

## 432 AND ABOVE EME NEWS SEPTEMBER 2006 VOL 34 #9

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@ceee.org](mailto:a.katz@ceee.org)  
PROD/MAIL: BRIAN MULLANEY, KB2TIS/TOM KIRK, KA2VAD (609-584/8424), E-MAIL [mullaney@mecc.edu/kirk@lintech.com](mailto:mullaney@mecc.edu/kirk@lintech.com)  
NETNEWS EDITOR: G4RGK, DAVID DIBLEY, E-MAIL [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) (based on K1RQG's Netnotes and Reflector News) & CW LISTS  
EME NETS: 14.345, 10 AM ET SATURDAY AND SUNDAY (AFTER VARONET ENDS ON SUNDAY)  
NET CONTROL AND SKEDS CORDINATOR: JOE, K1RQG, TEL (207-469-3492), E-MAIL [k1rqg@aol.com](mailto:k1rqg@aol.com)  
EME DIRECTORY: <http://www.dl4eby.de/>, DL4EBY/DK0TU, KLAUS TIEDEMANN, TEL (49-30-7955467), E-MAIL: [tklaus@snafu.de](mailto:tklaus@snafu.de)  
NL EMAIL DISTRIBUTION and EMAIL LIST CORD: WARREN, W2WD [wbutler@comcast.net](mailto:wbutler@comcast.net) [TXT OR PDF OR "ON WEB" NOTICE]  
EME STANDINGS: DAN GAUTSCHI, HB9CRQ/HB9Q E-MAIL [hb9crq@hb9q.ch](mailto:hb9crq@hb9q.ch) OR SEE HIS WEBPAGE AT [www.hb9q.ch](http://www.hb9q.ch).  
THE NL WEB VERSION IS PRODUCED BY W6/PAOZN AND AVAILABLE AT <http://www.nitehawk.com/rasmit/em70cm.html>

**CONDITIONS:** I don't like to use superlatives every month, but it does seem that every month is better than the last! We all expected the EME2006 Conference in Wurzburg to dominate Aug... And the gathering more than met expectations – see the report that follows. TNX to Rainer for a *wonderbar* job. What was not anticipated was the EME marathon by WA5WCP that put the states of RI, CT, VT and MA on 23 cm and kept the moon illuminated with RF between 17 and 23 Aug. Paul even found time to get some 13 cm EME in from MA. Our thanks to WA5WCP (and his supporters) for a tremendous effort and a great success. I know 432 suffered as a result of all the upper band activity. The turn out for the Aug 70 cm Activity Time Period (ATP) was the smallest I have experienced. The ARRL Microwave EME Contest on 16/17 Sept will again focus attention on the higher bands, so let's make a special effort to be active on 432 in Sept. (There is no 432 CW ATP in Sept, Oct and Nov because of the ARI and ARRL EME Contests).

**EME2006 IN WURZBERG:** This conference was one of the best attended with 140 OMs and 52 XYLs (and accompanying persons) for a total turnout of 192. (The list includes: DB6NT, DD2ZB, DF1OI, DF1VH, DF2ZC, DF3RU, DF9IC, DG5NFF, DG7GN, DH4FAJ, DH5NAH, DJ0FW, DJ3FI, DJ3QD, DJ5BV, DJ5HG, DK2PH, DK3EE, DK3UC, DK3WG, DL1YMK, DL2HWA, DL1HYZ, DL1HRX, DL3IAE, DL3IAS, DL3OCH, DL4DTU, DL4YEQ, DL7APV, DL7UDA, DL7URH, DL8NSB, DL8YHR, DL9JY, DL9KR, DM2BHG, EA3DXU, EA3BB, EA3XU, EB3GME, F1EHN, F2TU, F3VS, F5JWF, F5SE, F5TTU, F5VHX, G3LQR, G3LTF, G4DDK, G4HUP, G4NNS, G4RGK, G4YTL, HB9BBD, HB9CWB, HB9BHU, HB9Q, I1ANP, I2PHD, I5WBE, IK2FZR, IK2MMB, IK3COJ, IW3HVB, JH1KRC, JH5LUZ, JR5BMM, K1DS, K1JT, K2UYH, K5GMX, KB0G, KL7IZW, N2UO, N6TX, NA4N, W1GHZ, W1QA, WA6KBL, WA6PY, WA7CJO, OA4CRK, OE5JFL, OH1FF, OH3MCK, OH1LRY, OH6CQ, OK1KIR, OK1DAK, OK1DAI, OK1DFC, OK1DST, OK1CA, OK1VAO, ON4BCB, ON4CO, ON5GN,

