432 AND ABOVE EME NEWS
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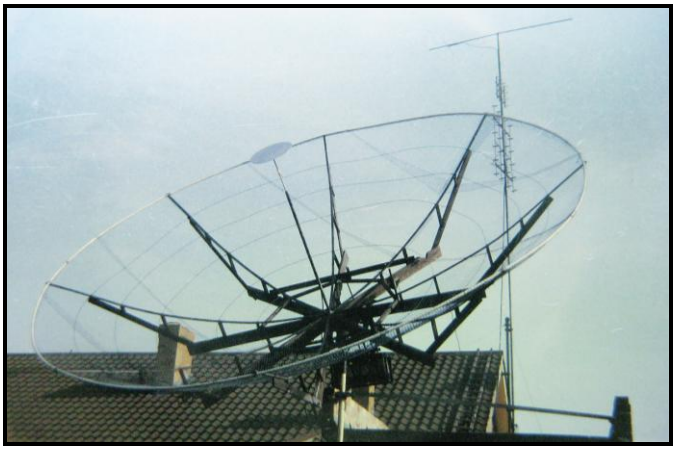
CONDITIONS: May is special this year with 3 EME DUBUS CW Contest weekends. The 9 cm contest was on 3/4 May and produced many excellent QSOs. The top reported score is from OK1CA with 27x25. Franta was followed closely by G3LTF and G4CCH, both with 26x23. Still to take place in May are the 3 cm contest on 24/25 May and the **BIG** 23 cm contest starting on 31 May. The 70 cm CW Activity Time Period (ATP) is also on 25 May from 0230 to 0430 and 1100 to 1300. The next ATP is on 22 June from 0200 to 0400 and 1000 to 1200. There should also be considerable NA EME activity during the ARRL's June tropo contest on 15 June. Besides all the contest activity the 6W/PE1L dxpedition provided Senegal on both 23 and 13 cm, and will be on 70 cm on 24 May. GS3PYE/p also provided a rare Scottish Isle on 1296. See the reports later in this newsletter (NL). Coming up on 2 June is ZA/PA2CHR on 70 cm from Albania, and KG7HF on 5-11 July from Panama and 16-25 Aug from Colombia.

50 YEARS EME MILESTONE: On 13 June, it will be 50 years since G3LTF made his first EME QSO (and the first EME from the UK) with KP4BPZ in Arecibo on 432. Peter made two QSOs with KP4BPZ as besides G3LTF only W1BU, W9GAB and HB9RG were QRV. His reports were (459) and later (569). One year later, in July of 1965, there were a lot more stations on, and by then many more low noise (2 dB) transistors available. His dish was a wood frame 15' dia reflector with an f/d of about 0.3 covered with 3/4" chicken wire mesh. The feed was a slot fed dipole plus circular reflector - derived from "Microwave Antennas" by Silver from the MIT Radar Lab series, our bible in those days. It was on a polar mount of course. The dish was later used on 1296. The PA was a 4CX250B giving 300 W in a coax line circuit from a W6AJF design. This amplifier is still in use (not the original tube!) as the driver for my current PA. The receiver had two preamps using the GEC A2521 tube followed by a diode mixer in a cavity, and the receiver was an ex RAF unit, the R1475, at 14 MHz with some reduced IF bandwidth from a Q multiplier. The overall NF was about 4 dB. Peter also had a parametric amplifier that had about a 2 dB NF, but it was a bit tricky to use and so he stuck to the tubes for his first QSOs. The Moon then was at +21 degs dec, but 50 years later will be at –19 degs, so he won't be able to be QRV on the day, but plans to be on 432 CW later in June!



G3LTF's 15' dish used for his 1st EME QSO in 1964

JA EME GATHERING: On 10/11 May the annual EME meeting took place in Tsuyama city (PM65sa). This year's meeting was also a memorial in honor of JA4HZN who passed away last Nov and was the owner of the lodge where the conference is held [See Dec 2013 NL FINAL section]. There were 43 in attendance.

2014 JA EME Gathering

6W/PE1L: Rene (PE1L) hasperrene@gmail.com sends news that his and PA3CEE's and DL2NUD's operation from Senegal have provided many 23 and 13 cm JT QSOs - besides record QSO counts on 2 m. They are setting up for 70 cm and will be QRV there with a 23 el yagi and 300 W SSPA on Saturday 24 May from moonrise (0320) until moonset (1550) with no obstructions and no local noise. They should be on the HB9Q when QRV on 70 cm. (When testing their 432 system they worked with to EA8 over a 2832 km path on tropo!) Rene promises a full report on their 70-13 cm results after the dxpedition is over.

6W/PE1L's 432 yagi was tested with a 2832 km tropo QSO!

9A5AA: Dragan dragan9a5aa@gmail.com had strong winds during 9 cm DUBUS EME Contest weekend -- The wind became weaker on Sunday around 1630, but strengthened again at 2030. In between I worked 11 stations: G3LTF, DL7YC for an initial (#), PA0BAT (#), K2UYH (#), OK1CA (#), G4CCH (#), SP6OPN (#), ES5PC (#), HB9Q (#), K5GW (#) and OK1KIR. At the beginning, I also had problems with my power but had it fixed by 1800. On 9 cm I am using my 2.4 m (expanded) offset dish with an RA3AQ feed, a G4DDK LNA and a 50 W SSPA. [See last month's NL for a picture of Dragan's dish.]

