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CONDITIONS: Despite very cold weather (WX) and snow, the end of Jan/beginning of Feb provided some fun times off the Moon. The annual 1296 SSb EME Funtest clearly generated the most interest, and it appears that OK2DL will be the Top Fun Maker for 2014 with 30 QSOs for 638 points. But, this could change as I may not yet have received all the logs. I actually slightly topped Merk’s score with 27 QSOs but more sectors for 714 points, but am disqualified from the award (by the contest scorer/monitor.) On 432, the scores as is to be expected are lower; OK1CA has the top reported score with 78 points. Franata also has the top score thus far for the DUBUS 70 cm CW completion with 23 QSOs. All contest scores throughout this NL are color shaded for easy comparison. There is nothing to report expedition wise this month. I have learned that Arzebaijan should be on 432 in April – see 4K report below, along with T88/DPSDX on 23 cm also in April and 6W/PE7LL on 70 & 23 cm in May as reported in the last newsletter. Coming up on 8/9 March is the 13 cm DUBUS EME Contest. This contest is growing and is now second in turn to the 23 cm contest. There is no 70 cm CW activity period (ATP) scheduled for March.

4K/DL8YHR: Frank dl8yhr@frank@aol.com reports that he and DM1CG will be operating from Arzebaijan between 4 and 30 April. Their main focus will be on 144, but as in the past they plan also to be active on 432 for a day or 2 depending on demand. They will have a single yagi and some power for 432. [As more details are announced, you will be kept informed.]

9A5AA: Dragos dragan9a5aa@gmail.com reports on the EME SSB contest on 23 cm -- I was only QRV on 2 Feb. On 1 Feb my dish was under ice and I spent a lot of time to defrost it. But it was worth the effort. I QSO’d at 1040 P9CAM (59/55) JO, 1100 UA3PTW (57/55) KO, 1114 DL6SI (57/55) NJ, 1129 SP6JLW (56/54) JO, 1335 OE5IFL (55/54) JN, 1340 HB9Q (57/55) JN, 1345 OK2DL (57/55) JN, 1423 LZ1DX (53/55) KN, 1510 FSSE/p (54/42) JN, 1655 LX1DB (57/55) JN, 1706 K2UYH (56/55) FN and 1721 OK1CA (55/54) JO. All contacts were 2XSSB for a score of 12x2x5 = 120 points. My rig is a 2.4 m mesh dish, RA3AUB feed with 300 W at the feed and a quad. QSO'd were at 1040 PI9CAM (JO), RA3AUB (KO), SP6JLW (JO), UA3PTW (KO), OK1CA (JO), OK1CS (JO), OK2DL (JN), K2UYH (FN), LX1DB (JN), LZ1DX (KN), N8CQ (FM), OE5JFL (JN), OK1CA (56/55) JO, 1344 OK1CS (56/54) JO, 1350 UA4HTS (55/54) LO, 1354 HB9Q (59/55), 1436 FSSE/p (56/43) JN, 1503 DL6SI (56/56), JN, 1603 LX1DB (56/55) JN and 1635 K2UYH (55/44) FN for a total of 17 2-way SSB QSOs in 5 sectors for a score of 170 points.

DL7APV: Bernd dl7apv@remx.de reports on his operation during the 70 cm SSB contest and only made 2 QSOs with UA3PTW and OK1CA. On JT, I added two initials with RU1AA who has 2 x 29 el yagis and 120 W and PY1NU who is running only 50 W and a 3 m dish on 70 cm. In the DUBUS CW Contest Murphy had no mercy sending high winds coupled with rain/wet feed lines that degraded my VSWR, generally bad condx and finally my SSPA blew! So I only completed 2 QSOs, again with UA3PTW and OK1CA.

F1PVR: André andre1pvr@yahoo.fr was QRV on 24 GHz in Jan with a 3.5 m and 20 W – [see last month’s report]. He had an easy random QSO with OK1KD in CW random and then JT. André is looking for skeds and notes he need 22 to 25 ° el and 90 to 180° AZ to operate.

