

432 AND ABOVE EME NEWS NOVEMBER 2009 VOL 37 #11

EDITOR: AL KATZ, K2UYH; DEPT. ELECTRICAL/COMPUTER ENGINEERING, THE COLLEGE OF NEW JERSEY, PO BOX 7718 EWING, NJ 08628, TEL (W 609-584-8424) OR (H 609-443-3184), FAX (609-631-0177), E-MAIL a.katz@iecc.org
PROD/MAIL: TOM KIRK, KA2VAD (609-584/8424), E-MAIL kirk@lintech.com
NETNEWS EDITOR & INITIAL LISTS: G4RGK, DAVID DIBLEY, E-MAIL zen70432@zen.co.uk (based on K1RQG's Netnotes & Reflector News)
EME NETS: 14.345, 10 AM ET SATURDAY AND SUNDAY (AFTER VARO NET ENDS ON SUNDAY)
NET CONTROL AND SKEDS COORDINATOR: JOE, K1RQG*, TEL (207-469-3492), E-MAIL k1rqg@aol.com
EME DIRECTORY: <http://www.dl4eby.de/>, DL4EBY/DK0TU, KLAUS TIEDEMANN, TEL (49-30-7955467), E-MAIL: tklaus@snaflu.de
NL EMAIL DISTRIBUTION and EMAIL LIST CORD: WARREN, W2WD wbutler@iecc.org [TXT OR PDF OR "ON WEB" NOTICE]
THE NL WEB VERSION IS PRODUCED BY REIN, W6SZ AND AVAILABLE AT <http://www.nitehawk.com/rasmit/em70cm.html>

CONDITIONS: The first leg of the ARRL EME Contest is now history. Mother Nature was helpful this year with some truly wonderful conditions on both 70 and 23 cm – read the reports. Congratulations to Michael and Monika for providing a second major (4 band) dxpedition, OH0/DL1YMK was the mystery location, in less than one year! It was a resounding success – see their report in this newsletter (NL). Unfortunately the Mongolia dxpedition did not make it to 70 cm. They had a lot of problems just getting 144 in operation. Plans do seem to be solidifying for a dxpedition to C9 the week of 4 - 11 Dec that will include 70 cm and 23 cm. 7/8 Nov is the microwave part (13 cm and up) of the ARRL EME Contest. 70 and 23 cm contest active will resume during the final weekend on 5/6 Dec. Because of the contest activity no 70 cm CW Activity Time Periods (ATPs) have been scheduled until the end of Dec/beginning of Jan. The designated EME activity weekends (AWs) are the same as the contest weekends in Nov and Dec.



OH0/DL1YMK's 6 m dish in operation on Aland Island
- see end of page 3 for report

DK3WG: Jurgen dk3wg@online.de continues to add initials on 70 cm EME. In Sept he added QSOs using JT65b with ZS6OB, IW4ARD and ES5PC to bring him to initial #480*.

DL7APV: Bernd DL7APV@gmx.de writes the contest started out not very good -- I could not install new superflex 7/8" around the rotor due to a lack of time. I also was up late with friends the night before the contest, which caused me to start the contest with very little sleep. I had hoped that I could use my new amp, but after 4 QSOs something in the screen went wrong and I had to reinstall my old amp. By the second Moon pass my old PA gave up a bit and my power was only 2/3 of normal by the end of contest. So I have a lot to do before the next part in Dec. When I was free of problems and awake I made some nice QSOs with old and new friends. Despite all my problems I managed to work 64x37 (including 14 on JT). The second pass activity on CW was down compared to the first. I worked 11NDP (55/55) on SSB. I had missed OH0/DL1YMK on Tuesday, but worked them (549) easily during the contest.

DL9KR: Jan bruinier@t-online.de writes on the Oct part of the ARRL EME Contest on 70 cm -- I was on only sporadically but enjoyed 47 CW QSOs

though I am being hampered by increasing bio blockage of my western window. There were even 2 initials. One with F6FHP (of 2 m fame) for #891 and ES5PC (loud) #892. Conx were good. However, we had a cold front pass through with heavy rain and close by lightning strikes on Saturday morning.

F2TU: Philippe f2tu.philippe@orange.fr reports that he QSO'd on 3 and 4 Oct, on random, on 1296 OH0/DL1YMK (549/569) for initial #331 and DXCC 52 and on 2320 (54/54) on SSB for initial #89 and DXCC 30. Philippe also worked on 2320 SSB G3LTF (55/55), SP5PC (54/54), and on 5 Oct on 10 GHz crossband 10450/10368 JA6CZD (529/449) for initial #51. He could not be QRV for the Oct EME contest weekend, but will be on for the Microwave EME Contest on 2300 up.

F5HRY: Herve F5HRY@wanadoo.fr was active during the Oct contest weekend on 1296 – I worked only 2 initials during the short time I could be QRV. They were PI9CAM for #73 and OK1KIR #74. My goal is to reach 100 initials (CW and random only) with my small 2.4 m dish in memory of Jean Pierre, F1ANH, and then move to a higher band.

F5SE: Franck kozton@free.fr was still in listening mode during Oct ARRL EME Contest weekend -- I was only QRV "EME Receive Only". My transmitting stuff is still on the work bench waiting for missing parts, which I have not yet located. During Sept, after having refurbished the 70 cm tropo rig and antenna, I intended to be QRV SWL mode for the ARI contest. Unfortunately, Murphy broke one of the steel cables used in my elevation spring balancing system just two days before the ARI contest. Cable could not be replaced in time. A new and stronger cable set now replaces the old ones. In the meantime, new access stairways for the dish tower and the working desk on top of the EME bungalow were installed, allowing safe access "up there". Right after the tower stairway installation was finished, Murphy stroke again... One of the azimuth driving motor suddenly showed problems with its built in Hall positioning sensor, and had to be sent back for repair. I thus only had one motor for azimuth, which is not sufficient at slow speed continuous duty (the torque is too low). During the contest, tracking was made "by hand", with a joystick (good thing I provided a joystick drive possibility in my own software). This control provides high torque short duration pulses before the power system switches into "safety status". Heard during the contest was no less than 54 callsigns as follows: DF3RU (539), DL0SHF (589), ES5PC (559), F5HRY (559), F5JWF (549), G3LQR (539), G3LTF (569), G4CCH (569), HB9BBD (579), HB9MOON (579), HB9Q (539), HB9SV (559), IK2MMB (559), IK3COJ (539), IQ4DF (569), IW2FZR (549), IZ1BPN (559), LA9NEA (559), LX1DB (57), LZ1DX (559), LZ2US (559), OE5JFL (559), OH0/DL1YMK (549), OH2DG (559), OK1DFC (559), OK1KIR (559), ON4BCB (549), OZ4MM (579), OZ6OL (529), PI9CAM (579), S50C (529), SD3F (549), SM6FHZ (559), SP6JLW (579), SP7DCS (549), SV1BTR (579), SV3AAF (579), RA3AQ (559), UA3PTW (559), UT5JCW (559), VA7MM (529), VE6TA (559), AL7RT (539), K1JT (569), K2DH (559), K3Z (569), K5JL (559), K8EB (559), N00Y (559), NA4N (559), W5LUA (559), W6YX (559), W7JM (579) and WA6PY (569). During this contest, I could only be QRV from 0600 until 1030 and missed the JA/VK windows on both days. All stations heard were on CW except for LX1DB on SSB and DL0SHF on both modes, as well as one unidentified station on JT65 with a (579) signal. DL0SHF was the strongest station heard, stronger than PI9CAM. Copy suffered from spurious out of a local ham beacon (60 km away but direct optical sight) running at 1296.050 and also from local air force radar signals. The second day, I asked the beacon keeper to switch off the beacon. Things did significantly improved as the radar pulses could be more or less cancelled by the noise blanker with only some background noise "rumbling" remaining. Of course, if it was easy to ask for switching off a ham beacon, the same request concerning the air force base radar was impossible - hi!! It seems the W2IMU feed is too broad and when aiming at the Moon on the western sky, the horn can "see above the dish" the air force base and the beacon hill-top, both located to the East of the dish. I hope my faulty motor will be fixed and back into operation before the end of Oct. Likewise, I will do my best to be fully RX/TX operational for the Dec contest weekend.

