# 432 AND ABOVE EME NEWS
# AUGUST 2012 VOL 40 #7

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**CONDITIONS:** Summertime is for microwave! There was a time when EME activity seemed to quiet down during the summer months, but now with the 6 cm DUBUS Contest in July, and all the microwave activity weekend (AWs) – TNX G3LTF, it has been transfer to a period of concentrated microwave EME activity. This July microwave activity was further boosted by the appearance of TM9PB on 6 cm using a 13 m dish with an EIRP of 25 MW! The resulting 5760 activity from their 3 days of operation seems to make mute concerns about where to fit a 6 cm AW – see the TM9PB report later in this newsletter (NL). Coming up on 14/15 July is the 9 cm EME AW. In July, the 70 cm CW activity time period is again split between 15 July 1200 to 1400 for NA and 22 July 0930 to 1130 for Asia. With all the microwave operation, let's try to give 70 cm a little increase this month.

**TM9PB 13 m dish used for 6 cm EME tests – see report**

**1296 MHz LUNAR BEACON REPORT:** Walter (ON4BCBP) on4bcb@gmail.com writes that the beacon continues to function well, and that the improved PA/combines are holding up under the continuous power dissipation -- We would like to include in the 2012 EME conference DVD as many RX reports from the EME beacon as possible. Please send your RX reports, photo of your setup or screenshots from your RX to my email or ON7UN@on7un.net. The smallest station reporting reception is CS5RAD/CR7AFN (IM59pk) using a 1.35 m dish with OK1DFC feed and 0.3 dB Goran LNA.

**G3LTF:** Peter's g3ltf@btinternet.com EME report for June -- Bad weather prevented much EME activity this month, but I was able to operate on the 6 cm DUBUS contest weekend on 23/24 June, where there was a lot of activity. I worked 17 stations, OK1KIR, F2TU, SV1BTR, PA0BAT, ES5PC, OH2DG, F1PYR, PA3DZL, SQ6OPG, DL7YC, OK1CA, PY1KK, K5GW, W5LUA, CT1DMK, VE4MA and SV3AAF. Heard were PA7JB, SP6GWN and G3LQR. CWNR were IK2RTI and LX1DB. The window to JA was obscured because of the low declination. I also had enormous problems keeping the dish on the Moon due to gusting wind all weekend. The backlash is about 2 beamwidths and the Moon noise was varying wildly. On Saturday, I used my W2IMU feed, which gave 14.5 dB of Sun noise with an SF88. I had suspected for some time that the RA3AQ feed, which gives 14 dB Sun noise (same SF) gave me better echoes. On Sunday, I changed over to it. Echoes were indeed slightly better, but the dish was even harder to keep pointed in the wind. (I'd forgotten that the beamwidth was even less with this feed!) But, I definitely had more signal on the Moon. The power at the feed was 22 W. The reasons behind the better performance is perfectly logical, and has to do with the outer 1 m edge of the dish. It is 12 mm mesh, which has a 5 dB feed through loss. The RA3AQ feed illuminates this area and there is a transmit gain, but the transparency lets though more noise from the hot ground. I will have to look at covering more with 6 mm mesh. One more (semi-technical) point, I find I get better copy on very weak noise like, spread signals using my SDR with the BW set to match the spread ~100 Hz or less, and tuning it in 12Hz steps. The signal then just "jumps out". It is certainly better than the analogue filters in the TS850, and my outboard tunable audio filter. Drift is a problem, of course, but this just means a lot of keyboard tapping. On 26thJune I was delighted to work Charlie, G3WDG and Petra, G4KGC on 9 cm for #38. I'm hoping to get more QSOs in July during the AW, weather permitting.

**G4CCH:** Howard howard@g4cch.com writes -- I'm hoping to be on for the 9 cm AW, but it will depend a lot on the weather. It's been raining here nearly every day for weeks, so I still haven't tuned the feed or had time to work on how to mount the "stuff" on to the dish. This will be the first time I have remotely mounted an SSPA at the feed and am a bit nervous.

**G4RGK:** Dave zen70432(x)zen.co.uk is currently working on a small extension to his dish, which will take it from 3.8 to 4.6 m and in doing so changed the f/D from 0.47 to 0.38, which should be better for his DFC feed -- I am seeing around a 3 dB improvement in Sun noise.

