432 AND ABOVE EME NEWS
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VERY BEST SEASONS GREETINGS AND WISHES FOR A WONDERFUL NEW YEAR FROM ALL ON 70 CM & UP EME TO ALL

CONDITIONS: Congratulations and celebrations are in order: DXCC on 1296 has been completed by HB9Q and OK1KIR. Dan (HB9Q) has confirmed that he completed the first DXCC – see his report in this newsletter (NL) for the details. The OK1KIR reported on their DXCC in the last NL. There is also a new 24 GHz distance record between VK7MO and G3WDG – see OK1KIR's report for the details. The last leg of the ARRL EME Contest is also big news. Reports on conditions are somewhat mixed. Polarization was definitely a problem on 70 cm, where it was not reciprocal and often near 90 degs. The top reported QSO count is from DL7APV with 80 QSOs. OH2PO reported 72 QSOs. Trend continues toward more contacts on JT than CW. On 1296 scores are up and CW is definitely holding its own, but libration was reported to be a problem, which may have encouraged more use of JT to work weaker stations. If I interpreted OK1DFC's report correctly, OK2DL has the top honors on 23 cm with 141 QSOs and a score 30 k more points than Zdenek with 124x46. On CW only I1NDP leads with 102x44. In Dec on 432 there was a successful dxpedition to IA0C – we will have a report on results in the next NL, and a new DXCC, A65BR, became active. DF8DX will be on from JW (JQ78TF) on 23 and 13 cm EME from 19 to 25 Feb. Coming up is a 70 cm CW Activity Time Period (ATP) on 4 Jan from 0030-0230 and 1600-1800, and at the end of the month on 31 Jan/1 Feb the DUBUS 70 cm EME CW/SSB Contest and the 432 EME SSB Funtest overlapping on Sunday 1 Feb. See the rules below.

HB9Q's 100 Cards for the first 1296 DXCC

23/70 CM EME SSB FUNTEST RULES: These events are intended to be fun. You do not need to transmit on SSB to participate. CW to SSB and vice verse exchanges are encouraged and count for points. (Only one QSO between stations is allowed, i.e., you cannot work a station SSB to SSB and SSB to CW for extra points). The 70 cm contest is from 2000 Saturday 31 Jan to 2000 1 Feb (This period over laps the 70 cm DUBUS EME Contest and contact may count in both contests). The 23 cm contest is from 2200 Saturday 21 Feb to 2200 22 Feb. These are two separate contests. Everyone one should have one Moon pass. Scoring is contact points x number of two letter Grid Sectors (IO, JM, FN, EM ...) worked. SSB to SSB contacts count as 2 points. SSB to CW (or CW to SSB) count as 1 point. The exchange is your Sector (IO, JM, etc.). Only the 2 sector letters need to be sent and copied by EME. The exchange of signal reports and/or 4 character grids is optional and not required. Operation may be by single or multiple operators from one location. No distinction for scoring will be made. Assisted operation is not encouraged. All skeds/operational announcements should be made prior to the start of the contest. Logs should be sent to the 432 and Up EME NL by email to a.katz@ieee.org ASAP after the end of the contests. (All logs for contest awards should have been received within the month following the contest). The top scoring station on each band will receive an attractively framed certificate that will be presented at the next International EME Conference (Venice 2016).

1A0C: Rene (PE1L) sends news that Frank, DL8YHR will be QRV on 432 from the Sovran Military Order Malta (JN61) on the moon pass starting on 31 Dec and ending 1 Jan with a 12 el xpol DF7KF yagi. They will be on the HB9Q reflector to provide last minute info. They recommend that you call them when you CAN copy them and not to stop calling when they are in QSO with someone else. After a QSO they will immediately call the next station decoded but only if he was TXing the period before. Don't hop around, choose a freq to call and stay there for a while. They will not TX 73. They know a QSO is complete by their RX of 73 from you. More info can be found at http://emelogger.com/1a/index.html.

7Q7EME: Rrene (PE1L) hasperrene@gmail.com alerts us to a dxpedition to Malawi (KH77ap) in May by the Atleticoteam. This group since 2009 has traveled yearly to Africa in order to give as many EMEers as possible a new DXCC. In 2015 they travel southwards to Malawi – see http://www.emelogger.com/malawi/index.html. They will be QRV from 9 May till 22 May 22, and have equipment for 432 (more power), 1296 and possibly even higher bands.

A65BR: Oleg a65br@gmx.net is now QRV from the United Arab Emirates on 432. He is using an FT847 and 9WL M2 yagi, and has already QSO'd on JT65B OK1DFC, I1NDP (28DB), OZ4MM (22DB), PA8A (17DB), LZ1DX (28DB) and DL7APV (27DB), and on CW DL9KR. He also heard DK3WG (23DB) but did not complete. His El to the west is limited to > 25-30 degs. Oleg is interested in skeds.

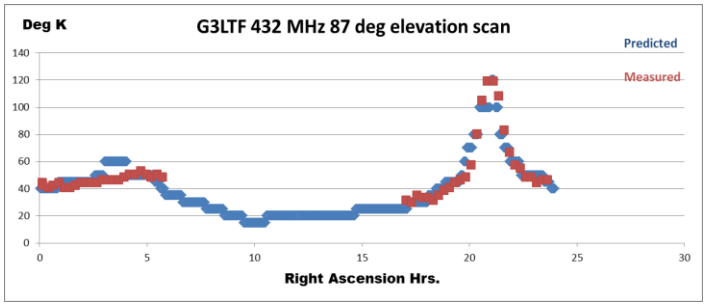
DJ8FR: Juergen juergen@dj8fr.de reports on his ARRL EME Contest CW results on 1296 -- This year I had only very short time to be QRV. During 4 hours in the 1st leg, I worked 21 stations, and during the 2nd leg, I worked 3 stations in less than one hour. I was glad to add 4 initials with S53MM, I5YDI, RN3DKE and RA3EC. I am now at initial #96 after 4 years of activity. I still need Africa (on CW) to complete WAC. Can anyone help? My station is a 5 m mesh dish with 300 W at an RA3AQ feed. For RX I have a HB9BBD preamp and Elecraft K3/P3.

DK3WG: Jurg dk3wg@web.de reports on his recent EME QSOs – On 432, I added I2FHW on CW, and on JT65B KJ7OG, EA1PVC and W5LUA. On my new band, 1296, I worked using JT65C OH2DG for DXCC 30, OK2DL and YL2GD.

DL7APV: Bernd dl7apv@gmx.de did a little better on 70 cm during the ARRL Contest this year than last year – The contest was fun as always. I ended up with 80 QSOs of which 16 were on CW and 64 on JT65B. I worked K2BAG for a new CW initial (#) with a good signal. Condx were not good with deep and fast QSB. Moisture and rain caused a bad SWR in the mornings. The highlight of the contest was working KT1J in VT for WAS #48. I only need HI and MO for WAS. Can anyone help?

EA5DOM: Luis Luis@vigilant.es is now QRV on 1296 EME with a modest system – I am using a 35 el yagi with 50 W for EME, and have worked thus far on 16 March HB9Q (21DB/29DB), 12 April HB9Q (23DB/28DB), 31 May PI9CAM (23DB/24DB), 7 Sept UA3PTW (27DB/30DB), 6 Dec HB9Q (25DB/28DB) and 24 Dec K2UYH (27DB/29DB).

