

432 AND ABOVE EME NEWS

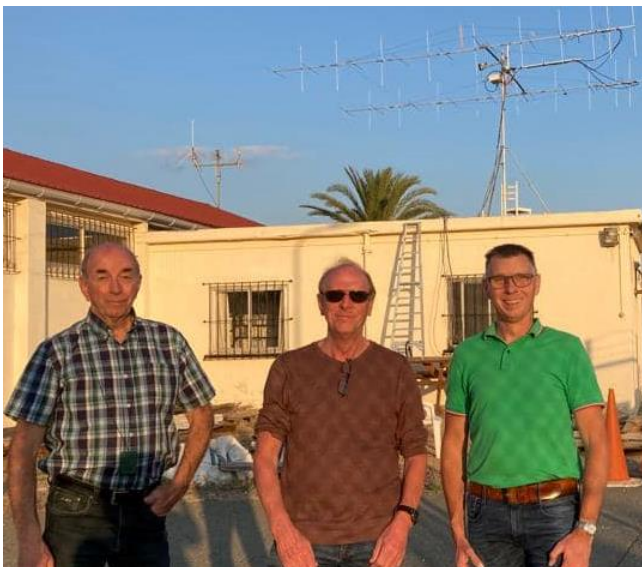
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CONDITIONS: Our plans were to get this newsletter (NL) out to you before the Nov weekend (WE) of the ARRL EME Contest (12-13 Nov). We just could not do it. Our goal now is to get the next NL covering the Nov WE out to you ASAP. This NL contain news received up to 11 Nov. We are holding news received since then for the next NL.

Reports from the Oct ARRL Contest WE indicate record breaking activity on 23 cm. **OK2DL** reports 125 1296 QSOs during the Oct WE but does not indicate his mults. Close behind in QSOs is **OK1DFC** with a score of 123x45. On 432 **DL7APV** reports a score of 74x46 for the WE, down from the past, but Bernd operated 3 bands this year.

We missed announcing the ZC4RH dxpedition to Cypress on 10-19 Nov. Info is in this NL. It was a very well-done event; its results will be covered in the next NL. The WR8AA dxpedition is covered in this NL; however, the related K1EEP dxpedition to VT is already started – see announcement in this NL. KA6U continues his phenomenal US State dxpedition and is included in this NL.



ZC4RH team G4WXJ, PA2CHR and PA3FYC

- ❖ **N1AV's** proposing a 902 EME activity weekend (AW) is on for 2, 3 and 4 Dec.

- ❖ The dates of the 2023 DUBUS/REF are for 2 m and 70 cm 25/26 Feb, 13 cm 25/26 March, 9 cm 1/2 April, 23 cm 22/23 April, 3 cm and up 20/21 May, and 6 cm 15/16 July.
- ❖ The 1296 SSB Funtest will be on 19 Jan. More info in the next NL. The 13 cm Funtest is TBD.

4X1AJ: Andrey andybezh@gmail.com is **QRV on 1268 or split 1268-1296** – On 23 cm, I am limited to transmission on 1268, but can operate their directly or crossband (XB). I've been operating split since the winter of 2021 and worked several stations in the Oct ARRL EME Contest (OK1DFC and K2UYH) on both direct and XB. Unfortunately, on 1268 my reception is rather poor. I loose around 6 dB comparing to 1296 even with double helix filters. I will redesign my 23 cm transverter board; now I'm a bit busy setting up for 3 cm EME. I have a 10 dBm low level board, Raspberry-based camera to target the Moon and in the basement a 110 cm dish is ready. (I also going to try on Es 4 m, which is a new band here). My 13 cm reception isn't so great either especially from west-side due to Wi-Fi interference.

AC0RA: Wyatt dirkswyatt10@gmail.com is now QRV on 23 cm EME and also working to add 902 – I'm planning to be on 1296 from Illinois at moonrise (about 0000) on Friday 11 Nov with his folding portable 2.4 m dish and 300 W. I may not be able to get there by moonrise but should be on shortly thereafter. I plan to operate till activity runs out, or I run out of energy. I plan to be back in Iowa for the remaining 2 Moon passes in the ARRL Contest. I now have 12' dish at home and 300 W to use from EN42hb. K0DAS, KC0SKM, N0LNO, NROX and myself have started building a 902 EME station. We are working on a 12' dish and a couple of 500 W Motorola surplus amps. I have the 2.4 m folding dish and plan to use it for roving as well. We are trying to be QRV for the 902 activity weekend (AW) proposed by N1AV for the 1st Dec weekend. Can anyone tell me what states have been active 902 EME in the past?

DK3WG: Jurg dk3wg@dark.de (JO72gi) reports on his Oct EME – I made initials on 70 cm using JT65B with OH3AWW, N4OGW, KA9OKH and UA5Y, and using Q65B WR8AA; and on 23 cm using CW with SA6BUN, and using Q65C WR8AA and AC0RA in EN41 and EM39.

DL7APV: Bernd dl7apv@gmx.de was QRV on 3 bands during the Oct leg of the ARRL Contest – Tired but still satisfied with my results. I was nearly QRV at all times the Moon was in view. I made 156 QSOs on 3 bands. I found 70 cm activity down compared to last year, but was very satisfied with my 23 cm result. Before the contest I assembled my 5 m dish (f/D = 0.61) and put it on a tower. (After, I had to remove the dish to store it behind the barn for next year as the tower was really too weak to hold it over the year). This year I added autotrack for 23 cm and 3 dB more power. I started with 7-8 dB of sunnoise and about 150 W at feed. I could work stations down to 2.4 m dishes and the reports were not bad. A high point was working WR8AA. I ended with 31x19 on 23 cm. On 432, Saturday was the peak of activity but dried out on Sunday. I added initials with WR8AA (before and in the contest), K1WHS, N9ZL, N9LHS, KA0OKH, VE3GKT, JR5FGP and 9A5R. My 70 cm score was only 74x46 down from 115x48 last year. I slept only a few hours; I now need more time for sleep. It is harder every year now. I hope to see much more activity in last leg of the contest.

IK1FJI: Valter valter_dls@yahoo.it was on for the Oct ARRL Contest WE -- I was QRV 8 hours in the 1st Moon pass on 23 cm; I worked 44 CW stations and found very good conditions. Sometimes, I had 3 stations replay to my CQ, but some were missed because I can replay only to one! I hope to work some more in the Nov leg. Hopefully the weather (WX) will be fine. My rig is a 3.8 m dish with a septum feed/choke, 0.2 dB NF LNA and TH327 PA @1400 W. Meanwhile, I'm working on 3 cm. I have a 125 cm dish with modified LNB with 25 MHz reference on a robust telescope mount with GPS and computerized tracking. I followed the Sun for 90 minutes and found its noise was a constant 9 ~10 dB. Thus, the tracking seems perfect. I am now waiting for the Moon to be at a declination >10 degs and the beacon to be working to perform more testing. I am look for the TX part with good power.



IK1FJI new 1.25 m dish for 3 cm EME

JH1KRC: Mike <qq363gud@voice.ocn.ne.jp> was QRV in the ARI EME Marathon on 23 cm CW -- I took part on Sunday only, after the typhoon on 14 Sept passed by. A

few decimal degrees of antenna pointing offsets needed to be adjusted first, and finally I worked six stations (NQ7B, IK3MAC, OK1DFC, G4CCH, G3LTF, and I1NDP. All of the signal reports (RST) were sent/received FB. There might be something wrong in my receiving system, and I guess the second cavity LNA of FHX35LG is somewhat damaged by a few watts of transmission into the LNA output. Still, it works but has a gain loss of a few dBs. Temporally it is inserted following the isolator. The massive, thick clouds after a huge typhoon might have also caused some noise temperature raise up also. Hopefully my top LNA was not damaged in its poly pack during our very hot and humid summer – Hi. [Mike was also QRV on 23 cm CW during the Oct ARRL Contest leg.

