

## 432 AND ABOVE EME NEWS JANUARY 2010 VOL 38 #1

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**CONDITIONS:** First I want to spread the holiday cheer and TNX for contest QSOs included with just about every one of the following reports. The final leg of the ARRL EME Contest provided some extraordinary conditions. 70 cm at times provided some of the best signals that have been heard in years. The Faraday was not always cooperative, optimum TX polarization was 90 degs from RX, but signal quality was generally good. (There were some amazing 432 QSOs. DL7APV QSO'd W5RZ, who was using only 5 W and two yagis – see W5RZ's report). The opposite existed on 1296. Although there were many strong signals, copy was more difficult than normal, especially on Sunday. WX was not cooperative in some locations, which I guess is to be expected in Dec. The fun is not over! There is still one more 70 cm CW activity time period (ATP) scheduled for 27 Dec from 1200 to 1400 and 2100 to 2300. Also coming up on 2/3 Jan is the first 70 cm EME SSB contest – see below, and the Jan 70 cm CW ATP on 23/24 Jan Saturday from 2000 to 2200 and Sunday from 1200 to 1400. The first 2010 activity weekend will also be 2/3 Jan. The 23/24 Jan is also the ARRL's Jan VHF Contest. Look for EME activity from North America on this weekend as EME QSOs are valid in this contest and can count as multipliers. The exchange is the four character grid square (EM90, FN31, etc.).

**HIGH CONTEST SCORES:** It appears that DL7APV leads the pack on 432 with a score of 86x46 and even on CW only is top with 66x36. On 1296 G3LTF is the highest with 86 QSOs – I do not have Peter's multiplier info. It is truly telling that the high QSO counts on 432 and 1296 are the same and an indicator in the difference in conditions this year between these bands.

**70 CM EME SSB CONTEST:** DUBUSis sponsoring the first 70 cm SSB FUN Contest on 2 and 3 Jan (Z time). SSB-SSB and SSB-CW QSOs count equally. The score is QSO x WPX prefix. Logs need to be submitted by 15 Jan to [funk-telegramm@t-online.de](mailto:funk-telegramm@t-online.de). Depending on participation this could be both the first and last 70 cm SSB Contest, so lets all try to turnout and submit our logs. TNX to DL8HCZ for the contest idea. About two months after the 70 cm SSB contest, the 1296 EME SSB Contest will take place from 2000 on 26 Feb (late Friday Z) to 2000 on 27 Feb. The rules for the 1296 contest are a little different from the 70 cm contest: 1) The 1296 contest lasts only one Moon pass rather than two. 2) The multipliers are two letter grid sectors (JN, IO, etc.) and must be exchanged for a valid contest QSO. And 3) SSB to SSB contacts count 2 points while SSB to CW or CW to SSB contacts count 1 point.

**GET YOUR EME CONEST LOGS IN:** This year it is especially important as G3LTF makes so clear in the following -- Now the contest is over we need to concentrate getting the maximum number of entries to the ARRL. Even if people had only couple of QSOs, they should submit their logs. We need to get the number of people who took part to send in their entry, so the numbers are higher this year than last to show that we like the rules as they are. No boycotts! It doesn't matter if the entrants are pro JT people or CW "Dinos" or mixtures. We need the numbers to be up this year to show that we like the rules as they are and were for most of the time this contest has been running. We also need to be aware that with the continuing sale of spectrum that our frequencies are very much at risk. The guys who are arguing our case need large turnouts to be able to point to EME operation as a "mass" international usage of the microwave spectrum. In order to prove this point, they need to be able to reference things like the growing numbers of people using the bands for EME. Contest results are a good record of our use of the frequencies. Also Galileo hasn't gone away (and if it did the Chinese are ready to take the slot). We need to be able to point to heavy and increasing usage of the 23 cm band, so that it must be taken into account in the receiver designs. **The message is simple: Put in an entry and help hold on to our EME bands!** Complete details on submitting your log can be found at: <http://www.arrl.org/contests/rules/2009/eme.html>. Scoring is QSO points (100 points for each complete EME contact) multiplied by number of DXCC countries (<http://www.arrl.org/awards/dxcc/dxcclist.txt>) plus US states and providences (K1JT = NJ, N4PZ = IL, K7XQ = CA, etc). Multiply QSO point total by the sum of multipliers worked from each band. Entries must be emailed or postmarked no later than 2359 on Tuesday, 5 Jan and must include complete log data as well as an official ARRL EME

Contest Summary Sheet. Official forms are available on the ARRL Web at <http://www.arrl.org/contests/forms/> or with a SASE request to the Contest Branch. No other forms of the summary sheet will be accepted. Each line of QSO data in the log should contain band, mode, date and time in UTC, call sign of station worked, exchange sent, exchange received, each new multiplier, and points earned. Photocopies of the log form and official Summary Sheet are acceptable. Logs should be emailed to [EMEcontest@arrl.org](mailto:EMEcontest@arrl.org) and hand-written paper logs or diskettes mailed to: EME Contest, ARRL, 225 Main St, Newington, CT 06111 USA.

**9HITX:** [davcut@malta.net](mailto:davcut@malta.net) was active on 70 cm during the Dec contest weekend -- I heard on 70 cm CW I1NDP and LZ1DX, but their signals were only (T-M) copy so I didn't call them. SM4IVE produced "beacon" signal during whole weekend and on Saturday I copied DL9KR (559) FB, but I didn't call Jan as I worked him in 1st leg. Except for these stations, I saw on Spectran several CW signals (not birdies), which were just too weak for my brain to decoder.

**AL7RT:** Dan [dpahunt@alaska.net](mailto:dpahunt@alaska.net) had a lot of fun in the ARRL EME Contest. He ended with 25 QSOs including 5 new ones. K5GW gets the big signal award. K5GW was S-7 most of the time. OK3RM was marginal. Ray wonders what equipment was OK3RM running?

**CT1DMK:** Luis [cupido@mail.ua.pt](mailto:cupido@mail.ua.pt) sends info on his Dec contest results – I worked 28 stations on 23 cm during the 5/6 Dec Moon pass. I only operated a few hours during my east window and another few during my west window. I added a few initials on 23 cm. My totals are now up to #64 on 70 cm, #127 on 23 cm, #24 on 6 cm and #27 on 3 cm. I had a few PA issues during my QSOs with W6YX, VE6TA and OK3RM. I transmitted erratically as I was concentrating on the repair rather than RX and TX. Signals they were loud and clear. I apologize for the garbage sent and QRZs – hi. Since I was not contesting avidly, I had some time for some extra measurements. The following are SNRs measured in a 10 Hz BW of stations heard – the strongest are shown first: OZ4MM – 31 dB, P19CAM – 30 dB, K5JL – 30 dB, K5GW – 30 dB, F2TU – 28 dB, W6YX – 26 dB, G4CCH – 26 dB, IZ1BPN – 26 dB, SP6JLW – 26 dB, DL4MEA – 25 dB, RA3AQ – 24 dB, WA6PY – 23 dB, VE6TA – 20 dB, OK1KIR – 20 dB, DF1SR – 20 dB, K2DH – 20 dB, SV3AAF – 20 dB, K1JT – 20 dB, SP7DCS – 18 dB, OZ6OL – 18 dB, OE5JFL – 16 dB, CT1DMK (my echoes) – 16 dB and OK3RM – 15 dB. After the contest I worked SV3AAF on 6 cm.



Luis,CT1DMK working on his dish.

**DF1SR:** Georg [df1sr@arcor.de](mailto:df1sr@arcor.de) reports on his contest activities – I was QRV on 23 cm for the Dec leg of the contest and worked OZ4MM, VK3UM, OH2DG, G3LTF, LA9NEA, IZ1BPN, HB9BBD, OZ6OL, IK2RTI, SP6JLW, RA3AQ,

PA3FXB, K2DH, K5GW, DL4MEA, PI9CAM, K8EB, ES5PC, SP7DCS, SV3AAF, G4RGK, G4CCH, IK3COJ, DL3EBJ, JA6AHB, OK1KIR, LZ2US, RD3YA, OK3RM, CT1DMK, G3LQR, DL6SH, UT2EG, K5JL, DF3RU, OE5JFL, K1JT, WA6PY, VE6TA, W6YX and F2TU. I heard PY2BS (nice signal, but never got a chance to call him as it was never his frequency). I was QRV for 12 hours and ended with 41 QSOs.

**DL6SH:** Andreas (DJ3JJ) [dj3jj@gmx.net](mailto:dj3jj@gmx.net) and Slawek (DL6SH) report on their contest activity -- We really enjoyed working the Dec part of the ARRL EME Contest on 23 cm. We were QRV only on Saturday from 2000 to Sunday at 0800. We made a total of 26 QSOs. I am sorry for the stations we missed (F2TU was one) due to our lack of experience with our new station. We expanded a 3 m (10') Orbitron dish (F/D 0.3) in a very simple way using 12 mm mesh to about 3.8 m (F/D 0.24). We optimized on Sun noise (+0.5 dB) with a mesh ring behind the septum of our very deep dish. With 250 W at the feed from a SSPA, we could speaker copy our echoes all the time (+10 dB to +20 dB on Spectran). Stations worked were DF3RU (559/559), G3LTF (559/549), OE5JFL (549/559), SD3F (559/559), LZ2US (559/539), OH2DG (559/549), RA3AQ (559/559), OZ6OL (559/559), G4CCH (559/559), JA6AHB (559/549), OK3RM (549/549), HB9BBD (569/569), IZ1BPN (559/539), PI9CAM (579/579), OK1KIR (549/549), DF1SR (559/559), K2DH (559/549), DL4MEA (559/549), K5JL (579/569), ES5PC (559/559), SV3AAF (0/0), WA6PY (0/0), SP6JLW (559/449), K5GW (579/569) and K1JT (559/559) for a score of  $26 \times 22 = 57,200$  points. We plan to be QRV for the SSB contest in Feb with a new 450 W SSPA.



**DL6SH's 3.8 m dish – note 12 mm mesh used to increase size**

**DL7APV:** Bernd [dl7apv@gmx.de](mailto:dl7apv@gmx.de) was very active on 432 during the ARRL EME despite a very busy time at QRL -- I made 100 contacts on 432 but minus all the DUPs ended with a score of 88x46 in mixed mode and 66x36 on CW only. My best QSO was with W5RZ using JT65. He was using only 2 x 9 w/ yagis and 5 W! at the feedpoint. We both were very surprised that we worked. Nil was heard from WB7QBS, so I urgently need something for vertical pol. I found the problem with my new PA. The tube's G2 had a short to ground, but only when RF is present. This is not good news as it means that I have to disassemble the whole cavity. The second Moon pass I tried an old solid state TV amp with good results. So my old TH347 PA can retire now. I will be QRV around XMAS due to holidays and plan to be active in the new DUBUS 432 EME SSB Contest on 2/3 Jan.

