

## 432 AND ABOVE EME NEWS DECEMBER 2008 VOL 36 #14

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**CONDITIONS:** Nov was another great contest weekend. It is hard to argue against a second weekend with the level of activity that was present. The reports of activity and also signal levels on 1296 are especially impressive. 432 also did well this month, although there were some reports of strange conditions – see G3LTF's report. Having polarization rotation definitely helped on 70 cm. I expect the Nov activity *high* will flow over into the Dec Activity Weekend (AW) on the 13/14 Dec. The 70 cm CW Activity Time Period (ATP) will be 13 Dec 1900-2100 and 14 Dec 0400-0600. I would like to propose a third ATP for NA to Asia/VK on 14 Dec from 1100-1300. Just prior to the contest, HB9Q completed the second 432 DXCC using both CW and JT with a QSO to A43DLH – see his report. Congratulations to Dan.



HB9Q's 15 m dish used on 70 cm for DXCC #2!

**DXPEDITION NEWS:** It appears there will be plenty of new countries on 70 and 23 cm to keep interests high in 2009. V51B will be QRV from Namibia (JG73ni) between 7 to 16 Jan on 6 m thru 23 cm EME TNX to HB9Q, ZS6WB, ZS6OB, ZS6BUN and N7BHC. We have only preliminary information, but the dxpedition is confirmed. Operation on 23 cm will be with DL3OCH's equipment. PY2BS is also planning a mini dxpedition in Brazil on 70 and 23 cm as PY1KK – see Bruce's report. Besides these dxpeditions, there were a number of new DXCC location worked on 70 and 23 cm during Nov. UK/DL9LBH and KG6DX were QSO'd by DL7APV during the contest. HB9Q QSO'd BX1AD. These contacts were on 432. On 1296 UA9FAD was worked by OK1KIR after the contest.

**HIGH SCORES:** There are some very impressive scores. It appears that DL0SHF has captured the lead on 1296 CW with 102 x 43 for 438600 points. Carsten *nosed* out K1RQG, who has one more QSO, but one less multiplier with 103x42 for 432,600 points. OK1CA has the most QSOs, but less multipliers with 107x39 = 417,300 points is now in third place. The next closest is F2TU with 97x37, who was second in Oct followed by G3LTF at 87x37. The highest JT QSO count reported on 23 cm was 18 by HB9Q. On 432 OH2PO now has the CW lead with 70x30. DL7APV is close with 64x29. G3LTF follows with 49x24. HB9Q reports the top 70 cm JT tally with 36 QSOs compared to 29 by DL7APV. HB9Q has the multi-band, multi-mode lead with 360x159 for 5,724,000 points followed by K1JT with a near 356x160 for 5,696,000 points.

**8J1AXA:** Mike (JH1KRC) [jh1krc@syd.odn.ne.jp](mailto:jh1krc@syd.odn.ne.jp) reports that the big 18 m dish has passed 70 cm interference test with the nearby JAXA satellite control station. On full power on 70 cm, the harmonic radiations (less than -85 dBc) did not make any disturbance to the JAXA system. Permission has now been granted to operate 70 cm on occasion.

**DL7APV:** Bernd [dl7apv@gmx.de](mailto:dl7apv@gmx.de) was active during the ARRL EME Contest on 70 cm, but will only submit a check log to indicate his feelings on the way the ARRL has been running the contest and the present rules – My final score was 93x41. This is a mixed total. I made 64x29 on CW and 29x12 with JT. During my last pass I added on JT KG6DX, RW6AG, and JN4VAX all for initials. Other initials were RW3WR, UK/DL9LBH, UT6UG, EA3BB/p, DD7PC and UA3DJG. I also had a partial with KC3RE, but my SWR went bad (close to 2 dB) due to bad WX. The last pass, I was only on for about 1 hour because of high winds and about 10 cm of snow. Prior to the contest weekend I worked A43DLH on JT but with a marginal signal (26DB), plus DL7FF, ES3RF, AA9MY, UA4API, VE2DSB, YU7AA and DL2LAH all on JT. It seems for me 432 activity has increased a bit.

**DL9KR:** Jan [Bruinier@t-online.de](mailto:Bruinier@t-online.de) was QRV on 70 cm during the contest weekend and sends his thanks for the various QSOs and RX reports, but did not put in his usual effort -- Due to family activities around my 73 birthday and lack of motivation under the new contest rules, I regarded this contest as sort of two AWs. Thus I only put in a puny 4 hours of total operating time. I worked on 18 Oct OH2DG, G4RGK, UA3PTW, I1NDP, JA5NNS, FR5DN, OH2PO, PI9CAM for initial #877, LZ1DX, DF3RU, K4EME, DL1YMK, N4GJV, KE2N, W8TXT, SP6JLW and DL7APV, 15 Nov SP7DCS, UT5DL, SM4IVE, SD3F, UA6LGH, K0RZ, LZ1DX dupe, OE5JFL and KL6M, and on 16 Nov JA9BOH, G3LQR, J11NNJ, G4ALH and G4YTL. I also heard WA6PY (569) but missed QSOing Paul. I will send a CHECK log to the ARRL. As long as CW and WSJT are not treated separately at whichever weekends or just one weekend, I shall participate in the "activity weekend mode" only. Prior to the contest, I QSO'd on 10 Nov A43DLH #878 on CW of course for DXCC 101.

**EA3XU:** Benjamin [bpaloma@telefonica.net](mailto:bpaloma@telefonica.net) is now QRV on both 70 cm and 23 cm EME. On 23 cm he now has 4 x 33 el M2 yagis mounted horizontal with 15 m of ECOFLEX15 feedline, 90 W HB PA, IC-910 with high stability xtal and a SSB preamp. Prior to the EME contest he had QSO'd in only one week on 1296 four stations with JT65C, G4CCH, DL9YW, RW3BP and K2UYH. In the contest Benjamin added OK1DFC, HB9Q, ES6RQ, ES5PC and OE9ERC, and heard OH2DG and K1JT. For 70 cm he 2 x 21 el Tonna yagis and 85 W. He has QSO'd on 432 HB9Q, OH2PO, DL7APV, I1NDP, PA3CSG, GW3XYW, LZ1DX and PI9CAM. [I believe all these contacts were made on JT65B]. He has also heard K7XQ (-27 dB). In the near future Benjamin plans to expand to 4 yagis and 300 W.



EA3XU's EME antennas for 2 m, 70 and 23 cm

**F2TU:** Philippe [f2tu.philippe@orange.fr](mailto:f2tu.philippe@orange.fr) writes on his contest efforts -- I concentrated on the 2304 and up. I only participated in the 1296\ part for fun.

All my QSOs were CW, no JT. My results were on 432 10x7 with 1 initial to bring me to #258, and on 1296 97x37 with 20 initials for #312. I heard N9JIM and OK1DST (M) calling me 5 min before contest ended. On the microwaves, I scored on 2300 33x22 with 4 initials for #76, on 5.7 GHz 8x7 with 2 initials for #28, and on 10 GHz 12x10 with 1 initials for #49) for a microwave total of 53x39.

**F5HRY:** Herve [F5HRY@wanadoo.fr](mailto:F5HRY@wanadoo.fr) had little time to operate during the Nov leg of the ARRL EME on 23 cm – I worked OK1DFC, IW2FZR for initial #68, IK2MMB, G3LTF, LA9NEA #69, OK1CA, DF3RU, OZ4MM, SP6JLV #70, IK3COJ #71 and K2DH #72. CWNr were HB9GR (loud) and JA6CZD. Both would have been initials. I am sorry for having some trouble to copy weak signals, but please remember that my dish is only 2.4 m.

**F5JWF:** Philippe [f5jwf@wanadoo.fr](mailto:f5jwf@wanadoo.fr) sends news about his activities during the ARRL EME Contest -- I was active on 13 cm and 3 cm on the weekend of 20/21 Sept and only on 23 cm on 18/19 Oct and 15/16 Nov. This year I had good weather for all 3 weekends and no technical problems to report. My location, hillside east, allows me good coverage of the moonrise. I can already hear my echoes within 2° of elevation. However, the moon disappears to the west when it goes below 28°. It is a pity that there are far fewer stations side is active to the east compared to the west. In Oct I worked on 13 cm, 7 stations: F2TU, G3LTF, G4CCH, OH2DG, OK1CA, ES5PC and SD3F, and on 3 cm, 13 stations: IQ4DF, OKCA, G4NNS, HB9BHU, WA6PY, F2TU, IK2RTI, RW1AW, W5LUA, K1JT, ES5PC, OK1KIR and WA7CJO. In Nov I QSO'd on 23 cm, 36 stations with 10 initials: K1RQG, SP6JLV, DL4MEA, K1JT, LA9NEA, ES5PC, SV3AAF, OK1CA, DL0SHF, HB9Q, SM4DHN, VK3UM, HB9DGG, F5FEN, OH2DG, F2TU, G3LTF, SD3F, IK2MMB, I5MPK, RA3AQ, DF3RU, HB9Q, DL1YMK, OZ4MM, DF3RUC, OK1DFC, WA6PY, IK3COJ, UT5JCW, PI9CAM, ON5RR, IQ4DF, K5JL and HB9GR [dupe – same HB9DGG?]. My equipment on 1296 are a 3.7 m dish, 250 W PA (EIRP ~190 kW) and ~0.4 dB LNA, on 2320 are a 3.7 m dish, 170 W PA (EIRP ~537 kW) and ~0.4 dB NF LNA, and on 10,368 a 3.7 m dish, 45 W TWTA (EIRP ~4 MW) and ~0.9 dB LNA. I have a multitude of areas for improvement to optimize these 3 bands. The septum feeds that I use on 23 cm and 13 cm are original versions as described by OK1DFC. By adding scalar chokes, I hope to gain some few dB. On 23 cm I worked with 4 MRF286 in parallel to get 250 W out. My 3.7 m parabola is a little small and I often find it difficult to get heard in the pile ups and to contact small stations. I am looking for opportunities to mount more powerful transistors to be about 400 W. On 13 cm, I use a surplus UMTS PA with 4 MRF21085 in parallel. I am limited for the moment by my hybrid coupler to about 170 W. I plan to change to a higher power coupler to exploit the full potential of my 4 MRF devices (400 W). I already have an heavy duty PSU 28 V/50 A (design by F5UAM). My biggest problem on this band is that I am not equipped for crossband (RX 2424, 2304, 2301). I'm hoping to have RX for these frequencies by next spring. On 3 cm, my TWT, YH2135, with 45 W does still not show its point compression and I expect there is a way to get more power. The current restriction is because the SMPSU goes into protection at this power level. As the tube is still cold, I think it should be possible to modify SMPSU to change the trip level without any damage. On the antenna site, I am still wondering if it makes sense for me to modify my 3 cm feed for circular polarization as on the other two bands.

**G3LQR:** Simon [G3LQR@aol.com](mailto:G3LQR@aol.com) spend a little time on the moon during the ARRL contest, but not as much as he would have liked – I worked on my 432 array again to make some repairs to my open wire phasing lines. It seems to have improved, but the VSWR is rather high at 3.1. I will try to sort this out in the spring. Even so, the antenna worked better with a delta type feed system like DL9KR. I managed to work 18 stations on 432: I1NDP, VK3UM, G3LTF, UA3PTW, SP6JLV, OH2DG, OH2PO, DL7APV, OZ4MM, WA6PY, SM2CEW, KL6M, PI9CAM, JA5NNS, SD3F, DL9KR, J1NNJ and DF3RU. On 23 cm there was so much activity that my 100 W at the feed was not enough. Many CQs gave no result apart from a call from OE5JFL at the end of the contest. I managed to work 19 stations: G3LTF, HB9DGG, RA3AQ, SD3F, F2TU, SP6JLV, ES5PC, DL0SHF, OK1DFC, K1RQG, DF3RU, LA9NEA, K1JT, VE6TA, K2DH, HB9Q, IQ4DF, OE9JFL and OZ6OL, and heard at least another 30. Back in Oct on 13 cm I also worked a few stations, but did not like the late night hours. QSO'd were G3LTF, G4CC, OH2DG, DL4MEA, OK1CA, F2TU and SM2CEW. I heard more, but was unable to be on for the NA window. My projects for this year will be try to get the YD1336 producing power on 1296 and improve the 8 yagis on 432 for next spring. I also want to get 9 cm working better by putting my Toshiba SSPA at the feed.

