432 AND ABOVE EME NEWS NOVEMBER 2006 VOL 34 #11

EDITOR: AL KATZ, K2UYH; SCHOOL OF 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@ieee.org

PROD/MAIL: BRIAN MULLANEY, KB2TIS/TOM KIRK, KA2VAD (609-584/8424), E-MAIL mullaney@mccc.edu/kirkt@lintech.com

NETNEWS EDITOR: G4RGK, DAVID DIBLEY, E-MAIL g4rgk@btinternet.com (based on K1RQG's Netnotes and Reflector News) & CW LISTS

EME NETS: 14.345, 10 AM ET SATURDAY AND SUNDAY (AFTER VARO NET ENDS ON SUNDAY)

NET CONTROL AND SKEDS CORDINATOR: JOE, K1RQG, TEL (207-469-3492), E-MAIL k1rqg@aol.com

EME DIRECTORY: http://www.dl4eby.de/, DL4EBY/DK0TU, KLAUS TIEDEMANN, TEL (49-30-7955467), E-MAIL: tklaus@snafu.de

NL EMAIL DISTRIBUTION and EMAIL LIST CORD: WARREN, W2WD wbutler@comcast.net [TXT OR PDF OR "ON WEB" NOTICE]

EME STANDINGS: DAN GAUTSCHI, HB9CRQ/HB9Q E-MAIL hb9crq@hb9q.ch OR SEE HIS WEBPAGE AT www.hb9q.ch. THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT http://www.nitehawk.com/rasmit/em70cm.html

CONDITIONS: Oct, if anything, was a repeat of Sept with generally good conditions during the ARRL Contest weekend, but not as good as the previous perigee weekend. WX was a problem in some places, but overall activity was excellent on 23 cm and good on 70 cm but not at the level it once was. Activity was enhanced by many new stations – see UA3DJG. I am afraid I had misinformation on WA5WCP station's destruction by fire. Paul is fine and successfully operated his mini dxpedition - see WA5WCP's report. Sadly the fire did occur, but at W9IIX's shack. Doug is QRT and working to be on again, but it will be a long haul. Besides the last leg of the ARRL EME Contest (11/12 Nov), there are several dxpeditions going in Nov. As I write this DL3OCH is setting up to put Montenegro on 70 and 23 cm for the first time. On 16 Nov 5A7A will begin operation from Libya with EME activity on 432–see below.

HIGH CONEST SCORES: I have far from a full picture. On 70 cm DL9KR appears to have the lead with a total of 64x30. NC1I is next with 60x28, but I do not have a report from OH4PO or HB9Q. On 1296 HB9BBD has the reported lead with 68 QSO and an unreported number of multipliers. RW1AW reports 60x31 and K1RQG also reports 60 contacts. In terms of totals contacts G3LTF has an impressive single op total of 79 QSOs on 70 and 23 cm.

5A7A DXPEDITION: Frank (DL8YHR) DL8YHRFRANK@aol.com will be operating from Libya (JM72) on 6, 2 and 70 cm EME from 16 to 23 Nov and possibly a week longer. He is not taking skeds and will use the N0UK Logger to indicate where and when he is active. On 432 he will be using a single 27 el DK7ZB yagi with around 600 W at the dipole. Operation will be on 432.050 with 5A7A always TXing first on JT65B, but will look for CW on Spectran and try replying on CW as well.

DL4DTU: Norbert d14dtu@darc.de is QRV on 23 cm EME from a weekend QTH in the mountains (JO60tr) with a 3 m dish. During the Oct ARRL contest weekend he QSO'd on 14 Oct at 1410 SM4DHN (539/559), 0113 HB9BBD (569/579), 0130 OK1KIR (O/O), 0130 G4CCH (559/569), 0137 G3LTF (539/549), 0158 OZ6OL (549/O), 0158 RW1AW (559/569), 0223 LA8AV (449/449), 0315 SM6CKU (O/O), 0415 HB9Q (539/559), 0415 LA9NEA (559/539), 0505 IW2FZR (O/O), 0515 K2RQG (0/539), 0655 K5JL (549/559), 0810 K5GW (O/559) and 0820 F6KHM (339/O).



DL4DTU mountain QTH with 1296 EME dish in the center

DL9KR: Jan <u>bruinier@t-online.de</u> was active on 432 during the ARRL EME Contest in Oct. He ended up with a total of 64x30 with 3 initials K1WHS, JH1KRC and UZ5TZ to bring him to #846. K1WHS was (579) on his moonrise. [K1WHS in not at a new grid or even QTH?]