G3LTF: Peter's g3lft@btinternet.com Oct EME report -- Another good month of EME on 432 and above with M & M's great 4 band dxpedition and a contest weekend with lots of activity and 11 new initials. I got the feeling that the NA activity was up as well, which is good. On 3 Oct I worked OH0/DL1YMK #311 on 1296 followed by DF3RU on SSB and UA3PTW for initial #312. The next day I worked OH/DL1YMK for initial #78 on 2320 followed by G4CCH, ES5PC, F2TU and ES5PC on SSB. I was able to copy OH/DL1YMK on SSB on both 23 and 13 cm. On 5 Oct I worked OH0/DL1YMK for initial #25 on 3400 followed by OK1KIR. Moon noise was 0.7 dB, exactly as predicted from my system parameters. When the OH0 expedition went to 432 on 6 Oct I could only just hear them and the WX condx at their end were very poor. On 8 Oct I worked YO8BCF #313 with his 4.9 m dish and only 44 W at the feed. He was really good copy on CW. I also worked LZ1DX. On 9 Oct I was on 1296 checking out the system before the contest and worked OH0/DL1YMK and WW2R. In the contest I started off on 432 as I wanted to be sure to work the OH0 expedition on that band. I did quite a lot of feed changing (which is becoming a bit challenging at 3 AM these days!) to try and get the best windows for the activity on both bands. It paid off as I worked in all 102 CW QSOs, my highest ever. Some of this is due to the SDR which helps find small signals as well as finding nice clear spots to call CQ. On 432 MHz on 10/11 Oct I worked UA3PTW, OH2DG, DG1KJG, JA6AHB, JA9BOH, J11NNJ, SM3JQU, OH0/DL1YMK for initial #427, I1NDP, SD3F, DL7APV, DL9KR, JA0TJU, SP6JLW, SV1BTR, SM2CEW, N8CQ, OK1KIR, N4GJV, K3MF, F6HLC #428, G3LQR, KL6M, ES5PC, JA5NNS, VK3UM, K1RQG, K4EME, K1JT, K0RZ, IK6EIW, WA6PY and DF3RU. Heard were P19CAM and DJ7GK for a total of 33x22. Conditions on 432 were quite variable with sharply defined pol at times and also very deep long fades. I probably spent more time on 1296 and so missed some on 432. I hope to remedy this in Dec. On 1296 I worked UT5JCV, LA9NEA, LZ1DX, RD3YA ,SP6JLW, RA3AQ, K2DH, LZ2US, SD3F, DF3RU, DL0SHF, IQ4DF, PA3FXB, SP7DCS, W6YX #314, VA7MM, ON4BCB, NA4N, N2UO, SV3AAF, K8EB, K5JL, WA6PY, OE5JFL, VE3KRP, OH2DG, HB9SV, SV1BTR, OK1DFC, IW2FZR, IK3COJ, JA4BLC, UA3PTW, OK1KIR, VK5MC, JA6AHB, HB9BBD, G4CCH, DL3EBJ, ES5PC, IZ1BPN, HB9Q, S50C #315, OZ4MM, SM6FHZ, PA3DZL, F5JWF, K1JT, OH0/DL1YMK, N0OY, W4OP, WA8RJR #316, HB9MOON, W7JM, RW6AG, W9IIX, VE6TA, G3LQR, W5LUA, P19CAM, SM2CEW, AL7RT, WW2R, DL4MEA, VK3UM, OZ60L, JH5LUZ, OK3RM and JA4HZN #317. Heard were JA8ERE, N4PZ, OE9ERC, K7XQ and IK2MMB for a total of 69x35. I am looking forward to the microwave leg in Nov. I shall be on 13 and 9 cm. The 6 cm station is undergoing a mechanical rebuild to accommodate a higher power 25 PA.

HB9BBD: Dominique dfaessler@bluewin.ch expresses his dissatisfaction with the current state of initial counting – Initial counting has been the logic performance indicator for EME for many years. The rules for initial counting were made very clear some time ago. Unfortunately initial counting is no longer possible. On one hand initials are counted across CW/SSB and digital modes with little or no differentiation of the modes used despite the differences and lack of evidence validating digital communications. On the other hand some newcomers use endless different calls on the very same station, which makes initial counting impossible even for those who honestly search for a true initial count. We may know or may not know that SM3AKW has got a new call - this is not too difficult to figure out and it has nothing to do with confusing us. It is much different in the case where club stations pop up with individual calls (and a club call). It seems to me that we have to reset our rules to remedy this disorder in "initials" which is clearly out of control! I personally have stopped making QSOs with stations using different calls. Some may have recognized this during my EME contest operation.

I1NDP: Nando nando.pellegrini@tiscali.it reports finally some good activity on 70 cm, especially during the during first Moon pass. It was more difficult to stay awake (due to physiological decay) in the second but still excellent conditions during both. I was active only on CW and ended with 51 QSOS. TNX for all the participation! I'll see you all in the second leg.

IK6EIW: Stefano asmag@libero.it was active on 432 during the ARRL Contest -- I spent a few hours on the Moon. Signals was quite strong and I had QSOs with I1NDP, K1RQG, DL9KR, UA3PTW, DL7APV, G3LTF and KL6M on CW and P19CAM (11DB/O) for my first JT contact. I felt this was not bad for 4 x 26 el yagis and 500 W with limited time. I need AF and SA for my WAC? [Try ZS6WAB, ZS5Y, PY1KK and LU7DZ].

J11NNJ: Kouichi j11nnj@extra.ocn.ne.jp EME activity in the ARI and Oct part of the ARRL EME Contests – In the ARI CW Contest on 432 I QSO'd on 12 Sept I1NDP (569/559), JA9BOH (O/O), SP6JLW (559/549), JA0TJU (O/O), N4GJV (O/O), W8TXT (O/O) and K2UYH (O/O), and on 13 Sept SV1BTR (439/519), DF3RU (559/539), N4GJV (O/O) - dup and JA6AHB (549/449). The Pol was all vert. Herd were YO2IS and JS3SIM. In the ARRL Oct contest leg on

70 cm CW I QSO'd on 10 Oct UA3PTW (559/559), DL7APV (559/549), DL9KR (579/569), I1NDP (559/559), G3LTF (559/559), JA6AHB (449/449), K1RQG (559/579), K1JT (559/559), JA9BOH (449/339), W8TXT (449/559), VE6TA (559/559), K3MF (449/449) for initial #115, VK3UM (559/559), JA0TJU (O/O), SM3JQU (449/539), SP6JLW (559/559), SD3F (O/O), ES5PC (O/O) #116, KL6M (449/559), SV1BTR (559/549), JA5NNS (549/539) and P19CAM (579/579), and on 11 Oct DG1KJG (449/449), DF3RU (559/559), N4GJV (O/O), N8CQ (449/559) #117, K4EME (449/559) and K0RZ (559/549) for a total of 28 QSOs. Heard were OK1KIR, OH2DG, K7XQ, SV3AAF, F6HLC and JH4JLV (H). Pol was K4EME TX/RX -60/-60, K0RZ 0/-60? [Bill TX'd V]. The others were all V/V. Conditions were stable and activity was high. I hardly felt Faraday's influence. The weather was good with no wind.

K0RZ: Bill wmcac@comcast.net in DM79jx QSO'd using 432 CW on 10/11 Oct with vert pol: DF3RU, DL7APV, G3LTF, I1NDP, JH4JLV, J11NNJ, K1JT, K1RQG, K3MF, K4EME, KL6M, N4GJV, SD3F, SV1BTR, W8TXT and WA6PY. Heard were DL1KJG, N8CQ and UA3PTW. Bill found good EME condx both days, but the weather on 10 Oct kept him off the Moon until after 1000. His score was 16x13.