**G3LTF:** Peter's [g3lft@btinternet.com](mailto:g3lft@btinternet.com) report for Nov follows -- A good weekend one EME, although I missed several multipliers on 432 by a poor choice of bands and sleep timing. There were some unusual conditions on 432 (see below). On 432, I worked on 15 Nov SP7DCS, LZ1DX, DG1KJG, SM3JQU, UT5DL, HB9Q, PI9CAM for initial #420, KORZ, WE2Y, K4EME,

W7CI, KL6M, KE2N, DJ7GK, OE3JPC, JA5NNS, VK3UM, G3LQR, FR5DN, JA6AHB, DL4MEA, JH4JLV, UT2EG, DL7UDA and YO2IS for a final total of 44x25 - slightly down from last year. On 1296 on 15 Nov I worked DF3RU, WA5WCP, JH5LUZ, OK1DFC and F5HRY, and on 16 Nov VE3KRP, IQ4DF, K5PJR for initial #289, ON5RR, K5JL, UT5JCW, DL1HCZ #290, K6JEY, WA5WCP, VK3NX #291, OZ6OL, SM3JQU, ON4BCB, JA8IAD, ON7UN, OK2KJT #292 and JA4HZN #293. My final total was 87x37 - up from last year. CWNr were DL2HWA and PA3DZL, heard were IK2RTI and OK1DST. My final overall claimed score in the all band analogue section is 1,582,400 points. Conditions on the first pass on 432 were what I call good; pol was sharply defined, but the fading was very long with *shortish* strong peaks, sometimes as much as 40 seconds apart and long periods of weaker signal. It was not a polarization effect because I was able to check this with my fully rotatable feed. In the fades the signal remained low despite rotating the feed. This is a similar effect to that which was observed last year (2007) and in Oct 2008, but then the effect was only at moonrise plus a few hours. This time it seemed to persist for much longer, up to 6 hours. By contrast on the second pass from moonrise on, signals were definitely weaker. This seemed primarily because the pol was badly spread with little change over large rotation angles. The same fading effect was still present, but much less marked. As I see it, there are three effects, Faraday rotation, Absorption and Libration, all with different periodicity. I think we can largely eliminate polarization. Can it be that the libration and absorption rates of change are similar at this period of the solar cycle and so we are seeing the interactive effect of two slowly changing periods? I gather we are in the quietest period of sun activity, since before amateur EME began. Could this be significant?

**G4CCH:** Howard [howard@g4cch.com](mailto:howard@g4cch.com) writes about his contest activity -- This was not really a serious effort on my part, as I like so many others have decided not send in a contest entry, but I was interested in working whoever was on. I suspect that to have done much better, I would have had to put a lot more time and effort in during the night. I wasn't up for that as the first weekend was only 2 days after an op on my foot, and I had to return to work the next day after the second weekend. Also, to get a good place in the most challenging category (CW unassisted) would require concentration on just analog QSOs and potentially missing some digital initials. There seemed no point in working digital and include the QSOs in a contest entry only to end up being placed 1st out of 1 like last year, hi! So I just went ahead and did my own thing at a relaxed pace and had some fun. Here's a list of stations in my log for the two weekends: On analog AL7RT, AL7RT, DF1SR, DF3RU, DL0SHF, DL1YMK, DL4DTU, DL4MEA, DL6SH, EA2LU, ES5PC, F2TU, F5FEN, F5VHX, G3LTF, HB9DGG, HB9GR, HB9Q, I5MPK, IK2MMB, IK3COJ, IW2FZR, IZ4BPN, JA4HZN, JA4LJB, JA6AHB, JA6CZD, JA8ERE, JA8IAD, JH5LUZ, K1JT, K1RQG, K1RQG, K2DH, K4QI, K7XQ, LA2Z, LA9NEA, LX1DB, N2UO, NA4N, NY2Z, OE9ERC, OH2DG, OK1CA, OK2KJT, OK3RM, ON4BCB, ON5RR, ON7UN, OZ4MM, PA3CSG, PA3FXB, PI9CAM, PY2BS, RA3AQ, RK3WWF, RW3PX, SD3F, SM5LE, SP6JLV, SP7DCS, SV3AAF, UR5LX, UT5JCW, VA7MM, VK3NX, VK4AFL, W9IIX, WA5WCP and WW2R for a total of 72 including 7 Initials. I missed DL1HYZ, HB9SV, IK2RTI, JA6XED, RA6DA, RA3EC, RU3ACE, SM4DHN and VE6TA. On digital I worked EA3XU, G4CBW, HB9EHJ/P, K1JT, K6JEY, K7XQ, PA3FXB, PY2BS, RW6AG, UT3LL, VA7MM and VK2JDS for a total of 12 including 4 Initials. Missed were DJ9YW, G4DZU, IK5WJD and W7UPF. I did monitor HB8Q's logger and occasionally ON4KST chat, but this is NOT my normal practice during contests. It was interesting to note that some stations known to be entering the contest were listed as logged on during the contest. Perhaps they forgot to log out. Curiously, this contest seems to have generated possibly the largest level of activity on 23 cm that I've known during my 26 years experience despite all the disagreements about the rules. Just think what we could have had, if we had some sensible rules and those that said I'm not even going to operate had showed up too!

**HB9Q:** Dan (HB9CRQ) [dan@hb9q.ch](mailto:dan@hb9q.ch) reports that he has completed DXCC on 432. His DXCC is by mixed mode. Since 2000 with his big dish he has worked 96 DXCC. Only 5 of the 101 were worked in the '80s and not reworked since 2000. 94 were on EME and 18 terrestrial, 64 on CW and 77 on JT. A43DLH was Dan's 100th! He added DXCC 101 in the contest with a random QSO with BX1AD in Taiwan! Edward, [edward.yhi@gmail.com](mailto:edward.yhi@gmail.com) was using 2 x 20 el yagis and 50 W. He called Dan on his CQ with a stable signal (24DB). During the contest Dan and his team operated unassisted class (totally random, no Internet, no chats, no real-time liaisons of any sort were used). They scored on 70 cm 79x39 with 43 QSOs on CW, 36 on JT and 10 initials, on 23 cm 99x37 with 81 QSOs on CW and 18 on JT and 12 initials, and on 13 cm 27x20 with all QSOs on CW and 12 initials. Dan also operated on 2 m to give an overall score of 360x159. A measure of the growth of activity on 1296 is that their QSO count on this band was 64% of his QSO count on 144. Interestingly they made no CW QSOs on 144, but 81% of his QSOs were CW on 1296. Based on their score,

the percentage of non European activity was highest on 70 cm; 51% vs. 36% on 144 and 35% on 1296.

**IK6EIW:** Stefano [asmag@libero.it](mailto:asmag@libero.it) writes about his experiences during the ARRL EME Contest -- I was not lucky, but did have some fun. About 30 minutes before the start of the contest, the power out of my 1296 PA dropped to 100 W. I was not able to fix the problem. (I need a good TH308 or TH338 tube. Can anyone help?) During the contest the signals received were incredible! I called OK1DFC and DL0SHF many times, but only got QRZs. Others heard were OZ4MM, HB9Q, HB9SV, ON7UN and some JA stations and many others. I also copied stations on SSB. I had sked with IK2MMB and we QSO'd with no problem. Then my AZ motor decided to take a rest and I went to sleep. I am working on repairing and improving my system. I hope to work everyone next time.

**JJ1NNJ:** Kouichi's [jj1nnj@extra.ocn.ne.jp](mailto:jj1nnj@extra.ocn.ne.jp) report for his operation on 70 cm CW during Nov -- I QSO'd on 15 Nov KL6M (449/549) with pol +30°/+30°, JH4JLV (449/449) pol H/H, OZ4MM (559/559) pol V/V, UT5DL (O/O) pol V/V dupe, FR5DN (449/439) pol +30°/+39° and HB9Q (559/549) V/V, and on 16 Nov VE6TA (449/449) pol +30°/+30°, SM3JQU (O/O) pol V/V for initial #107, SV3AAF (449/449) pol V/V, UT5DL (O/O) pol V/V dupe, DF3RU (559/559) pol V/V dupe, DL9KR (579/579) pol V/V and G3LQR (559/549) pol V/V #108. Heard were WE2Y, K4EME, WA4NJP, LZ1DX, DL4MEA and G4YTL. DL9KR had a very good signal. My final score was 34x21. I have participated in the contest every year since 1994 except for 1995 when I could not be on.

**K0RZ:** Bill [wmccaa@comcast.net](mailto:wmccaa@comcast.net) (DM79jx) reports he QSO'd on 432 CW in Oct using horizontal polarization: DL7APV, FR5DN, JA9BOH, JJ1NNJ, K1JT, K4EME, KE2N, N4GJV, N8CQ, OH2PO, SM2CEW, SV3AAF, UA3PTW, VK3UM, W7AMI, W8TXT, WA4NJP and WE2Y. In Nov using vertical polarization, he QSO'd DF3RU, DG1KJG, DJ7GK, DL4MEA, DL9KR, G3LTF, HB9Q, I1NDP, JA6AHB, JH4JLV, K1M, KL6M, LZ1DX, OE5JFL, OZ4MM, P19CAM, SM4IVE, SP6JLW, SP7DCS, UA3DJG, UA6LGH, UT2EG, UT5DL, VE6TA, W7CI and WA6PY. Initials were N8CQ for #335, LZ1DX #336, P19CAM #337, SP6DCS #338, DJ7GK #339, DG1KJG #340 and UA3DJG #341. Bill found both propagation and weather condx good for both weekends with horizontal polarity favoring the US and vertical favoring Europe. His contest score was 44x25.

