

## 432 AND ABOVE EME NEWS OCTOBER 2007 VOL 35 #10

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THE NL WEB VERSION IS PRODUCED BY W6/PAOZN AND AVAILABLE AT <http://www.nitehawk.com/rasmit/em70cm.html>

**CONDITIONS:** This was an incredible month! Thanks to the efforts of WA5WCP and his very successful Western State Dxpediton, K0ALL/VE4MA in ND and K0YW's Hawaii dxpediton in April and Paul's trip to New England last year, the first 1296 WASs have been completed. W5LUA completed the first WAS followed by K5JL minutes later. Congratulations to both Al and Jay on their achievement. It is going to be hard to top all the dxpediton activity of the last few months. But the next two months should see lots of activity. The ARRL EME Contest is usually the activity high of the year. It will begin on 29/30 Sept with the Microwave EME Contest and be followed on the 27/28 Oct and 24/25 Nov with the regular contest weekends. There will be no 70 cm CW Activity Time Periods (ATP) in Oct and Nov because of the contest. Reports on WA7WCP/7 and K0ALL's follow up weekend can be found later in this newsletter (NL).

**MICROWAVE EME CONTEST BAND TIMES:** F2TU proposes the following activities periods, 2304.1 + 2320.1 + Rx 2424 on 29 Sept 0000-0345, 0630-0800, 2200-2400 and on 30 Sept 0000-0330, 0800-0930 and 2245-2400; 5760.1 29 Sept 0400-0600 and 1930-2130; and 10 GHz on 30 Sept 0400-0730 and 2030-2230.



**RA1AW Prepares for the Microwave EME Contests**

**DJ3JJ:** Andreas [dj3jj@gmx.net](mailto:dj3jj@gmx.net) is now QRV on 70 cm EME and working stations. His first QSO was with HB9Q on 5 Aug. On 31 Aug added QSOs with SM2CEW and VK3UM, and later in Sept worked DL9KR during the 70 ATP. He also had partials with KE2N and K2UYH.

**DL9KR:** Jan [Bruinier@t-online.de](mailto:Bruinier@t-online.de) sends an update on his recent activity – I QSO'd on 15 July UT5JCW for initial #859, on 5 Aug D44TD #860 and DXCC 96, on 8 Sept FR5DN and SP6JLW and heard F3VS, and on 9 Sept UA3PTW, K1WHS in the ARRL VHF Contest on his horizon - loud, partial KC3RE, SM2CEW, IK6EIW - nice to have him back on and DJ3JJ #861, and heard G4RGK, SM3JQU and CWNR K8GP (569) many times. I attended Weinheim where I met DF6NA, DL1YMK (& Monika), PE1JKX, OK1DFC, OK1KIR, OK3RM, DJ3FI, DL3OCH and other friends. I will be in hospital for spinal surgery. As a result a sked with KC4/W1MRQ on 22 Sept probably won't be possible. I will see how I feel when I'm out of hospital. [We all hope all will go well].

**F2TU:** Philippe [f2tu.philippe@orange.fr](mailto:f2tu.philippe@orange.fr) reports good activity in Aug/Sept. He QSO'd WA5WCP/7 with one on SSB (44/44) on 23 cm and one on 13 cm (559/559). Other new contacts were PAOBAT (53/53) on 13 cm for initial #62

and on 1296 AL7RT (549/559), G3KPV (M/O), SV1OE (559/559), VE3KRP (529/539) for initial #271. Philippe was also active in the ARI Contest on 8/9 Sept and made 28 QSOs on 23 cm, 7 QSOs on 13 cm and 5 QSOs on 3 cm.

**F5SE:** Franck [kozton@free.fr](mailto:kozton@free.fr) is making slow progress on his 10.5 m dish project. The rotating tower is now in place. The AZ and EL drives and motors still remain to be installed. He also wants to do a "motorless" checkout for safety purposes. Full assembly of the tower should be complete within 3 to 4 weeks. Then, Franck and his "crew" will concentrate on the dish itself. He needs to complete the design of the supporting structure and assembly of the mesh. If all goes as planned, the dish could be mounted on the tower by mid Nov or early Dec. Frank has also submitted his moon charts for 2008 – see the end of this NL. They indicated that there will be some excellent moon months in 2008 with perigee, high moon and low noise all aligned.

**G4CCH:** Howard [howard@g4cch.com](mailto:howard@g4cch.com) sends info on his 1296 activity – I QSO'd on 25 Aug at 2032 DF0MFG (21DB/O) on JT65C, on 29 Aug at 0457 WA5WCP/7 (O/O) in WY for initial, grid and US state, 0508 WA6PY (569/569) and 0514 VE6TA (579/579), on 31 Aug I missed moonrise because the cable to my el jack got snagged on the tower and was disconnected, this in addition to high winds kept me QRT, on 1 Sept 0455 I5MPK (569/579), 0514 WA5WCP/7 (559/569) in UT for initial, grid and state, 0537 SM5LE (559/559), 0612 G4DZU (559/559), 0647 DK3SE (11DB/O) on JT65C, 0700 OK1KIR (569/579), 0710 SP6JLW (569/559), 0724 WW2R (559/559), 0830 W5LUA (579/569), 0857 EA3DXU (18DB/O) on JT65C – using 2 x 35 el yagis and 80 W and 0926 WW2R (12DB/O) on JT65C, and also heard DL4MEA (569), K9SLQ (599), SV1OE (569), F2TU (589), AL7RT (569), WA6PY (569) and apparently I missed UA3MBJ on CW. I made 40 QSOs in the ARI Italian Contest, but missed a few stations including VK3UM, ON7UN and K0YW. I'm up to 36 states here and would like to know if there's someone who can be active on 23 cm EME in the following 14 states: AL, AR, DE, KY, LA, MN, MS, MT, NE, NV, OR, SC, SD & TN.



