

432 AND ABOVE EME NEWS SEPTEMBER 2015 VOL 43 #9

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CONDITIONS: Reports for Aug are dominated by the 9 cm microwave activity weekend (MVAW). Considering the restrictions and time of year, the turnout on 9 cm was excellent. There is one move MVAW for 24 GHz this year on 24/25 Oct – see more info at the end of this newsletter (NW). If the 9 cm AW is any indicator, the ARRL Microwave (MW) EME Contest, 13 cm up, on the 5/6 Sept will be exceptional. There is considerable discussion on what bands to operate, on which days in this NL. There are some thrilling dxpeditions in Aug/Sept. HV0A will put the Vatican on 432 EME for the moonpass from 30 Aug to 31 Aug – see their report in this newsletter (NL). DL2NUD and DF8DX are planning to be QRV from a DXCC that has not been on the GHz bands on 18-20 Sept. If all goes well they will be QRV on 23, 13, 9 and maybe 6 cm. Check MMMVHF for the latest news. They hope to be able to release full details very soon. There is no lack of contest activity in Sept! Besides the MW EME Contest, the ARI's CW/SSB EME Contest is on 26/27 Sept, and the ARRL's Sept VHF up (tropo) contest that includes EME QSOs will be 12/13 Sept – look for stations seeking EME contacts. My apology for not announcing the DUBUS' 432 (& 144) Digital EME Contest on 8/9 Aug. It of course conflicted with the 9 cm MVAW and the 70 cm CW Activity Time Period (ATP), but had a reasonable turnout and is documented in several of the reports. No 70 cm ATPs have been scheduled for the next few months because of the ARRL EME contest activity. I would look for a bit of a renaissance in 70 cm activity with *big guns* DL7APV and I1NDP back in operation.



SP/OK5EME 9 cm portable station at Zieleniec Conference in Poland – see Zdenek's report

DK3WG: Jurg dk3wg@web.de has the following additions to his July report. He worked on 432 using JT65B and CW PE1LWT, and on 1296 using OK1KIR and UA4HTS.

DL7APV: Bernd d17apv@gmx.de is back on 432 – I used my holidays to repair my 16 yagis from the storm damage. I replaced the middle section of the booms with 25x25x2 mm aluminum. The WX was less than optimal with temperatures above 35°C. The work lasted more than 2

weeks. All now seems to be good; SWR is better than ever and Sun noise was around 20 dB, so I believe I am QRV again. [plan to be on for the ARRL EME Contest](#)

G3LTF: Peter's g3lft@btinternet.com activity this month was almost all on 9 cm – I have been looking for XE1XA on HB9Q to work on 23 cm CW, but have not found him yet. On 8 Aug I worked on 3400 G4NNS to check out the gear, the next day I started at 0500 and worked on CW OK1KIR, PA3DZL, SM6PGP, OH2DG, PA0BAT, PY2BS, LX1DB (also on SSB), OZ6OL, K2UYH, WA6PY and G4NNS. My VK window was blocked at the low moon declination. Most contacts on day 2 were on SSB; I worked OK1KIR, PY2BS, LX1DB and W5LUA. On CW I QSOed PA7JB, W5LUA and OZ6OL. I ran a test with G4DDK and he just copied my SSB enough to get both calls even though I had about 20% of the dish obscured at the time. (This is what AWs are for!) I also heard OH2DG, WA6PY, K2UYH, PA0BAT, SM9PGP and G4NNS. On the second day I ran my HB G4DDK preamp with an MGF4941, which got me another 0.4 dB of Sun noise. On 14 Aug on 9 cm, I worked PY2BS (56/56) on SSB and then SP/OK5EME on CW for initial #55. On 12 Aug I switched to 13 cm and worked JA4BLC on their new 2400 band (579) - the best signal I have ever heard from Yoshiro on 13 cm. Thanks to all who sent me Sun and Moon noise measurements. [The preliminary data appears at end of this NL]. In the 6 cm tests, the Sun was quiet and stable but in the 9 cm tests it was not, which is making analysis more difficult. I will have full results with G/T values next month. During the month I finished building a new 23 cm feed to the design by SM6FHZ. It looks like I have a G/T improvement of 0.8 to 0.9 dB over the old Super VE4MA feed due I believe is due to the reduced phase error and slightly lower spillover. See <http://www.2ingandlin.se/A%20novel%20step%20septum%20feed%20suite%20E.pdf> for details. I built this in aluminum with a combination of riveting and soldering, copper is far too expensive for me at least. I will have more results next month.

G4BAO: John john@g4bao.com is becoming operational on 23 cm as well as 13 cm -- I've built and added an SM6FHZ 23 cm patch feed to the 1.9 m dish that I use on 13 cm. I have to admit that I'm impressed with its performance, and it's MUCH smaller than a Septum/Kumar as far as dish blockage goes! So far I'm receive only with a 0.28 dB NF, but I get a respectable signal from the ON0EME beacon. RX shows around -15 to -17 dB C/N in 2.5 kHz and the CW is just readable. Sun/cold sky is around 8 dB. I've decoded JT from PA3FXB (20DB) and PA3CQE (19DB) and copied OZ4MM on CW. I'm working on getting power, cabling and housing outdoors for the 200 W PA, so it could be a week or so before I actually generate RF. [TNX to ON4BCB for forwarding this report].