F5SE: Franck kozton@free.fr writes that he has suffered a recurrence of his heart problems after 29 years and spent 6 days in the hospital. He is now getting back to normal activity, but at slower speed. His big dish project is still advancing. In Sept he tested the rotating carriage and the supporting tower is now in an upright position. The elevation drive was scheduled for Oct, but has been delayed. Frank and his friend, F5RZU, have also moved F5AQC's 6 m dish, complete with the 23 cm and 13 cm W2IMU feeds, supporting tower and drive to F5RZU's QTH. F5RZU lives in the open fields about 50 km east of Reims. The dish will be re-installed there. F5RZU needs Frank's help for this project, and unfortunately there now be some delay. Franck has also offered to take over responsibility for producing the yearly Moon Calendar and has ideas on how to better illustrate what is happening with graphs the Moon Declination and Distance vs. weekend. The best perigees will take place in March, April, Oct and Nov around weekends 11, 15, 43 and 47.

G3LTF: Peter g3ltf@btinternet.com reports on his Oct activity -- My main activity this month was the contest, but there was significant activity in the 10 days leading up to it when the moon was at perigee. I worked on 1296, on 7 Oct WA5WCP/5 at his demo in EM11ga for initial #247 - signals were similar to the early days of his W1 expedition, followed by RW1AW, SP6JLW, ZS6AXT, LA8AV, LA9NEA, PA0BAT #248 on random and G4CCH, on 8 Oct VK4AFL, and on 14 Oct (contest) OK1KIR, OZ6OL, HB9BBD, SP6JLW, LA8AV, SM4DHN, JA8ERE, JA4BLC, LA2Z #249, RW1AW, DL4DTU, HB9SV, JA6AHB, LA9NEA, SM6CKU, HB9Q, K1RQG, N2UO, ZS6AXT, SM2CEW, K5JL, F6KHM on SSB, SM3LBN, K5GW on SSB, K2UYH, HA5SHF, NA4N, G4CCH, ES6RQ, N2IQ, DL1YMK and VA7MM. At 1000 I changed feeds and went to 432 to worked NC1I, DF3RU, OH2PO, OK1DFC, UA3PTW, SP6JLW, DL7APV, N1BUG #399, KL6M, VE6TA, OE5JFL, K2UYH, SM3AKW, DL1YMK and G4RGK. At moon rise I was again on 1296 and worked VK3UM and VK4AFL, continuing on into 15 Oct for IW2FZR, OH2DG, KL6M, IK3COJ, OK1DFC, OE9ERC and IK2MMB. Things got very slow with lots of CWNR at 0230, so I changed the feed to 432 and worked JJ1NNJ, 7M2PDT, UT5DL, DL9KR, RW3PX and UT2EG #400, FR5DN, HB9Q, JA6AHB, FR5DN, HB9Q, JA6AHB, SM2CEW, N9AB, G3LQR, SV1BTR and HG1W (same as HA1YA). At 0945 I went back to 1296 to work VE6TA, ON5RR, K5PJR, OZ4MM, W5LUA, IZ1BPN, OK1CA, WW2R, K4QI, and finally a short multi-way SSB QSO with G4CCH, K1RQG and K2UYH. Back on 432 CWNR were KE2N, EA3DXU, UA6LGH, SM4IVE and heard was UZ5DZ. On 1296 I had a longer list of CWNR including LA8LF, WB2BYP, SM5LE, W7UPF, UA3DJG, JA8IAD, JH5LUZ, EA3UM and W2DRZ. Heard were DL2WHA, DL1HYZ, ES5PC and UT3LL. Conditions on 432 in the night were excellent especially on the 14th. I've been experimenting with a Super VE4MA feed for 1296 as described in the EME Conference paper by W1GHZ and WD5AGO. It gives me 0.5 dB extra sun noise (as predicted for my deep, 0.375 f/d, dish), but the larger choke upsets my polarizer and the CP was degraded, which meant it did not work so well on coherent signals. I stress that this is a function of my polarizer. When I get it retuned or replaced then I am confident that I will see the additional 0.5 dB on all signals. Final contest scores for this leg were 29x23 on 432 and 50x28 on 1296.

G4RGK: Dave g4rgk@btinternet.com reports on his contest activity — I did not last long on 23 cm. On 14 Oct I worked HB9BBD, LA9NEA and OE9ERC; then my PA power dropped off. I don't know what has happened — possibly a burnt connector. I then went back to 70 cm and continued there until the end of my window. On 432, I found conditions generally good. I worked around 40 stations and heard another 10 or so. Activity felt slightly better than last year, but there were some notable absences. CWNR were SM4IVE, N1BUG, YO2IS, SP6JLW and RW1AW.

HB9BBD: Dominique <u>dfaessler@bluewin.ch</u> reports the contest was superb regarding activity but painful regarding length for a single operator -- I made 68 QSOs and added 9 initials to my count, which now stands at #250. My window to the west is limited to elevations > approx 30 degs, which limits my time for

the NA window. The strongest station on the band was clearly HB9SV with his TH347 in the dish. He peaked at 40 dB above noise here. I am not sure if I will be on for the Nov weekend, but would like to add a few station that were on only for a short period of time.

