432 AND ABOVE EME NEWS JULY 2015 VOL 43 #&

EDITOR: AL KATZ, K2UYH; DEPT. ELECTRICAL/COMPUTER ENGINEERING, THE COLLEGE OF NEW JERSEY, PO BOX 7718 EWING, NJ 08628, TEL (W 609-584-8424) OR (H 609-443-3184), FAX (609-631-0177), E-MAIL <u>alkatz@tcnj.edu</u> NETNEWS EDITOR (BASED REFLECTOR NEWS) REIN, W6SZ <u>pa0zn@arrl.net</u> WITH HELP OF N4PZ AND WB2BYP INITIAL LIST G4RGK, DAVID DIBLEY, E-MAIL <u>zen70432@zen.co.uk</u>, AT: <u>http://www.zen70432.zen.co.uk/Initials/index.html</u> EME INFORMAL NETS: 14.345, ~1500 SATURDAY AND SUNDAY, NET COORDINATOR: STEVE GROSS, N4PZ <u>n4pz@live.com</u> ON0EME EME BEACON, 1296.000 IS QRV WHEN MOON >10°, SEND RX REPORTS TO WALTER (ON4BCB) <u>on4bcb@gmail.com</u> DL0SHF 3 CM EME BEACON, 10368.025, SEND INFO & QUESTIONS TO PER (DK7LJ) <u>per@per-dudek.de</u>. NL EMAIL DISTRIBUTION and EMAIL LIST CORD: WARREN, W2WD <u>wbutler@ieee.org</u> [TXT OR PDF OR "ON WEB" NOTICE] THE NL WEB VERSION IS PRODUCED BY REIN, W6SZ AND AVAILABLE AT <u>http://www.nitehawk.com/rasmit/em70cm.html</u>

CONDITIONS: They seemed pretty good in June, especially during the 6 cm contest. The top reported score is from the OK1KIR Club with a score of 30x29. The 3 cm activity weekend (AW) also brought out a goodly number of stations; but there are again no reports for the 70 cm CW activity time period (ATP). Let's all try to QRV for the ATP on 12 July from 0130 to 0330 and 1030 to 1230. It has no contest conflicts, but is the same weekend as the 13 cm activity weekend (AW) on 11/12 July. The 6 cm AW is the following weekend on 18/19 July. So, there is no lack of opportunities for QSOs in July! In June W1E (NC1I and W1QA) put CT on 1296 EME in grand style in what promises to be the first of a series of WAS dxpeditions - see their report later in this NL. In July look for SW8YA, who is to be QRV from KN20 (Thassos and Samothraki island) part of Greece on 432 (focus on 144). Just announced is an EME dxpedition to Saint Martin (FS) and Saint Maarten (PJ7) that will include activity on 432 and 1296 EME. Organizers are K5QE, PA3FPQ, PE1LWT and PE1L. The FS operation will be from 22 to 27 Oct (FK88kb), and the PJ7 activity will follow to 1 Nov. See <u>http://www.emelogger.com/fs</u> for more details as they develop. Congratulations to DJ9WY. Heinrich has received the second 1296 DXCC certificate - see below.

DJ9YW: Heinrich DJ9YW@t-online.de sends news that he has received the second 1296 DXCC certificate and the first by a DL station. He is now up to DXCC 103. [This DXCC is for mixed mode. The OK1KIR group has also applied for 1296 DXCC].



DJ9YW's 100 23 cm QSLs!

DK3WG: Jurg dk3wg@web.de in June added initial QSOs on 70 cm using JT65B RN6MA (using 2 x 38 el yagis and 80 W), UR3EE (using one 34 el yagi and 300 W), UX5UL, K9MRI (his first 432 EME QSO), AE7OV (using 50 W) and DL1RPL. On 1296 he had his first SSB QSO with HB9Q (55/52) and worked using CW SM2CEW, and using JT65C DK0ZAB, SP5GDM, PE2TV and W1E.