HV0A: Chris (PA2CHR) post@pa2chr.nl sends news of a dxpedition to put the Vatican on 432 EME -- From 28 Aug to 1 Sept we will be in Vatican City and hope to have luck with receiving via EME. Local noise is tremendous on VHF and UHF. We will have the best filters, preamps and receiver we could find. Our location is close to the ground and surrounded by buildings to avoid QRM as much as possible. We will need about 12 to 15 degs on moonrise and moonset. Operation will be on 144 and 432. The 432 activity will be on one moonpass, starting Sunday 30 Aug at moonrise (1930) to 31 Aug at moonset (0515). On 70 cm we will use a 38 el M2 yagi, Italab PA and cavity preamps with bandpass filters. The operating frequency will be announced on location. PSE see my website: <http://www.pa2chr.nl/News.html> for up to date info during the dxpedition.

I1NDP: Nando i1ndp.nando@gmail.com is now back on 70 cm EME (besides his big signal on 1296) -- After the wind storm that caused my 70 cm array to fall down, I was not sure what to do. The activity on 70 cm has been very low while the band conditions here in terms of noise and spurious signals have been worsening. After dismantling the remains of my array, I found that the actual damages to the yagis were relatively small. I, thus, decided it was worth a try to get the antenna back in operation. I had to purchase new mechanical parts for mount and the big H frame. It was also a considerable effort to rebuild the array. New phasing lines were required. It is now up again. The result from a visual point of view is worse than before, because the structure suffered some straining making the antenna alignment not perfect, but the performance seems to be very close to what it was before. Measured Sun noise is from 15 to 17 dB depending on the local noise level. **I am again QRV on 70 cm and will try to be more active than in the past.**

JA4BLC: Yoshiro's ja4blc@web-sanin.co.jp Aug EME report -- On 10450, I worked on 3 Aug JA1WQF (559/569) and on 11 Aug JA6CZD (559/569). I also tried a sked with IW5BHY on 10 Aug. I was using my 2 m solid dish with circular polarization and good TWT power. He used linear pol on 10450. We both saw traces on the screen, but no copy of callsigns. I changed the feed to a septum, which was made several years ago with a foot of semi-rigid cables in T and R lines. We tried again on 14 Aug and Andrea copied me well (O), but I only saw traces with Spectran. My Sun noise was 13 dB and Moon noise 1.5 dB with the linear pol feed, and 10 dB/0.65 dB respectively with the septum feed. Semi-rigid cable was located in the RX line between the septum and LNA. The additional loss in front of LNA must be the main factor of failure. I was pleased to know Andrea received my signal better in circular pol. I am preparing a low loss circular feed system with the help of PE1RKI and hope to try circular again in late Sept or Oct. On 2400/2320 XB on 12 Aug, I worked G3LTF (579/579). Peter had suffered from QRM on 2400 and switched to another 2400-144 converter. This time he had good result with the new converter. **During the ARRL MW EME Contest, I plan to operate on 3 cm (10450 TX) on Saturday and 6 cm on Sunday (or vice versa, to follow to major operation). I can operate on 13 cm (2400 TX) on both days as I use another dish for 13 cm operation and we have no 9 cm band.**

K1DS: Rick rick1ds@hotmail.com is setting up to participate in the ARRL MW EME Contest on 13 cm for the first time -- I just finished testing my newly constructed 28 VDC 60A PS for a 13 cm 160 W Spectrian amplifier. I also have an IF receiver to tune up to 160 MHz for the EU 13 cm band. I will be trying to operate the first weekend of the ARRL EME contest on 13 cm CW. Using a DB6NT transverter, a DEMI 0.5 dB nF preamp, and a WD5AGO feed into my 3 m dish. Please be patient, this is my first foray into 13 cm EME and cross-band operation.