**K1JT:** Joe [k1jt@ARRL.NET](mailto:k1jt@ARRL.NET) reports on his groups contest results on 70 and 23 cm -- The operators on 70/23 in Nov were K2UYH, K2TXB and K2LNS (operator WA2FGK). Overall we did considerably better than last year, thanks to the tremendous efforts of Russ and Herb. The leaf reduction was also a great help. We were able continue to the west until the moon was less than 7 degs despite increased noise. All QSOs were on random CW unless noted. We worked on 15 Nov, on 1296 at 0045 OK1DFC (569/579), 0058 UR5LX (O/O), 0115 UT5JCW (449/559), 0125 G3LQR (549/559), 0135 EA3UM (559/559), 0144 IW2FZR (539/559), 0234 K3JNZ/0 (559/579), 0239 EA2LU (559/5569), 0247 OZ6OL (559/559), 0259 I5MPK (559/579) dup, 0303 K5JL (599/589), 0310 RK3WWF (559/559), 0318 DL1HYZ (559/559), 0338 OZ4MM (579/589), 0347 P19CAM (579/599), 0400 RW3PX (559/559), 0410 DL2HWA (559/529), 0432 VE7BBG (13DB/9DB) on JT65C, 0445 PA3FXB (12DB/6DB) on JT65C, 0452 W7UPF (10DB/O) on JT65C dup, 0520 WA6PY (569/579), 0632 RA6DA -- lost on JT65C, 0646 PY2BS (O/O) on JT65C, 0727 ES6RQ (7DB/3DB) on JT65C, 0737 OH2DG (7DB/6DB) on JT65C, 0802 LX1DB (559/559), 0825 K7XQ (449/559) dup and 0838 N9JIM (439/559), on 432 at 1028 WA4NJP (12DB/O) on JT65B, 1033 WA4NJP (569/569), 1110 JA6AHB (559/559) and 1128 KL6M (559/559), on 1296 at 1250 VK3UM (449/549) and 1329 JA6CZD (559/559), on 432 at 0213 P19CAM (569/569) on JT65B, 0224 DK7GK (O/539) on JT65B, 0245 LZ1DX (O/579), 0301 UT5DL (O/O) dup, 0315 K1M (559/559), 0328 VE6TA (569/579), 0332 OH2DG (579/559), 0339 HB9Q (5DB/3DB) on JT65B, 0353 W7AMI (22DB/O) on JT65B, 0400 S54T (17DB/O) on JT65B and 0418 OZ4MM (569/579), on 1296 at 0457 OK2KJT (24DB/O) on JT65C, 0532 K6JEY (11DB/10DB) on JT65C and 0555 IQ4DF (559/539), and on 16 Nov, on 432 at 0635 KE2N (18DB/19DB) on JT65B, 0645 EA3BB (15DB/O) on JT65B, 0658 K7XQ (14DB/17DB) on JT65B, 0754 DL7APV (9DB/O) on JT65B, 0816 DF3RU (559/439), 0827 DL7UDA (10DB/O) on JT65B, 0943 ES5PC (19DB/O) on JT65B, 1000 K4EME (14DB/O) on JT65B, 1013 K4EME (449/339), on 1296 at 1055 G4CCH (7DB/5DB) on JT65C, 1108 JA8IAD (569/559), 1156 VE3KRP (539/569), 1303 JF3HUC (549/559), on 432 at 1340 VK3UM (O/O), and on 1296 at 1415 VK3NX (449/519). On 1296 we added in Nov 26 on CW and 7 on JT and ended with a total 94x37 with 81 on CW and 13 on JT. On 432 we added 23 on CW and 10 on JT and ended with 45x31 with 35 on CW and 10 on JT. With operation on 144 and the microwave bands our overall score was 356x160. One difference in Nov was the addition of an SDR-IQ module that allows us to see a full 100 kHz span and where stations were active. It was a learning experience

as how to best use this unit, but we found it very helpful and will be using it even more in the future.

**K1M:** Bennie (W4SC) [www4sc@alltel.net](mailto:www4sc@alltel.net) arranged to use K1RQG's station to put K1M on 432 for the Nov contest weekend. Here is the story -- When I approached K1RQG to do something *different* for the ARRL EME Contest, K1M was *born*. Getting permission to use the call K1M was the easy part. We decided to use K1M only on 70 cm EME. The justification in obtaining the call was for recognition of Veterans Day, and the US Navy's use of EME for communications in the late 1950s and early 60s. We also decided to keep the operation *under wraps* and hopefully be a surprise for 70 cm operators. My travel to Bucksport was troubled by airline flight cancellations and delays. I did however arrive Friday mid afternoon, and the first order of business was to have an early supper at a local eatery. The lobster pie was *good stuff*. Joe operated K1RQG on Friday/Saturday moon pass on 23 cm. A switch to the 70 cm feed was made Saturday midday in preparation for K1M. All equipment was checked and found to be in FB working order. We waited for Moonrise. After moonrise a follow up check revealed a TX problem, high SWR. Maybe there was too much *goo* during the earlier checkout? The K1M operation seemed jeopardy. We found water in a short jumper at the feed. Joe replaced it and we were back in business.



W4SC operating K1M (K1RQG)

The operation yielded 30 QSOs. There were only two escapes. Activity had to be ended early, before the VK/JA window, due to high winds - our apologies to the JA ops and friends *Down Under*. This was the first time I had ever experienced EME on 70 cm. A lesson learned was how important it is to have the ability to rotate polarity. It was truly amazing to see the affect on signals when adjusting the angle. Good signals would disappear with only a small change in the angle, while others would be affected very little. Polarity rotation is a must have. The previously unknown *out of the box* call revealed how EME operators respond to something out of the norm. The 1x1 call active on 70 cm certainly produced a range of responses. Most operators' expectations seemed to be that it must be a 1x2 or 1x3 call... Never a 1x1! There were exceptions and some got it straight away, and others even figured out who was behind the key! Listen carefully and trust your ears guys!! All contacts will be confirmed for the K1M operation. For some it will be an initial, but most not. [K1M is the same as K1RQG]. A special QSL is in the works, and the K1M QSL manager is W4SC. For the stations getting the call straight away, a Lobster Pie at The Weathervane is awarded courtesy of the Orcutt Mountain Radio Gang. There is no shipping on this special prize, as not even FedEx can get there fast enough for you to enjoy. This prize is *eat in* only and all cost incurred in order to retrieve said prize is the sole responsibility of the winner. My TNX to Pearl, Joe's XYL, for the greatest hospitality - fantastic cook!!! TNX to Joe for going along with and helping to conjure up this 70 cm EME adventure. It was GREAT FUN!

**K1RQG:** Joe [k1rq@aol.com](mailto:k1rq@aol.com) had a fun time during the Oct and Nov ARRL contest weekends -- I operated single operator 23 cm for three periods. I was not able to put in full time during the Oct weekend, as I ran the 20 m EME NET both days during good moon time. On the Nov weekend, I only operated one moon pass on 23 cm EME [see the K1M report]. I had a total of 119 QSOs on 23 cm with some duplicates due to working the same station on both CW and SSB. My actual score was 103x42 for 432,600 points with total operating time on 23 cm EME less than 24 hours.

**K2DH:** Dave [k2dh@frontiernet.net](mailto:k2dh@frontiernet.net) was QRV in Nov. He worked prior to the contest VE3KRP for an initial and K1RQG. During the Nov contest weekend he

added about 13 more stations including UT5JCW, SM5LE and IK3COJ is now around 62 QSOs. Dave is working on a 500 W SSPA for 23 cm.

**K3JNZ:** Bill [k3jnz@aol.com](mailto:k3jnz@aol.com) was active again on 1296 from his new IA home and sends his story -- KA0Y had his place up for sale for quite a while before I found it on an ARRL for sale listing. Ken wanted to sell his property to a ham who could make use of this great site, it's equipment, and antennas. But finding a buyer was a difficult task and with the housing market itself being in trouble Ken was forced to lower the price twice. When I contacted Ken, I was sure I was who he was looking for. Licensed since 1959 I have kept my original call, K3JNZ, since then. I was a past president of the Germantown ARC, am a current ARRL member, as well as an AMSAT and QCWA Life Member. In May of 2006 I retired from the ABC TV Network after 30 years of service as a Video Tape Editor. Last March I made arrangements to visit Iowa and on 8 July officially became the new owner. I'm still back and forth between NY & Iowa for now, but officially KA0Y is no longer licensed here and I will be operating portable until my move becomes official and I transfer my address, operator and station license to here. During the Oct contest weekend I worked 20 stations on 1296 and hope to work more during Nov. These were my first ever EME contacts and am very excited about it.

**K4EME:** Cowels [candrus@rica.net](mailto:candrus@rica.net) operated the Nov contest weekend on 70 cm with 4 yagis mounted vertically for RX only. The other 4 he had horizontal and used them on TX and for RX. In Oct he QSO'd DL9KR, OH2PO, FR5DN, K0RZ, WE2Y, KE2N, DL7APV, HB9Q, I1NDP, OZ4MM, and VK3UM. He worked in Nov I1NDP (dupe), G3LTF, W7CI, P19CAM or an initial (#), and KL6M. I1NDP turned out to be a dup. Heard in Nov, but not worked were UA3PTW, SM4IVE (?) and WA4NJP. He also heard many other stations that he had already worked in Oct. Unfortunately; Cowels lost his best preamp (on the horz array) for unknown reason. This has not happened to him for at least a year or two. He was able to change out the preamp in about 15 minutes and be back on the air, however with a NF of 0.7 instead of 0.2 dB. Between the first and 2<sup>nd</sup> passes he repaired his good cavity preamp and was back to close to 0.2 dB NF. Most Eur stations appeared to be coming on vert, and most US stations better on horz including his own echoes.

**K4OI:** Russ' [K4OI@aol.com](mailto:K4OI@aol.com) Nov report – 1296 condx were exceptionally good here on 15 Nov. Both echoes and signals were very strong. I worked DFRRU, OH2DG, K5JL, UT5JCW and PA3FXB in about 30 minutes. Unfortunately, some kind of intermittent receiver failure developed in the dish feed and shut me down. I saw this a couple years ago and after checking the feed very closely, could find nothing. The problem cleared up but high winds on the 16th kept me off. I have not had the feed out of the dish to check anything this time. I am using a Minicircuits L band amplifier as a second stage and suspect the problem may lie there.

**K5PJR:** Tony [k5pjr@centurytel.net](mailto:k5pjr@centurytel.net) was QRV on 1296 during the contest with his 5 m dish with 300 W at the feed and 0.2 dB NF LNA from EM37ka in MO – In Nov the wind was too high to get on Friday night. I have to tie my dish down at 30 MPH - solid dishes do catch the wind! Saturday night the wind was down and I was able to get on. I worked only 10 or 12 in about 3 hours. I spent most of my time tuning around and heard several 20 m type pileups! My echoes seemed to have large, slow QSB. I wonder if others heard the same thing? I only worked W4OP and K5JL in NA. Where was everyone else? I was pleased to add UT5JCW, his system was playing well. G3LTF's signal and CW was great!

**K6JEY:** Doug [doughhelen@moonlink.net](mailto:doughhelen@moonlink.net) sends info on his groups Nov success -- We were on 23 cm for both nights of the last weekend of the ARRL contest on CW and JT unassisted class. TNX to the crew, especially W6SZ [Rein our web host's new call], we were on in fine style. KJ6HZ, and I originally had the idea to form a special interest group in the San Bernardino Microwave Society that would get together to do EME. Over the year, we made plans and brought people together. This effort ultimately culminated in this year's activity. About 4 weeks before the first contest weekend, KJ6HZ invited W6SZ to join the effort. The crew was I, KJ6HZ, K16LQV, N6NM and W6SZ. The rig, the first weekend of the contest, was a hand pointed 7' dish with septum feed, GS15b PA and HB9BBD preamp at 0.16 dB NF. On the first weekend Rein, John and I ran on CW and JT mode and did pretty well. For the second weekend, we put together a 10' dish with the same feed, etc. It was quite a project, but proved very much worth the effort giving us much better reports and superior received signals. We also added the VR 5000 receiver and worked on an SDR radio for the wideband 10.7 MHz output. We had everything ready except the SDR radio. We hope to have it ready for next time. Murphy hit us pretty hard though. First, our TS 790A came out of lock on 1296 all night the first night. We knew of another radio nearby and borrowed it. In the meantime we used an LT 230S hooked to the TS 790A 2 meter port. We worked several stations with it. By the next night, the original radio had mysteriously recovered and ran without a hitch the whole night. Murphy next struck about 2 am. The GS15b PA went up in smoke –

literally! The transformer had been running at 400 ma in JT mode. The spec was 270 ma. We will run a lot less power next time. I have since found a spare transformer and we should be back on the air for the Dec AW. QSO'd during Nov were OK1DFC (O/O), PA3FXB (17DB/O) on JT, K1JT (10DB/O) on JT, OK1CA (O/O), K5JL (O/O), LA9NEA (O/O), G3LTF (O/O), OZ4MM (O/O) and HB9Q (10DB/O). The portable nature of the dish is made easier by extensive labeling and good procedures. It takes about 15 minutes from start to finish to set up the dish or take it down. We found that the sidewalk cracks are true NSEW directions! As a result of the weekend, the other members of the crew are working on their own stations.

