# 432 AND ABOVE EME NEWS
# JANUARY/FEBRUARY 2016 VOL 44 #1

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**CONDITIONS:** The dominent news this month is from the 1296 SSB EME Funtest. It was fun, but the high amount of SSB activity may have turned it into more of a contest than originally intended. Most reports do focused on the *fun* of hearing so many strong SSB signals off the Moon. The Top Fun Maker is I1NDP with 44 QSOs and 1020 points! Unfortunately, there is no one I can identify as the Top 432 Fun Maker this year. The activity and conditions were just not there. The DUBUS 70 cm CW EME Contest was much more of a *friendly* competition – see VK3UM's report. DF3RU and OK1KIR are tied the highest score reported to the newsletter (NL). Both have 21 QSOs and multipliers. The was not much dxpedition activity this past month. UR7DWW did show up on 6 cm to put the Ukraine this band for the first time. KB7Q has arrived in HI and plans toi be QRV on 432 starting at 12 Feb at 2015 (his moonrise) and 14 Feb at 2145 – see Gene report. Coming up is the **DUBUS 13 cm EME Contest** on the weekend of **13/14 Feb**. Next month on 12/13 March will be the 23 cm DUBUS CW EME Contest. The Feb 70 cm CW Activity Time Period is inconveniently scheduled for the same weekend as the 13 cm contest on 14 Feb from 1100 to 1300 and 1900 to 2100. Please try to support the ATP if you are not too involved with 13 cm.

**N2MO 60' dish operating position, 70th Anniversary of Project Dianna, L-R: Norm (no call), K2QM and N2GJ**

**9A5AA:** Dragan dragan9a5aa@gmail.com was QRV in the 23 cm SSB Funtest, but missed the North American window -- I QSO'd in the contest starting at 1244 DK7LJ JN, VK3UM QF, PI9CAM JO, DL6SH JN, RA3EC JN, OK2DL JN, DL3EBJ JN, UA3PTW KO, DF3RU JN, UA4HTS, LO, SP6JLW JO, LX1DB JN, G3LTF IO, F5SE/P JN, G4CCH IO, I1NDP JO, DL1YMK JO and HB9Q JN at 1730 for a total of 38 2-way SSB QSOs in 6 sectors and 456 points.

**BD4SY:** Zhu BD4SY@126.COM was not QRV during the SSB contest, but is available for skeds on 23 cm – My station consists of a 3 m TVRO dish with 0.385 f/d and OK1DFC septum feed, BERT 250 W (usually less than 100 W at feed) SSPA, G4DDK LNA with 0.3 dB NF and TS2000 with UT20 xverter. The AZ/EL rotator is an RC5-3 with armature bushing and homebrew control system. I completed my 23 cm EME system in Nov 2015. Thanks to all who helped me. From 27 to 29 Nov, I made 29 QSOs using JT65C with HB9Q, OE5JEL, DL6SH, DL/UA4HTS, UA9YLU, DF3RU, EA8DBM, OK1DFC, UA4LCF, IK5VLS, SP5GDM, S59DCD, I1NDP, G4CCH, LZ1DX, OK1KIR, OK2DL, ES6RQ, IK3COJ, PA3FXB, UA3PTW, JA6AHB, DC9UP, DF3RU, PE1CHQ, W6YX, VK4CDI, K2UYH and VE3KRP. I was most pleased to have completed my first EME CW QSO with OK1KIR.