EA3HMJ: Jose <u>ea3hmj@gmail.com</u> is QRV on 3 cm with a 1.8 m offset dish, a vertical polarized feed and 30 W of power [assumed at the feed] – I worked using JT4F on 23 May at 1325 F1PYR (12DB/12DB) and 1330 OZ1LPR (12DB/12DB), on 28 May at 1750 G3WDG (11DB/10DB), on 29 May at 2037 DF1OI (12DB/14DB), on 31 May at 2210 G3WDG

(12DB/11DB), on 31 May at 2244 OZ1FF (12DB/14DB), 31 May at 2300 WA3LBI (14DB/13DB), 13 May at 1310 W5LUA (12DB/12DB), and 20 May at 1302 OK1KIR (12DB/13DB) and 1618 WA3LBI (13DB/14DB).

G3LTF: Peter g3ltf@btinternet.com was only active on 6 cm this month -I had lots of conflicts; so no time to do random on 23 cm. On 12 June, I was testing my 6 cm system prior to the contest when I heard a small signal under my echoes. After a QRZ I copied UA3PTW and had a nice, truly random, CW QSO for initial #53. I also worked G4NNS. Fortunately the WX forecast for the contest weekend was wrong. The winds were much lighter than expected and I had only occasional problems keeping the dish on the moon. My 6 cm DUBUS Contest activity was good, but like others I worked a couple less than last year for a total of 26x24. On Saturday I worked OH2DG, JA6CZD, TM8PB (also on SSB), PA3DZL, ES5PC, UA3PTW, OK1CA, SQ6OPG, OK1KIR, DL7YC, SV3AAF, S57NML, F1PYR, SM6FHZ, G4NNS, IK3COJ, LX1DB, W5LUA, VE4MA, WA6PY, VE6TA and SM6PGP #54, and on Sunday JA4BLC, IZ2DJP, ON5RR #55 and K2UYH. CWNR were SP6GWN and S59DCD - just could not get my call. UA4AAV and F5HRY were heard working OK1KIR, but I never found them calling CQ. Sun noise was measured at 16.2 dB for SF of 140. Just like on the other microwave bands, because most people these days are using SDRs it makes sense for the small new stations to call CQ. We will find you! I can easily put the 6 cm stuff in the dish, its just 3 plugs and 4 wing-nuts, so if anyone wants a test I can be QRV. Thanks to all for a great weekend of CW EME.

G4DDK: Sam jewell@btinternet.com after a 3 year gap is again focused on the moon, now on 3 cm -- I'm happy to report that my 2.3 m dish has seen first light on 10 GHz. Although the dish has previously been used on all bands from 23 to 6 cm, my plan has always been to use it on 3 cm. On first listen DL0SHF was (10DB) and the Callsign in CW was easy copy (even for a CW duffer like me!). I am using one of the 'Dutch' LNAs, WG switch and linear polarization with a Chaparral 3 ring feed. The Spid Ras rotator encoder feedback is disabled and the display is only used as a rough indicator of the moon's position. The mouse controller is used to manually control dish position. This is about to be replaced with a 4 switch position joystick. A pulse progress driver is about to be fitted to automate the azimuth positioning. The inclination is indicated by a 'Lidl' digital inclinometer and moon noise indicated using an SDR-IQ and Spectravue in the continuum mode. This makes it relatively easy to find and 'lock' onto the moon. I have carefully set up my digital inclinometer to indicate dish elevation. Soon after moonrise recently, with the moon at 113 degs azimuth, and after the beacon switched on (in Germany), I saw the signal switch on. In continuing to track, I set the elevation by hand to the indicated figure from the VK3UM tracking program. I then lost the beacon for some time. When I eventually found the beacon again, the moon was around 12 degs elevation, but the digital inclinometer was showing around 13.6 degs. My question; is it possible that refraction was this much, or was my inclinometer not set correctly? Could the beacon signal have been 'locked out' by upward refraction from a duct over the sea at these low angles? It was a warm day and there may have been a surface duct present. I have a lot of cleaning up to do before I try to TX.