ON6UG, ON7UN, OZ4MM, OZ6OL, OZ7LX, PA2CHR, PA2DW, PA2KW, PA3CMC, PA3CSG, PA3DZL, PA3FPQ, PA3FXB, PA4EME, PE1BTX, PE1ITR, RU1AA, RW3BP, UA3TCF, SM0FOB, SM2BYA, SM3AKW, SM3JQU, SM4IVE, SM5BSZ, SM5LE, SM6CKU, SM7GVF, VE4MA, VE6JW, VK3UM, VK4AFL, VK4CDI, VK5MC, YO4FRJ and ZS6AXT – see the group photo). There were so many attendees that there was no way that anyone could send time with everyone! The following report from Barry, VE4MA, summarizes the conference well -- I am composing this on a plane coming back from Germany and wanted to share my experience. The conference was an outstanding success. There were more than 5 VKs, an OA4, some JAs, but a total absence of W5s. The technical and "family" programs, hotel, food were excellent. Wurzburg certainly was an excellent location. I really enjoyed the people... just a great group of people! Rainer should be very proud of the outcome. There were no less than 5 proposals of locations for the 2008 conference including 2 in the US, Australia, and Japan. The overwhelming favorite and choice was Florence, Italy. There was discussion of the practice used to set the transmitter frequency for a sked. The group was 100% behind the continued practice of setting the TX sked frequency WITHOUT any compensation for Doppler. Of course in responding to a CQ, the mutual Doppler value should be used to correct the TX frequency. There was NO discussion of the standard use of circular polarization above 13 cm, although one of the conference papers does discuss experimental results that show benefits. Thus the endorsement by previous conferences for the use of circular pol remains. There was a very interesting presentation by Joe, K1JT on JT65. He has made some improvements that should make it usable at 13 cm. There was a group, Alberto (I2PHD) originator of Spectran, Lief (SM5BSZ) of LINRAD fame and Jeffrey (WA6BKL) who are looking at producing a high performance SDR receiver with software that will attempt to reduce the spreading of microwave EME signals and improve copy.



EME2006 – Official Group Photo – 192 attended

**WA5WCP's DXPEDITION STORY:** The system consisted of a 10' 0.4 f/d TVRO dish, IC-910H with 30 W DEM brick driving 4 X 7289 PA with 300 W out, 0.25 dB NF W7CNK preamp, square septum feed with round scalar ring on a 17' trailer and Chevy 2500 3/4 ton Pickup, over cab camper. The hardware was supplied by W5LUA, K5GW and WA5WCP. The software for tracking, logging, and keying was provided by K5GW. Setup/deploy requires approximately 3 hours. I completed testing of the high power amp on 5 Aug. On 7 Aug K5GW and W5LUA visited and Gerald made some mechanical repairs to the feed. The dish and mount were complete. On 9 Aug I departed at 1730, but

had a flat tire and only achieved 190 miles the first day. The next day I did much better and was able to make it into TN. The following day, 11 Aug, I ran into a little hold up due to a massive storm that halted travel, but still made it to W1JJ in Warwick, RI on the afternoon of the 12<sup>th</sup>. (A big thanks to my nephew, Andrew who helped a bunch with all the traveling tasks and setup in RI). That evening, 13 Aug, we were QRV on the moon on 1296 and worked: K9SLQ, LX1DB, K5JL, DL1YMK, G4CCH, DJ9YW, OK1KIR, OZ4MM, K0YW, K5GW, W5LUA, G3LTF, F2TU, OE9ERC, K2UYH and VE6TA for 16 QSOs with quite a few random contacts. On 14 Aug operation was not quite as