FS5/Eq: Frank reports on his 23 cm SSB contest operation – I was active from local moonrise to local moonset, with a three hour break for lunch time. The low declination was a problem. All QSOs made between moonrise time and about local moonset were disqualified as obvious left a gap, I have now fitted the covering to 10 of the 16 sections, not fixing them completely out to the rim, only to the 4th ring. When I cut the mesh off the fallen dish with an angle grinder, in 2 section pieces that obviously left a gap, which I will have to bridge by soldering a strip of mesh across, but my first target is to get all 16 sections in place so that the weight is even. I have given up repairs – I had been making great progress, but the weather pattern has changed back to high wind with strong gusts (35 mph) and rain so not much progress lately. I have now fitted the covering to 10 of the 16 sections, not fixing them completely out to the rim, only to the 4th ring. When I cut the mesh off the fallen dish with an angle grinder, in 2 section pieces that obviously left a gap, which I will have to bridge by soldering a strip of mesh across, but my first target is to get all 16 sections in place so that the weight is even. I have given up...
on the idea of covering the centre 2.4 m with a finer, lighter mesh, it was eye-wateringly expensive. I use a pulley to haul the mesh up into position before pop-riveting. One good thing, anyone whose done this job knows how many ties you need to put in on the rings to hold the mesh... when you refit a large piece it already has the right shape so far fewer are needed. I still hope to be back on in February, but it all depends totally on the weather.

G3LQR’s 80th birthday party, L to R are G3LTF, G4FGS (chair EME2012) XYL, G4HUP, XYL G3LTF, G4DDK and G3LQR.

G4BAO: John john@g4bao.com has been active on 13 cm – I had a nice 2320 CW QSO on 14 Jan at 1800 with ESSPC. I am running a 1.9 m dish with a Septum feed, 180 W and VLN2A. I can also copy 2304 and am interested in skeds. Email me or hook up with me on HB9Q.

HB9BBB: Dominique dfaessler@bluewin.ch was active on 23 cm CW in Jan/Feb and worked SP6TFI (579/579), RN3A (579/559), ISYDI (569/539), DG5CST (529/559), RL22OG (579/589), RL22CW (539/579) and UA9YLU (529/559).

1NJP: Nando jnjp.nando@gmail.com reports poor conditions during the DUBUS 432 CW EME Contest and that he was rained out for both SSB contests – I was ready for the SSB contests but pouring rain for the whole of Saturday made operation on 70 cm impossible, and when I was making ready for the 23 cm session my AZ encoder refused to work. I found that my readout was full of water and the signal on the encoding disk wiped out by the moisture. I am now waiting for a replacement from US Digital. I was able to be on the air during the CW contest on 70 cm for few hours, but could complete only 13 QSOs. The activity was very low. In addition to the usual noise and spurious signals were bad, and I had some problems with my antenna not performing as it should. I have serious maintenance planned for when weather will be better.

JAI4BLC: Yoshior javblic@web-sanin.co.jp was active on the microwave bands – I worked on 12 Jan on 2302/2424 SM6eCUK (559/559) for initial #61. I appreciate PA3DZL’s in getting a 2424 converter to Ben. On 10450, I worked on 12 Jan LX1DB (559/569), on 14 Jan JA6CZD (O/O), on 4 Feb (10450/10688 XB) G3WDG (559/559) and FIPIJR (O/O) on random. I was also heard on 3 Feb by EA3XU, but was not able to not listen for Benjamin.

JH1KRC: Mike sends news on his activity in the 1296 SSB Funfest and his missing the 70 cm DUBUS Contest -- My SSB operation was on 23 cm from grid QM06 with my 4.4 m dish, OM66AA septum feed with a super choke, 1 kW TX, HB9BBB LNA and IC 9702D with audio filters. Because of the Moon’s low declination and my own window limitations, I QSO’d only into EU with at 857/85EJFL (56/55) JN08, 0902 OK1CA (55/55) JO, 0924 SP6FLF (54/52) JO and 0939 PI9CAM (54/55) JO. I also hear UA3PTW (56). My final score was (4x2)x2 = 16 points! Unfortunately we had stormy weather with heavy snow here in Japan at the time of the 70 cm EME contest that prevented me going to my EME shack. I am sorry that I could not take part.

