

# 432 AND ABOVE EME NEWS

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EDITOR: AL KATZ, K2UYH; ENGINEERING DEPARTMENT, THE COLLEGE OF NEW JERSEY, PO BOX 7718 EWING, NJ 08628  
TEL (W 609-584-8424) OR (H 609-443-3184), FAX (609-631-0177), E-MAIL [a.katz@ieee.org](mailto:a.katz@ieee.org)  
PROD/MAIL: BRIAN MULLANEY, KB2TIS (609-883-6390), E-MAIL [mullaney@mccc.edu](mailto:mullaney@mccc.edu)  
NETNEWS EDITOR: G4RGK, DAVID DIBLEY, E-MAIL [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) (based on K1RQG's Netnotes and Reflector News)  
EME NETS: 14.345, 10 AM ET SATURDAY AND SUNDAY (AFTER VARO NET ENDS ON SUNDAY)  
NET CONTROL AND SKEDS CORDINATOR: JOE, K1RQG, TEL (207-469-3492), E-MAIL [k1rgq@aol.com](mailto:k1rgq@aol.com)  
EME DIRECTORY: <http://www.dl4eby.de/>, DL4EBY/DK0TU, KLAUS TIEDEMANN, TEL (49-30-7955467), E-MAIL: [tklaus@snaflu.de](mailto:tklaus@snaflu.de)  
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THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT <http://www.nitehawk.com/rasmit/em70cm.html>.

**CONDITIONS:** There appears to be universal agreement that conditions on 70 cm were far from ideal. The main problem appears Faraday rotation that produced non-reciprocal polarization to many parts of the world. I found signal quality (libration affects) better than many previous years. But many Europeans – see G3LTF – report polarization dispersion and high atmospheric absorption. I know that I called and called several loud stations on 70 cm without reply. The poor conditions may have contributed to the low activity. G4RGK believes that only a total of 60 stations were active on 432 during the contest weekend – see High Contest Scores below. Only a few years ago 100 plus QSO counts were not unusual. The picture on 23 cm is more complex with reports of both good and bad conditions. The presence of the 40 m OVRO dish (W6IFE) was a big attraction. Even though they were running low power, true (599) signals were received at moderately equipped stations. There were also several other stations that produced nearly as strong a signal. Overall QSO counts were higher on 23 cm than 70 cm for the second year in a row. New DX stations as FR5DN (and where was OA4O?) should have attracted stations to 70 cm. On 1296 VK was represented again in a big way by VK4AFL. It shall be interesting to see how the contest turns out in Nov.



**W6IFE 40 m OVRO dish used on 23 cm in the contest**

**HIGH CONTEST SCORES:** 1296 leads 432 for the highest scores and HB9BBD leads the pack with a total of 69x37. Dominique is followed by OK1DFZ with 59x32, DL0SHF with 55x32, VE6TA 55x31, OZ4MM with 52x30, G3LTF 52x23 and HB9Q with 50x31. K0YW is also reporting 50 plus QSOs. VK3UM has an impressive total of 36x24 for down under. On, and 432 there is less competition. OH2PO appears in the lead with 56x28 followed closely by HB9Q with 55x29. These QSO counts are close to the total number of stations active on 70 cm during the weekend. G4RGK has compiled the following list of 60 stations (3 of which only operated on JT65) that were active the first contest weekend on 70 cm: OZ6OL, HB9Q, S52CW, K1FO, RW3PX, N9AB, OH2PO, DJ6MB, DL7APV, K2UYH, SV1BTR, VK3UM, 7M2PDT, OZ4MM, KL6M, SM2CEW, OE5EYM, SM3AKW, G3LTF, KE2N, S52RM, YO3II, FR5DN, K0RZ, SP6JLW, DJ7GK, K3MF, UT2EG,

KL7FH, I1NBP, KL7HFQ, KE7NR, S51ZO, UT3LL, OK1TEH, I5CTE, JA9BOH, JR1RCH, SV1AWE, LA9DL, YO2DM, DK3WG, JA6AHB, YO2IS, WA6PY, JA6DZI, SM2ILF, OK1CA, DL1YMK, RW1AW, SM3JQU, DL9JY, K5GW, K4EME, G3LQR, JL1ZCG, SM4IVE, ZS6WAB\*, AA7A\* and VE7BBG\* (\* = JT65).

**3Y0X 432 EME Dxpediton:** It looks like plans are moving along for the Peter Island dxpediton scheduled for Feb and discussed in the last NL. K3MF has sent Gordon, WORUN [geh@crosslinkinc.com](mailto:geh@crosslinkinc.com) a 4 x 19 K2RIW array to be used for 3Y0X. He will be testing the array soon and wants as much on air activity on 432 as possible when he tries the array out. He will be using JT65 for the tests.

**7M2PDT:** Shu [pdt\\_umesan@ybb.ne.jp](mailto:pdt_umesan@ybb.ne.jp) in QM05ek reports that his 70 cm log is as follows – On 22 Oct I worked G4RGK, OK1CA for initial #158, OE5EYM, N9AB, K0RZ, K5GW, K1FO, JA6AHB, VK3UM and HB9Q. The next day (23 Oct) I added SV1BTR who may be a new initial if he is in a new grid [he is], followed by OH2PO, DJ6MB, G3LTF, S52CW and DL7APV. Heard were JL1ZCG and OZ6OL. My station is now 16 x FO25 el yagis V-pol with GS35B PA at 1.5 kW on CW and 700 W on JT.

**DL0SHF:** Carsten, DL6LAU operated the 1<sup>st</sup> leg of the ARRL EME Contest on 23 cm using Per's 9 m dish and 800 W SSPA at the feed point -- I had a very good time operating again after a long time. We noticed some weeks before that sun noise was about 2.5 dB down, but had no idea where it gone to. With about 15 dB sun noise we were probably hearing like a 4.5 m dish. I apologize for 'some' QRZs and 'Y's. It was nice, but at the same time frustrating to see signals on Spect ran, and not be able to dig them out of the noise - (Sorry to SP6JLW and a W7). We were a real alligator this time! I would be very interested to know who tried to call. There is light at the end of the tunnel for the second weekend. We found the missing 2.5 dB (see below). I worked on 22 Oct JA8IED, ON7UN, IW2FZR, SK0UX, OK1DFC, HB9Q, DF3RU, RW1AW, G3LTF, HB9BBD, ES5PC, ZS6AXT, SM3AKW, OH2DG, JA6CZD, OE9ERC, G4CCH, OE5EYM, WA1JOF, RW1AW (dupe), LA9NEA, IK2MMB, UR5LX, K5JL, K0YW, N2UO, K5GW, W9IIX, K5PJR, W5LUA, VE6TA, WA5WCP, WA6PY, W6YX, VA7MM, OK1CA, W6IFE, SM6CKU, OZ6OL, OZ4MM, K2UYH, IOUGB, SM4DHN, N2IQ, VE9DW, OK1KIR and JH5LUZ, and on 23 Oct W6IFE (dupe SSB), DK0ZAB, IK3COJ, HB9SV, W7UPF, DL1YMK, F6CGJ, HA5SHF, F5HRY and K9SLQ for 55x32. Just before K9SLQ when things were a little slow, we decided to exchange preamps and voila we got our missing 2.5 dB of sun noise back. I would like to know if 17.5 dB is in the ballpark for a 9 m dish on 23 cm with an SFI = 75. [K5GW, Gerald answers - Expected sun noise performance is shown in great detail at [www.k5so.com](http://www.k5so.com) under "using sun noise". I have seen remarkable agreement with the data in my own system]. We will be looking for more QSOs in Nov.