**DL9KR:** Jan [bruinier@t-online.de](mailto:bruinier@t-online.de) reports on the 2009 ARRL contest on 432 -- Again, this contest was fun with the usual ingredients of condx ranging from extraordinary to mediocre, op's sleepiness, phases of very adverse WX, and increasing tree blockage. My yield was about 50% of contact count as compared with the nineties, but proves that 70 cm still is up and running. QSOs were JA6AHB, JA9BOH, JA0TJU, OK1KIR, JJ1NNJ, OK1TEH, OH2DG, I1NDP, SM3JQU, UA3PTW, OH0/DL1YMK, DL7APV, SP6JLW, DG1KJG, SP7DCS, G3LTF, LZ1DX, SD3F, SV1BTR, DF3RU, SV3AAF, DJ7GK, K1RQG, VE2ZAZ, N4GJV, UA6LGH, K4EME, VE6TA, KL7HFQ, K7XQ, SM2CEW, OZ4MM, KL6M, F6HLC, N8CQ, W8TXT, F6FHP for initial #892, ES5PC #893, PI9CAM, JA5NNS, DL7UDA, UA4AQL, IK6EIV, IK2RTI, HB9Q, LZ1DX DUP, YO2IS, DL4MEA, SM4IVE - cool to have Lars back, K0RZ, G4RGK, K1JT, NC1I, K3MF, LU7DZ -- FB signal, WA2FGK #894, OK2POI, SM6FHZ, WA6PY - strong, W7CI, JA5NNS DUP, OK1CA, VK3UM (589), DL7UDA DUP, WD5AGO, K7XQ DUP, DL5FN and JA0TFU DUP for 63x34. The ARRL's revised contest rules are quite acceptable and I've submitted my log.

**EA3DXU:** Benjamin [bpaloma@telefonica.net](mailto:bpaloma@telefonica.net) reports on his 70 and 23 EME contest efforts -- I did not do well during the Dec leg of the EME contest. I slept only 3 hours and looked up and down the frequency bands, but only consistently

heard HB9Q on 23 and 70 cm. I was active only on JT65. Besides HB9Q, I copied only K8EB and PY2BS on 23 cm, but no QSOs. On 70 cm I worked HB9Q, DL7APV, DK3WG, LZ1DX, DL7UDA for an initial (#), UA3PTW, DL2NUD and K3MF. CWNW were W5RZ, K1JT, and W7MEM. The conditions were very good on Saturday. I had speaker copy of my 70 cm echoes at an elevation of 60°. This never was heard before with my 2 x 21 el yagis and 750 W. I think the small JT stations did not try to operate the contest without chat support.

**F1EHN:** JJ [jjm\\_f1ehn@wanadoo.fr](mailto:jjm_f1ehn@wanadoo.fr) writes -- There are more than 140 photos of antennas into the database covering the EME bands from 6 m to 1.2 cm on my web site, <http://picasaweb.google.com/papatoux>. The goal of this database is to display (during a QSO or whenever) the photo of the antenna and the location of a DX station. Of course, the database can also be browsed with other tools like EME System and Google Earth at any moment, see the example on my web site. I had planned to do a new package at the end of 2009. If you wish to add your antenna's photo, please send it via email + info as indicated below: - a photo of your antenna (1 per band) (better than 640\*480 pxl -- 1280 \* 960 is preferred), - a comment/title for the photo (ex: F6KXS 3 cm - 3.3 m dish), - latitude and longitude of the antenna (optional), - your grid square (locator), - the nearest city to check the location of the photo, and - your web site (if you have one).

**F5SE:** Franck [kozton@free.fr](mailto:kozton@free.fr) reports on 23 cm the Dec ARRL Contest weekend -- Once again I was only QRV on EME "Receive Only". Parts needed for my transmitter arrived too late to allow completion before the contest. On the other hand my "fixed" drive motor arrived two days before the contest, so my PC driven auto-tracking was back in operation. Here is the list of stations heard, only 43 this time: CT1DMK (539), DF1SR (539), DF3RU (549), DL4MEA (569), DL6SH (569), ES5PC (549), F2TU (579), F5JWF (529), G3LTF (569), G4CCH (559), HB9IZ (569), IK3COJ (539), IZ1BPN (579), LA9NEA (549), LZ2US (549), OE5JFL (539), OH2DG (549), OK1KIR (579), OK3RM (539), OZ4MM (579), OZ6OL (529), PA3FXB (529), PI9CAM (559), PY2BS (549), SM2CEW (549), SP6JLW (579), SP7DCS (539), UR5LX (419), VA7MM (549), VE4SA (519), VE6TA (559), AL7RT (519), K1JT (569), K2DH (549), K5GW (579), K8EB (549), N2NQi (519), N2UO (529), NY2Z (529), W6YX (559), W9IIX (529), WA6PY (559) and WA8RJF (519). Several of the stations heard in Oct were not logged. It is likely that some weak stations were skipped in the list. But I have made an audio recording of all that I heard. Careful listening of the recording will be carried out later in order to identify any weak signals missed. During this contest I could only be QRV from 0600 until local moonset. So I missed the JA/VK windows on both days. I also discovered I can still hear signals when the Moon is lower than the surrounding trees. All stations were on CW. No SSB signals heard. F2TU, OZ4MM and SP6JLW were the strongest this time. I suppose PI9CAM was running low power. This time used an IC910H instead of my FT736R. The Icom rig does not seem to suffer from the radar as much as the Yaesu rig. Signals were clean and clear. Next year, I will have a DB6NT transverter linked to a good shortwave transceiver, the IC7800.

**G3LTF:** Peter's [g3lft@btinternet.com](mailto:g3lft@btinternet.com) Dec EME report -- On 28 Nov I was on 1296 and worked N4PZ for initial #317, VE3KRP, and VE6TA and on 29 Nov RK3WWF on both SSB and CW followed by DL6SH #318. I was active for some of the last leg of the EME contest but strong winds during the first pass forced me off for about 6 hours of moon time and in the last pass the lower declination meant I had tree blockage until the last 90 minutes. At the start of the contest, the 432 conditions were as good as I have ever heard in many, many years on EME. I really thought someone was trying to fool me with the strength and steadiness of the echoes. On 5 Dec on 432 I worked YO2IS, LZ1DX, SP7DCS, SM4IVE, DL4MEA, UA6LGH, W8TXT, NC1I, HB9Q, SM6FHZ for initial #429 and IK2RTI #430. On 1296 I worked DL6SH, IK2RTI, RW3PX, UT2EG, VK3NX, JA8IAD, UR5LX, SM6CSO for initial #319, RW6AG, DF1SR, CT1DMK, G4RGK and SM3JQU, and on 6 Dec YO8BCF, LX1DB and JA6CZD. Heard were OE9ERC, JA4LJB (and I5QLO on his sked with OE9ERC). Overall my totals were totals are 44 on 432 and 86 on 1296. Thanks to all for the excellent QSOs. I urge everyone who took part in the contest to submit their log to the ARRL.

**G4RGK:** Dave [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) was active during the Dec contest weekend on both 70 and 23 cm, but the WX was pretty bad and limited his operating time -- I was only on for a total of about 6 hours during the Dec contest weekend. (I was not on at all the first weekend). The local weather conditions were mostly bad to very bad. High winds and torrential rain. All the equipment seemed to work OK and conditions seemed quite good. I worked 5 Dec on 23 cm RA3AQ, G4CCH, SP6JLW, SV3AAF, HB9Q, LZ2US and G3LTF, and on 6 Dec OZ6OL, IZ1BPN, OK1KIR, OZ4MM, K2DH, K5GW, LA9NEA, K1JT, K5JL, PI9CAM, DF1SR and OH2DG. I called K5PJR for a long time on about .030 but heard no response. On 432 I worked on 5 Dec I1NDP, DL9KR, SM4IVE, KL6M and OZ4MM, and on 6 Dec DL7APV and K1RQG.

**HB9BBM:** Dominique [dfaessler@bluewin.ch](mailto:dfaessler@bluewin.ch) was QRV on 6 Dec. He operated only about one hour and picked up DL6SH (569/569) for initial #304, YO8BCF (559/579) #305 and UT2EG (579/579) #306. Unfortunately he had little time and just worked these new stations.

**IINDP:** Nando [nando.pellegrini@tiscali.it](mailto:nando.pellegrini@tiscali.it) was active (on CW only) for most of the second leg of the ARRL EME Contest on 432 -- My Dec result were rather poor. I was only able to add 10 valid QSOS to the 52 of first leg. Good conditions with strong echoes except on Sunday morning when conditions changed. The participation was not great and I had to fight against a very high level of local RF pollution (higher than usual). My apologies to WD5AGO, whom I could not copy. I was receiving strong but very short pieces of their signal. I also lost some others. In a couple of cases the calling stations gave up too early... Sometimes the process of decoding a weak signal takes long (at least to me). My final result was 62 QSOS against 69 a year ago. Hopefully this poorer result is not due to a decrease in 70 cm activity.

**IK3COJ:** Aldo [ik3coj@fastwebnet.it](mailto:ik3coj@fastwebnet.it) did well in 2009 on 1296 EME -- I added initials during the year with LZ2US, MI/DL1YMK, PI9CAM, RK3WWF, K6MYC, VK5MC, E77DX, LZ1DX, K8EB, W4OP, OH0/DL1YMK, W6YX, JA8ERE, RD3YA (believed the same as RK3WWF?), DF1SR and PY2BS to bring me to #186 in 50 countries. Throughout 2009, I used a PA with only one tube for 250 W. I hope to finish soon a new PA using a YD1336. In the ARRL contest I made a score of 54x29.

**IKSOLO:** Andrea [andrea@isaacasimov.it](mailto:andrea@isaacasimov.it) reports on his 23 cm QRP EME during the Dec EME Contest -- I am quite satisfied with my contest weekend results. I made only a few QSOs, but had a lot of fun. I spent hours calling stations on CW and getting only QRZs in reply. I definitely need more power! The JT side was much easier and faster - hi. Unfortunately could not find many of the big stations that heard in the first leg. My best QSOs were with JA4BLC (worked before the contest) and OZ4MM on CW. Yoshiro is a long time friend who pushed me to become QRV again on EME. Our QSO give us EME contacts on 3 bands (144-432-1296) in 20 years! The same goes for OZ4MM. I first worked Stig on 2 m in 1989 and later on 70 cm. I worked all on random, not assisted, K5GW, K5JL, PI9CAM, OZ4MM and SP6JLW on CW, and HB9Q, UA3PTW, PY2BS, OK1KIR, PA3FXB, RD3YA and K1JT on JT65. After the contest ended I QSO'd OE9ERC on sked on CW. Heard/CWNR on CW were HB9MOON, IZ1BPN, G4CCH, RA3AQ, DL4MEA, DF3RU, K1JT and VK3UM. My rig is a 2.4 m solid dish with a Septum feed and about 100 W and DB6NT xverter.