**G4CCH's 5.5 m dish**

**G4DZU:** Doug [doug.parker@btinternet.com](mailto:doug.parker@btinternet.com) is back on 23 cm – I changed my driver to a 120 W amp by Bert PEIRKI, and am back up at 700 W output from my YD1336 PA. I guess the old tube driver's output had gotten lower and lower over the years. With my cable losses, etc, there's about 400 W at the feed. I also changed the feed to a VE1ALQ/VE4MA design with a built in polarizer. This has given me a 1.5 dB increase in sun noise when compared to the old system with an air hybrid. I worked on 2 Sept OZ4MM (549), DF3RU (549) and VE7BBG (17 dB) on JT, on 3 Sept K5SO (549), on 4 Sept K1RQG (549), F2TU (569), OK1DFC (559) and RW1AW (559), on 8 Sept RW1AW (559) again, G4CCH (559) and F2TU (559), and 9 Sept K9SLQ (559), LA9NEA (559), K5JL (569) and K5SO (559). Echoes were great on the 2nd to the 4th, but during the ARI Contest weekend echoes and signals were down dramatically. I now have a dead optical encoder on the AZ, but thanks to VE1ALQ I'm expecting to be on for the next SW. I also have one of the new very VLNA preamp kits from G4DDK, which should improve RX.

**G4RGK:** Dave [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) was on 23 cm on 9 Sept and worked 4 stations. He then QSY'd to 432 where K8GP was a solid (559), but apparently hearing no one. DL9KR and SM2CEW also had no response. Dave reports that he have cut down a few trees and moved his dish and mount to improve his 1296 NA window.

**HB9/DL3OCH:** Bodo [dl3och@gmx.de](mailto:dl3och@gmx.de) has moved to Switzerland -- I moved last weekend and now have a new pretty comfortable apartment. I am located not far from HB9Q and plan to operate with this group in the future. My new address is Bodo Fritsche, Mardelaeckerstr. 14, CH-5417 Untersiggenthal, Switzerland. My call sign will change soon.

**15YDI:** Luigi [patriota.L@libero.it](mailto:patriota.L@libero.it) is a new station on 432 EME. He has what he considers a modest system with an array of 4 x 22 el FO HB yagis, a 3CX800 PA and an MGF1302 preamp. He only finished assembly of his antennas in Sept and is interested in CW skeds.

**IK6EIW:** Stefano [asmag@libero.it](mailto:asmag@libero.it) is QRV on 70 cm EME after many years of absence — I put my old array of 4 x 26 el HB BV yagis, 500 W PA and 0.5 dB NF preamp. On 1 Sept QSO'd VK3UM and UA3PTW, on 2 Sept K2UYH (strong signal) and SM2CEW, and heard SM3AKW and SV3AAF, and on 9 Sept DL9KR and heard FR5DN and G4RGK. In the future I plan to a 12' TVRO dish for 23 cm EME.

**JA5NNS:** Sho [sirakata@eng.ehime-u.ac.jp](mailto:sirakata@eng.ehime-u.ac.jp), an active JA EMEer, was in Fort Collins, CO from the end of July to the middle of Sept doing research at Colorado State University on Thin Film Solar Cells. During his visit he tried to see some of the local EME operators and I was able to connect with K0RZ. Sho plans to be active on 70 cm EME with 12 yagis when he is back home.

**JH1EFA:** Shige [BZZ24342@nifty.ne.jp](mailto:BZZ24342@nifty.ne.jp), who has frequent business trip to Thailand is working with local amateurs to set up an EME station in Bangkok, on the occasion of the 35<sup>th</sup> anniversary of SEA NET (South East Asian Net), signing HS35SEA. In Thailand, IARU amateur bands above 144 MHz is banned at present, but Joe, HS2JFW, hopes to operate 1296 with a 4 m dish made in Thailand. Mike, JH1KRC, offered his 350 W SSPA, which was used at 8N1EME recently. Joe has operated on 144 EME several years ago. [TNX – JH1KRC for sending this report].

**JH1KRC:** Mike [jh1krc@svd.odn.ne.jp](mailto:jh1krc@svd.odn.ne.jp) reports the Tokyo Ham Fair 2007 reported on last month was a great success with some 30k visitors. JA moon-bouncers had 2 exhibitions: one selling surplus radio parts and precision measurement equipments, and another for the Project BIG-DISH 8N1EME. JMIGSH and JH1KRC gave a 40 min talk on 8N1EME. SSPAs were sold for about 7-8k yen that can with an easy mod produce > 100 W on JA 13 cm band. The next Ham Fair and Japanese National EME Meeting will be held about the same period in August 2008.

**K0ALL:** Barry (VE4MA) [ve4ma@shaw.ca](mailto:ve4ma@shaw.ca) reports on the ND 1296 dxpedition part 2 -- The first day (8 Sept) we worked PA3CSG (559/O), G4CCH (559/549), OK1CA (569/549), OK1KIR (O/o), F2TU (559/O) and K1RQG (O/O). We also heard VE6TA very loud. The second day we added K5JL (579/559), K5SO (559/549), RW1AW (559/539), SM2CEW (O/o), DJ9YW (449/O), Oz4MM (569/539) and OE9ERC (569/559). Nil was heard from WW2R and SM5LE. We called but could not get the attention of DL1YMK (559), LA9NEA (549), K2DH (559) and K9SLQ (589) - chased him all over the band. We also had a partial with KL6M - ran out of elevation. The station is still at K0ALL's QTH and will be on again during the EME contest.

**K0YW:** Bruce [k0yw@frontier.net](mailto:k0yw@frontier.net) says it's good to be back on the moon -- I have worked in Sept so far on 1296, K5SO, K0ALL, RW1AW, SP6JLW, IK2MMB, IK3COJ, K5JL, K2DH, VE3KRP and ES5PC.