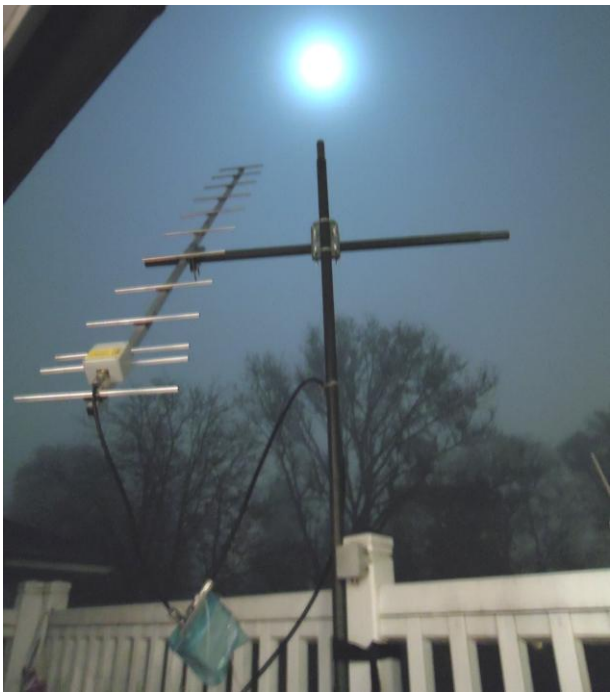
**DF3RU:** Karl karl.schmidt@asamnet.de 1296 SSB Funtest and DUBUS 432 CW Contest reports follow -- I worked on 17 Jan in the 23 cm funtest 27 SSB QSOs in 8 sectors for a score of 432 points. Worked were at 1157 VK3UM (55/55), 1159 RA3EC (55/55), 1203 UA4HTS (57/55), 1208 OK2DL (58/58), 1225 DK7LJ (59/57), 1226 PI9CAM (59/57), 1227 SP6JLW (58/58), 1229 DL6SH (58/57), 1256 JH1KRC (55/56), 1322 DL3EBJ (56/57), 1328 OZ4MM (58/56), 1344 G3LTF (57/56), 1357 9A5AA (57/56), 1437 LX1DB (57/55), 1447 F5SE/P (57/53), 1522 DL1YMK (56/55), 1717 DG5CST (57/55), 1723 I1NDP (57/55), 1726 HB9Q (59/56), 1740 OH2DG (57/56), 1759 IK3COJ (56/54), 1943 DJ8FR (56/56), 1949 OK1CS (56/55), 2004 K2UYH (57/56), 2011 SP6ITF (55/55), 2032 G4CCH (57/56) and 2039 S59DCD (55/55). Called but no QSO were ON5RR, SP2HMR, XE1XA, DF1SR, SP3XBO and G4YTL. In the DUBUS 432 CW EME Contest, I scored 21x21 for 441 points. Contacted were on 23 Jan at 1703 VK3UM (549/559), 1709 SP6JLW (549/559), 2126 LZ1DX (559/579), 2131 OH2DG (559/579), 2138 G3LTF (579/569), 2106 OK1KIR (559/559), 2119 I2FHW (559/559), 2221 ES5PC (559/559), 2227 SV3AAF (549/549) and 2303 G4RGK (559/559), and on 24 Jan at 0246 VE6TA (559/569), 0302 W5LUA (559/559), 0357 RW4HW (O/539), 1857 SP7DCS (559/579), 1923 F6HZL (549/559), 1934 VK5MC (559/559), 1940 DL7APV (579/579), 1945 LX1DB (559/569), 2011 DK4RC (559/559), 2033 DL8DAU (O/549) and 2048 PA2V (559/449). Out of the contest I worked using JT65B at 2129 F6CPI (O/16DB), 2202 OK2UQ (28DB/23DB) who was running 1 yagi and 50 W.

**DJ8FR:** Juergen juergen@dj8fr.de reports the 23 cm SSB Funtest was a nice contest again -- After 7 months in activity on EME, everything worked perfectly! My 1296 station is a 4.93 m mesh dish, RA3AQ feed, 300 W @ feed and HB9BBD preamp. Last year I worked 20. This year I did one better for a score of 21x2x7 = 294 points. QSO'd were OK2DL, PI9CAM, G3LTF, UA3PTW, RA3EC, DL1YMK, DL3EBJ, F5SE/P, LX1DB, UA4HTS, I1NDP, DG5CST, DL6SH, SP6JLW, HB9Q, K2UYH, DF3RU, OK1CS, G4CCH, S59DCD and OH2DG. Heard but not worked was ON5RR.