**KORZ:** Bill [wmccaa@comcast.net](mailto:wmccaa@comcast.net) in DM79jx reports his Dec activity using 432 CW with fixed vertical polarization -- I QSO'd on 5 Dec DL9KR, SM4IVE, DG1KJG, DL4MEA, OK1KIR, SP6JLW, SP7DCS, SM6FHZ for initial #342, SV3AAF, LZ1DX, UA6LGH, NC1I, UA3PTW, W7CI and JA9BOH, and on 6 Dec PI9CAM, OK1CA, JJ1NNJ, JA6AHB and VK3UM. I ended with a total score 35x20.

**K1JT:** Joe [k1jt@arrl.net](mailto:k1jt@arrl.net) reports on the ARRL EME Contest-- On 70 and 23 cm the Dec team consisted of K2UYH and K2BMI operating from K2UYH's QTH. We had planned to start on 70 cm and change to 23 cm as the Moon rose, but the noise on 70 made low elevation operation impossible, so we switched to 23 cm where the noise was only from the trees. When we went back to 70 cm, we lost power from the PA. It turned out that an N connector had gone bad. We were able to make a temporary fix that held for the remainder of the weekend -- but we did not push the PA after that and always ran less than a kW out. The only other technical problem was the loss of a 1296 preamp later that night due to a switch error -- sleep deprivation -- hi. Unfortunately we could not find the backup preamps (and still have not found them). We ended up using an old backup-backup preamp for the remainder of the contest. Our final tally was 51 QSOs on 432 and 73 on 1296. There were a number of easily worked stations in NA (and elsewhere) that we missed. We did a little better than last year on 432, but were down considerably on 1296. QSO'd on 5 Dec on 1296 were G4CCH (559/569), DJ9YW (559/559) and HB9MOON (579/579) DUP, on 432 DL9KR (579/579), NC1I (579/579), HB9Q (O/O) on JT, K1RQG (579/559), DG1KJG (559/559), SD3F (559/569), DF3RU (559/559), W7AMI (13DB/O) on JT, OK2POI (14DB/O) on JT, RU4HU (24DB/O) on JT, LZ1DX (O/O) on JT, W7CI (O/O), SV3AAF (559/549), SM4IVE (579/579) and SP7DCS (559/559), on 1296 OK3RM (559/559), K5GW (579/579), WA6PY (559/579), HB9IZ (559/559), F2TU (579/579), PA3FXB (559/559), LU1C (O/O) on JT DUP and SM2CEW (569/579), on 432 F5HRY (559/559), on 1296 JA8IAD (569/559) and on 1296 VK2JDS (17DB/O) on JT, and on 6 Dec on 1296 YO8BCF (22DB/14DB) on JT, DL4MEA (559/559), K5GW (579/569) DUP, VE4SA (559/559), G4RGK (549/559), OZ4MM (579/589), PY2BS (559/559) DUP, DL3EBJ (449/559), IK5QLO (28DB/O) on JT, DF1SR (559/559), N2UO (559/559), CT1DMK (549/559), UR5LX (449/559), PI9CAM (589/589), VE4SA (559/559) DUP, DL6SH (559/559) and WA8RJJ (549/O), on 432 K3MF (14DB/14DB) on JT, W7MEM (O/O) on JT and W8TXT (O/O).

**K1RQG:** Joe [k1rqq@aol.com](mailto:k1rqq@aol.com) was active on both the 10/11 Oct and 5/6 Dec weekends in the ARRL contest -- My primary operation was on 432. I did put the 23 cm feed in on 11 Oct but worked only a few stations. I had planned to also change the feed back to 23 cm on 6 Dec, but very high winds and heavy snow forced me to park the dish at around 0800 on Saturday and I thus missed many stations on 70 cm aqs well as 23 cm.

**K3MF:** Wayne [k3mf@aol.com](mailto:k3mf@aol.com) in the first leg of the contest worked 6 stations, 3 of which were initials. Signals were strong, but he was called into work and missed a lot of Moon time. During the Dec weekend, he had his first snow of the winter - heavy wet snow. Luckily his array is only 10' off the ground and he could knock off the ice.

**K4EME:** Cowles [candrus@rica.net](mailto:candrus@rica.net) reports -- The first night of the Dec leg of the ARRL EME Contest on 432 started out a little slow. We had high winds the day before that knocked my azimuth off by 4 degs on my horizontal array. With cloud cover and no visible moon to check alignment, I was not aware of my alignment problem until I could not return echoes. I tried to check the nearby 432 beacon, WA4PGI, and it was not there. I thought I had LNA problems. I switched to my vertical array, but still no WA4PGI beacon to be found. The tracking computer for the vertical array went down a few weeks ago, so my plan was to steer the array with a camera. With no visible Moon this plan did not work. I panned the small vertical array and heard some CW, it was SM4IVE. When I switched to the large horizontal array, I just had a very weak signal. I used SM4IVE signal to realign my horizontal array and I was in business with very strong signals; and my echoes were back! I had two helpers, W4TJ and KR4V. We worked SM4IVE, SV1BTR, W8TXT, NC1I, W7CI and K3MF. We heard many others including K1RQG that we worked the first leg. I think everyone had a good time! We enjoyed talking about other EME and ham radio subjects while copying signals! My helpers left early in the am hours when things slowed down, while I kept going alone. I unfortunately fell asleep through the JA/VK window however the snow may have caused problems anyway. The second night did not go well. At moon rise I never heard a good echo and started trouble shooting. I checked my VSWR and it was real bad! The night before I had about 2 W reflected with 1 kW out. The reflected power was now over 50 W. I looked at the array and it was snow and ice covered. We had about 4 to 6" of very wet snow and it stuck to everything including my 8 FO-33s. I tried climbing the tower and with the use of a leaf blower, I was able to remove a little snow. This reduced my reflected power down to 40 W. I still did not hear my echoes and only the very strong stations. For the first time that I can remember, ice and wet snow crippled me. I did not work any new stations. I am sure when the temperature comes up above freezing, everything will start working again.

**K5SO:** Joe [k5so@valornet.com](mailto:k5so@valornet.com) was active during the pre-contest weekend on 1296 and QSO'd N4PZ, VE3KRP and W9IIX all with good signals. Joe is still working on his dish expansion project and moving along slowly. During the contest he was flat on back and was not able to get on the Moon the first pass.

**K8EB:** Erv [mrdxc@sbcglobal.net](mailto:mrdxc@sbcglobal.net) had problems the first night of the Dec EME contest weekend and gave up went to bed, but found the trouble in the morning and worked SM2CEW, VA7MM and JA8IAD. During the second pass he got on for only a short period of time and worked a few more including DF1SR and K5GW for new ones.

**KL6M:** Mike [melum@alaska.net](mailto:melum@alaska.net) got in on some of the fun during the Dec contest weekend despite many WX and other challenges. He was QRV on 70 cm only and added 7 the first Moon pass including an initial with SM6FHZ (549/549) for #205. Heard but not worked included WB7QBS, OH2DG, WA6PY, DL5FN, LZ1DX, OK2POI, SV1BTR and F6FHP. His QSO total was 39.

**LX1DB:** Willie [wbauer@pt.lu](mailto:wbauer@pt.lu) was not active during much of the contest because of very heavy winds and rain. On Saturday/Sunday night the WX was a disaster. He was on 70 cm for a short time. On Sunday afternoon the wind let up and there was 1 hour with no rain. He took this opportunity to change the feed to 1296 for the very end of the contest and make a few QSOs. Before the contest he worked JA6CZD (559/549) on 10.450100 GHz. He is getting 2.7 dB of Moon noise on 10 GHz.

**N4GJV:** Ron [qstdemb@yahoo.com](mailto:qstdemb@yahoo.com) reports on his Dec ARRL EME Contest operation -- I was QRV on 5 and 6 Dec and logged QSOs with SM4IVE, NC1I, W7CI, OK1KIR, HB9Q, SP6JLW, K7XQ, OK1CA, and F2TU. Heard and called were DL4MEA, LZ1DX, K3MF (QRZ?), F6HLC (QRZ?), JA0TJU (QRZ?) and JA6AHB. Others heard include SV3AAF, WA6PY, OH2DG and G4RGK plus many of the stations that I QSO'd during the Oct contest weekend. I also made some QSOs on 2 m with a QRP station. I hope to be QRV, during the 27 Dec ATP.

**NA4N:** Greg [na4n@hughes.net](mailto:na4n@hughes.net) in Dec worked 2 getaways, K5GW and SV3AAF from Oct on 23 cm EME, but lost his driver and was forced to QRT early. He ended with 38 on 23 cm and 18 on 13 cm. Greg feels that activity was down this year.

**NC1I:** Frank [frank@nc1i.com](mailto:frank@nc1i.com) was active the first Moon pass of the Dec contest weekend -- Before the contest at 0423 on 4 Dec I worked OK1TEH (O/O). Matej was peaking (449) with a very nice signal for one yagi and 500 W. During the contest I worked K1JT, SM4IVE (nice to hear Lars back on the moon), DL9KR, K4EME, SP7DCS (louder than I have ever heard Chris before), SV3AAF, K3MF, DG1KJG, DL4MEA, SP6JLW, I1NDP (strongest signal heard all night), SD3F, OK2POI, N4GJV, WA6PY (569/569 - Paul can't still be using a single yagi can he?), W8TXT, OK1KIR, LZ1DX, KL6M, K1RQG, K0RZ, G3LTF, SM6FHZ, JA9BOH, J11NNJ and KL7HFQ. From 0545-0600 I was called by WB7QBS. He had a very nice signal (449) but after I sent (O) reports each time he would come back just sending calls. Finally after about 4 sequences of just hearing call sets I heard just 2 or 3 (O) reports. I sent Rs and 73s but only heard call sets again after that so I did not log it as a complete QSO. I found conditions to be a bit strange. Almost every QSO was made with me transmitting and receiving vertical. While receive signals were peaking vertical from both EU and NA there was only about 5 dB difference at any polarity angle. Did anyone else notice this? Echoes were very good but not outstanding. I found my echoes to be better the two previous nights. Polarity was also sharper the two previous nights. Typically I do find signals to be strongest when there is a clear polarity peak. I planned to put in more time the second pass, but unfortunately everything iced up from a storm the following day (SWR was 3.5/1) and the elevation drive froze up. I was thus unable to get on for the final day of the contest. Before the contest, I found a degraded preamp and am now hearing better than I have for a long time.