**K1ROG:** Joe [K1rqg@aol.com](mailto:K1rqg@aol.com) is QRV on 1296 EME with a 10 m dish and presently 300-400 W (he needs to work on his driver), but has a very big signal. Joe worked WA5WCP at all his locations and K0ALL. He worked on 31 Aug LA9NEA, I5MPK, DF3RU, VE3KRP & WB2BYP, on 1 Sept K2UYH, SP6JLW, WA5WCP/7, WW2R, on 2 Sept K9SLQ on CW & SSB, N0OY, WA5WCP/7 on CW & SSB, OK1DFC, SM3AKW, RW1AW, OZ4MM, AL7RT and VE3KRP. He is now at 110 initials on 23 cm!

**K2DH:** Dave [k2dh@frontiernet.net](mailto:k2dh@frontiernet.net) is QRV on 1296 again and sends his Sept EME activity report -- I'm back on EME after a 5 year absence, with a 5 m, 0.4 f/D solid dish. It's been my big summer project and the work is never done, but it's complete enough now to actually get on and renew my acquaintances with my EME friends around the world. I tried to make it on in time to catch WA5WCP/7 from a couple of his stops out West, but I was about a day late, as Paul had a system failure on his last night on 23 cm and that was the first night I had transmit capability. But I did work on 5 Sept K1RQG (569/549) and an initial (#) over the ARI contest weekend. I was able to work 13 stations: F2TU (569/529), VE6TA (569/449), W2UHI (559/O), IW2FZR (O/O) (#), G4CCH (569/569), W5LUA (569/549), DL4MEA (569/O)(#), RW1AW (569/569) (#), K5SO (579/549) (#), K5JL (579/559), K0YW (569/559), DL1YMK (549/529) (#) and K1RQG (579/569). All in all, I was quite pleased with the performance for a station that is fairly low power (150 W in the shack) and not anywhere near optimized. Thanks to everyone who was able to dig my "peanut whistle" out of the noise! It was great to hear the 23 cm band so busy. It is quite a change since the last time I was on in 2002. I heard, but didn't work SV1OE, DF3RU, DJ9YW, OK1DFC, K2UYH, SP6JLW, IK2MMB, OK1KIR, WW2R, ES5PC, K9SLQ, VE3KRP and LA9NEA. Some of these were heard during WA5WCP's expedition to Idaho, others during the ARI contest and some were CWNR during that event. I still have a long way to go. I have to optimize the tracking, optimize the feed/scalar ring position, optimize my transmit cabling and build up my TH-328 amplifier to get to the 500 W level. Plans for the near future include getting set up for 13 cm, 9 cm, 6 cm and 3 cm EME.

**K5SO:** Joe [k5so@valornet.com](mailto:k5so@valornet.com) is now getting 1.5 kW out of his new TH347 PA — I extended the length of the output cavity 25/8" using dual layers of 0.032" thick copper sheet to modify my TH347-based UHF TV translator to operate at 1296 MHz in a 3/4 wavelength mode. I Silver coated the interior parts, but am not convinced that the coating did very much, but maybe it did some. I attribute the increase to raising the screen to +600 V (3 kV/200 mA plate idle, 2500 V/1.7 A key down, -90 V grid, 50 mA grid current key down), the screen is regulated rock solid at +600 V and draws 15 mA key down) and cleaning up some things. I also reworked/replaced some of the finger stock in the output cavity, and eliminated 5 N-type connectors and 1 EIA connector at the output of the cavity and in my transition to the 1-5/8" Heliac. I replaced all the jumpers with a single 12' length of half inch Heliac (LDF4-50A) with an EIA connector on the cavity output coupler end and a 7-16 DIN on the end connecting to the LDF7 to the tower. That reduced my reflected power to nil on my meter. I'm sure each of those connectors were adding some unwanted attenuation too. My echoes from the moon with this thing now consistently peak S9 (and sometimes even better). That's very gratifying to see! Joe worked LA9NEA and WA5WCP/7 among others in Sept.



K5SO's TH347 1.5 kW PA

**K8GP:** Gene (W3ZZ) [ezimmerm@erols.com](mailto:ezimmerm@erols.com) tried to make some 432 EME QSOs near the horizon on CW during the ARRL's Sept VHF Contest. They used 8 x FO22 yagis (4 high and 2 wide) with full elevation control and 1.5 kW. They were active between 0900 (their moon rise) and 1200, but made no QSOs. Gene thinks the problem was a bad preamp. They also tried on 1296 where they had 500 W and 2 55 el loop yagis with similar results.

**KC4/W1MRQ:** Ernie [w1mrq@yahoo.com](mailto:w1mrq@yahoo.com) is now QRT from Antarctic. He was on 70 cm and expects to be back in Aug 09. In the mean time he will be moving to ZD8 where hopes to be QRV after the first of the year.

**KL6M:** Mike [kl6m@qsl.net](mailto:kl6m@qsl.net) writes that he was active for the Sept 70 cm ATP – I made it on 8 Sept on 432 for 3 hours at European moonrise. Conditions were excellent, but very poor turnout. I worked only 5 stations. The highlight of the afternoon was a random QSO with OK1TEH (O/O) with his single yagi. Mike was also active a bit on 23 cm in Sept.

**LA9NEA:** Viggo's [la9nea@online.no](mailto:la9nea@online.no) activity report with his re-installed 5.3 m dish and 250 W SSPA follows – I worked 31 Aug K1RQG (569/579), I5MPK (449/559), DF3RU (559/559) and N0OY (569/579), 1 Sept K5JL (569/559), I5MPK (559/569), RW1AW (569/579), WA5WCP/7 (559/569), K2UYH (579/569), WW2R (549/O), VE6TA (569/559), K9SLQ (589/579), SP6LJW (559/559), 2 Sept K9SLQ (579/569), K5SO (579/559), W2DRZ (559/559), SM5LE (549/O), SM3AKW (569/559), DL4MEA (559/569), KL6M (559/549) and G4CCH (569/569). I plan on increased power with my water cooled 6 x 7289 PA in the future.