K1EEP: Frank (NC1I) frank@NC1I.COM announces that he and W1QA will be activating VT on both 432 and 1296 this Nov and/or possibly December. The equipment will be exactly as used at WR8AA in WV, except this time we will remember the TX feedline; so, our signals should be noticeably better. The 432 station has already been set up in VT and is ready to go. Once again, we plan to operate one full Moon pass on 432 and two Moon passes on 1296. Our exact schedule is not yet set so watch for announcements and updates on MoonNet and MMM. Operation may or may not take place during the final weekend of the ARRL EME Contest. This operation will take place from NC1I's daughter's horse farm in central VT. We will be using Emily's call (K1EEP) and I expect that she will be the operator for at least some of the QSOs. The grid square will be different from our last VT DXP in 2015; this time we will be in FN33. As in the past all QSO's will be uploaded to LOTW and QSL cards will automatically be mailed for all QSOs. If you would like to send a card in return it can be mailed to K1EEP's QRZ.com address.

K5DOG: Steve steve@k5dog.com is planning to participate in the Dec 902 AW -- I have 3 States (AK, TX and FL) and 3 DXCCs and also VE6 and VE4 on 902. I am working on a switchable polarity patch for my 4.4 m dish, and hope to be able to combine a couple Moto 250 W PAs. If not, I will be at 225 W at the feed. My objective is to be able to operate 902 on a regular basis (feed in the dish all the time) and make a CW QSO or two.



K5QE's antenna farm used ARRL EME Contest

K5QE: Marshall's k5qe@k5qe.com contest team was on for the first leg of the ARRL Contest and running hard - Recently, we installed a 4.5 m dish for 1296 and have about 500 W out of a Beko PA. This dish has been a real eye opener to me about what can be done on 1296. We were able to work some 2.4 m dishes and one 1.8 m dish. Performance is way beyond anything that I expected. We also just rebuilt the 432 array. We removed all the phasing lines and replaced them with new ones. The performance is much better than it was... like 3X better than before. We also are working on a 6 M EME. In the Oct leg our score was roughly 2.7 M points (125 cm 6x5, 70 cm 48x24 and 23 cm 79x37 for a total including 2 and 6 m of 232x117).

K8ZR: Tony temanuele@ebulent.com brings us up to date on his EME activity -- It has been just over two years since the last time I was active on EME. About a year ago my dish mount developed a problem necessitating the removal of the 10' TVRO dish. I made the repairs recently and was able to be QRV for the Oct ARRL EME weekend on 1296. It was too windy for the 1st pass, but WX conditions for the 2nd Moon pass were ideal. No wind & not a cloud in the sky permitting use of a camera to keep the dish on the Moon. I easily worked OZ4MM on CW and then moved up the band to work the many stations on Q65. However, I did not decode a single station despite the fact that many were seen and in some case I could clearly hear the tones. It was extremely frustrating. The following week I ran some tests and believe that the issue is my 30 year old homebrew XVTR. Its stability is not suitable for the digital modes. During the testing I also discovered that my ICOM 9700 lost its lock to its reference. I hope to have the stability issues solved by the Nov weekend. Fingers crossed that the WX will cooperate. I also interested in the 902 AW. Thus far I have 15 States on 902 (WI, CT, IN, PA, VA, NY, OH, MI, MA, IL, IA, KY, WV, AL and TX plus VE3 and VE6. Almost all were worked on tropo. It has been a while since I have worked a new State or province on 902. Additions via the Moon would be very welcome.

KA6U: Peter petervanh143@gmail.com sends news [much extracted from MMMonvhf] – I was QRV on 11 Nov in EM31 in LA and put 36 1296 and 4 222 QSOs in my log. I then operated the Nov ARRL Contest WE with K5QE. After, I drove 11 hours from TX to TN on 14 Nov. My pans are to go to OH [was on 1296 on 16 Nov] and then WDC and DE area between 17 to 27 Nov, and after return to FL. I may be able to activate in States including MD, VA, DE, NC during this time and on the way back to FL.



KA6U portable operation

KB7Q: Gene's geneshea@gmail.com EME report follows -- I replaced manual Moon tracking on my 2.4 m dish with a new W2HRO SL-1 motorized tracking unit. It was integrated with a Green Heron RT-21 AZ-EL controller just before the Oct ARRL Contest. Being accurately on the Moon full-time resulted in 56 stations worked on 23 cm during the contest period versus 36 stations last year - a significant difference. I am looking forward to the Nov weekend and hoping to spend more time on CW.

KNOWS: Carl carlhasbargen@q.com reports his ARI and ARRL Contest efforts – During the 1st Microwave (MW) ARRL Contest weekend I had no success on either 3 cm or 6 cm. (I had not checked the “VHF and sub band” box in setting up WSJT), I was thus especially happy that the ARRL had added a 2nd MW weekend! I drove to my northern property and set up my gear knowing the WX forecast was for intermittent rain. As always, I wrapped nylon electrical tape around my cable connections and use plastic garbage bags and tarps to cover outside gear. I had no visual Moon position and I know that the twisting and bending of my polar mount shaft can result in up to a 2 deg error - not good on 13 cm. WSJT-X and Windows only agree on port settings of my laptops about 2-3% of the time; so rather than struggle to set up, I put “none” in the radio drop down and did without CAT control. As expected, I had dish pointing troubles but was able to decode DF3RU (11DB), UA5Y (14DB), OH1LRY (14DB), DL1SUZ (14DB) and OK1KKD (21DB). I had forgotten my reading glasses at home, so I got a bit of eyestrain trying to read my screen! Using Q65C, I worked OK1CA (6DB/11DB), K2UYH (15DB/22DB) and initials with K3WM (10DB/12DB) and OK1KIR (10DB/18DB) for a total of 4x3. My 1st year on 13 cm in 2017, I had 11 QSOs, so this year was disappointing. Before the Moon pass was over, a great thunderstorm hit. Lots of lightning, so I shut things down and moved away from my operating tent under the dish. About 2 hours and 1.5 inches of rain later, I was noting water getting into coaxial connections and my mount electrical controller; so I started taking things down and prepared to drive home wet. I told my wife I could not have been wetter if I had gone swimming. Once home, where the WX was clearer, I set up for 9 cm for the 2nd Moon pass. After having waterfall screens full of interference on 13 cm, it was nice to see a clear waterfall except for EME operators. Not many were on the band. I tried to TX to several, who did not see me. I almost went to bed, when I discovered a broken solder joint at my PA PTT line. Once that was fixed, I got 3 Q65C QSOs in the next 20 mins: OK1CA (8DB/12DB), DF3RU(15DB/14DB), VE6TA (14DB/17DB) and then K2UYH (9DB/14DB). A little spider bit my ring finger when I was up north, so I took my wedding band off before the finger swelled. Now I am missing my 37 year-old wedding band 😞. Oh well, at least I was not hit by lightning! My 2022 ARRL totals were 0 on 3 and 6 cm, 4x4 on 9 cm and 4x3 on 13 cm. For the ARI weekend, my intention was to set up at my northern QTH on 70 cm with my 20' dish as a practice run before the ARRL Contest. It was raining yet again. During setup, I had RX troubles; I set up scaffolding to investigate, and discovered that the junction where the copper tube from the feed loop passes through the steel