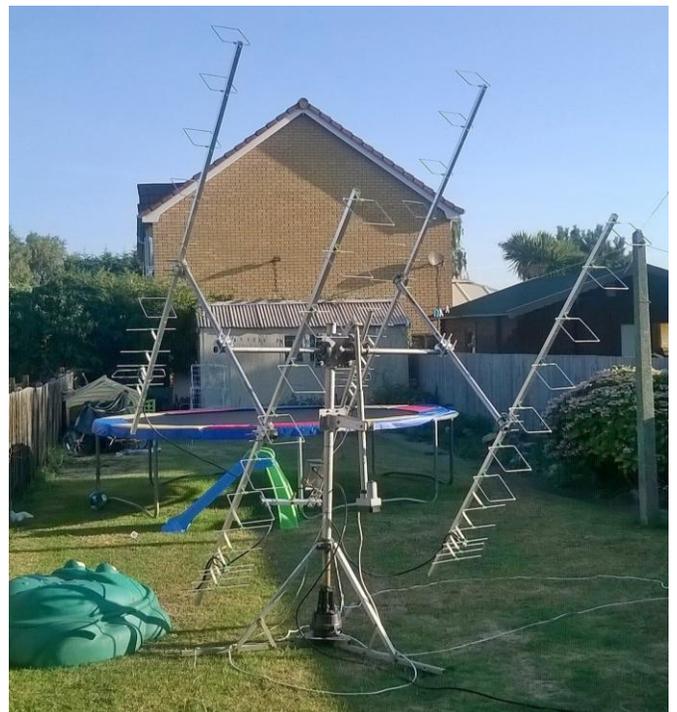
K4EME: Cowles candrus@mgw.net is doing the final tweaking of his 1296 EME system -- I had Sunday free, so I work Sunday afternoon getting my power amp hooked to my dish for the first time! I transmitted and my preamp is still operational, so I think the sequencer and relay is doing well. I am running around 450 ~ 400 W at the dish, so I figure if I can hear the beacon as I have in the past, I should be able to hear my own echoes. But, still have not had a chance to listen for echoes. My dish is 10' and is using the original VE4MA feed. I will be run about 200 W on JT for a while due to my hybrid combiner is only rated for 200 W. I may chance a little more power on CW, since the duty cycle is much less. I placed my power amp in one of those dog house igloos and used a dryer type hose to vent the hot air. I started this project from scratch at the beginning of this year, so I was pleased to get this far with a full time job and wife. **My goal is to be QRV on 1296 during the ARRL EME contest.** [TNX to ON4BCB for relaying this report].

K4MSG: Paul's Phbjr@aol.com Aug EME report -- The first part of Aug was very satisfying from a 432 EME standpoint. In the DUBUS Digital 432 Contest I made 10 EME QSOs including two new grid locators and one new DXCC. My totals now stand at initial #28, locators 25 and DXCC* 15. That same weekend I had my first EME CW QSO on 432 with DL9KR. Jan has an amazing signal and was very patient with me. Thanks to 432 EME, I have now completed and submitted my 432 VUCC application (55 confirmed). I also received a K4EME 432 LNA (which tested at 0.26 dB NF and 22.9 dB gain) and am busily configuring a relay box to allow me to put it to work. I did test it in a receive-only set-up and was extremely pleased with the improvement it showed. My next step will be more power on 432, which with the new LNA should make ZS6JON "reachable" and allow me to complete my 432 WAC. (I have 5 WAC

confirmed on 432 and need only Africa; I've already received a 144 MHz Digital WAC).

K6ICF: Don don.rea@verizon.net is very close to being QRV on 1296 -- Successful receiving tests in June spurred me on to get a complete QRP station together. Work has progressed well and I now have everything required in hand. My basic lineup is a M2 35 el yagi, PE1RKI 100 W SSPA (near yagi) and G4DDK LNA right at the antenna feed. I am using SG-Labs transverter and FT-718 IF transceiver at 2 m. I'm hoping to make some QSOs by the end of Sept, but still a lot to do.

MX0CNS/M0ABA: Tom m0aba1970@gmail.com plans to be active again on 432 during the ARRL Contest -- The antenna system is built so that even though I have a no antenna rule at this QTH, I can operate covertly. It takes about a hour to setup. I rushed to have the array ready for the DUBUS EME Championship and had no time to test the system. I use 4 x 12 quagi array and QSO'd UA3PTW, HB9Q and OK1DFC with 40 W at the feed point. I operated Sunday morning (as M0ABA) and completed with UA3PTW no problem using only 10 W.



MX0CNS's quagi array used in DUBUS Digi Contest

NC1I: Frank frank@NC1I.COM writes his EME activity in Aug -- Not much time for EME in Aug, but what time I had was spent on 70 cm. I found conditions very good and activity outstanding. I was active for about 4-5 hours and made 30 QSOs including 14 initials, many of which were using 1 yagi and 100 W or less! As always all QSO's were random. The following stations were worked starting on 8 Aug at 1017 UT5DL (07DB/07DB), 1028 UA3PTW (05DB/02DB), 1034 DL7FF (24DB/21DB), 1040 DH1WM (07DB/09DB), 1046 PY1UNU (18DB/15DB), 1054 OK2AQ (25DB/18DB) - Mirek was running an 8 wl vertical yagi and 50 W, 1102 G3LGR (24DB/15DB), 1110 DL8DAU (14DB/12DB), 1116 YL2GD (8DB/9DB), 1126 KNOVS (9DB/14DB), 1138 SM2A (13DB/10DB) and 1727 KJ7OG (24DB/15DB), and on 9 Aug at 0646 PE1LWT (17DB/07DB), 0657 OT7K (14DB/12DB), 0705 GW3XYW (24DB/O), 0711 PE1RDP (17DB/18DB), 0723 WA4NJP (12DB/O), 0729 G4EZF (18DB/11DB), 0737 R4YM (21DB/17DB) - Genn was running an 18 el yagi and 100 W, 0747 RA9LR (18DB/15DB) - no info on this station, 0757 DD0NM (26DB/15DB) -- a 16 el yagi and 70 W, 0820 K4MSG (20DB/14DB), 0833 SM3KPX (14DB/01DB), 0906 RN6MA (20DB/12DB), 0926 RK9CXM (23DB/O), 0936 OK1DFC (06DB/O), 0948 G3LGR (25DB/15DB), 1002 K9MRI (12DB/O), 1008 K7ULS (28DB/22DB) -- 9 wl yagi and 70 W in UT, and at 1030 SP1JNY (23DB/18DB). My 4.5 m dish used on 23 cm suffered some minor damage in Aug. We had updated the firmware in the rotor and did not notice that it overrode some of the programmed limits. On the morning of the 8th, I had stopped tracking the moon and decided to check Sun noise. The rotor decided to take the shortest route (through North) to get to the sun. Unfortunately this