G4NNS: Brian brian-coleman@tiscali.co.uk was on 6 cm for the DUBUS Contest -- Many thanks to all 16 stations I completed with. Mr Murphy was working overtime and the system died twice due to water that had entered various places on Friday, but waited until Saturday to make itself known. I must improve the waterproofing! I get the impression I'm a bit deaf, so I would be particularly interested in hearing from anyone who called me that I did not hear. It was a very enjoyable weekend. I was also QRV during the 3 cm AW on 22/23 June. I was installing a new microcontroller system for the dish, and the AW was an excellent opportunity to test and calibrate it. In addition to azimuth and elevation, the new system includes a focus adjustment from buttons on the tracking software screen. This speeds up the process of band changing, which can involve changing from prime focus on the lower bands to Cassegrain feeds on 10 and 24 GHz. It also provides another adjustment to tweak... and we all know how much we like to tweak everything for maximum smoke! This project has reached the "what could possibly go wrong" stage without much pain (so far).

IK3COJ: Aldo ik3coj@gmail.com is now on 6 cm as well as 23 and 13 cm -- On 5760, I am running my 3.8 m dish that has mesh holes of 10 mm square and a 20 W TWTA. During the DUBUS 6 cm contest I made 9 QSOs. After the contest, I also worked on 6 cm K2UYH (O/O).

JA4BLC: Yoshiro ja4blc@web-sanin.co.jp reports on his 6 cm contest and 3 cm activity -- I scored in the DUBUS 6 cm contest 13x12 and two dups. QSO'd were UA3PTW, OK1CA, OH2DG, OK1KIR, ES5PC, SQ6OPG, PA3DZL, TM8PB, JA6CZD, JA1WQF, SM6FHZ, F1PYR, G3LTF, PA3DZL (DUP) and TM8PB (DUP). After the contest, I replaced the feed with my 3 cm one and worked on 16 June JA6CZD (569/569) on 10450 and 19 June YO2BCT (569/559) for initial #27 (XB), and on 20 June during the AW PA0BAT (559/559) (XB) and DF1OI (559/559) #28 on 10450. I will be on for the 13 cm AW and 6 cm AWs in July. During the 6 cm contest on 14 June, I listened during my very poor NA window after 2100 and heard and unidentified signal on 5760.098 at 2145. I could not separate the moon noise from the thermal noise of buildings at this time. The signal was heard several times and I suppose it was W5LUA. When I was able to detect moon noise at 2250, nobody was on the band.

KORZ: Bill <u>wmccaa@comcast.net</u> reports he has sold his 432 EME antenna and 8938 amplifier to Duane (WA7KYM) <u>dlh8444@localnet.com</u> in Wyoming. Duane is a long time EME operator on 144 and Bill will be helping Duane become QRV on 70 cm before the summer is over. It will be great to see Wyoming on 432 EME CW, SSB and probably WSJT. Bill became QRV on 432 EME in 1983 and ended up at initial #349, 48 States, (Missing ID and VT) and 50 DXCC countries. Bill thanks all those many stations he had QSOs with on 432 and helped him along the way. He is sorry he has to QRT, but has to move to a location where continued EME operation is not possible.

K6ICF: Don don.rea@verizon.net writes on his EME receive testing -- I had great success with my EME receive testing. Special thanks to G4CCH and I1NDP who kindly put up nice test signals for me on a prearranged schedule. Our window was short but it all worked out perfectly. On Saturday, 13 June, I got several decodes of Howard's signal at -17 dB and Nando's at -25 dB. Nando was running only 100 W and was at very low elevation with some dish blockage. On Sunday, Nando was back on and I got a few more decodes at the same level. Interestingly, I had previously plugged Howard's power and antenna parameters into my EMECalc model and got a predicted SNR of exactly -17 dB. Now I will get serious about transmitting. [See Don's report in the last NL for more details.]