K1JT: Joe k1jt@arri.net reports that he is again operating the ARRL EME Contest as a team effort with K2UYH. This is the third year we have teamed. 2 m operation is at Joe's QTH and 70 cm up at K2UYH. Other operators the first leg were K2TXB, K1RS and K2QM. [Please note that QSOs with K1JT do not count as initials if you have already worked K2UYH, or vice versa]. We work over the weekend on 432 I1NDP (559/559), DL7APV (569/569), N4GJV (559/559), OH1/DL1YMK (O/O), SV1BTR (559/559), DG1KJG (559/559), OZ4MM (579/569), OK1KIR (559/549), K4EME (559/559), DL5FN (9DB/O) on JT, EA3XU (21DB/O) on JT, YL2OK (19DB/O) on JT, UA4AQL (10DB/O) on JT, G4ZFI (27DB/O) JT, RW3WR (21DB/O) on JT, SM2CEW (569/569), HB9Q (2DB/O) on JT, N8CQ (559/559), KL7HFQ (559/559), J11NNJ (559/559), JA9BOH (559/549), VK3UM (O/559), ES5PC (559/559), G3LTF (559/559), P19CAM (3DB/5DB) on JT, EA7AJ (18DB/O) on JT, ES5RY (19DB/O) on JT, UA3PTW (569/559), WA6PY (559/559), K0RZ (569/579), WE2Y (O/O) and KL6M (569/569), and on 1296 DF3RU (559/559), LZ2US (559/579), SM6FHZ (559/559), SP7DCS (559/579), IK3COJ (559/559), SP6JLW (559/569), OE5JFL (559/569), VA7MM (559/579), IK2MMB (559/569), W9IIX (559/559), DL0SHF (589/569), NA4N (559/559), S50C (439/449), ES5PC (569/579), W6YX (579/579), PY2BS (9DB/O) on JT, AL7RT (549/559), LU1C (20DB/O) on JT, VE3KRP (559/579), 1258 JA8ERE (559/559), JH5LUZ (559/569), VK3UM (559/569), OK1DFC (13DB/9DB) on JT, RD3YA (16DB/O) on JT, K8EB (10DB/O) on JT, LA9NEA (559/559), G3LTF (559/569), SV3AAF (559/559), UT5JCV (559/559), LZ1DX (569/569), F5JWF (559/569), K2DH (559/559), N0OY (569/O), RA3AQ (559/559), K5JL (589/589), G4DZU (10DB/7DB) on JT, UA3PTW (10DB/9DB) on JT, PE1HNG (17DB/O) on JT, F5HRY (559/559), OH0/DL1YMK (559/569), OE9ERC (6DB/O) on JT, WW2R (12DB/O) on JT, HB9MOON (589/559), OK1KIR (559/559), ON4BCB (559/559), 0935 IZ1BPN (559/559), JA6AHB (559/589) and 1554 VE6TA (559/559) for a total on 70 cm of 32 and on 23 cm of 48. Overall we had a total of 204. All QSOs were on CW unless noted as JT. We were disappointed by the JT activity during our VK/Asian window. We had serious tree blockage during this window and were hoping to make up for some of the tree loss using JT, but made not even one JT QSO on either 70 or 23 cm during this period. We plan to be active on 13, 9 and 3 cm WX permitting during the microwave part of the contest in Nov and back on in Dec with a better (less leaves) western Moon window.

K1RQG: Joe k1rqg@aol.com worked 1296 during the pre-contest weekend and mostly 70 cm during the ARRL contest -- I worked on 3 Oct K5JL, VE3KRP, W4OP, LA9NEA, VE6TA, K5SO and WW2R. There was very nice activity for an off AW weekend. On 4 Oct OH0/DL1YMK showed up and there was even more activity. During the first night of the ARRL contest, 10 Oct, I was on 70 cm but missed many stations. I did work LU7DZ with a nice signal. I missed OK1KIR (called me on someone else's frequency and I tried to drag him down freq with no luck), DJ7GK, PA3CSG, SD3F, KL7HFQ and others. The second night I was on 70 cm sporadically. I called QRZ and WE2Y called me but never responded to my report (559). After the 20 m EME Net I switched to 23 cm and was able to catch a few in the Asian window. Let's hope the weather holds in Dec.

K2DH: Dave k2dh@frontiernet.net writes that he has fixed his 23 cm SSPA and that it is back up to power. He worked during the ARRL Contest weekend on 1296 LX1DB on SSB and caught OH0/DL1YMK as well, but missed OK1DFC. He reports it WAS the best weekend he has had on 23 cm EME. Dave is trying to get 13 cm for the Nov Microwave Contest weekend.

K3ME: Wayde k3mf@aol.com lots of fun on 432 during the Oct contest weekend -- I have made several improvements to my EME system by replacing

the LMR 400 phasing lines and the receive feed line with LMR 600. The best improvement was adding a SoftRock IF to my TS-2000x and being able to see about 20 kHz of band at a time. It has really helped a lot when searching for JT signals and also CW since almost everyone I worked was within 20 kHz of each other. I worked 28 stations during the first part of the ARRL contest using 8 x 25 el FO yagis and 1.2 kW, which is an improvement over last year.

K4EME: Cowles candrus@rica.net was QRV in the ARRL EME Contest on 70 cm -- I worked the following stations: I1NDP, DL9KR, N4GJV, HB9Q, K1JT, OZ4MM and DL7APV. I heard N8CQ, EA7AJ, RW3WR and DN1MA?. I may have missed a couple of stations due to the Doppler and having my filters set too narrow. I had tree trouble at moonrise which was compounded by a light rain or heavy dew. Other complications were the loss of my tracking computer for controlling my vertical array due to a hard drive failure and the loss of a tracking camera on my horizontal array. The day before the contest we had high winds that re-aligned the yagis in my arrays. However, my echoes appeared good. I worked most stations on my horizontal array in spite of the camera problem.

K5SO: Joe k5so@valornet.com is making steady progress on his dish extension project – I am increasing my 28' Kennedy's diameter to 40'. The steel support fabrication work is now finished and mounting the steel structures onto the dish is in progress. Details of the project progress can be viewed on my website at <http://k5so.com/40%20dish%20extension%20project.html>. I have to admit that progress seems to me to be a bit slow since I'm doing it all by myself, but at least I'm steady if not fast, hi hi!



K5SO's progress on expanding his dish to 40'

K7XQ: Jeff k7xq@secure.elite.net writes about the Oct AW – I was active on the 10/11 Oct weekend to see who I could work. I was too tired to stay up late both nights so I missed over half of each EU window on both nights. My objective was to prove out my 432 array's performance (8 x 28 el yagis with vert polarity), which did a great job, and also my new 50 MHz EME array. On 432 CW I QSO'd OZ4MM (559/559), DL7APV (549/559), I1NDP (549/559), VE6TA (449/449) for an initial (#), SM2CEW (559/559), DL9KR (569/579), K1RQG (569/559) and JA6AHB (449/559). On 1296 CW I contacted SM4DHN (579/539), K5JL (589/559), OK1DFC (579/559) and SP6JLW (579/559) for an initial (#). 432 libration was the deepest I ever heard on this band, especially during daylight hours where signals would peak S6 down to almost nothing and making QSOs very difficult, but 1296 libration was minor. I just acquired an SDR-IQ receiver and it was fun to look at all the CW traces across the band on 1296 while working 432 at the same time. I want to try to use this receiver to pick out weaker CW stations with its sharper "brickwall" filter response.

K8EB: Erv mrdxc@sbcglobal.net had a great time in the first weekend of the ARRL EME contest – I worked several new ones, but had a big scare on Saturday at 5 am when the cooling water pump quit working and overheated the amp causing the water lines to fall off and fill the PA and HV supply with water - this led to a great explosion as the glitch resistor in the HV supply blew up. [I have had exactly the same experience!] All was repaired and I was back on for the second Moon pass. I hope to have 2300 running for Nov microwave EME weekend.

LA9NEA: Viggo la9nea@online.no worked during the Oct pre-contest weekend on 1296 UA3PTW (549/569) for an initial (*), K1RQG (579/589), K5SO

(569/589), K5JL (569/579), W4OP (559/569), VE6TA (569/569) and VE3KRP (O/O) - had problems with copy. I also heard WW2R (549).

LU7DZ: Ed LU7DZ lu7dz@yahoo.com in on FF78ra has expanded his EME array from 4 yagis to 8 yagis recently. His system is now 8 x 22 FO yagis and a 1.5 kW GS23 PA. He reports much better reception now. Ed needs 10 degs on his moonrise for a clear Moon shot and plans to be active on 30/31 Oct and 1 Nov calling CQ on 432.035 KHz after his moonrise. Ed is also working on 23 cm and is almost QRV with a 3 m dish and RA3AQ septum feed. [TNX G3LTF and kc2toq/lu6kkLU7DZ for sending this report].