**BD4SY 3 m dish with 1296 feed**

**DK1KW:** Werner's wkraus@wkraus.de sends his 70 cm EME story -- I started on EME during the night of 29/30 Oct. I put a hand operated elevation mount on a 12 el DK7ZB yagi and was amazed to hear OH2PO with a good signal by just searching the band. After I found out that most of the stations were on HB9Q page, I was able to locate and decode

some more. I didn't try to call this first time because the SWR of my antenna was very bad (2.5). I needed to optimize the elements. However, the following night, I heard several more stations and I just tried with that bad SWR. I worked HB9Q, UA3PTW, OH2PO and DL7APV. I also heard K2UYH, DL9KR (CW) and SM4IVE (CW). It was really easy going. The following days I had QSOs with DK3WG, OK1DFC, DF3RU and HB9Q again, and heard JA6AHB. During the second leg of the contest, I had QSO'd DL7APV, OH2PO, NC1I (first NA) and UA3PTW. My station is a IC-7100 with 0,6 dB LNA and 10 m H2007 cable. The PA is a Gemini 70 from Wales, making about 250 W. I prefer to make my QSOs without sked as it is more fun for me and most of the time it works out. My possibilities are very limited as I only can mount my antennas in the balcony of my flat. At the moment I am working on a new antenna system with 2 x 13 el YU7EF yagis with expected 16.5 - 17 dBd gain. This is the maximum I can handle here. I am thankful to all these Big Guns who make EME for me possible and I hope to be able to work some more stations during the months to come.



**DK1KW's balcony mounted 12 el yagi looking at Moon**

**DK3WG:** Jurg dk3wg@web.de sends news on his Dec/Jan EME activity – I added initials on 432 using JT65B with RW4HW, UX4IJ, KB7Q, RA4SD, RA9DA (2 x 20 el yagis and 100 W) and DL2ALF (single 6 wl yagi and 100 W). On 1296 I worked using CW JA4BLC and LX1DB, and with JT65C UA4WP, BD4SY for DXCC 49, ZS1LS, VA6EME, S508PCM (special call S59DCD).

**DL3EBJ:** Chris' dl3ebj@t-online.de 23 cm FUNTEST report – I operated the contest with a 4.8 m (f/d = 0.4) dish and 500 W at the feed. All QSOs were SSB to SSB. My final score was 29x2x8 for 464 points. QSO'd were at 1238 UA3PTW (57/55) KO, OK2DL (58/58) JN, 1249 DK7LJ (59/56) JO, 1253 DL6SH (58/57) JN, 1300 PI9CAM (58/57) JO, 1305 SP6JLW (57/56) JO, 1309 VK3UM (57/55) QF, 1324 DF3RU (57/59) JN, 1330 UA4HTS (58/56) LO, 1335 9A5AA (55/55) JN, 1337 RA3EC (55/55) KO, 1341 G3LTF (57/56) IO, 1409 OH2DG (57/57) KP, 1445 LX1DB (59/56) JN, 1451 F5SE/p (58/53) JN, 1457 SP3XBO (54/55) JO, 1542 I1NDP (59/58) JN, 1546 DJ8FR (57/57) JO, 1556 DL1YMK (57/56) JO, 1559 DG5CST (57/57) JO, 1725 HB9Q (59/54) JN, 1752 IK3COJ (55/55) JN, 1804 SP2HMR (55/51) JO, 1944 K2UYH (56/55) FN, 2013 S59DCD (56/55) JN, 2020 SP6ITF (55/55) JO, 2054 OK1CS (56/55) JO, 2057 G4CCH (57/56) IO and 2226 WB2BYP (56/53) FN.