**OE3FVU:** Franz [oe3fvu@oe3fvu.eu](mailto:oe3fvu@oe3fvu.eu) is now QRV on EME on 432 from JN37ve. He has 4 x 17 el yagi array, but only 35 W thus far. He is available for skeds and has made 4 EME QSOs on JT65b.

**OE5JFL:** Hannes [oe5jfl@aon.at](mailto:oe5jfl@aon.at) writes about his contest operation -- In Dec I was QRV on 23 cm using my EME beacon system (100 W and 5 m dish) for a couple of hours on both moonrises and moonset only on Sunday. For both weekends together, I worked 60 stations, all on CW. I heard another 25, but with the low power, it was not possible to get every bodies attention. Because of problems with my e-mail provider, I have changed my e-mail address -- see the start of this report.

**OK1CA:** Franta [strijavka@upcmail.cz](mailto:strijavka@upcmail.cz) reports on his recent EME activity -- I worked on 10368 on 2 Dec ON6TA (559/559) and OZ1FF (M/O) for initial #37, and on 5 Dec VE4MA (539/449) #38. I also worked on 5760 on 4 Dec WD5AGO (549/339) for initial #15. I was active during the 2nd Moon pass of the Dec part of ARRL EME Contest on 432 with new loop feed designed by OM6AA and worked OZ4MM, SP6JLW, DL9KR, SM4IVE, DL7APV, PI9CAM for an initial #144, I1NDP #145, VK3UM, ES5PC #146, JA5NNS #147, J11NNJ #148, K0RZ, UA6LGH, K1RQG, SV1BTR, W8TXT #149, SM6FHZ #150, DG1KJG #151, SM2CEW, N4GJV and KL6M.



**OK1CA's new 70 cm feed.**

**OK1KIR:** Tonda, Vladimir and Jan [ok1vao@o2active.cz](mailto:ok1vao@o2active.cz) report on their club's Dec EME results -- Before the contest on 4 Dec we worked on 2320 at 2021 PA3DZL (549/549) for initial #98. We then worked during the contest on 5 Dec on 432 at 0018 SM4IVE (579/559), 0144 SD3F (559/549), 0344 K0RZ

(559/449), 0402 K1RQG (569/569), 0423 UA6LGH (549/559), 0436 DL4MEA (549/O), 0503 NC1I (589/579), 0513 DG1KJG (549/549) for initial #370 and 0631 N4GJV (O/O) for a total score on 432 of 26x19, and on 1296 at 1919 RD3YA (549/559) for initial #286, 1936 RW3PX (549/559), 2040 VK5MC (579/569) DUP, 2052 UT2EG (549/559) #287, 2134 OZ4MM (579/569), 2147 F2TU (579/569), 2155 OK3RM (549/569), 2210 OZ6OL (569/569), 2225 JH5LUZ (559/559), 2246 G4CCH (579/569), 2327 UR5LX (549/559), 2332 SP7DCS (559/559) and 2359 CT1DMK (559/559), and on JT65c at 2002 VK2JDS (15DB/O), 2012 YO2BCF (13DB/9DB), 2106 PA3FXB (13DB/O) and 2112 PE1HNG (18DB/16DB), and on 6 Dec on 1296 at 0048 DF1SR (559/559) #288, 0055 G3LQR (559/559), 0121 DL6SH (549/549) #289, 0206 G4RGK (549/549), 0410 UA3PTW (559/569) #290, 0509 K5GW (589/569), 0525 VE3KRP (559/559), 0537 W5LUA (579/569), 0542 W4OP (569/579), 0552 DL4MEA (569/559), 0558 VE4SA (559/549) #291, 0710 FJWJF (559/569), 0722 N2UO (549/559), 0728 W9IIX (559/559), 0835 WA6PY (569/559), 2032 VK3UM (569/559) and 2343 JA6CZD (569/569) - we heard in QSO with other stations JA4LJB, SM3JQU and LX1DB but we didn't work them -, and on 1296 JT65C at 0341 IK5QLO (18DB/O) for digital initial {#52}, 0359 UA3PTW (12DB/O) {#53}, 0631 LU1C (-19/O) {#54}, 0643 SP3XBO (22DB/O) {#55}, 0742 RW6AG (11DB/O) and 2056 JA1WQF (1DB7/14DB) - we also decoded signals from K8EB and W3HMS. Our total count on 1296 was 81x38. After the contest we added on 7 Dec on 1296 at 0043 JA6AHB (9DB/DB12) on JT65c and were heard by EA3XU (23DB). Our 2009 ARRL microwave (MW) EME Contest results are on 13 cm 31x25, on 9 cm 6x5, on 6 cm 10x7 and on 3 cm 10x9, this with our 70 and 23 cm scores give a total score of 163x103 or 1,689,200 points. We are very happy that in ARRL EME Contest we worked on all bands new initials and some new DXCCs as well. However, we think that having all MW bands active in a single weekend is not the best solution. We would prefer the bands be split as in European EME Contest.

**OK1TEH:** Matej [ok1tehlst@seznam.cz](mailto:ok1tehlst@seznam.cz) took part in Dec contest weekend only on 432 -- I used my 5.7 m long yagi and with a power of 360 W on JT65 and 530 W on CW at my antenna feed (coax attenuation is about 1.34 dB). I was QRV without any connection to internet and worked in JT65 (no SDR) DL7APV and LZ1DX and on CW SM4IVE.

**OZ4MM:** Stig [vestergaard@os.dk](mailto:vestergaard@os.dk) was active in Dec but is now temporarily QRT -- Due to a very heavy snow load my elevation mounting was damaged. When I moved the dish down from its park (bird bath) position, the snow load caused my 10 m dish to bump up and down. I was concerned but everything seemed OK until I returned the dish to the park position. I then discovered the bridge between the counter weights was bent, even though it is quite heavy. I will remove the drive during the Christmas holidays days, and will start building a new and better support for the drive. During the EME contest I was only partially active as I was very busy with QRL, but nevertheless I was QRV in all 3 contest weekends. Prior to the Dec contest weekend, I worked on 432 UK/DL9LBH (DXCC 62), who is doing very well on CW. In the final weekend I added the following on 432: JA5NNS, J11NNJ, SM4IVE, SP7DCS, SM6FHZ for initial #324, OK1CA, YO2IS, OK2POI, JA9BOH, JH4LJV, G4RGK, SV1BTR, DL7UDA, LZ1DX, JA0TJU, WD5AGO, W8TXT and F2TU giving 50 contacts total. On 1296 I added VK5MC, JA4LJB, UT2EG, VK3UM, RW3PX, JH5LUZ, JA6AHB, JA8IAD, JA6CZD, VK3NX, OK3RM, OK1KIR, DF1SR, UR5LX, JA1WQF, G4CCH, YO8BCF, G4RGK, K5GW, K1JT, OH2DG, VE3KRP, IK5QLO #342, SM3JQU, W3HMS for initial #343, VE4SA, PA3FXB, PI9CAM, CT1DMK, W4OP, VE4MA, LU1C #344, W9IIX, F2TU and AL7RT giving 84 stations on 1296. All stations were worked on CW unassisted. I missed several heard stations on both bands. I hope to soon be back.



**OZ4MM's Dish's bent bridge between the counter weights**

**PY2BS:** Bruce [bruce@zirok.net](mailto:bruce@zirok.net) send his last report for 2009 -- I had a total of 21 QSOs on 23 cm during the last leg of the ARRL EME Contest. 14 were on CW and 7 on JT. I also added 12 initials and 2 countries. QSO'd were PA3FXB (JT), YO8BCF (JT), W6YX for mixed initial #73\*, RA3AQ #74\*, K5JL#75\*, IK5QLO #76\* and DXCC 31 (JT), LU1C (JT), VE7BBG (JT), IZ1BPN #77, SP6JLW #78, K2DH #79, DL4MEA #80, K5GW #81, OH2DG, K1JT, LA9NEA, PI9CAM, K8EB (JT), SP3XBO #82 (JT), WA6PY #83 and LZ2US #84. I had a few equip. failures during the weekend including two during on going QSOs (K5GW and OH2DG) but managed to complete both. I apologize to all friends whom may have called me and I could not read. I hope we can make it in next year's contests or before -- I'm interested in sked requests. New year's plans are for my firsts tests on 9 and 6 cm. I am going to 1 kW on 70 cm at PY1KK, but some months will go by before this happens.

**RD3DA:** Yuri [rd3da@list.ru](mailto:rd3da@list.ru) is to be congratulated for completing WAC on 1296 using JT65c. All QSO were made during 2009. In March he worked ZL1WN for Oceania, in May PY2BS for South America, in Aug DP1POL in Antarctica, in Sept GW3XYW for Europe, JA1WQF for Asia and K8EB for North America, and in Nov 5N0EME for Africa.



**RD3DA's 1296 digital "WAC" award**

**RW3BP:** Sergei [rw3bp@vhfdx.ru](mailto:rw3bp@vhfdx.ru) implemented some major improvements to his 1296 system for the Dec part of the contest -- First of all I extended my 2.4 m offset dish to 3.4 m. I installed a new mount that can be tilted to allow work to be done on the dish more easily and safely. I used 6 x 6 mm mesh that I hope will also be good on 13 cm and maybe even higher up. The feed is still an RA3AQ design with a 400 mm aperture that was optimized for max gain with the 2.4 m offset dish. The new extended dish with this feed is under illuminated, but it is not far from a G/T optimum for my new LNA. I was very happy to exceed 17 dB of Sun noise with my small dish! My last measured results were Sun/CS = 17.1 dB (SFU 71, interpolated value for 1300 MHz: 50.5), Moon noise = 0.35 dB at perigee, and termination (290 °K)/CS = 12 dB. So the system temperature is 19 °K or even a bit better. My LNA is HB with WD5AGO - G4DDK line as a prototype. The input transistor is an MGF4919G. NF = 0.13 dB (in my scale - hi). If you subtract the noise temperature of the antenna and the TR switch from the measured system temperature, it will be 9 ~ 10 °K or about a 0.13 ~ 0.15 dB NF for the LNA. All these results are in good accordance with the last version of the VK3UM EME Calculator. The last improvement was the SSPA. I increased it to 16 water cooled RA18H1213G modules to now produce more than 1 kW in the shack and 800 W at the feed. RA3AQ operated my station in the contest and will report on his results separately.

**SM2CEW:** Peter [sm2cew@telia.com](mailto:sm2cew@telia.com) operated (on CW) the last weekend of the contest on 3 bands -- I found conditions very good with stable polarization and little libration. I spent most of my time during the first night on 2 m, but did QSO at the end of my Moon window on 23 cm G4CCH, K1JT, AL7RT and K8EB - all with very nice signals. The next day I was delighted to work WD5AGO and his crew on 432. They had an excellent signal and good operating techniques. My new 1296 W6PQL solid state driver PA is now assembled and ready for test. There will be a lot of good moon times over the coming holidays. I will be on checking for activity on 432 and 1296 whenever family activities allow. I am also working on 3 cm EME.