**K7XQ:** Jeff's [k7xq@secure.elite.net](mailto:k7xq@secure.elite.net) Oct/Nov EME report – I spent the last few months reconstructing my 432 x 7 wl XPOL yagi array. The antennas were modified M2 9 wl yagis with added vertical elements. The antennas were shortened to 7 wl to properly balance the array and to allow spacing at 5°. The biggest problem on this band is Faraday lockout, so I decided to eliminate the problem by adding vertical polarization. As expected, it has proved to be a problem solved. I now find in most cases signals from EU vertical most of time. Only 4 of the 8 yagis were used during the last few months. Now I just need to add the remaining power divider and phasing lines for the 4 remaining yagis. On 1296, I improved the preamp by replacing the existing device with an ATF 36077. Signals and my echoes have noticeably improved. I do not participate in any contests (meaning I do not submit logs), but I do continue to get on the moon and make contacts and enjoy the increasing activity. Here is my activity for Oct and Nov. I worked on 432, on CW OH2PO and HB9Q, and on JT HB9Q, DL7APV, KE2N, SM2A for an initial (\*), WA4NJP (\*), PE1ITR (\*), EA3BB (\*), S54T (\*), K1JT and OE9ERC (\*). Murphy hit me hard on 432. First I was plagued by a couple of melted center conductors inside jumpers up at the tower, which had to be troubleshoot and replaced in the middle of the night during the contest time. The light of the bright moon help me see in the dark! I also was plagued by birdies covering the 432.00 to 432.025 portion of the band - filters couldn't get rid of it. A lot of time and many stations were missed as a result. I worked on 1296, on CW LA9NEA, HB9Q, SM4DHN for an initial (#), OK1CA, PA3CSG (#), F2TU, DF3RU, G3LTF, K1JT, ES5PC, K1RQG, G4CCH, P19CAM (#), DL0SHF and LX1DB (#), on SSB P19CAM, and on JT W7UPF (\*), K6JEY (\*), K1JT, G4CCH, RK3WWF (\*), PY2BS (\*), VE7BBG (\*), UR5LX (\*), PA3FXB (\*), and ES6RQ (\*). Due to a heavy QRL schedule, I only operated a total of about 20 hours and missed one day out of the total four. I am still finding that once the EU moon window closes, most activity ceases. I think this is the time the US stations go to bed and maybe resume activity in the morning. I will probably do the same next time. This was an observation I found for the last several years now. I hope to catch more of you on 432 during Dec. I am excited to finally have a reasonable array on 432 to make reliable CW contacts. I always thought having a 4 yagi station on 432 was too marginal for making regular CW contacts, but there are some who would argue this point.

**K8EB:** Erwin in EN73cb is working on a 23 cm EME system. During the contest as a SWLer he heard DL0SHF, K5JL, K1RQG, SP6JLW, OK1DFC, P19CAM, VE6TA, K1JT, DF3RU, OZ4MM, HB9Q, WA6PY and lots of partials. K1JT was heard on both JT65 and CW, and DL0SHF was really loud!

**KL7HFQ:** Roger [trygve@mtaonline.net](mailto:trygve@mtaonline.net) was active on 70 cm during the contest in Nov. He added two new stations, P19CAM and K1M. He CWNR I1NDP for more than an hour.

**KW6AM:** Jon (x-WB6IMC) [kw6am@frontiernet.net](mailto:kw6am@frontiernet.net) is planning to return to 70 cm EME and is also building up a 23 cm EME station. Jon was active in the '90s and has about 60 initials on 432 using 4 x FO37s. I do not think he is ready for skeds, but is interested in hearing from others on 432 and up EME.

**N4GJV:** Matt [qstdebb@yahoo.com](mailto:qstdebb@yahoo.com) was active on 432 during Nov but had some WX problems -- My activity, on Saturday was limited by a series of very strong thunderstorms that accompanied the passage of a strong cold front. Propagation conditions seemed to be very good during the rare times that polarization alignment was good. On Sunday, conditions seemed to be excellent, but once again one way propagation was a frequent problem and I found that I was frequently in the SWL mode. If I hadn't been hearing my own echoes well, I would have suspected that I was transmitting into a dummy load! Two large dish stations that I repeatedly called many times without success; each later replied to my CQs and gave me excellent reports. Apparently signal polarization was very sharply defined! The weekend did, however, produce several highlights. The crown jewel was a random (CW) QSO with WA6PY (1 yagi to 4 yagis)! Paul's signal was well above the noise floor (449), and I truly believe that it could have been copied by a station using one good, long (~13 wl) yagi! Congrats to Paul for the excellent job with just one 8.5 wl yagi! He later advised me that he used vertical polarity for both transmit and receive during our QSO. In addition to WA6PY, I wish to thank HB9Q, P19CAM, SM4IVE (huge 4 yagi signal),

SP6JLW, KL6M, JA9BOH, JA6AHB, K1M, FR5DN and WA4NJP for FB random CW QSOs. I had a partial QSO with DJ7GK, who vanished after I sent him a signal report. Called without success were K4EME, DF3RU, UA6LGH, OH2DG, UT2EG, DL7UDA and DL4MEA. Others heard include SM3JQU, LZ1DX, OE3JPC, JH3SIM, DL1YMK and G3LQR plus nearly all of the stations that I contacted last month. I plan to be QRV during the Dec CW ATP, and hope to catch some of the stations that I missed.

**N9JIM:** Jim [n9jim-6@pacbell.net](mailto:n9jim-6@pacbell.net) sends his 1296 EME report for Nov -- AD61W and I setup for the Nov weekend of the EME contest from my house. We were running 120 W and a 3 m dish mounted on my tower. We used Goran's brand new TS2000X, a 120 W PA he designed and built, and one of his LNAs. I provided the antenna, feed (the Jamesburg round septum), mechanics, and control. AF6KD also helped move equipment and put up the dish. It took a day to get everything put together. I took the day off to get the station ready. At moonrise I was copying stations (the TX was not quite ready). I raised the tower from 5 m to 15 m to clear obstacles. Then on the first test transmission, the LNA went dead. Worse than that, the tower winch teeth were jammed. It was stuck in the UP position! After some mechanical engineering and scary experiences, we got the tower back down. Goran took the LNA back to his house for repair, while I reviewed and fixed the control circuitry. We got back on at about 0700. We worked on the first pass (Friday night) on CW unless noted DL0SHF, OK1DFC, K1RQG, P19CAM and K1JT. Heard were DL4MEA, LX1DB, HB9Q and F2TU. On the second pass (Saturday night) we added OK1CA, OZ4MM, W5LUA, K5JL, LA9NEA, OH2DG (on JT), HB9Q (on JT), OE9ERC (on JT), RD3DA (on JT) and HB9Q. Heard were OH2DG, ON7UN, HB9GR, WA6PY, DJ9YW (on JT), ES6RQ (on JT), F2TU and IQ4DF.

**NC1I:** Frank [eme@nc1i.com](mailto:eme@nc1i.com) reports on his stations status -- I finally had some time to do some antenna work and with help from KA1QFE and WIQA (TNX) tried to resolve a couple of issues. I had a couple of problems on the HF tower that were quickly repaired. The EME array was a bit more challenging. During the DUBUS Contest back in March, the AZ seized up us. Do to summer and early fall family activities, this weekend was my first opportunity to spend substantial time trouble shooting. We confirmed that the problem was not related to control issues. It was clearly a mechanical seizure. My fear was that the main bearing had seized. Thinking about it this summer, I realized that the bearing had not been lubricated in over 10 years! Failure of this bearing would mean the array would need to come down to replace or repair the bearing. Taking the array down would obviously be a major project (requiring a crane) and based on current activity levels on random CW, my enthusiasm for making repairs and putting the array back up was not real high. I think if the array comes down, I will end up replacing it with something else, either for HF or perhaps a dish for 1296. Trouble shooting quickly led us to believe the problem was related to the prop-pitch. This was good news because I had a brand new spare (identical unit) sitting here ready to go. We had a bucket lift here and we expected that we could swap the units out in an hour or two. Unfortunately we were not able to disengage the mast from the prop-pitch. The spline coupling has seized and brute force from any direction was ineffective. After about two hours, it started to rain pretty hard, so we decided it was a good time to abort our efforts and think about another approach for another day. We planned to regroup on 15 Nov, but unfortunately we were rained out. The next available time is during the week of 8 Dec. We will first try to heat up one side of the coupling. If this is ineffective, we will be forced to cut the mast. I will try and have a new coupling fabricated so that we are prepared should we need to take this approach. Clearances for the new coupling are tight so we will need to pay close attention to design details. The new coupling would need to be welded to the mast up on the tower. The AZ drive is the only thing keeping me off the moon, so if all goes well (and the weather cooperates) I expect to return to 70 cm EME for the second weekend in Dec. BTW, great to see N4GJV and K0RZ active again.

**OH2DG:** Eino [eino.metsamaki@sulo.fi](mailto:eino.metsamaki@sulo.fi) sends his ARRL contest results -- The contest was interesting and very enjoyable. I found condx excellent on both the 23 and 70 cm bands. I worked on 23 cm 77x31 using both CW and JT modes. I had initials with P19CAM, SV3AAF, RU3ACE, SP7DCS, RA3EC, DF1SR, G3RGK, HB9DGG, HB9HAL, EA2LU, RW3PX, K3JNZ/0, VE4SA, PY2BS, RK3WWF, F5FEN and WB2BYP. On 70 cm my score was 23x15. Initials were made with DK1KJG, K1JT [same K2UYH] and DL7UDA.

**OK1CA:** Franta [strijavka@upcmail.cz](mailto:strijavka@upcmail.cz) was only QRV in the Nov part of ARRL EME Contest on Sunday, but still did extremely well on 23 cm -- My total score is 108x39, all on CW. It is the best result in all my years of ARRL EME Contest operation. I made initials with RK3WWF, N9JIM, HB9GR, K6JEY, VK3NX, and DL2HWY to bring my initial total to #234. The activity on 23 cm CW was colossal, CW not dead! I will send my contest recommendations to ARRL.

**OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) because of QRL had only very limited time for EME operation and the contest -- I was traveling so much that I did not

have time to be active. But starting 15 Dec, I will be on holiday and will send all QSLs and do more EME! In Oct, I installed a new supporting system for the dish that should better enable it to survive high winds. This was confirmed during some very windy days in Nov. The new supports increased the mechanical stability of the whole system. In Oct, I did QSO on 23 cm SM0FOB (18DB - O/O) for initial #50; on JT and on CW (O/O) for #224, UT5JWCW, G4CCH, I5MPK, OK3RM and on SSB and W4OP, and in the Oct leg of the ARRL contest RU3ACE #225, P19CAM, G4RGK, SP6JLW, DF3RU, SM5LE, LA2Z, HB9HAL #226, OK3RM, DL0SHF, IK2MMB, DL6SH, DF1SR, ON4BCB, F5VHX #229, P19CAM, LA5ZK, G3LTF, K2DH, RA3AQ, K1RQG, SV3AAF and OK1CA. Then I had to leave for a trip to the USA and was not able to continue. Before Nov leg, I QSO'd EA3XU (O/O) #51; on JT, UT3LL (14DB/O) on JT and UT3LL (539/559) #230, RK3WWF, JA8IAD, JA6CZD and OK2KJT (539/559) #231. In the Nov leg of the contest I worked RA3EC #232, RW3PX, RK3WWF, G3LQR, UT5JWCW, LA9NEA, UR5LX, K1JT, ES5PC, IW2FZR, EA3UM, EA2LU, NA4N, DL2HWA, NY2Z, VE3KRP, K3JNZ/0 #234 and IA for WAS 27, OH2DG, W7UPF, VE6TA, OZ4MM, OK3RM, I5MPK, DL4MEA, HB9Q, F5JWF, VA7MM, WA6PY, W5LUA, WA8RJF #235, WA5WCP, AL7RT, IK3COJ, OK2KJT, LX1DB, N9JIM #236, W4OP, JA8IAD, JH5LUZ, ON5RR, VK3UM, VK2JDS (559 on CW) #237, F5FEN, HB9SV, RW6AG, JA4BLC, F2TU, JA4LJB, JA6XED #238, F5HRY, SD3F, SP7DCS, JA4HZN #239, HB9GR #240, IK2RTI, SM3JQU, G3LTF, PA3DZL, IQ4DF, K6JEY #241, WB2BYP, DL1HYZ, VE4SA, OE9ERC, ON7UN, and K5JL. Activity on 23 cm was great. So many new stations worked directly with CW and also stations, which I have worked JT before with improved systems and now starting to work CW too. In Nov, I got early Christmas present from my wife IC7700 and try to use this nice TRX for EME. After first tests I can say that TRX is very comfortable for using and also DSP system works great. I did not have problems reading very weak signals. It is a pity that SM6FHZ had problems with weather and was not able to call me longer because, he had problem with wind. But his 5 m dish with 20 W on the feed was quite good readable when he started call me with spread letter groups. I have received M666FFFH only. I hope to work him soon. I am expecting to be QRV during Dec EME window and will try JT and CW. If anybody is looking for sked, let me know by e-mail.

**OK1DST:** Lexa [kobranov@amosecz.cz](mailto:kobranov@amosecz.cz) is now QRV on 23 cm. He was active in the contest but for only a limited time in both weekends and only made one QSO with OK1CA. He has a 2.4 m dish and 120 W PA with 6 m of coax and jumpers. He feels his sun noise is down about 2 dB from where it should be. He did copy very good signals from VK3UM, DL0SHF -- very strong and CWNR several, LX1DB, F2TU (responded with QRZ and YYY), HB9GR, HB9SV, OK1DFC, OK3RM, ON4BCN and some others Lexa also has a system for 13 cm prepared with a 180 W PA.

**OK1KIR:** Tonda (OK1DAI) [jelinek.antonin@email.cz](mailto:jelinek.antonin@email.cz) writes about his club's EME results in Oct and Nov -- On 3400, we worked on 18 Oct at 2055 DF9QX (O/O) for initial #16 and on 19 Oct at 0015 OZ6OL (549/559) #17 and the 1st OZ -- OK 9 cm QSO. On 1296, we worked on 22 Nov at 0206 UA9FAD (0/0) on JT for digital initial #25, LO field and 1st UA9 -- OK 23 cm QSO. We used a linear rotatable feed. Victors best signal was at 45° from horz pol. It was Victor's 1st 23 cm EME QSO. He used 1.5 m dish with 0.25 f/d with a fixed elevation of 25° and linear pol with 120 W at the feed. We also worked at 0231 JA6AHB (O/O) #26.



## OK1KIR's rotatable dual dipole linear feed for 1296

**OK1TEH:** Matej [ok1tehlist@seznam.cz](mailto:ok1tehlist@seznam.cz) sends an addendum to his report in the Sept NL. He says that he finally completed on 70 cm with LZ1DX with full RRR and 73s

2 days after his QSO with UA3PTW. I believe this QSO was on CW and would have been Matej's #21 using only a single yagi and 750 W on CW.

**PA3FXB:** Jan [jvmmap@bart.nl](mailto:jvmmap@bart.nl) reports on his operation from home; he also operates PI9CAM -- I had a lot of fun on 23 cm during the ARRL contest weekends - what activity! During the Oct weekend, I spent one night at PI9CAM and one night at home. The short third pass was fully blocked by a tree. During the Nov weekend, there were more operators available at PI9CAM, so I spent more time at home. The tree had lost its leaves, so there was something like a VK window again. This gave me QSOs with VK2JDS and VK3UM. My CW is improving from a "disaster" to "very bad," so there is hope. Last year I had 150 W at the feed, now I run 300 W, which surely helps! I was also able to work SV3AAF and IQ4DF. Last times I only received QRZs. My dish is nearly 3 m. For the ARRL weekends, I mounted a collar to make it 3.5 m. This does not give much gain (under illumination), but keeps some noise out of the feed. It gives me an estimated 1 dB better RX - a small compensation for my bad CW. I ended up with 43 QSOs (26 on CW and 17 on JT). In 2007, I had only 19. I am also now up to initial #71. But most important, I had a great time!

**PE1RDP:** Arno [arno.bollen@chello.nl](mailto:arno.bollen@chello.nl) (JO21qk) reports on his new antenna -- My new array for 432 is now QRV. It's 4 x 7 w/ BV yagis and is performing well. At this moment, my RX is not that good due to my local noise problem. The noise can be up to S9 and maybe caused by overload of my preamp. I am still QRP (100 W at the antenna), but I am building a new PA. The TX feeder has also been replaced by 7/8" Cellflex, which is only 12 m long. Despite my problems, I received good reports from HB9Q (17DB) and I1NDP (20DB), so the antenna seems to work.

**PY2BS:** Bruce [bruce@zirok.com](mailto:bruce@zirok.com) sends news on 23 cm EME from Rio -- From 27 Dec 27 to 11 Jan, I plan to be QRV on 23 cm from the southern coast of Rio de Janeiro using the call PY1KK (see QRZ.com). I will have a 4 m dish with 80 W at the feed and OK1DFC septum feedhorn. Please e-mail for skeds. I will call CQ on 1296.075. For present only JT65C or SSB. In the ARRL EME Contest with my 2.7 m dish and 50 W at feeder, I made 13 QSOs on 23 cm during the last contest leg. QSO'd were UR5LX, K7XQ, HB9Q, VE7BBG, ES6RQ, ES5PC, K1JT, OH2DG, G4CCH, PA3FXB, OE9ERC, RD3DA and VA7MM - all on JT65. I plan to be better prepared for next year's contest.



**PY1KK operating position – not a bad winter location**

**PY2MJ:** Guiatur [guiherme@guiaturistico.tur.br](mailto:guiherme@guiaturistico.tur.br) is QRV on 1296 with a 2.4 m dish, patch linear horis feed with 4.5 m of RG213 cable and a barefoot IC1271 running 10 W and no preamp. Thus far he has worked K2UYH before the contest and HB9Q during the contest. He also copied OK1DFC during the contest, but could not get his attention due to the pile up. Guiatur is interested in skeds.

**RA3AQ:** Dmitry [ra3aq@vhfdx.ru](mailto:ra3aq@vhfdx.ru) send information his on ARRL contest results -- I was QRV only on 23 cm CW. I was active the whole time except a few hours. It was quite an experience to see what we can be done with a small setup on 23 cm. I was QRV from RW3BP's shack using his 2.4 m offset dish with mesh in the bottom part as was done in previous years. I used his water cooled SSPA with 10 x RA18H modules giving about 500 W in the feed. Sergei did big improvements with his RX. He now has a G4DDK LNA with a 0.18 dB NF for a total system noise temperature of 28°K. In Nov, I made only 23 QSOs and

finished the contest with 88x37 total score. Heard but not worked in the last leg were SM3JQU, WA8RJF, JA6XED, JA4LJB, IZ1BPN, DL2HWA, JA4HZN, DL1HYZ and K6JEY. [Note RA3AQ should not be counted as an initial if you have already QSO'd RW3BP].



**RA3AQ/RW3BP 2.4 offset dish used on 1296 for the contest**

**SM2CEW:** Peter [sm2cew@telia.com](mailto:sm2cew@telia.com) was QRV during the Nov contest weekend. He worked on 70 cm PI9CAM for an initial (#), SM4IVE, KL6M, DJ7GK (#) and F2TU. He heard and called W6PY, who disappeared after a round of QRZs. Peter also QSO'd K1M, but suspect it was K1RQG! He will be active on 432/1296 during the Dec AW WX permitting, but no 2320 operation at this time. Peter is still working on weather proofing the feed with the transverter and PA bolted to the septum horn.

**SM4IVE:** Lars [sm4ive@telia.com](mailto:sm4ive@telia.com) was QRV on 432 with 4 yagis -- I worked the following stations during the contest: I1NDP, K0RZ, UA3PTW, SD3F, SP6JLW, DL9KR, PI9CAM for an initial (#), DL7APV, OH2PO, OE5JFL, WA4NJP, OZ4MM, KL6M, N4GJV and SM2CEW. CWNr HB9Q, but got only QRZ. My own echoes were loud at the time! I also heard WA6PY, DJ7GK, DF3RU, G3LTF, VE6TA, DJ7GK and some others. I have been making good progress on my big dish despite the cold WX and heavy snowfall.

**SM5LE:** Sven's [sm5le@telia.com](mailto:sm5le@telia.com) Nov EME Contest weekend was his *swan song* on EME -- I want to announce that SM5LE is now QRT on EME. This is just my *normal* hobby rotation between Swedish folk music and amateur radio in about 10 year cycles. PSE don't be sad. I will miss you all. The EME gang has been so very kind in so many ways. SM0FOB is also QRT as much of his activity was inspired by me. [I first worked Sven on 70 cm EME in the '70s. I shall be looking for news of his return!]

**SM6FHZ:** Ingolf [ingolf.fhz@swipnet.se](mailto:ingolf.fhz@swipnet.se) writes on his renewed EME activity -- It feels really good to be back on the moon after a absence of almost exactly 20 years. My last QSO was F1HDI in March, 1988. I had then worked initial #29 on 23 cm and #4 on 13 cm. I have been working hard this autumn to finalize my new antenna. I made tests on 1 Nov, at apogee and max negative declination, and it worked fine. I copied nice echoes on both CW and SSB in spite of the 4.5° moon elevation. During the Nov contest weekend, I started at 0700, but heard nil - no stations and no echoes. I later concluded that I had blockage at moonset and the few hours before. There were more and higher trees than I had anticipated; I have some foresting to do. Saturday evening brought some other obstacles, but finally I heard a station and quickly worked DL0SHF at 10° elevation. As I had problems with my AZ indication, I used Carsten's signal together with my own echoes as moon tracking beacons. After that I worked RA3AQ, UT5JCW, IK2COJ and SP6JLW on my CQ. Other stations were also calling, but it was hard to catch the calls with all on the same frequency together with the libration and other QSB. I do apologize. At the end of my QSO with

SP6JLW (at 1815) my TH338 PA started blowing fuses in a spectacular way. I decided to try using my driver, which give slightly above 20 W at the feed. I worked VK3UM with this setup - good work Doug! I also tried calling OK1DFC, but Zdenek never got my call. I did some SWL on the band, what activity! It was amazing to find the band so crowded all the way up to .040. Quite a difference from what I remember back in the mid 80's. This is really promising. Unfortunately the winds picked up and I was forced to park the dish (at 2030). On Sunday, I was able to find the cause and fix my AZ indication problem and the PA did not arc anymore after a few hours of formation - the tube was still OK. I plan to be active during the Dec AW. With respect to counting initials, I intend to continue to add initials to my 29 from 20 years back. I assume that I will not be an initial to the old timers I worked then. I have moved about 80 km. [Are you in a different grid square, i.e., moved from JN20 to JN21? If it has changed then you count as a *new* initial. If you are in the same, then you don't].