JJ1NNJ: Kouichi jj1nnj@extra.ocn.ne.jp sends his 70 cm report for Sept and Oct -- I participated in the ARI Contest on 9 Sept, but worked only 3 stations. I QSO'd on 9 Sept W8TXT for an initial #85, JA6AHB and 7M2PDT. On Monday morning (Japan time) I heard DL9KR, but I couldn't call him because I had to go work. I felt the activity was very low during the contest. I did better in the ARRL EME Contest. I worked on 14 Oct at 1528 K1FO (O/O), 1549 NC1I (559/539), 1623 VE6TA (339/339), 1645 KL6M (O/O), 1656 KU4F (559/559), 1758 JA6AHB (339/559), 1859 JH4JLV (339/O), 1919 JA9BOH (O/O), 2306 OH2PO (559/559), 2335 DF3RU (449/439) and 2351 UA3PTW (O/O), on 15 0010 HB9O (579/439), 0040 DL9KR (579/559), 0102 DL1YMK (O/O) for an initial #86, 0137 DL7APV (449/559), 0300 G3LTF (O/O), 1833 VK3UM (559/559) and 1837 N9AB (O/M). After the contest on 16 Oct I QSO'd at 0000 UA3PTW (339/559). Heard were JH1KRC, JR1RCH, 7M2PDT, K4EME, RW1AW, EA3DXU, SV1BTR, FR5DN, KE2N and W8TXT. I was using H-pol during NA window and V-pol during the EU window with my 16 x 13 el yagis array and GS23B (700 W) PA.



JJ1NNJ 16 x 13 el yagis rotatable pol array

K1ROG: Joe k1rqg@aol.com was on 23 cm for the first time in 5 years for Oct part of the ARRL EME Contest − I had a blast on 23 cm EME during the contest weekend. I made 60 contacts including 6 SSB QSOs and added 31 initials to bring my total to #93. I had a frustrating near miss with UR5LX and later found that I was not tuning far enough off my frequency. Unfortunately the next weekend we had terrific winds (58.4 mph with gusts 20 mph higher), and I have suffered another setback. The good news is the dish is OK, but azimuth drive system has a problem, and also one of the counter weight arms suffered major damage. In the interest of resolving this without patching it, I have decided to take the dish down ASAP, and try to find the root of the problem. It looks like the azimuth gearbox may have suffered some damage, but I won't know until I take things down. It was fun while it lasted. I hope the third time is a charm!!!

K4QI: Russ's K4QI@aol.com EME Report -- I was able to be on 1296 for part of the first ARRL contest weekend and QSO'd on 14 Oct N2IQ, OK1KIR, WW2R, IK3COJ, G4CCH, VA7MM and K5GW. The condx did not seem very good and echoes were sub-par with signals seemed down in general. The next day, 15 Oct I worked OK1CA, LA8AV, OK1DFC, RW1AW, OZ4MM, SM6CKU, G3LTF, VE6TA, OE9ERC, K1RQG, LA9NEA, K2UYH, NA4A, SM2CEW, IK2MMB, K5JL, K9BCT/4, W2DRZ, K5SO, JA8ERE, VK3UM and VK4AFL. Condx seemed much better on this day. There seemed to be a lack of activity from across the Pacific. The 3 stations worked were the only ones heard.

K6JEY: Doug <u>dougnhelen@moonlink.net</u> was active from his home station during the Oct contest weekend – I had a good time on 432 on 15 Oct. I got on

at about 0930 and heard DL9KR through the trees (589)! Besides Jan, I worked NC1I (569/589), OH2PO (559/589) and DF3RU (O/O). I heard one other station but didn't get the call. My brain gave out about that time as well. Everything ran ok. Conditions were ok, although I was hoping for more activity. Signals were strong with very deep fades. The local noise was pretty good with not much QRN at all and no radar QRM. I was using 4 25 el FO yagis, 1.2 kW and a 0.3 dB NF LNA. I have gotten to like the Timewave DSP 599ZX over the NIR 12. I am really looking forward to the Nov weekend. I hope to also run 1296 with 3.2 m dish. 250 W and 0.2 dB NF LNA.

K7XO: Jeff k7xq@secure.elite.net reports on his Oct ARI and belatedly his Sept activity – I am getting a little more active again on EME and having lots of fun. I was on 23 cm and worked on 16 Sept SM6CKU for an initial (#), G4CCH and OZ6OL (#), and on 17 Sept VK7MO (d#) on JT. I added 10 QSOs on 8 Oct including initials with LA9NEA (#), RW1AW (#) and SM5LE on JT (d#)

KL6M: Mike kl6m@qsl.net writes -- I was active in the ARRL contest and spent the first pass on 70 cm. I worked 29 stations before my GS35B amp quit with many heard but not worked. I think I have a bias problem. I switched to 23 cm and worked 6 stations with fantastic signals in about an hour before my moonset. I gave HB9BBD a (599) - he was S9+10dB! On my moonrise I could not get anyone to answer me due to my 70 cm PA problems. I spent the whole pass troubleshooting and found the problem with one hour left in the contest, but no one was left. I'll be back on next month, but my moon window is not quite as good. I plan to be QRV right to the end of the contest. I'll be on 70 cm for the first pass, and 23 cm in the second pass. I have a good EU window right up to 2359 on 12 Nov. There was a nice write up on EME and my station by one of our local reporters. I have posted the article at http://cworthy.net/kl6m/moon/EME-ARTICLE/EMEarticle.htm