G3LTF: Peter's g3ltf@btinternet.com EME report for Dec follows -- The ARRL contest had a pretty good level of activity on 23 cm with US/NA activity higher than in recent years, and some new stations appearing on CW. On 6 Dec, I worked EA3UM, UA4HTS, N0OY, G4BRK for initial #393, S53MM, G4RGK, SM3JQU, N4PZ, N8CQ #394, PA3CQE, LU1C, VE6TA, W7JM, W5LUA, WA2FGK and K6JEY #395, and in the next pass, JH3EAO, PI9CAM, SV3AAF, KL6M,VK5MC, OK2ULQ, YO2BCT, ON5CS #396, JA4BLC and DK0ZAB. I also heard IK3GHY. Continuing on 23 cm on 7 Dec, I added JA4JLB, JR4AEP and JR4AEP giving a total of 81. On 432 it was a different story and despite spending several hours on the band, I worked only, 6 Dec SV3AAF, SP6JLW,and on 7 Dec K2GAB for initial #458, F6HLC, OK2POI, and JA9BOH giving a total of 18. One of the great things about this contest is working old friends of 40 years or more, like Kimio, JA9BOH, on truly random CW; thanks to all for the excellent QSOs. It's good to see many more of the small stations calling CQ as well as working the big stations; I believe this is due to the much increased use of SDRs. My final claimed score for 5 bands all on CW is 1,306,400. K1JT was the only station I worked on all 5 bands. On 9 Dec I worked on 23 cm VE4MA/W7 in Az with his 1.5 m dish and 250 W with an easy (549) signal. This QSO was #397, but I then discovered that I never counted WA9FWD for some reason and when checking VE4SA for my contest entry realized that he had moved to Manitoba so that brings my 23 cm initials total to 399. On 28 Dec, I worked VE4MA/W7 on 3400 for initial #53. My only disappointment this month was the PZ5UD dxpedition on 13 cm. I came on at 1800 on 1 Dec 1 and worked in 20 minutes on SSB OK1KIR, PA7JB, UA3PTW, HB9Q, ON5TA and PA0BAT. I could copy the "73" tones of PZ5UD easily at about (549~439) depending on their antenna pointing, but it took them 3 hours to work through the queue of about 9-10 JT stations and then they ran out of elevation. Obviously it's the choice of the dxpedition what modes they use, and I accept that. I only observe that if the logger is to be used to manage/co-ordinate JT QSOs anyway (and it was), why not avoid the situation of 5 or 6 stations, several of them with similar ERP, calling simultaneously, all in 2 kHz, and save some time (if CW operation was contemplated and I believed it was). Obviously I didn't bother to look for them on 23 cm although as shown above with VE4MA, I can quite easily work stations with optimized 2 m size dishes. I have included a result from a 432 drift through scan [see below] at 87 deg elevation, or 49 deg dec, (my dish was in the parked position). It makes use of a new facility in the VK3UM EME planner, where you can extract a sky temperature series at any given declination - Thanks Doug.



G4BRK: Neil neil@ignika.com reports on his 23 cm activity during Nov and Dec -- I set up 4 x 55 el yagis in my garden, portable-style, for both weekends. The elevation was controled with satellite jack, VK5DJ controller. I used my usual tropo PA with up to 400 W at the combiner. My Sun noise was ~7.5 dB with an SFI around 130. On CW, I worked in Nov SM4IVE, G4CCH, OE5JFL and I1NDP. I added G3LTF on CW in Dec and also had QRZs from SP6JLW. I also could not get through the pileup for LX1DB. Others heard were K1JT, OK2DL, OK1KIR (all already worked on JT so I didn't call) plus OK1CS and probably a couple I have forgotten. On JT, I gave another 16 contacts the 1st weekend - OK2DL, DL6SH, K1JT, OK1KIR, DF3RU, OK1DFC, HB9Q, SQ7D, RA3AUB, PA3FXB, OK1YK, ON5TA, IK5VLS, RA4A, VA7MM and W6YX, and 10 more the 2nd with VE3KRP, RD3DA, UA3PTW, UA4HTS, IK3COJ, YL2GD, PA3DZL, PI9CM, ES6FX and W3HMS. I even had some replies to CQs! Sorry to any that called unsuccessfully; the yagis presumably have a worse G/T than a dish. My grand total was 31 QSOs, well above what I expected to work with a yagi system. I worked a number of other initials outside the contest, even got one decode from a single yagi station DJ2DY! My total is now at initial #7 on CW and on JT65C {#39}. Best of all I had a great time!

G4BRK 4 x 55 el yagi array

HB9JAW: Michel hb9jaw@bluewin.ch is ready to go 6 cm, and should be QRV this spring. I have a 3.6 m dish, 100 W PA and 0.5 dB NF LNA. 23, 13 and 9 cm are nearly ready and will follow.

HB9Q: Dan dan@hb9q.ch sends news of completing the first DXCC on 1296, although he is still waiting for acknowledgement from the ARRL -- On 12 Sept, we worked 5B/PE1L for DXCC 100! On 27 Sept, we added IS/DJ4TC for DXCC 101. Then on 1 Nov, we worked Z21EME for DXCC 102, and finally on 29 Nov we added PZ5UD for DXCC 103. 64 DXCCs were worked on CW/SSB and 39 on JT65c. The DXCC application was submitted on 12 Oct. Due to the fact that it is the first ever 1296 DXCC and there was no 1296 category so far, the DXCC-board is reviewing my application and hopefully they will add 1296 to the DXCC band list. We accomplished DXCC 100 in 14 years and 4 months. This achievement was only possible with the big help of many dxpeditions. DL3OCH/DF8DX was the first introducing JT 1296 QRP EME dxpeditions. He proved that it is possible to work many stations with just 1 yagi and 100 W. DL1YMK (Michael & Monika), the XX-dxpedition team with their great QRO microwave multiband dxpeditions played an important part. DL2NUD, who now is QRV up to 3.4 GHz with his 1.5 m dish, the Atletico-Team who added 1296 to their standard dxpedition bands, OK1DFC with his friends doing great microwave dxpeditions, DL9MS, DM1CG, DF7KF, ZS6OB, K2UYH, EA3DXU (SK), LA8LF, DJ4TC, EA1DDO, OX2K team were also important contributors. Many thanks guys for your great effort and the incredible fun working you from all those very special places! Our next target on 1296 is WAS, there are still 17 states missing, anyone with 1 yagi and 50 W active from those states. For more info see (http://www.hb9q.ch/hb9q/index.php?option=com_content&view=article&id=46&Itemid=171).

I1NDP: Nando i1ndp.nando@gmail.com reports on his ARRL contest effort – I have not much news besides my participation in the ARRL EME Contest on 23 cm (CW only). There was good activity, thought as usual, not too high from US & Canada. My final score was 448,800 points (102 x 44). Mr. Murphy did not forget me during the contest. I had a failure in a bypass capacitor for the PTT in my PA (shorted). It caused idle current to alway flow in the MOS FETs and act as a good noise generator. My RX had to have been compromised during the last 2 Moon passes. I did add a nice one on 70 cm. On 26 Dec, I QSO'd A65BR for an initial and new DXCC.

JA4BLC: Yoshiro ja4blc@web-sanin.co.jp sends his Dec report -- On 2 Dec, I worked on 24 GHz LX1DB (M/O) for initial #4. In the ARRL Contest using CW on 6/7 Dec, I QSO'd K1JT, N0OY, JH3EAO, W6YX, JA6AHB, VK5MC (dup), VE6TA, SP7DCS, S53MM, DG5CST for an initial (#), F5SE/p (DUP), I1NDP, PA3DZL, HB9Q, SM3AKW, OE5JFL, 9A5AA, OK1DFC, YL2GD, G3LTF, OK2DL, IK3COJ, SM4IVE, VE6TA (DUP) and VK2JDS. My final score was 41 x 22 on 23 cm, 2 x 2 on 13 cm, 8 x 7 on 6 cm, and 2 x 1 on 3 cm. I worked on 12 Dec, on 5760 JA6CZD (559/549) and JA1WQF (549/449), and on 15 Dec

JA6CZD (569/559). [see new on new JA 13 cm frequency sub-band in FINAL at the end of this NL.]