K5QE: Marshall k5qe@k5qe.com sends his report of my 432 EME operation in support of W1AW/S celebration of the ARRL’s 100th Anniversary -- I was only able to operate 432 for two days on the weekend of 8/9 Feb. On Saturday I made 13 QSOs. All were from EU except for W7M6M. Signals were extremely loud that day. I have never heard 432 signals that strong in the past. I had one station at (6DB)! Many others were at (8DB – 9DB)– big fat traces and signals that you can hear in the speaker. On Sunday, I worked 7 more for a total of 20 EME QSOs. I have never made over 13 QSOs on 432 except for the 432 ops just don’t want to give out contacts in an ARRL VHF contest. Anyway, I thought I was going to break my 13 contact jinx, but the Moon was lost in EU before I could finish that 14th contact. AAaaaaAARGH - maybe someday!

KL6WE: Ed kl7uw@acsalaska.net has both good news and bad -- I was able to get my dish with re-installed LNA/relay box at the feedhorn in operation, and with 50 W was on for the SSB contest weekend (1/2 Feb). I copied some SSB stations (023), but not quite well enough to get calls. Later I heard a strong CW station (019) and another not so strong station he was working. Then I moved up to 1296.070 to try working ZL2IP, but I did not find his trace. VK2JPS copied my signal, but reported I was sending in LSB? That is crazy as the K3 operates in the TX mode. Activity appeared to die about 0100. The next day, 3 Jan, I finally made some 23 cm QSOs on JT6S5C. I worked at 0037 VK4CDI (22DB/19DB) and about 0045 VK2IDS (15DB/15DB). These QSOs tell me that my 50 W is not good enough for CW with 3 m dish station. The bad news is the following week the WX turned very bad with winds up to 73 mph in some local areas and lots of damage. Fortunately the dish survived any major issues. I will be QRT for a few days until I get everything checked out and any repairs done. I should be on for the March activity.

N4GJY: Ron bad779@yahoo.com was QRV for the DUBUS CW EME Contest -- I was QRV on both 2 m and 70 cm during the contest. I experienced extremely poor conditions, 70 cm during my first 300 minutes, then 2 m, when I was rained out for both SSB. I was not able to hear any DX QRV. Signals from normally strong stations were very weak and QSB was severe. Signals were extremely difficult to copy. However, much of what I perceived to be poor conditions, may have been due to a very unfavorable and non reciprocal polarity alignment. I base this impression on my impression that many QSO partners seemed to be hearing my signals better than I was hearing their signals. Conditions were generally better during the remainder of the contest. The number of very strong signals were heard. However, “one way propagation” was very often a very serious problem. I replied to CQs from a number of stations that had very strong signals with no response, whatever. On the other hand, the one way propagation apparently prevented me from ever hearing a number of “big signal” stations that I would later learn had been active and I struggled mightily to copy the cross polarized signals from others. I received a couple of replies to my CQs that I failed to id, before the calling station gave it up. This one way propagation issue was often very evident, on both bands. On 432, I logged VESTA, W1AW/4, JA4ABH, VK3UM, OK1CA, UA3PTW, SP7DCS, NC1I, ES5PC, and DL9KR. Stations CWNR’d included OH2DG, SP6JLW, 1NDFP and IK2FOO. My QSO numbers were very low, which was no great surprise. Some stations were unable to be QRV due to the bad WX that plagued much of the northern hemisphere, and the Moon was nearly at apogee. Nevertheless, I greatly enjoyed the fun, and I would like to thank all the guys at DUBUS and the REF, for sponsoring this enjoyable, fun event!

N4PZ: Steve ndgz@live.com was disappointed to miss the SSB EME Funfest this year but notes that his polar mount does not allow operation at declinations of 0 and below -- I worked on 1296 CW on 3 Feb NCH1 and PA3FXB, and on 5 Feb N6OVP (559/559). This was David’s first 1296 EME QSO. He has a 2.2 m dish and 400 W through a long run of coax line, which he plans to shorten. I plan to be QRV on 1296 when I have Moon looking for CW QSOs.