LA9NEA: Viggo la9nea@online.no was QRV on 1296 during the contests in Oct -- I worked in the ARI Contest on 7 Oct SP6JLW (549/559), ZS6AXT (559/559), RW1AW (579/569), G3LTF (579/569), LA8AV (569/569), ES5PC (559/559), G4CCH (569/569) and G4RGK (539/O), and on 8 Oct K5JL (579/569), K5PJR (549/549), ES6RQ (559/559) and K7XQ (559/549). I also heard very well but did not work LA2Z (549) - Helge blew his preamp, and CWNR SM5LE (539).

N1BUG: Paul paul.kelley.n1bug@gmail.com is happy to be back on 432 EME - After many delays I am finally on 70 cm again with 8 x 21 el yagis with fixed horz pol and open wire feedline. The reflected power is a bit high but had no time to mess with it before the contest weekend. My PA gives 500 W. I had an azimuth readout failure during testing but was able improvised a quick and dirty fix. The conditions seemed good the first pass but poor the second pass with pol lockout to Europe. Echoes are about as I expected, but I don't seem to be hearing many small stations. I had hoped to work a few more, but it was fun! QSO'd were OH2PO, DL9KR, HB9Q, NC1I, VE6TA, KL6M, G3LTF, OE5JFL, DL7APV, N9AB and W8TXT. Heard were K1FO, DL1YMK, FR5DN, DF3RU, SV1BTR, KU4F, K4EME, KE2N, K2UYH, UA3PTW, OK1DFC, G4RGK, 7M2PDT, HG1W and K6JEY. I am interested in skeds. My western window is impaired by trees below 40 degs elevation.

N2UO: Marc lu6dw@yahoo.com was active on 1296 in both Sept and Oct – Back in Sept I was on 1296 MHz on 10 Sept and worked on random IW2FZR, G4CCH, LA8AV, K5JL, OZ6OL, K2UYH, G3LTF, LA9NEA, W6IFE and ES5PC. All signals were excellent due to the perigee conditions. On 14/15 Oct, I operated the ARRL contest on 1296 QSO'd K1RQG for initial #74, HB9BBD, HB9Q, LA9NEA, G4CCH, SM6CKU, SM3LBN, SM2CEW, G3LTF, IW2FZR, SM4DHN, K2UYH, F6KHM, K5JL, K5GW, RW1AW, HB9SV, OZ6OL, OK1KIR, W7BBM, JA6AHB, OE9ERC, OH2DG, OK1CA, OK1DFC, VE6TA, OZ4MM, LA8AV and VK3UM #75. All contacts were on random CW. My window to the west is very bad, but I still managed to work Japan and Australia. VK3UM must have good ears because my 3 m dish was blocked by almost 50% by the roof of the house when I called him. He asked me to repeat my call just once. I will be on for the last part of the contest in Nov again on 23 cm CW.

N8CO: Gary gabercr@nc.rr.com operated the Oct part of the ARRL EME Contest on 432 from K1FO's QTH. He had a lot of fun and worked at least 36 stations. At home Gary is working on a DB6NT 10 GHz transverter and is hoping to get on with a 1.8 m dish. He already has a TWT and has most of the parts needed to get on the moon.

NC11: Frank frankp@gcq.net sends info on his Oct contest activity — Both the weather and my schedule cooperated this year and I was able to put a major effort into the contest for the first weekend. Conditions the first night seemed excellent, but the second night did not seem as good, especially towards the end of our moon window. Everything here worked flawlessly throughout the weekend. Our total score was 60x28. All contacts were random without any aid

from the computer other than utilizing RealTrac to provide moon coordinates. (I plan on having autotracking working by the end of the year). The 60 QSOs is half the number of contacts made over the first weekend back in 94 & 95. This is disappointing, but I am optimistic that activity will improve. It was nice to find SM4IVE and OE5JFL back on the band. Perhaps with these two big signals back on along with the always present huge signals from DL9KR and more activity from K1FO, we can generate more interest from old and new 432 EME stations. K1FO and N8CQ stopped by for a couple of hours on Friday afternoon before the contest. We gave Gary a tour of the shack and antennas. Weather and time permitting I hope to be back on again next month.

OKICA: Franta oklca@ges.cz writes on his Oct activity -- I was QRV in the second part of the ARRL EME Contest only on 23 cm. I worked 52 QSOs and made 7 initials with KL6M, LA2Z, UA3DJG, K1RQG, I0UGB, UR5LX and DL1HYZ to bring my initial total #165. The QSO with W5LUA was my thousandth EME QSO! The conditions on Sunday were good, but there were also good tropo conditions at this time, which can be the problem when the antenna is at lower elevations.