JA4BLC's 24 GHz Cassegrain feed system

K1JT: Joe's (K1JT) k1jt@arrl.net contest group continued operation from 3 locations for the Dec weekend. At K2UYH's QTH, Al was joined by NE2U and K2BMI. Operation there was primarily on 23 cm with less than 3 hours on 70 cm. The remaining time on 432 was from W2PU, which was operated by AG6RG and K2QM. K2BMI also operated at W2PU during the first moonpass. [Joe primarily operated 2 m with AK2F.] We QSO'd on 432, on 6 Dec W7MEM (O/O), K5DOG (20DB/25DB), KJ7OG (19DB/26DB), G4FUF (17DB/O), DL8DAU (17DB/O) and KA1GT (25DB/27DB), and on 7 Dec HB9Q (28DB/O) and W5LUA (10DB/16DB) - all on JT65B for a contest total of 40x28; and on 1296 on 6 Dec IW5BHY (11DB/O) JT, WA2FGK (10DB/O) JT, OZ6OL (559/569) CW, G4RGK (559/569) CW, PA3FXB (14DB/O) JT, PE2TV (22DB/O) JT, UA4HTS (6DB/O) JT, 0130 W5LUA (5DB/O) JT, CT1DMK (579/559) CW, IK3COJ (559/569) CW, N0OY (589/589) CW, N4PZ (579/579) CW, 0308 VE3KRP (17DB/O) JT, LU3ENU (18DB/O) JT, N6OVP (559/559) CW, JH3EAO (559/569) CW, JR4AEP (559/649) DUP CW, VK5MC (559/569) CW, JA4BLC (559/569) CW, and VK2CBD (14DB/O) JT, and on 7 Dec YO2BCT (10DB/O) JT, ES6FX (11DB/O) JT, PA3CQE (10DB/O) JT, DJ5BV (26DB/O) JT, W3HMS (17DB/O) DUP JT, R7CK/6 (13DB/8DB) JT, DF3RU (O/O) JT, PA2DW (O/O) JT, ON5TA (559/569) CW, W7UPF (16DB/O) JT, OK1KIR (579/579) CW, SM4IVE (579/579) CW, OH3LWP (10DB/O) JT, SM2CEW (599/579) CW, PA3DZL (559/559) CW, WA8RJF (559/559) CW, N6OVP (559/559) DUP CW and VK2JDS (559/559) CW for a contest total of 91x43. This was our best ever year on 1296 score wise although we did make more QSOs in 2008. We have some work to do on 13 cm, which was way down from past years. Overall it was an excellent contest and enjoyed by all our team.

K2GAB: John (WB2BYP) storyavenue@hotmail.com informs us that K2GAB is his XYL's (Gloria) call and that she was operating on 70 cm with his assistance during the Dec contest weekend -- It was fun showing up on 432 random CW with an otherwise unfamiliar call; I hope for the other end of the QSO too. Gloria's fingerprints are all over the dish (8.4 m), and she assists, though it is likely me running the CW key. We had some problems with the driver amp (digesting a 3CX800), so many of the contacts were made with relatively low power. We occasionally heard my echoes, but mostly not. I am going to keep the feed in for now to work some of the coming up ATPs. I have no polarity rotation, so the feed is set at 45 degs to my horizon. Thanks DL9KR for trying to hear us through the noise and cross-pol loss.

K3MF: Wayde K3Mf@aol.com in the contest QRV on 70 cm -- During the Nov leg, I worked 32 stations (29 on JT65B and 3 on CW). I did not see much activity on the CW end. I was using a SDR receiver to monitor the band. I worked several new small stations, which was nice. In the second leg, I worked 5 more stations (2 on CW and 3 on JT65B) for a total of 37 stations. I was also QRV as W1AW/3 on 432 between 29 and 30 Dec. I worked a total of 22 stations using the centennial call. Conditions were excellent with my echoes reported at (5DB) by NC1I. The highlight of the weekend was working W7MEM on JT65B, and then switching to CW for a (429/529) QSO. This was the first time we have been able to work on CW. My station is 8 x 25 el FO yagis and 1.2 kW.

K4EME: Cowles candrus@mgwnet.com report on his contest results on 432 -- I did very well for me. In the Nov leg, I made 30 QSOs, however the weather was not in my favor during the Dec leg with high winds, cloud cover and heavy rain. I still managed to work 5 new stations giving me a total of 35 for the contest. I discovered around 1:30 AM local when the clouds broke for a minute that my vertical array was off the Moon by several degrees causing me not to hear/decode the real weak stations on MAP-65 from about 0000 to 0630 Saturday morning. The heavy rain also caused my SWR to be much higher than normal. I back my power down a little, to about 400 to 500 W, so not to damage anything and risk being off the air during the contest. I am sure this array misalignment and lower power output cost me a few contacts, but that's life. The good news is that I had no real equipment issues. Except for the array alignment due to high winds, everything went as well as to be expected with the weather conditions. I will say that my echoes were much louder on the Wednesday night before the contest; however I had perceivable echoes almost the whole time during the contest.

K4MSG: Paul Phbjr@aol.com reports that he was very pleased to come in 9th in the 70 cm digital portion of the DUBUS EME Contest -- I did the ERP estimate by using Innov's stated gains for 70 cm antennas with different numbers of elements on the assumption that they wouldn't be too far from the actual gain of any antenna design of that size. Then I added 2.7 dB for two, and 5.4 dB for 4, and calculated the ERP based on the final gain factor and the stated power. My ERP came in next to smallest of the lowest 6 (all with 1 or 2 antennas except for the 4 antennas with 100 W), the other 8 being 4 antennas or a dish and lots more power. It's a swag, but probably not that far off. My modus operandi during the contest was to camp on a frequency and call CQ, and let the other stations (many of whom use SDR and MAP-65) find me. It worked pretty well, but my next purchase (sometime in 2015) will be a Funcube Pro Plus, so that I can start "scanning the band" for stations like the "Big Guys" are doing. I would also prefer to have a 400 W or so amplifier, which even if used from inside, would give me about a 2 dB increase in power at the antenna (after cable losses) vis a vis the 170 W, I have now, and I wouldn't have to carry an amplifier/power supply box back and forth to the antenna every time I operated 432 EME. It would also mean a new switchable preamp at the antenna (currently the preamp is part of the amplifier unit carried outside), but that's the price of a bit more convenience. There have been a few more stations showing up on 432, but activity is still low compared to 144, which is becoming loaded with 1- and 2-antenna stations these days. I'm anxious to complete my immediate 432 goals (VUCC and WAC) so that I can migrate to 1296, which is why I am resisting spending money on a bigger amp, etc. for 432. I'm only 3 grids shy of the 50 needed for VUCC-432, and one continent (Africa) away from WAC.

K6JEY: Doug drzarkof56@yahoo.com writes on his operation during the ARRL EME Contest -- On 5 Dec conditions were as good as the month previous. We heard many very strong signals and worked both CW and JT modes. We had eight or so people show up to operate and help. Almost all of them are in the process of setting up their own EME stations. It was a good chance for them to actually operate and to see an operating station. Often we "intellectually" over engineer our stations when we really need to just get on the air and then improve what we have. It was also a good chance for them to network. Three are interested in 2.4 GHz portable stations and between them have all the gear necessary! It was a very successful night and we hope to be on again in the spring.

KA1GT: Bob ka1gt@hotmail.com has moved to Main (FN54uj) and was QRV again on 432 EME during the ARRL Contest in Dec – I have built a new preamp (PGA 103+) and a new antenna (M2 4329WL design), which has mechanical polarization rotation. TX is around 125 W (solid state) at the feed. (I don't have a power supply the old K2RIW amp that I used for EME back in the early 1980s). I have a pretty early Moon window for a US station, maybe the earliest of any since I'm on the extreme eastern border of the Eastern Time zone. I also have a clear shot across water at the rising Moon, so should be able to take advantage of any ground gain.