**JA4BLC:** Yoshiro ja4blc@web-sanin.co.jp was QRV for the DUBUS 6 cm Contest on 23/24 June -- I worked on 5760 with my 3 m Cassegrain dish ES5PC for initial #16,SV1BTR #17, OH2DG #18, OK1KIR, F2TU and OK1CA, and heard VK3NX. My 25 W seemed too weak. After the contest, I tried to expand the sub-reflector from 30 cm dia (10 wl at 10450) to 60 cm (10 wl at 5760). This change improved both my own echoes and Sun noise (+1 dB). After modification, I worked on 29 June JA6CZD (549/449).

**JA6CZD:** Shichiro ja6czd@mx35.tiki.ne.jp was also active in the 6 cm contest. He used a 5 m mesh dish and 80 W, and worked SV1BTR, OK1CA, OH2DG, F2TU, ES5PC and OK1KIR. [TNX to JA4BLC for forwarding this report.]

**JA8ERE:** Mikio sgl01011@nifty.ne.jp has 3 m TVRO mesh dish that he operates successfully on 3 cm, down on 6 cm with 80 W. He worked K5GW, SV1BTR, ES5PC, F2TU, OK1KIR and OK1CA. [TNX to JA4BLC for forwarding this report.]

**JJ1NNJ:** Kouichi jj1nnj@extra.ocn.ne.jp was an SWL using a 3 m solid dish during the 6 cm contest. He heard ES5PC, SV1BTR, VK3NX, F2TU, OK1CA, OK1KIR, OH2DG, JA8ERE, PA3DZL, PA0BAT, SQ6OPG and JA6CZD. [TNX to JA4BLC for forwarding this report.]

**OK1CA:** Franta strihavka@upcmail.cz was on for the 5760 contest -- I worked in the 6 cm part of DUBUS EME Contest: SV1BTR for an initial #30, ES5PC, OH2DG, VK3NX, SQ6OPG, JA6CZD, PA3DZL #31, OK1KIR, PA0BAT, PY1KK #32, F2TU, G3LTF, S57NML, DL7YC, JA8ERE #33, SP6GWN, JA4BLC, F1PYR #34, G3LQR #35, K5GW, IK2RTI, VE4MA, SV3AAF, CT1DMK, PA7JB and WA6PY. I ended with a total of 26x25. I was not QRV at Saturday for my NA window and thus missed W5LUA and WD5AGO. I found very good activity and achieved my best ever 6 cm results. I plan to be QRV in 9 cm AW in July.

**OK1KIR:** Tonda (OK1DAI and OK1DAK, OK1DCI and OK1VAO) jelinek.antonin@email.cz report on their club's recent EME -- From 1 to 23 June, we continued hard work on extending our existing 4.5 m solid dish

(f/D=0.42) to 6.1 m (f/D=0.31) with zinc-coated mesh (pitch 6.3 x 6.3 mm, wire 0.6 mm). The mesh was formed and mounted to the Al supporting structure from 24 ribs by loops made from thin stainless wire. The ribs structure was strengthened by intermediate and outer circles. The extended dish was used already in the 6 cm part of DUBUS EME Contest. On Saturday, 23 June, we worked at 0814 VK3NX (559/569), 0823 ES5PC (559/559), 0831 SV1BTR (559/559), 0848 OH2DG (559/569), 0901 F2TU (559/559), 0931 PA3DZL (O/O), 0944 JA8ERE (O/O), 1006 OK1CA (559/569), 1047 F1PYR (O/O), 1101 G3LTF (549/559), 1115 PA0BAT (559/559), 1127 SQ6OPG (549/559), 1340 PY1KK (559/559), 1423 SP6GWN (O/O), 1514 DL7YC (549/539), 1654 W5LUA (559/559), 1713 K5GW (569/569), 1740 VE4MA (559/559), 1751 PA7JB (549/559), 1815 S57NML (O/O) and at 1847 WA6PY (O/O) for at total of 21 QSOs. On Sunday, 24 June we added at 0922 JA4BLC (549/559), 1008 JA6CZD (559/559), 1625 CT1DMK (559/559) and 1839 SV3AAF (549/559) for total of 25 stations. CWNR were G3LQR, IK2RTI and LX1DB. During the tests before contest, we verified the expected ground noise leakage on this frequency through the mesh extension. Due to this leakage, the extension cannot be fully utilized on RX, and a compromise between TX and RX illumination needs to be found together with the appropriate feed. Temporarily the existing proven tube feed with a simple trapezoidal shape choke was used. We were also QRV on 13 cm on 24 June to work on sked at 1358 SM3BYA (549/549) for initial #117. For this contact the extended dish was illuminated directly by a square septum and without any adjustment. The measured Sun noise was 15.8 dB (SF=84), Moon 0.5 dB and CS/G 5.3 dB (all on the SDR-14). On 9 cm, on 26 June at 1723, we worked on sked G3WDG (549/549) for initial #43 using a square septum feed with an OM6AA triple collar choke. Later we moved the choke and found improved echoes. At 1752 we worked G4KGC (559/529). We tried SSB, but signals were too weak to copy. However our own echoes were easy to copy. Further feed optimization was interrupted by local QRM's sudden appearance. We were also on 3 cm on 26 June due to requests on the HB9Q logger and worked at 1919 PA0BAT (549/539) for initial #68 and 1926 F2TU (549/559). Moon noise was 2.5 dB. We were on 23 cm on 27 June after lunchtime and thanks to the absence of QRM, we were able to optimize our septum feed for the new f/D. We found the best position of our OM6AA triple choke was about 60 mm behind the flush position. We measured a CS/G of 7.8 dB, Sun noise 19.6 dB (SF104) and 3 dB beamwidth 2.6 degs. Moon noise, expected to be round 0.3 dB was blocked by about 1 dB of ground noise at the very low Moon elevation (too low declination). All data was measured with the SDR-14. We suppose to participate in the planned 9 cm AW on 14/15 July.