NC1I: Frank <u>frank@NC1I.COM</u> send the following report for June -- Due to the time and effort putting the W1E station on the air, I had very little time to operate from home. I did get on Sunday 21 June for a short while after returning from the Connecticut operation. The following 23 cm stations were worked starting at 1644 UA4LCF, 1651 DK3WG, 1728 PE1LWT, 1749 SM7FWZ, 1828 R4YM (2 x 50 el yagis and 100 W), 1903 PA3FXB, and 2138 KL7UW. [See the W1E report later in this NL].

OK1KIR: Vlada and Tonda vladimir.masek@volny.cz send a summary of the OK1KIR Club's EME operation in June - In the 6 cm part of DUBUS Contest, we completed QSOs using CW on 13 June at 0206 JA1WQF (559/569), 0218 ES5PC (569/569), 0223 UA3PTW (559/569), 0241 JA4BLC (559/569), 0251 SQ60PG (559/559), 0309 OK1CA (579/579), 0335 OH2DG (569/579), 0346 JA6CZD (569/559), 0359 DL7YC (569/559), 0423 PA3DZL (569/569), 0436 TM8PB (569/559), 0456 F1PYR (549/559), 0536 G3LTF (559/569), 0603 S59DCD (549/559), 0611 SV3AAF (549/559), 0715 S57NML (559/579), 0732 SM6FHZ (569/569), 0934 G4NNS (569/569), 1019 IK3COJ (549/549), 1105 LX1DB (579/579), 1118 K2UYH (559/559), 1135 VE4MA (559/559), 1154 W5LUA (579/569), 1228 VE6TA (559/569) and 1242 WA6PY (559/569), and on on 14 June at 0708 ON5RR (559/529), 0808 IZ2DJP (549/569, 0909 F5HRY (O/O) #80, 0952 SM6PGP (O/O) and at 1321 SP6GWN (O/O) for a total of 30x29. Overall in this year's DUBUS contest we have reached in the multiband class a score of 6,085,800 points. On 23 cm, we also worked on 19 June at 1140 W1E (549/549) with CW for initial #377, 1503 LU8ENU (20DB/12DB), 1538 W1E (12DB/11DB) for digital initial {#219} and in sked at 1603 KNOWS (22DB/20DB) {#220} in MN as our 41st US state on 23 cm. KNOWS was worked on cross-polarization (CP vs. LP), and had very good signal, but had troubles with RX. He only made 2 QSOs despite many calling stations. Carl will not be QRV for several weeks due to QRL. During the 3 cm AW, we worked using CW on 20 June at 1141 PA3DZL (559/559), 1222 F1PYR (559/559), 1230 OZ1LPR (569/569), 1456 IZ2DJP (549/569), 1602 WA3LBI (O/O) for initial #99 and PA for our 7th US state, 1625 HB9SV (569/579), 1824 DL0EF (589/559) and 1959 VE6TA (O/O), and on 21 June at 1304 G4NNS (559/559), 1532 OZ1FF (549/549), 1548 OZ1LPR (569/569), 1619 WA3LBI (O/O) and 1910 IZ2DJP (549/579). On Sunday we measured Sun noise at 18.8 dB and Moon noise at 2.9 dB. Furthermore using JT4F, we worked on 20 June at 1244 OZ1LPR (12DB/14DB) for digital initial {#64}, 1310 EA3HMJ (12DB/13DB), 1342 OZ1FF (14DB/9DB) {#65}, 1510 DF1OI (11DB/ 13DB) {#66} and at 1652 WA3LBI (14DB/14DB), and on 21 June at 1636 WA3LBI (14DB/12DB) and 1956 VE4MA (15DB/16DB) {#67}. We also heard W5LUA on Saturday and the DL0SHF Beacon on JT4G (10DB). We had no JA QSOs due to a failure of our 10450 transverter. [They express frustration in their attempts to receive recognition from the ARRL for achieving DXCC on 23 cm. The official (OK) card checker continues to receive responses from the ARRL that a DXCC award can't be issued for 1296. NN1N at the ARRL was contacted back in Dec and promised to arrange for the certificate after his return from vacation. I have been trying to get action without success o far].