N6OVPI: Steve nd6ovp@pacbell.net is very excited have made a 1296 EME QSO -- I work N4PZ tonight (5 Jan). Steve did sound good here and gave me a (559)! I plan to move my dish in the next few weeks to a location where I will have a better Moon window to the east. I am interested in additional QSOs and skeds via email. I will also check HB9Q.

NC1I: Frank frank@NC1ICOM sends his Jan activity report -- Bob (W1QA) and I made noticeable improvements in performance in Jan and are now able to work more of the 3 m and smaller low power station on CW. Probably our best CW QSOs were with PASCQIE (3 m and 90 w) and UA9YLU (4.5 m and 50 w). When we started thinking about what to build for a 2424 converter to Ben. On 10450, I worked on 12 Jan LX1DB (559/569), on 14 Jan JA6CZD (O/O), on 4 Feb (10450/10688 XB) G3WDG (559/559) and FIPIJR (O/O) on random. I was also heard on 3 Feb by EA3XU, but was not able to not listen for Benjamin.
On 23 cm SW starting on 10 Jan at 2000 PA3FXB (559/599), 2010 OK1CS (57/57) JO, 2019 UA4HTS (54/55) LO, 2024 JH1KRC (53/54) JN, 2035 OK2ULQ (53/56) JN, 2042 DJ3FI (55/56) JO, 2050 PY2BS (569/589), 2051 DJ3FI (55/56) JO, and 2057 PA3DZL (549/569) and 2120 2A2DW (O/O), 2157 PA3DZL (549/569) and 2205 DL6SH (569/579), on 11 Jan at 0538 JA6AHB (579/579), 2017 11NDP (589/589) and 2024 IK5VLS (529/549), and 21 Jan with W1QA operating JT65C at 2258 PA3DZL (11DB/8DB), 2304 PA3CQCE (16DB/8DB), 2312 G4CGW (12DB/8DB), 2324 DL6SH (8DB/7DB), 2332 K5DOG (20DB/12DB) and 2340 PA2DW (23DB/14DB), on 12 Jan at 0100 PY2BS (10DB/6DB), 0016 IK5VLS (13DB/7DB) and 0052 DKOSF (12DB/7DB) - I am assuming DKOSF is the same station as DL6SH, and on CW at 2250 LX1DX (589/589), and on 14 Jan on CW at 2309 PA3CQCE (O/O) and 2335 UA9YLU (O/O). During the time period that I worked PA3CQCE and UA9YLU both my echoes and the ONE/EME beacon were by far the loudest I have heard them. On 18 Jan I called CQ on CW for nearly 4 hrs starting shortly after my moonrise and only heard one station reply (T2A2E), but was unable to complete. I called CQ again on 18 Jan for a little over an hour during my Asian window with no luck. On 19 Jan, we switched between modes and found activity starting at 0217 RM22DU (12DB/5DB), 0233 RL2JT (15DB/0), 0312 UA4LCF (23DB/23DB) and on 0356 HB6TXA (O/O CW), 0401 2A2DW (539/569), 0441 RL22PW (569/569), 0607 DF4PV (18DB/0), 0637 SE6FX (23DB/12DB), 0658 SP4MPB (O/O CW), 0707 VE6TA (539/549) and at 0756 LX1DB (559/589), 0850 VA3BFZ (O/O CW) and 2100 WA3GFZ (O/O) - I worked this on JT (this was the first time I have ever operated JT) and added at 2108 PA3F3B (16DB/0DB), 2117 K5DOG (25DB/14DB), 2132 IK5VLS (16DB/0DB), 2142 PA2DW (21DB/14DB), 2156 UA4FCL (23DB/23DB) and 2254 RA3AUB (12DB/6DB), on 09 Feb at 0525 VK4CDI (17DB/14DB) and (O/O) on CW at 2050 SM7SJR (17DB/14DB), 2124 PA2DW (20DB/0) and 2135 PA3F3B (15DB/14DB) – I worked this the loudest I have ever used a 23 cm SW starting on 8 Feb at 0210 WA3GFZ (O/O), 1928 DF3RU (539/589) and 1935 OKICS (559/579). I then switched to JT (this was the first time I have ever operated JT) and added at 2108 PA3F3B (16DB/0DB), 2117 K5DOG (25DB/14DB), 2132 IK5VLS (16DB/0DB), 2142 PA2DW (21DB/14DB), 2156 UA4FCL (23DB/23DB) and 2254 RA3AUB (12DB/6DB), on 09 Feb at 0525 VK4CDI (17DB/14DB) and (O/O) on CW at 2050 SM7SJR (17DB/14DB), 2124 PA2DW (20DB/0) and 2135 PA3F3B (15DB/14DB) – this was the loudest I have ever used a 23 cm SW starting on 8 Feb at 0210 WA3GFZ (O/O), 1928 DF3RU (539/589) and 1935 OKICS (559/579). I then switched to JT (this was the first time I have ever operated JT) and added at 2108 PA3F3B (16DB/0DB), 2117 K5DOG (25DB/14DB), 2132 IK5VLS (16DB/0DB), 2142 PA2DW (21DB/14DB), 2156 UA4FCL (23DB/23DB) and 2254 RA3AUB (12DB/6DB), on 09 Feb at 0525 VK4CDI (17DB/14DB) and (O/O) on CW at 2050 SM7SJR (17DB/14DB), 2124 PA2DW (20DB/0) and 2135 PA3F3B (15DB/14DB) – I worked this the loudest I have ever used a 23 cm SW starting on 8 Feb at 0210 WA3GFZ (O/O).
IN [for a score of (2x7+2x4+1x10+4x7+10 = 70 points] The station was 6.5 m dish with 1 kW SSPA (16 x BLV958) and DG0VE VLNA.