DC9UP: Pit (x-F5VKQ) radio.dc9up@googlemail.com should be on 1296 EME soon -- I am working hard on a 3.2 m dish with an 800 W. At the end of April I tried some 23 cm EME SWLing with just a 12 el yagi on my balcony. I was very pleased to copy K2UYH's signal on JT.

23 cm small antenna EME at DC9UP

F1PYR: André andre_f1pyr@yahoo.fr is active on the microwave EME bands -- I recently had a nice 3 cm QSO with F5IGK (519/519). It was a very easy QSO. Alain is a new on 10 GHz EME. He has a 2.4 m offset dish with 26 W. I am finalizing a new 13 cm mult-band transverter (F6BVA design) that provides operation on 2304/2320/2401/2424. I also moving to a new 270/290 W PA, and am interested in skeds.

DL7YC: Manfred ploetz@snafu.de was activite during the 9 cm DUBUS Contest weekend – I had another very successful EME weekend on 3/4 May. I was QRV both days most of the time and worked 23 different stations, 9 initials, 2 new countries and one new US State! QSO'd were SP6OPN, VK3NX for initial #25, ES5PC, OH2DG, G3LTF (big improvement), PA7JB #26, G4CCH, OK1KIR, S59DCD, K2UYH, OK1CA, partial G4NNS (not complete due to power failure), WA9FWD #27, SM6PGP, K5GW, VK3NX (on CW and SSB), G3WDG #28, G4NNS #29, LA8LF #30, PA3CQE #31, S57NML #32, HB9Q, 9A5AA #33, OZ6OL and PA0BAT. Heard, but not worked was DF3RU. I missed W5LUA and DL1YMK. I QSO'd VK3NX on SSB with (55/56) reports. Later we ran a special test on Charlie`s moonset. I could hear him at 1.3 degs above his western horizon! His signal disappeared in between his 30 sec TX period. He heard me to some degs below his horizon - truly remarkable! Sorry for TXing some QRZ`s and "T" to "MM" reports. I tried hard with all my filter methods, but couldn't identify all callsigns. Thanks to all for the nice QSOs. I plan to be on again for the 3 cm contest weekend.

G3LTF: Peter g3ltf@btinternet.com sends his April/May report -- Not too much activity apart from the 9 cm DUBUS Contest, which was quite good. I worked on 1296 on On 26 April W1AW/2 (aka K2UYH) and heard TI2AEB with a good CW signal. On 2 May while checking out my 9 cm stuff before the contest, I worked G4NNS, SM6PGP and G4CCH. Just in time for the contest, I finished the integration of a new 90 W PA at the feed point. This amp is driven by one half of my old Ionica PA. With 1-2 dB more dish gain from the dish rebuild and 4.5 dB more output power, it was an interesting weekend with excellent activity. I worked 26 stations, all on random CW. QSO'd were OH2DG, G4CCH, ES5PC, SP6OPN, G3WDG, VK3NX, SP6GWN, S59DCD, DL7YC, PA0BAT, OK1CA, G4NNS, PA7JB for initial #50, OK1KIR, DF3RU #51, WA9FWD #52, OZ6OL, K2UYH, VE6TA, K5GW, SM6PGP, HB9Q, PA3CQE, S57NML #53, LA8LF and 9A5AA. I also heard DL2LAC. Sun noise was 18 dB with an SF126. I now have nice SSB echoes. It does take a bit longer to get the 9 cm system in place. Eventually I will rebuild it to simplify switching, but I can still be QRV on any band 70 cm to 6 cm in about 30–40 minutes.

G4CCH: Howard howard@g4cch.com writes about his 9 cm EME activity in May -- I was active on 9 cm EME between 2 and 8 May. This period included the 9 cm leg of the DUBUS EME Contest. In the contest I was able to make 26 QSOs and add five initials to my standings. I missed a few stations, but was able to add another initial later in the week with DL2LAC. Worked were on 2 May G3LTF (589/579), on 3 May SP6OPN, OH2DG, G3LTF, VK3NX, ES5PC, G3WDG, SP6GWN, S59DCD for initial #34, PA7JB #35, OK1CA, G4NNS, PA0BAT, OK1KIR, DL7YC, K2UYH, W5LUA, VE6TA, SM6PGP #36, HB9Q and K5GW, on 4 May S57NML #37, LA8LF, PA3CQE, WA9FWD, OZ6OL and 9A5AA #38, on 5 May G3WDG (15DB/13DB) digital initial {#1} and VK3NX (16DB/14DB), both on JT4F, and on 8 May DL2LAC (559/O) #39. My 9 cm system consisted of my 5.4 m HB dish, scaled N2UO septum feed, 100 W SSPA at the feed point and G4DDK VLNA with 0.4 dB NF. Hopefully I will be QRV on 31May/1 June for the 23 cm contest weekend. Right now, my SSPAs are being reworked; I'm hoping this can be completed and they can be re integrated into my system in time for the contest. So, many thanks for all the activity and QSOs... It was really good fun!

GS3PYE/p: John (G4BAO) john@g4bao.com reports on his group's dxpedition to the Isle of Lewis (IO68) on 26 April to 3 May -- On 23 cm using just a single Tonna yagi, a G4DDK VLNA23 and 150 W, we managed 13 initials, all on JT65C. QSO'd were I1NDP, UA4HTS, UA3PTW, W1AW/2, K2UYH, PA0BAT, HB9Q, OH2DG, DF3RU, JA6AHB, OE5JFL, PY2BS and PI9CAM. Gotaways included VK2JDS and PA3FXB (3 m dish) who got decodes from us, VK2JDS was visible at moonrise (I guess due to ground gain) but no decodes. On CW, just my poor hearing and EME spreading meant I failed with G3LTF, but a better CW EME operator than me should have worked Peter easily. On 2 m we had serious problems with birdies and a general high noise level that caused us to abandon 144 as we couldn't even copy G4SWX! We also tried 70 cm with PI9CAM using a satellite station on JT, and decoded them, but our low TX power precluded a full QSO. From my point of view, the operation was a huge success in that it achieved its main objective of showing the G3PYE team just what is possible via the Moon with a small system. Everyone wants to do it again next year. A special thanks to G4DDK who bailed me out with the loan of his 150 W PA when I blew mine the previous week!