**DL7APV:** Bern [DL7APV@t-online.de](mailto:DL7APV@t-online.de) reports that condx were good the first day of the contest on 432 with signals mostly horizontal. Unfortunately the WX was not very cooperative. He could not hold his antenna on the moon due the wind on moonset. Despite the WX problems he worked a number of stations, but found activity poor. Getaways were WA6PY, KE7NR, K0RZ and K3MF – CWN'R'd for 15 min.

**DL9JY:** Ruediger [R.Knorr@t-online.de](mailto:R.Knorr@t-online.de) was QRV on 70 cm during the contest in Oct – I was QRV for few hours with my small 4-yagi station during the 1<sup>st</sup> leg. The weather was bad with lots of rain here, and conditions did not seem favorable either. I did manage to work OH2PO, HB9Q, OZ4MM, G3LTF, DL7APV, KL6M for initial #20, SM2CEW, N9AB and VK3UM #21. Stations CWN'R were SV1BTR, DL1YMK, OZ6OL, DJ6MB, G4RGK,

K1FO, K5GW and JL1ZCG (very strong signal). My station in JO31mk was 4 x 29 el yagis, 1 kW GS35B-cavity PA and FHX35 0.35 dB NF preamp.

**EA3DXU:** Josep [ea3dxu@jazzfree.com](mailto:ea3dxu@jazzfree.com) sends the following on his 432 contest activity – I was able to work K1FO, OH2PO, OZ4MM, N9AB, S52CW, HB9Q, DJ6MB, DL7APV, SV1BTR, VK3UM, KL6M, SM2CEW and G3LTF all on CW. I also heard and called JL1ZCG and another not completely identified station. I will be QRV again in second leg on 432 CW.

**F2TU:** Philippe [f2tu.om@guido.fr](mailto:f2tu.om@guido.fr) does not report on his Oct contest activity, but does say – I have found a few active stations on 10 GHz random on 10 Oct and worked G4NNS (O/O), F5JWF (O-529/M) and RW1AW (M/M). I also heard F6KXS (539) and PA3CSG, but there frequency seemed to be unstable. I had good echoes. I have place wave files of 10 GHz signals on my Web Site <http://F2TU.perso.wanadoo.fr>.

**FR5DN:** Philippe [philippe.mondon5@wanadoo.fr](mailto:philippe.mondon5@wanadoo.fr) is operational again from Reunion Island with 8 x 21 el FT yagis and a GS23 amp on 70 cm – I worked the following stations on 22 Oct OH2PO, DL7APV, N9AB, K1FO, OZ4MM, HB9Q, K2UYH, VK3UM, SM2CEW and G3LTF, and on 23 Oct OE5EYM and DK3WG for a total of 12 QSOs on random CW. Stations CWRN were UT2EG, 7M2PDT, RW1AW, JL1ZCG (very strong), DJ6MB, K0RZ, N4PZ, K5GW, KE2N and DL1YMK. I found condx poor on Saturday night with weak echoes and signal spreading. Some good sigs were heard from time to time, but many stations just came back with only QRZ.



**FR5DN's 70 cm 8 x 21 el F9FT yagi array**

**G3LOR:** Simon [G3LOR@aol.com](mailto:G3LOR@aol.com) operated the contest but with a heavy heart as his brother (well known for his recording of 8th USAF during WW2) had passed on from cancer shortly before – I had some successes and failures during the contest. On 432 I QSO'd OZ4MM, SV1BTR for initial #205, VK3UM, DL7APV, HB9Q, OH2PO, G3LTF, KL6M and N9AB. On 1296 I contacted K9SLQ, K5JL, G4CCH, VE6TA, G3LTF, K5GW, W6IFE for initial #98, HB9BBD, K2UYH and K0YW. On 1296 (4.2 m dish, NE325 and 300 W PA) the sun noise was down. I found later it was at 11 dB and was surprised I heard anybody. My window is also limited in both the east and west. On 432 (8 old 27 el HB yagis, MGF1302 and 400 W at feed) the sun noise was also down, and only 11/12 dB. My elevation is limited only to 30 degrees and should be extended. Surprisingly my echoes always there all this weekend. I plan to be active for the 2nd weekend, but the low declination will restricted my moon time.

**G3LTF:** Peter [g3lft@btinternet.com](mailto:g3lft@btinternet.com) was active in the contest and collected 32x25 on 70 cm and 52x23 on 23 cm, but needs to check on the states to be sure of his tally – The 70 cm condx were very trying (polite word!) with polarization spread over 90 degs. I have continuous pol rotation, so can see the full picture. I also observed some excess ionospheric attenuation in the early part of the contest. It was probably 2 to 3 dB. Conditions improved after 0500. I was sorry to miss ES6RQ on 23 cm. He had a good signal, but just could not hear me at all. JL1ZCG was another alligator. This is the second or third year I have CWRN'd him. K2UYH had hum sidebands about 10 to 15 dB down on 23 cm. As you look at the signal on Spectran, you can sometimes observe them fade at different times indicating a channel coherence of only 200 Hz or less.

**G4RGK:** Dave [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) writes the following -- I have spent the last few weeks replacing all the feed lines to my yagis array. They were damaged during tree cutting. All seemed to be working again OK, but soon after the start of the contest I came to the conclusion that something was not right. On Saturday I checked sun noise and it was down to 9 dB. I continued to persevere through to Sunday morning, when I decided to QRT and find out what was going on. On inspection of the antennas, I found that the first director on one of the yagis had partially melted along with its mounting insulators. When I removed it from the boom, a half liter of water came out of the boom. I checked the other 7 yagis and they were all full of water too. The reflector ends of the booms are capped, but the other ends are not. It appears that I must have left the array elevated during a storm. After I drained the water and replaced the director all was well again, but it was then too late as the moon had set. Consequently my contest results are not very good. I QSO'd a total of 19 stations as follows: 7M2PDT, OH2PO, DL7APV, K1FO, N9AB, G3LTF, HB9Q, KL6M, K2UYH, SV1BTR, OZ4MM, SM3AKW, DJ6MB, RW3PX, OE5EYM, S52CW, SM2CEW, VK3UM and OZ6OL. Heard or CWRN were OK1CA, DL1YMK, RW1AW, SM3JQU, DJ9JY, K5GW, K4EME, G3LQR, JL1ZCG and SM4IVE (big signal). I will only be QRV the first day of the 2<sup>nd</sup> leg due to a big microwave event in England on 13 Nov.

**GM4ISM:** Mark [g4ism@bigfoot.com](mailto:g4ism@bigfoot.com) will be QRV on 70 cm soon -- I finally have the K2RIW PA running without being an oscillator! With 2300 V under load, I am seeing 700 W, although I will probably keep it throttled back for a while to 600 W. The problem turned out to be corrosion on one of the valve bases. It was making a poor RF connection to the chassis. I actually had to gently file the mating surfaces as less abrasive cleaning did not work. I now have 30 dB isolation from input to output. This means that I will be putting the 4 x 21 el yagis back up as soon as I fix the elevation rotator. My G-500A's motor is in very poor shape with one bearing badly corroded. I will either have to replace the motor or put an alternative elevation system in place. I'm looking forward to a return to EME operation. The 23cms PA is still QRT so I'm not ready for that band yet, but working on that too - see [www.dc2light.co.uk](http://www.dc2light.co.uk).

**HB9BBD:** Dominique's [dominique.faessler@vontobel.ch](mailto:dominique.faessler@vontobel.ch) results for the ARRL EME Contest first leg – I just want to let you know how HB9BBD did on 23 cm. I made 69 QSO and 37 multipliers. Conditions are hard to assess. My own signals came back substantially weaker than it usually does. Sun noise was only 22.9 dB at unknown flux. On the other hand some stations that are usually weak were good copy. Furthermore confusing the picture is that JH1EFA, historically (529) was really marginal this time. Many stations showed up, which gives an impression of good conditions, but in fact I suspect that they were down. I am still tired, but the good news is that the electricity bill goes to the property owner of my dish site. It's part of the package - HL I will be back again in November for the 2<sup>nd</sup> leg.