PY2MJ: Guilherme guilherme@designgroup.com.br was QRV on 23 cm with an AZ-EL mounted 2.4 m dish, horizontally polarized path feed and 38 W DEM PA. Using this setup and no preamp – just an IC1271A - he easily QSO'd G4CCH and OE9ERC on JT65B, but has since burnt out his PA. He is QRT until he finds replacement transistors (2 2SC3542).

RW3BP: Sergey rw3bp@co.ru write about his first steps toward 76 GHz EME – On 6 Oct I tried a first attempt to measure sun and moon noise on 77.5 GHz. The weather was windless and good enough to do measurements. The best sun noise was at 29 degs elevation, 5.8 dB; at 22 degs 4.2 dB; at 10 degs, 1.6 dB; and at 6 degs, 0.5 dB. The best moon noise was 0.53 dB at 35 degs. I used a 2.4 m dish. My NF was 6.5 dB with no filter in front of mixer and no IF suppress. It is easy to see that long distance EME will be a big problem on this band due to the very high losses in atmosphere at low elevations. Unfortunately I have no real power for EME yet. So this test is a very preliminary.

RW1AW: Alex's rwlaw@appello.de Oct ARRL contest results – I made all QSOs on random CW except for two on SSB (with F6KHM and DK7LJ). On 1296 my score was 60x31 and included 12 initials: LA2Z, K1RQG, EA3UM, W2DRZ, G4DZU, VA7MM, N2IQ, DL1HYZ, JA8IAD, UA3DJG, ON5RR and NA4N. On 432 I was only QRV for a short time (~2 hours) and scored 13x10 with one new UT5DL. I plan to fabricate a new rotary dual dipole feed for the next weekend. In the final leg I will be QRV on 2 m, 70 cm and 23 cm.

SP7DCS: Chris' sp7dcs@wp.pl 70 cm report -- I was QRV in the Oct part of the ARRL Contest in the CW random (unassisted) class. I spent most of time on 2 m, but I was OSYing to 70 cm from time to time. On the first pass I found condx poor. WX was not good and I had a lot of water on antennas and open wire feedline. The Moon was not visible, so could not my calibrate rotor. I heard few stations with weak signals. It was much better on the second pass. I heard HB9Q with huge signal - much louder than the day before. He got my callsign after just one QRZ and we QSO'd for my initial #2. Few seconds after, OH2PO was easily worked for #3. Later I found DL9KR and worked Jan with not need even a single QRZ (dup). During the end of NA window signals was much weaker again. I heard NC1I and called him. After long time calling Frank managed to get my callsign and we made nice QSO for my #4. I also heard DF3RU, SV1BTR, SP6JLW, DL7APV and YO9FRJ. During the contest I used 4 x 25 el yagis, FHX35G LNA and 200 W at shack to 30 m of coax. I plan to be QRV in the final weekend of the contest and will be again looking for big guns on random CW.



UA3DJG/UA3ATS' 23 cm portable EME station with 3 m stress dish

<u>UA3DJG:</u> Nick (UA3DJG) <u>ua3djg@mail.ru</u> and Oleg (UA3ATS) <u>kazz@inbox.ru</u> are set up for portable EME operation on 1296 -- After almost a year of preparation, we were QRV on 1296 EME under the call UA3DJG in Oct part of the ARRL contest. The station consisted of a portable 3.6 m stressed dish with f/d = 0.4 and DFC septum/choke horn feed, HB transverter (2 m/23 cm), PA with 300 W out and 36077 LNA. We went to KO85xf and during 8 hours of operation made 8 contacts (all on random CW). QSO'd were HB9BBD, G4CCH, OK1CA, SM4DHN, HB9SV, HB9Q, RW1AW and OH2DG. On the afternoon of 15th, we had very bad WX and our dish was blow over by a wind blast just before the US window. The parabola surface damaged and our gain appeared down by about 3 dB. So, we decided QRT. We plan to be active again in Nov with a repaired dish.

<u>UA3MJB</u>: Nik <u>ua3mbj@rambler.ru</u> in KO88sa was active on 23 cm in Oct. Using a 39 el horiz pol loop yagi and 20 W with 16 m of the cable QSO'd OE9ERC (-20/-27dB) on JT65B. He also copied K2UYH (-22 dB) on JT65C [but was not detected by me]. Since then he has switched to a 3 m dish and now should be more easily worked.

VE6TA: Grant ve6ta@telusplanet.net had his best weekend ever in the ARRL EME Contest − Being in the far west usually makes it quite difficult as the European stations tend to lose interest after a few hours of operation with the lack of stations in NA and Asia. I managed to stay awake and operated on 432 CW the first pass and on 1296 CW the second. Initials were on 432 N1BUG for #116, and on 1296 K1RQG #132 and LA8AV #133. Every year the signal strengths on both bands continue to amaze me. It is getting to be that it is not a weak signal contest anymore with the average station pounding in here 10 to 20 db over the noise. Many (579's) and (589's) were given out and almost all stations were speaker copy. My total on 432 is 23x18 so far. 1296 yielded 40x27. I hope to dig a little bit deeper in Nov for those I may have missed due to QRM or timing.