GS3PYE/p dxpedition 23 cm (& 2 m) EME antennas

HP1/KG7HF: Paul kg7hf@comcast.net is planning a dxpedition to Panama between 5 and 12 July with operation on 432. Preparations are well underway. The licensing is easy and should be completed shortly. The airline and condo are all set. I will have access to a flat roof, in fact, the roof of the high rise condo is a heliport, which I have been granted permission to setup on and use for the week. Current plans are to build the station on the first day. I will work 144 until conditions degrade and then switch to 432. On 70 cm I will have 2 x 15 LFA yagis (lin pol) and a 1.2 kW PA with a WA2ODO preamp at the power splitter. More details can be found at http://home.comcast.net/~kg7hf/EME_Dxpeditions/kg7hf_eme.htm.

JA1WQF: Mitsuo ja1wqf@d5.dion.ne.jp 6 cm contest (5/6 April) report missed last month [9 cm operation is not allowed in JA] -- I worked 12 stations in the DUBUS 6 cm CW EME Contest. I QSO'd DL7YC, TM8PB, OK1CA, OK1KIR, G3LTF, SM6FHZ, W5LUA, JA6CZD, G3WDG, PA0BAT, ES5PC and IK2RTI. Heard were G4CCH and SQ6OPG. I also worked on the following Monday (7 April) F1PYR. [TNX to JA4BLC for forwarding this report.]

JA4BLC: Yoshiro ja4blc@web-sanin.co.jp fills us in on JA 6 cm contest activity missed last month -- I worked 10 stations in the DUBUS 6 cm CW EME Contest. Worked were TM8PB for an initial (#), OK1CA, DL7YC, ES5PC, LX1DB, OH2DG, SQ6OPG (#), VK3NX, LA8LF (#) and OK1KIR. Heard were JA6CZD, JA8ERE, JA1WQF, PA3DZL, PA0BAT, IK2RTI, IK3COJ, G4CCH, SP6GWN, TM8PB on SSB and DL7YC on SSB. I also worked on the following Monday F1PYR (O/O) (#) on 6 cm. I worked on 1 April on 2320/2424 XB DL7YC (579/569) for an initial #17 on 13 cm, on 27 April on 1296 JA6AHB (559/569) and JA8ERE (559/559), on 3 May on 2304/2424 XB SM3BYA (559/549) and on 10368/10450 XB HB9SV (O/O) #18, on 4 May on 10368/10450 XB HB9SV (549/559), and on 5 May on 10368/10450 XB DL7YC (559/529) #19 and on 10450 JA6CZD (O/O).

JA6CZD: Shichirou ja6czd@mx35.tiki.ne.jp worked 20 stations in the 6 cm leg of the DUBUS EME Contest. He contacted G3LTF, SM6FHZ, OK1CA, DL7YC, OH2DG, TM8PB, SQ6OPG, ES5PC, SM6CKU, G4CCH, G4NNS, OK1KIR, W5LUA, JA8ERE, JA1WQF, IK2RTI, G3WDG, PA3DZL, PA0BAT and F1PYR. He also QSO'd on 3 cm on 3 May HB9SV and on 5 May DL7YC. [TNX to JA4BLC for forwarding this report.]

JA8ERE: Mikio sgl01011@nifty.ne.jp worked 8 stations in the 6 cm leg of the DUBUS EME Contest. He contacted TM8PB, OK1KIR, LX1DB, DL7YC, JA6CZD, W5LUA, OK1CA and PA0BAT. On the Monday after the contest, Mikio added F1PYR on 6 cm. 0n 2320/2424 XB, Mikio worked on 1 April DL7YC and on 3 May SM3BYA. [TNX to JA4BLC for forwarding this report.]

KJ7OG: Steve eagle572@comcast.net is coming soon to 13 cm EME from Arizona (DM42mh) -- I am putting together a 9.3' dish and 125 W on 13 cm. I expect to be ready in a few months for skeds when the system is operational.

LX1DB: Willi wbauer@pt.lu was not able to QRV during the 9 cm contest due to family commitments on that weekend – I worked VK3NX (O/O) on 27 March on 24 GHz CW. His signal was directly copied on the mutual Doppler frequency. I was using an MGF4953A in a new LNA, which gives me CS/G noise of 3.4 dB compared to 3.2 dB with my old NEC32584 LNA. I also worked on 11 May on 9 cm SM6PGP (559/559). I will be on for 23 cm contest.

OK1CA: Franta strihavka@upcmail.cz was QRV in 3.4 GHz part of the DUBUS EME Contest during the first weekend in May -- I start at Saturday late after missing my east window because of a fault in one of the cables to my dish. I worked on Saturday S59DCD, SP6OPN, PA7JB for initial #43, OH2DG, G4CCH, SP6GWN, G3LTF, G4NNS, OK1KIR, DL2LAC #44, ES5PC, WA9FWD, K2UYH, DL7YC, VE6TA, SM6PGP #45, W5LUA, K5GW and HB9Q, and on Sunday VK3NX (on CW and SSB - 55/56), VK4CDI #46, LA8LF, PA3CQE #47, S57NML, OZ6OL, PA0BAT and 9A5AA #48. I heard several times G3WDG and I missed DF3RU, DL1YMK and SP7JSG. My score was 27x25 with 6 initials.