**SM4IVE:** Lars [sm4ive@telia.com](mailto:sm4ive@telia.com) had his problems during his debut with his new dish -- When moon was in the south, my PA went QRT. It blew all 16 A fuses in the incoming wall supply. This is the reason I was not on Saturday night/morning. I spent the whole day repairing the screen/bias supply and some other parts as well. Fortunately the tube was still alive and I was in business for the second Moon pass.

**SP7DCS:** Chris' [sp7dcs@o2.pl](mailto:sp7dcs@o2.pl) Dec contest report -- I operated multi-op this year with my son SP7MC on 3 bands (2 m, 70 cm and 23 cm) CW random unassisted EME. Luckily this year WX was very cooperative in SP, which is not very common for Dec. On 70 cm we worked mainly in the night to avoid TVI. I was very satisfied with 18 QSOs with our modest 4 x 25 el yagi setup and 500 W. An additional problem was some pulse interferences that sometimes caused RX trouble. QSO'd were I1NDP, DL9KR, UA3PTW, DL7APV, PI9CAM, KL6M, SM4IVE for an initial (#), G3LTF, SV1BTR (#), SD3F (#) (same SM3AKW), NC1I, K1RQG, K0RZ, DF3RU, K1JT (same K2UYH), OZ4MM SP6JLW and VK3UM. Thanks to VK3UM and SV1BTR for their patience during our QSOs. (I missed final RRR from Doug during the first weekend QSO). CWNR were JA5NNS and SM6FHZ. 23 cm was amazing again. Even with my small system, 3 m dish and 500 W, I was able to hear a lot of stations. Contacts were made with DL0SHF, LA9NEA, UT5JCV, LZ1DX, SP6JLW, K2DH, SM6FHZ, ON4BCB, RA3AQ, LZ2US, IQ4DF, OH2DG, K5JL, SV3AAF, K8EB for an initial (#), SV1BTR, G3LTF, IW2FZR, W6YX (#), IZ1BPN, OK1DFC, IK2MMB, K1JT, HB9Q, RD3YA (same RK3WWF), DF3RU, HB9MOON, JA4BLC, HB9BBD, OH0/DL1YMK, JA6AHB, ES5PC, G4CCH, OE9ERC, DL3EBJ, JR4AEP (#), OZ4MM, HB9SV, WA6PY, VA7MM (#), OE5JFL, VE6TA, DL4MEA, SM2CEW, K5GW (#), UA3PTW (#), VE3KRP (#), OK3RM, F2TU, OZ6OL, PI9CAM, VK3UM, F5JWF (#), OK1KIR, DF1SR (#), W4OP, IK3COJ, CT1DMK (#) and VK3NX (#). We ended with 59 QSOs. Our total multi-band QSO count is 120 with all on CW.



**RW3BP's extended offset dish and new mount**

**SV1BTR:** Jimmy [jimmyv@hol.gr](mailto:jimmyv@hol.gr) operated the last leg only on 2 m and 70 cm - Being away from the EME QTH for a month, it is highly likely to come up with problems when one shows up. This time the motor of my azimuth rotor was dead prior to contest, and thus dish could not move. Thus I could not be QRV on 23 cm where I missed a lot of fun, action and many of my friends. My 2 m V pol also had water problem that I had no time to fix. 70 cm RX was degraded by 2 dB by 2 days of non-stop rain. Sunday night WX was at last good and signals were much better. To warm up the shack Murphy decided to assist! Thus, Saturday afternoon onwards, I had 40°C + fever, which made operation quite challenging. I lost a big part of my moonrise session on Saturday as my body would not cooperate. The ears were working in the red, to copy call signs and reports. My total QSO count (all on CW) was 208 + 6 DUPs. All QSOs were on random (no logger chats-no spots), except 2 which were skeds with very fast and ubf signals. The QSO breakdown was 60 on 2 m (including several single yagi and QRP stations with great signals - congrats!), 48 on 70 cm, 57 on 23 cm (QRV first leg only) and 43 on 13 cm. QSO'd on 70 cm were UA3PTW, DL9KR, I1NDP, G3LTF, SP6JLW, DF3RU, DL7APV, DG1KJG, DJ7GK, SV3AAF, OK1KIR, VE6TA, K1JT, N4GJV, ES5PC, J11NNJ, F6HLC, F6FHP, SM3JQU, JA5NNS, JA9BOH, VK3UM, SM2CEW, K1RQG, W8TXT, N8CQ, K0RZ, WA6PY, JA0TJU, SM4IVE, OH2DG, YO2IS, SP7DCS, DL4MEA, K4EME, LZ1DX, SM6FHZ, W7CI, UA6LGH, OZ4MM, JA0TJU, P19CAM, IK2RTI, OK1CA, IK6EIW (sked), KL6M, JA6AHB, DL5FN, OK2POI and JA5NNS. QSO's on 23 cm were HB9BBD, JA4LJB, SP6JLW, JA4BLC, RD3YA, LZ1DX, RA3AQ, IW2FZR, LA9NEA, IZ1BPN, K5JL, LZ2US, OK1DFC, SP7DCS, PA3FXX, OE5JFL, NA4N, UT5CJW, SM6FHZ, N4PZ, VE3KRP, UA3PTW, NA4N, SV3AAF, DL0SHF, SM4DHN, IK3COJ, VA7MM, WA4EV, W6YX, N2UO, ON4BCB, WA6PY, F5JWF, G3LTF, DF3RU, IK2MMB, OK1KIR, S50C, JH5LUZ, DL3EBJ, OE9ERC, G4CCH, RW6AG, JR4AEP, 9A5AN, K2DH, ES5PC, OH2DG, HB9SV, N0OY, W5LUA, OZ4MM, W9IIX, G3LQR, VK3UM, JA6AHB and JA8ERE. QSO'd on 13 cm were OK1CA, SP6OPN, SV3AAF, DF9QX, OH2DG, G3LTF, LZ1DX, PA0BAT, ES5PC, IK2RTI, OK1KIR, SD3F, SP6GWN, F5KUG, PY2BS, HB9Q, OE9ERC, DL4MEA, K1JT, F2TU, K8EB, W5LUA, P19CAM, NA4N, VE6TA, WD5AGO, W9IIX, K5GW, DL3EBJ, LA9NEA, G4CCH, OZ4MM, DF3RU, RK3WWF, IW2FZR, JA8IAD, JA8ERE, PA3DZL, SM2CEW, W7JM, WA6PY, VE4MA and K7XQ.

**SV3AAF:** Petros [sv3aaf@yahoo.com](mailto:sv3aaf@yahoo.com) reports on the 2009 EME Contest -- It has been three enjoyable weekends with very good QSOs per time spent ratio (for EU) despite the glitches, bad WX and terrible libration on 23. The total QSO count on 5 bands was 125 on CW (and SSB) plus a few DUPs. QSO breakdown from high to low: 4 on 6 cm, 23 on 13 cm, 69 on 23 cm, 19 on 70 cm and 10 on 2 m. It looks like the growth winner this year was the microwave section. Activity on 13 cm is fast approaching maturity and requires more time devoted as QSO numbers have increased. Adding up band/feed changes sometimes leads to a time shortage and coordination problems therefore a single MW weekend may not be enough for everyone. After the contest I added LX1DB on 6 cm.

**UA3PTW:** Dmitrij [ua3ptw@inbox.ru](mailto:ua3ptw@inbox.ru) reports recent 70 cm QSOs on CW with N4PZ, SM6FHZ and WA2FGK, and on JT65B with RU4HU, DF3RL, JE1TNL, OE3FVU, DL2NUD and WA3QPX. On 23 cm he has CW contacts with LA8LF, UR5LX, SM2CEW, RW3PX, OZ6OL, N4PZ and K7XQ, and on JT65C with 5N0EME, EA3XU and UR5LX. He also worked on SSB RK3WWF (55/55).

**VE3KRP:** Eddie [eddie@tbaytel.net](mailto:eddie@tbaytel.net) was active on 1296 on 28 Nov and worked K5SO and CWNR N4PZ, but on 29 Nov worked N4PZ for initial #57 and state 13. Eddie also worked VE6TA and G3LTF. In the contest he added a few more including on 5 Dec SP7DCS #58 and on 6 Dec IZ1BPN #59. He had no luck in the Asian window and only CWNR JA8ERE.

**VE4MA:** Barry [ve4ma@shaw.ca](mailto:ve4ma@shaw.ca) during the Dec contest weekend, was on 3 cm during the first pass -- I worked OK1CA (449/539) for an initial on Saturday, but the temperature was too cold to change the feed over to 23 cm. On Sunday I tried to get on 1296 at 0500, but found that my TR relays were not working. It was a bad diode across a coil. I clipped it out standing on top of a ladder in -20 deg C weather -- very tough on bare hands. I was QRV at about 0600 and worked OZ4MM, but most signals did not seem that strong. I had a difficult time identifying even the strongest signals because of short high speed CW IDs. The strong stations need to slow down and repeat calls for weak stations. I did work K5GW who had a tough time pulling me in (O) report but he was (559). My echoes were 10 dB over the noise. I tried to work IZ1BPN, who had a good signal but sent too short and fast IDs. My preamp was oscillating when going back to RX, so I QRT'd. In the daylight, I confirmed that I had my polarity wrong. I had switched hybrid cables after a preamp failure a couple of months ago.

**VE4SA:** Shawn [ve4sa@rac.ca](mailto:ve4sa@rac.ca) had a great time on 23 cm during the Dec contest on 1296. He now has a big signal with his 6 x 7289 ring PA working FB. On the first pass he worked a few including new ones LZ2US and SP6JLW. On Sunday

he added 7 more with 3 initials, DL4MEA, VE6TA and OK1KIR. Shawn also fixed his elevation actuator -- the limit switch froze. He is using a modified digital level for elevation readout, but it also failed when it got cold (-63.4 F)!

**VE6BGT:** Skip [macaulay@red-deer.oilfield.slb.com](mailto:macaulay@red-deer.oilfield.slb.com) made his first EME QSOs during the contest on 5 Dec with DJ9YW and W4OP on CW -- The CW was a struggle but it is coming back. I use to be quite good at CW 30 years ago. I am using a 14' dish with a homebrewed septum feed. I started with a 10' TVRO dish and heard echoes and then rebuild/extended it 14'. My biggest problem is trees, which severely limit my Moon window to the east. I also have about 130' of 7/8 Helix for RX and TX into the shack. The 1296 power amp is my pride and joy, twin cavities running 4 each 2C39As with a very fancy PIC controller for the power supplies, sequencer and water flow monitoring, etc. I had a lot of fun building it up and at first I could get 750 W out of it, but it has fallen off since then to about 550 W. I suspect my very old fingerstock. I get about 300 W to the dish, if I am lucky. The IF radio is an older Kenwood TS-711, the down converter is a new Kuhnes with WD5AGO preamp.