VK7MO: Rex rmoncur@bigpond.net.au wants to try JT on 13 cm -- My aim has been to get the last dB out of the system for QRP EME. Having achieved 5 W on 23 cm, I would like to go even lower on 13 cm. In discussions with K1JT, he agreed that relying on AFC will never be quite as good as getting the frequency right in the first place. So the way I have gone is to GPS lock my rig to remove the rig's instability. If I can also automatically correct my rig for Doppler then I hope I can get the last dB or so out of the system for QRP. Of course it will only work if the other station has a similar set up. VK3HZ is setting up in a similar way so we can test it. In K1JT's case, he wants to make the system universal to cope with normal non GPS locked rigs and those who cannot automatically correct for Doppler. From my echo testing at 23 cm I see significant amplitude variation and frequency spreading due to libration and this means the AFC system is trying to fit a curve to something that is noisy in both dimensions. This will be much worse at 13 cm. But with Automatic Doppler correction of the rig, I at least have the curve right and the absolute fit is much more likely to be right with an average fitted through the libration amplitude peaks. While the individual tones that convey the message will also suffer libration frequency spreading and amplitude variation, the nature of the Read Solomon coding is that it has sufficient redundancy to cope with up to 80% of incorrect tones, so I think there is a lot of potential for benefit. How much I won't know until I try it.

W5LUA: Al al ward@agilent.com also tried some measurements on 76 GHz --After Sergei's success, I decided to try a DB6NT harmonic mixer thanks to W0EOM and a W2IMU horn made by WA5JAT. Since I had no idea as to how well the horn and mixer worked by themselves, I fed LO power out to the dish from a signal generator and varied the LO frequency such that I could measure sun noise from about 76 GHz to 81 GHz. As it turned out, my best sun noise was only 1.1 dB and seen at about 79.8 GHz. This number is probably optimum for my mixer and horn and maybe even O2 absorption. Not much, but it is a start. My antenna is a 2.4 m offset fed dish with a 0.12 deg 3 dB beamwidth! My DB6NT mixer is fed from one of W0EOM's 13 to 39 GHz multipliers. Based on Sergei's measurements, I guess my DSB NF to be about 16.4 dB. 2 dB of which is my 2M IF NF.

W8TXT: Mike <no e-mail> had a good weekend and worked 12 during contest on 432 -- I had fun and no major problems. Initials were completed with K1FO, N1BUG and JA6AHB. I had 9 *gotaways*: FR5DN, KU4F, DF3RU, OE5JFL, SM3AKW, 7M2PDT, K4EME, SV1BTR and K6JEY.

WA5WCP: Paul paul.perryman@lmco.com wants everyone to know that he is still very much in operation -- The Oct newsletter reports that I had a fire... It wasn't me! My mini expedition on 7/8 Oct went pretty much as planned. I made 5 QSOs and was able to show what EME is about to a bunch of guys. It was a good time. Contacted were G3LTF, OE9ERC, K5JL, W5ORH (Jay's XYL) and K5PJR. Mostly I wanted to get some of the younger set to see what the EME

thing is about. We had quite a few in that category looking it over... They were pretty blown away. That "you're kidding..." reaction is always fun to watch.

WW2R: Dave ww2r eme@g4fre.comreports on his Oct activity -- During the Oct leg of the ARRL contest worked 20 stations. Initials on CW were HB9BBD for #43*, SM4DHN #44*, HB9SV #45*, LA9NEA #46*, N2IQ #47*, K1RQG #48* and on JT65C VA7MM (-18 dB) #49*. CWNR were W7BBM, W2DRZ, JA8ERE, LA8AV, JH5LUZ, K9BCT, OE9ERC and OK1DFC. Conditions were much better on 1st day than on the second. I got an FT847 as anniversary present, which I tried during the contest. Initially I had TX noise troubles on JT due to the way the PTT and audio multiplexed into DATA connector. The problem was solved by using opto-isolator on PTT line. The optional International Radio IF filters make it a completely different radio. I stole the CW filter from my FT1000MP - same part number. I will not be on for the final leg as I will be in UK attending/talking at the Martlesham Microwave Round Table. I presented a talk a MUD on "Backyard Microwave Eme; What They Didn't Tell Me". If you are interested you can find it on my web site at http://g4fre.com/mud_2006_eme.pdf.