caused the flex-lines to wrap up around the outer rim of the dish damaging the rim and the mesh in one petal. W1QA and I made a quick crude repair for now. I suspect the dish will work fine as it is, but sometime between now and the winter we will take another look at it and make a better repair. We continue to work hard on getting the 70 cm equipment ready for our Vermont trip the end of Oct and 1 Nov. We are also making some minor improvements to the 23 cm portable setup and will have an update next month. [Frank's group plan to put CT on 144 as W1E on 19/22 Nov].

OK1DFC: Zdenek ok1dfc@seznam.cz sends his log for the DUBUS 432 DIGI EME Contest on 8/9 Aug -- I was QRV only for a short time. On Saturday morning I had phone call with my son. He was on hiking in mountains and had broken his leg. So I drove 250 km to find him and get him back to a hospital. Anyway, Saturday was lost. Then on Sunday morning we had terrible wind and I lost operating the JA window. When I was finally able to get on, I found nice activity and was able to work many initials. The high point was working a new state on 70 cm, UT. I QSO'd on 8 Aug at 0014 UA3PTW, 0046 MX0CNS for mixed initial #332*, 0149 G3LGR (23DB), 0155 OT7K (14DB) #333*, 0236 G4EZX (12DB), 0253 DH1WM (10DB) #334*, 0634 PE1LWT (9DB), 0652 YL2GD (10DB), 0659 K3GNC (23DB) #335*, 0711 RN6MA (23DB) #336, 0720 K9MRI (9DB) #337*, 0731 SM3KPX (22DB), 0744 K7ULS (28DB) #338* and new WAS, 0750 K4MSG (22DB), 0802 UT5DL (8DB), 0713 OK2AQ #339*, 0714 R4YM (22DB), 0716 WA4NJP (15DB), 0735 KG7CN #340*, 0746 ZS6JON (9DB) #341*, 0804 DL8DAU (14DB), 0834 PY1UNU (24DB) #342*, 0852 G3LGR (28DB), 0858 PE1RDP (15DB), 0938 NC1I (8DB), 0948 W7MEM (18DB), 0955 HB9Q (7DB), 1029 YL3AG (21DB) #343*, 1035 KJ7OG (17DB) #344*, 1043 KN0WS (13DB), 1057 DF3RU (7DB), 1126 SP1JNY (28DB), 1148 SM2A (18DB), 1156 UT6UG (10DB), 1206 DF7FF (22DB) #345*, 1237 K5DOG (16DB), 1249 K2UYH (15DB) and 1319 LU1CGB (28DB) for a total of 38x37. [Zdenek was also active as SP/OK5EME - see the report later in this NL].

OK1KIR: Vlada and Tonda vladimir.masek@volny.cz send news on their EME in Aug – On 1296 we worked on 7 Aug using CW at 2329 VK3AXH (559/559) for initial #382, 2244 VK3AXH (13DB/13DB) on JT65C, 2255 VK2AMS (18DB/O), 2310 VK3XDK (25DB/16DB) for digital initial {#221} – he was using a 1.7 m dish and only 30 W. On 9 cm during the MWAU we worked using CW/SSB on 8 Aug at 0041 OZ6OL (549/559), 0053 VK4CDI (O/549), 0131 VK3NX (559/569) - Charlie first time ever on 3398.100 in the new VK band, 0516 G3LTF (569/569), 0542 SM6PGP (559/559), 0555 PA3DZL (569/569), 0633 OH2DG (569/579), 0758 G4NNS (569/579), 0811 PY2BS (579/579) for initial #61, 0851 LX1DB (579/569), 0906 K2UYH (569/569), 0947 WA6PY (559/569), 1147 HB9Q (589/579), 1221 PY2BS (55/54) on SSB, 1234 HB9Q (57/53) on SSB, and on 9 Aug at 0651 G3LTF (44/45) on SSB, 0812 PA7JB (549/559), 0853 PA0BAT (579/569) and 0936 W5LUA (579/569). We also worked with digital modes on 9 cm on 8 Aug at 0615 PA3DZL (15DB/14DB) JT65C, and on 9 Aug 0107 VK4CDI (15DB/13DB) JT4F for digital (#14) and new continent on digi, 0151 VK3NX (16DB/16DB) {#15} and JT ODX 15886 km, 0555 HB9Q (13DB/15DB), 0603 PY2BS (15DB/12DB) (#16) and 5th continent on digi (in CW only 4 collected, hi) and at 0701 again PY2BS (13DB/13DB). In total during the 9 cm AW we worked 16 stations on CW, of these 4 were repeated with JT4F and one in JT65C. Furthermore, 3 stations were QSOed on SSB. We also tried a QRP test with HB9Q. After they decreased their power from 100 W to only 0.5 W (-23 dB), we could still easily decoded their JT4F signal (17DB). This would be equivalent to a decrease of the dish size from 10 m to only some 70 cm at full power or to two less than 2 m dish stations with less than 100 W. It indicates an interesting opportunity even for very small stations to work at least moderate and big guns on 9 cm. Our Sun noise on 8 Aug at about 0700 was 18.1 dB (SF121), Moon noise during local night on 9 Aug reached 1.2 dB, but during the day, it was impacted by external noise background and was floating down to only 0.8 dB. We use a prime focus 4.5 m solid dish extended to 6.1 m by the mesh (6.3x6.3x0.6 mm), but on 9 cm the extension is illuminated only partly (about 5 m) using OM6AA chaparral septum feed (3 rings). The LNA is 0.5 dB and system NF is estimated at about 0.6 dB. The following weekend during MW/EME meeting in SP on 15-16 Aug we worked Zdenek on 9 cm as SP/OK5EME. First on 15 Aug at 0736 in JT65C (14DB/20DB) {#17} and then in CW at 0817 (559/539) #62. Zdenek was loud but had a problem with decreasing RX sensitivity (low noise) and unfortunately after our CW QSO his 9 cm transverter became deaf.