LU7DZ's new 8 yagi array

N4GJV: Ron's qstdemb@yahoo.com Oct 432 EME activity report follows -- Murphy had a grand time, at my QTH, beginning even before moonrise! On 10 Oct I contacted DL9KR, I1NDP, DL7APV, K4EME, K1RQG, K1JT, SV1BTR, OZ4MM, VE6TA, SM2CEW and G3LTF. Two of the several problems encountered included a series of strong thunderstorms, which forced me to QRT several times, and a failure in my 35 year old HB transmit converter. By the time that I was able to repair the latter, I only had a few minutes of useable Moon window remaining, which did allow me to contact VK3UM. On 11 Oct QSOs were added with W8TXT, DG1KJG, UA3PTW, DF3RU, SD3F, KL6M, J11NJ, JA9BOH, and K0RZ. Heard and called without success (some many times) were UA6LGH, OK1KIR, DJ7GK, K3MF, N8CQ, WA6PY, ES5PC, N4PZ, NC1I, and WE2Y. Also heard were PA3CSG and JA6AHB. I will be looking forward to the second half, of the contest in Dec. I am hoping that Murphy forget where I live!

N4PZ: Steve n4pz@juno.com is still working on dish and 1296 expansion project – I QSO'd during the pre-sked weekend on 23 cm, on 3 Oct K1RQG, K5JL, W4OP, VE6TA, VE3KRP, LA9NEA and WW2R (not in that order), and on 4 Oct VE6TA and K2DH, and had a partial with N0OY. I got Pete's call wrong so it isn't a QSO. I also heard 4 others calling but was unable to dig them out. During the ARRL EME contest I worked 8 new ones on 23 cm the first night: DL0SHF, DF3RU, K5JL, LZ2US, IZ1BPN, SP6JLW, SV1BTR and HB9SV. It was exciting. I was called by many and am sorry for those not answered. I am now up to initial #13. The second night I added HB9MOON and OK1DFC. I also tried 70 cm for a few minutes and worked K1RQG, I1NDP and DL7APV.

NA4N: Greg na4n@hughes.net was active on 1296 during the Oct contest weekend and worked 36 stations. He plans to be on 13 cm in Nov (TX/RX 2304 and RX 2320/2424). Greg will have a 10' dish on 3 cm after first of the year. He is looking for TWT for 10 GHz.

OH0/DL1YMK: Michael and Monika DL1YMK@aol.com report on their second successful dxpedition of 2009 -- After two days of travel by car and 2 ferries we arrived at our "mystery" dxpedition site. We didn't tell anybody about the destination in advance. A little wooden bungalow in JP90sf on the Aland Isles, which belong to Finland. This was our QTH for 10 days. Problems as usual (and expected) – the WX was horrible, storms and rain, cold, but we managed to set up the dish at a location that was a compromise between a clear Moon shot and at least some shelter against the wind. Two pine trees limited our moon windows to the east and west, but no problem to the South as we were very happy to have had a high moon declination. We activated 4 bands and made a total of 150 QSOs. On 23 cm we worked (only the initials are shown) HB9BBD (569/579), SV1BTR (559/529), SP6JLW (559/559), VK3UM

(559/559), LX1DB (569/569), F2TU (569/549), OK1KIR (549/549), PA3CSG (559/539), JA4BLC (549/539), SM2CEW (559/549), JA6AHB (559/549), OZ4MM (569/569), LX1DB (55/53) SSB, OE9ERC (579/579), G3LTF (559/559), SP7DCS (549/549), DF3RU (559/559), SM3AKW (559/559), ES5PC (559/549), PA0BAT (539/539), OZ6OL (549/549), UA3PTW (O/O), G4RGG (O/O), DJ9YW (549/549), K1RQG (579/579), K5GW (569/569), G4CCH (559/569), ES6RQ (549/549), W7JM (559/559), K5SO (569/569), N00Y (549/549), W7BBM (559/559), W4OP (O/O), VE6TA (559/559), G4DZU (O/O), K2UYH (559/559), G4DDK (O/O), WA6PY (559/559), K2DH (559/559), SV3AAF (559/559), ON4BCB (569/559), LZ1DX (539/559), OE5JFL (539/549), IK3COJ (539/O), DL0SHF (579/559), LA9NEA (549/549), SP6JLW (559/559), DF3RU (559/559), IQ4DF (559/529), OK1DFC (559/569), IZ1BPN (539/539), W6YX (539/559), SM6FHZ (539/549), RA3AQ (O/O), OH2DG (539/O), HB9Q (559/559), DL4MEA (549/549), LZ2US (549/549), OK3RM (O/O), PY2BS (JT), HB9SV (579/569), UT5JCW (549/559), K5JL (569/579), K8EB (559/559), RD3YA (O/O), W5LUA (559/559), IK2MMB (559/559), WW2R (O/O), IW2FZR (549/559) and SM3LBN (O/O). In total we made 96 QSOs with 67 initials! When we changed the feed to 13 cm for the first time, we used a brand new choke ring for our DFC-septum feed. The 13 cm station was upgraded furthermore by a new PA consisting of 2 Ericsson modules, which we had never tested for longer than a few minutes. After a first call the pile up was just overwhelming and we needed quite sometime to identify one after the other. We worked ES5PC (559/549), SP6OPN (559/559), OK1CA (569/559), OK1KIR (559/549), OZ4MM (569/559), LX1DB (569/569), G4CCH (559/559), HB9Q (569/559), F2TU (569/559), G3LTF (559/559), SM2CEW (549/559), LZ1DX (539/559), PA0BAT (539/539), DF9QX (539/559), LX1DB (55/55) – our second band on SSB, F2TU (54/53) - surprised to hear a second SSB call, G3LQR (539/539), SM3AKW (539/559), OE9ERC (599/589) and OE9ERC (56/55) - a third on SSB. We waited for 2 hours for the NA window and we added K5GW (559/559), WW2R (O/O), WD5AGO (O/O), W5LUA (559/559), VE6TA (559/449), G4DDK, SV3AAF and PY2BS (the only JT65C on 13 cm) and WA6PY. We ended on 13 cm with 27 initials from 19 DXCC. Our 9 cm activity took place on a calm evening with bright moonshine, so we could correct the position of the dish optically from time to time by aiming over the feed to the moon. The beamwidth of our dish on 9 cm is surprisingly narrow (around 1 degree), so our tracking system was not able to follow the moon with sufficient resolution. Monika stepped outside every 5 minutes to correct the position of the dish. Compared to our last dxpedition, we had more power and a more stable frequency with a new 60°C OCXO – but still not stable enough. Our first 2 skeds failed because the dish was partly obstructed by a big pine tree, than we found our echoes and were able to work OK1CA (O/O). Afterwards we worked LX1DB (O/O), G3LTF (O/O), F2TU (O/O), PA0BAT (O/O), OK1KIR (O/O) and after 2 hours of sleep W5LUA (O/O) and finally OE9ERC (559/559). The 70 cm activity was affected by a vigorous storm front moving in from the west that caused us to cease 70 cm operation at the first night. We had to tie down the dish with ropes, but it was heavily distorting in the gusts. We did work VK3UM, DL9KR, UA3PTW, OZ4MM and IINDP on the first night, and during the ARRL contest added HB9Q, DL7APV, G3LTF, DL9KR, UA3PTW, SP6JLW, OK1KIR, K1RQG, OZ4MM, DF3RU and K1JT (and K2UYH). A big thank to all our fellow EMEers who worked us and did not disclose the call during our stay on Aland in order not to spoil the fun for others. The idea not to disclose where we were was born on the European moon reflector discussing the question of what a real random QSO is all about. Actually, 140 of our 150 QSOs, which we made in these 10 days on 4 bands were “really” random for both sides. Sometimes it was difficult to decode many, many different stations close to zero-beat in huge pile ups – but CW is king! 23 and 13 cm were really fun and comparatively easy. We heard continuously our own echoes and were copied by many stations, so our optimization did pay off. The 9 cm band is still difficult as our signal is not as stable in frequency as it should be. The weakest band now seems to be 70 cm where we have room to improve.