KT1J: Henry kt1j@madriver.com has put VT back on 432 EME with a modest system --The setup here is a 19 el yagi at 40' on a tubular crank-up fold-over mast in back of the house. I'm located in the Lake Champlain Valley with a clear view in all directions, but a horizon of about 5 degs East (Green Mountains) and perhaps a bit more toward the West (Adirondacks). I can elevate the antenna to 90 degs. I'm using a K3, DEMI 432 xvtr (both w/o frequency lock). The LNA is a mast-

mounted SSB SP7000. The PA is a modified Acrodyne, which I crank down 50% to 400 W for JT65B. The equipment is temporarily removed from our VHF/UHF/uW contest bus, which is parked in my back yard about 300' away. No heat in the winter! I got on at the request of OK1DFC, who was looking for VT for WAS. When it became clear I could work the larger stations with my minimal set up, I thought it would be a good way to complete 432 VUCC as well. (It worked!) It was also nice to work my friends at PI9CAM. I am actually a member of CAMRAS. The TS2000 transceiver in use at the Dwingeloo operation used to belong to me, hi. I'm beginning enjoy EME and 432 might be a good starting point. Two things are clear: I need more antenna gain and ideally H and V pol. Frequency lock of my IF rig and transverter is needed too. I like Joe Taylor's ideas on a small 432 EME station that he recently wrote. I have to be careful not to get into big construction projects until I have some of my current small ones finished! Going on 80, I'm now picking and choosing my projects. So for the next few weeks 432 EME will be set aside so I can complete the modification of two pairs of Harris Platinum amps for 6 m and two each CW transmitter-beacons and receive converters for 241 GHz... After that I'll get on locally with a 2 m EMEer, W1ICW and practice JT65B EME operation.

KL6WU: Ed kl7uw@acsalaska.net writes that he is final QRV on 1296 – I missed the contest but plan to be on for 3/4 Jan, which appears to be a good EME weekend. I current have 85 W. The problem is drivce level to my SSPA. For 150 W, I need 10 W, but only have 5.2 W at the dish. I am begining construction of a 20 W driver amp that should drive my SSPA to 300 W.

N4GJV: Ron's rmb1991@live.com 432 report -- I was QRV for several hours during the Dec ARRL EME contest weekend on CW, and contacted DL9KR, PI9CAM, DL7APV and SM2CEW. Stations heard include PA2V, WA6PY (CWNR), plus most of the stations that were contacted in Nov. Unfortunately, I missed the VK/JA activity entirely. On 13 Dec, I contacted DL9KR, who had a humongous signal! Stations heard include PA2V, and WA6PY (CWNR), and on 14 Dec I added PI9CAM, DL7APV, and SM2CEW.

N4PZ: Steve n4pz@live.com writes -- Activity was furious on 23 cm during the Dec contest weekend, but slowed down the last pass. Pile ups were common on my CQs. After 0400 no signals were heard. I worked only 4 NA stations. Where was everyone? All stations were Q5 and I had no unidentified calls… Condx seemed excellent with very loud signals even from the smaller stations. I worked on 100% CW! All were answers to my CQ except 2 or 3. Worked were I5MPK, G3LTF, OE5JFL, I1NDP, G4CCH, F5SE/p, DL3EBT, SP7DCS, W6YX, DF3RU, OK1DFC, K1JT, SM3AKW, S53MM, SP6ITF, CT1DMK, KL6M, 9A5AA, W5LUA, I5YDE, RA3EC, WA6PY and OK1CS for a total of 23. My 1296 system is a 4.9 m dish on a simple polar mount a 1000 W PA. I now plan to be active on 1296 after a 6 month absence. I am excited again about 1296, and coming soon 13 cm. I have all I need for 2304 - all of K1RQG stuff and one of those 180 W SSPAs from K5GW. I do need to get up to speed on 13 cm by having an Elmer coach me a bit.

N6OVP: David n6ovp@pacbell.net is QRV on 23 cm, but has a very limited Moon window to the east -- I was not on during the contest for long as my window was so late (2:30 am to 3:30 am my local time). I did work K1JT, W6YX and NC1I. I almost got JA4LJB. I heard him OK and called but no answer. Where my dish is now, I can only see the Moon from 190 degs Az to 240 ~ 250 degs. I need 35 degs el and up. If you look at QRZ.COM you will see why my dish is so limited. I hope to soon move it to where it can see 90 degs on.

NC1I: Frank frank@NC1I.COM has been ery active off the Moon -- After a fun and successful first weekend of the contest in Nov on 23 cm, I elected to stick with 23 cm exclusively for the second weekend. Unfortunately the weather did not cooperate in Dec. Just 45 minutes into the first night, freezing rain forced me to shut down and stow the dish. Only 3 new stations were added to the log before the forced shut down. The temperature finally climbed to above freezing just a couple of hours before moonrise on the second night. Even though the ice was gone, we still experienced extremely heavy rain for my first 5 hours of moon time and conditions were far from optimal. Finally the heavy rain stopped, but it was not until the Moon had nearly set in EU, so only 9 additional new stations were worked. This brought my total to 77x40 over the two weekends. All QSO's were on random CW. After working 65 stations the first weekend, I was hoping to add 15 or more during the second weekend to reach a total of 80. If the weather had cooperated, I believe I could have easily reached this goal. The following stations were worked, on 6 Dec at 0005 NO0Y (dupe), 0011 SM3JQU, 0018 PA3FXB, 0026 S53MM (dupe) and at 0032 UA4HTS, and on 7 Dec at 0004 N8CQ, 0017 ON5GS (dupe), 0047 LX1DB, 0054 PI9CAM, 0103 PA3CQE, 0217 VE6TA, 0224 W4OP (dupe), 0250 VE4MA(/K7), 0959 N6OVT (dupe), 1010 JR4AEP, 1017 JA4LJB, and at 1110 VK2JDS. The highlight of the weekend was working VE4MA on CW with his 1.5 m dish. About 2-hours after working Barry, I heard him calling CQ with an outstanding signal (several dB stronger than when I worked him). I also worked in Dec starting on 70 cm, on 3 Dec using JT65B at 2245 PZ5UD (16DB/12DB), 2257 F6APE (12DB/11DB) , 2304 YL2OK (13DB/13DB), 2312 VA3ELE (18DB/12DB) and 2330 G6HKS (15DB/12DB), on 4 Dec at 0114 K4MSG (18DB/23DB), 0144 KL7OG (13DB/19DB), 0204 W5LUA (8DB/7DB), 2253 K3MF (8DB/10DB), 2302 LU8ENU (19DB/16DB) and 2342 LU7HI (10DB/12DB), on 5 Dec at 0152 KD5CHG (15DB/12DB) and 0235 K5DOG (8DB/O) and on 8 Dec at 0327 KD5CHG (9DB/7DB); and on 23 cm on 13 Dec UA4HTS (9DB/5DB). On 12 Dec, we measured 17.1 dB of Sun noise to cold sky with an SF of 148. I think that is very close to what we should be getting. While we seem to be hearing well on CW, I'm not certain that we are copying signals on JT as well as we should. I have watched many smaller stations work the dxpeditions while I cannot see or decode the dxpedition station. Over the next couple of months we will try and review our WSJT settings and check gain levels going in to see if we can improve our WSJT sensitivity. We experienced several ice storms in early Dec. The first storm forced me to essentially lose the first night of the EME contest. Another ice storm hit us just a few days later. In this second ice storm Bob (W1QA) slipped on the ice and broke his leg while getting out of his car. Bob is in a large cast and will be returning to see the doctor on 24 Dec for an update on his condition. I have compared my schedule with DL7APV's 2015 Lunar Calendar and discovered that I have major schedule conflicts with every positive declination weekend in Feb, March, April and May. I expect to be active weekdays but weekend activity will be extremely limited at best. Perhaps once W1QA recovers from his broken leg, he will be able to get here to activate the station during some of those weekends that I am unavailable. At the time of this report (21 Dec), I have antenna problems on both 70 cm and 23 cm. My polarity on 70 cm has not worked for the last two months. I have some help scheduled to be here the day after Christmas, but if we end up removing the prop-pitch for servicing, it could be many months before it is repaired. Obviously the weather in New England is not very cooperative this time a year and as noted above I have a very busy schedule over the next 4-5 months, so I am just not sure when it will get fixed. Also, my azimuth on 23 cm has stopped working. This happened twice previously, but it mysteriously started working again a day or two later. This time it has been over a week since I have been able to move it. I am almost certain it is the result of a faulty component in the Alpha-Spid MD-01 controller. I am expecting delivery of a new MD-01 in a few days, so hopefully this resolves that problem and will allow me to be active again in early Jan. I should point out that I have been very pleased overall with the performance of the Alpha-Spid rotor. It easily handles my 4.5 meter dish and tracks the moon precisely to 1/10 deg in both AZ & EL.