PA3DZL: Jac pa3dzl@ziggo.nl was on for the 9 cm MWAU – I worked on Saturday 8 Aug all random G3LTF (569/569), OK1KIR (569/569), OK1KIR (15DB/14DB) JT65C, OH2DG (569/569), SM6PGP (559/569),

PA0BAT (569/569), G4NNS (569/569), PY2BS (579/579), K2UYH (559/559), WA6PY (569/559), OZ6OL (559/559), LX1DB (579/569), HB9Q (559/579), HB9Q (53/55) SSB and PY2BS (53/54) on SSB. I was also QRV on Sunday for 30 min and heard OK1KIR (13DB), HB9Q (12DB) and PY2BS (13DB) on JT4F. Signals were very nice on 9 cm this AW. Strongest signals were from HB9Q, PY2BS and G3LTF. On 14 Aug I worked VK4CDI on 9 cm both on CW and JT4F for initial #38. Phil was running 15 W output and a 3.6 m dish. The following day I worked the SP/OK5EME 9 cm dxpedition on CW, JT65C and JT4F. My rig on 3400 is a 3.7 m Andrew solid dish with f/d 0.34 and RA3AQ feed, >150 W SSPA @ feed and <0.5 dB NF @ feed. I will be active in the ARRL MW Contest and am thinking of operating 13 cm on Saturday and 3 cm on Sunday because this band is new for me and I worked only 18 initials up to now. Changing on Saturday to 9 or 6 cm is an option, but only during daytime for some hours. 6 cm will be the best band because of the activity. Changing bands takes me about 20 min, but must be during daytime with no rain.

PY2BS: Bruce bruce@zirok.com writes about the 9 cm MWAU – I had a total of 21 QSOs with 14 stations on the AW, of which 4 were initials including the first LX - PY on 9 cm. I also made my firsts tests with JT4F with Tonda and Dan. I could decode HB9Q signals down to 0.5 W at his feeder. On Saturday I worked G4NNS (559/579) for an initial (#), G3LTF (569/579), SM6PGP (559/569), OK1KIR (579/579) (#), PA3DZL (579/579), OH2DG (569/579), LX1DB (569/579) (#), K2UYH (569/579), OZ6OL (549/559), WA6PY (559/569), HB9Q (57/55) SSB, OK1KIR (54/54) SSB and PA3DZL (53/53) SSB. On Sunday I added OK1KIR (JT4F), HB9Q (JT4F), G3LTF (55/56) SSB, G4NNS (569/579), PA7JB (549/569) (#), PA0BAT (569/579), W5LUA (579/579) and W5LUA (55/55) SSB.

SM6PGP: Hannes sm6pgp@illipe.se sends some info for the NL – I worked 9 QSOs in the 9 cm MWAU, OK1KIR, G3LTF, OH2DG, PA3DZL, PA0BAT, PY2BS, G4NNS, K2UYH and HB9Q. This was the first trial with my extended dish. I have added 30 aluminum sheets to my 1.8 m dish. It now has a diameter of 2.3 m and an f/D = 0.31. I am also mounting LNAs and SSPA into frames using an RF-head concept that makes it easy to change bands and to get the feed into same position every time. I found it very convenient to use my 3D printer to print feed-holders in black ABS plastic. The 9 cm RF head was just finished in time for the AW – [see picture at end of NL]. The 6 cm RF head is almost finished and 23 cm is on the way.