**HB9JAW:** Michel [hb9jaw@bluewin.ch](mailto:hb9jaw@bluewin.ch) has not sent any information on the 432/23 part of the contest, but does want everyone to know that he now has full output from his 13 cm PA. He fixed a broken bias voltage regulator and is available for skeds until he must remove his dish – see last month's NL. In Oct on 13 cm he worked OZ4MM (55/57) on SSB and OK1KIR (559/579) on CW.

**HB9Q:** Dan [dan@hb9q.ch](mailto:dan@hb9q.ch) sends his group's contest results for part 1 – I had the great pleasure to have Conrad, G0RUZ, as guest-operator. (Mark, HB9DBM, was out of town due to QRL). Conrad did an absolutely great job. We enjoyed very much operating on 3 bands. On 144 we found very poor CW activity during the night hours and spent most of our time on JT65. We ended with 79x42 (6 on CW and 73 on JT65B). 432 was a huge disappointment. Conditions were difficult with many hours of 45° rotation. This may have been part of the reason for the low activity on this band. Our result was 55x29 (53 on CW and 2 on JT65B). We hope to increase this result a lot during the second leg! Please come and help to activate 432! 1296 was great! We only spent about one quarter of the window-time on 1296, but worked many initials and 3 new DXCC for a total of 50x31 (49 on CW and 1 on SSB)! We should have spent more time here and less on 432. For our detailed logs see on the band-pages at [www.hb9q.ch](http://www.hb9q.ch). We are quite happy with our results and are very much looking forward to the second leg.

**K0YW:** Bruce [k0yw@frontier.net](mailto:k0yw@frontier.net) reports some good nights on 23 cm – I worked 50x? and 3 initials in the contest and have the PA running fine. The weekend prior to the contest I Worked 5 stations including UR5LX (559) for country 49. Others were WB5AFY, WA5WCP (549), VE6TA (579) and K5PJR (549-559). Sigs were ok, but probably down a bit due to moderate rain here. K5PJR was way up from previous QSOs. He is running a 10' dish and 300 W, while WA5WCP has 12' dish with similar powers.

**K4EME:** Cowles [candrus@rica.net](mailto:candrus@rica.net) worked on getting his 432 EME station ready for the contest, but was disappointed with the conditions. He has 8 x FO-33 yagis and 1.5 kW on CW. He can also run JT65 at about 800 W output. During the contest he worked OE5EYM and DL7APV, and KE2N on tropo among others. He ended with only 10 EME QSOs and hopes for better conditions in Nov.

**K7XQ:** Jeff [k7xq@elite.net](mailto:k7xq@elite.net) was active on 29 Oct and on 1296. He copied on CW LA9NEA and CWNR K9SLQ and VE6TA, both were (569). He ran a sked at 1430 with WA5WCP but heard nil. CQs also yielded no reply despite the fact that Jeff was hearing good echoes with only 150 W at the feed. He notes that he has a minimum dish elevation of 25 degs. Jeff is in CM97qi and interested in skeds on both CW and JT65 modes.

**KE2N:** Ken [ke2n@cs.com](mailto:ke2n@cs.com) writes on his 70 cm contest activity – I was on for the first leg and found conditions were not too good and was only able to work the big guns. QSO'd were OH2PO, N9AB, K1FO, HB9Q, OZ4MM, K2UYH and K5GW. I could copy my own echoes at all times. Where were all the other folks? Apologies to the 2 stations that answered my CQs who I could simply not copy - the Curse of Spectran is that you can plainly see stations that are impossible to copy by ear.

**N2UO:** Marc's [lu6dw@yahoo.com](mailto:lu6dw@yahoo.com) EME contest results and first ever MMCW QSO on 23 cm – I had a great time operating 23 cm EME during the contest weekend. I worked 29 stations. I also worked four initials including LA9NEA, W6IFE, OK1DFC and RW3BP. Sergei's is the smallest station I ever worked off the moon. He has a 2.4 m dish, linear polarization and 25 W. I have a 3 m dish and circular polarization. I could not see his signal with Spectran. He was seeing a weak trace from me due to my higher power, but could not copy anything by ear. We used the MMCW Exchange software that Sergei and a friend developed for 47 GHz EME. It worked well and is not hard to use. We ran 5 minute sequences and reduced the bandwidth to 25 Hz at 12 wpm. The processing gain achieved by signal averaging and the narrow bandwidth provided clear CW copy of signals that are so weak they do not even show up on Spectran. The receive audio is continuously fed to the computer speakers, but as time passes by, what you hear is the averaging of the previous transmission, so the signal "builds up" until it becomes readable. After Sergei sent for about 3 and a half minutes, I started to copy my call and at 4 and a half minutes I had complete calls. Morse knowledge is still required because the operator has to decode the information, just like in a regular CW QSO. The gain that can be achieved with this CW software is such that very small stations can also try CW EME on 23 cm or higher bands where the coherence bandwidth is an issue. However, if a large station listens to the QSO, the operator will be able to copy the signals by ear (no computer needed) if the antenna gain is high enough. As I said, the transmission uses regular Morse code. If anybody is interested in trying this software, it can be downloaded from VE1ALQ's web site at [www.ve1alq.com](http://www.ve1alq.com). It also has a simulator and an "echo" mode to check your own signal off the moon and perform system adjustments. I will be happy to set up a sked.

**N9AB:** Andy [andrew\\_bachler@msn.com](mailto:andrew_bachler@msn.com) comments on his 70 cm contest experience and polarization -- I am limited to fixed horizontal polarization. In the contest, the number of my completed 432 MHz QSOs was down significantly and CWNR was abnormally high compared to past years. A few European CWNR horizontal stations were very strong (559) for hours. Stations to my west, experienced with polarization control, significantly reduced their signal strength during QSOs with my station.

**OH2PO:** Jukka's <jukka.sirvio@vesatel.fi> 1st leg score report-- We found bad conditions and poor activity on 70 cm. We scored only 56x28 (54 on CW and 2 on JT65B). The operators were Jukka, OH6DD and Jyrki, OH2HYT. We hope for better conditions and activity during the 2nd leg.

**OK1CA:** Franta [ok1ca@ges.cz](mailto:ok1ca@ges.cz) sends his report for the microwave part and 1<sup>st</sup> leg of the UHF part of the ARRL EME Contest -- I was QRV during MW ARRL EME Contest on 2.3 and 10 GHz. I worked on 13 cm F2TU, OZ4MM, HB9SV, OH2DG for initial #26, G3LTF, OE9ERC, RW1AW #27 and a new country, ES5PC, VE6TA #28, W5LUA, JA4BLC, OK1KIR and SM3AKW. I also heard SM4DHN. On 3 cm I made only 5 QSOs with IQ4DF, F6SKX, DL0EF, OK1KIR and W5LUA. CWNR were LX1DB, HB9SV and HB9BHU. I heard WA6PY, F2TU, IK2RTI and DL1GTH. It is problem to be heard with only 20 W and 3 m dish. In the first leg of the UHF contest I was active on 70 cm for only 8 hours with a 300 W PA, I worked 20 stations and had initial QSOs with OZ6OL, 7M2PDT, DL7APV, RW1AW, RW3PY, SP6JLW, UT2EG and K5GW to bring me to #136. I heard G4RGK, YO2IS, K2UZH, G3LTF, DL9JY, OE5EYM and CWNR many a time EA3DXU. I worked JL1ZCG, VK3UM and KL6M with only 3 – 5 degs elevation of my antenna at Sunday morning. On 23 cm I worked 42 stations and had initials

with RW1AW, SM4DHN, ES5PC, IW2FZR, JR4AEP, W6IFE and WA5WCP to bring me to #139. The conditions on Sunday were very good. I heard DL1YMK, DL4DTU, W5LUA, W9IIX and CWNR VA7MM. I plan to be again QRV on 23 cm in the second part of ARRL EME Contest in Nov.