**DL6SH:** Slawek DL6SH@online.de was active in the 23 cm SSB Funtest -- I worked 24 stations in 7 sectors for 336 points as all QSOs were on SSB. Worked were OK2DL, RA3EC, VK3UM, UA4HTS, DK7LJ, DF3RU, PI9CAM, UA3PTW, DL3EBJ, 9A5AA, OH2DG, SP6JLW, G3LTF, DL1YMK, DG5CST, ON5RR, DJ8FR, I5YDI, SP2HMR, IK3COJ, SP5GDM, HB9Q, I1NDP and LX1DB. Heard were OK1CS, F5SE/P, SM?, SP6ITF and UA4WP using Russian. I had some preamp problems and was not able to hear during the last part of contest. I missed PA2DW and probably others because of my RX problem. It was snowing and -12 degs C outside, so no repair was done at that time. I also was able to QSO N2MO for the celebration of the 70th anniversary of the Project Dianna first EME echoes. They had a very strong signal despite that I worked them through my house on CW with only 50 W.

**DL7APV:** Bernd dl7apv@gmx.de reports on 432 – In the 432 SSB EME Funtest, I made only 4 QSOs. I had hoped to do better in the CW contest, but my antennas and feedlines were iced up; my SWR >10. On Sunday it melted and I worked 4 on CW before the rain started and my SWR was not useable again. On Friday before the DUBUS test, I did work MX0CNS using JT65 for an initial. He is using only a 7 el yagi and 80 W and was easy copy (26DB).

**F5SE/p:** Franck kozton@free.fr had *fun* in the 1296 Funtest -- Because of tree screening at moonrise, my QRV was delay by 2 hours. When operating on CW, it is sometimes possible to work through the curtain of trees, but on SSB signals are most of the time too weak to copy. I finished up with 31 QSO's and 11 multipliers for 682 points. I had the same number of QSOs as last year, but with 1 less multiplier. The stations worked were 9A5AA (53/55), DF3RU (53/57), DG5CST (54/57), DJ8FR (53/57), DL1YMK (55/57), DL3EBJ (53/58), G3LTF (53/56), G4CCH (55/56), HB9Q (57/57), I1NDP (55/57), I5YDI (52/53), IK3COJ (54/55), LX1DB (56/56), OH2DG (54/57), OK1CS (54/55), OK2DL (55/59), ON5RR (53/55), PI9CAM (56/57), S59DCD (55/56), SM4DHN (56/56), SP3XBO (53/54), SP6ITF (53/55), SP6JLW (55/57), RA3EC (53/58), UA3PTW (55/58), UA4HTS (55/56), K2UYH (55/57), W6YX (55/55), WA6PY (53/55), WB2BYP (54/54) and XE1XA (53/55) for initial #189. Stations CWNR were DF1SR (53), IK3GHY (54), JA1KRC (42), SP9GDM (42) and possibly a few more whom I have not been able to understand. All reports sent were "converted" from the average SDR readings, with a scale factor of 5 dB per S unit. There was surprisingly low activity this time from Italy. No Canadian stations were heard either, but I suspect may have been the result of tough weather conditions. This time, I managed to work XE1XA, but his signals were weak and unstable in frequency. On the TX side, I was once more working with only about 220 W at feed-horn. The safety circuits of the kilowatt SSPA are still under design. During the contest, the sky was clear with no clouds and nice moonshine. But a sudden cold wave arrived at sunset with temperature down to -8°C. The AZ-EL drive of the dish did make some strange noises when putting back the dish to its idling position; this probably due to some already partly frozen gear drive and bearings.

**F6DRO:** Dom is active on 3 cm using circular pol (CP), but is frustrated that many stations are still using linear pol -- Around perigee [in Dec/Jan], I made only a few QSOs. The WX was bad, and most days it was too windy to take advantage of the reduced path loss. I did work DB6NT on CW and WA3LBI on JT. I had partial QSOs with G3WDG on CW and IW5BHY on JT. I copied both and also OK1KIR on CW. I have a problem: with my small system I can work many stations, but if they do not use CP, it is either difficult or impossible to work. This will probably last a long time as CP is still not in use by that many stations.