SM6PGP's extended 2.3 m dish

SP/OK5EME: Zdenek ok1dfc@seznam.cz operated portable at the MW meeting in Zieleniec on 14 and 15 Aug -- I was QRV with my portable setup on 3400 and tested a new transverter (TRV). During the evening on the 13th, I was able to build antenna and find a suitable operating location near an extension of the hotel that was under construction. The morning of 14 Aug, I installed the TRV at the focus point of my dish and tested Sun noise. At first all looked OK; Sun noise was 12 dB, but during my first QSO with HB9Q, I realized that something wrong. The signal from Dan was not strong enough. So I measured Sun noise again and it was only 9 dB. Hmm, I started to check all again and again and was not able to find anything wrong. The feed and TX worked well, because my

received reports all indicated a good signal via Moon. I was able to work 19 QSOs, but then TRV stopped RX totally. When I arrived home, I have found problem was due to a bad potentiometer used to set the idle current for the NE 32584 LNA. If I increased its temperature with hair dryer, I was able to simulate same problem as I had in SP when the TRV was heated by the Sun. The TRV is now repaired and ready for other tests. **I will try all again, maybe in ARRL MW contest.** In Poland I worked HB9Q JT4F, HB9Q JT65C, PA3DZL JT65C, PA3DZL CW, OH2DG CW, LX1DB CW, PY2BS JT65C, G3LTF CW, HB9Q CW, PA0BAT JT65C, OZ6OL JT65C, PA0BAT CW, W5LUA JT65C, W5LUA CW, VK4CDI JT65C, VK3NX CW, OK1KIR JT65C, PA3DZL JT65C and OK1KIR CW. I have to apologize to others on the band that waited for me. I was not able to repair it portable. So for next dxpedition to SP, I will take 3.4 again and there will be a chance to work me for sure.

T12BAE: Armando aebonilla@ice.co.cr writes to explain why he has not been QRV -- My 1296 G4DDK LNA died about a month ago. I tried to be sure it was dead. Remember that my antenna is on the roof of my house and I am 76. My MD said not to go on the roof. So last Saturday with the help of a ham friend and 2 more men, they reached the feeder box, opened the LNA box, and found the connections were OK. I had them replace it with an old LNA and I again could hear the hiss of a good LNA. To hire people to do what I could do before my illness causes a big delay and is expensive. I also need to replace/repair the faulty LNA. My cables were also messed up; I normally do not turn it beyond 280 degs. I recalibrate AZ and EL motors, and beacon was OK. So I'm on the air again, but with less sensitivity.

UA3PTW: Dmitry ua3ptw@inbox.ru has the following additions to his July report. He added on 432 using JT65B AE7OV and PE1LWT, and on 13 cm using SSB DK7LJ and CW SM2CEW. On 6 cm he QSO'd on CW K2UYH. [TNX to DK3WG for forwarding this report.]

VE3KRP: Fast Eddie eddie@tbaytel.net sends news of his 1296 EME operation -- I worked on 18 July PA3CQE JT, NC1I JT and LU8ENU JT, on 15 Aug PA3FXB JT, LU8ENU JT and IK5VLS JT, and on 16 Aug WA3GCQ JT for a mixed initial (#*), IK5VLS JT and W7MEM JT (#*). **I have been trying to chase down XE1XA for a new country and initial but keep missing him.** I also need to work on my azimuth drive reduction gear, which is leaking gear oil. Once the snow falls and the temperatures fall, I know it will be time to do so, hi hi!

VK3NX: Charlie charlie@vk3nx.com reports that future operation on 9 cm from VK will be in a new lower frequency band -- It seems that we in VK are affected by new regulations and the resultant changes to our band allocations. We can still operate on 3400+ until around 1 Oct 2015. I have already made the necessary LO changes and can now operate in the new 3398-3400 band. I have already worked OK1KIR and OH2DG from the band. I worked both direct on the new VK "sub band" of 3998.100. **[During the 9 MVAW Charlie worked additional stations from the new frequencies].**

W5LUA: Al w5lua@sbcglobal.net bring us up to date on his summertime activity -- On 1296, I worked on 14 June UN6PD for a new DXCC, on 19 June W1E in CT, and on 13 July XE1XA for another new DXCC. **During the 8/9 Aug 3400 MVAW, I was able to work VK3NX on 3398 CW and SSB, WA6PY on 3398, and on 3400, G4NNS, OK1KIR, K2UYH, OH2DG, G3LTF (CW/SSB), PA0BAT, and PY2BS (CW/SSB).** Also on 9 cm, on 14 Aug I QSO'd SP/OK5EME with both CW and JT65C. On 5760, I worked during the 13/14 June DUBUS MVAW SQ6OPG, K2UYH, OK1CA, SM6FHZ, G3LTF, OK1KIR, UA3PTW, VE4MA, ES5PC, PA3DZL, TM8PB, LX1DB, F1PYR, DL7YC, SV3AAF, IK3COJ, WA6PY, OH2DG, VE6TA, JA1WQF and JA6CZD, and on 18 July P19CAM, SM6FHZ, G3LTF, ES5PC, K2UYH, VE6TA and PA3DZL, all on CW. On 10368 I worked on the weekend of 15/16 June using JT4F VK7MO (12DB/10DB), EA3HMJ and G3WDG, and on 20 June PA3DZL for a initial and also OZ1FF. And on 24048, I worked on 29 June, VK7MO (19DB/12DB) using JT4F, which is not bad for the middle of our Texas summer.