**OK1DFC's new 10 m dish**

**OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) report on the 1st leg of the ARRL EME contest on 1296 – I was QRV the whole time except for the last 2.5 hour, which I missed thanks to strong winds. Conditions the first night were very strange. My own echoes were weaker than usual and occasionally very strong stations as HB9BBD were heard very weak. It looked like Faraday on 432 MHz, but this should be impossibility on 23 cm with circular pol. I think the explanation is the presence of a very strong tropo inversion in my area. I also repaired for 1.5 hours my driver for PA, but do not believe that during this period I lost any QSOs. I have added 18 initials and am now at #131. My QSO with Trevor, VK4AFL also gave me a new field #29. Worked were RW1AW (569/579), G4CCH (559/569), ZS6AXT (559/569), SK0UX (559/569) for #113, HB9BBD (599/589), DL0SHF (579/579) #114, JH5LUZ (559/559), SM3AKW (579/569), IW2FZR (559/559), OE9ERC (579/569), G3LTF (559/569), ES5PC (559/559), HB9Q (559/559), OH2DG (579/559), OE5EYM (559/579), OZ4MM (579/549), N2IQ (559/559), IK2MMB (559/559), ON7UN (579/569), LA9NEA (559/559), K5GW (589/579), K5JL (579/569), VE6TA (579/569), N2UO (559/559) #115, PA3CSG (579/559), W5LUA (559/569), W7BBM (559/559) #116, W9IIX (559/559) #117, WB5AFY (559/579), UR5LX (559/559), WA6PY (559/559) #118, DF3RU (559/549), OZ6OL (559/569), W6IFE (55/55) #119, OK1CA (559/579), WA1JOF (559/539) #120, IOUGB (559/539), K2UYH (559/559), W6YX (539/559) #121, OK1KIR (559/559), VK4AFL (559/539) #122, JA8IAD (559/569) #123, IK3COJ (559/549), JA6CZD (559/559), F6CGJ (579/569), HB9SV (589/569), HA5SHF (559/559), JA6AHB (539/559) #124, DL1YMK (559/559) #125, JR4AEP (559/559) #126, IK2RTI (539/559) #127, K2UYH (539/549), F6KHM (579/559) #128, F6KHM (55/53), K0YW (579/569), DK0ZAB (559/559) #129, VE9DW (579/569), SM4DHN (579/559), WA5WCP (559/549) #130, VA7MM (539/539) #131, F1ANH (559/549), OZ6OL (55/54) and G3LTF (55/54). Heard were F5HRY, G3LQR, K9SLQ, W7UPF, DF9QX, SP6JLW, JA1BGU and OH3MCK. I will send QSL cards to all stations next week. I plan to be QRV for the second leg, weather permitting. In preparations I will fix some of the problems with my new system. It was great fun. On my web site you can find MP3 files with your signals. The gallery is still not finish but I should finish work on it very soon. W6IFE produced a great signal. It was a great pleasure to work the San Bernardino gang. I have had questions on the initial status of my new station. I should be an initial for all who have worked me on 1296 since Aug, as I have never operated on 23 cm from this grid (JN76) before this time. Earlier I only operated 23 cm from JO60. On 432 I have made QSOs from the present QTH

since Jan 2003. More details about my change of location can be found on my web site [www.ok1dfc.com](http://www.ok1dfc.com). [I agree with your analysis. You are an initial for stations reworking you at your new location since you have changed 4 character grid, JN76 vs. JO60. (Changes in the last 2 characters of the 6 character grid do not count as an initial. This difference is not always understood). With regard to your personal initial list, the decision to start over or continue is up to you. Generally most stations use the rules for WAS as a guide, which says that QSOs must be made within a 25 mile radius. DXCC location rules are even more liberal].

**OK1KIR:** Tonda, OK1DAI [ok1vao@quick.cz](mailto:ok1vao@quick.cz) reports on Sept and Oct EME during the ARRL EME Contest – During the MW part on 13 cm we QSO'd on 25 Sept at 0033 G3LTF (549/549), 0157 ES5PC (559/559), 0208 JA4BLC (549/449), 0250 F2TU (559/559), 0304 OE9ERC (569/559), 0313 SM3AKW (559/539), 0400 OK1CA (549/559) and 0432 RW1AW (0/0). Heard was JA8ERE (M) on 2424 and on 2304 OH2DG (559) and LX1DB (569). The rig was our 4.5 m dish with circular pol (square Septum feed w/o a choke), 80 W SSPA on only 2320, but RX on 2304, 2320 and 2424. On 6 cm we QSO'd on 24 Sept at 0722 G4NNS (O/O) for initial # 19 and DXCC 13, 0819 F2TU (559/559), 0828 OE9ERC (569/559), 0846 W5LUA (559/559) and 0855 IK2RTI (549/529). The rig was our 4.5 m dish with circular pol (septum feed in WG) and 70 W SSPA. On 3 cm we QSO'd on 24 Sept at 0437 IQ4DF (569/559), 0505 F5JWF (O/O), 0525 F6KXSX (O/O), 0555 DL2LAC (O/O), 0601 IK2RTI (O/O) for initial #29 and 1008 WA6PY (O/O), and on 25 Sept at 0604 G4NNS (O/O), 0617 HB9BHU (549/529), 0624 DL0EF (569/529), 0700 HB9SV (539/549) #30, 0711 OK1CA (0/549), 0815 LX1DB (549/559), 0831 W5LUA (559/549), 0853 F2TU (O/O) and 1047 CT1DMK (M/O). The rig was our 4.5 m dish with linear rotatable pol and 50 W TWTA. We also QSO'd on 3 cm on 14 Oct at 1819 RW1AW (O/O) in sked for #31 and the 1<sup>st</sup> OK – R QSO, and 1903 SP7JSG (529/519) in sked for initial #32, 1945 LX1DB (559/569) on random and on 15 Oct all random at 1908 IK2RTI (439/549), 2045 IQ4DF (559/539), 2051 G4NNS (O/539), 2058 RW1AW (529/559) and partial with F5JTA. Heard on SSB in QSO was IQ4DF/RW1AW. We also worked on 13 cm on 19 Oct at 2158 HB9JAW (579/559) for initial # 44 with our new 2304/2320/2424 transverter. We heard OZ4MM. We can now TX on all three bands and we hear good echoes on each band with only 80 W. In the regular ARRL EME Contest we worked on 23 cm on 22 Oct at 0037 HB9BBD (579/519) with only about 35 W (single 2C39 at the moment) and then switched to G17B 400W+ PA for at 0234 SK0UX (569/559) for initial #198, 0247 G3LTF (559/559), 0247 SM3AKW (559/559), 0719 W6IFE (589/559) #199, 1044 VE9DW (549/539), 1056 DL0SHF (559/529), 1916 OK1DFC (559/559), 1933 OZ6OL (549/559), 2008 JH5LUZ (549/549), 2035 HB9Q (569/569), 2048 IW2FZR (539/519) #200, 2104 OK1CA (549/549), 2300 ES5PC (549/559) #201 and 2310 G4CCH (569/569), and on 23 Oct at 0030 partial HA5SHF (O/QSB), 0053 RW1AW (549/559), 0100 ON7UN (579/559), 0132 ZS6AXT (549/549), 0140 IK2MMB (549/559), 0528 VE6TA (559/559), 0535 W9IIX (549/449) #202, 0549 OH2DG (559/459), 0602 K2UYH (559/549), 0611 DF3RU (549/449), 0615 K5JL (569/559), 0659 WA6PY (559/449), 0711 W6IFE (589/579) dup, 0812 W5LUA (559/559), 0840 WA5WCP (O/QRZ), 0857 OE9ERC (569/569), 0912 OZ4MM (569/559), 0940 HB9SV (579/569) and 0944 K0YW (579/569). We heard during contest DK0ZAB, G3LQR, F6CGJ, F6HKM, IK3COJ, JA6AHB, JA6CZD, K5GW, N2IQ, OE5EYM, PA3CSG and WA1JOF. Noise ratios measured were CS/G = 5.3 dB, Sun (SF 75) = 13.5 dB and Moon = 0.14 dB with a new noise meter. We plan to be QRV in the Nov part of the contest on 23 cm. MW skeds are welcome.