**New extended 6.4 m dish at OK1KIR**

**PA3DZL:** Jac PA3DZL@planet.nl reports on his recent 6 cm activity -- During the contest I made 13 QSOs, 4 initials and added 2 DXCCs on 5760. QSO were SV1BTR #18, OK1KIR, ES5PC, OK1CA #19, PAØBAT, F2TU, OH2DG #20 and DXCC 13, G3LTF, PY1KK, SQ6OPG, K5GW, W5LUA, VE4MA #21 and DXCC 14. Heard were PA7JB, DL7YC, F1FYR and WD5AGO. Conditions were average! My echoes were always there, but have heard them stronger. The strongest signals were from SV1BTR, "a real beacon", peaking (579) followed by K5GW peaking (569). I was not able to be QRV during the second contest Moon pass, but I was on 6 cm on 29 June with CT1DMK (559/449) - very nice signals #22 and DXCC 15, and on 30 June SQ6OPG (O/O). I also worked on 9 July TM8PB and K2UYH.

**PY1KK/PY2BS:** Bruce py2bs@me.com 6 cm contest report -- Despite an unreliable elevation reading, which required frequent readjustment by self echoing, I had 19 QSOs, 7 initials, and 3 new countries, which are the firsts from VE, CT and I with PY on 6 cm. QSO'd were F2TU, SV1BTR #18, OK1KIR, ES5PC, OH2DG, OK1CA #19, PA3DZL, PA0BAT, SQ6OPG #20, G3LTF, PA7JB, K5GW #21, W5LUA, VE4MA #22 and DXCC 13, F1PYR, DL7YC, CT1DMK #23 and DXCC 14, SV3AAF, IK2RTI #24 and DXCC 15. [Bruce missed the TM9PB test and will miss the 9 cm AW as he is away on vacation. He will be QRV again after 1 Aug, but then will be off to the big event: EME 2012.]

