM, W2ZQ and OK1USW. My last contact with OK1USW was especially appreciated. We both use small antennas of 1.8 m diameter and run 150/200 W of power. I decoded Lada's CQ quite reliably, but he didn't pick me up. So, we changed the mode to Q65-120D and were able to exchange reports (27DB/28DB) with no problem. Distinguished CW operators like to use the phrase "CW is King" and I add "Q65 is Queen". DUBUS/REF 3 cm Contest was held during nice spring WX with good, mostly EU, participation. I had setup for the 3 cm band on 13 May and was lucky that my first contact was with CT2GUR using Q65D. Paulo was my digital initial {#132}. He had a good signal from a 2.3 m dish and 15 W. A series of repeat contacts followed providing a good opportunity to check out my system. On 18 May I QSO'd PE1CKK {#133}. In the contest using CW I worked OK1KIR, SP6LW, IW2FZR, HB9BHU, UA5Y, HB9BBD, VE4MA for initial #36, OZ1LPR, DB6NT, PA0BAT, PA3DZL, OH2DG, F2CT and OK1DFC. The eastern part of my lunar windows had again considerable spreading - up to 200 Hz. Before moonset; however, the spread of signals conveniently decreased to a few tens of Hz and this allowed me to make my last CW QSO with SM7FWZ #37, who has a 4 m dish but only 10 W. In total I scored 15x14. Among CW contacts, I also completed a number of nice digi QSOs including CX2SC (1.8 m & 10 W) and G0OLX (1.2 m offset & 15 W). The only critical comment I would have about some of the extra strong CW stations is that they should also have a corresponding receiver. It should be noted that on 20 May the solar flux jumped to 170 SFU and was reflected in my SN/CS, which measured 13 dB. It was all

great fun. See my On-line log at https://www.radio.feec.vutbr.cz/esl/files/EME/LOG/EME_LOG_10G.htm.

OK2DL: Marek sochor@kwradio.cz had a very nice time operating the 23 cm DUBUS/VK3UM Memorial EME Contest weekend -- On Saturday I had beautiful WX, while Sunday was a bit breezier. Conditions were excellent; I measured the SN/CS at about 20.5 dB. In total I logged 83 valid contacts and 67 multipliers. An interesting contact was with OK2AQ, who ventured on CW with his QRP gear, had a little trouble tuning to the right frequency, but the contact was successful. The signals of K0PRT, DL7KJ and LX1DB were of huge strength, I worked them on SSB (59/59). From OK I met on the band: OK1DFC, OK1KIR, OK1KKD, OK2ULQ, OK2PE and OK2AQ. The full list of stations QSO'd on 21-22 May were 9A5AA, CT1FGW, DG5CST, DJ3JJ, DK3T, DK7LJ, DL1AT, DL6SH, DL7UDA, F2CT, F5JWF, F5KUG, F6CGJ, F6ETI, F6KRK, G0LBK, G0LBK, G3LTF, G4CCH, G4RGK, G4YTL, HB9Q, I5YDI, IK2DDR, IK3COJ, IK3GHY, IK3MAC, IK6EIW, JH1KRC, K0PRT, K0PRT, K2UYH, K3WM, K5QE, KL6M, LZ2US, N5BF, NQ7B, OH1LRY, OH2DG, OK1DFC, OK1KIR, OK1KKD, OK2AQ, OK2PE, OK2ULQ, ON5GS, OZ4MM, OZ6OL, PA3DZL, PE1LWT, RA4HL, S59DCD, SA6BUN, SM5DGX, SM6FHZ, SP3XBO, SP6GWB, SP6ITF, SP7EXY, SP9VFD, UA5Y, UA6AH, UA9FAD, VA7MM, VE6BGT, VE6TA, VK2JDS, VK3NX, WA6PY, WA9FWD, WB8HRW, WK9P and ZS6JON. [TNX to OK1TEH for translating this report from the Internet].