OK1KIR: Vlada and Tonda vladimir.masek@volny.cz sends the latest EME news from OK1KIR (April/May) – We QSO'd on 26 April on 1296 CW at 1007 G4IDR (O/O) for CW initial #367 and 1141 W1AW/2 (579/569), and on JT65C at 0627 ES6FX (20DB/8DB) for digital initial {#174}, 0736 PA3CQE (17DB/14DB) {#175}, 0826 G4IDR (16DB/11DB) {#176}, 0935 GM4PMK (18DB/9DB), 0941 UA4LCF (27DB/11DB), 1042 IW5BHY (17DB/12DB) {#177} and 1230 W1AW/2 (8DB/4DB), on 2 May on 1296 JT65C at 1425 GS3PYE/p (23DB/O) {#178} - just before packing up, on 9 May on 1296 JT65C at 1914 6W/PE1L (24DB/O) {#179} and 1st 6W – OK 23 cm QSO, and on 10 May on 2320 at 1614 UA4HTS (13DB/15DB) and 1904 6W/PE1L (20DB/O) for digital initial {#19}. We were also active in 3400 part of the DUBUS Contest. We suffered from low RX sensitivity due to a failed transverter, however we worked on Saturday 3 May at 1404 G3LTF (559/569), 1410 G4CCH (559/569), 1428 ES5PC (559/559), 1440 SP6OPN (549/559), 1451 DL7YC (559/579), 1554 OK1CA (579/579), 1852 K2UYH (569/579), 1934 K5GW (569/579) and 2016 HB9Q (579/579), and on Sunday 4 May at 0839 VK3NX (559/559), 0854 OH2DG (559/559), 0930 G3WDG (O/O), 1247 S59DCD (549/559), 1325 G4NNS (O/O), 1338 PA7JB (O/O) for initial #56, 1554 LA8LF (559/569), 1620 PA0BAT (559/559), 1818 OZ6OL (549/559), 1835 S57NML (O/O), 1852 PA3CQE (O/549), 1947 VE6TA (O/O), 1959 9A5AA (O/O), 2027 SM6PGP (O/O) and 2103 SP7JSG (O/O). After adding a filter, we got our RX sensitivity back and repeated (2xQSOs) at 2154 VE6TA now (549/559). In total we ended with 24x22. In the 3 cm and up part of the DUBUS Contest, we will be limited on Saturday (awaiting 6W/PE1L on 70 cm) and suppose to operate 24 GHz on Sunday's Moonpass.

ON0EME: Walter (ON4BCB) crauwels.walter@telenet.be reports that on 1 April ON0EME celebrated its 2nd anniversary. It has operated for more than 700 days and Moon passes! [Happy birthday to ON0EME!]

PA7JB: John pa7jb@ziggo.nl was QRV on 9 cm during the DUBUS Contest weekend. His set up consists of a 2.4 m offset dish with RA3AQ feed, around 40 W at the feed and a G4DDK preamp. Before the contest weekend he had made 4 QSOs on 9 cm. [I have no yet received John's report on the contest.]

SM3BYA: Gudmund SM3BYA@wannberg.net reports on his April/May 13 cm activity – I am trying hard to squeeze the most out of the time remaining for SMs on 2.3 GHz. All indications are that there will be no more extensions of our 13 cm high power permits after 30 June, but who knows - we've been positively surprised before. I worked on 2 April DL7YC on sked for initial #50, on April 3 JA8ERE on sked (XB) for # 51 and JA4BLC who tailended, and on 4 April JA8IAD on sked (XB) for # 52, completing my collection of workable 13 cm JA stations. (I had previously QSO'd JA4BLC and JA6CZD). For the JA QSOs I now used my own stand-alone 2424/144 MHz converter. This had only been bench tested with a NF meter and a spectrum analyzer/tracking generator combo before the JA8ERE QSO; his EME signal was the first coherent signal I ever heard through the unit - kinda cool! The JA converter is essentially a collection of 1980s vintage connectorized subsystems bolted onto the back side of a rack panel. Bulky, quick and dirty but I had all the components lying around (with the exception of a passive GaAs frequency doubler chip that I got off eBay) and it works fine! It is available for loan to any European station that has not yet worked JA on 13 cm and who isn't scared by the sheer bulk of the thing. It has a built-in 5 MHz OCXO; frequency accuracy is < 500 Hz at 2424 after warmup, so more than good enough. It takes 24 VDC at about 300 mA. BTW, JA4BLC was very pleased to learn that there is now a JA capable converter available locally in EU, so he won't have to send his unit all the way from Japan. My SM2BYA [old] email address will be deactivated in less than a month's time; we are finally in the process of moving down to SM3 land. The move and the construction work at the new location will take up most of my time for the rest of this year, but I will be active on 13 cm until our P&T pulls the rug out from under my rig.