successful and only 6 QSOs with OH2DG, SM6CKU, N2IQ, HB9Q, HB9SV and SM2CEW were completed. There were some very nice loud signals, but quite a few could not be identified and a lot more ignored the skeds. Sorry I could not sort out more from the mess. Then it was on to CT and the front yard of Dennis, K7BV/1, where I operated as W1AW/1 - what a great experience to use the call I first heard as a novice in 1969! Stations worked on 15 Aug were OK1KIR, SM2CEW, OE9ERC, LX1DB, DJ9YW, K5JL, HB9Q, K5GW, SM6CKU, DF3RU, F2TU, G4CCH, OZ6OL, W5LUA, G3LTF, K0YW, K2UYH, W2UHI, W7BBM, VE6TA and N2IQ, and on 16 Aug HB9BBD, OZ4MM, OK1DFC, HB9SV, OH2DG, DF3RU, WA6PY and K9SLQ. While in CT we had a deluge (12 hours of rain) that made a real mess. (My apology to Dennis for leaving the ruts). It was then on to VT. Getting from CT to VT was a challenge. I got stuck in K7BV's front yard and as a result arrived in VT a bit late. I met W1QA there and had a super tour of his work QTH (WWLP). Bob was a huge help keeping me awake and navigation to NIUR's QTH in Vermont. Ed has an absolutely awesome place. On 18 Aug we made 19 QSOs with OK1KIR, OK1DFC, SM2CEW, SM6CKU, HB9SV, K9SLQ, OZ6OL, OZ4MM, LX1DB, DJ9YW, W5LUA, K0YW, N2IQ, W2UHI, K5JL, K5GW, G4CCH, W7BBM, and WA6PY, and on 19 Aug with 6 stations, G3LTF, OE9ERC, OK1CA, OH2DG, PA3CSG, HB9BBD and VE6TA. Then I had to be off to MA. As rain was expected any thought of 2304 activity was put off until MA. We arrived at the NC1I's QTH on the afternoon of the 19<sup>th</sup> and began setup immediately in a light rain with W1QA and NC1I assisting. Bob and Frank were a big help and repaired some minor damage to dish and feedline problems. We worked on 20 Aug HB9BBD, G4CCH, OE9ERC, SM2CEW, OK1KIR, OK1CA, OZ4MM, PA3CSG, OK1DFC, HB9SV, DJ9YW, K0YW, K9SLQ, K5JL, K5GW, W2UHI, VE6TA, W5LUA, W7BBM, F2TU, WA6PY and KL6M, and on 21 Aug SM6CKU, N2IQ, OZ6OL and OH2DG. As a bonus I tried some 13 cm operation. We made the equipment switch literally hours before my planned departure for TX. The system had never been tested before, although I had checked sun noise and confirmed TX output power. I QSO'd W5LUA, WD5AGO, OK1KIR, and WA6PY on 21 Aug. To be fair to others, I hung around another day and on 22 Aug (my birthday) worked F2TU, OE9ERC, SM4DHN, and heard F2TU calling CQ on SSB. I called him and completed with CW on my end. This was a truly wonderful way to finish. TNX to Frank, et al for a great time in MA. I arrived safely back home on 25 Aug with a total travel of 4,145 miles, 102 contacts on 1296 CW and 8 contacts on 2304 (and a oneway on SSB). 13 countries and 10 US states were worked with a total of 32 stations participating. Thanks to everyone who helped both on my team and the interested parties, and also all the ops on the *other end*. It was a really excellent way to spend my vacation. I am now planning my next portable EME for 2007.



**WA5WCP on the road**

**406EME:** Bodo (DL3OCH) [dl3och@gmx.de](mailto:dl3och@gmx.de) plans to put Montenegro on 23 cm and maybe also 70 cm EME for the first time at the end of Oct -- The call will be 406EME. On 23 cm I will again use my 59 el yagi, IC-7000, transverter with 83 W (to the dipole) and Laptop for JT65. I will leave on 28 Oct and go along the Croatian coast down to Dubrovnik, then cross the border to Bosnia and finally to Podgorica (the capital city of Montenegro). [Unfortunately this will put Bodo in Montenegro right when the moon is at its most southern declination and limit activity primarily to Europe]. The first EME QSO can be on Saturday evening from 9A and Sunday evening again from 9A or maybe T9. I want to be in Podgorica (YU6) on Monday to pick up my license. I plan to stay in Montenegro until Thursday. I will try to work 23 cm EME on Monday and Tuesday. Afterwards, I will try 70 cm. I will have only one yagi from DL7APV and a 100 W PA from DL8YRM. However, my focus will definitely be on 23 cm and 70 cm would be a nice plus. On the way back to Germany, I might there may be time for another EME night from 9A or T9. I have already contacted the president of the radio club regarding a license so the activity will be valid for the DXCC.

**F2TU:** Philippe [f2tu.om@neuf.fr](mailto:f2tu.om@neuf.fr) reports goods good QSOs with WA5WCP/1 (539/559). And also contacts G3LTF (569/589), W5LUA (569/8579), DL1YMK (559/569), OK1KIR (569/579) and VE6TA (569/579) on 1296.

**G4DZU:** Doug [doug.parker@btinternet.com](mailto:doug.parker@btinternet.com) writes -- It's been some time since I have been active on 1296 EME. Thanks to the encouragement from G4CCH and VE1ALQ, I have finally got the station working again. I have also upgraded to allow JT65 QSOs. The reasoning behind my adding of JT65 is my failing hearing, I've been advised not to burn my ears out with any more white noise. Having now had a number of JT QSOs, my conclusion is that contrary to popular belief, it's not as easy as shelling peas on 1296. It does help if you have good frequency stability and timing accuracy. And if working skeds, frequency accuracy is needed as well. But even with all of this, random QSOs are up another league of difficulty. I have worked on JT65C, on 21 June G4DDK (-22 dB), SM5LE (-23 dB) and G4CCH (-16 dB), and on 20 July OK1KIR (-15 dB), random QSO OH4MCK (-22 dB) who was using 4 yagis, RW3BP (-18 dB) and WW2R (-16 dB). Also worked on CW on 21 July ZS6AST (539), SM6CKU (559) - both were loudspeaker copy. My station is 400 W to a 3 m dish, an AGO preamp with frequency and timing via a Z3801 GPS standard.