OH2DG: Eino aino.metsamaki@sulo.fi reports on his contest activity – The EME contest was great and it even became more exciting during the second day when DL1YMK signal from Aland Island came through very strong. I worked 70 and 23 cm and made 60 QSOs and a multiple of 35. WX and condx were great. On 70 cm the local horizontal polarized noise was 2 to 3 S-units. Through this noise I heard only few strong stations. I had to rotate the antenna to a noise minimum at about 50 degrees. After this I heard a few more stations, although polarization misalignment blocked the low signals. On 23 cm, I was very active and QSO'd 8 new stations: K8EB, VK3MC, JA6XED, OK3RN, RD3YA, JA4LJB, UA3PTW and SK0C to bring me to initial #232. I also added a new DXCC, OH0/DL1YMK. Thank you for the first QSOs. Good news is that after the contest week end I tried my 9 cm EME equipment for the first time. Noise from the sun was 15 dB at an SF = 70, measured with a HB step attenuator. The noise from moon was 0.5 dB as estimated with my S-meter. During TX testing, I sent my first CW signal to moon on the 9 cm band, Doppler was -2400 Hz, and I was very excited after 2 seconds to hear a clear echo coming back from moon. The equipment works fine. This was the first signal on the 9 cm band I have

heard. My target is to be in the micro wave contest on the 13 and 9 cm bands. I still have some fixing to do, but will be QRV in the microwave contest.

OH2PO: Matti oh2po@dlc.fi and OH6DD and OH2HYT send sad news that their big dish is out of action -- The 16 m dish at OH2PO was badly damaged by strong winds just before the Oct EME contest weekend. There is no change to get the dish back in operation by 10/11 Oct. Even early Dec is a question mark. We will need a mobile crane, which weights 50 tons to lift the dish to the ground for repairs. Unfortunately the field around the dish is now too soft due to the heavy autumn rains. Thus it might very well be summer 2010 before we are back on 432 EME.

OK1DFC: Zdenek ok1dfc@seznam.cz reports on the first leg of the ARRL EME Contest on 23 cm -- As a result of strong wind on Sunday, I was not able to operate my dish the last 8 hours of the contest. I hope the next leg in Dec will be better. I did manage to work 67 stations including 4 initials with RD3YA #261, OH0/DL1YMK #262 and DXCC 64, 9A5AN #263 – nice surprise, K8EB #264 - very strong and N4PZ #265. With N4PZ I had big problem. I called him many times, including spreading out my call in letter groups. His signal was (579), but he apparently has problem with RX. For the first count I have 67x36. I am looking forward to Microwave part where I will be QRV on 13 and 3 cm. I will be traveling before the contest (from 1 to 9 Nov I will be in Hickory, NC) and will not have a chance to prepare anything special. My 3 cm gear is working well. I have tested during our tropo contest.



OK1DFC's 10 m dish

OK1KIR: Tonda, Jan and Vlada (EME team ops) vladimir.masek@volny.cz sends news of Oct activity – We worked on 2.3 GHz on 4 Oct at 1920 OH0/DL1YMK (549/559) for initial #88 and DXCC 36, on 3.4 GHz on 5 Oct at 1816 OZ6OL (O/O), 1915 LX1DB (559/559), 1927 DL4MEA (549/439), 2018 partial OH0/DL1YMK (O/O) - no R's, 2137 G3LTF (559/559), 2152 F2TU (559/559) and 2217 OH0/DL1YMK (O/O) for initial #25 and DXCC 16. We worked on 1296 on 3 Oct at 1906 OH0/DL1YMK (549/549) #282 and DXCC 57 on CW and the 1st 23 cm OH0 - OK QSO. In the ARRL EME Contest we QSO'd via CW on 10 Oct at 2056 VK3NX (559/569) #283, 2118 DL0SHF (589/579), 2115 OK1DFC (579/569), 2140 JA4BLC (559/559), 2147 RA3AQ (559/569), 2152 IK3COJ (559/559), 2159 OE5JFL (559/569), 2242 G3LTF (569/569), 2335 LZ1DX (559/579) and 2339 OH2DG (559/559), and on 11 Oct at 0005 VK5MC (569/559), 0025 SV1BTR (569/569), 0118 SV3AAF (559/559), 0127 IZ1BPN (569/559), 0137 OH0/DL1YMK (559/549), 0219 HB9Q (569/559), 0239 HB9BBD (589/579), 0248 ES5PC (569/569), 0312 JA6AHB (549/549), 0314 UT5JCW (559/559), 0348 LA9NEA (559/559), 0355 DL3EBJ, (549/559), 0402 OE9ERC (589/579), 0806 HB9MOON (569/559), 0818 VE6TA (569/579), 0838 IK2MMB (569/569), 0845 ON4BCB (569/549), 0851 K2DH (569/569), 0858 SM6FHZ (559/559), 0904 PI9CAM (569/569), 0919

NA4N (559/559), 0927 K1JT (569/559), 0935 IW2FZR (559/559), 0945 K5JL (579/579), 0950 partial OZ4MM (579/lost), 1001 F5HRY (549/549) #284, 1122 SD3F (559/559) and 1133 W6YX (559/559) #285. On JT65C we worked on 10 Oct at 2256 UA9UHN (17DB/O) and then lost our JT software and fixing required a complete reinstallation. It was not until 11 Oct that we finally got back in operation and QSO'd at 1159 PY2BS (11DB/10DB) and 1227 VA7MM (12DB/11DB) for JT initial {#51}. On 432 in the ARRL contest via CW on 10 Oct at 0011 I1NDP (559/559) for initial #366, 0018 DL9KR (569/569), 0034 OH2DG (559/449), 0320 OH0/DL1YMK (O/O) #367, 0347 K1RQG (579/?), 0440 OZ4MM (579/559), 0459 DL7APV (559/559) #368, 0503 DJ7GK (549/529) #369, 0512 DF3RU (559/559), 0540 SV1BTR (549/429), 0559 SP6JLW (549/449) #370, 0624 K1JT (549/559), 0938 SM2CEW (559/559) and 1032 G3LTF (549/549), and via JT65B on 10 Oct at 0426 HB9Q (5DB/O), 0649 K3MF (21/O) for JT initial {#11}, 0745 K2UYH {6DB/O} {#12} – [Sorry not a valid contest QSO, I had JT set to the wrong call at the start of operation], 0842 ES5PC (15DB/O) {#13}, 0851 EA3XU (20DB/O) and 0946 DL7APV (7DB/O) {#14}.

OK1TEH: Matej ok1teh@seznam.cz was QRV with a single 23 el DK7ZB yagi and high power on 70 cm during the Oct contest weekend -- I worked on random HB9Q on JT65 with a great signal and had a nice opened text chat and DL9KR on CW. I CWNR I1NDP for over an hour and heard G3LTF (weak) and SM2CEW (in QRM). I also found a NA station on .070 on JT65; however he went QRT after my first call.

PI9CAM: The team jvmmmap@bart.nl reports on their 10/11 Oct moon pass we activity -- PI9CAM was QRV on 70 and 23 cm during the Oct contest weekend. We were very happy to be back on the Moon after more than three months and had a lot of fun. We had 87 QSOs. There was a lot of activity on 23 cm. hen Dick PA2DW started to call CQ on CW on Sunday morning a real pile-up started and lasted for about 90 minutes. On our screen we sometimes saw 5 or 6 stations calling at the same time! Fortunately Dick is a very experienced CW operator and he managed to run the pile-up without any problem. On 70 cm we worked a bunch of nice "small" stations in JT65b and also found nice activity in CW. Now we are looking ahead to 7/8 Nov when we plan to have the dish on 13, 9 and 6 cm. There is still a lot of work to do.

RA3AQ: Dmitry ra3aq@vhfdx.ru writes – During this leg I was a guest operator at Sergey, RW3BP's QTH. In my opinion activity was lower than in the previous year. I made 60 QSOs on CW. Stations worked were DF3RU, DL0SHF, DL3EBJ, ES5PC, F5JWF, G3LTF, G4CCH, HB9BBD, HB9MOON, HB9SV, IK3COJ, IK3COJ, IQ4DF, IW2FZR, IZ1BPN, JA4BLC, JA6AHB, K1JT, K2DH, K5JL, K8EB, LA9NEA, LX1DB, LZ1DX, LZ2US, N0OY, NA4N, OE5JFL, OE9ERC, OH0/DL1YMK, OH2DG, OK1DFC, OK1KIR, OK3RM, ON4BCB, OZ4MM, OZ6OL, PA3FXB, PI9CAM, RD3DA, RD3YA, RW6AG, SD3F, SM6FHZ, SP6JLW, SP7DCS, SV1BTR, SV3AAF, UA3PTW, UT5JCW, VA7MM, VE4SA, VE6TA, VK3NX, VK3UM, VK5MC, W4OP, W5LUA, W6YX and WA6PY. Heard but missed were N4PZ, IK2MMB, JA6XED, VK2JDS, JH5LUZ, VE3KRP and W7JM. Thanks to all and I hope to see you in next leg on 3 cm from my EME QTH. My station is a 2.4 m offset dish with 550W at the feed.