UA3PTW: Dmitrij ua3ptw@inbox.ru was active on 23 cm in Jan on 1296. He added on CW DG5CST and SP4MPB, and on JT6SC ES6FX and IW5BHY. [TNX DK3WG for forwarding this report.]

UA4HTS: Anatoly tolygvz@gmail.com had good results in the 23 cm EME SSB Funten – I QSO’d at 0033 VK2JDS (Q5F 07/22 UA4AAV (54/53) LO on CW/S, 0724 UA3PTW (56/56) KO, 0845 E0EJL (55/55) JN, 0901 DF3RU (55/55) JN, 0921 SP0WL (55/54) JO, 0942 P9PACM (55/58) JO, 1011 OKICS (55/54), 1020 FSSEJF (55/54) JN, 1043 RA3AUB (55/55) KO, 1056 DL0SH (55/55) JN, 1101 OKICA (55/55) JN, 1144 DL9FR (55/55) JO, 1158 H9BQ (55/55) JN, 1222 DD8C (49/49) JN, 1258 G4RGK (55/55) JN CW/SSB, 1308 OE5JFL (55/55) JO, 1351 DJ1DX (55/55) JN, 1351 OK2DL (55/55) JN, 1351 DG5CST (55/55) JN, 1413 LJ1DX (55/54) JN, 1623 LX1DB (55/56) JN and 1651 K2UYH (57/55) FN CW/SSB for a total of (16x2+6) for 16 points.

UA9YLU: Rakov is a new station on 1296 EME from Asiatic Russia. He worked in Jan on JT6SC, RL22CW, RL22GQ, JA1WQF, RL22JT, SV1CAL, IW5BHY, ES6FX, PA2DW, PA3CQE, RN3A, ES6QJ, NC1I, RM2DUD2 and VK4CDX. [TNX DK3WG for forwarding this report.]

VA7MM: Mark (VE7CMK/VA7MM) and Toby (VE7CNF) va7mm@rac.ca report on their teams 1296 EME SSB Contest results – We were active on 1296 for the first 2 hours of the contest and had random contacts with K2UYH (FN) and VK3JM (QP) for a contest total of 8 points. We also had CW QSO with VK5MC. Unfortunately we were not available during the EU window. We intend to operate next in the DUBUS 1.2 GHz EME contest in May, but are otherwise available anytime for scheduled contacts. Please e-mail for arranging scheduled contacts.