OK2PE: Karel ok2pe@kbb.cz has a short report on the 1296 DUBUS Contest weekend -- The Moon rose on Saturday at 0810 with beautiful WX. My first contacts were with HB9Q, OK2DL, PA3DZL, LZ2US, SP6GWN and G3LTF. I then had to pause because the Moon was too high for my elevation range. I resumed at 1459 to add DG5CST and OK1DFC before moonset. On Sunday, I was happier and logged SP9VFD, KL6M, RA4HL, SA6BUN, OK2ULQ, G4CCH, CT1FGW, OZ4MM, SM6FHZ and UA3PTW before high elevation caused me to again take a break; after which was added K0PRT and UA5Y. I made only 20 QSOs and 20 mults, but had four initials with SP6GWN, SM6FHZ, K0PRT and UA5Y.

OK2ULQ: Peter ok2ulq@seznam.cz was QRV 23 cm for the DUBUS EME Contest marred by several complications -- I didn't get on air until quite late on Saturday evening. Unfortunately, I was delayed by work that had to be completed; then my shack computer turned blue and I needed to move to my spare laptop. When I was able to get on, conditions appeared excellent. With less than two hours until sunset, I made 13 QSOs including an initial with K0PRT. On Sunday I made another 9 QSOs in another two hours. That was all the time I had available to operate. The result was 22 QSOs and 20 mults with OK1DFC, DG5CST, OK2DL, IK3MAC, KL6M, SA6BUN, HB9Q, G4CCH, K0PRT, K3WM, OH1LRY, VE6TA, OZ4MM, LZ2US, RA4HL, SP9VFD, PA3DZL, G3LTF, JH1KRC, DU3T, OK2PE and OK1KKD. I was an SWL for the 10 GHz DUBUS Contest. I checked my transverter the week before and found no problem. I believed that I had 17 W of power.

On Saturday morning I called many stations but did not get any response. So, I just listened. I heard SP6JLW, SM4DHN, OK1KIR, DL0EF, DB6NT, OZ1LPR, PA3DZL, F5JWF, HB9Q, IK0HWJ and UA5Y. [TNX to OK1TEH for translating this report].

ON5GS: Dirk dirk.reyners@telenet.be reports on his DUBUS 1296 Contest operation -- I had a great time working random CW stations without use of computers -- my favorite part of EME! Sadly, I wasn't able to be QRV during my moonsets and only worked 2 NA stations. Some of you big dish QRO signals make 1296 sound like 20 meters! With my 6 m HB dish, septum feed, G4DDK LNA and 200 W at feed, I logged on 22 April HB9Q, OH1LRY, IK2DDR, PA3DZL, SM6FHZ, OK2DL, 9A5AA, SP6ITF, LZ2US, CT1FGW, G3LTF, SA6BUN, SP9VFD, S59DCD, DG5CST, G0LBK, IK3MAC, G4CCH, F5KUG, K5QE, OK1KKD and K3WM; and on 23 April DU3T, OK1DFC, OZ6OL, OZ4MM, RA4HL, DL1AT, UA9FAD, G4RGK and F6CGJ for a score of 31x30. (My special thanks K3WM for his patience!)

PA100KM: Jan (PA3FXB) jvnmvu@gmail.com reports on PI9CAM's operation under the commemorative call PA100KM -- After four months of maintenance the 25 m dish in Dwingeloo is back in action again! Just in time to join a special event. 5 May (2023) was exactly 100 years after the first longwave radio link between Indonesia and the Netherlands was established. The stations involved were Radio Malabar and Radio Kootwijk. During the following three days, special event station PA100KM was active. At PI9CAM we were active with this callsign during two Moon passes on 6 and 7 May and on both 70 cm and 23 cm. [We do not yet know the results of these tests].

SP6JLW: Andy and Jacek sp6jlw@wp.pl were QRV in 3 cm CW Contest -- After a period of limited activity, we are back in the game with a successful start in the EU 10 GHz EME Contest. Our equipment worked flawlessly; the WX was also good. Contacted were PA3DZL, OK1KIR, OH2DG, HB9BBD, OZ1LPR, HB9BHU, IW2FZR, 9A5AA, F5JWF, OH1LRY, JA1WQF, DL4DTU, G4NNS, OK1DFC, DB6NT, F5IGK, SM6PGP, OK2ULQ?, F2CT, DL0EF, VE4MA, HB9Q, OK2AQ, WA9FWD, WA6PY, K6MG, JA4BLC, DG5CST, PA0BAT, SM4DHN, IK2RTI, DJ3FI and SM7FWZ for a score of 33x28.