**VK3UM:** Doug [tikaluna@bigpond.com](mailto:tikaluna@bigpond.com) had a challenging time during the Dec contest weekend -- The first night was "interesting" to say the least. On my moonrise Faraday on 70 cm was close to 90 but 30 minutes later had changed to a rapid "oscillation" between 0 -- 45 degs that made things quite a challenge. K1RQG was solid coming in vertical all the time, but the smaller stations were in and out near the threshold level. 23 cm had severe Libration bordering on Aurora (none here that I am aware of) as well as deep fading. Otherwise I would rate 23 cm conditions as "very ordinary". These conditions kept up right through to my moonset. 70 cm on the other hand seemed to settle at ~45 degs and was by far the better band for me. I was certainly kept busy during the EU window and still had a lot left to work. Why does everyone have to call me at < 2 degs! I started and finished with LA9NEA at 0.2 degs! Activity from the USA was not good. My 23 cm pre amp failed. Why I have no idea. This did not enhance my humor.

**W4TJ:** Bill [w4tj@comcast.net](mailto:w4tj@comcast.net) writes -- I'm still alive and well and in fact making progress on my EME system, slow but sure. During the EME contest I wanted to give a listen on 432, so I put up a single RIW 19 el yagi again about 6 ft off the ground. I built another cavity preamp and measured 0.18 dB NF. This new preamp did make a difference and I am now seeing 6.2 dB of Sun noise and about 5.8 dB of CS/G noise. I surely need a bigger antenna, but it is interesting to listen with a single yagi. I could rotate polarization. At times it was well defined and rotating the pol made the difference between hearing and not hearing some stations. I heard over the last two EME weekends SM4IVE, K1RQG, OZ4MM, DL7APV, SV1BTR, K4EME (both on tropo and off the Moon), DL9KR, N1NDP, NC1I, OK1CA, K0RZ and SM2CEW. I am trying to get a GS35B amp completed. When it's operational, I may try a couple contacts with the single yagi. I hope to have a 14' dish up soon and when I have it checked out on 23 cm, I'll give it a try on 70 cm as well. The big problem is feeding its 0.375 F/D on 432. I have some ideas for a feed and we'll see how it works out. I had a nice visit with K4EME on Saturday of the Dec contest weekend. It sure was nice to hear the BIG signals and echoes that his 8 yagi array produced. More activity would have been nice, but we had fun working a few stations on 70 cm.

**W4OP:** Dale [parinc@verizon.net](mailto:parinc@verizon.net) operated the contest on 1296 for a couple hours on 5 Dec and worked K5GW and VE6BGT - Skips second contact. He also heard nice signals from NA4N and VE4SA.

**W5RZ:** Dennis [dennisw5rz@gmail.com](mailto:dennisw5rz@gmail.com) writes -- EME is not my primary ham radio activity but I find it fascinating. I decided to try 70 CM "extreme QRP". I used two Cushcraft 424B antennas (about 8 w1) on a tripod, vertically polarized, with 15 W in the shack and several dB of feedline loss. My U-100 elevation rotator seemed to be overloaded and wanted to crash the antennas into the ground instead of stopping. But I thought maybe I would have a chance to hear someone, anyway. I finished setting up in darkness on 5 Dec and listened for DL7APV because I knew Bernd needed Arkansas on that band. Traces were weak and the signal would come up for 20 seconds or so and then fade back. I finally pulled out his CQ. Later, with the Moon at about 20 degs elevation, we were able to complete a QSO. Then 10 minutes later, I worked HB9Q. I was thrilled to make QSOs with just an FT-897D and two old antennas. The next day, I took a wattmeter to the feedpoint and found 5 W there! I installed a small amp at the feedpoint and now have a preamp and 12 W at the antenna. On the evening of 6 Dec, I heard DL7APV calling CQ again, but this time his traces lit up the screen! His signals were around (14dB) most of the time. Since I had worked him the previous evening, I asked my wife, N5HX, if she would like to make an EME contact. She called Bernd and made an easy contact. This wasn't an "initial" for Bernd, but we did initiate a new EME operator. After this, I heard Bernd on CW and had good copy. Needless to say, he didn't hear my 12 W signal on CW. I realize that conditions were extraordinary and I couldn't have done this otherwise. I used the N0UK logger to announce I was calling CQ (no

results) and also the HB9Q logger to try to coordinate a contact with EA3XU (not successful). I will not be able to submit a contest entry, but didn't intend to anyway. Like many small stations, I use the contest weekends for their high activity and good conditions to try to make a few contacts. This experience proves several things to me. First, 70 cm is a great band for those with high terrestrial noise on 2 m. My chances of making a CW contact on 70 cm are better than on 2 m, but I know I need higher power and more antennas. However, for me, the biggest FUN is doing something unexpected with small equipment.

**W6YX:** Goran [goran@ad6iw.com](mailto:goran@ad6iw.com) sends news on his group's (AD6FP and AD6IW) 23 cm contest efforts -- For the second part of the contest we improved our EME system. We installed new LNA, added a choke ring to the feed, and optimized the antenna's performance. We measured 16.5 dB of Sun noise and 5.5 dB CS/G noise, which was a 2 dB improvement. Before the contest we tested all equipment and made a QSO with N4PZ (579/579). Our echoes were peaking over 20 dB. We also installed an SRD as second receiver. We ran a 500 W SSPA in the shack, but because of the long cable had only about 350 W at the feed. On the Friday and Saturday the conditions were not very good; the libration was intense. During the EU window our antenna was looking straight to the Silicon Valley, and noise level was very high until we elevated the antenna above 7-8 degrees. On the Saturday we had a visit by IK2MMB. Sergio had just arrived in CA. Despite being tired from his 14 hours flight, he wanted to come. He was curious to see our setup and how EME signals sound from this part of the world. It was nice to meet him again. Our total score in the contest was 80x43. We worked in Oct K5JL, LZ2US, HB9SV, DF3RU, DL0SHF, SV3AAF, OE5JFL, RA3AQ, UT5JCW, OK1DFC, SD3F, LZ1DX, G3LTF, LA9NEA, SP7DCS, IK3COJ, WA6PY, ON4BCB, OH2DG, SP6JLW, LZ1BPN, SV1BTR, OH0/DL1YMK, IK2MMB, NA4N, AL7RT, SM6FHZ, OZ6OL, W9IIX, SM4DHN, ES5PC, VE3KRP, K1JT, JA8ERE, W7JM, JH5LUZ, K5SO, JA4BLC, VK3UM, VK2JDS, VK5MC, HB9MOON, UA3PTW, PI9CAM, K2DH, VE6TA, W5LUA, N0OY, OZ4MM, RD3YA, WW2R, G4CCH, VA7MM, DL4GA, SM2CEW, VE4SA, OK3RM, OK1KIR, DL4MEA, K8EB, JR6AHB, K1RQG and JA4LJB, and in Dec FY2BS, NY2Z, F5JWF, PA3FXB, RW3PX, N2NQi, K5JW, UR5LX, WA8RJF, F2TU, HB9JZ, JA8IAD, JA6CZD, CT1DMK, N2UO, DF1SR and DL3EBJ. Heard but not worked were ES6RQ, LU1C, 9A5AA and DL6SH.

**W7CI:** Steve [wagners@aol.com](mailto:wagners@aol.com) reports on his Dec contest activity on 432 -- I have just shut down early because of high winds. The winds came up fast and while parking my dish a bolt on the linear actuator broke, but I was able to rope it down and think all is OK. During the weekend I worked a number of JA stations and ended with a count of 20x12.

**W7EME:** Jeremy [oaxaca@oregoncoast.com](mailto:oaxaca@oregoncoast.com) has started working on an encore dxpedition for next Aug to JTI (Mongolia), but this time on 23 cm and/or 13 cm. Although high power is not normally allowed on 1296, he has been told that he can get special permission for operation on 1296 for up to 300 W. He wants to keep the system light weight and easy to set up and is looking for ideas. His initial thought was to use four long loop yagis. PSE send you ideas to Jeremy.

**W7MEM:** Mark [w7mem@msn.com](mailto:w7mem@msn.com) was QRV from ID on 432 during the Dec contest weekend, but had problems -- I lost my preamp, but did work 4 guys on JT, DL7UDA, DK3WG, DL2NUD and K1JT, with out it. I am still thinking about expanding to 8 H and 8 V yagis -- does anyone have any advice?

**W9IIX:** Doug [w9iix1@yahoo.com](mailto:w9iix1@yahoo.com) was on Moon on 1296 on 28 Nov and worked N4PZ. In the contest on 5 Dec he worked 4 stations but notes that the band was a bit quiet, and on 6 Dec added eight more. He had to quit during the JA window due to power line in the way. Doug's system worked fine and he end with 35 QSOs. He also echoes comments about those that give up too quickly.

**WA3QPX:** Paul [wa3qpx@atlanticbb.net](mailto:wa3qpx@atlanticbb.net) is now QRV on 432 EME from DE -- I am using four M2 9 wl yagis and a Lunar Links PA. On 28 Nov I made my first QSOs using JT with DL7APV (15DB/O), I1NDP (20DB/O), UA3PTW (25DB/O) and K3MF (16DB/O). In the contest after three hours of calling CQ on JT, I gave up and used the logger. All I got using random was a warm shack and warm LMR 600. Stations worked were K3MF (heard my tropo signal first then worked me on EME) (19DB), UA3PTW, DK3WG, DL7APV, KE7R and UA4AQL. My new station is four M2 9 wl yagis on AZ/EL), Lunar Link 1 KW out, AR2 preamp at antennas and 100' LMR600. And yes I did hear my echoes. Without a sked, MAP65 or the logger, I found myself wasting a lot of operating time. I saw more stations on the logger then I have ever seen during a contest. I guess the league had the right idea, since they have to log line manually; they can now save on personnel. [It is really disappointing to hear these comments. I wonder what frequency Paul called CQ on? With his system he should have be easily able to make CW QSOs and have made many QSOs on random. It does not seem the fellows using the logger did much to help Paul get

the most out of his EME station? I know Paul can also operate CW and in the future plans to expand his array to 8 yagis].