reflector, had a lot of corrosion and boke when touched. This was the same junction that I "fixed" earlier this year. I had to drive two towns away to get a propane torch and parts to make the repair. I use lots of tarps and plastic bags to try to protect my equipment from the rain. In the morning, I discovered that the tarp had blown off my power amp and rain had soaked it. It did not work! I had a backup PA, but again had Rx troubles. The only signal I saw was DK3WG (20DB). I worked Jurg for my 1st 70 cm QSO since 2019. It seemed I had no preamp. But I decided not to climb to the feed again in the rain. I packed up and drove home. When I returned next week, I discovered that a crimp-style N connector had come off a RX cable. With a new cable and dried working PA, I decided to try 70 cm for the 1st Moon-pass of the ARRL Contest. Temperatures were 15 degs below normal and I awoke to one inch of snow at my home before driving north. Despite the miserable WX, I worked using Q65B 7M2PDT (19DB), DL7APV (20DB), DL8DAU (19DB), G4RGK (15DB), HB9Q (7DB), K4EME (11DB), K5DOG (15DB), K5QE (14DB), OK1TEH (21DB), PA3DZL (10DB), UA3PTW (8DB), W7MEM (18DB), and had initials with AA5C (17DB), DL1VPL (18DB), JR7PJS (21DB), K7KQA (18DB), KA9OKH (22DB), KD2LGX (15DB), KU4XO (15DB), N1AV (24DB), NN3Y (20DB), ON4AOI (20DB), OZ1SKY (22DB), PE1ITR (22DB), RD3FD (18DB), SM4GGC (28DB), UA5Y (23DB), UX5UL (17DB), VK2CMP (16DB) and W7JW(18DB). It seems all you need to get 18 initials in one pass is just to stay off the band for a few years! I also decoded signals from W4ZST (21DB), HG5BMU (21DB), IZ2DJP (19DB) and WC8RK (20DB). I had lots of pol issues and my polarity control was literally frozen by ice. I then tore down and moved my operating tent and gear to move 80' away to my other dish for 23 cm. No moon was seen all weekend, but I used some recent sun measurement corrections to steer my mount the best I could and had another good Moon-pass on 23 cm. My MAP65 screen at one point showed about 35 signals at the same time, but my first several hours it felt like I was a runt piglet jostling for a place by the sow, only to have another piglet beat me at every turn! Using Q65C I worked AA6I (15DB), CX2SC (23DB), DF3RU (11DB), ES3RF (13DB), G0L BK (20DB), G4YTL (20DB), HB9Q (0DB), IK2DDR (17DB), IK5VLS (13DB), IQ2DB(16DB), K2UYH (9DB), K3WM (10DB), K5DOG (12DB), K6VHF (14DB), KA1GT (12DB), KB2SA (13DB), KB7Q (20DB), LU8ENU (21DB), N0CTR (13DB), N1AV (20DB), N5BF (17DB), OH1LRY (15DB), OK1CA (6DB), OK1DFC (12DB), OK1UGA (10DB), OK2DL (7DB), OM4AOI (14DB), PA3FXB (14DB), RA4HL (9DB), SM5DGX (8DB), SM6CKU (13DB), SP5GDM (15DB), UA5Y (15DB), UA9FAD (18DB), VA7MM (16DB), VE3KRP (18DB) and YO2LAM (15DB). I had initials with AE6GD (15 DB), K5QE (17DB), N6RZJ (26DB), SC0CT (9DB), W2ZQ (18DB), W5GLD (14DB), W7JW (15DB) and WR8AA (19DB). I decoded signals from LZ1DX (11DB), SP3YDE (12DB), OH2DG (8DB), AC0RA (21DB), PA3DZL (10DB), IK7EZN (17DB), PE3LWT (19DB), OM4XA, DL1SUZ (22DB), CE3VRT (21DB), OK2ULQ (15DB), W3CJK (23DB), KC2HFQ (22DB) and XE1XA (11DB). Several of these I failed with, but most of them were just moving around or not TXing when I looked. After my recent difficulties, it was

nice to have on 70 cm 30 QSOs x about 24 mults, and on 23 cm 45 QSOs x about 30 mults in one weekend including 26 initials. The weekend helped turn me from a grumpy EMEer into a happy one, in spite of pol and WX issues. If WX is good in Nov, I will go north again exclusively on 23 cm, but can try a bit of CW. If weather is bad, I will set up 23 cm for the 4 hour EU Moon-passes from my back yard with a 6 dB loss in dish gain to see if I can catch any bigger guys that I missed last time.

LZ2US: Marko lz2us@dir.bg was QRZ on 23 cm in the Oct ARRL Contest -- I was active for about one hour on Saturday and 2.5 hours on Sunday near moon set. I used CW to make 25 QSOs. I also had two stations that I lost. Thanks to these operators for their persistence but I just was not able to recognize the callsigns. It was very nice contest with good activity. I hope to be more active during Nov.

NC11: Frank frank@NC11.COM reports that the WR8AA WV dxpedition was very successful -- This despite the fact I forgot our 7/8" TX feedline. We were able to improvise for feedlines but that cost us an additional 3 dB+ loss on 1296 and an additional 2 dB of loss on 432. So, our power at the feed was only about 200 W on 1296 and 425 W on 432. We ended up on 432 with 43 initials for our one Moon pass (Thursday night), and on 1296 with 95 initials for the two passes during the ARRL Contest. Everything worked flawlessly; the only issue was our unexpected low power due to leaving the 7/8" feedline home in the barn! [See K1EEP VT dxpedition report in this NL]

N1AV: Jay whereisjay@gmail.com reports on his Oct ARRL Contest efforts and 902 plans -- The first WE of the contest went well. It had my highest score for a first weekend. My totals were on 70 cm 22x22 (including my first CW EME QSO on 432 plus several more), on 23 cm 78x74, and more on 2 m. 23 cm was CRAZY busy from .050 all the way to .120 with digital signals. It was a lot of fun chasing stations on digital and CW. I will most likely only be on for the 1st pass of the final contest weekend. I have a social conflict on Saturday night, which will eat up my EU window. I might jump on late to chase some stateside stations. I am looking forward to working more stations on all bands 2 - 1296. I will be rocking 222 for the next WE as well. Once the contest is over, I will start promoting the 902 EME AW (2, 3, 4 Dec) on Moonnet and direct email. If you have 902 gear, this will be the time to try it out! Also, I am to head back to Hawaii for 1296 and 902 EME for 5-9 March. The location is reserved and I will again use my special call N1V. I am calling this trip the "Unfinished Business Tour". I know there are several who need 1296 for WAS and with the popularity of 902 EME growing stateside, I am going back to activate KH6 one more time. I will have the same sub-lunar 2.4 m dish and 350 W PA. For this trip I am adding rotor control for computer assisted aiming and a more stable platform to reduce wind swing over hand aiming, which should give a dramatic improvement. My website <https://www.n1rwy.org/?p=925> will be updated as more information becomes available.

OK1CA: Franta fr.strihavka@seznam.cz was QRV for Oct part of the ARRL EME Contest on 23 cm – I was quite pleased with the contest. Overall, the activity was good, weaker for stations from VK and JA and great from North American stations, mainly using digital modes. I made a total of 103 QSOs of which 43 were CW, the rest using Q65-60C, except for two with Q65-30B. In total I worked stations from 28 DXCCs, 21 US States and 3 Canadian provinces, a total of 49 multipliers. New CW initials were SA6BUN and WB8HRW #398, and I did a total of {22} digi initials; the last being VE4MA {#165}. I also added two US States; the WR8AA dxpedition to VW and AC0RA in MO for my State 45 for WAS. The contact with WR8AA was even more significant to me in that it was my 6000 EME QSO. The nice autumn weather contributed favorably to the course of the contest.