SP6JLW 3 cm dish is shown in the center

SP9VFD: Rafal sp9vfd@yahoo.com sends news on his results in the **1296 Memorial CW EME Contest** -- The time spent on 23 cm during the DUBUS weekend was excellent and gave me a lot of fun making random CW QSOs. Unfortunately, I wasn't able to be QRV for the full moon window during both passes; and probably missed many of you. Some of CW signals were very, very loud, e.g. HB9Q, K0PRT and many others too. I managed 63 CW QSOs. Worked were on 22 April WA9FWD, SM6FHZ, DL7UDA, VE6TA, OH1LRY, G4CCH, N5BF, WA6PY, SM5DGX, 9A5AA, G0LBK, UA9FAD, K3WM, SM6CKU, PE1LWT, F6KRK, SA6BUN, RA4HL, F6CGJ, K5QE, LZ2US, IK3MAC, OK1DFC, OZ4MM, DU3T, DG5CST, G0LBK (DUP), SP6ITF, ON5GS, CT1FGW, F5KUG, S59DCD, G4RGK, OK2DL, SP3XBO, F6ETI, JH1KRC, PA3DZL, DL1AT, HB9Q, IK2DDR, KL6M and G3LTF; and on 23 April VA7MM, IK3COJ, K2UYH, W2BYP, DF3RU, NQ7B, SM2CEW, ES3RF, OZ6OL, K0PRT, I5YDI, SP7EXY, UA3PTW, G4YTL, OK2PE, OK2ULQ, F5JWF, OK1KKD, SP6GWN and UA5Y for a total score of 62x51. Heard were VK3NX, SM6PGP and DL6SH, but I hadn't have the fortune to catch them. Measured Sun noise on Saturday noon was 20.5 dB with my 6.4 m homemade dish (f/d 0.4), RA3AQ septum feed with 400 W at the feed (MRF13750H HB SSPA) and G4DDK HB LNA.

VE4MA: Barry barryve4ma@gmail.com active during the **DUBUS 10 GHz Contest** on both days -- I have a limited window (only to the east), but ended working 19 stations on CW in the contest. I also QSO'd 10 stations on Q65D including CT2CGR, F6BKB, IZ4BFA, CX2SC, G0OLX with a 1.2 m dish and 12.5 W, and IU0BTM. I note that many stations are using 1.8 m dishes and 10-15 W and had good signals even close to Apogee. I am still using 50 W at the feed but have a 350 W TWT being readied for use. I tested a number of 50-100 W Varian TWTs recently hoping to provide for others, but they all tested bad. I have been active on 902, but have been experiencing problems with failures in surplus Motorola cellular PAs. I am preparing to use a new PA with an MRF13750 that delivers 800 W. This is the same device that powers many of the 23 cm PAs. W6PQL is considering production of a 902 PA with the same device. Those interested should send W6PQL expressing their interest. There has been quite a bit of discussion about the possible use of circular pol. Some stations have tried it using broadband Commscope hybrid couplers. However, there is some question as to the phase response at 902 of these hybrids, as the signals off the Moon seem to have a poor axial ratio. This is the coupler used by W2HRO so successfully on his 23 cm umbrella dish patch feeds. I have seen that the amplitude split is very good, but have not been able to test the phase response. I still plan to be QRV again on 47 GHz EME this fall (Sept/Oct). I still need to do some degassing work on the 30 W TWT. There has been so much modification of a more modern HVPS to match the TWT.

VK4CDI: Phil yk4cdi@gmail.com is now QRV on 23 cm -- All is working FB on 1296 after a lot of setbacks and failures. I am using a 2 m dish with a Septum feed, G4DDK LNA and 250 W SSPA. My window is presently limited to

only moonrise because of blocked by my house to the west. I plan to move it soon to a better position. I have QSO'd several US and JA stations including **YB2MDU for a new DXCC**. My 70 cm yagis will be up again soon.