**OZ4MM:** Stig [vestergaard@os.dk](mailto:vestergaard@os.dk) writes -- The first part of the ARRL EME Contest is over and as usual I enjoyed being on the moon. I was active on both 432 and 1296. I found conditions much better on Saturday (even with heavy rain) compared to Sunday. Most of the time there was a 45 deg pol shift on 432, but even on 1296 I found condx down on Sunday. The following stations all found their way into my log for a total of 97 stations on 432 and 1296. On 432 CW I worked K1FO, EA3DXU, DL7APV, OK1CA, S52CW, YO2IS, RW3PX, DL1YMK, DJ6MB, FR5DN for initial #277 and EME DXCC 48, SM2ILF, RW1AW, OH2PO, K4EME, KE2N, OZ6OL, K0RZ, N9AB, K2UYH, SP6JLW, DK3WG, I1NDP #278, DJ7GK, S53RM, UT2EG, WA6PY, SM3JQU, VK3UM, SV1BTR, JL1ZCG, KL7HFQ, G3LQR, SM3AKW, G4RGG, HB9Q, KL6M, JA6DZI, JA9BOH, G3LTF, DL9JY, LA9DL #279, K5GW, S51ZO, SM2CEW and SM4IVE giving at total of 47x27 stations. I CWNR K3MF. On 1296 CW I worked HB9BBD, SK0UX, G3LTF, ON7UN, ZS6AXT, HB9Q, OH2DG, IK2MMB, OK1DFC, RW1AW, SM3AKW, OE5EYM, DL0SHF, K5JL, N2UO, VE6TA, W6IFE #241, W6YX #242, DF3RU, WA1JOF, SP6JLW #243 and EME DXCC 49, IOUGB, W7UPF #244, W5LUA, VA7MM, WA6PY, SM6CKU, G4CCH, K5GW, WA5WCP #245, OK1CA, SM4DHN, JA8IAD, IW2FZR, IK3COJ, UR5LX, ES5PC, JH5LUZ, HA5SHF, OZ6OL, F6CGJ, HB9SV, K0YW, PA3CSG,

W9IIX, K2UYH, VE9DW, LA9NEA, DK0ZAB, DL1YMK, OK1KIR and ES6RQ for a total of 52x31 stations. CWNR were JA1BGU, VK4AFL, G3LQR and OH3MCK. Unfortunately I will not be able to be QRV in Nov, so this is my final score for this year. On 30 Oct I ran skeds with K3MF and M0EME. I worked K3MF (449/O), but heard nil from M0EME. I also heard a few stations on 1296, but had no time to use in the shack. Back in Sept I worked on 1296 CU8AO (449/O). Fred is really doing well and should be easily worked. In the Microwave part of the contest in Sept I worked OH2DG, F2TU, OK1CA, ES5PC, VE6TA, HB9SV, W5LUA, G3LTF, SM3AKW, SM4DHN for initial #51, WA6PY, RW1AW, WD5AGO #52 and OE9ERC. After the MW contest I QSO'd RW1AW, NA4N #53 and HB9JAW #54.

**RW1AW:** Alex [rw1aw@skylink.spb.ru](mailto:rw1aw@skylink.spb.ru) sends much news including his 1<sup>st</sup> 10 GHz QSOs and many other firsts – My 1<sup>st</sup> 3 cm contact was on 14 Oct with OK1KIR (539/O) followed by LX1DB (559/559) - very fast BK QSO. I worked on 15 Oct IQ4DF (569/539) #3 - very strong signal, G4NNS (O/O) #4, OK1KIR (559/529) again on random, IQ4DF (54/41) on SSB random, WA6PY (539/519) #5 and W5LUA (559/539) #6, on 25 Oct F2TU (519/539) #7, and 29 Oct F6KXSX (539/M) #8. The rig is a 2.4 m offset dish (F/D = 0.68), W2IMU RX and TX feeds, 32 W SSPA in focus and 0.55 dB LNA. The sun noise is 17 dB and moon noise 2.0 dB. I was QRV on 13 cm in Oct and added WA6PY (559/549) and OZ4MM (569/549). NA4N was CWNR. In the ARRL EME Contest I was active on 22/23 Oct on the 23 and 70 cm bands. The weather in KP50da was not great with winds of 20-25 m/sec and strong rain - not good for my 6 m dish! I was QRV with QRP Pout of 160 W at the feed on 23 cm and only 260 W to a new dual dipole feed on 70 cm. On 1296 I QSO'd HB9BBD, OK1DFC, G3LTF, OE9ERC, G4CCH, IW2FZR, SM3AKW, DL0SHF for an initial #60, ZS6AXT, OZ4MM, ON7UN, OE5EYM #61, HB9Q #62, DL0SHF (dup), LA9NEA, SK0UX #63, K5JL, OH2DG, WA1JOF #64, VE6TA, WA6PY, IK2MMB, W6IFE #65, OK1CA #66, K2UYH, K5GW, F6CGJ, OK1KIR #67, K0YW, ES5PC, PA3CSG and HB9SV for a total of 33x22 and 9 initials. Heard and hope to QSO next time were JH5LUZ, JA6CZD, JA8IED, VA7MM, VE9DW and WA5WCP. On 432 I QSO'd OH2PO, K1FO, OK1CA #91, DL7APV, OZ4MM, HB9Q, G3LTF, S52CW, SM2CEW and K2UYH for a total of 10x10. I will be QRV in next part of the contest on 2 m (CW only) as well as 70 and 23 cm.



**RW1AW 10 GHz dish and feed (see dual TX-RX feeds)**

**RW3BP:** Sergei's [rw3bp@co.ru](mailto:rw3bp@co.ru) side of first ever MMCW QSO on 23 cm – Thanks to Marc for this interesting test. With my 25 W tropo station on 2.4 m dish, I was SWL in ARRL EME contest. Now I have one QSO on 23 cm and I am happy. Of course it was a sked QSO, but we had no email or other contacts until the end of the contest. I spent a few hours calling big guns, but the best was QRZ and SRI. The program was done for millimeter wave EME, but on 23 cm it is effective too. It enables EME QSOs with big guns if you have 50 W and single 2 m long yagi. It also allows two stations with the same setup (about 200 W and 4 yagis) on both sides to QSO. The main problem is frequency accuracy and stability. If you use 10 Hz filter you need to stay in this frequency band for 300 sec (or more for extremely weak signals). This is why all my oscillators are now locked to a GPS controlled OCXO. The last was the base oscillator of IC-746 transceiver, which had very poor stability. With a thin cable and two turns on a coil of the transceiver's TCXO I injected an external 32 MHz and locked this oscillator to a standard too. It is easier if you can see at least a weak trace on Spectran. In which case it is possible to tune frequency and to keep the trace on 1000 Hz. On 23 cm there is a big difference between "I can see a trace" and "I can read an unknown call sign".