**SV1BTR:** Jimmy jimmyv@hol.gr reports on his 2012 DUBUS Contest results -- In the recent 6 cm weekend and in all the weekends, it was great EME fun. On 6 cm I worked 25 stations with limited operating time. On Sunday I had an accident and was badly cut with a saw at the start of 2nd pass. I was cutting a tree blocking my moonset, 10 m high. I had to go to the hospital for stitches, medication, etc. During my NA window, my PA started suddenly oscillating. For the whole weekend due to problems with my azimuth readout, tracking was a problem and done on Moon noise. I found that signals (and my echoes) were not as good as my last 2 times operating 6 cm, in July and Sept 2011. I also had problems during the 23 cm weekend (RX VFO had bad drift) and on 70 cm when a power divider burned up. Nevertheless I am thrilled and thankful to work 227 QSOs and 1 dup. All were on random, CW with no loggers, of course! The breakdown per band was on 2 m 38, 70 cm 38, 23 cm 77 (lower activity this year with ARI digital contest on the same weekend), 13 cm 49 and 6 cm 25. QSO'd on 6 cm were ES5PC, JA8ERE, SQ6OPG, OK1CA, OK1KIR, VK3NX, JA4BLC, PA3DZL, JA6CZD, OH2DG, PA0BAT, F2TU, F1PYR, S57NML, G3LTF, DL7YC, PY1KK, SP6GWN, PA7JB, W5LUA, K5GW, WD5AGO, VE4MA, WA6PY and SV3AAF; on 13 cm JA6CZD, JA4BLC, SN2012GAM, ES5PC, PA3DZL, SV3AAF, RK3WWF, SP7JSG, JA8IAD, OH1LRY, S50C, HB9Q, HB0/DF1SR, HB9SV, ON5TA, F1PYR, 9A5AA, F5JWF, DL1YMK/A, OZ4MM, CT1DMK, F2TU, S59DCD, G4CCH, OK2ULQ, SD3F, LZ1DX, IZ2DJP, OK1DFC, G3LTF, PA0BAT, IK3GHY, OK1CA, WA9FWD, NA4N, IK2RTI, K5GW, SM3BYA, IW2FZR, VE6TA, WD5AGO, SP6GWN, K2UYH, WA6PY, OK1KIR, OH2DG, DL3EBJ, LA8LF and G3LQR; on 23 cm UA3PTW, VK5MC, LZ2US, OK1DFC, ES5PC, JA6AHB, JA8IAD, VK3NX, OK1CS, IK3COJ, DL3EBJ, I1NDP, JH5LUZ, JA8ERE, SP6JLW, OK2DL, OH0/OH3TR, SP7DCS, SV3AAF, SM3JQU, RA3AUB, RA3YF, S59DCD, IK5VLS, SD3F, F5SE/P, SM7FWZ, ON7UN, OK2ULQ, G4RGK, HB9SV, IZ2DJP, TK/DL1YMK, UA4AAV, UA3TCF, IK6EWB, OK1KIR, PA2DW, CT1DMK, HB9BCD, N2UO, IK3GHY, NA4N, PA3FXB, K2UYH, PA3DZL, VE4MA, IK5QLO, IW2FZR, VA7MM, N4PZ, WD5AGO, F5HRY, W4AF, OE5JFL, WW2R, VK3UM, VK4CDI, JR4AEP, JA4BLC, JA1WQF, G3LTF, ON5TA, OZ4MM, F5JWF, G3LQR, DL4DTU, IZ1BPN, PY2BS, VE3KRP, GM4PMK, WB2BYP, F2TU, G4CCH, WA6PY and VE6TA; and on 70 cm UA3PTW, DG1KJG, SM4IVE, JA6AHB, SM6FHZ, SP7DCS, VK3UM, UT2EG, SP6JLW, LZ1DX, F6DRO, I1NDP, DL7UDA, JA9BOH, JA0TJU, DK3WG, OK1DFC, ES5PC, SM3JQU, G3LTF, OZ4MM, OH2DG, G3LQR, DF3RU, G4RGK, N4GJV, F2TU, DL7APV, IK2RTI, SM2CEW, NC1I, K5GW, WA6PY, PA0PLY, DL9KR, DJ3JJ, DL5FN and OK2POI.

**SV1CAL:** Michael michael_margaras@yahoo.gr participated in the ARI EME Digital Contest on 1296 on 26/27 May – All my QSOs were on JT65C. I worked PA3FXB, OK1KIR, RD3DA, IK3COJ, PY2BS, OK1DFC, JA6AHB, G5WQ, PA3DZL, PA7JB, GW3XYW and IK5VLS. My setup consists of a 2 m dish with f/D=0.5, a G4DDK LNA and about 45 W at the feed. A couple of months ago, I decided to construct the N2UO version of the W2IMU feed. TX/RX port isolation with the feed looking at the open sky is as predicted by simulations, better than 45 dB. But when the feed is aimed at the reflector, strong reflections from the flat center of the dish reduce isolation to about 13 dB. The poor isolation when the feed is at the focal point contributes about 15 degs K to the system noise temperature due to noise coupling from the TX port into the LNA input. Noise figure from the input of the LNA protection switch to the 144 MHz IF output was measured 0.37 dB using an Agilent 346A noise source and Sun noise over cold sky was found to be 8.7 dB at SFU=95. The next step will be to try to improve TX/RX isolation by placing some absorptive material at the shadow of the feed in the center of the dish. Hopefully sensitivity will be further improved by about 0.5 to 1 dB. Of course, in a big city like Athens, it is often difficult to find a "cold" position in the sky given that in certain directions there is strong interference from L-band radars and other noise sources. All in all, even with such a small dish, I am very pleased with the challenges presented and the results that can be achieved.