WA6PY: Paul's pchomins@san.rr.com main EME focus in Aug was the 9 cm MVAW -- I QSO'd during 8 Aug on 9 cm OK1KIR, G3LTF, PA3DZL, PY2BS, K2UYH, HB9Q and G4NNS, and on 3398.1 W5LUA and VK3NX. I was QRV only during first day. Noise measurements on 3400.100 on 8 Aug at 2340 were Sun 15.8 dB, CS/N 5.8 dB, Moon 0.6 dB with a 3.6 m dish and septum chaparral feed. I used a power meter at 144 IF my after down converter. The BW was 3 MHz. I do not run Sun noise measurements very often; last time, few years ago the Sun Noise

was 13.5 dB. **I will be active in the ARRL MW EME Contest. My window to EU is very short. Changing band will take out 1/3 of my window. I plan to be QRV both days on 3 cm and the first day on 13 cm and the second day on 6 cm.**

WB2BYP: John storyavenue@hotmail.com is now set up for 9 cm operation -- **I did some SWLing on 3400 on Sunday of the 9 cm MVAW and heard G3LTF, K2UYH and HB9Q.** My feed was placed adjacent to W2IMU 23 cm feed with some predictable skew to the beam. My sun noise was 15.6 dB measured on 8 Aug with an SF of 127 is off VK3UM prediction by at least 3 dB. Moon noise about 1.0 dB at best, so I think there is improvement to be made. I wonder how that my shortfall compares to others with compromise feed locations. My ant is an 8.4 m dish with 0.43 f/d fed by septum horn with a scalar ring and an LNA with a 0.7 dB NF. The box with the TX and up/downconversion was in the shelter at the tower base, not at the feed. I hope to have everything in place sometime soon. More details can be found at <http://www.storyavenue.com/dsk3400.htm>.



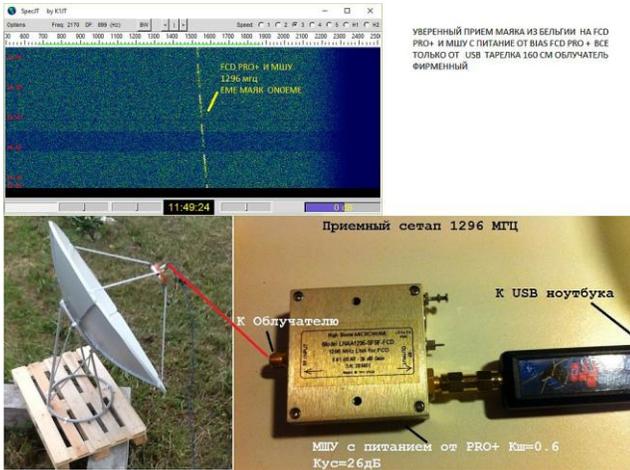
WB2BYP's 28' dish with 23 and 9 (offset) cm feeds in place

WD5AGO: Tommy wd5ago@hotmail.com has been busy this summer organizing an ARISS contact at his school and attending various conferences -- It was great to see K2UYH, WA6PY, N2UO and others at MTT-S symposium this year. I have also been racing my custom built EV bike, which reached 100 mph for 11.8 s! **Our group plans to be on 13 cm and possibly 6 cm for the MW portion of the EME contest. The following month will be split between 23 cm and 70 cm.** Our school group has rebuilt the large horn (now 13' long). It is now performing as expected with 7.5 dB of Sun and 8 dB CS/G with CP. We plan to use it on one of the contest weekends. 23 cm skeds welcome.

K2UYH: I alkatz@tcnj.edu did not have lot of success on the Moon this month. Although, I had all my DXCC cards approved and am now waiting for the certificate! My next focus will be completing 1296 WAS. I still need several states and have a number of missing QSLs. **I was on for the 9 cm MVAW and QSO'd on 8 Aug at 0831 OH2DG (559/569), 0856 G4NNS (559/559), 0900 PY2BS (579/569), 0906 OK1KIR (569/569), 0918 G3LTF (569/569), 0934 SM6PGP (559/549), 0950 PA3DZL (559/559) and 1016 WA6PY (559/559), and 9 Aug at 0940 W5LUA (569/559), 0955 OZ6OL (559/559), 1010 HB9Q (589/559), 1023 PA0BAT (559/559) and 1054 PA7JB (559/539) for a total of 13 QSOs over the weekend.** I was also on 432 and worked on 8 Aug at 1530 KNOWS (23DB/24DB) JT65B for mixed initial #889*, on 9 Aug at 1241 YL2DG (20DB/18DB) JT65B and 1246 OK1DFC (22DB/O) JT65B, and 22 Aug at 2145 LU8ENU (25DB/25DB) JT65B. Sadly I missed the 432

ATP as I was adding more 3400 QSOs at the time. I also tried with KN0WS (26DB/-) in MN, one of states I am missing a QSO, but he had RX problems and did not copy me. I will be operating ARRL EME Contest under my own call this year. K1JT has some conflicts but may get on for part of the contest. I hope to have the station (K2UYH) QRV for the MW EME contest at least on 13 cm, if not some of the higher bands with NE2U and K2TXB at the controls, as I have to be away in EU at the time of the contest. I should be on for the other contest weekends.