**N2UO:** Marc [lu6dw@yahoo.com](mailto:lu6dw@yahoo.com) is QRV on 23 cm from his new QTH near Greensville, NC – Just before my sked with K0ALL, I punctured the dielectric of one of the tubes in my PA. So I was off the air 10 minutes before my sked. I connected up one tube only, but K0ALL shut down early and I missed them. The good news is that I did work WA5WCP/7 in all three states.

**OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) has his 10 m dish on the moon with better pointing accuracy and stability than ever before – I hope to be QRV in the ARRL Microwave Contest next weekend on 13 cm. I have finish my Septum feed with LNA by W5LUA (NF = 0.5 dB). A new 500 W SSPA is still waiting for change of couplers, but I have a working 100 W SSPA. I worked on 1296 on 2 Sept W2DRZ, WA5WCP/7 (559) for initial #163 and WAS 23 with very good signal, RW1AW, K1RQG, SP6JLW, SV1OE #164 and DXCC 46, VE7BBG #165, F2TU (55/56) on SSB, IW2FZR, DF3RU and SM2CEW and heard someone calling with a 3 in their call sign, on 4 Sept OZ4MM (589) - UFB signal, G4DZU (559), WA5WCP/7 (559) #166 and WAS 24 on random at the last moment because bad weather was coming and DF3RU (559) before I had to QRT, and on 22/23 Sept SP6JLW (559/559), G4DDK (559/559) and finally I5MPK (539/579). I suggest if anyone hears QRZ or YYYYY, please send only your own call sign. My call I already know. A couple of years ago I also proposed the use of "DDDD" when libration conditions are bad. When "DDDD" is heard, you should send your call sign split into groups of 5 letters. For example for OK1KIR send OOOO KKKKK 1111 KKKKK IIIII RRRRRR. Copy is always better if you hear the same letter repeated a couple times. Please give this a try if you will hear DDDDD from me. At <http://www.vhf.cz/rekordytoplisty/emetrtoplisty/okemetop.htm> you can find the Initials and DXCC EME top List for OK.

**OK1KIR:** Tonda (OK1DAI) [vladimir.masek@volny.cz](mailto:vladimir.masek@volny.cz) sends his group's Aug/Sept EME report -- On 23 cm we worked on 30 Aug at 0340 WA5WCP/7 (549/569) for initial #240 and the state of WY, on 1 Sept at 0631 WA5WCP/7 (559/559) #241 and UT state and 0701 G4CCH (579/569), on 4 Sept at 0931 WA5WCP/7 (559/O) for #242 and ID state, on 8 Sept at 1306 K0ALL (O/O) for #243 and ND state to bring our WAS total to 39 on 23 cm, at 1319 OK1CA (569/559) and 1431 SP6JLW (549/449). On 13 cm we worked on 5 Aug at 0604 PA0BAT (549/539) for initial #67, on 2 Sept at 0858 F2TU (569/569), 0903 RW1AW (569/569) and heard WA7WCP/7 (M) as they were already in the ground noise and too late for us, and on 5 Sept heard F2TU, RW1AW, WA6PY and WA5WCP/7 (O) but later Paul disappeared. Our total for overall EME initials is now up to #739.

**RW1AW:** Alex [rw1aw@appello.de](mailto:rw1aw@appello.de) was active in the ARI EME Contest – I worked on 10,368 HB9BHU, F2TU, G4NNS, F5JTA, WC8VOA, F5VKQ, I4BER, VK3NX, HB9SV, SP7JSG, F3VS and GW4DGU for 12 QSOs, on 2304/2320 F2TU, DL4MEA and IW2FZR for 3 QSOs, and on 1296 VK3UM, IW2FZR, SP6JLW, G4CCH, JA4BLC, JA6AHB, ES5PS, ZS6AXT, SM5LE, DL4MEA, IZ1BPN, GW3XYW, IK2MMB, OK1CA, ON4BCB, LA9NEA, G4DZU, K1RQG, F2TU, DF3RU, SM2CEW, VK4AFL, ON7UN, SM3LBN, IK3COJ, PA0BAT, SV1OE, K9SLQ, VE3KRP, K2DH, K0ALL, PA3CSG, DL1YMK, K5SO, K0YW and K5JL for 36 QSOs and a total of 51 QSO in

contest. I am feeling quite frustrated as I still have not received any certificates for the ARRL 2006 EME Contest despite complaints.

**SM2CEW:** Peter [sm2cew@telia.com](mailto:sm2cew@telia.com) EME report – The highlight of the month was of course the WA5WCP expedition to the western US states. Again Paul invited us to have some CW EME fun. I managed to work his portable station on 23 cm from Wyoming and Utah. Well done and a big thank you to everyone involved in this successful expedition! I have been doing repairs on my dish. The reflector mesh was out of shape in many places. I now see a noticeable improvement on returning echoes. Many cable ties have broken over the last couple of years, mainly due to heavy snow and ice during the winter months, and this of course distorts the reflector. The following stations were worked on 23 cm on 30 Aug WA5WCP/7 for initial #184 (WY) and 1 Sept WA5WCP/7 #185 (UT), 2 Sept G4CCH, OK1DFC, SP6JLW and ES5PC, 8 Sept WW2R #186, SP6JLW, IK3COJ, IK2MMB, VE6TA, SP7DCS #187, RW1AW, G4CCH, ES5PC, VE3KRP #188, K9SLQ and K0ALL #189. I also had a sked with YO2IS on 23 cm, but unfortunately it was not complete. Szigy heard me very weak, but I did not copy him. On 432 I was QRV and worked on 31 Aug UA3PTW and DJ3JJ for initial #426, on 2 Sept IK6EIW (nice to see Stefano back again!), KL7HFQ, K2UYH and SV3AAF, and on 9 Sept FR5DN. I was hearing contest station K8GP really well, and called for about an hour together with DL9KR, but we did not even get a QRZ. I wonder if they had receiver problems. I could even hear them call and work KC3RE quickly on tropo, so they were coming in very well indeed. Bad weather prevented me from spending more time in the ARI contest. We had a lot of local storms passing by during the weekend. However, it was nice to see so much CW activity on the bands. I was also QRV on 144 in the contest.