W2HRO: Paul w2hro.fn20@gmail.com has completed **WAS on 432 (Cert. #34)** -- My first 432 EME QSO was with NC1I (MA) on 30 Jun 2018; I completed WAS with a QSO to KA6U (NC) on 9 May 2023. My station was a 4 x 15 x-pol LFA yagis and 1 kW. 48 QSOs were digital and 2 on CW. I already have WAS on 144 and 1296; and am now QRV on 902 EME with a 3 m dish, patch feed and 300 W, and looking for skeds. This new dish is built using the same frame (see www.Sub-Lunar.com) as my all-weather 2.4 m semi-foldable fiberglass ribbed stress dishes; but is covered with 20 mm stainless steel hex wire. The combination of fiberglass and aluminum dish seems very strong and can handle 50 mph winds. Its maximum frequency is limited by the hex wire holes.

W2BYP: John storyavenue@hotmail.com sends an update on his recent EME -- I had fun for a day in the **DUBUS 23 cm event**; I worked OZ4MM, SA6BUN, OK1DFC, WA9FWD, K0PRT, IK3MAC, PA3DZL, OK1KKD, LZ2US, F5JWF, SP9ITF, OK1DL, VE6TA, K3WM, IK3COJ, NQ7B, IK2DDR, SM5DGX, G4CCH, CT1FGW, KL6M and G3LTF for a score of 22x19. My new remote operation of the equipment took a bit of getting used to. I probably missed a few just figuring out the system. I was unable to get SSB to function, though it worked when I tested the system a few days before, but made all other contacts on random CW. I have a new 5G cell site about 300 m LOS from my dish; and I am suspicious of a higher noise floor on some bands and am investigating. I propose a K5FF Memorial 222 EME Activity/Contest Weekend. The idea is a weekend similar to the DUBUS events. It could be something where for two days (0000 to 2359), likely in a fall time frame at a low degradation, northerly declination knowing that 222 is a Region 2 only allocation for the most part; with no restrictions on mode or coordination on loggers, just usual rules for not sharing QSO info online, just skeds. Logs could be collected with scoring QSOs x Grids and certificates made for both high scores participation. Finding the right weekend needs to be done as carefully. Is there is interest? Please let me know.

W5AFY: Dan wb5afy@wb5afy.net (EM04id) reports on his April/May EME -- 23 cm EME was busy this month. I was out of town for the DUBUS Contest, but worked several stations at other times. QSO'd were on 24 April **KA6U (in KS)**, UA4LCF, W3HMS, **KA6U (in NE)**, **KA6U (in SD)**, ON4LX, DK3WG, **KA6U (in ND)**, IU4MES, IK2MMB and **KA6U (in MN)**, on 27 April **KA6U (in WY)**, on 28 April **KA6U (in ID)**, on 29 April **KA6U (in WA)** for my 50th State and **WAS**, and **KA6U (in OR)** and 30 April G0LBK and **KA6U (in NM)**. I sent my 1296 WAS application to ARRL and was awarded 1296 WAS #19 on 11 May. After completing WAS on 1296, I finished work on my 902 EME station. I was QRV on 902 EME on 1 June and worked K5DOG and W2HRO with good signals. The best signals were at greater than 20 deg EL as the noise floor drops considerably once I am

aimed well above the horizon. My plans are to be active on 902 for the next several weeks; I am open for skeds anytime.

K2UYH: I (AI) alkatz@tcnj.edu had disaster right before the 23 cm VK3UM Memorial/DUBUS Contest -- When I checked out my system before the contest, I discovered that my dish's digital readout system was not working. We had a big thunder storm a few days before. It never occurred to me that I could have been hit by lightning as everything appeared to be functioning normally. It turned out that my W2DRZ controlled board and a US Digital readout were bad. Nothing else was found damaged. I was able to get another controller from K2TXB and borrowed a usable readout from W2HRO, although my autotracking and other functions were inoperable. I have not yet fully recovered. I was able to operate 1296 manually during the contest, but my start was delayed due to the repairs. I missed most of my EU window and my VK/JA window due to a social conflict. On Sunday, I operated during my Moon window until activity disappeared. QSO'd on 23 April were K3WM (559/569), OZ4MM (579/579), VE6TA (559/579), OK2DL (569/579), K0PRT (569/559), NQ7B (559/549), G4CCH (549/569), G3LTF (549/569), F6CGJ (439/569), N5BF (549/559), KL6M (579/579), XE1XA (559/569) and VE6BGT (569/569); and on 24 April OK1DFC (589/599), OH1LRY (569/579), F5JWF (569/589), UA5Y (589/599), OH2DG (589/589), LZ2US (579/589), OZ6OL (559/569), S59DCD (569/569), PA3DZL (579/599), LX1DB (58/57) SSB, 9A5AA (579/589), WA9FWD (569/449), DL7UDA (569/579), SP2VFD (589/589), 1905 SM5DGX (589/599), 1915 F2CT (559/569), 1938 WK9P (559/559), 1945 SP6ITS (559/579), 1953 IK3COJ (569/569) and 2041 CT1FGW (569/569) for a total of 33x33. I had planned to also operate the 3 cm contest, but I did not have time to get my Moon tracking system work properly and thus did not attempt operating 10 GHz. I will not be QRV for the 6 cm contest in July either because of a travel conflict.