OZ1FF: Kjeld kjeld@oz1ff.dk was active during the recent 3 cm AW --After a break of two years, I'm now back on the Moon on 10 and 24 GHz. I replaced the 1.8 m dish that I used previously with a 2.4 m Prodelin 1244 dish and now have auto-tracking going. My power on 10 GHz is 50 W at the feed and on 24 GHz is 10 W. Since returning I have worked on 10 GHz using JT4F N4EME, UA4HTS, OK1CA, WA3LBI, G3WDG, DF10I, EA3HMJ and OK1KIR, and on CW OZ1LPR, PA7JB, PA0BAT, YO3DDZ, PA3DZL, W5LUA and OK1KIR. On 24 GHz, I have had several unsuccessful attempts with F1PYR despite signals being heard at both ends.



OZ1FF's new 2.4 m offset dish

PA3DZL: Jac pa3dzl@ziggo.nl had a great time During the DUBUS 6 cm Contest weekend - I ended the contest with a score of 28x27 and 7 initials, plus 4 additional non-contest QSOs. I worked on Saturday OK1CA, JA4BLC, OK1KIR, SQ6OPG, ES5PC, UA3PTW for initial #42, G3LTF, F1PYR, DL7YC, TM8PB, OH2DG, SM6FHZ, G4NNS, S57NML #43, W5LUA, K2UYH, VE4MA, VE6TA #44, LX1DB, TM8PB (55/55) on SSB DUP, and on Sunday JA6CZD, JA1WQF, S59DCD #45, JA4BLC DUP, IK3COJ #46, SM4DHN #47, SV3AAF, ON5RR, IZ2DJP #48, SM6PGP, K2UYH DUP and SM6FHZ DUP - nice fun QSO. I think activity was slightly less than last year, but personally I did better this year (28 QSOs vs. 21). The strongest signals were TM8PB, SM6FHZ, LX1DB and DL7YC. There was one station on Sunday who called me but signals were too weak; perhaps F5HRY but I was not sure. On 5760 the rig is a 3.7 m Andrew solid dish with 0.34 f/d, >100 W @ feed and a < 0.6 dB NF. I measured 1.1 dB moonnoise. I was also QRV for the 3 cm AW and worked with CW OK1KIR (559/559), OZ1FF (O/O - peaking 559) for initial #17, W5LUA (559/559) #18 and DXCC 13 - my first NA/USA QSO and our 5th band QSO and DLØEF (539/579). Heard was

OZ1LPR (579) and I ran some tests with WA3LBI and VE6TA but could not complete. On 3 cm I have the same dish as on 6 cm but with a linear vertical pol feed, about 60 W @ feed and a < 0.7 dB NF LNA.

PE1RDP: Arno <u>arno.bollen@onsbrabantnet.nl</u> is QRV again on 432 (as his kids are now in school giving him more time for the moon) -- After 2 days of hard work, the 432 array is again on the roof. The antennas are unchanged and 4 x 5.5 WL DK7ZB yagis. I did a quick sun noise measurement and the result was 7.5 dB. I am now looking for skeds.



PE1RDP's 4 x 5.5 WL DK7ZB yagi array

<u>UA3PTW:</u> Dmitry <u>ua3ptw@inbox.ru</u> is now QRV on 6 cm and participated in the DUBUS 6 cm Contest in June. He worked G3LTF, OH2DG, PA3DZL, TM8BP, F1PYR, LX1DB, W5LUA, WA6PY, JA6CZD and VE4MA for a total of <u>10x10</u>. On 432, he added initials using JT65B with RN6MA, YL3AG and UX5UL. And on 1296, he added QSOs using JT65C with VE3NXK, W1E, ZS6JON and R6CS.