VE6TA: Grant ve6ta@xplornet.com was active in the 432 CW weekend of the DUBUS EME Contest – Despite the minus 25-30 deg C weather, I activated the station for the 432 contest. Activity was lower than previous years and an elevated K index disturbed conditions. The following stations were worked: N9GIV, ES5PC, VK3UM, JA6AHB, 1NDP, OK1A, UA1PTW, SP6JLB, LZ1DX, NC1I, DL9KR and SP7DCS for 12x12 score. Huge signals were heard from DL9KR, NC1I, UA1PTW, OK1A, and VK3UM despite the disturbances and agape conditions. I called WI4AW and received QRZs, and heard the following with no opportunity to call, DL7APV, DF3RU, P3A? and IK2OLO (?). Overall it was a fun weekend and nice to hear some of the big signals that made it back from the Moon. I also managed to work WA4NJP as WI4AW prior to the contest period. I will be on for the 13 cm contest next month, WX permitting.

VK3UM: Doug tkhaluna@bigpond.com has some interesting and unusual observations to report – Stations worked during the 1296 SSB Contest (1/2 Feb) were at 0131 W7JM (55/55) DM, 2256 R0UHY (55/57) FN, 2242 VA7MM (55/55) JN, 2315 VE6TA (55/55) JN (49 points). Unfortunately, I was unable work my normal EU window due to a hydraulic interlock failure. On 432, on the previous day, I only QSO’ed at 0750 UA3PTW (55/55) KO and OK1CA (55/55) JO. However, the big event for the whole period occurred during the 432 SSB Contest. It was what we now believe to be a scintillation event (occurred on 31 Jan whilst working K2UYH. In well over 30 years, I have never come across what I witnessed that morning on 432 with 70 cm with m55/55) JN, 1617 G4RGK (49/44) JN, 1738 P9PACM (50/50) JN, 1747 PJ3CM (44/55) JO, 1818 FSSEJF (55/54) JN and 1920 W2BBF (55/55) FN for a score of (6x2x+4) = 48 points. We heard many more SSB stations were very easy to spot on the Linrad’s waterfall, even with an inexpensive E4000 based RTL software defined radio in linearity mode with a passband filter in front of it. A partial list of SSB stations heard include VA7MM, VK5MC, JH1KRC and W7JM. We have several gigabyte of Linrad.raw files from 1296.000 to 1296.080 containing several more stations. All contacts were 100% random using only information passed through our feed. During this event, we also reported to LiveCQ spots from JT65C stations that choose to call QO at http://www.livecq.eu/1296/latest.asp using MAP65/Linrad. Thank to all the participants that toughed through the null in activity until CA got Moon. We had a great time and look forward to operating this event again next year. We plan to be active next for the DUBUS 1296 CW Contest Weekend at the end of May.

WA4NJP: Paul’s pchomions@san.rr.com Jan/Feb EME report – I had bad luck on 70 cm with much higher noise that averaged about 20-30 dB above normal. When I looked closer, I found subcarriers every 90 Hz. I went to my lab and connected a short yagi to the spectrum analyzer and I found that the noise was caused by a 1 MHz wide OFDM signal centered on 432.0. I had very similar type of QRN few years ago during one of the contests. Fortunately later this QRN disappeared. So, no 432 activity during this part of the DUBUS contest. I hope it is not a permanent signal.