NET/REFL/CHAT NEWS: VE4MA was not QRV for the 9 cm MVAW as his rig was left behind in AZ for operation during the winter. **KL7UW** plans to install a 3400 feed on top of his 1296 feed. He sees a Sun noise of 16 dB vs. 17.3 dB predicted. **N7MB** is working on a stress type dish for portable (rover-like) 1296 EME operation. **RV3APM** reports copying the 1296 EME Beacon (ON0EME) with a 1.6 m dish, LNA and FCD PRO+ dongle.



RV3APM 1.6 m dish & dongle reception of ON0EME Beacon

FOR SALE: WD5AGO has 2 new 9 cm CP feeds, 1 new 23 cm CP feed and 1 new 3 cm feed (w/SMA's) available. He also has plenty of stock on 70, 23, 13 and 9 cm LNAs with 25 to 40 dB gain and 0.2 to 0.5 dB NF. Email Tommy for info at wd5ago@hotmail.com. **IZ0CLS** has a 3 m f/d 0.4 parabolic dish kit for sale. The kit includes 16 pre-assembled ribs, 8 angular reinforcement structure, central hub, circumference tubes and all hardware (stainless steel). The weight is around 20/30 Kg. (The mesh is not included). The price is 850 EU plus shipping. If interested contact Fabrizio at fabrizio.iz0cls@gmail.com or iz0cls@libero.it. **OE5JFL** has

TECHNICAL: We have G3LTF's preliminary results for the Sun/Moon measurements taken during the 9 cm MVAW. See Peter's report, more will follow.

Callsign	Date	Time	YdB Sun	YdB moon	Dish diameter
HB9Q	08-Aug	12:00??	20.1	1.6	10
G3LTF	08-Aug	09:45	18.2	1.12	6
PA3DZL	08-Aug	10:00	15	0.6	3.7
PY2BS	08-Aug	1500	15.8	0.9	5.1
LX1DB	08-Aug	10:15	16.5	1.2	10
W5LUA	08-Aug	1500	16.2	0.8	2.3
WA6PY	08-Aug	23:40	15.8	0.6	3.6
G4NNS	08-Aug	12:00??	13.4	0.425	3.7
SM6PGP	08-Aug	11:00	12.1	0.31	2.3
OZ6OL	08-Aug	09:00	13.5	0.6	5
G4DDK	09-Aug	15:00	11.5	0.35	3
K2UYH	08-Aug	10:00	17.25	1.6	8.5
VK3NX	08-Aug	03:00		0.65	3.7
OK1KIR	08-Aug	07:00	18.1	1.2	6

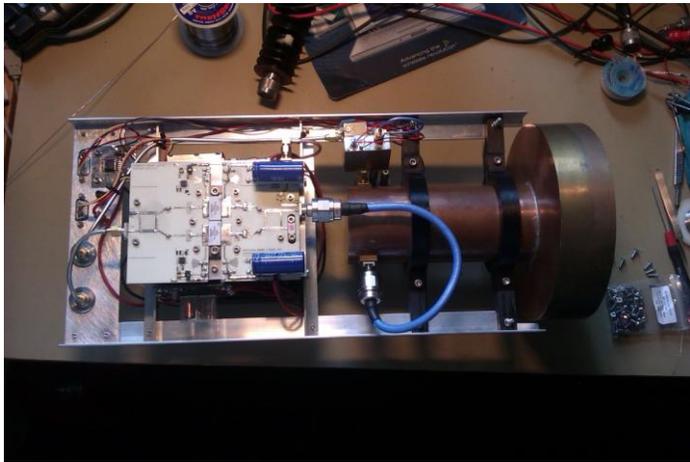
new firmware for his antenna tracker. See Hannes' webpage http://www.qsl.net/oe5jfl/ant_cont.htm.

FINAL: The question sometimes is asked as to why 2 m EME activity is not covered in this NL. Back when a 2 m EME NL was first started, we had an agreement to not compete. The original 2 m NL has long since stopped publishing, (but others taken over and kept the 2 m EME NL alive and well); over the years I have always tried to honor this agreement and keep 2 m reports to a minimum. [BTW I have over 100 QSOs on 2 m EME and could be QRV if needed].

There will be 24 GHz MVAW on 24/25 Oct. LX1DB surveyed the 24 GHz operators and determined that this would be the best weekend for this MVAW – TNX to Willie for his efforts. Please add these dates to your AW lists.

EME2016 in Venice on 19-21 Aug 2016 is now 360 days away! The web site is under construction and gathering a list of those planning to attend- see <http://www.eme2016.org/>. You do not want to miss this one!

More reports and the technical material are needed. PSE keep them coming! See my report. I will be away for the MW EME Conference weekend, but my station (K2UYH) should be on. I shall be looking for you off the Moon. 73, AI – K2UYH



SM6PGP's RF-head for 9 cm/LDMOS PA 200W/3D printed feed-holders.