VE3KRP: Fast Eddie <u>eddie@tbaytel.net</u> found activity on 1296 rather limited in June -- On 21 June, I worked UA9YLU, I5YDI and SP5GDM digital {#} all on JT65C. There were some very bad thunderstorms with high winds here, but no damage to the antennae. Some of our trees did not fair well here, but of course, not the ones blocking the Moon!

VE6TA: Grant ve6ta@xplornet.com reports on his 6 cm DUBUS results - Sometimes good things come in small packages. After a few years on 5760 with my 5.5 m homebrew mesh dish, I tried a 10' mesh TVRO dish on 6 cm. This the ame dish that I used last month during the DUBUS 3 cm contest. Efficiency is much better on this band and echoes are very good with almost half the dish size. Stations worked were OK1KIR, TM8PB, SM6FHZ, LX1DB, VE4MA for initial #14, G3LTF, ES5PC, PA3DZL #15, WA6PY #16, JA6CZD #17, OH2DG #18, K2UYH #19, G4NNS #20, W5LUA and JA1WQF #21 for a total of 15x15. I worked almost everyone I heard, except DL7YC who gave me several QRZ's, and ON5RR who I didn't get a chance to call. Conditions and activity seemed very good, although, I must admit to a very small sample size and only weak echoes at best with the larger dish. TM8PB was at times S-8 on the meter. Smearing seemed surprisingly high at times despite CP. At other times the signal width was small with good strength. Thanks for a great contest once again, and I now have to decide whether to keep the small dish in operation. It is truly surprising to see what these little lightweight dishes can achieve on the nosebleed bands.

W1E: Frank (NC1I) frank@NC1LCOM reports on his and Bob's (W1QA) 1296 dxpedition to Connecticut -- Our dxpedition went very smoothly and we are quite pleased with the end results. Bob and I really pushed to make this happen in June. The dish went up quickly and easily with the extra help that we had. We were able to transport the 2.4 m dish in one piece complete with feed-arms and feed bracket in place to save some setup time. We had intended on operating from moonrise Friday (19 June) until mid-afternoon local on Sunday, but a forecast of heavy rain and thunderstorms for late Saturday and most of Sunday lead us to break everything down around 2200 on Saturday. We worked almost everyone that was on over the weekend. As expected we were able to work 3 m dish 100 W stations (DK3WG) and 2.3 m dish 20 W stations (LU8ENU) without too much difficulty. Our station produced about 500 W at the feed of the 2.4 m dish. We ended making 41 QSOs with 35 different stations. 5 stations were easily worked on CW! The site was

incredibly quiet and we had a terrific negative horizon on the rising moon. On Friday we heard and worked UA9YLU right at moonrise (sure wish I could do that from home!). Our only disappointment was the lack of North American (NA) and Asian activity. Only 5 NA stations made it in the log and no JA's or ZL's were heard or worked. We were pleased to work VK4CDI. The following stations were QSO'd on 19 June UA9YLU, HB9Q, UA4LCF, DK3WG, I1NDP, UN6PD, LU8ENU, DC9UP, OZ4MM (CW), HB9Q (CW), OK1KIR (CW), DL6SH, PA3FXB, OK1KIR, TI2AEB, DKOSF, W5LUA, UA3PTW, PA0PAT, DF3RU, PA3CQE, SP5GDM. IK5EHI, PA3DZL, G4CCH, G4CCH (CW), and KL7UW, and on 20 June VK4CDI, ZS6JON, YL2GD, IK3COJ, PE1LWT, PI9CM, PA2DW, OZ4MM, I5YDI, VE4MA, LZ1DX, DL6SH (CW), W6YX, and at K5GW. Our intention is to create a special QSL for this operation and have asked the property owner to help with some photos. It may take some time to get cards printed and distributed. We will send cards for each QSO direct via your QRZ address (if that is inaccurate please email your preferred QSL route to NC1I). Return QSL's direct or via the buro via NC1I - no SAE/SASE or green stamps necessary. We were joined over the weekend by KA1QFE, KU1RT, W9JJ and Don Cook. Without their assistance, we could not have pulled this off!