**SP6JLW:** Andy [sp6jlw@wp.pl](mailto:sp6jlw@wp.pl) reports that his group did very well in the EME contest - We operated in multi Operator class on CW only. We have made 41 QSOs on 70 cm and 84 on 23 cm band, which is better than last year. On 70 cm we used 8 x 32 el BV yagis, GS35B PA, ATF54143 LNA and a TS811. We QSO'd DL9KR, I1NDP, DF3RU, UA3PTW, OH2PO, DL7APV, G3LTF, VK3UM, SD3F, JA5NNS, DL1YMK, J11NNJ, YO2IS for an initial (#) and new DXCC, SM2CEW, K1JT, OZ4MM, WA4NJP#, W8TXT, OE5JFL, UT5DL#, PI9CAM (#), HB9Q, LZ1DX, K0RZ, UA6LGH (#), SM4IVE, N4GJV (#), KL6M, DL7UDA (#), DL4MEA (#), OH2DG, UT2EG, JH4JLV, G3LQR (#), JA6AHB, DG1KJG (#), JA9BOH, FR5DN, K1M (#), LZ1DX (dupe) and WA6PY. On 23 cm we used a 6.5m dish with a HB SSPA using 16 x BLV958, VLNA and SP9WY XVTR + FT757GXII. QSO'd were OK1DFC, RA3AQ, DF1SR for an initial (#), G3LTF, OK3RM (#), UT5JCW, LA9NEA, HB9HAL (#), PI9CAM, K1RQG, OK1CA, SD3F, SV3AAF, DL0SHF, RA3ACE (#), DL4MEA, K1JT, LA2Z, K2DH, IK2MMB, NY2Z (#), F5JWF (#), IW2FZR, G4CCH, DF3RU, F2TU, VA7MM (#), IK3COJ, F5VHX (#), SP7DCS, WW2R, WA5WCP (#), HB9SV, W4OP (#), HB9Q, K4QI, ON7UN, LX1DB on SSB, SM4DHN, ES5PC, NA4N, JA6CZD (#), JA4BLC, OE5JFL, OH2DG, JA6AHB, RA3EC (#), JA6CZD (dupe), PA3FBX (#), HB9DGG (#), DL1YMK, DL4DTU, ON5RR (#), VE6TA, K3JNZ/0 (#), HB9PNR (#), OZ4MM, K2DH (dupe), F5FEN, OE9ERC, VK3UM, SM5LE, F6CGJ, JF3HUC (#), G3LQR, EA2LU (#) and new DXCC, I5MPK, OZ6OL, ON4BCB, UT5JCW (dupe), W5LUA, RW3PX (#), WA6PY, AL7RT (#), SM6FHZ (#), JH5LUZ (#), JA8IAD (#), DL2HWA (#), IK2RTI (#), IQ4DF, HB9GR (#), K5PJR (#), K5JL and F5HRY.



**SP6JLW's antennas**

**SP7DCS:** Chris [sp7dcs@o2.pl](mailto:sp7dcs@o2.pl) reports on the Nov part of ARRL contest - After the Oct weekend on 2 m and 23 cm, I managed to QRV on the 70 cm band in Nov. As usual I was QRV on CW random unassisted. I started the weekend on 70 cm and my new SSPA proved to work well and I was happy with performance of my station. After some time I switched to 2 m and I realized that there was not a single signal on the band. As my CQs with 25 - 30 dB echoes were not productive, I decided to spend most of first night on 70 cm. During second night I concentrated on 23 cm and again I was extremely pleased to hear a lot of stations, pileups etc. My own echo was present most of time on 23 cm with a signal of about 12 dB on a Winrad screen. I added on 432 11 QSOs with 4 x 25 el yagi s and a 400 W SSPA. QSO'd were OH2PO, G3LTF, DL7APV, PI9CAM for initial #15, I1NDP, HB9Q, UA3PTW, K0RZ #16, DL9KR, OZ4MM and KL6M. On 1296 I added 13 QSOs using a 3 m dish and 200W SSPA with 4 x BLV958s. Contacted were OZ4MM, OK1DFC, IW2FZR for initial #54, UT5JCW #55, HB9SV, F5FEN #56, IQ4DF #57, W5LUA, WA6PY, I5MPK #58, K5JL, LX1DB #59 and OE5JFL. I ended on 432 with 11 QSOs (vs. 7 last year), on 1296 46 QSOs (vs. 29 last year). My overall QSO count

including 2 m was 91. I had a good time during the contest and I hope to improve my 70 cm and 23 cm station before next year. I was especially amazed by my 46 QSOs on 23 cm. I do hope that next year the ARRL will make a fair competition with separate weekends for CW and JT modes and without the Assisted Internet class.

**UR5LX:** Sergey [ur5lx@vhf-dx.net](mailto:ur5lx@vhf-dx.net) was QRV on 1296 during the Nov leg of the ARRL EME contest - I used a 36 m dish and 200 W, but had problems with my PA and only for a few hours. With it working, I could receive weak echoes. I ended with a total of 32 QSOs. Initials on CW were SV3AAF, F5FEN, OE5JFL - now worked on EME on 3 bands and ON4BCB. Initials on JT65 were PY2BS, K7XQ and RK3WWF. I am interested in skeds on CW or JT65C.

**VA7MM:** Mark [lunarlink@hotmail.com](mailto:lunarlink@hotmail.com) reports on his group's Nov contest operation - We contacted on 1296 18 stations during the Nov contest weekend. QSO'd were OH2DG, WA6PY, OK1DFC, W5LUA, VE7BBG, AL7RT, JA6CZD, JH5LUZ, K5JL, OE9ERC, IW2FZR, UT5JCW, HB9GR, ON7UN, ES6RQ, K0JNZ/0, IQ4DF and PY2BS. Contacts were made on both CW and JT65C. The Nov leg of the contest marks five full years of operation from VA7MM. This year was by far the best. In 2003 we score 11x9 for 9,900 points, 2004 27x21 for 56,700 points, 2005 34x24 for 81,600 points, 2006 37x24 for 88,800 points, 2007 47x26 for 122,200 and now in 2008 50x32 for 160,000 points! We are now up to initial #89 on CW and in mixed mode #102\* for a total of 394 QSOs of which about 95% were on random CW. Our station is a 3 m TVRO dish modified for Az-El tracking with a VE4MA feed, 0.33 dB NF LNA and an OZ9CR PA delivering about 200 to 250 W to the feed. The Operators are VA7MM, VE7CMK and VE7CNF. More details on VA7MM can be found at URL: <http://www3.telus.net/public/va7mm/eme/>. Looking back on the last five years, it has been fun and worth the effort.

**VE3KRP:** Eddie [eddie@tbaytel.net](mailto:eddie@tbaytel.net) was active on 1296 in Nov. He worked G4CCH, K1RQG and K2DH prior to the contest. During the contest he found conditions good. New ones added were DL0SHF, PI9CAM, RA3AQ and IK3COJ. Eddie is also working on 13 cm EME.

**VK3NX:** Charlie [ibnkarim@bigpond.net.au](mailto:ibnkarim@bigpond.net.au) was pleased by all the activity on 1296 during Nov -- I had a great time during my first outing on 23 cm and was delightfully surprised how many stations are QRV with big signals. I apologize for the number of stations who called me and only got QRZ or YYY from me. At 0100 - 0700 local time, the brain is not working very well! Stations worked were K1RQG, VE6TA, VK3UM, HB9Q, RA3AQ, OZ4MM, HB9GR, K5JR, K1JT, JA6CZD, OK1CA, OZ6OL, F2TU, DL4MEA, IK3COJ, G3LTF, G4CCH, IK2MMB and LX1DB. My apologies to the following stations, which I think called me but I just couldn't dig out their calls: UT5JCW, VA7MM, ON7UN, OZ4MM, F5? and JA4? If you heard me and/or called me, I would appreciate it if you could drop me an email. I hope to get on again in a few weeks to work some more.

**VK3UM:** Doug [tikaluna@bigpond.com](mailto:tikaluna@bigpond.com) writes on the ARRL contest - On 23 cm I scored 64x36 with QSOs to K1RQG, K5SO, JA6CZD, VK4AFL, JA6AHB, RA3EC, OE5JFL, RA3AQ, DL4MEA, IW2FZR, UR5LX, F5JWF, W9HX, VE6TA, K4QI, NY2Z, JF3HUC, K2DH, WW2R, JA4LJB, JA4BLC, ES5PC, F5FEN, RW3PX, SP6JLW, DF3RU, G3LTF, SM5LE, OE9ERC, SP7DCS, G4RGK, OK3RM, F5VHX, RA3EC, RW6AG, F6CGJ, SD3F, F2TU, VE3KRP, K1JT, VK3NX, JH5LUZ, HB9Q, UT5JCW, I5MPK, SM6FHZ, ON5RR, OK1DFC, OH2DG, JA8IAD, AL7RT, K3JNZ, K5JL, OZ6OL, OK1CA, RK3WWF, OK2KJT, ON4BCB, IK2MMB, SM3JQU, LX1DB, DL2HWA, PA3FBX and DL1HYZ. On 70 cm my score was 39x24 with QSO to N4GJV, K0RZ, W8TXT, K3MF, JA9BOH, JS3SIM, J11NNJ, UA3PTW, UT5DL, DF3RU, SD3F, SV3AAF, FR5DN, OH2PO, DJ8MB, DL7APV, DL7UDA, SM3BYA, JA0TJU, DL1YMK, OH2DG, HB9Q, I5CTE, G4RGK, SP6JLW, IK6EIW, G4ALH, K4EME, KL6M, OZ4MM, UT5DL, UT3EG, I1NDP, LZ1DX, DG1KJG, G3LTF, G3LQR, K1JT and JH4JLV. As usual there was insufficient window time to work all that were available, but 103 QSOs is not too shabby!

**W4TJ:** Bill [w4tj@comcast.net](mailto:w4tj@comcast.net) reports good luck listening off the moon on 70 cm with a single 19 el yagi and WA6PY cavity preamp during the Nov contest weekend. He copied 13 stations: I1NDP, PI9CAM, DL9KR - extremely strong, KL6M, G3LTF, HB9Q, SM2CEW, DF3RU, OZ4MM - the loudest, DF3RU, OH2PO, K0RZ, K1M, WA4NJP and a UA3?. There were several other signals that should have been good copy, but had strange fading. Bill hope to have his 14' dish up in a month or so and is looking forward to working all the fellows he heard this weekend plus many more.

**WA3QPX:** Paul [wa3qpx@atlanticbb.net](mailto:wa3qpx@atlanticbb.net) in DE is working towards 70 cm EME. He is presently active on 2 m EME. He has 4 x 9 wl M2 432 yagis and 300 W.

He is planning to use a MT-1000 rotor for tracking but is having problems getting it calibrated. Paul also notes he has and 100 W on 23 cm, but no antenna.