TM8PB: Guy's (F2CT) F2CT@wanadoo.fr reports on his group's 6 cm Contest activity, which did not arrive for the last NL -- Despite apogee, signals were amazing and the band sounded like during the Marconi CW on 144 MHz! We worked on CW DL6SH, DL7YC, ES5PC, F1PYR, G3LTF, G3WDG, G4CBW, G4CCH, G4NNS, IK2RTI, IZ2DJP, IK3COJ, JA1WQF, JA4BLC, JA6CZD, JA8ERE, K2UYH, LA8LF, OH2DG, OK1CA, OK1KIR, PA0BAT, PA3DZL, SM6FHZ, SM6CKU, SM6PGP, SP6GWN, SP7JSG, SQ6OPG, SV3AAF, S57NML, S59DCD, VE6TA, VK3NX, WA6PY and 9A5AA on SSB, DL6SH, DL7YC - very strong, ES5PC, F1PYR, G3LTF, G3WDG, LX1DB - very strong, OK1CA, PA3DZL and W5LUA. Missed were UT3LL, K5GW and N8DJB. Our Sun noise was 26 dB @ SF148, Moon noise 5 dB, and our echoes averaged ~ 45 dB/noise. The rig was the big 13.5 m Cassegrain dish called PB8 with 80 W@feed, 0.6 dB NF LNA and automatic tracking system with 1/100° accuracy. QSO'd on 5 April were at 1049 JA1WQF (569/589), 1052 JA4BLC (559/589), 1056 ES5PC (569/579), 1102 SQ6OPG (579/589), 1108 VK3NX (579/599), 1113 G4NNS (579/579), 1117 OK1CA (589/589), 1124 PA3DZL (569/569), 1128 DL7YC (599/599), 1132 G3WDG (579/599), 1136 JA6CZD (579/599), 1141 OK1KIR (579/589), 1145 G4CCH (569/599), 1150 JA8ERE (579/579), 1156 F1PYR (559/579), 1200 OH2DG (579/599), 1207 LX1DB (57/58) SSB, 1213 DL6SH (559/569), 1218 9A5AA (559/599), 1223 SM6CKU (579/599), 1227 SP6GWN (559/569), 1232 SM6FHZ (579/579), 1251 IK3COJ (559/569), 1258 LA8LF (579/589), 1322 G3LTF (579/589), 1450 SM6PGP (569/579), 1515 SV3AAF (569/589), 1533 SP7JSG (559/599), 1803 K2UYH (559/569) and 1809 PA0BAT (579/579), and on 6 April at 1248 G3WDG (55/56) on SSB, 1253 DL7YC (58/59) on SSB, 1257 IK2RTI (57/57) on SSB, 1303 S57NML (559/579), 1434 S59DCD (559/589), 1513 G4CBW (559/559), 1534 IZ2DJP (559/569), 1700 DL6SH (559/559), 2041 W5LUA (57/57) on SSB, 2044 G3LTF (56/57 on SSB, 2051 WA6PY (569/589), 2056 VE6TA (559/579), 2102 DL6SH (55/56) on SSB, 2145 OK1CA (56/58), 2152 PA3DZL (55/55) on SSB, 2225 F1PYR (53/55) on SSB and 2233 ES5PC (56/58) on SSB for a total contest score of 40x36. At the Pleumeur-Bodou Space Telecom Center, we need help and funds in order to restore the PB3 32 m cassegrain dish and PB5 16.5 m cassegrain dish; these 2 parabolic reflectors can be easily restored and used for EME and radioastronomy. We plan to organize each year at Pleumeur Bodou a special EME and microwave round table. All ideas, critics and suggestions are welcome. Kind regards to all and we hope to see you off the Moon at the end of May on 10 and 24 GHz.

TM8PB 13.5 m dish and op position

UA3PTW: Dmitry ua3ptw@inbox.ru had a very productive past month – On 432, I QSO'd on 10 April at 2036 9Y4TBG (O/O) for a new DXCC and mixed initial #478*, and on 26 April at 0711 UA0ALA (O/O) in NO66 #479*, 0754 YL2FZ (O/O) in KO37 #480* and 0934 F4DJK (O/O) in JN15 #481*. On 1296, I added on 3 April at 1423 UA9FEM (O/O) for mixed initial #262*, on 4 April at 1903 K5DOG (O/O) in EM00 #263*, on 9 April at 1442 T88QX (O/O) in PJ77 #264* and a new DXCC, on 11 April at 2216 9Y4TBG (O/O) in FK91 265* and another DXCC, on 13

April at 2053 G4BAO (O/O) JO02cg #266*, on 23 April at 0814 EI2FG (O/O) in IO61 #267* and another DXCC, and on 27 April at 0742 S53MM (569/569) on CW #268* and 1251 GS3PYE/p (O/O) in IO68 #269. All QSOs were using JT unless noted. [TNX to DK3WG for forwarding this report.]

VA3ELE: Peter maximumthreshold@yahoo.com has improved his 70 cm EME system since starting with a single yagi and low power using JT – My current station is - 4 x M2 9 wl yagis (center @ 33' above ground), an AM6154 PA modded for 432 with aprox 250 W (on JT65) and an ARR preamp right at the power divider. The phasing lines are 1/2" super flex and the main line to shack is just 70' of 7/8" Heliax. I am looking forward to making some CW QSOs off the Moon with the new set up and am available for skeds.

VE3ELE's new 4 x M2 9 wl yagi array

VE3KRP: Eddie eddie@tbaytel.net he is back on the Moon and doing well -- I have increased mobility with my temporary prosthetic and everything is progressing smoothly. Activity has been limited again due to the weather, which included some high winds which caused a shear pin to let go on the azimuth drive. Everything has been repaired and operational. On 23 cm I worked on 27 April G4IDR on JT for a digital initial {#}, W1AW/2 (K2UYH) on JT and CW, I1NDP on JT and TI2AEB on JT, and on 6 May PE1LWT on JT {#}, IK3COJ on JT, PA3FXB on JT, YO2BCT on JT and PA3CQE on JT.