LOGGER/NET NEWS: **KD2XM** expects to be QRV on 1296 this summer or early fall from NY State with 2.3 m mesh dish, OK1DFC Septum dual mode feed, 300 W SSPA and 0.3 dB LNA. He wants to thank KA1GT and W2BYP (for dish) for all their help. Phil can be reached at kd2xn@icloud.com. **VK7ZBX's** club is QRV on 3 cm with a 1.8 m dish and 20 W from Tasmania. Richard vk7zbx@gmail.com plans to run tests on 9 June from 2300 until moonset at about 0200 (10 June). **WK9P** participated in the 23 cm leg of the DUBUS Contest on 22 and 23 April. Tim tcherrone@yahoo.com had strong winds during Sunday making his tracking difficult; and ended up working 11 stations in total. **YO8RHI** is now QRV on 3 cm EME. Adi adiyo8rhi@yahoo.com is using a 3 m solid dish with a circular pol feed and 20 W. See <http://yo8rhi.blogspot.ro/> for more info.

FOR SALE: **DK7LJ** needs the upper housing of a Wilson WR 1000 rotator (same as Aiga ART 8000). A damaged rotator with upper housing intact will do fine. Per also needs waveguide parts, WR19 for his 47 GHz beacon project. **DL6SH** reports that if you need an RX downconverter for

23 cm or 70 cm down to 28 MHz for SDR, a good source is <https://www.hamradioparts.eu/>. **EA8DMF** offers Radio vacation on Tenerife! The Canary Islands offer one of the best amateur radio locations in the world. Enjoy this location and the excellent climate as well as peace and quiet and good food. In addition to the other facilities there is also a TS-850S available in the apartment. There is space to set up your own antennas or you can use the installed antennas. A WIFI-Router and 1GB ethernet connection is installed in the apartment. See <http://ea8dmf.vhf-dx.net/VaAp.html> and/or email Rainer at ea8dmf@moon-net.eu. **Looking for an inexpensive Digital Elevation Readout:** **PA0PLY** pa0ply@telfort.nl recommends the HH-12INC: A 12-Bit inclinometer, compatible to HH12 encoder for antenna control. It has an angular resolution of 0.1°, accuracy of +/- 0.1°, supply voltage over cable is 5 V, pre-calibrated over 360°, easy solder connections, operating temperature from -20°C to 50°C (tested), weight is 60 g and dimensions are h = 40 mm, w = 20 mm, l = 70 mm. **K6PF** has for sale a Yaesu FT-817ND all modes MF/HF/VHF/UHF XCVR mounted on a board with a 10 MHz OSC, JWM Model 5112 phase locked OSC or \$575 or OBO. He also has Kuhne MKU 10 G2 XVTR (144 IF), a small 1.6 W PA, TR relay & sequencer, a tripod and 67 cm dish with feeds including a motor for EL control; there is no LNA or PSU, for \$825 or OBO. Everything is \$1,200 or OBO. He has for sale a 4' solid Andrew dish (38 dB gain at 10 GHz). It has a mast and actuator but no feed. Price is \$100 or OBO - pickup only. He also has an older HP spectrum analyzer & synthesized signal generator (both to 18 GHz) available. If interested contact Bob at k6pf@sbcglobal.net.