**WA6PY:** Paul [pchomins@san.rr.com](mailto:pchomins@san.rr.com) sends his report on his Nov activity during the contest -- Hot Santa Ana winds generates noise, which eliminated the possibility of any operation on 144. At low elevation this noise was 30 or more dB relative to a 50 ohm termination. I wonder how this noise is generated. Even on 70 cm, I observed an unusual noise increase and wide band noise bursts lasting several seconds with non periodic repetition. Polarization was sharp and changing very rapidly, during one sequence I was sometime forced to switch pol. Many signals came back from the moon with similar signal levels on both polarizations, but I had more luck using vertical for TX. On 70 cm, I QSO'd HB9Q, K0RZ, UA3PTF, I1NDP, OH2PO, P19CAM, OE5JFL, OZ4MM, DF3RU, UT5EG, K1M, W7CI, KL6M, G3LQR, SP6JLW and N4GJV. On 23 cm, I QSO'd DL0SHF, RA3AQ, K1RQG, UT5JCW, RW3PX, VA7MM, VE6TA, IK3COJ, DF3RU, K1JT, K3JNZ/0, OK1DFC, K2DH, F5JWF, EA2LU, W4OP, ES5PC, DL4MEA, SP6JLW, LA9NEA, OK3RM, OH2DG, WA5WCP, P19CAM, HB9GR, OK1CA, OE9ERC, HB9SV, SP7DCS, OZ4MM, IK2MMB, IW2FZR, VE4SA, I5MPK, IQ4DF, K5JL, AL7RT, RK3WWF, F2TU and HB9Q. I apologize for QRZs from time to time, even if signals were strong. Usually after my CQ, there were a few stations calling me, sometimes on the very same frequency. On 432 my single yagi does not generate a great Signal to Noise ratio, and I need more time to make sure that I've got a call sign correct. Unfortunately many times after my QRZ, the other station comes back repeating 10 time my call sign and 4 time his own. When I ask YYY, this almost never helps - maybe too much excitement? Thank you for another nice contest. I am so far to the west that usually outside of times of contests or dxpeditions I can only test my echoes.

**WA8RJF:** Tony [temanuele@kentdisplays.com](mailto:temanuele@kentdisplays.com) reports on his Nov contest weekend on 1296 -- I arrived back from Eur business travel on Friday evening of the contest weekend. The WX was warm and dry -- the calm before the storm. I placed the feed/preamp at the dish and was ready to go a little after my moonrise. Unfortunately I only worked 4 stations (3 initials) before a major cold front moved thru with heavy rain and very high winds necessitating the securing of the dish. The rain and high winds continued the remainder of the weekend and I was not able to QRV again. During my European travels I was able to attend the Martlesham Microwave Roundtable in the UK. A quality event similar Microwave Update with an excellent program and wonderful hospitality. A number of EMEers were in attendance including G3LTF, G4CCH, G4NNS, G3LQR, GW4DGU, G4DDK, DL4MEA, DF6NA, WW2R and a few others who's call signs escape me. WX permitting I hope to be QRV on 23 or 13 when the moon is in a favorable position during the New Year.

**WE2Y:** John [johnffl@ix.netcom.com](mailto:johnffl@ix.netcom.com) was active during the contest on 70 cm. During the Oct weekend he QSO'd about 10. He is running 600 W.

**K2UYH:** I [a.katz@ieeeg.org](mailto:a.katz@ieeeg.org), again operated the EME contest as part of the K1JT team and did not add any QSOs under my own call. It was great to be associated with Joe's contest effort. I was up all night during both moon passes and thoroughly enjoyed the contest. (Joe operated 2 m from his QTH, which is about 6 miles from mine. On 70 cm I tried on 7, 8, 9 and 10 Nov to work the A43DLH dxpedition without success. Frank reports copying my JT signal (24dB), but I never heard anything from him. On 8 Nov after my sked with A43DLH, I had a partial at 2200 VE2ZAZ (25DB/18DB) on JT65B. I later learned that Bert had to QRT. On 1296, I worked on 12 at 0130 PY2MJ (16DB/11DB) on JT65C for mixed initial #331\*, and on 14 Nov at 0130 EA3XU (25DB/17DB) #332\*. The same day I had nil results from LZ1DX on sked. Ned reports copying me during the contest.

**NETNEWS BY G4RGK: CT1DMK** is getting back on EME. Luis plans to try 5.7 GHz in Dec. **K6DV** has sold his Mt Palomar location in CA and will be relocating to IA. **WA5WCP** worked 26 stations on 23 cm during the Oct weekend. **WA9KRT** is available for moonrise skeds (EN61pg) on 70 cm. **W2UHI** was not QRV on 1296 during the contest because of bad WX. Otherwise he is QRV. **K5JL** plans to be back on 70 cm for the Dec. ATP. During the Nov contest weekend on 23 cm, he accidentally blew preamp and did not make Asian window the first night. Jay QSO'd 27 in 2 hours before the preamp went out. **W5LUA** was QRV on 23 cm during the Nov contest weekend. **VE4MA** had problems with GS-15 PA and never made it on 1296 for the contest. He now has PA working and may be QRV in Dec. **W4OP** had a lot of fun on the moon in Nov on 23 cm. He added AL7RT and had a partial with EA2LU. **W5AGO** plans to be on 13 cm in Dec. **WA8RJF** was on 23 cm for the Nov contest weekend and reports having a ball. **VE6TA** was QRV during the contest in Nov. He ended with about 65 QSOs on 23 cm and 24 on 70 cm. **G4ALH** was active on 70 cm both contest weekends, but had a rotor problem to the west. **RW3WR** is QRV on 70 cm with 4 x 15 el yagis and 200 W on JT65B. **RW3PX** is now QRV on 23 cm with a 4 m dish and 300-400 W.

**DK3WG** worked ES3RF on 432 using JT65B. **UK/DL9LBH** is QRV from MN41log on 432 with 2 x 23 yagis and 500 W, but needs a new preamp.

**FOR SALE: WA9FWD** has a Ayden 100 w X-band TWTA for sale. It has a WR112 output connection. He hasn't tested it. It needs a cannon style 120 Volt power connector, and seems to be set up to be controlled remotely. Contact John at [jstefl@wi.rr.com](mailto:jstefl@wi.rr.com) if you interested. **IK6EIW** is looking for a good TH308 or TH338 tube -- see Stefano's report. **G4DDK** has 23 cm LNA kits available. See <http://www.btinternet.com/~JEWELL/23cmvlna.html>. **SM5LE** is selling a lot of his equipment, but for pick up in Stockholm only. For Sweden, look at <http://www.dx-radio.se/> under "Elektroniktorget". Small packages can be sent by post, if the postage paid by the recipient. See Sven's report. **W1DEY** has a 10' mesh C band dish with polar mount and actuator for the taking. If anyone is interested, contact Tom at [tdwelley@207me.com](mailto:tdwelley@207me.com). It can be disassembled. **K2DH** has many coaxial relays for sale. Most are for US\$25 plus shipping. All have been tested and verified as working. Contact Dave at [k2dh@frontiernet.net](mailto:k2dh@frontiernet.net) or by phone at 585-395-0571 for details. **WA9KRT** is looking for 700 W or so power amp for 432. Contact Don at [wa9krt@hotmail.com](mailto:wa9krt@hotmail.com). **K4PKV** has a 3 kV, 1 A power supply for sale. It is ready to plug in after you reform the electrolytics. It's in a box 12" x 12" x 24" and uses 220 VAC for the input. There are timers inside to allow a slow turn on, and it provides plenty of goo for an 8877 or 8938. It's pickup only. Dick notes that he wants the folks who get it to have an opportunity to browse thru the rest of his junkbox (including GaAs FETs and N connectors), which is also FS. He is asking only US\$100. Contact Dick at [rhattaway@rocketmail.com](mailto:rhattaway@rocketmail.com). **W5AGO** has 70 cm LNAs (and other bands too) for sale. Contact Tommy at [wd5ago@hotmail.com](mailto:wd5ago@hotmail.com).

**CONTEST RULES:** There are a lot of very strong feelings on how the ARRL Contest rules should be changed. Unfortunately there is not total unanimity on how the rules should be changed. If you feel that the rules should be changed it is important to send your recommendations to the Contest Branch Manager, Sean Kutzko, [kx9x@arrl.org](mailto:kx9x@arrl.org). Among the possible areas for change are: 1) How best to divide activities on different bands among 2 or 3 contest weekends? 2) Should CW and Digital activities take place on the same or different weekends? 3) Should there be an Assisted class? [Should any real-time liaison, solicitation, self-spotting, or arrangement of QSOs by non-EME means be permitted during the contest?] 4) Should there be separate Analog, Digital, and/or Mixed-Mode entry classes? 5) Are the present "band classifications" too many, or poorly chosen? [We now have: Single Band (50 144 432 1296 2.3 3.4 5.7 10 ...), Multi-Band (50-1296), Multi-Band (2.3G and up), and Multi-Band (All Band)] 6) What is the optimum format for presentation of results in QST and on the ARRL web site?

**23 CM STATIONS ACTIVE IN CONTEST:** DL0SHF put together the following list of stations active on 1296 during the ARRL contest. The calls are not just those heard by Carsten but a composite of many stations and contains 138 different calls. \* indicates stations only active in JT mode. AL7RT, DF1SR, DF3RU, DJ9YW, DL0SHF, DL1HYZ, DL1YMK, DL2HWA, DL4DTU, DL4MEA, DL6SH, EA2LU, EA3UM, \*EA3XU\*, ES5PC, ES6RQ, F2TU, F5FN, F5HRY, F5JWF, F5VHX, F6CJG, G3LQR, G3LTF, G3RRS, G3RUH, \*G4CBW\*, G4CCH, G4DZU, G4RGK, HB9BBD, HB9DGH, HB9EFP, \*HB9EHJ/p\*, HB9GR, HB9HAL, HB9PNR, HB9Q, HB9SV, I5MPK, IK2MMB, IK2RTI, IK3COJ, IK5WJD, IQ4DF, IW2FZR, IZ1BPN, JA4BLC, JA4HZN, JA4LJB, JA6AHB, JA6CZD, JA6XED, JA8ERE, JA8IAD, JF3HUC, \*JH0TOG\*, JH5LUZ, JH6XED, K1JT, K1M, K1RQG, K2DH, K3JNZ/0, K4QI, K5JL, K5PJR, K5SO, K6JEY, K7XQ, KA0Y, LA2Z, LA5ZK, LA9NEA, LX1DB, N2UO, N9JIM, NA4N, NYZZ, OE5JFL, OE9ERC, OH2DG, OK1CA, OK1DFC, OK1DST, OK2KJT, OK3RM, ON4BCB, ON5RR, ON7UN, OZ4MM, OZ6OL, PA0BAT, PA3CSG, PA3DZL, PA3FXB, P19CAM, \*PY2BS\*, \*PY2MJ\*, RA3AQ, RA3EC, \*RD3DA\*, RK3WWF, RU3ACE, RW3PX, RW6AG, SD3F, SM3JQU, SM4DHN, SM5LE, SM6FHZ, SP6JLW, SP7DCS, SV1OE, SV3AAF, UR5LX, UT3LL, UT5JCW, VA7MM, VE3KRP, VE4SA, VE6TA, VK2JDS, VK3NX, VK3UN, VK4AFL, VK5MC, W3HMS, W4OP, W5LUA, W7BBM, W7UPF, W9IIX, WA5WCP, WA6PY, WA8RJF, WB2BYP and WW2R.