**G4HUP:** Dave [g4hup@btinternet.com](mailto:g4hup@btinternet.com) is now QRV on 23 cm after 3 years operation as DL4MUP -- I am now active again on 23 cm from my own station in JO02pc. My first QSO was on JT65C with G4CCH. It was followed a few days later (15 Aug) by a CW contact (539/549). I also CWNR WA6PY (549) and heard F2TU on SSB and W1AW. Later a tentative sked with VK7MO did not work out as I discovered that the window is much further north than I had realized. When I cut back the foliage in the area around the dish to get a window in that direction, I did not cut enough - my easterly window starts at about 60 deg. The station is a 2.4 m dish, RWST (Septum) feed, 0.28 dB LNA (NE32585 in WD5AGO circuit) and 200 W SSPA. The next day I spent a couple of hours mounting the PA remotely at the base of the dish in a large plastic gardening enclosure. I am now delivering virtually the whole 160 W actual output to the feed. With it in the shack, only about 120 W is at the feed. I need to find out why it only delivers this power (saturated) as the spec states 240 W! I then worked all my skeds and 2 random contacts, all on CW. Worked were at 0730



**W5WCP/1 in MA at NC1I's QTH**

K2UYH (539/449) #2, 0830 WA6PY (449/M) #3, 0900 G3LTF (539/O) #4, 0915 F2TU (559/529) #5 on random, 0930 SM6CKU (539/O) #6, 1000 W5LUA (439/O) #7 and 1024 OK1DFC (O/O) #8 on random. Details of my dish design/installation can be seen at <http://g4hup.infinites.net>, including info on my motor driven feed positioner. It's great for peaking sun noise from the shack! Keep those old inkjet printers! I plan to be QRV during the next AW and am interested in skeds.

**G4RGK:** Dave [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) is now about operational on both 70 cm with his yagis and on 23 cm with a 3.8 m HB stressed dish held together with fishing line and #2 carp hooks. On 23 cm he has heard 10-15 stations with good signals including DL1YMK while calling WA5WCP/1. Presently Dave has a 0.4 dB NF preamp and N6CA cavity PA.



**G4RGK's new 3.8 m stress dish**

**G8VHI:** Reg [Regwoolley@aol.com](mailto:Regwoolley@aol.com) is now QRV from IO92fm on 70 cm with modest power -- After many years I now have 4 x 23 el Wimo yagis with no elevation on my tower and 70 W at the feed. I am hoping to work some of the big guns on CW. I have no interest in JT65. It has been difficult here and my operation has been delayed as a result of family illness. I am, I hope, just about coming over that hill and going down the other side! I think a number of the EME gang will remember me from Thorn when I was helping out Geert. There are still lots to do radio wise. I will try over the coming year to slowly upgrade the system. The next step is a better H frame with elevation, and then more power.



**G8VHI's new 4 x23 el Wimo yagi array**

**GW4DGU:** Chris [chris@chris-bartram.co.uk](mailto:chris@chris-bartram.co.uk) reports he has completed a couple of easy 10 GHz QSOs in Aug with WA6PY and DF9QX (2.4 m dish to 2.4 m dish) and has been able to detect his SSB echoes -- If anyone is interested in skeds, please contact me. I still have a minimum elevation of 30 degs due to dish mount limitations, but apart from this, I have an unobstructed view of the Moon. My system is 2.4 m dish, 35-40 W at the feed and 0.6 dB NF preamp.

**IQ4DF:** CRBR club station [iq4df@crbr.it](mailto:iq4df@crbr.it) is QRV on 10 GHz and during Aug corked HB9BHU (529/559) and VE4MA (O/O). Heard were F2TU, WA6PY, F5JWF and I4BER. 6 signals were seen in WINRAD window. They hope to see the same activity during the Italian EME contest.

**JH1KRC:** Mike [jh1krc@syd.odn.ne.jp](mailto:jh1krc@syd.odn.ne.jp) sends news of the possibility of "Big Dish" operation from JA. A 32-m Cassegrain antenna made by Mitsubishi Electric Corp. is being taken out of service and could become available for

EME. In 1963 the first USA-JA TV signals were successfully sent using the RELAY-1, a low orbit, communication satellite using this dish. The up-link frequency used is 6 GHz. This should allow EME operation on 5760 MHz with a little modification. For operation at 432/1296 they must use 2.9 m diameter about 10 m in front of the main reflector that cannot be removed. [This reflector should not be a problem when illuminated with an appropriate feed located at or near the vertex of the dish, and could be increased in size, if needed]. Recently, 18 JA EME operators (see picture) got together at the KDDI-Ibaraki Satellite Communication Center in QM06 to see the dish and discuss its future.

**K0YW:** Bruce [k0yw@frontier.net](mailto:k0yw@frontier.net) was active on 23 cm in Aug -- I made a clean sweep of WA5WCP. I also QSO'd during the AW VE6TA (579/579) and D11YMK (559/569), but nil in a sked from WW2R -- strange as Dave is usually loud. Later I QSO'd him and also G4CCH among others.