K2UYH: I, katz@ieee.org had more now this year than in more than 10 years. I cannot operate when my dish is filled with snow as its weight disrupts the balance, and I fearful of over stressing the mount. Fortunately we had a short period of warm weather during the time of the SSB contests and I was able to operate. NE2U and K2YY joined me during part of the 1296 contest. I started on 31 Jan at 2200 where I reported the contest start at 2200 – 2230 – 2300 – 2330 – 2400 – 2430. I was not able to repeat the QSO after the official contest start at 2200 – only QRZs. I originated attributed this problem to increased noise on 70 cm due to the lower elevation, but Dough had experienced very unusual propagation – see VK3UM’s report. After moonrise the next day, I worked at 1556 SM2CEW (55/55) KP SSB to CW, 1600 OKICA (55/55) JO, 1635 L1DX (55/55) – would not respond to my SSB (not a contest QSO) and 1708 WA4NJP (55/55) EM for a score of (2x4x2+3)x = 22 points. I was about 1400 meters above sea level, and operated with just under 1200 watts transmitted, starting on 1455 K2UYH (55/55) CM, 2234 VK3UM (55/55) QF and 2240 W7JM (55/55) DM, and on 2 Feb at 1526 P9PACM (55/58) JO – still in the trees, 1539 OKDL7 (55/57) JN, 1553 SP6LW (55/55) JO, 1604 LX1DB (56/57) JN, 1610 OE5JHL (56/56) JN, 1617 G4RGK (44/44) JO CW/SSB, 1625 DG5CST (44/45) JO and initial #349, 1636 FSSEJF (55/57) JN, 1642 OKICA (56/56) JO, 1645 OKICS (55/57) JO, 1648 DS8QF (55/57) JN, 1649 UA1HTS (55/55) JN CW/SSB, 1652 DL0SH (55/57) JN, 1656 CT1DMK (55/55) JN, 1705 95A5A (55/56) JN, 1709 DL1YMK (55/55) JO, 1715 OKU2Q (55/55) JN, 1727 L1DX (55/45) KN, 1803 DK0SF (55/55) JN, 1824 W2BBF (55/55) FN, 1913 EY6DI (O.O) CW (not a contest QSO), 1952 N8CQ (55/55) EM, 2030 LU1CCG (55/55) GN and 2053 W3AGFZ (17DB/O) on JT (not a contest QSO). I ended with johncr7@gmail.com on 2100.

NETNEWS: JAB1AD worked on 6 Feb SM6CKU on 2424/2320 – [TNX JA4BLC for this info]. WA4NJP was QRV as WA1AW/4 on 3:2 from 5 Feb through 11 Feb. Ray planned to operate primarily on 432.02 JT65B using his
36’ dish and several hundred watts, G3LQR plans to get back on 432 EME soon with a rotatable feed in his 3.7 m dish.

**TECHNICAL: JUPITER NOISE ON 77 GHz** – RW3BP notes that evaluating RX system quality (G/T ratio, etc.) can be a major problem on 77 GHz. On the lower bands it is possible to check Sun or Moon noise, but on 77 GHz the angular size of Sun and Moon is too big in comparison to antenna beam widths. So we can check system noise temperature (T), but cannot check antenna gain (G) and related G/T. My idea was to use Jupiter as a noise source. Unfortunately this is not easy test. With my system, Jupiter noise was only about 0.0035 dB! I used the wide band radiometer module by CT1DMK but even with a 40 MHz BW, it was impossible simply to point antenna by maximum of noise in real time.

![Jupiter noise](image)

**77 GHz Jupiter noise measured by RW3BP**

**FINAL:** The originally proposed dates for the 2014 ARRL EME Contest caused quite an uproar! (I liked G3LTF’s comments on his XYL’s pleasure.) For once sanity ruled and the dates were quickly revised to 11-12 Oct for 2300 and up, and 8-9 Nov and 6-7 Dec for the 50-1296 weekends. There are really no good weekends this year as can be seen from F5SE’s 2014 Moon Charts that appear at the end of this NL – TNX frank.

The DL0SHF 10 GHz Beacon is still in regular operation on 10368.025 at 50 W. Per is offering a high power mode (500 W) on advanced request. He has also added operation on JT4G with 1 min on CW and 1 min on JT4G.

**SSB EME Contest** – DJ3JI feels the 70 and 23 cm SSB Funtests are a big success, and recommends that the idea be expanded to a 13 cm and 9 cm SSB Funtest week. 13 cm is similar to 23 cm and appears to be another good band for EME SSB. I suggest before we try an actual contest we try a SSB time period during one of the summer Activity weekends.