**TECHNICAL:** A 9 cm noise problem by G3LTF - Earlier this year I was troubled by what seemed to be intermittent interference when measuring sun noise on 3.4 GHz. It manifested itself as a variation in the quiet sky level of up to 1 dB, randomly varying and apparently independent of direction (I concluded it was interference coming in through the far out sidelobes). During the recent contest, when aligning the dish using moon noise I was having great difficulty in getting a stable quiet sky reading on my wideband noise receiver (RATS). I initially thought it was being caused by vibration of the feed system by changing the declination with the motor and indeed I found a hairline crack in the short circuit plate at the back of the feed, which I re-soldered and it seemed to improve again but not go completely. On Sunday afternoon I used the feed access tower to get to the feed when it was pointing up to the cold sky at about

20 degrees. I extended the IF signal via cable and set up the RATS on the tower so I could observe the fluctuation while at the feed, tapping the feed, choke, preamp etc. This had no effect, there was no fluctuation. The 12 V DC feed to the preamp comes from a regulated PSU at the foot of the dish and comes through about 8 m of 8 way cable up inside one of the feed legs to a 9 pin D connector at the feed point. Amazingly, as I moved the last 40 cm of this cable around there was a slight 0.2dB movement in the RATS meter reading, (it has a 3 dB scale, so 0.1 dB is easy to see.) I eliminated the possibility of loose connections and in the end decided to look inside the preamp and the DC supply circuit. The preamp is a DJ9BV DUBUS 1& 2/95 design. The 12 v line comes in through a 1400 pF feedthru then a 100 nF to ground, and then into a 78L05 regulator. On the regulator output is 100 nF and 1 mfd tantalum to ground. I am not using Rainer's self biasing circuit, but the gate bias comes from the standard 7660 inverter and the collector supply from a 2.7v zener, again bypassed appropriately. I "normally" put 1-10 mfd across the input to IC regulators, certainly on the 1Amp ones, but the application notes for the 78L05 all recommend only 330 nF. So, I added another 100 nF and a 10 mfd tantalum across the 78L05 input, and put the preamp back. The quiet sky level is now absolutely steady and I have gained about 0.8 dB in sun noise and 0.15 dB in moon noise. I say gained, but "recovered" would be more accurate because this problem has only been there in the last 6 months or so. I don't think there is any doubt that the problem was being caused by the regulator, but the actual mechanism is a mystery to me. I pass this on in case you want to check the input decoupling on any 78L05 regulators in your own preamps. The actual route by which any noise was reaching the frontend is unclear, whether conduction or radiation from the device. Chris, GW4DGU commented that "The problem with the 78xx devices is that the bandgap voltage reference can't be decoupled. Bandgaps are intrinsically fairly noisy circuits, and the internal topology of the 78xx parts results in the noise generated by the bandgap being amplified and effectively ending-up in series with the regulator output as a low impedance noise source. Hence your problems...There are now much better, and quieter, regulators available. For general use to 50 mA, I now tend to specify the National LP2985 in its various voltage ratings.

**FINAL:** There were a number of stations using special calls or different calls during the contest that were taken for initials in error. I did not attempt to correct these errors in the reports as there were so many of them. It is important that if a station uses a different call during the contest (or at anytime), that this be publicized. All of us who keep track initials need to be especially vigil to verify that any new station worked truly counts as an initial. It would be very helpful if some would make up a list of known duplications, (for example K1JT = K2UYH on 432/1296, K1M = K1RQG on 432, NY2Z = W2DRZ, RA3AQ = RW3BP, etc.).

At the end of this NL I have the 2009 Moon Calendar TNX to DL7APV. The Contest dates, ATPs and AWs (marked with an \*) are shown on the calendar. In 2009 the contest dates are not as obvious as they were in 2008. The 1296 EME SSB Contest is easy choice for 7/8 Feb. The ARRL contest dates are not as clear. I have listed my best guess for these dates on the calendar, but they are not certain. The proposed dates are 10-11 Oct for the Microwave Contest and 7-8 Nov and 5-6 Dec for the 50 to 1296 parts. This also assumes the ARRL continues the present band/weekend arrangement. (In the calendar A= Apogee (loss=1.9dB), P=Perigee (loss=0dB), \*= AW, ATP for 432).

There are a number of items I have held off until next month because of the size of this NL. Among these are graphs of the monthly moon conditions during 2009 prepared by F5SE.

I regret to inform you of the death of another EMEer. KL7FH has become a silent key. Frank was active on 70 cm EME back around 2004 with 16 x 12 el yagis and 100 W.

I received a question on signal reports in the NL. For CW I always enclose reports in (S/R) with the sent report first and the received report second. I also place JT reports in prentices and show the DB level without the minus sign and with the level and DB in caps combined. For example -24 dB is shown as (24DB).

That is the News for this moon cycle. Please keep the information coming! Tnx to all for your support especially K1RQG, G4RGK, W2WD and W6SZ. The very best holiday greets. I hope to CU of the moon during Dec. 73, AI - K2UYH



**EMEers at UK Microwave Group round table at Martelsham on on 8/9 Nov - Left to Right WA5VJB, G3LQR, G4HUP, DL4MEA, G4RGK, G3LTF, G4NNS, WA8RJE, G4CCH, GW4DGU, WW2R and DL1YMK. G4DDK missed the picture.**

**NF measurements results from Martelsham meeting - TNX G3XDY**

432MHz	G3LTF	F5VHX Design ATF54143	21.3	0.35
	G4RGK	Homebrew	18.2	0.51
	G3LYP	G4DDK VLNA	34	0.37
	G8XIR	SSB Electronics DX1296 Preamp	21.7	0.87
1.3GHz	G3ZEZ	G4DDK VLNA	28.4	1.52
	DL4MEA	G4DDK VLNA	36.1	1.22
	G4RGK	G4DDK VLNA	35.15	0.64
	G4BRK	G4DDK VLNA	26.6	0.35
2.3GHz	G0MJW	SSB Electronics transverter	-9.3	13.30 Faulty?
	G3ZEZ	G4DDK VLNA	23.3	1.48
	G3LQR	G3LTF Preamp ATF36077	10.7	1.40
3.4GHz	DL1YMK	DJ9BV Preamp	41.57	1.83
	DL1YMK	DJ9BV Preamp	39.8	1.20 Without lid
	G3LQR	G4DDK VLNA	23.8	0.59
	G3XDY	DB6NT Transverter + Relays	20.7	1.45
	DL4MEA	G4DDK VLNA	22.5	1.18
	DL4MEA	DJ5BV two stage	32.1	1.00
10GHz	G3LTF	W5LUA ATF36077	15.2	0.58
	G3LTF	DJ9BV Preamp	13.15	0.67
	G4GLT	DB6NT TRANSVERTER	14	1.25
24GHz	G3XDY	DB6NT Transverter & Realsys	10	2.27
	G0MJW	Transverter	34	1.60
	G8CUB	2 x Franco's specials	21.9	1.33
	G0EWN	DB6NT transverter/preamp	15	10.00

Lunar Weekend Calendar for 2009 (by DL7APV)

2400 Sat/ 0000 Sun	Decl. (deg)	Signals (dB)	Sun offset/°	Sky temp (K, 432)	Comments & contest dates
Jan 03/04*	7,12	-0,83	82 DP	25	Daytime ATP sat 20-22&sun11-13
Jan 10/11	23,96	-0,13P	180 N	30	Perigee, night
Jan 17/18	-15,08	-1,33	-95 DA	35	Daytime, moon south, ARRL Tropo-Test
Jan 24/25	-23,54	-1,83A	-12sun	50	Sun close, moon in south, apogee
Feb 00/01	11,47	-0,73	63 DP	25	Daytime ATP sat19-21&sun9:30-11:30
Feb 07/08*	21,82	-0,13P	161 N	35	Perigee night 23cm SSB Contest
Feb 14/15	-18,05	-1,33	-114 DA	35	Daytime moon in south
Feb 21/22	-21,3	-1,73A	-31 DA	35	Sun close, moon in south, apogee
Mar 00/01	15,55	-0,63	45 DP	35	ATP Sat18-20&Sun 9-11
Mar 07/08*	18,88	-0,23P	143 N	35	EU V/UHF T-contest,
Mar 14/15	-20,49	-1,43	-134 N	35	moon in south
Mar 21/22	-18,68	-1,73A	-50 DA	30	moon in south, apogee
Mar 28/29	19,01	-0,53	27 sun	35	Sun close REF/DUBUS 2m + 10GHz CW/ssb
Apr 04/05*	15,03	-0,23	126 DP	35	REF/DUBUS 432+5760 CW/ssb
Apr 11/12	-22,57	-1,53	-153 N	35	moon in south, near apogee
Apr 18/19	-15,7	-1,73	-70 DA	30	moon in south, apogee
Apr 25/26	21,71	-0,43	9sun	Sun	Sun close Italy EME Meeting
May 02/03*	10,5	-0,33	108 DP	35	EU T-contest ATP sat 12:30-14:30&22-0 REF/DUBUS 2,3+3,4GHz ssb/CW
May 09/10	-24,34	-1,63	-172 N	35	Moon in south, Night, close apogee
May 16/17	-12,34	-1,63	-90 DA	30	Moon in S, day, nr apogee Dayton Hamv
May 23/24	23,74	-0,33	-9sun	Sun	Sun close
May 30/31*	2,74	-0,43	-84 DA	35	ARI Contest Dig. & 23cm REF/DUBUS
Jun 06/07	-25,67	-1,63A	170 N	>35	Moon in south, Night, apogee
Jun 13/14	-8,61	-1,53	-110 DA	35	ARRL Tropo-Test Daytime
Jun 20/21	25,23	-0,33	-28sun	35	Sun close
Jun 27/28*	1,24	-0,43	71 DP	20	ATP Sat 11-13&19:30-21:30 Ham Radio
Jul 04/05	-26,39	-1,73A	152 N	>35	EU V/UHF T-contest
Jul 11/12	-4,6	-1,53	-130 N	35	Night, near apogee
Jul 18/19	26,19	-0,23P	-46 DA	35	Perigee, daytime high dec
Jul 25/26*	-2,78	-0,53	-152 N	25	ATP Sat 10-12&17-19
Aug 01/02	-26,35	-1,73A	135 N	200	ARRL Tropo-Test Moon in south apogee
Aug 08/09	-0,46	-1,43	-149 N	35	ATP Sun4-6&20:30-22:30
Aug 15/16*	26,43	-0,13P	-64 DA	35	Perigee, Daytime
Aug 22/23	-6,36	-0,63	31 DP	25	Sun close
Aug 29/30	-25,25	-1,83A	117 DP	180	Moon in south, Night, apogee
Sep 05/06	3,61	-1,33	-70 DA	35	Eu 144 T-Contest
Sep 12/13*	25,74	-0,13P	-80 DA	35	ARI Cont CW/SSB ARRL Tropo-T Weinheim
Sep 19/20	-9,72	-0,73	11sun	30	Sun close
Sep 26/27	-24,11	-1,83A	98 DP	100	Moon in south, day, apogee
Oct 03/04	7,46	-1,23	172 N	35	Eu 432&up T-Contest
Oct 10/11*	23,98	-0,13P	-96 DA	35	(ARRL EME MW Cont?) Perigee, daytime
Oct 17/18	-13,07	-0,83	-8sun	SUN	Sun close
Oct 24/25	-22,19	-1,83A	79 DP	50	Moon in south, day, apogee
Nov 00/01	10,97	-1,13	153 N	35	Night
Nov 07/08*	21,32	-0,03P	-112 DA	25	(ARRL EME Cont?) Eu 2m CW T-Contest
Nov 14/15	-16,46	-0,93	-27sun	30	Sun close
Nov 21/22	-19,91	-1,83A	59 DP	40	moon in south, apogee
Nov 28/29	14,12	-1,13	132 N	25	Night cold sky
Dec 05/06*	18,16	-0,03P	-129 N	20	(ARRL EME Cont?) Perigee night cold
Dec 12/13	-19,68	-1,03	-45 DA	35	moon in south
Dec 19/20	-17,26	-1,83A	40 DP	30	moon in south, near apogee
Dec 26/27	17,00	-1,03	112 DP	30	Christmas ATP sun12-14 & 21-23