OK1DFC: Zdenek [ok1dfc\(x\)seznam.cz](mailto:ok1dfc(x)seznam.cz) reports on his Oct leg of the ARRL Contest – I made only one feed change during the contest WE because I needed to finish my band switching. I installed an IC7700 as the main transceiver with a DB6NT TRV for the 70 and 23 cm bands and a 144 TRV for the 13 cm IF. However, I didn't have time to complete water-proofing the SSPA; so, it had to remain in ham shack. This was a good thing, as rain was pouring and probably would have filled the SSPA with water. But this deprived me of 4.5 dB of signal due to the 1/2" cell flex running from the ham shack to feed. Installing the IC7700 caused another problem. It has no USB output, only RS232 CAT, so I struggled for a while with an RS232 to USB converter before I got the WSJT-X up and running. As a result of this technical "struggle" I ran only CW for the first 8 hours, which deprived me of several digi contacts from the east; however, I did get some nice CW contacts. The dish worked great and the log reports below show that my signal at the opposite end were not bad either. In the morning the technicians had their say, and I joined the Q65 traffic. I must state that there is still work to be done. The band was full of stations, so I was still listening in parallel on the SDR during the minute RX periods of digi traffic, looking for CW stations not in the log. I think overall it was a good success. QSO'd were KL6M, VK2JDS, SK0CT, OK2ULQ, DU3T, JA6AHB, RA9FLW, DJ7FJ, IK5VLS, OK1USW, PA3HDG, DK1KW, ON4BCV, LZ1DX, DK0TE, ON4LX, JH7OPT, G4FUF, PE1LWT, KA1GT, AC0RA, ON4AOI, W3HMS, LA9NEA, DL3WDG, W2ZQ, W3HZU, VE3KRP, OK1KIR, W7JW, G4EZF, KN0WS, RA4HL, DK3WG, 4X1AJ on 1268, W2HRO, KB2SA, VE4MA, IK3COJ, AE6GD, SM6CKU, LU1CGB, UA3PTW, N9JIM, IK7EZN, I1NDP, OZ4MM, IK1FJI, N0CTR, OK1IL, W5GLD, DF2VJ, LZ2US, IW2FZR, G4YTL, W3CJK, SM7FWZ, G0LBK, JH6XED and VK5MC. I made a total of 123 QSOs with 45 mults; there were a few DUPs because of stations that want to make both CW and Q65 contacts. I was very pleased with the EME dxpedition to rare WV, WR8AA. I worked them on Q65 and CW. Their CW signal was impressive (559). I only added 2 initials on CW: SA6BUN and WR8AA; and 5 new ones on Q65C: WR8AA, G4LBK, PA3HDG, AC0RA and DL3WDG. Let's hope the Nov window is not affected by a hurricane or torrential rain.

My number of first round QSOs now matches the number of QSO that I made over the whole contest! The OK activity on 23 cm was impressive! OK1CA, OK1KIR, OK1IL, OK1KKD, OK1UGA, OK1USW, OK2AQ, OK2ULQ and OK2PE, and also on the band was OK2UZL with whom I don't yet have a log entry. Only OK1YK and OK1CS were missing. I am looking forward to Nov.

OK1KIR: Vlada [vlada.masek\(x\)volny.cz](mailto:vlada.masek(x)volny.cz) and Tonda send their Oct EME report -- During Oct WE of ARRL EME Contest we focused on searching for initials. Before the contest, we worked on 70 cm on 14 Oct using Q65B at 0530 WR8AA (10DB/11DB) {#327} and 0533 N1AV (14DB/18DB) for digital initial {#328}. Later we repeated both using CW at 0721 with WR8AA (O/O) for initial #406 and 0741 N1AV (O/O) #407. During the contest we contacted on 23 cm on 15 Oct using Q65C at 0607 WR8AA (9DB/9DB) for digital initial {#504}, 0640 W3HZU (7DB/10DB) {# 505}, 0709 N6RZJ (7DB/10DB) {#506}, 1020 K0PRT (4DB/0DB) {#507}, 1957 SP3DYE (9DB/14DB) {#508} and 2024 G0LBK (8DB/6DB) {#509}; and using CW at 2138 SA6BUN (589/589) and 2144 G0LBK (559/559) for initial #507; and on 16 Oct using Q65C at 0404 AC0RA (12DB/12DB) {#510}, 0444 DL3WDG (15DB/9DB) {#511}, 0450 OK1DFC (5DB/8DB), 0508 K5QE (6DB/6DB), 0633 4X1AJ (17DB/18DB) with RX/TX on 1268(!) and 0805 PA3HDG (7DB/7DB) {#512}; and using CW at 0953 WR8AA (549/559) #508 in WV as our 48th US State on 23 cm (just MN and SC missing for CW WAS), 1016 KL6M (579/589) and 1023 SP9VFD (569/579). Due to health issues we made a total on 70 cm of only two digi and two CW QSOs and on 23 cm 12 digi and 5 CW QSOs.

OK1TEH: Matej ok1tehist@seznam.cz was active on 70 cm in the Oct leg of the ARRL EME Contest -- I used Q65B for the first time on 432; it seemed to work well. However, I made 9 QSOs with K5QE, K4EME, KN0WS, DL7APV, UA3PTW, HB9Q, PA3DZL, DK3WG and VK2CMP for a total of 9x8; last year I worked 20 QSOs in about the same time. Conditions were very bad with a 1-way path most of the time, especially for EU to EU. I'm not sure if my results are because of Q65 vs. JT65 or because of the conditions. Q65B seemed to work nice with signals decodes close to -30 dB. But, the new WSJT-X's waterfall isn't as effective as the one with WSJT 10. I have a big problem finding weaker traces. One positive result is working a new UFB initial, VK2CMP! So, I'm quite happy with the weekend. I have been thinking about putting up 2x or 3x 38 el M2 yagis in V pol for the ZC4RH dxpedition. My biggest problem is how to control the elevation remotely. One possibility is to use some old *superjacks* that I have.

OK2AQ: Mirek mirek@kasals.com writes on the Oct leg of ARRL Contest – It was beautiful Indian summer before and after the contest; but was rainy weekend during the contest. I was on 23 cm for the first time in the contest. It was a learning experience. The Moon signals were like on "20 meters" and the strength of some of them would bear similar comparison. It was clear to me that with such a small antenna (1.8 m offset) and power (100 W in the feed)

it was like riding the "superbike" category on a moped. But it was great fun with lots of new knowledge. If anyone would like to follow me, I highly recommend it, but be very patient. Almost every station with a stronger signal has a pile-up and you have to wait until everyone else has QSO'd and then do it too. My main goal was to add initials. In the contest I made 25 Q65C QSOs with 12 initials to K3WM, DL6SH, K2UYH, PA3DZL, VK2JDS, SK0CT, DL7UDA, LZ1DX, DF3RU, OM4XA, UA5Y and ON4AOI. Since I was also QRV on Thursday and Friday, I made additional initials with G4YTL, UN6PD, SP7EXY, IK2DDR and F1RJ and on Monday IK3COJ and PE1LWT, and on Tuesday G0LBK for a total of 20. I used an Adalm PLUTO SDR for TX/RX. I solved the CW elegantly, but I forgot to include a monitor. I tried to solve this with a second SDR, but the delay in (the software defined) receiver was such that telegraphing was not possible - a task for next time. My log can be found at https://www.radio.feec.vutbr.cz/esl/files/EME/LOG/EME_LOG_1296M.htm.