VE4MA: Barry ve4ma@shaw.ca since returning to Canada has been focusing on 902 -- I have struggled with my 902 power amplifiers. On 31 May, I worked W5LUA (M/O) - not an initial. Later my 560 W amp suffered a malfunction, which dropped the output significantly. I think it's a bias/control problem, but with no schematics it's difficult to troubleshoot. I substituted a smaller amplifier producing 280 W out, and on 8 May worked VE6TA (O/O) for an initial (#) and a first VE-VE 902 EME QSO. Grant suffers from severe QRN in his eastern window, and I have a limited western window. This was using my 2.4 m offset dish with a dual dipole over a plan reflector feed. This feed over illuminates the dish, but I was getting 8 dB of Sun noise. Today I moved over to my 3 m dish with a better feed and was able to see more than 10 dB of Sun noise, so I will migrate the EME system over to this dish and get configured for 3 cm on the 2.4 m dish. I am also doing more work on my 1296 SSPAs, but want to move to getting the 24 GHz system back on the Moon! I am still struggling with TWT/power supply troubles.

VE6TA: Grant ve6ta@xplornet.com reports on his 33 and 9 cm EME results -- Activity continues to pop up on 33 cm. I managed to work K2UYH with a very unique signal on 902 for initial #4, and a new state. I also tried a couple of skeds with N8DJB, and heard Craig several times, but no completions yet. I was using my 18' dish, dual dipole feed and about 250 W in the shack with about 150-200 W at the feed. The DUBUS 9 cm weekend turned out to be a good EME weekend as well. I worked K5GW, K2UYH, VK3NX, OK1CA, G3LTF, ES5PC, G4CCH, SP6OPN for initial #35 and very likely the first SP-VE QSO on 9 cm, HB9Q, OK1KIR and PA0BAT for a score of 11x10. Heard but not worked were DL7YC, PA3CQE, G4NNS, G3WDG and W5LUA. The WX was rainy and snowy all weekend. I did notice that at elevations <30 deg that signals were lower than usual. I am not sure if the wet weather is an attenuator at this freq? [It should not be significant.] I felt I need more power as many are not hearing me well, so more work is required here. Hope to catch you all on 23 cm at the end of the month. My 9 cm station was 5.5 m dish under-illuminated to 4.5 m with 45 W at the feed. Sun noise was 14.3 dB at SF 143.

W2PU: Joe (K1JT) k1jt@arrl.net is helping the Princeton Amateur Radio Club build up a 432 EME capability. The station will eventually consists of 4 InnovAntennas cross-pol yagis and a 1 kW SSPA. He presently has only 2 yagis mounted, but did some monitoring using MAP65 on 26 April. Linrad was not yet calibrated, nor was the adaptive polarization in MAP65 in operation. The system copied DL7APV, W1AW/2 and JA6AHB in several hours of automated operation.

70 cm 2 x yagi array at W2PU

W5LUA: Al w5lua@sbcglobal.net reports on his March to May Moon activity -- I was fortunate enough to work 6W/PE1L on both 23 cm and 13 cm in May. I also worked on 1296 IW5BHY on JT65C for mixed initial #385*. On 902, I added on 2 May K2UYH for initial #13, and on 3 May VE4MA (O/M). (My new patch feed per PY2BS design is about a dB better in Sun noise than when using my dual dipole feed. My dish f/d is .375.) Earlier on 3 May, I was on 3400 and worked 7 stations including K2UYH, K5GW, VK3NX, G4CCH, SP6OPN, ES5PC and OK1CA. Back on 5/6 April, I operated on 5760 and worked 28 stations including SM5FHZ, OK1KIR, ES5PC, G4NNS, OK1CA, LA8LF, G4CCH, OH2DG, SQ6OPG, PA0BAT, F1PYR, OK1KIR on JT65C, G3LTF, G3WDG, K5GW, K2UYH, VE6TA, JA1WQF, JA6CZD, JA8ERE, WA6PY, SM6CKU, 9A5AA, DL7YC, TM8PB, IZ2DJP, PA3DZL, and DL6SH. During the 13 cm weekend on 1 March, I was able to work 29 stations including VE6TA, K5GW, JA8ERE, JA8IAD, JA4BLC, ES5PC, SP6OPN, OK1CA, OH2DG, OK1KIR, OK1KKD, UA4HTS, DL1YMK, IK3COJ, PA0BAT, UA3PTW, OH1LRY, PA3DZL, G3LTF, SM6CKU, WA6PY, K2UYH, WA9FWD, VK3NX, DL7YC, G4CCH, F1PYR, WA8RJF and G3WDG.

WA9FWD: John jstefl@wi.rr.com sends his 13 and 9 cm DUBUS contest info -- I was on for the 13 cm contest in March and worked OK1KIR, OK1CA, VE6TA, W5LUA, ES5PC, K2UYH, SP6OPN and SM3BYA for a score of 8x7. In May, I was on 9 cm for the contest and QSO'd OK1CA, G3LTF, SP6OPN, DL7YC, ES5PC, K5GW, HB9Q, G4CCH, K2UYH, PA0BAT and OK1KIR for a total of 11x10. Heard but not worked were 9A5AA, VE6TA, DL2LAC and LA8LF. I am hoping to be on for the 23 cm contest. I have my four W6PQL amps assembled and combined now, and I just need to complete my hybrid to handle the extra power. My last 1296 contact was back in 2000, so it has been a long time.