YO8RHI's 3m dish on 3 cm

TECH INFO: **DJ3JJ** posted important information about using the MRF13750h in SSPAs on 23 cm at <https://www.grz.com/db/dj3jj>. **OE2IGL** has developed a new EME Budget and Analysis Tool. The VK3UM EME tool is only correct up to 10 GHz. This new tool gives the most reliable results based on currently known dependencies. At higher frequencies and/or smaller beam widths additional dependencies must be taken into account such as atmospheric loss, Ruze loss, beam pointing loss

on Moon, fill factor for Sun/Moon noise, beamwidth factor (BWF) for Tx/Moon/Rx combination, libration spread (depends on BWF), etc. Gerald's gerald.ihninger@inode.at webpage at <https://wetersat.bplaced.net/EME/EME.html>.

FINAL: Plans for **EME 2024 in Trenton, NJ** are moving forward. **The date has been set for 9, 10 and 11 Aug 2024** (Friday, Saturday, and Sunday with an 8 Aug, Thursday check in date). The first Zoom organizing/planning committee meeting was on 17 May. Committee assignments: **Chair:** AI K2UYH, **Vice Chair:** Paul W2HRO, **Recording Secretary:** George NE2U, **Treasurer:** Roger KD2FDT (IEEE PCJS Chair), **Publicity:** W2HRO (Social Media: **Streaming:** W2HRO, **Webpage:** Marc N2UO with OK1TEH available for support), and **Spouse Program/Tours:** Sally (XYL K2UYH). **Open positions are Program, Banquet, Vendors/surplus, Door prizes, Test/measurements activities, Special Events, and Lodging. The next meeting will be Wednesday 21 June at 1600 (1200 EDT).** If you are interested in joining the EME2024 Committee, please let me know, and I will send you the connection information. The link will be the same as last time and is open to all.

► **The future of the 23 cm band** is still far from settled with considerable debate taking place. PA2DW writes that by the end of the recent meeting [WRC23] there was reasonably good and stable agreement for the range 1296 to 1300 MHz: For narrowband (BW < 150 kHz) applications in the amateur service: a) Block 1: 1296-1298 MHz; Maximum transmitter power = 50 W; b) Block 2: 1298-1300 MHz; Maximum transmitter power = 150 W. **For narrowband Earth-Moon-Earth communications in the amateur service using a symmetric high performance antenna (e.g. boresight gain at least 30 dBi) pointing at least 15 degs above the horizontal:** a) Block 2: 1298-1300 MHz; Maximum transmitter power = 500 W.

► A talk by K1JT on the inner workings of WSJT-X and its weak signal communication modes give for the DVRA radio club (W2ZQ on 1296 EME) can be found on YouTube at <https://www.youtube.com/watch?v=Ye8iZ5fvKc>.

► The 55th Annual Central States VHF Society a popular EME meeting will take place this year in Little Rock, Arkansas on 27-29 July. Details can be found at <http://2023.csvhfs.org/>.

► **The 24 GHz beacon** is running well and now has been increased in power from 4.5 to 10 W. [The 10 GHz beacon is repaired, has been up and running and working well. The 1296 EME is still not in operation but is being worked and hopefully will be in operation again before too long.

► **I5WBE** shows following **Top 3 Results for ARI Spring EME Contest** for the 432 and Up bands. See the full results at <http://www.eme2008.org/ari-eme/contest2023.html> and <https://www.ari.it/eme/classifiche.html>. You can download your Award at https://www.ari.it/index.php?option=com_wrapper&view=wrapper&Itemid=370&lang=it. Enrico congratulations to all of the winners, as we do too.