**WA5WCP:** Paul [paul.perryman@lmco.com](mailto:paul.perryman@lmco.com) is considering hitting the road again next summer and has started his planning -- I am thinking it would be fun to see if we can tabulate who needs what states and make a sort of "hit list" that all portable stations could work from. I believe K0YW is warming up for a run at a few states too. In my view, a good article (or a website) is overdue to show how much fun this type of operation can be is also over due. It would help generate new interest from the younger crowd. The "most wanted" list could help with regard to motivation too, particularly when the states are close together as then a weekend or extended weekend expeditions would be an advantage to the larger community. From 5 land a single state or pairs of states are doable in an extended weekend and the gasoline expense is nothing like the long distance trips I made a few years ago.

**WA6PY:** Paul [pchomins@san.rr.com](mailto:pchomins@san.rr.com) was active in the Dec part of ARRL EME Contest -- On 432 I QSO'd DL9KR, NC1I, K1RQG, SD3F, DF3RU, SM4IVE, JA9BOH and VK3UM. The highlight was a QSO with JA9BOH who was using 4 x 17 el yagi. For WAC on 432 with a single yagi I still need South America. On 1296 I QSO'd LA9NEA, RD3YA, OK3RM, UA3PTW, K5GW, K1JT, F2TU, VK3UM, VE3KRP, VK5MC, JH5LUZ, JA4LJB, DL4MEA, PY2BS, DF1SR, DL6SH, PI9CAM, N2UO, DL3EBJ, OK1KIR, VA7MM and CT1DMK. The day after the contest I had a very nice and easy QSO with N4PZ (569/569). I do not think that Steve hears real well. My total for the contest is on 144 20x15, on 432 16x13, on 1296 57x36, on 2.3 GHz 26x22 and 10 GHz 10x9. My big limitation in the contest is my short common window to Europe. I will submit my logs to ARRL.

**WA8RJF:** Tony's [TEmanuele@kentdisplays.com](mailto:TEmanuele@kentdisplays.com) Dec contest report -- I just made it home from PA land in time to work the contest. I was on by 0500 and worked K1JT, K2DH, F2TU and K5GW. I also heard K5JL and K5GW. I worked W6YX in first leg for a score of 9x9 for the contest. I appear to be hearing good and just need more power.

**WB7QBS:** Glenn [gbskinner@hotmail.com](mailto:gbskinner@hotmail.com) was active on 432 over the contest weekend. He heard on 5 Dec K4EME and thinks he completed with NC1I. He also heard HB9Q loud and VK3UM (439). Prior to the contest he confirms a QSO on 30 Nov with K2UYH.

**WD5AGO:** Tommy [wd5ago@hotmail.com](mailto:wd5ago@hotmail.com) had a very eventful past couple of months -- 13 cm was on fire in Nov. We had 34 QSOs and heard 39; all with new 3.1 m dish. New ones worked were SP6OPN, SV1BTR, IK2RTI, K8EB, LA9NEA, JA8IAD, VK2JDS, RK3WWF, PI9CAM, W9IIX and PA3DZL to bring me to initial #63. For the second moon pass in Nov we took out the 13 cm feed and put in our 6 cm system to help out for on 5760 for a couple of hours on moonrise and moonset with a change to 13 cm in-between. We worked for the 6 cm log OE9ERC, F2TU, W5LUA, JA8ERE for initial #11 and JA6CZD #12. Heard were OK1KIR, OK1CA and JA4BLC. I left the 6 cm system in for the full month (CP feed, 35 W SSPA, HB 0.7 NF 26 dB gain LNA). I see 0.6 dB Moon and 11.6 dB Sun noise, and worked on 1 Dec JA4BLC #13, VK3NX #14 and OK1CA #15. The 6 cm system is now down and 13 cm back in the dish. It will remain there until 9 cm DUBUS EME Contest. During the first part of Dec we were getting ready our 70 cm array located at the college. Students helped and after some weather delays, we were on the air on 6 Dec with 16 x 10 el K5GW yagis, D1010 (110 W) SSPA and 0.2 dB NF HB LNA. We worked CW only; maybe next year I'll let the students try some digital. QSO'd were K1RQG, DL9KR, DL7APV, OK1CA, SM2CEW, and OZ4MM. CWNR were I1NDP, SV1BTR and W8TXT. I think we will keep the 70 cm functional for a year (through the next ARRL contest) and promise to keep it going next time for the western window. We will have it going again for the DUBUS 70 cm contest in the spring. I am still looking for a low cost SSPA in the 200 to 400 W range, but would consider a compact single ended GS7 or similar small triode amp in this power range.

**YO2IS:** Szigy [szigy@upcmail.ro](mailto:szigy@upcmail.ro) found conditions good on 70 cm during the contest -- I was pleased to run my 20th in row ARRL EME contest. After the failure of my 23 cm antenna elevation drive, the second leg did compensate a bit with excellent conditions and fine CW activity on 432 EME. I was happy to connect with SM4IVE (579) on his comeback. Lars gave me my first 70 cm EME QSO in Sept 1990! I also worked G3LTF - strong signal, SV1BTR, DL7APV, DF3RU, SP6JLW, I1NDP -- worked twice, OH2DG, SD3F - first QSO with new call, DL9KR - solid as usual, OZ4MM and DG1KJG for my initial #170. CWNR were K0RZ and heard were DL4MEA, NC1I, SM2CEW, JA9BOH and OK1KIR. My rig and antenna performed faultless despite their respectable age (K2RIW 2 x 4X150A PA at 450 W and 4 x 7.7 WL BV yagis and DL9KR preamp - MGF1402/BF960 since 1994) as well as the operator.

**YO8BCF:** Emil [yo8bcf@hotmail.com](mailto:yo8bcf@hotmail.com) was QRV with his 4.9 m dish and 44 W at the feed in ARRL EME contest on 5/6 Dec -- I worked (all random - not assisted) on CW G4CCH, F2TU, LZ2US, G3LTF, OZ4MM, HB9BBD, OZ6OL, PI9CAM, RA3AQ and IZ1BPN, and on JT65C PA3FXB, HB9Q, ES5PC, PY2BS, UA3PTW, VK2JDS, OK1KIR, RD3YA, K1JT and VA7MM. CWNR were K5GW, K5JL, N0OY, HB9MOON, SV3AAF, SP6JLW, VK3UM, DL4MEA and LA9NEA. I am now working to improve my power on TX.

**WW2R:** Dave [ww2r@g4fre.com](mailto:ww2r@g4fre.com) reports that his station was operated on 23 cm by his XYL, N2NQL, during the contest. She worked SV3AAF, K5JL, RA3AQ, W6YX, LA9NEA and LZ2US. The only getaway was DF3RU who never got the call correct. Dave notes that it was so cold in his garage EME shack that he could run his TH328 PA with no blower at 400 W and it did not get amp warm.

**K2UYH:** I [alkatz@cnj.edu](mailto:alkatz@cnj.edu) spent most of my Moon time in Dec operating the EME contest as part of the K1JT team – see the K1JT report. I did do some 432 operation during the pre-contest week. I QSO'd 29 Nov at 0315 K7XQ (11DB/13DB) JT65c (I operate on c by mistake) and 0323 K3MF (9DB/9DB) also JT65c – there was some interesting multipath from Wayde's direct signal on this QSO, and on 30 Nov at 0218 WB7QBS (O/O) for CW/SSB initial #716 and mixed initial #777\*, and 0237 KL7HFQ (559/559). My QSO with WB7QBS was a bit exciting as a capacitor in my 432 PA went bad just before our sked and I missed the first 10 minutes getting my final working again. It was not even back in the rack when I started calling Glenn. I also ran skeds on 1 to 4 Dec with BX1AD on JT65b. Edward copied me, but I had no decodes. This is a difficult path because of tree blockage and local noise.

**NETNEWS BY G4RGK:** **K5AZU** is still working on his 7289 ring PA, but should be on 23 cm soon with a bigger signal. **K5QE** has an array of 70 cm 16 x 28 el yagis operating on the horizon and will take skeds - [k5qe@sabinenet.com](mailto:k5qe@sabinenet.com). **WA9KRT:** Don [wa9krt@hotmail.com](mailto:wa9krt@hotmail.com) in EN61pg is also available for moonrise schedules. **K6MYC** was listening on 23 cm EME with 4 yagis during the Dec contest weekend. **RW3PX** worked on 1296 CW HB9BBD, SM2CEW and UA3PTW. **UA4AOL** QSO'd on 432 CW SM4IVE and on JT65B OK1TEH and OE3SJA. **UA9UHN** added RW3BP on JT65C. **UR5LX** QSO'd on 23 cm UA3PTW and YO8BCF on JT65C. **DK3WG** worked on 70 cm CW OK2POI and SM6FMZ, and on JT65B G4ZPJ and RW3WR. **K5JL** was QRV on 1296 during the Dec contest weekend and added an initial with UT2EG. Jay says conditions were reasonably good, but he lost his driver. **K5PIR** has problems with PA and was not QRV on 23 cm in Dec. **K2DH** was QRV on 23 cm during the Dec contest weekend and ended with 80x43. Dave did not hear many of the NA stations but did work WA8RJR. He plans to QRV on 13 cm next. **N4PZ** was active during the pre-contest weekend on 23 cm and QSO'd G3LTF, VE6TA, VE3KRP and K5JL. Steve was also on during the Dec contest weekend. **FR5DN** is sorry to report that he could not be QRV in the Dec leg of the contest due to a problem with his electrical power resulting from a lightning strike. Phil was not QRV in the first leg because he was traveling in France. **W0DRI** reports nil in a 432 sked with DL7APV. **K0YW** had transmit problems during the contest. He is hearing fine and should have the TX fixed very soon. Bruce has a new e-mail address [k0yw59@centurylink.net](mailto:k0yw59@centurylink.net). He is also making progress on his portable station. **VE6TA** was active on 23 cm during the pre-contest weekend in Dec and QSO'd N4PZ, G3LTF, OZ6OL and VE3KRP.



**K5QE's 16 yagi array – see Netnews**

**FOR SALE: AD6IW** has for sale ready made and tested pallet SSPA amplifiers, with latest 6th generations MOSFETs. These pallets will provide 125 W, 16 dB flat gain 1240-1300 MHz, 6-7 W drive for full power and a PAE 50% for \$345. They run from a 28 V/10 A PSU and are small in size and easy to combine using 2:1 and 4:1 power splitter/combiner on RO4003. From more info write to Goran at [goran@ad6iw.com](mailto:goran@ad6iw.com). **VE3KRP** is looking for a couple of OC3A regulator tubes and a 9 pin delay relay tube. Eddie is also looking for an Amperex DX-393 or 8930 tube. **VE1ALO** has TS-2000X and DEMI 3 transverter for sale. Contact Darrell at [ve1alq@nbnet.nb.ca](mailto:ve1alq@nbnet.nb.ca) for more details. **N4VOS** has a brand new DEMI 500 mw 1296/28 MHz IF transverter for sale for \$US295 with split 23 cm side, common 28 MHz input of up to 10 W in. It has been tested, but never put in service. Contact [n4vos@bellsouth.net](mailto:n4vos@bellsouth.net). **K7NII**, [k7nii@msn.com](mailto:k7nii@msn.com), has a GS-15B amp, never been used (cavity + tube) for sale to any serious EMEer.