OH2PO: Matti mattioh2po@gmail.com send news on their 432 ARRL Contest effort -- The old team OH6DD, OH2HYT, OH2BGR and OH2PO were active again with our 16 m dish at OH2PO. We operated both on CW and JT. Sadly the CW activity was very low indeed. We made only 18 QSOs on CW in spite of active calling. In total 72 stations were worked. So JT activity compensated for some of the missing CW activity. Still, in 1998 we had 138 CW QSOs! We had to stop working few hours before the end of the contest due to very heavy rain and near gale-force winds.

OK1DFC: Zdenek ok1dfc@seznam.cz writes – I worked on 27 Dec KT1J in VT for my 37 state toward WAS on 432 and am actively looking for the others. In the contest, I concentrate on 1296 and ended with a score of 124x46 for 570,400 points. However, OK2DL has 30,000 points more and made141 QSOs.

OK1KIR: Vlada and Tonda vladimir.masek@volny.cz send their latest news -- In the last part of ARRL contest we were on 1296 and on CW added an initial with IZ2DJP (559/579) for #372. Our JT65C operation brought 5 initials with CS7AFN (14DB/O), R7CK/6 (5DB/O), OH3LWP 18DB/O), RA9FMT (25DB/O) and RW0LDF (17DB/O) to bring us to digital initial {#211} and PN field and our 37th zone for WAZ. On 70 cm, on 27 Dec we decoded A65BR's signal (29DB) once with terrible interference. We also copied KT1J (20DB) at vertical, and CWNR many times while rotating polarization ±45 degs and horizontal with full power of 1.5 kW. It was disappointing, but we had Happy New Year (last 2014

day, first day of 2015 at VK7MO). On 31 Dec at 1323, we worked on 24 GHz with JT4F VK7MO (16DB/15DB) and copied at 1400 G3WDG-VK7MO's QSO to established new world distance record (IO92rg to QE36wv)! Later on 70 cm we were the third station to work at 1537 1A0C (7DB/O). This was a really great to end 2014!

ON5GS: Dirk <on5gs@telenet.be> in (JO21SC) is new to 23 cm EME and had his first QSO in May – I had my best EME weekend ever during the recent contest. Although my CW skills are relatively poor, I decided to do a CW only contest on 23 cm until my old second-hand FT736 broke down just after working SM4IVE and my power was gone. My station is 3 m dish with L/R circular septum feed, a 200 W PA and DDK LNA. The dish moves automatically with a VK5DJ tracking system and 2 HH-12 encoders. HDSDR proved to be a VERY useful tool while searching for stations. I used an old transverter (1296 to 146) and a 20 Eu RTL dongle for reception. In my log are I1NDP, G4CCH, OE5JFL, OK1DFC, OK2DL, SP6JLW, G3LTF, DL6SH, OZ6OL, DL3EBJ, OK1CS, SP6ITF, F5SE/p, PA3DZL, PA3CQE, LX1DB, NC1I and SM4IVE. I especially cut one big tree, which blocked my east view for JA, but worked only one station outside of EU, NC1I. I5MPK kept on calling me ON6OU; I was very sorry to miss this QSO. I also CWNR S53MM for a long time. Heard were SV3AAF and K1JT. My best QSO was PA3CQE; 3 m to 3 m dishes, 40 km distance (JO21-JO21) QSO via EME!

ON5GS's 3 m dish with 1296 feed

ON5TA: Eric eric.vanoffelen@skynet.be enjoyed the nice activity on 23 cm during the ARRL contest – I found there was a good mix of CW, JT and SSB during the contest. Many stations were contacted on both CW and JT modes. After cleaning all the DUPs, I ended with a total of 86x33. I was also very pleased to QSO the PZ5EME dxpedition on 13 and 23 cm for a new DXCC and firsts from ON. Their 1.5 m dish was producing a very nice signal on both bands! My station is 3.6 m mesh dish with 200 W at feed on 1296.

OZ1LPR: Peter OZ1LPR@mail.dk writes - I hope 2015 will bring many QSOs. At least I will be able to burn holes in the Moon in 2015. I have gotten a 2.4 m offset dish. My old one was 1.8 m. My PA is also going up from 40 W to 700 W. Well at least 250-300 W at the feed is my aim.

PA2DW: Dick qtc@kpnmail.nl reports on his Dec contest activity -- I was active in the ARRL contest. First from Dwingeloo as PI9CAM, hitting the brass. I tested my trusted Marconi 365D and – thanks to the help of SM4IVE – a military version of the Swedish key. Both are superb keys. The Swedish key is a real delight to key on and off, due to its light touch. With the Marconi 365D, I can go faster, but not the 40 wpm, I used to be able to do… As SM3AKW pointed in our QSO, we are getting old, hi! I left Dwingeloo at 0100; leaving PA3FXB behind to clear all the equipment. I arrived home after a 200 km drive, but still had some energy left to tune the band. As my dish still had a clear view of the moon, I could not resist making some contacts. I worked SP6JLW after they had great difficulties picking out my call, OE5JFL, K1JT, OK2DL and OK2ULQ for an initial (#) and W6YX with super signals. At about 0430 my XYL (*she who has to be obeyed*) discovered I was still up and ordered me to go to sleep.

PA2V: Peter's peter@pa2v.com 70 cm EME report -- I think conditions were not very good in Dec. I suffered much from pol misalignment/ rotation problems. It never seemed in my favor. I wonder if other horiz pol only stations had the same. LU8ENU is a good example. He was at (22DB), but did not copy me. The next time he saw me, I did not even could get traces. On the positive side, I was able to work the PZ expedition, which proved that my system is still working. I QSO'd 30 Nov at 1340 OK1DFC (O/23DB) and 1919 OZ4MM (439/429) CW for mixed initial #55*, on 2 Dec at 1922 W2PU (25DB/23DB) and 2100 PZ5UD (22DB/28DB) #56*, on 4 Dec at 1807 UA3PTW (17DB/9DB), and during the contest on 6 Dec at 0210 I2FHW (439/O) #57*, 0357 KJ7OG (28DB/22DB) #58*, 0439 DF3RU (19DB/O), 1834 HB9Q (14DB/15DB), 1907 DL7APV (17DB/13DB), 2045 OH2PO (18DB/7DB), 1833 VK4CDI (27DB/20DB) and 1829 YL2OK (29DB/26DB) #60*; all QSOs were on JT65B unless noted as CW.