**SM5LE:** Sven [SM5LE@telia.com](mailto:SM5LE@telia.com) a very nice weekend during the AW on 8/9 Sept – I made 2 new initials and a found great amount of activity. I worked on CW G4CCH, OZ4MM, SV1OE (new), LA9NEA and DL4MEA (new). I heard K2UYH, K9SLQ, SP6JLW, F2TU, OK1DFC and K1RQG.

**SP7DCS:** Chris [sp7dcs@o2.pl](mailto:sp7dcs@o2.pl) has made his first 23 cm EME QSO -- After my SWL activity in May, I am extremely excited to report my first 23 cm EME QSO. It was a hard work the last few months, but it was worth doing it. I think I am falling in love with 23 cm - hi hi! My station consists of 3 m solid dish (0.34 f/D), RA3AQ feed with 150 W at feed from an SSPA by SP9WY. A few days before the ARI contest I lost my preamp, but I decided to try even without it. My xverter is mounted 4 m from feed and has a good NF. I worked OK1CA (559/549) for my first initial #1, SM2CEW (539/439) #2, K1RQG (539/529) #3, K5SO (559/529) #4 and on sked G4CCH (539/529) #5. I heard and/or called: F2TU, K9SLQ, K5JL, ON7UN, RW1AW, DF3RU, DL4MEA, IK2MMB, IW2FZR, SP6JLW, VE3KRP, GW3XYW and other not identified signals.

**SV3AAF:** Petros [sv3aaf@yahoo.com](mailto:sv3aaf@yahoo.com) writes -- I was QRV for the Sept 432 DUBUS activity event (ATP). I was active during both slots and found that conditions were generally good. QSB was present with no Faraday at least in my area. Activity was low judging from what I heard on the band during ATP. Stations worked were VK3UM (539/539), FR5DN (539/559), K2UYH (539/559) and SM2CEW (O/O). I also heard UA3PTW.

**VE3KRP:** Eddie [eddie@tbaytel.net](mailto:eddie@tbaytel.net) is now in full operation on 1296 -- I'm rolling along on 23 cm and having a good time on the band. I'm up to 12 initials with QSOs to RW1AW, F2TU, K0YW, K5JL, K9SLQ, K2UYH, K1RQG, OK1CA, K5SO, G4CCH, VE6TA and SM2CEW. The dish is 3.1 m with a septum feed, about 180 W at the feed and a WD5AGO preamp. My is grid EN58ij. [See a picture of Eddie's dish on the next page].

**VE6TA:** Grant [ve6ta@telusplanet.net](mailto:ve6ta@telusplanet.net) concentrated on the WA5WCP/7 dpxpedition on 23 cm in Sept and worked them on 1296 in all states plus others. On 13 cm he QSO'd them in UT and worked 4 other stations, PA0BAT, F2TU, DL4MEA and IW2FZR. He is now up to initial #40 with PA0BAT. He is working on 10 GHz and may be on by the end of the month.

**VK3UM:** Doug [tikaluna@bigpond.com](mailto:tikaluna@bigpond.com) fills us in on his recent activity -- I was not QRV in July due to a holiday in VK8 – returned after 31 years absence (ex VK8KK). After my return I worked on 28 Aug on 1296 AL7RT, on 29 Aug on 1296 AL7RT again, JA6AHB and SP5JLW, on 31 Aug on 432 DJ3JJ on sked, on 1 Sept on 1296 WA5WCP/7 (CW/SSB) and SP6JLW, on 432 UA3PTW, SV3AAF, EA3DXU, FR5DN and IK6EIW, on 4 Sept on 23 cm K5SO, on 8 Sept on 70 cm KL6M, UA3PTW, SP6JLW, FR5DN and JA6AHB, and on 23 cm VK4AFL, SP6JLW, IW2FZR, RW1AW and SV1OE. All QSOs were random (4 initials) except where noted. I accept skeds with those with limited windows or those with small systems (and at a mutually convenient hour). Sadly activity during the ARI Contest was quite limited due to the early hour in Eur. Libration on 23 cm was significant whilst on 70 cm Faraday was ~45 to 90

degrees at Moon Set with little Libration. I have refurbished my 70 cm polarity and pre amp feed box after moisture ingress. It was not pretty before the fix!



**VE3KRP's 3.1 m dish**

**W5LUA:** Al [al.ward@avagotech.com](mailto:al.ward@avagotech.com) reports completing the first WAS -- Working WA5WCP/7 in Wyoming, Utah and Idaho on 1296 MHz gave me states 48, 49 and 50. I submitted my cards to the ARRL this week for WAS and it was accepted. I also worked the same 3 states on 2304 MHz, which brings me up to 33 states on 13 cm. I also worked SP6JLW and K2DH on 1296 for new ones. During the Microwave EME Contest, Al plans to be on 13 cm then go to 10 GHz, 5760 and 3400/3456 by appointment.

**WA3BZT:** Edward [wa3bzt@verizon.net](mailto:wa3bzt@verizon.net) will be putting Delaware (FM29ep) back on 432 and 1296 EME -- I purchased W1QC station and am getting it ready for operation. I am presently a base for the tripod support. My plans are to put Delaware back on the moon for 432 and 1296 next year or sooner. I have all the equipment for that except a 432 MHz feed and am looking for suggestions. W1QC's dish is 17' not 16' as was listed and there is possibly enough mess to extend it to 20 feet with a little extra work.