**K5SO:** Joe [k5so@valornet.com](mailto:k5so@valornet.com) is now QRV on 70 cm a circular waveguide feed (20" dia x 42" long) w/circular scalar ring (0.4 x 0.25 lambda) with linear polarization (V or H instantly switchable on the fly) and 8938 amp at 1.3 kW -- I'm pleased to report that both of my Aug 70 cm EME skeds with K2OS (539/O) -- good to hear Frank back on again and PA3CSG (559/449) were successful. I can now confirm NM on 70 cm EME for them both!

**K6JEY:** Doug [doughelen@moonlink.net](mailto:doughelen@moonlink.net) sends some notes on his station's status -- I have been working on my 432 array and switching, and this last weekend brought it to operational status. I am also working on putting a 10' dish on my old mount and hope to have it ready by the end of the month. I hope to be on both bands for the ARRL contest.

**KL6M:** Mike [melum@alaska.net](mailto:melum@alaska.net) reports frustration over the WX -- We have had 50+ mph winds for two days and torrential downpour and even lightning/thunder (not common for this part of the world).

**LA9NEA:** Nilsen [la9nea@online.no](mailto:la9nea@online.no) is now QRV on 23 cm EME -- I worked the following CW stations on 12 Aug at 0554 G4CCH (539/449), and on 13 Aug at 0622 G3LTF (539/539), 0628 K0YW (549/549), 0637 VE6TA (539-O/O) and 0718 G4CCH (539/549). Heard but not worked were ZS6AXT, ON7UN, LX1DB, F2TU and OK1KIR - with lots of QRZs. I am using a 2.43 m stressed dish with AZ and EL readout, 500 W SSPA and 0.3 dB NF preamp, but I am switching to a 5.33 m dish, which hopefully will be ready for operation by the middle of Sept.

**MOEME:** Paul [m0eme@qsl.net](mailto:m0eme@qsl.net) was QRV on 432 during the Aug AW, but reports nil results -- This was the first time I've used the system in 2 months. The sky was very cloudy with intermittent rain, so I couldn't check the position of the moon. Even so everything seemed to function fine, but I didn't hear any signals all night.

**OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) has improved his 1296 systems and is hearing signals better than ever before -- I worked on 1296 on 18 Aug at 0734 WA5WCP/1 (O/O) in VT for initial #153 and WAS 20, 19 Aug 0033 VK7MO (O-17dB/O) on JT65 and 0927 RW3BP (559/569), on 20 Aug at 0900 HB9BBD (579/589), 1045 WA5WCP/1 (O/O) in MA #154 and WAS 21, 1121 SP6JLW (559/569), 1126 NA4N (559/569) #155 and WAS 22 and 1131 HB9SV (589/579). I now am up to DXCC 43 and initial #155 on CW. Unfortunately I was not able to be on for WA5WCP in RI and only achieved a partial QSO when Paul was in CT. If anybody know of someone with a reasonable tropo station on 23 cm in RI or CT, please let me know and I try to setup sked for Moonrise with him. I should be able to work a 2 m dish and around 100 W, and am interested in other skeds as well. I worked back on 2 June on 1296 at 1907 CT3/DL1YMK (O/O) for the 1<sup>st</sup> CT3-OK QSO, 1946 IW2FZR (559/569), 1950 DF3RU (559/569), 2005 IK3COJ (559/569), 2030 SM3AKW (559/569), 2139 K5PJR (O/O) #149 and 2154 LA8LF (539/559), on 3 June 1511 RW1AW (569/579), 1554 GW3XYW (559/439), 2019 F2TU (579/569), 2026 OK1CA (559/569), 2042 K5JL (569/569), 2052 G4CCH (579/579), 2055 OZ4MM (579/569), 2110 VE6TA (559/569), 2123 OE9ERC (589/569) and 2154 OK1KIR (559/559), on 4 June at 1917 G4DDK (O/O) and 2005 SM6CKU (559/559), on 16 Aug at 0500 K9SLQ (579/579), 0524 SM3LBN (559/559) and 1102 G4HUP (O/O) #151, and on 17 Aug at 0823 SM5LE (539/539) #152. I worked on 70 cm on 6 June at 2045 9H1MRL (O/O) on JT65 for initial #34\*\* and first OK-9H on 432 and 2140 DK3SE (O-24dB/O) on JT65 #35\*\*, on 8 June at 1810 CT3/DL1YMK (O/O) first CT3-OK on 432, and on 12 Aug at 2238 JA6AHB (449/559), 2243 SP6JLW (559/559) #59 and 2306 OZ6OL (559/559).

**OZ4MM:** Stig [vestergaard@os.dk](mailto:vestergaard@os.dk) writes -- The EME conference was great again and I want to give a big thanks to Rainer. Radio wise I was very pleased to work WA5WCP/P on 1296 at all his stops. Paul put out an excellent signal during his great trip. I also want to thank to W5LUA and K5GW for their

support of this dxpedition. Unfortunately I do not plan to be very active during the next few months as we are doing some very serious house rebuilding, which will take most of my time. I will do my best to be on few hours during the coming contests. I am sorry to say I am far behind on my QSLing, but promise to QSL 100% all already received.