PA8A: Dick (PA2DW) sent out an announcement of a special operation of the Dwingeloo dish (PI9CAM) using the call of PA8A during the afternoon of 27 Dec. Operation will be primarily SSB on 432.030 and 1296.030. Some CW is also possible. This is an extraordinary event in honor of Peter's (PA8W) contributions in the formation and early years of CAMRAS. It will be a good opportunity for small stations to make an SSB EME QSO. [I am sorry for the lateness of this news. I hope to have a report on this event for the next NL.]

SP7DCS: Chris sp7dcs@wp.pl reports on his second weekend (Dec) of EME contest CW activity – My plan was to concentrate on 23 cm. I added 29 (including 3 DUP) on 23 cm. Unfortunately, I had no time to repair 70 cm rig and thus made no QSOs there. A nice surprise was to QSO SP4MPB. He used a 3 m dish with no elevation and linear pol. I was at only 7 degs el when we QSO'd. Another surprise was to work SM2CEW at only 1.5 degs el. I was hoping to work stations I missed first weekend, but many of them were not on. I heard a lot more, but could not get their attention with my CQs. It was a pity that the smaller stations did not call more CQs. I feel that separate weekends for CW and JT would be better. My score was a bit disappointing with less bands QRV and less overall QSOs than last years, but it was still great fun for me to be on and meet old and new friends. QSO'd on 1296 were on 8 Nov OK1DFC, 9A5AA, KL6M, OK2ULQ, SP6JLW, UA3PTW, IK3COJ, JA1WQF, DF3RU, SM4IVE, SP6ITF, DL3EBJ, I5MPK, IW2FZR, RN3DKE or an initial (#), DL4DTU, S53MM, G4CCH, PA0BAT, HB9Q, I1NDP, SM3AKW, OZ6OL, RA3EC, OE5JFL, OK1CS, G3LTF, CT1DMK, DJ8FR, I5YDI, SP3XBO, PA3FXB, HB9BCD, F5SE/p and ON5TA, on 9 Nov EA3UM, IK5VLS, NC1I, ON5GS, K9KFR (#), W4OP, WA9FWD, OK1CA, DG5CST, K1JT, W6YX, K1DS (#), PI9CM (#), DL6SH, WA6PY, VE4SA (#), OZ4MM and VA7MM, OK2DL, JA6AHB, IZ2DJP, JA8ERE and JR4AEP, on 6 Dec G4RGK, N0OY, N4PZ, UA4HTS, VE6BGT (#), W7JM, W5LUA, K6JEY (#), VE6TA, SM2CEW, JH3EAO, PI9CAM, SV3AAF, VK5MC, JA4BLC, ES5PC, YL2GD, PA3DZL, DK0ZAB (#), LX1DB, OK1KIR and N8CQ, and on 7 Dec VE3KRP, ON5TA (DUP), W1AIM, SP4MPB (#), RA3AUB, ON5GS (DUP) and JR4AEP (DUP) for a contest total 85. Heard were VK4CDI, PA3CQE, OK1YK, SM3JQU, JA8IAD, IK6EIW, IK5QLO and R7CK/6.

SQ7DQX: Matt's (SQ7D/SN7D) sq7dqx@poczta.onet.pl ARRL contest report follows -- I missed microwave part of the EME contest because of a conflict with other contest activities, but was QRV for both the Nov and Dec weekends on 1296. I operated only JT65C using a 3.7 m dish and 300 PE1RKI SSPA. My OK1DFC feed with choke ring was perfectly aligned (thanks to 10 GHz module tests), and I was very pleased to be able to work single yagi stations such as DJ2DY. I ended with 52 QSOs in log, 20 DXCC and 5 NA multipliers.

SV3AAF: Petros sv3aaf@yahoo.com sends news on his contest activity -- During ARRL EME Contest (low bands part), I was QRV only for a few hours, and mostly during my eastern window. On 1296 in Dec, the libration was destructive for CW. At the time that I was on, I measured

>10 dB change in 130 msec. Despite this handicap, I worked on CW OE5JFL, I5MPK, SP6ITF, F5SE/p, OK1CS, W4OP, DL3EBJ, I1NDP, NC1I, RA3EC, G3LTF, OK2DL, UA3PTW, SP7DCS, S53MM, 9A5AA, OZ6OL, YL2GD, UA4HTS, G4CCH, SP6JLW, OK1DFC, ES5PC, CT1DMK, SM2CEW, JA4LJB, DF3RU, IK3COJ, JA6AHB, PA3FXB, SM3AKW, ON5TA and RA3AUB for a total of 32 QSOs. On 432, the Faraday was moderate and not bad considering the current solar activity. I assume it was worse at high latitudes. I worked on CW only OK1CA, OH2PO and G3LTF. CWNR were I2FHW and SP6JLW.

VE3KRP: Eddie eddie@tbaytel.net contributes his Dec EME activity -- I was active for the second 23 cm part of the contest and had a great time. I worked 19 JT stations, which gave 4 initials. On the CW side of things, I worked 6 stations, which resulted in 1 initial. Again I missed the Asian window, this time it was my fault as I had slept right through it. I found that during this round that I mostly CQ'd and that seemed to work a lot better than trying to chase stations in the QRM with my relatively small station. It was also nice to work some folks that I haven't heard on the bands for a bit. After the contest on 28 Dec, I added QSOs on JT with PA3FXB, I1NDP, W3HMS, LU8ENU, IK2MMB for an initial (#) and DL6SH.

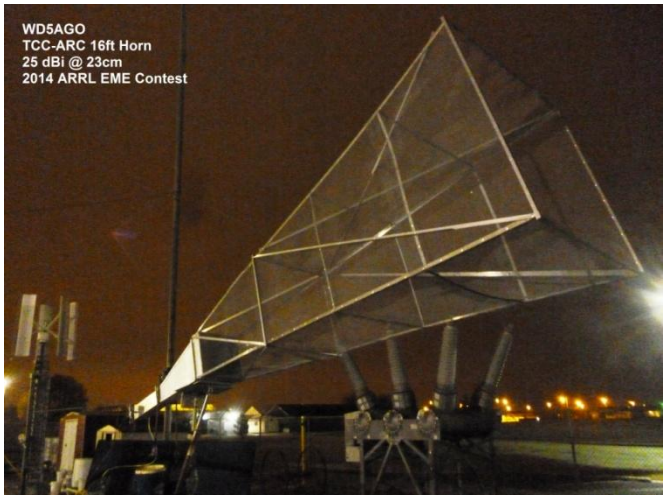
VE4MA/W7: Barry ve4ma@shaw.ca operated from his AZ QTH during Dec -- After the Nov ARRL contest weekend, I completed 23 cm CW QSOs with KL6M and VE6TA. I was able to increase my 23 cm power from 170 to 275 W in the shack. On 6 Dec, I was having difficulty copying signals, I did copy K1JT and worked JA6AHB with a 11 dB difference in JT signal reports! It turned out that my preamp was not acting right. It had an open RX relay contact! On 7 Dec on CW, I worked NC1I on first call (559/449), WA6PY, F5SE/p, G4CCH and SP6OPN, and on random JT W6YX and JA6AHB. I got many QRZs from SP6JLW. I had a total of 21 contest QSOs with 8 on CW. Outside the contest I worked on JT VK4CDI and JA1WQF, and on 9 Dec OK1DFC (569/549) on CW and (12DB/10DB) on JT and G3LTF (559/ 549). I now up to mixed initial #37* and initial #21 on CW. I reconfigured my 1.5 m offset dish for 3400 and see 11.8 dB of Sun noise. Now I know my 5.7 RX must be really sick! I retuned the TWT for 3.4 and have 125 W in the shack with ~8 m of 7/8 in foam coax. On 16 Dec, I worked W5LUA for my first AZ 3400 QSO. Al's signal was 10-12 dB/N with a lot of libration due to near zenith conditions. I am trying to work as many 3.4 stations as possible as I will be leaving to go back to VE4 on about 20 Jan, and have since added G3LTF #2, K2UYH #3 and PA0BAT (0/0) signals ~10 dB peak here - very nice 10 minute QSO.