**WA5WCP/7:** Paul's [paul.perryman@lmco.com](mailto:paul.perryman@lmco.com) Great Western States Dxpediton -- This dxpediton will certainly be remembered as one of the most ambitious and successful dxpeditons. The following is the best picture of Paul's results that I have been able to put together from many sources. QSOs were made on both 23 and 13 cm from 3 rare US Western State. The first 1296 WASs were completed as a result of the dxpediton and virtually all the trips goals were achieved. Paul had both technical and logistic problems to overcome and deserves great praise and much thanks for his accomplishment. He worked on 1296 in WY the first day: K5SO, OE9ERC, K9SLQ, OK1CA, K5JL, K2UYH, VE6TA, W5LUA, F2TU, G4CCH, WA6PY, WW2R and W7BBM, and on the second day: N2UO, DF3RU, PA3CSG, OK1KIR, OZ4MM, DJ9YW, OZ6OL, W2DRZ, SM2CEW and VE6TA. He worked in UT on the first day: K2UYH, K5JL, K1RQG, RW1AW, G4CCH, K9SLQ, OZ4MM, LA9NEA, PA3CSG, F2TU, DJ9YW, OK1KIR, VE6TA, DL4MEA, SM2CEW, WW2R, W2DRZ, W5LUA on CW and SSB, N2UO, OZ6OL, WA6PY, N0OY, KL6M, VK3UM on CW and SSB and JA4BLC. Nil was copied from OE9ERC and DL1YMK on sked. The second day Paul added: OK1DFC, K5SO, SM3AKW, DF3RU, ES5PC and K1RQG on SSB, and on 2304 W5LUA, VE6TA and WD5AGO. Unfortunately I have no detailed contact information on the ID operation. He was there for two days and had some equipment problems, but still made many QSOs. Paul did report that he thought he made a total of 88 QSOs for all states on 23 cm.

**WA8RJF:** Tony [temanuele@kentdisplays.com](mailto:temanuele@kentdisplays.com) sends the following progress report for his 1296 EME efforts -- After many false starts on 1296 EME I finally made sufficient progress worth reporting to the newsletter. WA5WCP was the driving force behind my effort as I knew his Dxpediton would light up the band. My temporary station consists of a 10' TVRO dish (temporary as in it will stay up until it is replaced by the 12' dish), a VE4MA feed and WD5AGO preamp. I slapped the feed in its holder the first evening of Paul's operation, waited for the moon to clear the tree and immediately heard the mayhem on the band. On 29 Aug I heard: OK1CA (529), K2UYH (539), W5LUA (519), F2TU (519) and G4CCH (529). On 1 Sept I heard: K5JL, K9SLQ (very strong), K1RQG, K2UYH, G4CCH, OZ4MM, F2TU, RW1AW, DJ9JW, LA9NEA, PA3SCG and WA5WCP. I could also tell that KL6M was on frequency, but it was very late by then and I could barely keep my eyes open. Because I have a feedline issue on the TX side, it is likely that I will be QRV on 2304 before 1296 as I can place the 2304 SSPA at the dish. [I will look for Tony during the ARRL EME Microwave Contest].



**WA8RJF's 10' dish and 1295 test location**

**WD5AGO:** Tommy [wd5ago@hotmail.com](mailto:wd5ago@hotmail.com) will be on for the microwave portion of the ARRL EME Contest. The first night I'll be on 13 cm and if the weather is fine switch to 6 cm the second or else I will stay on 13 cm. I worked WA5WCP/7 on 13 cm in WO for initial #27 and in UT for #28 (it is a little early to be counting states), but no copy from ID. I am hoping for good activity in the contest despite some people's negative feelings about the contest.

**WW2R:** Dave [ww2r\\_eme@g4fre.com](mailto:ww2r_eme@g4fre.com) had a generally successful month despite some frustration -- On 29 Aug I had a sked with WA5WCP/7 (WY) on 1296.035. I heard him every period, sent O's but no response. I heard him calling CQ on the same frequency and called him and again no response. Memories of Paul's New England expedition came flooding back. I went to get coffee. Came back and saw him calling CQ on 1296.018. (Thank goodness for my SDR1Q system). I called and this time he came to my back first call and we QSO'd for WY and initial # 70. On 1 Sept I worked K1RQG, RW1AW, K2UYH and LA9NEA on CW while waiting for my sked with WA5WCP/7 in UT. We easily QSO'd with only 200 W for #71. Afterwards, I worked G4CCH and F2TU on CW and G4CCH again on JT65C. I called DL4MEA, W2DRZ and SP6JLW, each for 10 mins, but my best response was a QRZ. On 4 Sept I added WA5WCP/7 in ID #72 on sked, and heard F2TU on SSB. On 8 Sept I had nil results on sked with K0ALL, and nil on sked with SM2CEW at 1400, but he was delayed by power outage. I worked Peter at 1440. I also QSO'd W2UHI in MI #74 on sked, CWNR SP6JLW and heard VE3KRP. On 9 Sept I again achieved nil on sked with K0ALL. Condx seemed poor as even K9SLQ was weaker than normal.

**YO2IS:** Szigy's [yo2is@wa7v.ampr.org](mailto:yo2is@wa7v.ampr.org) 1296 activity was limited by bad WX. He sets his station up outdoors with no shelter and must have fair WX to operate. He reports that he has a stability problem as a result of the 12 MHz VXO he uses to generate his 1296.025 signal, and so have to retune his VXO a couple of times during a EME QSO. Szigy has partial contacts with both SM2CEW and K2UYH on sked during Sept. He is interested in sked for the 29/30 Sept weekend. His 23 cm moon window is limited to AZ 110-160 and 225-245 with EL > 50 at his QTH (KN05ps). [See Szigy's dish picture on the next page].