RW6AG: Fedyun on 432 worked K7XQ for an initial on JT65b and on CW added LZ2US, JA6AHB, SV1BTR, OK1DFC, LZ1DX, G4CCH and G3LTF. On 1296 he contacted using JT65c OH2DG, K7XQ and UA3PTW.

S50C: Matija's (S53MM) club s50c@hamradio.si was QRV on 23 cm -- After changing from a linear polarized feed to a new square septum feed with a ring choke, we see a significant improvement on RX and TX. In the DUBUS EME Contest we made only 2 CW QSOs, OZ4MM and F2TU. Later we worked OE9ERC. During the Oct leg of the ARRL EME Contest we put 15 QSOs in the log. The king of the band was surely DL0SHF. It took me a few minutes to realise that it was not tropo signal. By the middle of the second night, I had made QSOs with everyone that I had heard. S50C is using a 2.48 m mesh dish with about 150~200 W at the feed and an LNA with a NF of 0.28 dB. We put the antenna down on Sunday because winter is coming and we are located at a hilltop VHF contest location. Maybe we'll appear on 2304/2320 EME again in Nov. It depends on the WX. QSO'd on 10 Oct were OK1DFC (449/549), DL0SHF (579/529), K1JT (449/439), HB9BBD (549/549) and SP6JLW (439/449), and on 11 Oct HB9Q (549/559), IZ1BPN (439/449), SV1BTR (O/O), HB9MOON (559/559), G3LTF (439/449) - on a CQ, LZ2US (449/529), DF3RU (439/539), OH2DG (O/M), OZ4MM (559/549) and PI9CAM (559/559). Heard were W6YX, WA6PY, K5JL, VK3UM, G4CCH, HB9SV, OE9ERC (on SSB), PY2BS and W5LUA.

SD3F: Carl sm3akw@spray.se writes about the Oct leg of the EME contest -- Quite a tough weekend for the Moon with us bombarding it at different frequencies and those actual explosions. (OR did we set those blasts in motion -

hi?) Does our activity show on any of the instruments on the Moon; I wonder? I had a lot of moon time up here on Saturday, 0000 to 1350 and 1830 to Sunday at 1410 and again from 2020 to 2400. I used most of this time on 432 except for the first three and the two last hours when usually no stations are heard. I made 65 QSO, all on CW. 43 were on 1296, 18 on 432 and 4 on 144. This leaves space for an enjoyable third weekend as well. My SD3F call is still causing confusion to some. BCNU in Nov.

SP7DCS: Chris sp7dcs@o2.pl reports on the ARRL EME Contest -- I was very happy to be QRV on 3 bands on CW random unassisted. On 2 m and 70 cm there was high degradation and fast Faraday changes that made some QSOs a little harder. On 23 cm at the same time, it was like HF. The only thing bad on 23 cm was that I had very short window to VK due to building blockage and I was not able to manage any QSOs with my VK friends. During full weekend I was supported by my son SP7MC. We did our best to make as many QSOs as possible. Our final score was 84 QSOs (1 dup) consisting of 33 QSOs on 2 m, 7 QSOs on 70 cm and 44 QSOs on 23 cm (+1 dup). It is much more than I expected and is the best ever first weekend. Achieving such a good score would not be possible without improvements to my stations that were made recently. My dish mounted SSPA now gives 500 W on 23 cm and the new preamp improved my sun noise by 2 dB - I really was feeling like I had a bigger dish - hi. My SDR with software by SQ4AVS monitoring the 9 MHz stage in my IC746 was great. As result I was able to see about 15 kHz of selected band on a Winrad screen - it really helps!

SM3IOU: Per perolof.sjlander@telia.com temporarily QRT -- There can be big and small problems that cause trouble for a moonbouncer. I have a very small problem that is causing me QRT for the moment. It is due to just a tiny gearwheel in my rotator. I'm using two AC-motor drives in an old Daiwa rotator and the primary drive at one of the motors has broken into two pieces. Unfortunately just one drive-unit is not enough. I have tried to glue the plastic cog-wheel together but with no success. If anyone has small gears in their junk box, I would be very pleased to hear from them.

SV3AAF: Petros sv3aaf@yahoo.com writes on ARRL - part 1 -- The ARRL's EME2009 is one more contest with the M&M stamp on it. The OH0/DL1YMK mystery expedition excited curiosity, rocked the moon for a week and shined through the first weekend of the contest. The bulk of my operation for the 1st weekend was on 23 cm, but I also spent a fair amount of time on the other bands listening to a lot of noise and burning up kWh. My QSO count on 2 m and 70 cm were both 6 while on 23 cm it was 55. Conditions were generally good with libration velocity at its highest. Its effect was not the worst on 70 cm, but it was annoying on 23 cm. On 70 cm I experienced only slight Faraday rotation with mostly sharp pol, which is rare for Greece outside of the winter months. I plan to be on for the two remaining weekends of the contest.



S50C's 2.48 m dish

UA3PTW: Dmitrij ua3ptw@inbox.ru was active on Sept/Oct. Prior to the contest he worked on 432 JT65b YL2OK and EB5ERZ. On 1296 using CW he added HB9HAL, LZ2US, G4CCH, K1RQG, OK1DFC, ES5PC, G4RGK, OE5JFL and HB9CKL, and on JT65c RD3DA, HB9HAL, LZ1DX, PY2BS, K8EB, DJ9YW, PA3DZL, RW6AG, G4CBW, PA3FXB, ES5PC, JA1WQF, UA3MBJ, UA9UHN, G4RGK, VK2DJS, VK4CDI and DF3RU. He is now using on 23 cm a 3.7 m dish and 300 W.

UT5JCW: Serge ut5jcw@usa.com was QRV on 23 cm during both windows of the Oct contest weekend – I completed with my small station, 3.7 m dish and 500 W, a total of 41 QSOs. I heard another 10 different stations, but did not work them. I hope to catch them and others in Dec.

VA7MM: Mark va7mm@rac.ca reports that his group was active on 1296 MHz in the ARI contest in Sept and the first leg of the ARRL contest in Oct -- In the ARI contest we contacted 10 stations on CW - K2UYH, G3LTF, SV1BTR, G4CCH, SM6FHZ, LZ2US, K8EB, SM2CEW, K1RQG and AL7RT. In the first leg of the ARRL contest on 10/11 Oct we contacted 40 stations on CW and JT-65c modes. Stations contacted on CW were DL0SHF, K5JL, G3LTF, SM4DHN, OK1DFC, SV1BTR, SP5JLW, IQ4DF, RA3AQ, LZ2US, SM6FHZ, DF3RU, K1JT, IK2MMB, WA6PY, ES5PC, JA4BLC, VK3UM, OZ4MM, PI9CAM, W5LUA, SP7DCS, SD3F, K8EB, W6YX, SM2CEW, K2DH, SM2FHZ, VE6TA, DL4MEA, W9IIX, NOOY, K1RQG and JA6AHB. Stations contacted on JT65C were PA3FXB, UA9UHN, VK2DJS, OE9ERC, PY2BS and OK1KIR. We found conditions were good in both contests and our QSO count was up from past years. We continue to pick up new stations and our initial count currently stands at #115* on all modes and #98 on CW only. VA7MM is scheduled to operate the second leg of the ARRL contest on 1296 in Dec. We are available for skeds via e-mail.

VE3KRP: Eddie eddie@tbaytel.net was on during the pre-contest weekend on 23 cm -- I worked on Saturday K1RQG, K5JL, W4OP, K5SO and LA9NEA. I heard VE6TA. On Sunday I worked G4CCH and heard OH0/DL1YMK. I called them for quite a while but with no luck. His signal was up and down. In the Oct part of the EME Contest on 1296 I worked in the first pass 10 stations: DL0SHF, LZ2US, LA9NEA, IQ4DF, SV1TBR, G3LTF, W6YX, K1JT, K5JL, K5SO and VK3UM despite problems with wind, sleet and freezing rain. The second pass I add 5 more: OZ4MM, SP6JLW, HB9BBD, OK1DFC and ES5PC for initial #56.