W1AIM: Paul (W1GHZ) w1ghz.arrl@gmail.com sends info on W1AIM EME results on 1296 in the contest – They worked on 9 Nov at 0301 I1NDP, 0321 OE5JFL, 0332 G4CCH, 0342 SP6JLW, 0359 OK1CA, 0420 NC1I, 0430 OK2DL, 0437 F5SE/p, 0510 SM4IVE, 0528 OZ4MM and 0614 G3LTF, on 6 Dec at 0316 OK1DFC, 0406 OK1KIR, 0431 WA9FWD, 0455 W6YX, 0502 OK1CS, 0514 VE6TA and 0533 WA6PY, on 7 Dec at 0253 W4OP, 0300 I5MPK, 0342 DL3EBJ, 0420 SP7DCS, 0435 SP6IDF and 0551 CT1DMK for a total of 24 QSOs. The operators were W1AIM and W1GHZ. The stations was a 4.9 m dish with VE4MA circular feed, Klitzing 150 W SSPA, AD6IW preamp, Kuhne 1296H xverter, FT-817 as IF with Funcube Dongle panadapter.

W3HMS: John's w3hms@aol.com fall 23 cm contest report – I was very happy to make 31 QSOs with one DUP (K1JT, HI!), thus we had 30 QSOs with 8 multipliers for 54,000 points. This was my best showing by 4 over 2013. Seven stations were worked on CW and were G4CCH, G3LTF, I1NDP, OK1CA, W4OP, OE5JFL and F5SE. On JT65C we worked 23, PA3FXB, OK2DL, OK1YX, IK5VLS, RN3DKE, VE3KRP, OK1KIR, DL6SH, K1JT, RA3AUB, HB9Q, YL2GD, PE1CHQ, WA2FGK, UA4HTS, IK3COJ, OK1DFC, W5LUA, YL3AEV, IW5BY, ON5TA, VA7MM, and G4BRK. My station was a 3 m, 450 W PA, 0.19 NF LNA and short feed lines.

WA8RJF: Tony's temanuele@ebulent.com activity report -- I was QRV for the ARRL EME Microwave weekend in Oct and started the contest on 13 cm. I worked HB9Q and OK1CA the first pass. I heard SP6OPN, ES5PC, OK1KKD, G3LTF and VE6TA before I experienced a preamp failure – my first in about 8 years of EME operation. Activity seemed to be down on 13 cm from previous years and my guess is with so many stations now capable for multiple microwave bands activity was elsewhere. Two weekends devoted to Microwave EME would certainly help. I have been struggling with an RX problem on 9 cm for some time and since the weather was good (my EME operation is limited to fair weather only), I decided to reconfigure for 9 cm on Saturday. I found myself dozing on and off while listening on 3400.100 or so and just before 0400 I thought I heard a CW signal. The signal was visible on the panadapter, but by the time I was fully awake, peaked on the Moon (I manually track with camera), I could only pick out two characters before the signal disappeared. What are the odds that the dish would happen to be on the Moon and I would be on the same frequency, given Doppler, etc. as the random station calling CQ? I waited a full hour before I saw or heard another signal on the band. Promptly at 0500 on the same frequency SP6OPN appeared calling CQ. Later I heard HB9Q – very loud, OK1CA and G3LTF both with good signals. I had thought about taking out the 90 W amp to the dish and setting up to TX, but decided it was inviting trouble being very late/early and very dark. I am looking forward to more 9cm activity in 2015. I was QRV on 23 cm during the ARRL contest and on the first weekend worked G3LTF, OE5JFL, NC1I for an initial (#), OK1CA, SM4IVE, OZ4MM and OK2DL. Special thanks to Frank for not giving up as I called him for well over 30 min before we worked. Curious as to why some of the usual suspects had trouble or did not copy me a post contest system check revealed an intermittent TX problem resulting in a bit over a 3 dB drop in power. Frank don't worry – there is nothing wrong with your receiver and in fact you hear very well as when the power drops only about 90 watts was making it to the feed of my 3 m dish. The second weekend I added W6YX and K1JT.

WD5AGO: Tommy wd5ago@hotmail.com operated the Dec contest weekend on 1296 with a 16' long horn -- Now that the weekend is done for us here in OK, I will report on our set-up. First of all, there was no visible moon the whole time. It rained all of 1st day's Moon pass. Students helped haul out the newly built 16' long horn, (don't get too excited it is just a 5' aperture, so the calculated gain is just 25 dBi). There was no testing, no counter weights, no AZ/EL indicators, and unfortunately no visible Moon. On the first day our group managed to find the Moon on I1NDP's signal and called him for about an hour with just QRZ's heard. We heard others, but figured his signal was the best opportunity. We shut down after 2 hours. We did not want to, I but decided it would be better to try again on Saturday. On the second day, I basically soloed as many of students had to study for exams. I found some 40 lb buckets for counter weights and added 100 lbs, which allowed me to elevate and move AZ without having to move the ladder. Next, I fixed the read outs; a carpenter's angle gage worked fine for EL, and an old HAM IV rotor worked for AZ (used its readout). I did some CS/G testing and found the horn to be a little under the weather at 6.5 dB. It should be about 9 to 10 dB. I found some of the mesh flexing, which caused about a 1.5" ripple in the sides. There was no time to fix this problem – will save it for another day. I then focused on making contacts, and heard about a dozen stations. PI9 was the loudest, but I could not get through with the QRM, and decided to come back later. Up 3 kHz was the I1 again. I called, and on the 4th try I1NDP came back (559)! I went back to PI9CAM, but they had left the building. I called NC1I for about 30 min with only QRZs, W6YX, LX1DB; all no luck. Then up the band was a new one, OE5JFL. I called once and received a (559) in reply. The SDR-IQ had about 7 signals that I could identify; the others were just too weak. As I could not steer the horn past 50 EL and 120 AZ, so after about 3 hours, we were done at about 0400. The system was a *wounded* HB 16' x 5' square horn with CP, 300 W PA, 0.19 dB NF HB LNA, DEMI Trans-IC706, SDR-IQ for research and testing CS/G.



WD5AGO's 16' long 5' x 5' aperture horn for 1296

K2UYH: I alkatz@tcnj.edu besides having a great time operating the ARRL contest in the beginning of Dec - see K1JT's report, QSO'd on 24 Dec on 1296 at 1655 EA5DOM (29DB/27DB) JT65C for mixed #487* and at 1710 EA3HMJ (24DB/27DB) JT65C. I used my linear feed for both QSOs. I was on 432 and worked on 27 Dec at 2011 UT6UG (20DB/13DB) JT65B, and 28 Dec at 1635 F6HZL (559/559) CW for initial #733 and 1758 DL6KAI (449/O) CW #734. I then switched to 3400 and QSO'd at 2210 G3LTF (559/559) and 2230 VE4MA/7 (O/O) in AZ for initial #35. [I was also happy to QSO 2 new 432 DXCC stations on New Year's Eve and New Year's Day while trying to finish the NL. I'll report on these next month.]