OK2DL: Marek ok2dl@seznam.cz found this year's ARRL EME Contest for once was held in nice WX – There was almost no wind and temperatures of 10 - 15 degs C. The Moon was up overnight again, so I didn't get much sleep! Friday into Saturday, I sat down at the radio a little after 2 am our time and by moonset I had 76 contacts. At first, I operated CW but after two hours started looking for digi signals. I then ran the classic tactic of calling on Q65C and searching for CW in the spare minutes when the TX was not on. When someone showed up, I went after them. Saturday night the Moon rose at around 9:30 pm. There were few stations on the band, and poor activity from the east. It wasn't until around midnight that things started to pick up. After I had 100 contacts in the log, I went to bed to have enough strength for the western stations. When the Moon was 9° above the horizon I QSO'd G4BRK (24DB/26DB) with a single 36 el yagi, no elevation and only a couple of watts. I ended with a total of 125 contacts. Initials were SA6BUN, AC0RA, WR8AA, KN2K, W3HZU, N5TM, W2ZQ, N6RZJ, EA2BRI, OK2UZL, W7JW, G4RGK, DL3WDG, KD5CHG. It can be seen that activity from USA is on the rise.

OK2PE: Karel <no email> was QRV during Oct on 1296 in the EME Contest -- I made a total of 16 QSOs using CW. My window is limited to when the Moon is either high or already in the woods. Initials were KL6M and DK0ZAB; otherwise all "old" friends. Signals were great and my equipment did not disappoint me. It was especially nice to make contacts with people I met at the Prague EME Conference in Aug.

OK2ULQ: Petr ok2ulq@seznam.cz was again active in the Oct EME Contest on 23 cm -- I was not ready this time, but I managed to make some FB QSOs. On Friday I installed the feed and listened to the Sun. All seemed OK. In the morning I started on CW and later tried to switch to digital; but the computer wouldn't work on TX. It took me quite a while to figure out the problem. Once QRV, I was able to add a lot of initials. On CW my only initial SA6BUN for my 4th EME band with Michael. QRA65C then brought 12

additional initials with SP3YDE, OK1USW, SM6CKU, K5QE, **CE3VRT**, W2ZQ, LU8ENU, W7JW, WR8AA, AA6I, N0CTR and G0LBK. In total I made 32 QSOs. With better preparation and scheduling I probably would have done more but you can't play if you are not in the game. Still it was a very nice weekend.

OZ4MM: Stig gsvestergaard@gmail.com was QRV for few hours in the Oct part of the EME Contest on 1296 CW – I found activity quite good activity, but had several getaways. I hope to catch them in Nov. Overall I worked 52 stations. I plan to be active in Nov but my time will still be limited.

PA3DZL: Jac pa3dzl@icloud.com was activity during Oct part of the ARRL Contest -- I was QRV for 11 hours and made 65 QSOs on 3 different bands. There was great activity on 23 cm! The Digital 30 sec periods work great, but signals were also booming on CW with amazing reports. On 70 cm I worked 11 stations; 2 on CW and 9 on digital, including 5 initials. On 23 cm I worked 44 stations; 8 on CW and 36 on digital including 9 initials. The remained of my QSOs were on 2 m.

SM6CKU: Ben sm6cku@jockert.se reports on his activity the Oct Contest WE on 1296 – I QSO'd on 15 Oct using Q65C DL7UDA, W3HZU for a digital initial {#}, DJ3JJ, PA3FXB, OM4XA, YO2LAM, KB7Q, OZ9KY, CE3VRT {#}, OK1USW, N5TM {#}, WR8AA {#}, K3WM, OK2DL, N5BF, IK3COJ, N6RZJ {#}, LU1CGB, IQ2DB and AA6I, and using CW N8CQ for an initial (#), WK9P (#), SM6FHZ, SM6PGP, OZ4MM, IK3MAC, IK1FJI, SP7DCS and DF3RU; and on 16 Oct using Q65C OK1CA, N1AV, LZ4OC, DL3WDG {#}, AC0RA {#}, LU8ENU, UA9FAD, DJ7FJ, W2ZQ {#}, WA3RGQ, VA7MM, OK1DFC, IK7EZN, IK2TIF {#}, DK0TE, KB7Q DUP, KN0WS and DL1DWI, and using CW G4CCH, WA6PY, KL6M, SP3XBO, SP9VFD, OK2ULQ, F5KUG, SP6ITF, VE6BGT, G4RGK, SA6BUN (#), PA3DZL, UA9FAD and G0LBK (#) for a total of 37 QSOs on Q65C and 20 on CW with 29 mults.

SP9VFD: Raf rgrygorow@gmail.com tells of his experiences on 15/16 Oct in ARRL EME Contest on 1296 – In the single operator CW only category without Internet or chat/cluster assistance, I had QSOs with OK1DFC, DG5CST, OK2DL, DF3RU, SP6ITF, SP7DCS, SA6BUN, SP7EXY, WA6PY, OZ4MM, G4CCH, SM5DGX, OK1CA, IQ2DB, DL1AT, KL6M, IW2FZR, OK1KKD, OK2PE, JA6XED, F5KUG, DL7UDA, OM4XA, DU3T, CT1FGW, SM6CKU, SP3XBO, WK9P, K2UYH, IK1FJI, SM6FHZ, VE6TA, IK2DDR, VE6BGT, LA9NEA, OK1KIR, LZ2US, VK5MC, SK0CT and SP3YDE for a total of 39x20. Heard only were G4YTL, PA3FXB, DK0ZAB, DL6SH and K3WM. I used a 6.4 m HB dish, OE5JFL controller, G4DDK LNA, MRF13750H SSPA, Kuhne G4 1296 transverter with 28 MHz IF and FTDX-3000D with RspDuo SdrPlay receiver. A lot of my equipment are built by myself. Software is Hamradio De Luxe for logging, SdrUNO as band activity monitor with waterfall and VK3UM EME planner. I plan to be active in the contest in Nov.

VK2CMP: Mick vk2cmp@me.com was active on 70 cm in the Oct part of the EME Contest – 432 during the Oct ARRL Contest seemed quieter than expected; however, still loads of fun. It started just after midnight down under with Moonset at around 10 or 11 am local time. It did leave me wondering what other hobbies or sports would allow you to compete in a contest in your pajamas? I worked 8 mixed initials over the weekend including OH3DP, PE1ITR, OK1TEH, DL2HWA, OH3AWW, K7KQA, K1WHS and DL8FBD. This year most QSO's were using Q65B with only one JT65 QSO, which helped speed things along. It was also the first time I used Q65-120D to complete a QSO after trying over two days with OH3DP. He suggested we try 120D, which resulted in immediate success. Like magic the very 1st decode appeared at (31DB) and we soon added another to the log. It was also great to finally work Matej after what seems like years of trying to copy OK1TEH. Certainly, having used the K4D for a year now made this contest a lot 'simpler' to operate in. Last year I had 48 hours to learn the Elecraft way of working vs a lifetime of ingrained Yaesu operating behaviors. Having two high quality receivers (H&V) vs just one (H-pol) with the FT2000 (in addition to the adaptive polarization setup) has certainly helped capture a few that would have got away. The start of the 2nd day was delayed by more QRM than usual in the direction of the Moon that resulted in the noise floor worsening by 8 dB as well as 20 dB pulses every 5 or so seconds observed on Linrad. This prevented any decodes for the first hour until the Moon's elevation cleared the QRM. Also worked in Oct was BV3CE and LU8ENU for new DXCCs.