Because of the fast and deep QSB, it can be 5, 10 or more dBs. Maybe I am not that an experienced CW operator, but very often I can hear a loud signal and cannot read it. Even two repeats averaging makes it much more readable. The present program is for sked QSOs only, but I have some ideas on how to make it suitable for random operation. I am not sure this addition is of interest to our EME community considering the CW -JT conflict. My program is very close to CW. The operator must decode signal and decide if copy is OK or not. It is also compatible with common CW. You can read it with your ears alone. But it is not pure "hand sent" CW and pure CW supporters may not consider it valid.

**SP7JSG:** Czeslaw, SP7DCS [sp7dcs@wp.pl](mailto:sp7dcs@wp.pl) reports on his group's recent 3 cm contest activity – I am the skeds coordinator for SP7JSG's 3 cm EME operation. We were active in the Italian EME Contest and QSO'd IQ4DF on random CW. We had more success in the ARRL EME Microwave Contest and contacted IQ4DF again on random CW, had only a partial with F6K5X in sked, QSO'd DL0EF and W5LUA for an initial and the first SP-W 3 cm QSO. On 14 Oct we had a sked with OK1KIR and worked for an initial the first SP-OK 3 cm QSO. Audio of these QSOs can be found at <http://sp7dcs.vgj.pl/sp7jsg>.

**SV1BTR:** Jimmy [jimmyv@hol.gr](mailto:jimmyv@hol.gr) writes on his Oct EME contest operation – I was active for a total of 5 hours on 70 cm and found good activity and echoes, but most signals were severely distorted. In total I completed QSOs with 27 stations as follows: DL1YMK, OH2PO, KL6M, HB9Q, G3LTF, I1NDP, DJ6MB, G4RGK, DL7APV, OZ4MM, VK3UM, SM3AKW, S51ZO, SP6JLW, RW3PX, G3LQR, SM2CEW, EA3DXU, S52CW, I5CTE, UT2EG, SM3JQU, OZ6OL, 7M2PDT, OK1CA, S53RM and K2UYH.

**UR5LX:** Sergej [ur5lx@vhf-dx.net](mailto:ur5lx@vhf-dx.net) was active on 23 cm during the contest-- I worked 21 stations including ON7UN, DF3RU, W6IFE for initial #41. Heard were JU5LUZ, IW2FZR, WA1JOF, W9IIX, DF9QX, IK3COJ, LA9NEA and VE9DW. I will be looking for all in the second leg with my 3.6 m dish and 200 W.

**VA7MM:** Mark [lunarlink@hotmail.com](mailto:lunarlink@hotmail.com) sends information on his group's 1296 results in Leg 1 of the ARRL EME Contest – Our station operated on 22 and 23 Oct in the first leg of the ARRL EME Contest. 19 contacts and 15 multipliers were made with QSOs to HB9BBD, DL0SHF, VE6TA, SK0UK, OH2DG, OZ4MM, K5GW, G4CCH, K5JL, F6KHM, HB9Q, F6CGJ, OK1DFC, G3LTF, W6IFE, K0YW, OE9ERC, WA6PY and VE9DW. These contacts included 3 initials to bring our station total to #45. Our operation was nearly cut short on 22 Oct by a failure in the PLL circuit of the station's 1296. We were able to complete repairs and continued operation on the following day. Operators are Mark, VE7CMK and Toby, VE7CNF. The station is comprised of 3 m dish with circularly polarized feed, 200 W transmit power at the antenna and 0.4 dB receive NF. For more information see our URL <http://www3.telus.net/public/va7mm/eme/>.

**VE6TA:** Grant's [ve6ta@telusplanet.net](mailto:ve6ta@telusplanet.net) first UHF weekend results -- After a few station upgrades this year and much discussion on various modes in the EME community, I was curious to see how the ARRL contest would play. The presence of a large dish usually attracts more of a crowd to the bands as well, and the group at OVRO did a bang up job this year. Weather wasn't much of a factor either as the first pass had good weather with the wind picking up on the second day. The station performed without a visit from Murphy so all in all a great start to the contest. The following stations were worked on the 22 Oct pass: SK0UX, G4CCH, G3LTF, SM3AKW, HB9BBD, IK2MMB, ZS6AXT, ON7UN, N2UO, OK1DFC for an initial (#), UR5LX, W7BBM, K5JL, ES5PC (#), DL0SHF, OH2DG, OZ6OL, RW1AW, DF3RU, VE9DW, W9IIX, LA9NEA, WA1JOF, VA7MM, W5LUA, IW2FZR (#), W6IFE (#), WA6PY, OK1CA, OZ4MM, SM6CKU (#), I0UGB, JA8IAD, JH5LW, K5GW, VK4AFL, K9SLQ, K0YW, W6IFE (dupe on SB) and JA6CZD (#). The first pass was very exciting and I didn't hold out much hope for the second as the wind was coming up and I had already surpassed last years total. However I was pleasantly surprised to work the following stations on 23 Oct: F6KHM, K2UYH, DK0ZAB, OK1KIR, HA5SHF (#), IK3COJ (#), G3LQR, HB9Q, PA3CSG, F6CGJ, SM4DHN (#), HB9SV, WA5WCP, W6YX, DL1YMK and N2IQ. Totals so far appear to be 55x31. DL0SHF, W6IFE, K5JL, K5GW, HB9BBD and OE9ERC all get the "Eardrum Breaker" award for this year as they were all pushing S8-9 on my stingy TS2000x meter. I plan to construct a new dual dipole feed for my flatter 0.45 f/d dish and hope to be on 432 for at least one moon pass next month.

**VE9DX:** Darrell (VE1ALQ) [ve1alq@nbnet.nb.ca](mailto:ve1alq@nbnet.nb.ca) operated the contest under his VE9DX contest call and reports – I had a great time and worked a bunch on 23 cm, but also missed a bunch including K5JL. I did QSO W9IIX for an Initial. Tnx as it has been a while since I have had an initial. A half hour into

operation my single tube drive developed an internal water leak and blew. It took out my 15 A fuse. Water is still in the tube – hi. Last summer I got tired of ducking under the messenger Cable running between the House and the dish tower, so I raised it about a foot. When the moon went to 73 degs el and my counter balance on the 7.6 m Dish caught the messenger cable. My 190 pound prop pitch motor never even slowed down when the end of the counter balance caught the cable and pulled the large eye bolt completely out of the newly sided house leaving a hole you can put 3 fingers in... Like I said I had a great time!