**RD3DA:** Yuri [rd3da@list.ru](mailto:rd3da@list.ru) in KO85pt is QRV 23 cm EME (horizon only) on JT65C with a 2 m dish and about 30-35 W. In Aug he QSO'd G4CCH.

**RW1AW:** Alex [rw1aw@appello.de](mailto:rw1aw@appello.de) was active in June and July on 3 bands (23, 13 and 3 cm) with his greatly enhanced station -- I have added the following initial QSOs since my last report: on 23 cm (8 m HB dish, 320 W at feed and 0.18 dB NF LNA) CT3/DL1YMK, GW3XYW, SM3LBN, G4DDK, SM5LE, DL4DTU, W9IIX, KL6M, LA8LF, VK4AFL and DK7LJ; on 13 cm (6 m HB dish, 200 W at feed and 0.4 dB NF LNA) PA3CSG, DK7LJ and G3LQR; and on 3 cm (6 m solid dish, 30 W at feed and 0.6 dB NF LNA) GW4DGU and I4BER on SSB (58/54)! I was on holiday in Hungary from 10 to 27 Aug, but when I returned on the 27th I had a very nice 3 cm EME QSO with DF9QX (539/529) for another initial.

**SM2CEW:** Peter [sm2cew@telia.com](mailto:sm2cew@telia.com) reports nice contacts WA5WCP/1 [and W1AW/1] -- The dxpedition has been the highlight of my week. Special thanks to W5LUA and K5GW for the equipment etc, and to all the hosts as well, also K1RQG for skeds.

**VE6TA:** Grant [ve6ta@telusplanet.net](mailto:ve6ta@telusplanet.net) reports working WA5WCP in all 4 states on 1296. He also worked G4DDK on 23 cm in two modes and is looking for WB2BYP for a sked. Grant has also been busy on 13 cm and reports the first PA-VE 2300 QSO with PA3CSG.

**W6IFE:** Doug (K6JEY) [doughelen@moonlink.net](mailto:doughelen@moonlink.net) reports the OVRO group is planning to be QRV for the weekend of 9 Sept and the Italian EME contest -- We will be running 60 W at the feed on 1296 and 5 W on 10 GHz. The dish is 40 m in diameter. We will be on at local moonrise (0415) on 1296 and are arranging schedules for 3 cm and are open for more. This will probably be our last activity for quite a while. We are looking forward to a fun weekend.

**W8TXT:** Mike was active during the 70 cm ATP on 13 Aug but worked only K2UYH and N9AB. He heard no one else. Mike is now up to #23 initials and 34 QSOs on 70 cm. He also has 5 Continents and 16 countries.

**WA9FWD:** John [jstefl@wi.rr.com](mailto:jstefl@wi.rr.com) has been fighting noise on 432 for 15 years. He is measuring 1mW of noise power at his antenna. He now has more time for EME and hopes to get back on 23 cm and hopefully 70 cm with a loop feed for his 12' dish.

**WW2R:** Dave [ww2r\\_eme@g4fre.com](mailto:ww2r_eme@g4fre.com) had good results piggybacking on the activity generated by the WA5WCP dxpedition -- Making the most of the stations QRV for the WA5WCP/1 expedition, I worked on 13 Aug OK1KIR for initial #36, ON7UN #37 and DL1YMK #38, on 19 Aug RW3BP #39\* on JT65C, on 20 Aug K0YW #40\* - my first new state since Jan, failed with W9IIX who had rig issues, G4DZU (-22 dB) on JT65C, G4CCH (-9 dB) on JT65C, OK1KIR (-12 dB) on JT65C and WA6PY #42 on random CW for another new state. I heard WA5WCP in all 4 locations 3-4db above my noise floor, but no QSOs with my 200 W. Upping my power to 420 W (temporary rigged up a TH338) for my 20 Aug sked still resulted in no success. 3456 operation in the Sept EME Contest looks unlikely as have to go to UK for my father's funeral [I know you have the sympathy of the EME Community]. I should make it on 2304.

**ZS6AXT:** Ivo [zs6axt@telkomsa.net](mailto:zs6axt@telkomsa.net) reports -- On Saturday 12 Aug. we had very strong winds that prevented operation. I was able to be QRV on Sunday and worked on 23 cm K9SLQ, DL1YMK, OK1KIR, ON7UN, K5JL and G4CCH. CWNr were LA9NEA and WW2R. I found activity very low. Back on 29 July I worked on 23 cm GW3XYW, OZ6OL and G3LTF. During both weekends signals were very good. I will miss the Italian and MW EME contests because I will not be back from my Europe until the end of Sept. After EME2006 in Wurzburg, I plan to visit Weinheim and hope to bring home some additional equipment for EME that will result in better signals on the higher frequencies. [Congratulations to Ivo and his XYL on the celebration of their golden wedding anniversary]!