VK7ZBX: Richard vk7zbx@gmail.com was QRV in both the ARRL and ARI EME Contests on 10 GHz – I do not consider myself a big contester but this month I took a crack at both the ARRL and the ARI Contests. I was on 3 cm. I did not make too many contacts but it was great fun. Worked over the two weeks (8-11 Oct) were IZ4BFA, IK0HWJ, UR3VKC, DL7NN, IW2FZR and IK26CAK. The system is working really well. I am now working to make it easier to change polarity as EU favour V pol and US favour H pol.

W2HRO: Paul w2hro.fn20@gmail.com had quite a month – I did not operate the ARRL EME contest directly, but did make some selected QSOs including my 50th State for 23 cm WAS. Instead, I supported the W2ZQ EME effort that I helped to establish. I am also planning to be on for the 902 activity-weekend on 2-4 Dec; and considering putting PA on 902 EME.

W2ZQ: Joe (K1JT) joe@princeton.edu reports for the Delaware Valley Radio Association's (DVRA) club station, and especially co-builders and operators W2HRO and AD2CC -- After a 2.5 year hiatus due mostly to Covid, we have put our 1296 EME station back on the air after making substantial improvements. Our 3 m dish now uses one of W2HRO's Sub-Lunar SDD3 Dual Axis Slew Drives, and a KL6M septum feed with a cake-pan choke. The LNA is now located at the feed; the 250 W SSPA, power supplies, and remote monitoring equipment are in a gray box mounted

on the tower section supporting the dish. In the shack about 40 m away we have a GPS-locked IC-9700 and Green Heron RT-21 Az/EI Controller. We started making a few EME QSOs in mid-September, using a PST rotator for Moon tracking and WSJT-X for Doppler control and Q65C. We made more careful measurements of the focus and pointing soon afterward. More work is needed in this area, and possible adjustment of the choke position. But, already we are seeing 12 dB of Sun noise and echoes at (15DB) in 2500 Hz bandwidth. The setup had its first real workout during the Oct ARRL Contest weekend, when we made 90 QSOs (84 Q65, 6 CW) and 43 multipliers. In late October we added a PTRX board to the IC-9700 and Linrad and MAP65 software for wideband display and wideband decoding capability. We plan to work more CW during the Nov Contest weekend.

W5LUA: Al w5lua@sbcglobal.net plans to be active during the Dec 902 activity WE -- I have been using on 33 cm two of the 250 W Motorola amps for years and combining with cell type combiners and knock on wood, so far so good at about 450 W out. K8ZR is doing this as well. States I need are on 902 are CA, OR, NV, UT, NM, ID, MT, WY, SD, ND, WI, VA, WV, MD, DE, PA, VT, ME, MA, CT and RI. Any and all help is appreciated. I use a patch feed on 902 with dual polarity designed by PY2BS. I can send info on it.

WK9P: Tim tcherrone@yahoo.com was QRV during the Oct Contest WE on 23 cm -- I worked 18 CW contacts. After the contest weekend, a family member was in an accident with now a long recovery ahead. I'm hoping to be QRV again in Nov.

WR8AA: Frank (NC1I) frank@NC1I.COM and Tow (W1QA) report on their WV dxpedition – The dxpedition seemed to get off to a bad start when we were setting up shortly after arriving. I realized that I forgot to bring the 7/8 TX feedline! We ended using a 130' long piece of FSJ4-50B for our TX line. That is not bad on 432, but pretty bad on 1296. Normally we would use a 65' piece of LDF5 and 20' FSJ4-50B jumper. The long piece of FSJ4-50B resulted in an additional loss of 1.5 dB on 432 and 3 dB on 1296. Other than forgetting the TX feedline and having much less power at the feed than we normally have, everything else went great. All equipment worked flawlessly and the site was extremely quiet (by far the quietest site we have been to so far). We started off on 432 operating one pass the day before the start of the contest WE. 43 different stations were worked. Other than those noted all were Q65B. The following stations made it into our 432 log: W4ZST, W2HRO, DL8FBD, G4YTL, DL1VPL, KU4XO, W7JW, OH2DG (Q65 & CW), UA3PTW, K5QE, UT6UG, OH3AWW, UX5UL, DK3WG, DL7APV, N1AV, ON4AOI, DL9KR (CW), W7MEM, PA3DZL, N9HF, N9LHS, OZ1SKY, PA2V, OK1KIR (Q65 & CW), NN3Y, RD3FD, DL8DAU, DL8GP, LU8ENU, OZ4MM (CW), KL6M (CW), AA5C, DL5FN, DL2HWA, GW4ZHI, PA2CHR, HB9Q, OH6UW, K7KQA, K5DOG, JR7PJS and W5LUA. Our 432 QSO total would have been significantly lower if we did not have polarity rotation. 95 different stations were worked on 1296 starting on 15 October and ending on 16 October:

SP3YDE, UA9FAD, IQ2DB, OK1CA, SP5GDM, DF3RU, DL7UDA, PA3FXB, OK1KKD, UN6PD, OM4XA, RX6AIA, IK2DDR, PE1LWT, VE3KRP, DK3WG, G4CCH (Q65C & CW), SP7EXY, OK2DL, W2ZQ, HB9Q, W7JW, UA9YLU, LU8ENU, OH2DG (Q65C & CW), IK3COJ, DL8FBD, RA4HL, PA3CSG, UA3PTW, IK7EZN, YO2LAM, VE6TA, N1AV, K5DOG, K3WM, OK1KIR (Q65 & CW), DJ7FJ, KA1GT, F1RJ, N0CTR, K5QE, SM6CKU, DL0SHF, DL6SH, ON4QQ, DL1SUZ, G4YTL, KB7Q, EA1IW, OK1DFC (Q65C & CW), ES3RF, N5BF, DF2VJ, W5GLD, WA3RGQ, IK1FJI, AA6I, W5AFY, OH1LRY, VA7MM, K6VHF, N6RZJ, W3HZU, K2UYH, AE6GD, KD5FZX, AA4MD, G7TZZ, UA5Y, LZ1DX, OK1UGA, ON4AOI, DL7APV, ON4LX, PA3DZL, IK5VLS, AC0RA, DG0FE, VA6EME, G0LBK, W2HRO, SK0CT, KB2SA, DJ2DY, VE4MA, SM5DGX, CX2SC, OK2ULQ, KL6M (CW), OZ4MM (CW), OZ9KY, KN0WS, W3CJK and KN2K. Due to our unexpected low power, we did not spend much time on CW but did work everyone that asked us to go to CW. We also called DU3T on random CW but we were not able to get his attention. All QSO's were uploaded to LOTW within 24-hours of the end of the contest. As of 28 Oct, we have a 50% LOTW confirmation rate (great to see the increased use of LOTW for EME). We are still working on a QSL card design and don't expect to have cards back from the printer until mid-Nov. We hope to have all of the cards in the mail by the end of Nov. We would like to thank our gracious host, K3ZJ! The site was perfect! Watch for an announcement of our next dxpedition.