NETNEWS: **UA3PTW** worked the PZ5EME dxpedition on13 cm using JT65C [TNX info DK3WG]. **RN4AT** QSO'd on 1296 using JT65C DL6SH, YO3DDZ and possibly others [TNX info DK3WG]. **DU3BC** expects to be QRV on 1296 in 2015 with a dish and possibly 300 W. **PI9CM** was operated by the DX-Group team of PA2CHR, PE1LWT and PA3FPQ in the ARRL EME contest during the Nov and Dec weekends on 144, 432 and 1296. **RN3DKE** is reported to be the same as RD3DA. **WA3LBI** is now QRV on 3 cm with a 2.4 m dish, RKI feed, Siemens TWTA and Kuhne LNA and transverter. Contact Jim for skeds at wa3lbi@icloud.com. **WA3QXP** reports that 1296 is on the horizon from Delaware. His 12' dish is assembled, mount is in the garage, cable is here and the pier is poured. He is just waiting for warmer WX. Contact Paul wa3qpx@atlanticbb.net for skeds.

FOR SALE: **PA0PLY** in conjunction with DU3BC is offering 3 cm LNAs with NF 0.65 dB and gain of 27 dB (WR90 in to SMA) for EU185. Send email with quantity, details including postal address to info@pa0ply.nl. **K6JEY** has a Henry 3004A 432 2 kW PA for sale with the book and two spare used tubes (8938s). It is in a 3' rack with wheels. Low hours and operates to spec. Doug is asking $2500. He also has relays and preamps available, and a very nice Rohde Schwarz/Polarad model 309 synthesized signal generator, 10-18 GHz for $500. He prefers picked up in Long Beach, Ca. Contact Doug at drzarkof56@yahoo.com or tel 562-810-3989.

N2MO HISTORIC OPEN HOUSE: The Ocean-Monmouth Amateur Radio Club would like to invite you to an informal open house for radio amateurs at the N2MO Station at InfoAge on 10 Jan starting at 11:00 am to 3:00 pm (local time). The N2MO Station occupies a site rich in history: On the morning of 10 Jan, 1946, an experiment was conducted by Lt. Col. John DeWitt (W4ERI), Edwin King Stodola (W2AXO). F. Slacker (W2DMD), Herbert Kaufman (W2OQU) and Jacob Mofensen. A series of radio signals were transmitted, and in each case, the echo was picked up in 2.5 seconds, the time it takes light to travel to the moon and back. We know this experiment as Project Diana. In 1959, the US Army Signal Research and Development Laboratory deployed the TLM-18 telemetry antenna. This 18 m dish was used as a ground station supporting the TIROS I and II satellites. The TLM-18 was used by the US Army until the site was decommissioned in the mid 1970's. InfoAge, OMARC and our academic partner, Princeton University are restoring the 60' TLM-18 Telemetry antenna system to use for radio astronomy and EME. The project team has restored power to the TLM-18, rebuilt the drive system and deployed computer controls. Work continues on deployment of upgraded feed lines, new feed horns and SDR/digital receivers - see on the web at http://www.n2mo.org. Please RSVP to diana@n2mo.org.

DUBUS 70 CM EME DIGITAL CHAMPIONSHIP RESULTS (16/17 AUG): Joe (CT1HZE/DL8HCZ) writes -- Congratulations to UA3PTW for winning the 2014 70 cm Championship and thanks to all who sent an entry. This was the first ever 70 cm event with over 40 stations active, but just 14 sending an entry. So, do you think that we should continue this event again in 2015? Please let us know. Send any feedback please to: DUBUS@t-online.de. The results were (Place/Call/Setup/QSO/Multi/Points): 1) UA3PTW 32 x 25 1K5 36 33 1188, 2) UT5DL 4x8.5wl 700w 23 21 483, 3) YL2GD 6m dish 300w 21 20 420, 4) W2PU 4 x 15 LFA xpol 500W 14 13 182, Op K1JT & K2QM, 5) SP1JNY 4 x 21H 500w 11 11 121, 5) W6YX 4 x 12 11 11 121, Op K2YY & KG6NUB, 7) JE1TNL 4 x 20 500w 10 9 90, 8) OK2POI 2 x 17 500w 10 9 90, 9) K4MSG 2 x 18 lfa 170w 9 9 81, 10) PI9CAM 25m dish 400w 8 8 64, 11) VK5APN/8 1 x 21 70w 6 6 36, 12) OK1TEH 1 x 23 800w 4 4 16, 13) IV3DXV 2 x 25 el 350w 3 3 9, and 14) HG5BMG 4 x 23 el 100w 1 1 1.

FINAL: This month has was a busy one and thus this NL is a few days later than I had planned. I have more material, but it will have to wait until next time. I am open to suggestion on how the NL can be improved. For example I eliminated the purple shading. Is the current shading OK? It is now 43 years of the NL. If anyone would like to volunteer to help, I am open to suggestions. The terrific help of W2WD and W6SZ is gratefully acknowledged.

A new era for JA 13 cm EME will start on 5 Jan. After this date, the frequency sub band 2400-2405 can be used by JA stations for EME. This addition does not prevent the continued use for moonbounce of 2424.0-2424.5. JA4BLC, who sent in this news, is not sure how JA activity will be divided between these 2 frequency ranges in the future. Yoshiro hopes that everybody on 13 cm will listen for JAs on the new frequencies without suffering from Wifi QRM.

There were some beacon problems this month. DK7L reports that the 3 cm beacon lost power around 14 Dec, but power was back up in a day or so. The 23 cm beacon, ON0EME, also had a glitch just before Christmas (24 Dec) and was taken off the air. As a belated Christmas present, the beacon team had it back on the day after (26 Dec).

Doug has made some very nice updates to his VK3UM Planner. Significant changes have been made to the Moon Noise calculation to provide greater accuracy of Moon temperature relative to frequency and phase. This was achieved by using Guidice and Monstein measurements and supplementing them with actual measurements taken by G3LTF on 13, 8.6 and 5.2 cm as well as on 23 cm by the author. In addition a 'Sky noise plot option' has been added to show a noise profile at any declination selected over a 24 hour period. This can provide a comparison of Sky Noise against drift plots. It proved useful in the course of the above investigation - see G3LTF's report. Minor cosmetic and corrections to the VK3UM DXCC data base have also been made, and the Help file has been updated to reflect all changes. (My thanks go to especially G3LTF, G4RGK and Mr. Google). Work on the EMECalc is still progressing with respect to refinements to Feed Types as a result of W1GHZ's extensive work recently published in EME France, as well as additional work by SM6FHZ. (Note: Moon temperature in the current version does not reflect the changes in the EME Planner and should be disregarded for the time being). What is the difference in feed through with a prime focus fed mesh dish, when using circular, vertical or horizontal polarization? Stay tuned - that will be revealed when the next version of the EME Calculator is released. Yes, there can be a difference!

ZS6AXT sends holiday greetings and hope to get (finally) sometimes to 3 cm EME. Ivo writes that he is having lot of other problems, but that his health is reasonably OK, but that his XYL is not doing so well.

PE1L reminds us to please vote for the best dxpedition in 2014 at http://www.mmmonvhf.de/voting.php. We certainly owe a great deal to the many dxpeditions that have made 70 cm and above more interesting. Even if you are a smaller station that may not be able to work many of these dxpeditions, they do bring out the bigger stations for you to work.

Rick (K1DS) sends his thanks to all for your participation, pictures and reports to assist him with writing of the contest article in a future QST edition. He notes for those contestants who entered logs and need to know if they were received at ARRL, to send an email inquiry to Matt (W1MSW), who is the new contest manager at the League. I inquired earlier about the use of the robot for this contest and he explained that due to the nature of the EME contest that the robot was not set up for it. He did however say that he would respond to any log received inquiries. He can be reached at W1MSW@arrl.org.

There were many holiday greetings and good wishes for the New Year with this month's reports; rather than include all of these, I and sending greetings from myself and all who have contributed to this NL: Our wishes for the very best 2015 health, happiness, prosperity and lots of fun – and off the Moon! I will be looking for your echoes. 73, Al – K2UYH

N2MO 60’ Dish