Band 432 MHz. MIX MODE								
Pl.	CALL	Point-CW	Point-JT	Multi	Total	Antenna	WT	
1	IZ2DJP		4		4	4x2,5Wl	2h	
Band 1296 MHz. MIX MODE								
Pl.	Cat. A-mix	CALL	Point-CW	Point-JT	Multi	Total	Antenna	WT
1		IQ2DB	72	41	16	1808	3 mt. Dish	20h
2	**	IK5VLS	32	38	14	980	4 m Dish	17h
3		PA3FXB	20	46	12	792	2,4 m Dish	22h
** Cat.B down grade								
Band 1296 MHz. CW & SSB								
Pl.	at. A CW & SS	CALL	Point-CW	Multi	Total	Antenna	WT	
1		DL1AT	72	-	10	720	3,06 m Dish	9h
Pl.	at. B CW & SS	CALL	Point-CW	Multi	Total	Antenna	WT	
1		DG5CST	136	-	18	2448	10 m Dish	8h
2		IK1FJI	112	-	20	2240	3,8 m Dish	8h
3		G3LTF	136	-	12	1632	6 m Dish	8h
Band MW MIX MODE								
Pl.	CALL	Point-CW	Point-JT	Multi	Total	Antenna	WT	
1	2,3 GHz SP3XBO	8	6	3	288	3,6 m Dish	4h	
2	2,3 GHz IK3COJ	16	3	4	228	3,8 m Dish	5h	
3	2,3 GHz PA0PLY	12	1	5	195	3 mt. Dish	3h	
1	10GHz OZ1LPR	28	14	9	2646	1,8 m off Dish	7h	
2	10GHz OK1CA	28	16	7	2156	2,4 m Dish	12h	
3	10GHz OK2AQ	24	15	6	1638	1,8 m off Dish	10h	

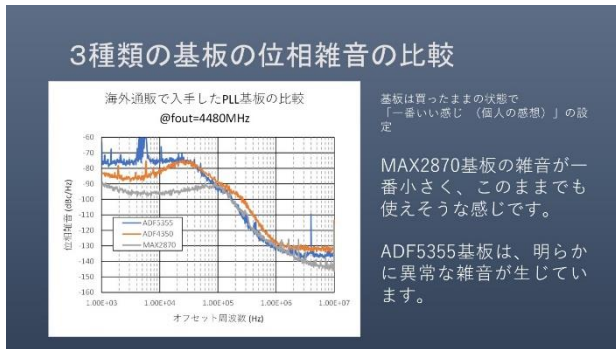
► It has been a busy time for both Matej and me. My lightning disaster kept me off for the 3 cm contest and caused me to lose time. All your reports and tech info do truly help keep us going. 😊 – keep them coming! Our TNX G3LTF, who has been a great help in generating them. Next week I will be at the IEEE/MTT Microwave Symposium in San Diego, and hope to see some of you there. There is a ham social gathering. Other traveling will cause me to miss the 6 cm contest in July. I hope you all will try to QRV for it. We both expect to be more active and will be looking for you off of the Moon. Let's all have a wonderful time on EME Good luck with the dxpeditions. **73, AI – K2UYH and Matej – OK1TEH**

JA EME Conference Continued: At the beginning of the meeting, an ICOM staff member presented a lecture on their newest rig IC-905, and IC-9700 rigs. Unfortunately, in Japan, Telecom requested that ICOM not advertise the IC-905. [Why?] During the meeting, several lectures were presented on: 1) The history of the *DISH HOUSE* and the personal EME activity of JA4BLC. Yoshiro (shown below) has graduated from 2.4 GHz and below and now limits his EME to above 5.7 GHz, up to 24 GHz.



2) How does a 28 GHz TWTA work, or not work, on 24 GHz? by JF3HUC. 3) Comparison of microwave PLL oscillator boards, available in the internet markets by JF1WKX. 4) Phase noise characteristics, effects of noise in the power supply, etc. were measured and discussed into

detail. Nob is famous for his Solilock, the precision microwave oscillator. He also explained the influences of oscillator phase noise on receiver performance.



5) Time was made to remember and pray for our passed friends; including JA9BOH, JA8CMY and JA1JRK.

Rio (JA1KRK) was an exclusively active HF & 6 m DXer, and an active 70 cm EME op years before became an SK (silent key) on 17 April – see photo below.



and the difficulties they experienced on the isolated island – a very interesting story.



JA1- area attendees



Spouse tour: Visiting a local flower park



JJ1NNJ (on left in above photo, JJ3JHP and JF3HUC are on the right) showed details of the interesting measured power changes of “W-shape” for the unobserved Sun. 6) GaN SSPAs for 1.2/2.45/5.6 GHz bands by JR1EUX. Hide explained how to make and break high power amplifiers. He is a professional engineer. 7) JD1YCC described Ogasawara EME dxpedition by JP1EXR and JH3AZC. Yutaka and Kei told how they obtained high-power licenses,



Season's decoration of May: Samurai's helmet, armor, and sword

The next JA-EME National Meeting will be held in JA5 by JH5FOQ and JH5LUZ in 2025.