ZS6AXT: Ivo's zs6axt@telkomsa.net news for Oct -- On Sunday 7 Oct I worked on 23 cm RW1AW, VK3UM for initial #215, LA8AV #216, ES6RQ, SP6JLW #217, G4CCH, LA9NEA, SM4DHN, G3LTF, ES5PC and OE9ERC. Heard were VK4AFL, DF9QX and some weak stations. There was not that much activity, but good signals with perigee conditions. The next weekend during the ARRL Contest on 14 Oct I worked OK1KIR, LA8AV, HB9BBD, LA9NEA, G4CCH, SM3BLN, K1RQG, IW2FZR, SM6CKU, RW1AW, SP6JLW, G3LTF, SM2CEW, K5JL, SM4DHN, K5GW, N2IQ and K2UYH, and on 15 Oct VK3UM, HB9SV, OK1CA, OK1DFC, OE9ERC, JH5LUZ, HB9Q, JA6AHB, DL1YMK, IK3COJ, OH2DG, LA8LF, OZ6OL, F6KHM, VE6TA and OZ4MM. Heard were N2UO, EA3UM, W2DRZ, RW3BP and OH2DG on first day and IK1MMB, DL4DTU, DL1HYZ, DL2HWA, VA7MM, UA3DJG, NA4N and W5LUA on the second day. Some of these were CWNR. I especially tried to IZ1BPN attention without success. Conditions were not as good as the previous weekend, but still not bad. I hope to make few of those CWNRs and some more initials in next leg. NA stations please remember that my western moon window will be very short. I have now installed frequency standard GPS locked and receive the detailed GPS data too. It gives my grid as KG33vv 82. Does anyone know how the "82" works? Regarding the NL, I do not like the "new system to identify initials". I believe there should be simply two categories for each band. I do not worry about "total" initials, just separate CW/SSB and digital listings. This way will be quite clear and should eliminate any problems. "Total" is meaningless!

K2UYH: Oct was not a very productive month with no initials. I tried JT65C skeds with OH1JCS on 70 cm and UA3MBJ on 23 cm with nil copy on my end but good copy on theirs. On 7 Oct on 432 I caught at 0404 NC1I (55/55) on SSB and 0428 VE6TA (569/569). In the ARRL contest I thought conditions were pretty good, but my QSO count was much lower than equivalent stations. I worked on 14 Oct on 1296 at 0708 HB9BBD (589/579), 0714 OK1KIR (559/559), 0727 G3LTF (569/579), 0733 SM2CEW (569/569), 0746 N2UO (559/559), 0749 SM6CKU (569/569), 0753 K5JL (579/579), 0757 G4CCH (579/579), 0800 UA3MBJ nil on JT65C, 0826 HA5SHF (559/559), 0830 K5GW (589/579), 0836 LA9NEA (559/569), 0847 ZS6AXT (559/579), 0846 SM4DHN (579/569), 0909 K5PJR (559/569), 0929 N2IQ (569/579), 0938 NA4N (559/559), 0948 DL1YMK (559/559), 0954 LA8AV (559/569), 1003 W2DRZ (559/559), 1010 RW1AW (559/539), 1021 OZ6OL (559/559) and 1047 W7UPF (559/569), switched to 432 at 1111 NC1I (599/579), 1119 G3LTF (559/559), 1124 UA3PTW (559/559), 1132 DF3RU (559/559), 1136 KL6M (569/559), 1142 OH2PO (579/579), 1148 OK1DFC (559/559), 1203 K1FO (559/559), 1222 SM3AKW (559/559), 1233 EA3DXU (O/O), 1256 OE5JFL (559/569) and 1313 G4RGK (559/559), and on 15 Oct 0755 DL7APV (569/559), 0811 W8TTX (559/559), 0835 HG1W (559/559), 0847 DL9KR (589/579), 0857 RW2PX (559/449), 0856 SP6JWL (559/559), 0909 SV1BTR (559/559), 0924 N9AB (559/569), 0947 UT5DL (O/O), 1012 DL7UDA (559/549) and 1040 SM2CEW (559/559), then back to 1296 at 1112 LA8LF (559/569), 1120 OK1CA (569/569), 1126 ES6RQ (559/559), 1135 OE9ERC (569/559), 1146 K1RQG (579/569), 1151 RW1AW (569/569) DUP, 1158 VA7MM (559/559), 1203 HB9SV (589/579), 1211 ON5RRG (559/559), 1234 OK1DFC (579/579), 1240 OE9ERC (569/559) DUP, 1248 VE6TA (559/559), 1259 K4QI (559/559), 1305 SP6JLW (559/559), 1324 WW2R (559/559), 1330 IK2MMB (559/559), 1350 W7BBM (55/55) on SSB and 1733 VK3UM (559/559) for a total on 432 of 23x16 and on 1296 of 38x42. I also had a nice 3way SSB QSO with K1RQG and G3LTF.