**F6ETI:** Philippe f6eti@wanadoo.fr operated in the 1296 Funtest -- With my small 100 W and 3 m dish, I QSO'd on SSB with PI9CAM, HB9Q and I1NDP, but there were many stations that I could not hear/understand. I could not make myself heard by OK2DL nor LX1DB. Both were good copy here. A recording of my QSO with HB9Q is at https://www.facebook.com/philippe.martin.9480/videos/1100528703292105/

**G3LTF:** Peter pkb100@btinternet.com writes on his recent EME activity – I had an interesting month with CW initials on 3 bands. I started by working N2MO, the project Diana Commemorative station on 23 cm on 10 Jan. The low declination meant that the moon was about 2 degs below my beam center, about 4 dB down, and I could only get to that dec after taking an angle grinder to a bit of the dish mount! They were a good signal, readable on SSB, but activity was strangely low, a pity. On 14 Jan, I worked OZ1LPR on 6 cm with his new CP feed; definitely a better signal than on the initial contact. (I hope Peter will send you something about his new feed). On 16 Jan, I was on for the 432 SSB Funtest. It was pretty quiet. The 90 degs of Faraday in daylight hours didn't help. I worked only VK3UM (CW & SSB), UA3PTW, DL7APV and SP6JLW on 2-way SSB for a score of 4x3X2 = 24 points. The next day, 17 Jan on 23 cm SSB, there was much more interest. I worked DL3EBJ, DF3RU, VK3UM, UA4HTS, OK2DL, UA3PTW, G4CCH, JH1KRC, SP6JW, PI9CAM, LX1DB, F5SE/P, M0DTS for initial #416 - (I can't recall another fully random SSB initial!), RA3EC, 9A5AA, DJ8FR, SM4DHN, DL6SH,

DL1YMK, SP3XBO, ON5RR, I1NDP, DG5CST, OH2DG, HB9Q, SP6ITF, OK1CS, S59DCD, K2UYH, WB2BYP and WA6PY all on SSB and W6YX on CW to SSB for a score of (31x2+1)x12 = 756 points. CWNR were SP2HMR, IK3COJ and DF1SR (lost). Heard were I5YDI on SSB, VE4MA/K7 on CW and G4YTL on CW. I ended with On 19 Jan, I was back on 6 cm to work UR7DWW for initial #57 and DXCC 28. On 23 Jan, I was on 70 cm for the DUBUS CW/SSB Contest. The WX here was quite kind, but elsewhere was appalling. The conditions were excellent with very little Faraday rotation on echoes and, more importantly, sharply defined polarization on received stations. I worked I2FHW, W5LUA, OH2DG, G4RGK, VE6TA and SP7DCS, on 2nd pass VK3UM, SP6JLW, OK1KIR, OZ4MM, VK5MC, ES5PC, LZ1DX, DL7UDA, SV3AAF, LX1DB, PA2V, DF3RU and RW4HW for initial #463, and on the 3rd pass I heard F6HZL working others but never heard or saw him call CQ and he didn't find mine! I ended with a total of 19x19. I understand that RW4HW has 400 W and 4x26 el yagis and no elevation! (Well done Valery, many others could follow that example and do CW EME on 432). Even taking into account the poor weather, the activity was low, but it is so satisfying to make proper CW contacts, fully random and no side channel. Finally, over the New Year I rebuilt the dish control systems and re-organized the operating position. My declination indicator system moved forward by nearly two centuries from a Wheatstone bridge to an LCD display!