WR8AA's 1296 and 432 antennas on same mount

ZC4RH: Chris (PA2CHR) post@pa2chr.nl writes that Cyprus S.B.A will be active in Nov -- VHF/UHF activity from (S)overeign (B)ase (A)rea of Cyprus will be on all propagation modes but especially EME (144, 432 and 1296) from 10 to 19 Nov (KM64ux). We will have on 70 cm 27/23 el X-pol yagi with 17.8 dBd gain and an SSPA; and on 23 cm DB6NT transverter, GPS locked and 67 el 19.9 dBd yagi and SSPA. This is the same setup as we used in TG in 2018 and VP2 in 2019. It proved to be possible to work single yagi stations on 70 cm running 400 W and stations with a 3 m dish and 150 W on 23 cm. More info is on my QRZ page <https://www.qrz.com/db/PA2CHR>. If you would like to sponsor this 'most wanted DXCC' you can use PayPal: [post\(at\)pa2chr.nl](mailto:post(at)pa2chr.nl). **[Our apology, we just could not get the NL out in time for this dxpedition].**

K2UYH: My (AI) alkatz@tcnj.edu Oct Moon time was exclusively during ARRL Contest WE on 1296 – I found activity excellent and enough to keep me occupied for the whole moonpass without even a short nap. I had no assistance for this contest. QSO'd on 15 Oct were using CW at 0546 DF3RU, 0552 DL1AT, 0559 SP3XBO, 0652 NQ7B AZ, 0654 IK1FJI (579/579), 0700 SP6ITF, 0706 OK1DFC, 0712 F5KUG, 0718 OK1KKD, 0722 G4CCH, 0725 OH2DG, 0731 WK9P IN, 0733 IK3DDR, 0834 OK2ULQ, 0842 and VE6BGT; I then switched to Q65C at 0902 IK7EZN, 0910 OM4XA, 0914 LU8ENU, 0919 DL7UDA, 0922 IQ2DB, 0926 OK2AQ for mixed initial #735*, 0932 WA3RQG FL, 0937 PA3FXB, 0942 N1AV AZ, 0946 YO2LAM, 0950 VA7MM (6DB/7DB), 0956 K3WM PA, 1002 DL7APV, 1008 SP3YDE, 1012 K6VHF (10DB/9DB) AZ #736*, 1018 W5GLD (5DB/5DB) OK, 1024 CX2SC, 1033 OH1LRY, 1034 KB7Q MT, 1043 W2ZQ NJ, 1048 IK3COJ, 1104 HB9Q, 1124 N5BF CA, 1149 **WR8AA WV** #737*, 1204 W3HZU #738* PA, 1217 K5QE TX #739*, 1235 K0RPT CO, 1240 AA6I CA, 1316 JH7OPT, 1322 KD5FZX TX, 1332 AE6GD CA, 1400 JH1KRC, 1431 DU3T, 1455 AA4MD FL, 1528 VE6TA, 1538 WA6PY CA, 1610 UA9YLU and 1617 JS6UJS #740*; and continuing on 16 Oct using Q65C at 0524 RA9FLW #741*, 0528 OK2DL, 0533 UA5Y, 0536 SP5GDM, 0541 RX6AIA, 0545 SK0CT, 0550 DL7AIG, 0554 UA9FAD, 0558 OZ9KY, 0602 LZ1DX, 0607 DJ5FJ #742*, 0612 DL6ABC, 0614 DL1SUZ, ON4LX #743*, 0628 IK7EZN, 0634 PE1LTW #744*, 0642 G4RGK, 0648 DL3WDG (17DB/9DB) #745*, 0652 PA3DZL, 0700 RA2FGG, 0726 **4X1AJ on 1268**, 0740 DK3WG, 0750 SM5GDG, 0759 OK1CA and 0813 K8ZR lost; switched back to CW at 0930 SP9VFD, 0935 LA9NEA, 0840 SM6FHZ, 0849 SA6BUN, 0855 G0LBK for CW initial #453 and #746*, 0904 CT1FGW, 0910 F6CGJ, 0921 KL6M and 0935 LZ2US; and back to Q65C at 1000 KN0WS MN, 1044 LU1CBG #747*, 048 ES3RF, 1053 N6RZJ #748*, 1101 VE4MA, 1134 ON4AOI, 1138 W7JW MI #749*, 1150 KD5CHG CT #750*, 1158 N0CTR CO, 1200 DG0FE, 1206 N5TM TX, 1226 G4YTL, 1306 K5DOG (5DB/7DB) TX, 1325 VE3KRP, 1417 KA1GT ME, 1442 KB2SA CA, 1500 N9JIM CA, 1504 KC2HFQ NY, 1613 KN2K (14DB/17DB) VA #751*, 1615 XE1XA and 1623 JH7OTP DUP. I ended with a score of 107x45; the best I have done for a first weekend on 23 cm. I made 23 QSOs on CW but only one CW initial; on Q65C I added 16 initials.

LOGGER NEWS: **LY1G** is planning to add 23 cm EME and asks if he is better off using a couple of yagis or a small dish with the same gain. [The answer is clear. The dish with a circular feed will give him 3 dB advantage over the yagis]. **N4PZ** had problems with tracking the Moon in Oct. His calibration seemed be off. He plans to correct the problem and be QRV on 1296 for the Nov leg. **OK2UZL** is new 23 cm station, active on WSJT only. His log is online at <http://ok2uzl.nagano.cz/MoonData.htm>. **OK1USW** is now QRV on 13 cm EME [possibly 1296 too]. **VE6TA** is planning to be active during the 902 activity weekend scheduled for 2/3/4 Dec. Grant has 7 States on 902 using a 5.5 m dish and 400 W. **VK5FO** plans to be QRV soon on 1296 with a 2.4 m TVRO dish, RF Hamdesign Septum

feed, DDK LNA and PQL 600 W SSPA. He wants to go to a larger dish and is looking for ideas. You can reach Bob at vk5fo@vk5fo.com.

FOR SALE: N9BAA has to sell 23 cm EME equipment. All are brand new and never used: Sub Lunar 1296 Patch feed with dual coupler for \$320; VHF Design 23 cm 300 SSPA with remote head + cable for \$850; and Kuhn L Band ultra low noise 23 cm LNA for \$195. Will sell all as 'bundle' for \$1250 shipped. Prices includes shipping to any US lower 48 State. For more info contact Jose at jose-castillo@verizon.net. **PA3DZL** has high quality 2, 5 and 50 W attenuators SMA, APC3.5 and N mutiple values to 18 GHz (2 W for EU10). Also has a variety of adapters. Email Jac at pa3dzl@icloud.com. **OK1** OK1TEH 10 GHz OK1FPC's transverters for sale, see https://ok2kkw.com/next/ok1fpc_10g.pdf actually 4 pieces are ready. If interested write to ok1teh@seznam.cz.

► **FINAL:** We are disappointed to have missed our deadline again. We very much wanted to get this issue out before the Nov ARRL EME Contest. It was a great contest WE although a little less intense than the first 50 to 1296 WE. We will have the reports for the Nov out to you very shortly. Because of our wish to get this NL out quickly, it does not include all of our normal features. This one is titled the Oct-Nov NL, the next one will be the Nov-Dec NL.

► **Editor for the 2023 Moon Calendar needed. Is anyone able to take over 2023 Moon Calendar at least for the coming year. DL7APV has complications that prevent him from doing the calendar. I can provide a version of the 2022 calendar in Word doc format.**

► The 2023 Moon table showing Moon distance loss and declination follows. This table was prepared by F1EHN. Please express your thanks to JJ for this important contribution. Thank you JJ!