ZA/PA2CHR: Chris (PA2CHR) post@pa2chr.nl will be QRV from Albania on 432 EME on 2 June. He will be on for the complete Moon pass from 0800 to 2030. Operation will be on JT65B with TX first period on a QRG of 432.088. Chris will use a single 38 el yagi and 300 W. See http://www.pa2chr.nl/News.html for more details.

K2UYH: I a.katz@ieee.org was unexpectedly invited to put W1AW/2 on 70 and 23 cm EME the weekend of 26/27 April. It turned out to be a great experience. I QSO'd on 26 April on 1296 at 1139 OK1KIR (569/579), 1151 G3LTF (569/569), 1200 TI2AEB (O/O) CW, 1231 OK1KIR (5DB/O) JT65C, 1241 PA3CQE (11DB/9DB) JT65C, 1250 TI2AEB (15DB/12DB) JT65C , 1253 LU8ENU (18DB/11DB) JT65C and 1257 K5DOG (20DB/12DB) JT65C, on 432 at 1330 UX0FF (22DB/28DB) JT65B, 1335 DL5FN (13DB/15DB) JT65B, 1337 OH6UW (20DB/26DB) JT65B, 1343 F6APE (22DB/O) JT65B, 1353 OH4LA (18DB/22DB)

JT65B, 1402 G4RGK (13DB/14DB) JT65B, 1407 LU8ENU (20DB/29DB) JT65B, 1424 DL7APV (8DB/9DB) JT65B, 1427 VA3ELE (15DB/13DB) JT65B, 1435 DL8DAU (17DB/22DB) JT65B, 1451 K5DOG (14DB/O) JT65B , 1453 W7MEM (18DB/13DB) JT65B, back on 1296 at 1943 JA6AHB (17DB/12DB) JT65C and 1955 JA6AHB (559/579), on 432 at 2005 JA6AHB (8DB/11DB) JT65B and partial 2012 JA6AHB (-/559) CW, and on 27 April on 1296 at 1154 I1NDP (11DB/5DB) JT65C, 1157 UA4HTS (8DB/4DB) JT65C, 1209 ZS5Y (21DB/10DB) JT65C, 1217 GM4PMK (25DB/O) JT65C, 1224 G4IDR (15DB/14DB) JT65C, 1301 GS3PYE/p (22DB/20DB) JT65C, 1317 YL2GD (1ODB/12DB) JT65C and 1332 VE3KRP (15DB/9DB) JT65C, on 432 at 1347 YL2GD (10DB/12DB) JT65B, 1353 PA2V (16DB/18DB) JT65B, 1407 GW3XYW (19DB/22DB) JT65B, 1419 S51WX (28DB/29DB) JT65B, 1426 DK3WG (9DB/5DB) JT65B, 1500 W7MEM (559/O) CW, 1532 DL8DAU (20DB/O) JT65B, 1545 VE3KRP (559/559) CW, 1607 G3LGR (27DB/23DB) JT65B, 1637 DF2VF (8DB/O) –went to below his moonset and 2049 JA6AHB (559/559) CW for a total of 41 QSOs. I also worked on 27 April as K2UYH on 1296 at 1217 GS3PYE (22DB/20) JT65C for mixed initial #462* (dxpedition to Scottish island) and 1517 S51WX (28DB/O) JT65C #463*. On 2 May with the assistance of K1DS, I made my first 902 EME QSOs. We used Rick's portable tropo station consisting of a 100 W SSPA and Down East Microwave transverter mounted at the feed point of my 28' dish. I added a 0.3 dB NF preamp and used a dual dipole feed. As it turned out, we had a number of problems including 1) very high noise (QRN) partially solved by a low pass filter supplied by Rick, 2) pointing problems due to a slight offset of the feed and our inability to see Sun noise because of the QRN, which was solved by aligning on a local beacon, and 3) a terrible chirp possibly due to low voltage to the transverter – still needs to be fixed. Despite these difficulties, we worked at 2257 W5LUA (O/O) for initial #1 and 2310 VE6TA (O/O) #2. It had to have been a real challenge to copy our signal. Our echoes sounded like the noise made by a toy ray gun – there was no tone! Rick and I plan to return to 33 cm with the chirp fixed and better filtering. After the 902 QSOs, I switched to 9 cm for the DUBUS Contest. I worked on 3 May on 3400 at 0135 W5LUA (559/559), 0152 K5GW (569/559), 0200 VE6TA (O/O) and 0217 VK3NX (O/O), 1620 SP6OPN (559/559), 1629 OK1CA (569/569), 1644 ES5PC (559/559) 1649 G3LTF (569/569), 1712 DL7YC (569/569), 1725 G4CCH (569/569), 1735 PA7JB (O/O 539) initial #38, 1825 S59DCD (559/559), 1950 OK1KIR (559/559), 2026 G3WDG (549/539) #39 and 2102 HB9Q (569/559), and on 4 May at 0156 VE6TA (559/559) dup, 0200 partial VK4CDI (-/?) - Phil was copying me but I heard nil, 1718 OH2DG (559/569), 1732 LA8LF (559/559), 1757 ON5TA (O/O) #40 and DXCC 21, 1817 WA9FWD (O/O) and 1823 PA0BAT (569/559) for a contest score of 19x17. I also QSO'd on 1296, on 5 May at 0107 ZL2IP (21DB/12DB) JT65C, on 9 May 2127 6W/PEIL (25DB/O) JT65C #464* and DXCC 92*, 2137 IW5BHY (15DB/14DB) JT65C #465*, on 13 cm XB on 11 May at 0000 partial 6W/PEIL (-/O) JT65C – I could not decode and 0030 OE5TA (23DB/26DB) JT65C, on 70 cm on 11 May at 0053 XE2AT (22DB/25DB) JT65B for mixed initial #865*, and again on 12 May at 0049 XE2AT (22DB/22DB) JT65B. I plan to be QRV for both the 3 and 23 cm contest activity.