W1E dxpedition site with 2.4 m dish

XE1XA: Max <u>general.manager@corix.us</u> is just about ready on 23 cm EME -- I tested for the 1st time my 1296 eme system, and it seems to work as expected on the 1st attempt. I have my 5 m dish with a septum feed, 250 W at the feed and a good LNA from WD5AGO. I could hear my echoes consistently all the time, even with the moon near apogee. The ON0EME beacon signal is also good copy. I still have a few problems to resolve with the AZ/EL readouts and my transverter sometimes losses power.

K2UYH: My alkatz@tcnj.edu June activity was all on the microwave bands. In the 5760 DUBUS contest, I worked on 13 June at 1106 W5LUA (559/559), 1112 SM6FHZ (569/559), 1117 OK1KIR (559/559), 1124 OK1CA (559/559), 1138 WA6PY (449/559), 1142 ES5PC (559/559), 1151 DL7YC (569/549), 1204 SQ6OPG (449/559) for initial #30, 1214 LX1DB (569/559), 1221 VE4MA (559/559), 1238 SV3AAF (559/559) #31, 1249 PA3DZL (559/559) and 1310 TM8PB (589/569), and on 14 June at 1117 OH2DG (559/569), 1133 G3LTF (559/559), 1213 PA3DZL (559/559) DUP, 1309 LZ1DX (559/559), 1450 VE6TA (O/O) and 2121 JA1QWF (559/559) #32 and DXCC18 for a score of 18x17. I added on 15 June at 1520 IK3CQJ (O/O) #33. I tried to improve my 3 cm system for the June 10 GHz AW, but my plans did not work out as I had expected. The hexagonal mesh on my dish is about 3/4" in the largest dimension. Starting local time on Friday afternoon, with the help of NE2U, I covered my big dish with aluminum screening. The work took longer than I had anticipated, but we had the job done by my local moon window on Saturday. Unfortunately, the improvement on 3 cm from adding the finer covering seemed very small. I spent most of my Saturday moon window trying to understand why the new screening did not work. I had less time on Sunday because of family activities, but continued with adjustments and checks. I did make one QSO on 21 June at 1958 OZ1LPR (559/559) for initial #17. I still do not have a good an answer for the poor results. It is as if I did not add the screening. The pattern looks good, but my moonnoise is only 0.75 dB, about the same

as before. My sunnoise is also only 12.5 dB. I have since made some measurements on 6 cm where my moonnoise is now up to about 2 dB. I also installed a temporary 432 replacement feed for the one burnt up during my QSO with ON4AOI last month. VSWR looks good, but I have not yet completed a QSO with it. I plan to be QRV for the July 70 cm ATP, and will also try to be on for both the 13 and 6 cm AWs.



K2UYH resurfacing his dish

NET/REFL/CHAT NEWS: PI9CAM activity on Sunday 28 June for a short while. <u>VE3NXK</u> is now on 1296 EME. <u>KJ7OG</u> is coming on 23 and 13 cm with a 2.8 m dish. He is presently QRV on 70 cm. <u>KN0WS</u> is putting the state of MN back on 70 and 23 cm EME. Carl has so far made 2 QSOs on 1296, but should be giving out many more. <u>KP2/W3XS</u> QSLs should now be sent to Glenn Kurzenknabe, K3SWZ, 23 Carriage Rd, New Cumberland, PA 17070 USA, <u>bgkurz@verizon.net</u>.