**K2UYH:** Our [a.katz@iecc.org](mailto:a.katz@iecc.org) operating time was limited in Aug because of travel to EME2006. We also did some touring and had the opportunity to visit two truly impressive EME stations -- OE9JFL and OE9ERC. Thanks to both Hannes and Erich and their XYLs for their hospitality. I found activity way down during the 432 ATP and only QSO'd on 13 Aug at 0530 W8TXT (559/559), 0550 N9AB (569/569) and 0600 F3VS (449/549 for mixed initial

#725\* {#691 on CW}. During the period I sent several QRZs (DL7UDA?) and discovered that my polarization rotator was not working. (I fixed it the next day). Because of the low activity, I switched over to 1296 and worked at 0637 OK1KIR (559/559) and 0807 WA5WCP/1 (549/559) in RI for initial #270\* {#247}. I also added on 1296 on 15 Aug at 1038 W1AW/1 (549/569) #271\* {#248} and on 16 Aug at 0727 G3LTF (569/569), 0730 G4HUP (449/539) #272\* {#249} and 0815 SM6CKU (569/569). It was great to have random 23 cm activity in the middle of the week! The next day I was off to Germany for EME2006 and thus missed WA5WCP/1 at his other locations.

**NETNEWS: DK3WG** worked on CW K5SO (539/439) for initial #417 in Aug. **W5LUA** reports the following stations are active on 3456 EME: W5LUA, G4NNS, WA9FWD, OK1CA, LX1DB, OH2AXH and VE4MA. **K5JL** has swapped feeds on the dish and is now back on 23 cm. **W7MEM** is considering side mounting his 222 MHz antenna outside his 70 cm EME array. **W5AGO** is seeing about 8 dB of sun noise with 8' dish on 23 cm. **WA9KRT** reports that his 70 cm antennas seem to be working well. He would like to try with big stations on moonrise as he has no elevation. His power is currently 50 W in the shack, but he will have more power this winter. **DJ5MN** is interested in 10 GHz EME and may be QRV during contest in Sept. **K7NI** making progress on 23 cm EME. **W2HCQ** is returning to EME after 45 years. He plans to get on 70 cm. He has a 7289 ring amp almost complete. Contact him at [melandjohn@madbbs.com](mailto:melandjohn@madbbs.com). **KORZ** is recovering from surgery and as a result can not be active. [Bill has the wishes from all of us for a speedy recovery]. **K5PJR** copied WA5CRP and received a complete set of calls and sent (O) but did not get a response. He thanks Paul for all the efforts. **NIBUG's** EME pages are now hosted at <http://www.glogy.com/www.n1bug.net/>. **F2TU** reports QSOing on 23 Aug at 0555 VK3NX (529/559) for a new world record on 5760 of 16,445 km. **OE5EYM** is now QRT on EME. **PA3CSG** is looking for Kentucky to complete WAS on 70cm EME. Geert plans to be on 13 cm in Sept for the Microwave EME contest. **WB2BYP** on 1296 has been trying to get a pair of 7289 PAs combined with rat race hybrids working, but has had problems with instability. Anyone have any ideas? **NA4N** is now up to 12 initials on 13 cm.

**FOR SALE: W5LUA** has an azimuth positioner for an AB-421/FPS-14 antenna pedestal radar mount for sale [KA5JPD 817-221-9078] az only. It was used to rotate a 15' radar antenna. Al also a 12' solid dish to go with it. **N9AB** must sell his 16x22 432 MHz EME array. If you are interested in the array, please contact Andy at [Andrew\\_Bachler@msn.com](mailto:Andrew_Bachler@msn.com). **K5PJR** asks if anyone knows what a Y-464 is? They look like 2C39s. [They probably work like them too]. **K7XO** looking for a low noise preamp for 2.3 GHz EME.

**NF RESULTS FROM EME2006:** Dominique (HB9BBD) [dfaessler@bluewin.ch](mailto:dfaessler@bluewin.ch) conducted the NF measurements at the conference and reports -- 67 LNAs were measured. The test equipment was an Agilent 8973A and Agilent 8975A NF meter with a temperature compensated Agilent N4000A noise head. [The results for the different bands are listed in order of NF in the tables at the end of this NL. Those who want the graphs of their preamp's performance can email Dominique and he will send copies].

**FINAL:** I apologize for the delay in this newsletter. I had wanted to have this out last weekend and remind everyone about the ARI EME Contest and the ARRL's Sept VHF Contest during which EME contacts are welcome.

I want to thank to French EME group who gave me a beautiful special award for my work with the NL. It was a big surprise and was much appreciated. SM5LE's kind words were also appreciated.



**K2UYH receiving award from French EME operators**

Sally and I had a wonderful time at the EME conference and also want to express our thanks to Rainer for all his hard work.

I had the pleasure of handing out the 2006 EME SSB award to the F6KHM group – see picture at end. (I personally delivered the 2005 SSB Contest award to OE9ERC earlier in the week. Erich could not make the conference because of a conflict with his work. I shall be interesting to see who wins the title of *Chief EME Fun Maker* in the 2007 EME SSB conference, which is again scheduled for Feb.