**EME-2010 DALLAS TX:** The first Call for Papers for the 14th International EME Conference to be held in Dallas, TX on 12-14 Aug this summer is out. This event will be held at the Weston Hotel near the Dallas Ft. Worth airport in Irving. The Microwave Update was recently held at this hotel and the service, rooms and conference facilities were excellent. Hotel details as well as website check-in details will be forthcoming after the first of the year. In keeping with tradition, the conference will primarily concentrate on EME on the 432 and above bands. At this point, several speakers have already signed up but we are still actively pursuing talks and papers on various aspects of EME communication. This includes topics such as dish design and feed systems, yagi antenna design, low noise receiving techniques, higher power solid state and tube amplifier design, TWTs, EME expeditions, tracking the moon, evaluating system performance and EME QSO procedures just to name a few. We are also interested in articles for the proceedings even if you are not going to present at the conference. The ARRL will be publishing the proceedings. If you are interested in presenting, please let W5LUA know by the end of Dec. Reply to [w5lua@sbcglobal.net](mailto:w5lua@sbcglobal.net). The deadline for papers will be mid June. The technical talks will be presented on both Friday and Saturday 13/ 14 Aug. While we are enjoying the technical talks, tours will be available by air conditioned buses for the spouses on both Friday and Saturday. We are also planning a tour of the Ft. Worth area on Thursday for both hams and spouses. So plan on arriving by Wednesday evening to take full advantage of all the planned activities.

**FINAL:** The 2010 Moon Calendar is at the end of this NL. Much TNX to D7APV for again preparing the calendar. The AW are marked with an \*. The 70 cm ATPs and contests are also shown.

The DUBUS CW/SSB contest dates for 2010 have been announced: 9 cm will be 21/22 March, 3 cm up (and 2 m) will be on 27/28 March, 13 cm 17/18 April, 70 cm and 6 cm on 24/25 April and 23 cm on 22/23 May. One problem with the DUBUS dates is that the ARI Digital EME contest is on the same weekend as the 1296 CW contest. I do not feel this is good coordination or the way to generate cooperation between the two modes. There is also a DUBUS 70 cm EME SSB Contest to complement the 1296 EME SSB Contest sponsored by this NL – see details at the beginning of this NL.

The proposed dates for the ARRL EME Contest are 4/5 Sept for the Microwave EME Contest, 2/3 Oct for the first leg on 6 m – 23 cm contest and 30/31 Oct for the second leg. I was told that these dates are near certain. The ARI CW/SSB EME contest is on 25/26 Sept.

You can find the results of ARI's 2009 XVI Italian EME CW/SSB Contest at <http://www.contestvvhf.it/Risultati/2009/Classifiche%20Contest%20EME%20CW%202009.pdf>.

SM3AKW had a fall during the contest that caused Carl's hip replacement to jump out of its socket. Fortunately it was put back without surgery and he was released from hospital before the contest was over. He was still in a lot of pain and did not continue to transmit, but should be QRV again very soon.

Dave (G4RGK) is putting out a general call for updates to his CW initials list. See <http://www.zen70432.zen.co.uk/Initials/index.html>. I will try to have the updated list in the Jan NL.

F1EHN has up graded his antenna photo web site – see JJ report.

It is time to start making your plans for the 2010 EME Conference – see above.

I want to wish everyone a wonderful holiday season with lot's of EME, and all the very best for the coming year. I plan to be on over the holidays and will be looking for QSOs during the 70 cm CW ATP and SSB contest as well as on 1296. Don't forget to send in your ARRL EME Contest logs. 73, Al – K2UYH



## Lunar Weekend Calendar for 2010 (by DL7APV)

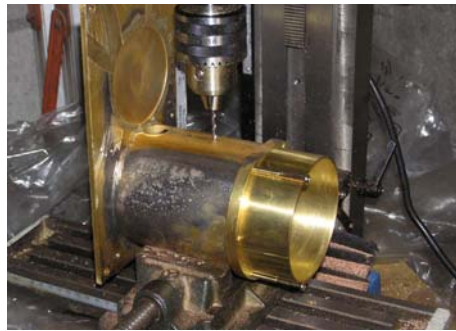
2400 Sat/ 0000 Sun	Decl. (deg)	Signals (dB)	Sun offse t/°	Sky temp K,432	Libra tion	Comments & contest dates
Jan 2/3 *	+14,9	+0,16 P	-147	15	-	70 cm SSB contest, Perig. & CS
Jan 9/10	-22,3	-1,3	-63	40	+	Moon in south
Jan 16/17	-14,2	-1,96 A	+21	30	-	Daytime PM, sun is close
Jan 23/24	+19,7	-1,04	+93	35	+	ATP sat20-22&sun12-14 ARRLVHF
Jan 30/31*	+11,8	+0,29 P	-167	20	-	Night, perigee & cold sky !!
Feb 6/7	-24,1	-1,32	-80	45	+	Moon in south
Feb 13/14	-10,9	-1,95 A	+1	30	-	Sun noise
Feb 20/21	+22,0	-1,08	+75	35	+	ATP sat20-22&sun10-12
Feb 27/28*	+8,6	+0,25 P	+173	20	-	23 cm SSB contest
Mar 7/8	-25,1	-1,27	-98	70	+/-	EU T-contest
Mar 13/14	-7,3	-1,9	-18	25	-	Daytime AM, sun is close
Mar 20/21	+23,8	-1,02	+58	35	+	AP sa19-21&su9-11REF/DUBUS3.4G
Mar 27/28*	+4,9	+0,06 P	+153	20	+/-	REF/DUBUS 2m + 10 GHz
Apr ¼	-25,3	-1,22	-117	120	+/-	Moon in south
Apr 10/11	-3,6	-1,82 A	-38	25	+/-	Day AM, Apogee
Apr 17/18	+24,8	-0,84	+42	40	+	REF/DUBUS 2.3 GHz
Apr 24/25*	+0,7	-0,19 P	+134	20	+/-	REF/DUBUS 432 + 5.7 GHz
May ½	-25,0	-1,26	-136	180	+/-	Moon in south EU T-contest
May 8/9	-0,0	-1,75 A	-58	25	+/-	Day, Apogee
May 15/16	+25,0	-0,59	+25	45	-	ATP sun7-9&17-19 DaytonHamv.
May 22/23*	-3,9	-0,40	+116	25	+/-	ARI digital & REF/DUBUS 23cm
May 29/30	-24,3	-1,37	-154	200	-	Moon in south
June 5/6	+3,5	-1,72 A	-79	25	+	Day, Apogee
June 12/13	+24,6	-0,33	+8	45	-	Sun noise ARRL June VHF
June 19/20*	-8,5	-0,50	+98	30	+	Day AM
June 26/27	-23,0	-1,54	-173	120	-	Moon in south HAM Radio DL
July 3/4	+6,9	-1,73 A	-99	25	+	EU T-contest
July 10/11	+23,7	-0,14 P	-11	40	-	Day, Perigee, Sunday sun close
July 17/18*	-12,6	-0,50	+81	30	+	Day PM
July 24/25	-21,2	-1,70 A	+169	50	-	Moon in south
Jul31/Aug1	+10,2	-1,75 A	-119	25	+	ATP Sat 22-0&sun 7-9
Aug 7/8 *	+22,2	-0,08 P	-30	30	-	REF/DUBUS Digi 2m ARRL UHF
Aug 14/15	-16,0	-0,42	+63	30	+	EME conference Dallas
Aug 21/22	-18,8	-1,80	+151	35	-	Moon in south
Aug 28/29	+13,4	-1,74	-138	25	+	ATP Sat 21-23 sun 6-8
Sept 4/5 *	+20,0	-0,14 P	-48	25	-	EU 2m contest ARRL EME-MW
Sept 11/12	-18,6	-0,32 P	+44	35	+	M.i.south Weinheim ?? ARRL VHF
Sept 18/19	-15,9	-1,85 A	+132	30	-	Moon in south
Sept 25/26	+16,4	-1,65	-157	30	+/-	ARI CW
Oct 2/3 *	+17,3	-0,28 P	-67	20	-	EU UHF/SHF Contest ARRL EME1
Oct 9/10	-20,6	-0,29 P	+25	35	+	Moon in south
Oct 16/17	-12,7	-1,84 A	+113	35	-	Day PM, Apogee
Oct 23/24	+19,0	-1,48	-175	35	+/-	Night
Oct 30/31	+13,7	-0,39 P	-84	15	+/-	ARRL EME2
Nov 6/7 *	-22,1	-0,40	+6	40	+/-	Sun noise EU 2mCW contest
Nov 13/14	-9,4	-1,82 A	+93	30	-	Day PM, Apogee
Nov 20/21	+21,1	-1,28	+167	35	+/-	
Nov 27/28*	+9,5	-0,40	-101	20	+/-	
Dec 4/5	-23,4	-0,62	-13	45	+/-	Moon in south, sun is close
Dec 11/12	-6,3	-1,82 A	+72	25	-	Day PM, Apogee
Dec 18/19	+22,7	-1,11	+148	35	+	Night
Dec 25/26*	+5,2	-0,26 P	-119	20	+/-	ATP sat22:30-030 sun6:30-8:30

A= Apogee (loss=1.9dB), P=Perigee (loss=0dB), ATP=ActivityTimePeriod for 432MHz CW, \* = AW

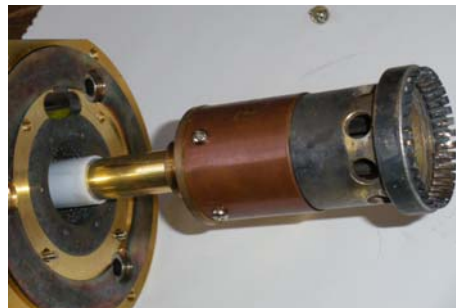
JA6XED, Hisao's [ja6xed@kumin.ne.jp](mailto:ja6xed@kumin.ne.jp) conversion of Plisch TH308AMP cavity for grid driven operation.



1: 100 mm diameter pipe for output is produced and cut down to length of 35 mm with inside diameter 95 mm and 1.2 mm thickness.



2: The grid is exchanged for production.



3: The grid finger is produced with phosphorus bronze and cut down .



4: Teflon is put in the part of the pipe and the cathode is produced.



5: Plisch TH308 amplifier completed after it remodels it