**SV1CAL 2 m dish with N2UO feed for 23 cm**

**TM9PB:** Guy, F2CT F2CT@wanadoo.frn to commemorate the 50th anniversary of the first TV transmission (via Telstar satellite between United States and France on 11 July, 1962) that he and F3ME operated on 6 cm EME using the 13 m dish at the French Telecom Center, near Lannion, France (IN88fs) -- It was a fantastic experience using the PB8 reflector from the Pleumeur Bodou French Telecom Museum! Activity was on 9 July from 0200 to about 0730, 10 July from 0230 to 0830, and 11 July from 0230 to 0930 with operation on 5760.108 with an EIRP of 25 MW! Operation was on both CW and SSB. A special QSL will be sent to all who made QSOs with TM9PB. [I do not yet have a list of QSOs, but it appeared that they worked just about everyone who has been QRV on 6 cm plus some new one. They gave me my initial 6 cm EME QSO.] At Cambridge, I will propose to organize the next EME conference in the PB8 location because of it interested for all ham community.

**TM8PB team, on right F2CT, on left F3ME and at center André Gilloire président ORPB society.**

**WD5AGO:** Tommy wd5ago@hotmail.com has his 6 cm feed I his dish --
I worked this past month on 6 cm: SV1BTR for an initial (#), K5GW (#) and OK1KIR. I also had a partial with PA3DZL, CWNR PA7JB, OK1CA, PA0BAT, F2TU, PY1KK, and W5LUA. I had problems with my TX. I had lots of frequency drift and unstable output power. The power problem is now fixed with about 25 W at the feed. I am working on the rest of my system to be ready for the 6 cm activity on 9-14 July. I am measuring 11.3 dB of Sun and 0.5 dB of Moon noise, SFU 85. I switched all the RX side to SMA, but really cannot see much difference. After 14 July, the 6 cm feed will be switch back to 13 and 23 cm through Christmas. Unfortunately, it is now appears that we will not make it to EME 2012.


**WD5AGO's dish used on 6 cm**

**WW2R:** Dave's eme_ww2r@g4fre.com June activity -- With the departure of my FT847, I am no longer able to receive on 2320, so I am transceive only on 2304, although I am working on a solution! On 16 Jun, I had a sked with SM3BYA on 2304, which was incomplete due to tree blockage at his end. We retried on 17 June, but were incomplete again due to tracking issues. I did work WA9FWD for initial #50 and state 8 and LX1DB on SSB (13 cm SSB QSO #2). On 18 June I easily worked SM3BYA For #51 after he did some tree pruning! I set up for 5760 contest weekend, but the Texas ambient temperature was the enemy. The PA at the dish was at a minimum of 102 degs F, despite providing extra fans and using an awning as for extra shade. Consequently, I destroyed my two TWT PSU. While the TWT was working, I did get a "very weak" report from F2TU and "I can see you on spectran" from W5LUA, so we are making progress using my non optimum dish! In total I identified 6 signals: W5LUA, F2TU, VE4MA, PA0BAT, OK1KIR and a drifting K5GW. All had a lot of signal spreading.

**K2UYH:** I a.katz@ieee.org was not as active in June because of travel. I was on 432 for the ARRL VHF Contest on 8 June and QSO'd at 0718 YO8RHI (18DB/20DB) JT65B for mixed initial #840* - also tried CW nil results, 0802 K5QE (7DB/O) JT65B to give contest QSO and 0820 LZ1OA (13DB/O) JT65B. I made it back from my trip to be QRV for the second day of the 6 cm DUBUS Contest on 24 June. This was my second attempt at 6 cm EME, and this time I copied many stations but could not get any to reply to my calls. When I learned about the TM8PM tests, I change the coupler following my SSPA and confirmed that I had a good 20 W at the feed. I also slightly readjusted the position of the feed. The changes paid off as I immediately heard echoes and worked on 5760 on 9 July at 0645 TM8PM (559/539) for initial #1 with the Moon still partially blocked by trees, 0645 OK1KIR (559/559) #2, 0659 PA3DZL (O/559) #3, 0738 VE4MA (O/559) #4 0803 F1PYR (O/529) #5 and 0919 sent multiple QRZs to SQ6OPG (O/-) – I did not recognize the call until later, and on 11 July at 0839 F2TU (54-/559) #6, 0843 K5GW (569/569) #7, 0848 W5LUA (559/559) #8, 0909 DL7YC (549/539) #9, O928 VE4MA (559/O), 0949 WA5AGO (O/O) #10 and 1008 WA6PY (O/O) #11. I was also on 432 on 8 July and tried to work at 1220 N9HF on CW, but had too much tree blockage.