**VK3UM:** Doug's [tikaluna@ycs.com.au](mailto:tikaluna@ycs.com.au) 432 ARRL Contest first leg report – On Saturday polarization was either dispersed or 45 degs off set from rise to set, which is quite unusual. On Sunday the pol was back to 'normal'. There was little to no Libration seen both days. Sun noise measured on Saturday approximated 75 SFU with my software. Activity out of NA was not good, but excellent from Europe (on Saturday). It goes without saying the following were totally random, etc. The polarizations as indicated below (TX first & RX second) bear out the unusual conditions on 22 Oct. High declination weekends are fine if you live in the Northern Hemisphere, but we "hand walkers" see the Moon skating along the horizon for longer periods and the consequent ground noise. Apogee did not help either, but you can't have everything! It is always a lot of fun and never a contest for me, rules or no rules. I QSO'd on 22 Oct at 1430 N9AB (55N/55N) V-H, 1438 JA6AHB (34N/55N) V-v/h, 1452 JA2JRJ (34N/O) V-v/h, 1456 K5GW (55N/55N) V-V, 1500 K0RZ (55N/55N) V-H, 1508 JL1ZCG (55N/55N) V-v/h, 1523 J11NNJ (33N/33N) V-V, 1527 partial K3MF (43N/?) V-V, 1534 K1FO (55N/55N) V-H, 1539 7M2PDT (45N/55N) H-H, 1920 OH2PO (55N/56N) H-v/h, 1927 OK1CA (53N/57N) H-v/h, 1932 DJ6MB (55N/55N) H-V, 1955 OZ4MM (55N/55N) H-v/h, 2012 OZ6OL (53N/55N) H-v/h, 2029 SV1BTR (55N/55N) H-V, 2038 SM3JQU (53N/55N) H-V, 2041 SP6JLW (55N/55N) H-V, 2057 UT2EG (33N/54N) H-V, 2106 FR5DN (53N/O) H-v/h, 2126 UA3PTW (53N/O) H-v/h, 2130 SM2CEW (55N/55N) H-v/h, 2138 RW3PX (43N/43N) H-v/h, 2158 EA3DXU (54N/43N) H-V, 2214 I5CTE (54N/54N) H-V, 2221 G3LQR (44N/44N) H-v/h, 2225 S52CW (54N/55N) H-v/h, 2228 DL7APV (54N/55N) H-v/h, 2233 G3LTF (54N/55N) H-v/h and 2239 HB9Q (55N/55N) H-V, and 23 Oct 2027 KL6M (55N/55N) H-V, 2038 SM2ILF (53N/O) H-V, 2047 SM3AKW (53N/54N) H-V, 2135 S51ZO (53N/54N) H-V, 2144 G4RGK (53N/44N) H-v/h, 2226 DL9JY (53N/33N) H-V, 2330 DL0SHF (O/O) H-V and several dupes not shown for a overall score of 36x24. There were a huge number of regulars not in the above log! You can only work those that are present! Thanks to several 'smaller stations' (1 yagi) that reported hearing, so conditions could not have been as bad as some believed. Persistence gentlemen persistence! A special thanks to DL9JY who stuck around after I changed tubes and got going again after 6 minutes and also to FR5DN, when I also had a time out following an arc over. A new feed will be installed in the dish by next contest period and also (hopefully) a better final bottle will bring me back my current lacking of 3 dB on TX, if I can find one in time.

**WA1JOF:** Don is back on 23 cm and was active the first night of the contest, but did not find too many on from NA. He worked stations those that he could identify. QSOs included K5GW, K5JL, W5LUA, WA6PY, W6IFE [at times S-9], ZS6AXT and VE6TA. Heard was VE9DX, but not worked due to QRM. Don was not active the second night because of bad WX. He did not hear any JAs, but notes that his west window is blocked by many fir trees. Otherwise all is working well. He did blow one tube in his ring PA and ran on only 5 tubes. He ended working 22x16.

**WA5WCP:** Paul [wa5wcp@hotmail.com](mailto:wa5wcp@hotmail.com) in writes on his first 23 cm EME contest activity – The first night I was having problems working even the big gun stations, but Saturday was a bit better. My ears are still blurry from all the noise of the 2 nights operation. I am very new to this and will try very hard to work anyone I can hear. The small dish (3 m dish with Septum feed, 300 W PA and 0.2 NF LNA) on my end makes it a real challenge. My total contacts including the 17 worked in the contest bring me to initial #32. Sending 12 to 14 WPM CW helps my reception when the noise chops up the signals. Slowing down can turn no QSO into a complete one. I have been a ham since 1969 and this was the most fun I have had since my first QSO on 21 MHz CW. I know my copying skills are not 100%, but I will give it another try in Nov.

**WA6PY:** Paul [pchominski@Jaalaa.com](mailto:pchominski@Jaalaa.com) reports on the contest – On 1296, I QSO'd DL0SHF, OK1DFC, G3LTF, SK0UX, N2UO, ON7UN, IK2MMB, RW1AW, K5JL, ES5PC, OH2DG, SM3AKW, W9IIX, VE9DW, VE6TA, HB9BBD, OK1CA, W6IFE, W6YX, G4CCH, WA1JOF, OZ4MM, K2UYH, DF3RU, K5GW, K9SLQ, K0YW, JA6CZD, VK4AFL, ZS6AXT, UR5LX, OK1KIR, PA3CSG, HB9Q, SM4DHN, F6KHM, IK3COJ, DJ9YW, IK2FZR, DL1YMK, HB9SV, F6CGJ, OE9ERC, VA7MM, W5LUA, WA5WCP and W7BBM. Heard were F5HRY on my moonrise when my noise floor is very

high and JH5LUZ for a short period. On 432 QSO'd were OZ4MM and OH2PO. I will pay more attention to 432 during the Nov weekend.

**ZS6AXT:** Ivo [zs6axt@telkomsa.net](mailto:zs6axt@telkomsa.net) has had his problems and writes — Windy weather did not give me chance to do repairs on preamps before the MW EME contest. Then a week before the VHF part of the contest my whole feed was thrown up in the dish. With the help of John we managed to repair this and put the feed into position. Despite windy weather I repaired the damaged preamp for 23 cm and noticed that the W2IMU is slightly damaged. This is probably the reason for just 13.5 dB of sun noise. No further repairs were possible and I operated with it as it is. On 23 cm I worked on 22 Oct G4CCH, OK1DFC for an initial (#), G3LTF, SK0UX, HB9BBD, RW1AW, IK2MMB, DL0SHF, HB9Q, ON7UN, SM3AKW, OH2DG, OZ4MM, OESEYM, LA9NEA (#), ES5PC, WA1JOF, K5GW, N2UO, K0YW, K5JL and VE6TA, and on 23 Oct F6CGJ, DF3RU, HB9SV, JH5LUZ, OK1CA, IW2FZR, JA6AHB, JA6CZD, OK1KIR, VE6DW, DK0ZAB, F6KHM and K9SLQ. Also heard and CWNr were G3LQR, PA3CSG, IK3COJ, HA5SHF, W5LUA, W9IIX and WA5WCP. I had quite short moon window as compared with stations in the north. Thus I still insist that ARRL contest is not fair for stations in the south will not send in my log. Conditions were rather funny towards the end of my moon pass. I suspect that there is a high noise level from some commercial coms equipment to the west of me. Weather this time was absolutely perfect. I was not happy with only 2 initials and hope to work more in the next leg. For new stations, please when you finish a QSO do not move from the frequency, but listen to see whether somebody calling you... And thanks to the big guns for waiting a while before calling CQ again! Finally again - please, if you hear me, try to work me ASAP as my moon window is much shorter than that of the northern hemisphere stations.

**ZS6WB:** Hal [zs6wb@telkomsa.net](mailto:zs6wb@telkomsa.net) reports on future 432 EME plans – We have had quite a few inquiries about 432 EME operation, but multimode equipment for this band is scarce down here and we have had neither loan equipment or antennas available for portable operations until recently when thanks to Dan, HB9Q and Mike, K6MYC we are now in the position of being able to start construction of a portable array. If we can assemble a full portable station in time, we hope to have the first 432 EME operation from Lesotho in Feb by Daniel, ZS5JR, who will operate as 7P8/ZS5JR. Hopefully this will be followed by Mozambique operation in July. During Dec and Jan I will be testing the portable antenna arrays from my home QTH that will be used for the 2006 operations. I plan to operate on both 144 and 432 EME as much as possible. All contacts and reports will be appreciated so we know what to expect with the antennas operating from portable locations. [The hazards of portable EME from Africa is indicated in the following report also from Hal on a 2 m EME expedition: On ZS6JDE's trip to Malawi and Zambia, barely 2 hours after departure, disaster struck. Hannes suddenly found an unlit trailer bearing down on him at high speed on his side of a divided highway. It had come loose from a truck going in the other direction and had jumped the median. Fortunately Hannes was able to avoid a collision by running his Toyota Venture into the bush. Neither he or his two passengers were hurt, but the trailer he was towing rolled and was damaged beyond repair. The 2 m EME antenna (2M7) and tent, which were on the top of the trailer were destroyed. The other equipment in the Venture was undamaged. The police arrived about an hour later and while making out a report on the accident a VW Passat passing by slowed down to see what was going on and was hit at high speed from the rear by a Dodge Colt double-cab with enough force that both drivers were taken to hospital. Because of the accident Hannes will be making this trip by aircraft and will not be able to take the EME station].