FOR SALE: PA3DZL has for sale parts for a 6 m dish including the hub (6 mm gal steel, 0.5 m) made for 20 ribs, 25 3.2 m long square aluminum tubes, 19 2.8 m square aluminum tubes and 10 M10 stainless steel threaded rods. All is new with pictures available. He also has a complte water cooled PE1RKI 8 x XRF286 23 cm PA, 600 W output with 40 W drive, plug and play in a rack and includes isolator, requires 28 V at 40 A see: http://members.chello.nl/b.modderman/customerfotos.html. If interested contact Jac at pa3dzl@ziggo.nl. G3LTF has a 6' 0.3 f/D solid al dish on a sturdy metal frame available. It will needs a trailer to transport. It is good to 9 cm and probably 6 cm. I will throw in a 9 cm septum feed with it. I'd like it to go to a good home. Contact Peter if interested. K6PF has for sale TWTA assemblies for 6.525-6.875GHz w/pwr level of +35 dBm includes DC-DC converter, Siemens 10-15 W RW1125D TWT for 11.7 GHz, and lotsof other stuff. Contact Bob at k6pf@sbcglobal.net. WA3GFZ has several 432 tube PAs for sale. The first is completed with power supply and provides 350 W. He is asking \$250. He has second similar PA that he has not checked out but believes is working for \$200. He has a third 432 RF deck that uses 2 8930/DX-393 tubes, very nicely built for \$150. Contact Paul at dogfaces@comcast.net if interested.

TECHNICAL: 3 cm Circular Pol Feeds by CT1DMK -- There are a lot of possible variations on feed and polarizer designs that I have read. Much has been written about the construction issues and difficulties associated with septum polarizer feeds, but I have seen very little about the narrow-section (aka squeezed waveguide) feeds that are orders of magnitude easier to construct than septum designs. The narrow-section polarizer is extremely easy to construct and can be made to connect to either coax or WG depending on your needs. It is just two metal plates soldered inside a round pipe - see http://www.gsl.net/ct1dmk/wg_pol01. jpg. Performance wise they are the same as septum designs, but less critical to construct - larger tolerances. Most of the plans/dimensions can be found at http://www.gsl.net/ct1dmk/mw_low.html. The OMT section can end in coax/coax, coax/waveguide and waveguide/waveguide, see the 5.7 GHz design that uses the same principle. (The article stresses the idea that feed, polarizer and OMT are 3 different components that can be chosen as required. A feed for the proper illumination of your dish, the polarizer and the OMT can be configured as required). This technique can also be used to make easy to construct 23 cm, 13 cm, etc feeds as well.

FINAL: I guess summertime is here as the reports are a bit down, but not the opportunities for QSOs! There are also several new US states (KN0WS in MN) and countries (XE1XA in Mexico) now available without a dxpedition.

The Spring ARI EME Trophy winners are for 432 LX1DX, for 1296 (QRP class) I5YDI and (QRO class) OK1KIR, and for 10368 (QRP) IZ1DJP and (QRO) DL9EF. See http://www.eme2008.org/ari-eme/Results% 20EME%20Trophy% 20Spring.pdf for the full results. The dates for the 2016 spring and fall contests have tentatively been set for 9/10 April and 24/25 Sept, but discussions are still in progress as to how best align/coordinate these contests with the 2016 DUBUS contests.

Don't miss MUD 2015 is in San Diego on 15/16 Oct. See <u>mud2015</u>registration @ham-radio.com for details and registration.

And theMid-Atlantic States VHF Conference on 2-4 Oct -- see <u>http://</u> <u>dataandwireless.com/packrat/2015_vhf_registration.php</u>.

Please keep the reports and the technical material coming. I plan to be QRV for the 13 and 6 cm AWs and the 70 cm ATP. I hope to see you off the Moon. 73, Al – K2UYH



It is summertime at G3LTF's. Peter is not always at his key. That is VK3UM serving bar.

W1E 2.4 m dish with transverter and 500 W SSPA on table next to tower.