VE6TA: Grant ve6ta@clearwave.ca reports working 17 stations on the first night of the ARRL EME Contests on 432 – I added one new one DJ1KJG for initial #135. There was a good JA turnout including JA6AHB, JN1NNJ and JA9BOH. He did even better on the second pass although did have a power bar switch fail, but was able to repair it and ended with 65 QSOs on 70 and 23 cm.

W0DRL: Al antylar46@gmail.com writes on his 432 EME operation -- I have been working on my 120 el array and have improved it. I worked KL6M on EME CW in Sept. I have not been very active on EME, but hope to be QRV more if the WX permits. It has really been cold here. I also have a new e-mail address [see above].

W4OP: Dale parinc@verizon.net reports a lot of fun on 23 cm during the Oct pre-Contest weekend -- I worked 7 stations: K1RQG, K5JL, K5SO, VE6TA, VE3KRP, LA9NEA and WW2R. I was also QRV for the ARRL EME Contest and worked on 10 Oct K2DH, DL0SHF, K5JL, IQ4DF and RA3AQ, and on 11 Oct OH0/DL1YMK, LA9NEA, G3LTF, W5LUA and DF3RU. DL0SHF was S9+10 on my S meter. I picked up 1 dB more sun noise by adjusting my scalar ring and feed position on the dish. I now have 15.4 dB of Sun noise. I received a QSL from IK2RTI. He is running a 4.8 m dish with 500 W and a dual helix feed. [See past NL for more details of Gianfranco's feed].

W6YX: Goran (AD6IW) goran@ad6iw.com and Gary (AD6FP) have put W6YX, the Stanford Radio Club, back on EME -- We used a 6 m dish (not the big one) and a new AD6IW 500 W SSPA. After trouble with the AZ motor and some other technical issues, we were ready to operate on Friday evening. Our total score was 64 QSOs on 23 cm. The second night conditions were better. Many small stations were worked. We will be on the air in Dec for the second leg of the contest.

WA6PY: Paul pchominski@maxlinear.com reports on his Oct ARRL EME Contest weekend results – Stations worked in alphabetic order were on 432: DL7APV, G3LTF, I1NDP, K0RZ, K1JT, OZ4MM, SV1BTR and UA3PTW, and on 1296: AL7RT, DF3RU, DL0SHF, F5JWF, G3LTF, IK3COJ, IZ1BPN, K2DH, K5JL, K8EB, LZ1DX, LZ2US, NA4N, OE5JFL, OH0/DL1YMK, OH2DG, OK1DFC, ON4BCB, OZ4MM, OZ6OL, PI9CAM, RA3AQ, SD3F, SM2CEW, SM6FHZ, SP6JLW, SP7DCS, SV1BTR, SV3AAF, UT5JCW, VA7MM, VE6TA, W5LUA, W6YX, W9IIX and WW2R. I also spent some time on 144.

WD1V: John john.seney@gmail.com put in an “all-nighter” on 1296 – I worked 4 new stations on EME solo. I got first CW QSO with OZ4MM (Denmark) (459/559) and then 3 on JT65c with ES6RQ (Estonia), PY2BS (Brazil) and G4DZU in England. Conditions were great! A clear Moon made pointing was trivial with its shadow in the center of the dish until clouds appeared around 4:00 AM local and time to sleep. Every station was audible. The stripes on the waterfall were getting crowded and we had to spread out up to 1296.095 for the contact with Brazil... CQ 20 CQ 20 hi!

ZS5Y: Derek derek@fotogravett.com was active on 70 cm during the Oct part of the EME Contest – I had hoped to be QRV with my big PA but for unknown reasons I could not get it working. I have not given up and will look into it today. I was using only 70 W during contact. Even with the low power, I was somewhat disappointed in my 70 cm results. I worked K2UYH (18DB) and HB9Q (10DB) - strongest heard, and called CQ for long periods with not one taker. Possibly my station is too small. It was great to easily QSO you [K2UYH] on random after all our trying on skeds. I plan go up to 23 cm with this 3.7 m dish and 150 W. It might be better, if I can just get it all to work!

K2UYH: I a.katz@ieec.org had a devil of a time fixing the break in my Heliac transmission line that terminated my operation in Sept. It turned out that only a difference from round of 0.002” was enough to prevent the Heliac splice from screwing on the cable - (TNX to WA2LTM, W2KW and K2TXB for helping find the solution). Most of my Oct Moon activity was under the call K1JT operating the ARRL EME Contest. I did QSO on 1296 on 9 Oct at 0524 OH0/DL1YMK (559/559) on CW for initial #302 and mixed #361*, and during the contest by prearrangement on 432 after QSOing using K1JT on random on 10 Oct at 0512 OH1/DL1YMK (O/O) for initial #715 and #772*. I initially thought that this mystery location was a new DXCC. Later I realized that I had worked Aland Island some years ago on both 432 and 1296, nevertheless Michael's and Monika's efforts and the initials were appreciated. I also ran a couple of unsuccessful 70 cm skeds with ZS5Y before the contest, but did easily work Derek on random during the contest. This QSO was actually the result of a mistake. When we started contest operation, we forgot to re-program my JT software for K1JT's call, and *brainlessly* started calling stations without realizing we were using “K2UYH”. I thus worked on 10 Oct on 70 cm JT65b at 0529 G4ZFJ (27DB/O) #773*, 0537 RW3WR (26DB/O) #774*, 0547 K3MF (10DB/O), 0702 EA3XU (15DB/O), 0718 ZS6Y (26DB/O) #775* and 0722 RU4HU (22DB/O) #776*. The additional initials were nice, but we lost over an hour of prime contest time. We were able to contact some of the station unintentionally worked as K2UYH and have tried to e-mailed to explain the situation.

NETNEWS BY G4RGK: VE6TA: Grant reports working 4 stations during the Oct pre-AW. He initially had tracking problems. **WW2R** was on moon on 3 Oct and worked 4. **UA3MBJ** is now QRV on 23 cm and using JT65c worked DL9YW, UA3PTW and RA3AQ. **UA4AOL** on 432 added on JT65b ES5PC in Sept. **VE4SA** was active on 1296 during the Oct part of the ARRL EME Contest on 23 cm and made a few contacts. **WB7OBS** was trying during the contest on 432. He CWNR I1NDP and J1NNJ and also heard DL9KR, K4EME and K1JT among others. **W9ZIH** heard DL0SHF and VK3UM on 23 cm during the ARRL Contest. **WB2BYP** has made a lot of progress in getting his big dish project going. **K5JL** was active on 1296 for the ARRL contest and reports it to be one of the best single weekends on 23 cm. **AL7RT** worked during the ARRL Oct contest weekend on 23 cm 14 stations and 4 new ones. The WX was nice in Alaska. **WA9KRT** reports he did not complete with VK3UM, but did copy full calls on 11 Oct. **W9IIX** will be 2304 for Nov Microwave contest weekend. **WD5AGO** is getting ready for the Microwave EME Contest. On 13 cm Tommy will be running a cooled preamp. He will try to spend at least 1 hour on 6 cm on second day, and says two bands is enough. **SM4IVE's** big dish is nearly complete and ready for the crane. **CT1DMK** was not active the Oct ARRL Contest weekend, but will be active on 6 cm in Nov. **W7MEM** was on 70 cm during the Oct contest weekend and worked 9, 8 on JT and 1 on CW. **W5LUA** worked JA6CZD on 3 cm 10.450/10.368 in Oct - TNX to JA4BLC for coordinating the JA stations. He will be QRV for the Microwave Contest in Nov and will try to run 5 bands, 13 cm the first night (13cm/6cm/3cm), 9 cm second night (9cm/6cm/3cm) and 1 1/4 cm sprinkled in.

FOR SALE: NA4N is looking for TWTA for 10 GHz. **WA9FWD** has power supplies for sale that are ideal for SSPAs. There are several types with voltage at either 24 or 28 V, and currents from 100 to 130 Amps. The weight varies greatly. If interested, e-mail John at jstefl@wi.rr.com. **SM3JQU** is looking for a small gear – see his report.