**K2UYH:** I [a.katz@ieee.org](mailto:a.katz@ieee.org) operated the contest on 70 and 23 cm and had some fun. FR5DN on 70 cm was a surprise. I also had some problems. On 70 cm I discovered that my new polarization rotator was not working. I suspect the problem was related to all the rain we have had. Unfortunately Faraday was a big problem. When I had the pol angle set for good RX signals, (I went out to the feed and physically moved its position) the Europeans could not hear me. I called EA3DXU and S52CW over and over again. When I move the pol, so that they could hear me, I could not copy them. I could tell that weak stations were responding, but not copy the calls. It rained both days, but I was able to fix the rotator for operation on the second day. On 1296 my water-cooled UPX ring PA blew up. Water was all over the place. I think the plate suppressor resistor got too close to one of the plastic tubes. What a mess! It happened when I was working W6IFE. Fortunately I was able to get an alternate PA going the second day and with about 350 W in the shack. I QSO'd on 22 Oct on 70 cm at 0419 KE2N (559/559), 0438 OZ4MM (579/569), 0444 N9AB (569/569), 0454 FR5DN (559/O), 0554 OH2PO (579/559), 0552 HB9Q (589/569) and 0632 DL7APV (569/569), then switched to 23 cm at 0720 OH2DG (559/569), 0730 HB9BBD (589/589), 0737 SK0UX (559/559), 0748 LA9NEA (559/549), 0800 G4CCH (569/579), 0804 RW1AW (569/579), 0809 DL0SHF (579/569), 0817 IK2MMB

(559/559), 0823 ES5PC (559/559), 0830 OK1CA (559/559), 0847 WA6PY (559/559), 0855 partial W6IFE (599/?) – PA blew, switched back to 70 cm at 0921 G4RGK (559/549), 0925 KL6M (559/559), 0930 DL1YMK (559/559), 0938 G3LTF (559/559) and 0942 DJ9MB (559/559). I went to bed depressed and over slept my non-existent Asia/VK window. After repair on 23 Oct I worked on 1296 at 0447 ON7UN (579/549), 0448 VE6TA (569/569), 0435 OK1DFC (549/539), 0503 K5JL (579/569), 0513 W9IIX (539/559), 0534 K0YW (569/569), 0553 W6YX (539/559), 0558 DF3RU (559/559), 0602 OK1KIR (549/559), 0608 K5GW (579/579), 0614 UR5LX (539/549), 0630 W5LUA (559/559), 0633 G3LTF (559/569), 0639 N2UO (539/559) – no hint of a direct signal, 0645 VE9DX (569/569), 0652 HA5SHF (539/559), 0657 IW2FZR (559/559), 0708 OZ4MM (569/559), 0722 IK3COJ (539/539), 0743 W6IFE (599/579) for initial #247 and 0756 G3LQR (539/539), then switched to 70 cm 0820 S52CW (559/559), 0843 SM2CEW (559/559), 0853 UT5EG (549/559), 0924 RW1AW (559/579), 0934 SM4IVE (559/549), 0840 ISCTE (559/449), 0848 S53RM (559/569), 1000 S53ZO (449/559), 1009 SV1BTR (559/559), 1017 K0RZ (559/559), 1023 G3LQR (559/559) and 1111 K1FO (559/559). At this point the band quieted down and I decided to get a little sleep. This was probably a mistake. I came back on around 1430 on 23 cm, but had more than an S-unit of noise from the wet trees. I never heard any JA or VK signals and only QSO'd at 1453 W7BBM (559/579). I end with 24x18 on 432 and 33x24 on 1296. Prior to the contest I ran a JT65C test on 17 Oct with EA6VQ with nil results. I suspect he problem was my pol rotator as previously I have copied full calls. On 25 Oct on 432 I easily worked at 1300 KL7FH (O/O) on a CW sked for initial #701. Hopefully some the leaves will be off the trees for the second week, which should give me a better window to the west despite the lower declination.

**NETNEWS BY G4RGK: N4PZ** was active in the contest on 432 CW only with an 8 x 10 w1 yagi array and 1.5 kW PA from EN52gb in IL (phone 1-815-734-4255). **W6IFE**, the 40 m dish station at OVRO, spent most of their time near 1296.025. QSLs and reception reports should be sent to K6JEY. **VK4AFL** is now QRV on 1296 EME with a big signal. **KMIP** has written an excellent report on his detection of the Mars Reconnaissance Orbiter (near 432) that N9AB has posted at [http://members.verizon.net/~km1p/N9AB\\_MRO\\_Report.pdf](http://members.verizon.net/~km1p/N9AB_MRO_Report.pdf). **KD7YBL** has found a 10' dish and is looking for info on how to mount it. Cara really needs local help. She is in Hillsdale, WY. **WB5AFY** was active on 23 cm during the contest for a limited time looking mostly for new stations. He worked a few of the big guns and called ES5PC, WA1JOF and W9IIX each for quite a while with only QRZ replies. **NA4N** did not get on 23 cm for the contest as the WX was not good. He has been on 13 cm for the past few weeks and his system is working very well. **W2UHI** was not QRV on 23 cm during the Oct contest weekend due to a PA failure. **WD5AGO** was not QRV on 23 cm for the Oct contest weekend, but did try 70 cm with nil results. **K1FO** was operated by N8CQ in the contest. **N8CQ** hopes to have 23 cm up in Nov from NC. **K5JL** operated the contest on 1296 and reports lots of QSB, but worked a number of stations including VK4AFL for an initial. **W5LUA** worked 38 plus on 1296 in the Oct part of the contest. **W9IIX** worked 22 stations on 23 cm during the Oct EME contest weekend. **N2IQ** was active during the contest. **SM4IVE** is QRV on 70 cm again after a long absence and worked 8 stations including KL6M for an initial. **LX1DB** was Out of town and did not make it on for the contest. **K0RZ** was active in the contest on 70 cm and scored at least 18x16. **K7LNP** reports no progress on the EME station. He did receive his 70 cm booms, but unfortunately his partner had a massive heart attack and stroke, so he has been busy trying to run businesses by himself. **WA9FWD** got ambitious and put a 23 cm feed in his dish. John did not TX and only listened. He heard HB9BBD, DL0SHF, HB9Q, K5JL and others. **W7MEM** is in the new home, but has not got his 70 cm array up yet. **GM0ONN** was on 23 cm during the Oct contest, but had bad WX - very heavy rain and was not able to get the attention of others.

**FINAL:** Please note that in the reports most stations refer to the Oct contest weekend as the first leg of the ARRL EME Contest. Actually it is the first leg of the 144 to 1296 part of the contest and the second part of the over EME contest. The true first leg was the Microwave EME Contest weekend in Sept. I hope this does not cause too much confusion.

G4RGK has written a simple web page to help new JT65 users on 432 avoid some of the pitfalls in using this software. The link is [www.zen70432.zen.co.uk/JT65/JT65.htm](http://www.zen70432.zen.co.uk/JT65/JT65.htm). Also don't forget the new JT65B CQ calling freq on 432.065. I did not read any comments on its use in the reports. There was JT activity on 70 cm, but not anywhere near the level on 144 where JT seems to have taken over. I don't think this will happen on 432 because of the stronger signals and smaller antennas – you don't need that much space for a real EME array. I suspect this activity was mainly the new assisted class.

Because of the short turn around (3 weeks), I am sending this NL out early. Please keep the reports and technical material coming. We could use some more tech material. I shall be looking for all of you in the contest on 12/13 Nov. 73 & GL, Al – K2UYH