► Here are the results 432 and above of ARI EME Contest Autumn & Trophy for 2022. The Autumn winners for Mixed Class on 432 is OK1DFC; and on 1296 Cat. AM is IQ2DB. The winners for CW Class on 1296 are Cat. A is DL1AT and Cat. B IK1FJI; and for the microwave bands on 2300 IK3COJ and 10 GHz DL4DTU. The Trophy winners for mixed Class on 432 is OK1DFC; and on 1296 Cat. AM is IQ2DB. The winners for CW Class on 1296 are Cat. A UA6AH and Cat. B DG5CST; and for the microwave bands on 10 GHz DL4DTU. The next ARI EME Contests in 2023 are on 22-23 April and 9-10 Sept. Thanks you to I5WBE – great work Enrico!

► There are serious fears about the future of the 1296 band. Here is PA2DW's response: In the last NL, OK1TEH expressed his fears of losing the 23 cm band. Although these fears are understandable, we should not lose ourselves in negative thoughts or look behind and try to blame anyone. Instead, we should build the future upon the past from which we learn and improve and look forward. And if we do that, we see the following important facts:

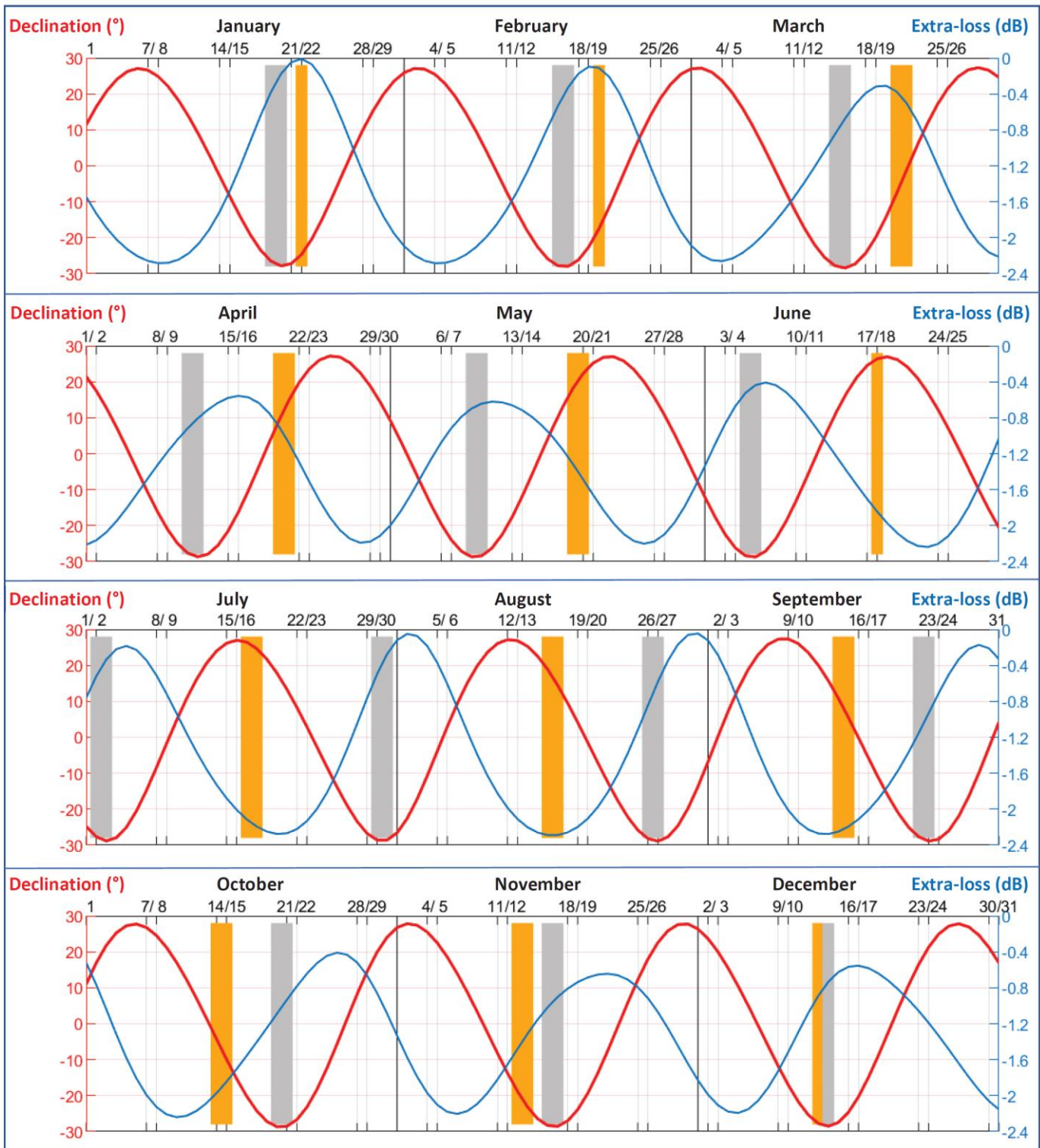
* The amateur-radio service uses the 23 cm band on a secondary basis which means that the regulators that licence us have an obligation to protect the primary services such as the radio navigation satellite service (RNSS) operating in the same band. This means we do have rights to use it, but on a non-interference basis;

* Losing 23 cm completely is unlikely as the ITU has stated that the current allocation for the amateur-radio service should not be removed from the allocation-table. This sounds very hopeful, but it does not prevent some restrictions or changes in the way we use it;

* Due to interference events caused by two repeater stations, the European Commission GALILEO team have demonstrated their fears, that amateur-radio signals can disturb their services and that we need to find a better way to co-exist. Co-existing means in principle that all users should be able to use the spectrum, but that we need to find a way to avoid harmful interferences by careful use of the band and careful band planning; currently, the ITU is preparing for the 2023 Worldwide Spectrum-conference in Dubai. Coincidentally, this conference carries the name WRC-23 and yes, for 23 cm [us] is maybe the most important topic on the (big...) agenda. The IARU International team has an excellent track record of success in the ITU-R and has regulatory experience to effectively represent the amateur community. The international focus team on this topic is lead by Barry Lewis, G4SJH, who also spoke at EME 2020 in Prague. The IARU also contributes to the CEPT and other regional organizations, which are also very important in the preparation - run towards WRC23. During WRC23; however, not only 23 cm is important for us. There are also subjects like Space-observation Sensors (needed for observing climate-changes and other earth-observations) and certain parts of the spectrum are needing to be kept clean for the use of these sensors. The IARU has insisted in the latest CEPT-meeting, that the spectrum for the radio-amateur service should never be allocated for these space-sensors. Due to the much-desired experimental behavior of radio-amateurs, they are not able to guarantee the avoidance of interference to these sensors. If you ask me what we can expect, I say that there are signs of hope in the WRC-23 preparatory papers I have read. The IARU target is to retain the ability to operate all the 23 cm band applications we enjoy today but it looks likely that we will have to rework some of the band planning. Matej said we should be more aggressive and less diplomatic, but my point of view is that diplomacy and goodwill are our only hope for a good result. The IARU continually reminds all parties that the outcome from this work should be proportionate to the (small) scale of the perceived problem and not hinder the development of either the amateur service or the RNSS. Let's move forward with courage and good intentions and please make sure your national regulator knows of the interest you have in this band! We all have a part to play!

► Thanks to everyone who participated in the Nov ARRL 50-1296 EME Contest WE. We both had a great time. Full results should follow very soon. We will be looking for you off the Moon. **73, AI – K2UYH and Matej – OK1TEH**

MOON EPHEMERIS OVERVIEW FOR THE YEAR 2023, 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.f1ehh.org>