<u>NETNEWS BY G4RGK: DL1YMK</u> is now planning his 2007 EME trip, but cannot announce the destination until it is confirmed. Michael has a 300 W PA and has built a Super VE4MA feed and has a Septum feed as well for 13 cm. <u>W4TJ</u> is still collecting parts for his dish project and is hoping to move forward

soon on EME. WB7QBS heard stations on 70 cm during the contest. He called NC1I, but got no reply from Frank. He has now dismantled N9AB's antenna and has it ready for shipment. **SM2CEW** worked about 55 stations in the Oct part of the ARRL contest. K2EVW is planning to be on 432 next year with 8 x 19 el RIW yagis. Richard's e-mail is rsubin@swva.net. ZL1WN is planning activity on 432 EME soon. K9BCT's dish was damaged during the hurricanes last year and needs to be taken down to straighten things out, but was active on the second pass and gave out a number of QSO. Randy notes that his state is Florida. RA3DQT and UA3DHC may soon be on 23 cm EME. SM4IVE has completed all the stick welding on the ribs for a new dish. Lars plans to get the ribs galvanized as soon as possible. N9AB is now QRT after 25 years of EME operation. LA2Z is a new station QRV on 23 cm EME with a 4.2 m dish and 300 W. W7EME has a 5.1 m dish and VE4MA feed prepared for tests on the moon. **G4CCH** is planning to get on 13 cm EME. **AL7RT** (x-K5WXN) is getting ready for 23 cm EME with a 12' dish. He copied K1RQG, G4CCH, K2UYH and G3LTF on SSB, along with lots of other stations during the contest. W2UHI did not get on for the contest due to bad WX. WB2BYP is running a new PA and worked K5JL the first night, but added no QSOs the second night. John is interested in skeds for the 4/5 Nov weekend. K5SO was on a short time in the contest and worked K5JL, SM2CEW, K1RQG and SM3LBN. **K5JL** reports working quite a few stations in the contest, but had PA problems the second night. W2DRZ worked 29 stations in the contest on 1296. W4SC copied K1RQG with only a 23 cm feedhorn! KQ4PI is getting on 13 cm EME with a 10' dish and 100 W PA. WA9KRT reports nil heard from DL9KR in test on 6/7 Oct. **VE4MA** was on 23 cm for the contest, but had problems with bad WX. K4EME was active in the contest on 70 cm, but reports no new initials. **W9IIX** is recovering from his devastating fire, but says it will take months to clean up. One bright spot is that his GS23 cavity and tube looks like they

FOR SALE: N8CQ has 2 large scaler rings and 3 Septum kits still available. N8XA is looking for 20' dish. K4PKV is cleaning his garage and has the following of possible interest to EMEers: 1) Bird Wattmeter (US Army TS118A/AP) with 500 W load rated for 20-1400 MHz (it's huge/25 lbs) for \$US150+S, 2) > 30 2C39A tubes both ceramic and glass. Most have been checked and all are clean, also some 23 cm plate and grid lines, some finger stock, plate line insulator material, and one Solid State Technology VCXO, frequency unknown – the lot for \$US200+S (10 lbs), 3) Slotted line and HP 415E SWR meter - worked well the last time I used for \$200+S (35 lbs), 4) Decibel Products directional power samplers for use to 1 GHz for \$50+S, and 4) Icom IC 1271A, shop manual and antenna mounted preamp – make an offer. Contact Dick at rhattaway@rocketmail.com WA2BYP is looking for a copy of a GR1236 manual. Contact John at storyavenue@hotmail.co.

ARRL EME CONTEST RULES: Judging by the reflectors there seems to be a great deal of dissatisfaction with the current interpretation of the ARRL contest rules limiting the use of Loggers during the contest. Many JT operators want to be free to use the loggers and clusters as they see fit. [A similar level of concern has not been expressed in the reports to this NL, but what the ARRL does with the contest rules obviously affects activity on 70 cm and up]. K5GW has proposed a plan for separate CW and Digital contest weekends similar the ARI EME Contests. This proposed rules change has received favorable responses from many EME operators and could be an indication of how the contest could be changed in the near future. To aggravate the situation a bogus report attributed to K1JT was sent to the WIA claiming an EME2006 proposal for digital ONLY frequencies had been agreed upon. It has been proven that this false report could not have come from Joe, but it has propagated across the world and now appears in Amateur Radio Newsline on QRZ.COM. The report has upset many people, as no agreement or even discussion of JT operating frequencies took place at EME2006. It is sad how the mischief a few can upset things.

FINAL: Just before posting this NL I learned of the passing of N7AM. Jack was first licensed in the 1930's and a long time 1296 EMEer with his 30' dish. Jack had been battling congestive heart failure for several years Unfortunately this time he was unable to recover from a serious arrhythmia condition. Jack will be deeply missed by all of us. Jack was 85.

W1QA can supply copies of the 2 DVD's from the 2006 Würzburg EME conference to anyone in Canada or the US for \$5 US/CDN to cover the cost of postage an handling - either currency or checks in US dollars. Checks can be made out to: W1KK Wireless Association, Inc. Please include your call and shipping address with your order. Send to: W1KK Wireless Association, Inc., Bob McCormick, PO Box 2210, Springfield MA 01102-2210. If you have any questions email to EME *at* W1QA.COM.

That the news. Please keep the operating and technical info coming. I shall be looking for you on 70 and 23 cm during the contest. GL & 73, Al - K2UYH.