I hope to be on for the Microwave EME Contest on 16/17 Sept, but am still waiting for the return my digital readouts that were damaged by lightning. Without them tracking could be a problem.

Please keep the information coming! It was great to meet with so many you in Wurzburg. 73, AI- K2UYH

### 70 cm

OWNER	TYPE	DEVICE 1st STAGE	STAGES	NF dB	GAIN dB	REMARKS
DL9KR	#1	MGF4919G	2	0.4	42.9	INCL. ADAPTOR TO 7/16
DL9KR	#3	ATF58143	2	0.43	54	INCL. ADAPTOR TO 7/16
DL9KR	#2	ATF58143	2	0.45	52.6	INCL. ADAPTOR TO 7/16
PA3CSG	HM #2	ATF54143	1	0.46	20	
DJ3FI	HM	FHX35	1	0.54	20.4	
PA3CSG	HM #1	ATF54143	1	0.56	17.4	
PA3DZL	HM	MGF1302	1	0.6	21.5	
EA3DXU	HN CAVITY		1	0.6	17.5	
DL3IAE	MICOMM	ATF54143	2	0.63	37.6	
DF1VH	MICOMM		1	0.66	20.7	
HB9Q	SSB EL.		1	0.77	19.9	
EA3DXU	HM BOX	MGF1302	2	0.82	47.4	
SK4CDI			1			NOT RATED

### 23 cm

OWNER	TYPE	DEVICE 1st STAGE	STAGES	NF dB	GAIN dB	REMARKS
HB9BBD	#2-035	NE32484A	2	0.17	41.6	
ON7UN	HB9BBD	NE32484A	2	0.22	39	
HB9BBD	#2-034	NE32484A	2	0.23	38.9	
G4HUP	WD5AGO	NE325	2	0.31	25.2	
G3LTF	HM	NE334	2	0.33	30.6	
HB9CW	W7CNK		1	0.33	16.6	
IK3COJ	HM	NE32484	1	0.35	19.4	
G3LQR	HM	NE325	2	0.39	24.6	
DJ3FI	HM	FHX35	1	0.42	20.4	
OZ4MM	HM	ATF54143	2	0.43	32.8	
JH5LUZ	HM	FHX35LG	1	0.43	19.6	
SM5LE	HM	MGF4304	1	0.44	16.7	3,1V
F5VHX	HM			0.45	18	GRAPH NAMED "K5FHX"
OZ4MM	DJ9BV	MGF4919	1	0.46	16.9	
DJ3QD	DB6NT		2	0.48	31.6	1420 MHz
K1DS	WD5AGO	NE321	1	0.49	15.2	
SM5LE	HM	MGF4907	1	0.54	20.3	2,6V
G4HUP	HM	ATF54143	1	0.54	15.6	
DJ3QD	DB6NT		2	0.56	34	
JH5LUZ	HM	NE329S01	2	0.61	19.3	
PE1KXH	HM	ATF54143	1	0.65	11.3	
F2TU	HM	2SK569	2	0.69	31.3	
PE1KXH	HM	ATF54143	1	0.72	13.3	
DL9JY	HM		1	0.79	5.1	
F2TU	DJ9BV		1	0.8	13.8	

UA3CTF	HM	3P326	1	0.84	15.8	
IK3COJ	HM	NE32484	1	0.85	11.6	NO GRAPH

13 cm

<u>OWNER</u>	<u>TYPE</u>	<u>DEVICE 1st STAGE</u>	<u>STAGES</u>	<u>NF dB</u>	<u>GAIN dB</u>	<u>REMARKS</u>
G3LQR	HM	ATF36077	1	0.34	15.3	
G4DDK		ATF36077	1	0.42	14.4	
JH5LUZ	HM		2	0.51	34	
WA6PY	HM	FHX35	2	0.52	24.3	
OZ4MM	HM	MGF4919	1	0.52	12.6	
G3LTF	W5LUA	ATF36077	1	0.53	14	
G4HUP	DJ9BV	NE424	1	0.57	11.9	
PA3DZL	HM	NE42484A	1	0.69	11.7	
DL1YMK		NE3210S02	2	0.73	41.8	
SM2BYA	SSB ELECT.		1	0.84	20.8	
PA3CSG	HM		1	1.05	10.1	

6 cm

<u>OWNER</u>	<u>TYPE</u>	<u>DEVICE 1st STAGE</u>	<u>STAGES</u>	<u>NF dB</u>	<u>GAIN dB</u>	<u>REMARKS</u>
WA6PY	HM		2	1.13	28	

3 cm

<u>OWNER</u>	<u>TYPE</u>	<u>DEVICE 1st STAGE</u>	<u>STAGES</u>	<u>NF dB</u>	<u>GAIN dB</u>	<u>REMARKS</u>
HB9BBD	HB9MIN	FHX13LP	1	0.93	10.8	
HB9BBD	HB9MIN	N5827B	1	2.27	20	



F5TTU with 2006 EME SSB Contest Award