**NETNEWS:** **VE4MA** is now QRV on 6 cm. **W5LUA** was also active on 6 cm in the DUBUS Contest. **WB5AFY** will be on 13 cm with a 5 m dish and a Spectran PA. He is getting good Sun and moon noise. **W2CNS** has a Russian cavity for the GS-35B for use on 70 cm EME. **WB2BYP** has a new solid state driver to replace his TH328. John is making mechanical changes to PA to allow for input tune from the front panel. He is also working on a new gearbox arrangement for his AZ drive to reduce backlash. **WB7QBS** is still working on combining two 432 PAs for his 70 cm EME system.

**FOR SALE:** **WW2R** has for sale various parts useful for EME: A GR1236 IF amplifier, TH338 1296 PA, TH328 Tubes, 2304/144MHz LO locked xverter, VK3UM Track Box, etc. More info and pictures are at g4fre.com/sale.htm. **W2CNS** is looking for info on the Russian GS-35B cavity PAs. Contact Bob at w2cns@arrl.net.

**FINAL:** This will be last NL before EME2012 at Cambridge starting on 17 Aug. This conference will be the largest ever and one you should try to attend, if

at all possible. There is still time. Full details can be found at www.eme2012.com.

This month we have the G4RGK's updated CW Initials Listings for the top 10 stations on each 70 cm Up EME band. For the full list see http://www.zen70432.zen.co.uk/Initials/index.html. As a result of th DUBUS Contest, there are lots of changes at top on 23 cm.

Despite the high microwave EME during the past month, there are still fewer overall reports. Please keep the reports and technical information coming. I hope to see you off the Moon and at EME2012. We will be arriving on Wednesday evening as are many others. Have a great trip. 73, Al – K2UYH

## G4RGK's Initial Listings

| Call | 70cm |
|---|---|
| DL9KR | 908 |
| K5JL | 827 |
| K2UYH | 726 |
| SM4IVE | 624 |
| K1FO | 613 |
| DK3WG | 551 |
| G3LTF | 444 |
| N9AB | 440 |
| SM2CEW | 437 |
| SM3AKW | 390 |

| Call | 23cm |
|---|---|
| F2TU | 387 |
| G4CCH | 365 |
| OE9ERC | 363 |
| G3LTF | 343 |
| W5LUA | 339 |
| K2UYH | 338 |
| OK1KIR | 334 |
| OK1DFC | 322 |
| OZ4MM | 320 |
| HB9BBD | 306 |

| Call | 13cm |
|---|---|
| F2TU | 134 |
| OK1KIR | 116 |
| OK1CA | 113 |
| W5LUA | 112 |
| G3LTF | 102 |
| OE9ERC | 91 |
| G4CCH | 88 |
| OH2DG | 83 |
| OZ4MM | 82 |
| WD5AGO | 81 |

| Call | 9cm |
|---|---|
| OK1KIR | 42 |
| W5LUA | 39 |
| G3LTF | 36 |
| OK1CA | 36 |
| K2UYH | 29 |
| OH2DG | 26 |
| WD5AGO | 17 |
| LA8F | 16 |
| VK3NX | 16 |
| G4NNS | 12 |

| Call | 6cm |
|---|---|
| OK1KIR | 57 |
| F2TU | 55 |
| W5LUA | 44 |
| OE9ERC | 35 |
| CT1DMK | 35 |
| OK1CA | 35 |
| G3LTF | 30 |
| OH2DG | 27 |
| VK3NX | 24 |
| WD5AGO | 17 |

| Call | 3cm |
|---|---|
| W5LUA | 75 |
| F2TU | 73 |
| WA7CJO | 71 |
| OK1KIR | 67 |
| OK1CA | 50 |
| F6KSX | 40 |
| G4NNS | 34 |
| AA5C | 34 |
| CT1DMK | 27 |
| I5PPE | 26 |

| Call | 1.2cm |
|---|---|
| OK1KIR | 12 |
| W5LUA | 9 |
| VE3MA | 7 |
| G4NNS | 3 |