**The EME2014 Web site** is up and running and preparation for the conference is moving along well. Now is the time to get your registration/bookings made.

**Booking will be closed on 30 April.** You also need to submit your talk/paper. (All contributors will receive a 10% discount on package prices). A special program is planned on measurements and EME tests with the PB8 13.5 m dish. Testing with the big dish on 10 and 24 GHz is to take place during 5/6 April REF/DUBUS Contest. At the conference interesting talks about EME propagation, Faraday, libration, spreading, Moon geophysics, feed systems, SDR, weak signals decoding, radio astronomy, etc. will be presented by CNET engineers. Two lab rooms have been reserved for NF tests up to 47 GHz.

**EME OLYMPIC GAMES SOCHI Awards** for EME has been announced by the Amateur Radio Union of Russia (SRR) and the Russian branch of SRR. These awards are the first in history to be dedicated to the Olympic Games. Diplomas will be issued for working two-way communications with amateur stations operating with reflection from the Moon (via the earth-moon-earth path). Contacts are counted with all stations operating from territory of Russia by their callsigns and special callsigns, which are issued to the Days Activity Winter Olympics. The Diploma has three degrees and it is awarded depending on amount of earned points at days of the activities; BRONZE – 500 points, SILVER – 1000 points and GOLD – 2014 points. The points awarded for QSOs on 432 are 600 for Russian stations with regular calls, 900 for headquarters stations (RK22WG, RO22WG), 800 for RO22AA – RO22ZZ, RC22AA – RC22ZZ, RK22AA – RK22ZZ, RM22AA – RM22ZZ calls, and 700 for other special call sign blocks. For QSO’s on 1296 the points are respectively 250, 650, 450 and 400 for the same call categories. Contacts via the Moon will be counted from 7 Feb to 31 Feb by all modes. Repeated QSOs count on different bands and on one band in different modes CW, SSB and DIGI. Applications for diplomas should contain all radio contact data and be emailed to Nikolay (UA6AGE) at uafage@bk.ru.


An updated Version (1.85) of VK3UM EME Planner is now available that includes Moon distance in the home planner screen and the expansion of Sky noise to cover from 50 MHz to 47 GHz. Please note that the values are only approximate for frequencies below 400 MHz (interpolated) as the amount of accurate data available is quite limited. Home suburban noise situations can make it all superfluous, but they have now been included for completeness. For accurate stellar noise source values please use the VK3UM Noise Sources program.

I hope to CU you off the moon and on 13 cm in the DUBUS EME Contest. Please keep the reports and technical material coming. 73, Al – K2UYH

**First Wedding by EME at PI9CAM** - The couple names are Marit and André. André is the chairman of the CAMRAS foundation. We did a wedding ceremony and the couple exchanged their ‘I do’s’ via SSB EME on 23 cm!

Happy couple in front of dish controls. PI9CAM dish shown below.
Moon Ephemeris Overview for the Year 2014, by Franck F5SE

- Vertical blue bars show the overall "quality" of each week-end for EME. The higher the bar, the "better" the week-end.
- Figures below bars show expected signal improvement, in dB, referred to apogee path loss, for Sundays at 00:00 UTC.
- Full scale span: 2.4 dB. Scale step: 0.4 dB per division. 0 dB level = Band path loss figure at apogee, as quoted below:
  - 144 MHz: 252.8 dB, 432 MHz: 262.3 dB, 1296 MHz: 271.8 dB, 2.3 GHz: 276.9 dB, 3.5 GHz: 280.4 dB, 5.7 GHz: 284.8 dB,
  - 10.4 GHz: 289.9 dB, 24 GHz: 297.2 dB, 47 GHz: 303.0 dB. Data computed for an apogee around 406500 km.
- To get the week-end path loss on a given band, subtract to band apogee figure the value printed under the week-end bar.
- The shading pattern below shows how close the Sun is to the Moon, at any time - the darker, the closer.
- Shading is only visible around New Moon date, appearing as a vertical gray bar.