**ZS6AXT:** Ivo [zs6axt@telkomsa.net](mailto:zs6axt@telkomsa.net) sends bad news -- In our first thunderstorm this spring I received direct lightning hit that resulted in great damages to my equipment. It appears that I have at least 3 months repair work to be QRV again. I may even forget it and concentrate on finishing my 3 cm dish mount. I feel very frustrated and have not decided what course I will take as yet. I was active

on 1296 on 8/9 Sept. I worked 12 stations on Saturday, at times with difficulties, suspecting some QRM. Also few CWNRS. On Sunday I finally found the fault, it was an unreliable contact of the TR relay! So I operated it many times and it seems to be now OK. I then worked 11 additional stations, but could not get through the QRM from big guns to work K0ALL and few others. My moon window is much shorter than the stations in EU have, which is the problem. I was not competing in the contest, but wanted to provide Africa QSOs. There seemed very few W stations on.



**YO2IS' 1296 outdoor operating position**

**K2UYH:** I [a.katz@ieee.org](mailto:a.katz@ieee.org) had a good month EME wise on 23 cm. I QSO'd on 29 Aug on 1296 at 0418 WA5WCP/7 (O/O) for WY State and CW initial #268 and mixed #302\*, on 1 Sept on 1296 at 0415 K1RQG (579/579) – great to have Joe back on, 0430 WA5WCP/7 (549/569) UT State #270 & #303\*, 0450 SM3LBN (559/559), 0500 SP6JLW (559/559), 0520 RA1AW (589/589) – big signal, 0531 WW2R (549/559), 0540 OZ4MM (589/579) and 0550 LA9NEA (569/579), on 2 Sept on 1296 at 0445 nil YO2IS – Szigy could not make sked and 0511 VE3KRP (449/549) #271 and #304\*, on 432 at 0650 UA6LGH (559/O), 0715 SV3AAF (559/569), 0730 IK6EIW (559/559) and 0745 SM2CEW (569/569), on 3 Sept on 1296 at 0500 partial YO2IS (O/O) – lost signal, 0535 SV1OE (559/539) and 0600 K5SO (579/589), on 4 Sept on 1296 at 0828 WA5WCP/7 (O/O) ID State #272 & 305\*, 9 Sept on 432 at 1330 nil DJ3JJ, 1400 partial I5IDY (O/?) and 1445 partial OK1TEH (-/M) – still have 70 cm noise problem, and on 9 Sept on 1296 at 1517 DL1YMK (559/559), 1528 G4CCH (559/559), 1534 SP6JLW (559/559), 1542 IK2MMB (559/559), 1551 K5SO (589/579), 1619 K1RQG (579/589) and 1630 F2TU (569/569) CW and on SSB. All activity was CW this month. I will be joining forces with K1JT for the ARRL EME contest. Joe will operate on 2 m and I will provide the higher bands from my QTH.

**NETNEWS BY G4RGK:** **WB7OBS** is still working on x-N9AB's EME array. He hopes to have it on by Nov. **W2UHI** worked on 1296 in Sept WB2BYP, K2DH, K1RQG, G4CHH, IK3COJ and WW2R and reports that K2DH seemed to be doing quite well. **W4OP** is still not on the moon, but has been making big progress and is looking forward to being QRV soon. **N8CQ** has 70 cm 8938 now working super at legal limit. **SM6CKU** is planning a new mount and thinking about using hydraulics. Ben would like to hear from others that use hydraulics. [K2UYH uses a hydraulic piston for elevation]. **WB2BYP** in end Aug/Sept worked K1RQG, OZ4MM, called K9SLQ and OK1DFC with QRZ only. **NOOY** worked WA5WCP/7. **AL7RT** in Sept worked W5LUA, F2TU and WA6PY for an initial but did not connect with WA5WCP/7. **W2DRZ** worked WA5WCP/7 in UT and others. **JA4BLC** QSO'd WA5WCP/7 in UT. **K0RZ** is still looking for four states on 70 cm (NV, ND, KY and VT) to complete WAS. **PA3CSG** worked WA5WCP/7 in WY and UT. **W9IIX** has his dish working again and copied at least 15 stations. He now needs to get his GS-15 PA running and is looking for info on splitting the TS-2000X (TX/RX) on 1296. [Contact K2TXB]. **DK3WG** worked on 432 UTSJCW on CW for initial #428 in Aug. **VE1ALQ** had equipment trouble – lightning strike smoked all his transverters and is disappointed to have missed all the Sept dxpedition activity. **SM4IVE** getting ready to assemble 14 m dish. He was on moon on 9 Sept on 70 cm and heard DL9KR calling K8GP. **K7XQ** is planning to be on 13 cm in the ARRL Microwave EME Contest with a new 3 m dish and 200 W PA. **VE4MA** will be on 10 GHz for the Microwave EME contest. **W8TXT** reports he has his 8 yagis up and most of the cabling done. He expects to be on by the beginning of Oct whenever the moon is > 10 degs on 432.015.

**FOR SALE:** **W2DRZ** wrote that there was an error in the last newsletter about the 300 W 1296 SSPA, Tom wants everyone to know that it was designed by Goran (AD6IW) and that he had no input in its design. All inquiries about its purchase and availability should be address to Goran directly at [goran@ad6iw.com](mailto:goran@ad6iw.com). Tom waiting for Goran to finish his design and plans to purchase one. **KBOEMR** has 4 x 22 el yagis (in their box) with stacking frame and phasing harness, LNA Technology preamp and coax relays in metal mast mounted weatherproof box, and Lunar Link 1.5 kW PA with PA70 HV power supply for \$US2,450 – pick up only in Des Moines, IA. (Was on e-bay). **DB6NT** has some NOS GS23b for sale. Inquiries should be directly to DB6NT, [Kuhne.db6nt@t-online.de](mailto:Kuhne.db6nt@t-online.de).