TECHNICAL: W3HMS, John W3HMS@aol.com sends the following readout info -- I am now using TV cameras for position readout of my 23 cm 3 m dish. I have one camera on an AZ disk and another camera on an EL inclinometer, and both are easily seen on TV monitors in the station. It is great to have them when

the moon camera shows only clouds, HI! I wanted a large compass rose for the AZ readout. I found exactly what I needed at UBR-LLC in Dillsburg, PA. They were able to supply compass roses with considerable flexibility. The one I use is 24". The center hole size can be reduced or enlarged. It comes in two pieces for easy addition to an existing dish installation. The AZ graduations can be clockwise or counter-clockwise. The material is ¼ inch "Phenolic xxx". I have an all-weather version that can also be made in aluminum. The required vertical space is about ¾ inch and I have found the calibration to be linear and the image very crisp. I see the image on my remote TV camera monitor day or night and even in rain. For more info, price and terms contact Frank Ulrich, CEO at Frank.Ulrich@UBR-LLC.com or call 717-432-0398.



W3HMS' TV camera dish readout system



W3HMS' Azimuth readout as seen on monitor in his shack

FINAL: The problem of identifying who and who is not an initial QSO is really getting out of hand. HB9BBD addresses this problem in his report. I cannot fully agree with Dominique's solution of not QSOing stations that operate under more than one call. I am guilty of this offense, but I feel there are times when using multiple calls is justified. I do agree that we have a serious problem. Part of the solution is to make clear when and why these situations occur (family stations for example), and make sure this information is widely publicized.

I received a number of responses on the JT's echo mode in the last NL confirming its usefulness. DL2FCN in particular wanted to remind everyone that VK3UM's EME calculator software works well with the Echo mode program to predict performance.

This month we have F5SE's Moon Chart for 2010. From Franck's chart you can predict Moon conditions for the coming – see end of this NL. Next month I hope to have the 2010 Moon Calendar now produced by DL7APV.

For related Sun noise testing N2UO points out that K5SO at http://www.k5so.com/Using_sun_noise.html has some interesting plots of sun noise vs. dish diameter. You can get the sun noise from the day before at <http://www.solen.info/solar/>. Sun noise does vary a lot over time, so you can't take the numbers too seriously. The web site shows the average at a particular location. For those with SDR-IQ receivers, moving your antenna across the Sun while running in the continuous display mode produces a nice display of your beam pattern.

The 1296 EME SSB Contest will run from 2000 on 26 Feb (late Friday Z) to 2000 on 27 Feb in 2010.

For those of us who have had our antennas disturbed various animal friends (squirrels, mice, insects, snakes, birds, etc.), VK3UM sends along the following picture. He discovered the problem while working OH0/DL1YMKI – the VSWR was a little high. The Swallows only cost Doug about 2 dB of Sun noise. He has since relocated the occupants and replaced his discarded shroud with black plastic fly wire.



**VK3UM's horn feed with Swallows nest
– Does wonders for the VSWR!**

Please keep the reports, technical info and pictures too coming. We certainly could have used more for sale items this month. Good luck in the contest! I will be looking for you off the Moon this month on the microwave bands under the K1JT call. 73, AI – K2UYH

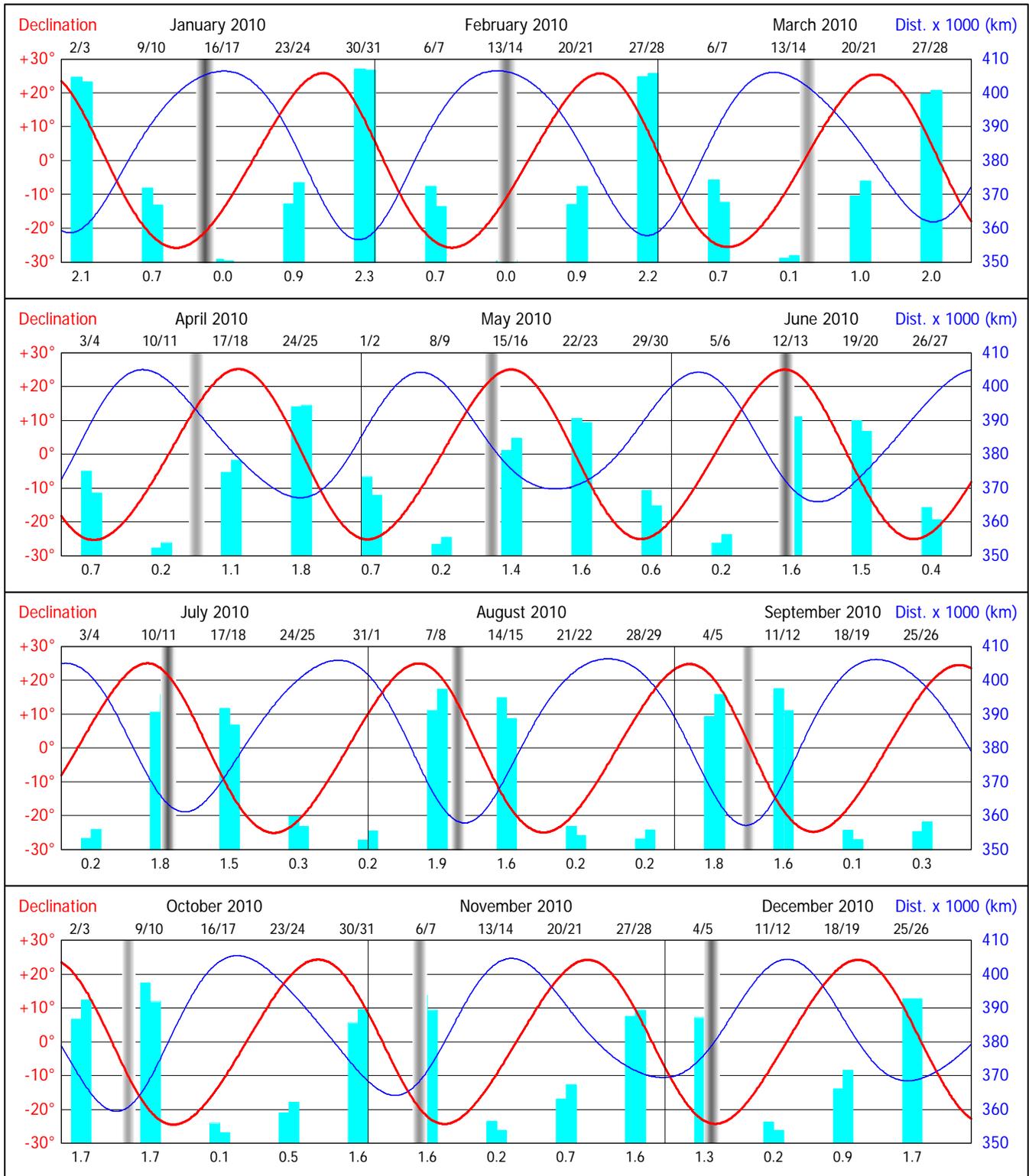
Moon Calendar for the Year 2010, by Franck F5SE

Theoretical average path loss at apogee.

Band	Loss
144 MHz	252.8 dB
432 MHz	262.3 dB
1296 MHz	271.8 dB
2320 MHz	276.9 dB
3470 MHz	280.4 dB
5.7 GHz	284.8 dB
10.4 GHz	289.9 dB
24 GHz	297.2 dB
47 GHz	303.0 dB

In order to obtain the average path loss for a given band and a given week-end, subtract the value displayed on the plot to the value given in the table above: Example: band 1296 MHz, on 2010 February 28: loss = 271.8 – 2.2 = 269.6 dB.

Moon Ephemeris Overview for the Year 2010, by Franck F5SE



- Vertical blue bars show the overall "quality" of each week-end for EME. The higher the bar, the "better" the week-end.
- Figures below bars show expected signal improvement, in dB, referred to apogee path loss, for Sundays at 00:00 UTC.
- Full scale span: 2.4 dB. Scale step: 0.4 dB per division. 0 dB level = Band path loss figure at apogee, as quoted below:
- 144 MHz: 252.8 dB, 432 MHz: 262.3 dB, 1296 MHz: 271.8 dB, 2.3 GHz: 276.9 dB, 3.5 GHz: 280.4 dB, 5.7 GHz: 284.8 dB,
- 10.4 GHz: 289.9 dB, 24 GHz: 297.2 dB, 47 GHz: 303.0 dB. Data computed for an apogee around 406500 km.
- To get the week-end path loss on a given band, subtract to band apogee figure the value printed under the week-end bar.
- The shading pattern below shows how close the Sun is to the Moon, at any time - the darker, the closer.
- Shading is only visible around New Moon date, appearing as a vertical gray bar.