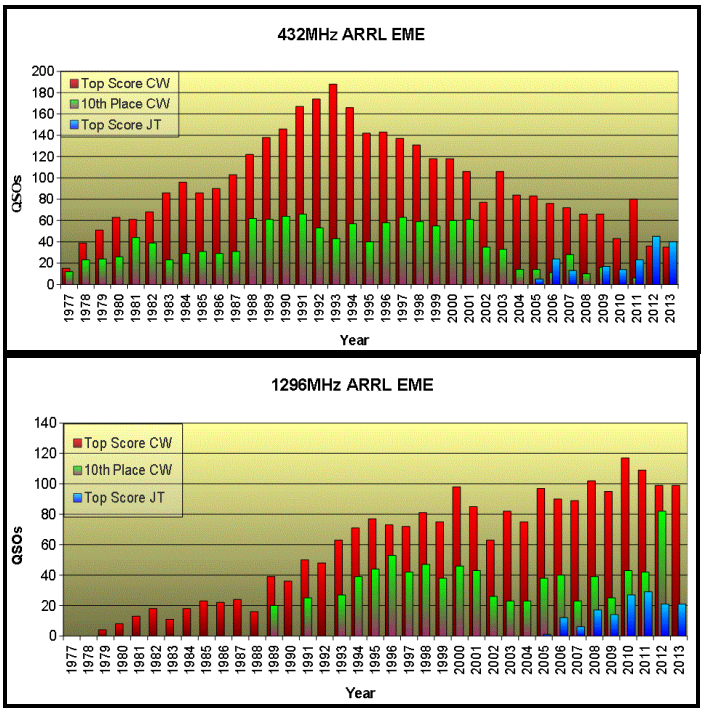
NETNEWS: **JA8IAD** worked on 2320/2424 XB on 1 April DL7YC, and on 4 May SM3BYA. **JA4LJB** reports copy of TM8PB on 6 cm with his 5m mesh. **JA9BHB** also reports hearing TM8PB using a 5 m dish during the DUBUS Contest. **K8EB** is leaving EME. Ed reports he put his equipment up for sale on the Internet and was overwhelmed by the response. It was all gone within a day. **N6OVP** during the 23 cm contest. Dave has moved his 10' dish for a better Moon window to EU.

FOR SALE: **WW2R** has for sale a TH338 tube in a KB2AH cavity mounted on chassis with a cathode fan, G3SEK triode control board, heater transformer and switched 110 VAC output for huge Vortex anode fan (supplied). It needs EHT Power supply. Price is $US450. He also has a PA7TA 432 GS35B PA assembly with blower, but needs power supply. It was made by PA7TA and comes with a GS35B for $US350. Contact Dave at g4fre@g4fre.com. He is open to offers. Pictures are at http://g4fre.com/sale.htm.

FINAL: The 2013 ARRL EME Contest results are now available at http://www.arrl.org/files/file/ContestResults/2013/2013%20EME%20Contest%20-%20Web%20-%20Version%201_01.pdf. Thanks to K1DS for preparing the results and his excellent write up. The top multiband station on multimode was UA3PTW and on, CW was SV1BTR (for both single and multi op). The top 70 cm multimode scorer multi op was OH2PO, single op was UA3PTW and on CW I2FHW. The top 23 cm multimode scorer was I1NDP and on CW G4CCH. The top 13 cm scorer was SV1BTR. The top 9 cm scorer was W5LUA. The top 6 cm scorer was F2CT. And the top 3 cm scorer was OK1KIR.

CT1DMK has put together some very interesting statistics on activity in the ARRL EME Contest since its start. Luis writes that a good measure for activity and active stations is the ARRL EME Contest participation. The top score reflects nearly the total active EME stations, while the performance of the 10th place gives an indication of serious contest operation. I have shown only Luis' graphs for 70 and 23 cm. If you are also interested in 2 m see http://www.qsl.net/ct1dmk/eme_stat.html.

EME2014 France – The deadline for reservations, 31 May, is fast approaching. Please get your reservations in before the cutoff. This date is for accommodations at the conference hotel. If you miss this date, you can still register for the conference up to 31 June, but you will have to locate you own housing. Guy reports that there will be lovely local surprises for all who completed their reservations before 30 April! Attendance is expected not just by Hams, but also scientists working at Dwingeloo, Bochum, Onsala, Jodrel Bank, Goonely, etc. with interest in Venus and Mars projects, and/or DSN/VLBI. The EME 2014 logistic and technical staffs continue work on making the meeting one of the best!



I was at Dayton on Friday this year and had the opportunity to meet with some of the EMEers there. Unfortunately I could not attend the VHF banquet, maybe next year.

I received some good feedback on the new font that I am using for the NL and will continue it.

This NL is a bit short on technical material. I hope to have more for next month. Please keep the reports and tech material coming. Thanks to G3LTF for drumming up reports on Moon. I shall be looking for all of you on 3 and 23 cm during the contest weekends. 73, Al – K2UYH

N6OVP's 10' dish with 23 cm feed