**ARI EME CONTESTS:** I need a better way to keep track of the ARI EME Contests. Somehow I missed that the regular (CW) ARI Contest was scheduled for 9/10 Sept. (Searching the web did not help). I was active during the weekend and would have put in more time, if I realized a contest was in progress. I am sure others were in the same situation. I did receive news about the 2nd Italian Digital EME Contest that took place back in May. The only results for 70 cm and above was on 1296 and by SM5LE (2 -20 R) with a 2.2 m dish and 250 W. Sven won first place and will receive his award at the 2008 International EME Convention to be held next summer in Florence. The same rules were used as in the first ARI Digital EME Contest. I shall be looking for news about the 2008 contest.



**UZ5DZ expects to be QRV on 432 EME very soon**

**FINAL:** Happy birthday to SM3AKW who tuned 77 and W7GBI 90 during the month of Sept. Charlie is expected back on EME this fall if all goes well.

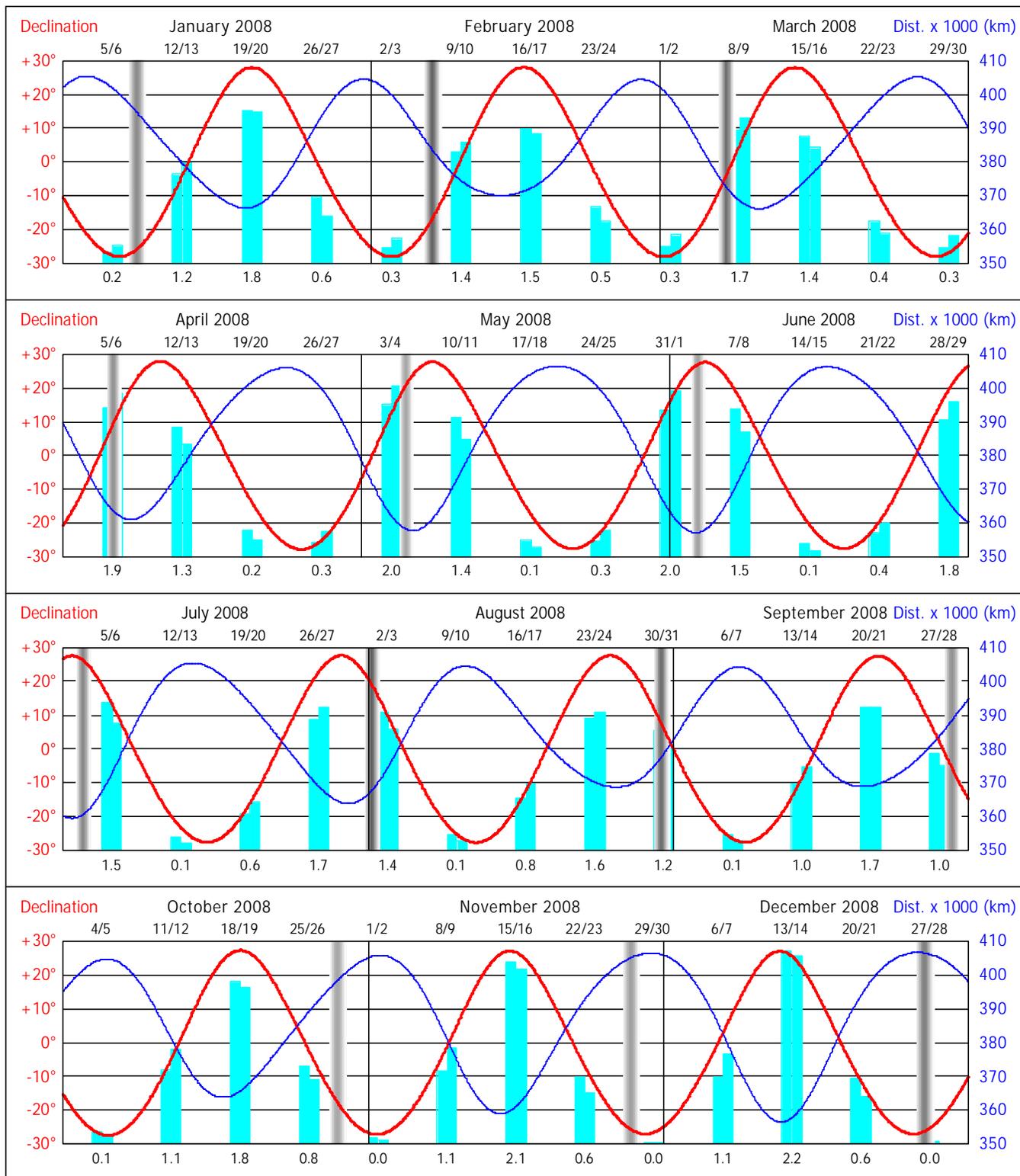
Last month there was some miss information on AD6IW's SSPA. W2DRZ did not want to create the impression that he was involved with the design – see the For Sale Section for the correct story.

A number of people have expressed unhappiness with the way the ARRL has been running the ARRL Contest. Some have even suggested a boycott. I know there were mistakes made by the ARRL, but I believe a boycott is not a good idea. The problem on 70 cm and above has always been activity. 432 in particular does not have the population of 2 m. It takes real effort to get an EME system going on 432 and even more so on 1296 and the higher bands. The ARRL's EME contest has always been one of the activities highs of the year. Many new stations make their first appearance during the contest. Boycotting the contest will reduce this activity level and I fear could untimely discourage new stations and affect regular activity. If you and others are unhappy with the way the ARRL runs the contest, don't send in your logs to get your message across. We do not want to discourage activity, we want to encourage it!

Congratulation to Al, W5LUA and Jay, K5L on achieving WAS - the first two 1296. This is a major milestone for the 1296 band.

With so much going on, there is more I would have liked to cover in this NL, but I again find myself running out of time. Please keep the information and reports coming. I hope to work you during the coming contests. 73, Al – K2UYH

# Moon Calendar for the Year 2008, 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.

Gray Scale calibration

Sun to Moon Distance, in degrees