**G3WDG:** Charles charlie@sucklingfamily.free-online.co.uk sends some interesting 10 GHz EME news/information on CP experiments he is doing -- For the last few months, I have been attempting to measure the spectral characteristics of own echoes on 10 GHz using linear and circular polarization. I have been using the same type of feed (SM6FHZ design: one CP using a septum, the other linear using a waveguide feed from the rear). The CP system has 0.3 ~ 0.4 dB less moonnoise, most likely due to the loss of an SMA to WG transition needed to interface to the SMA connector on the feed. Clear sky moonnoise with the linear feed is generally now 3.0 to 3.1 dB, measured at about 30 degs elevation using azimuth swing to get the cold sky reading. I am now also using a DL3BPC preamp, which has excellent performance with no stability issues. I have been using WSJT-X Echo mode to collect the data, and now have improved Doppler control to 1 Hz steps. Experiments so far have been to collect and plot 10 individual echoes at the same value of libration spreading (about 50 Hz), as well as 12 echoes averaged. In addition, I have been using JT9F (fast) with 5 sec periods to compare decoding performance of my own echoes. JT9F has a message length of 1.7 s, so that one echo should contain all of the message. So far there seems to be little difference in the characteristics of the signals. I plan to do some more experiments with higher spreading to see if CP or LP does better. If CP signals were less spread, as some have claimed, then under these circumstances CP might offer some advantage. With 50 Hz spreading (equal to the tone spacing of JT9F) both LP and CP decode reliably. On 20 Jan, I did a test with HB9Q using JT9F and we completed a QSO quite easily using 10 s periods (to minimize QRM from our own echoes). The first 8 decodes were our own echoes. On my own echoes I have about a 3 dB margin at this level of spreading (which also gives reasonable SSB echoes).

**G4BAO:** John john@g4bao.com reports on his recent activity -- I worked my SSB initials #1 and #2 on 1296 in the Funtest! Guess who? Yes, HB9Q and PI9CAM. Well what do you expect with a 1.9 m dish and 180 W? I also worked initials with DL6SH on CW for #12, and using JT65C GM4PMK digital initial {#55}, SP3XBO {#56}, UA4LCF {#57}, OE5JFL {#58} and VA6EME {#59}. I will put the 13 cm feed in the dish soon for the Feb 2.3 GHz DUBUS EME Contest. Please email for skeds.

**G4RGK:** Dave zen70432@zen.co.uk had fun on 432 in the DUBUS EME Contest -- I was able to get on for the start of the contest, but only for an hour and a half. I found conditions excellent with loud echoes and was able to work everyone I could hear at the time. I QSO'd at 0018 I2FHW (559/449), 0024 OH2DG (559/559), 0030 G3LTF (569/559), 0117 VE6TA (449/449) and 0139 SP7DCS (449/449). I QRT'd around 0145 pretty bushed after a long week at work. At the next moonrise, I added at 1710 VK3UM (559/559), 1955 SP6JLW (559/559), 2012 LZ1DX (559/559), 2245 ES5PC (O/O), 2256 DF3RU (559/559) and 2305 OK1KIR (O/O). I was unable to be QRV at all for the Sunday passes. It was a very pleasant relaxed contest where nothing went wrong. I ended with a total of 11x11.

**HB9Q:** Dan dan@hb9q.ch (JN47cg) sends an update on his recent results -- We had a very nice and successful 2015. Since adding 6 and 3 cm in Sept, we have added 25 initials and18 DXCCs on 6 cm, and 36 initials on 3 cm and 17 DXCCs. [I believe these are mixed initials, both CW/SSB and digital]. We are very happy with our first results. The smallest station worked on 6 cm was DL2NUD with a 90 cm dish and 50 W, and on 3 cm VK7MO with 77 cm dish and 5 W. This confirms that we are capable of working QRP stations on both bands. On 23 cm we are up to mixed initial #533 and DXCC 113. DL6EDF with a 1.5 m dish and 10 W is one of the smaller stations we worked in 2015. On 13 cm we are now up to mixed initial #134* and DXCC 52 with 5B/DL2NUD (1.5 m dish and 100 W) one of the smaller stations worked in 2015. We are QRV TRX on 2304 and 2320 and RX-crossband on 2400 and 2301.9. On 9 cm, we are up to mixed initial #51* and DXCC 51 with 5B/DL2NUD (1.5 m dish and 100 W) one of the smaller stations in 2015. Since we were Hermann's first 9 cm QSO from 5B, this contact gave us the first WAC on 9 cm (WAC award dated 7 Dec 2015). We were QRV only a few hours during the 1296 Funtest. I was the operator but was limited due to family commitments. It was amazing how much activity there was! I called CQ once and then I was busy working the callers; most of the time 2 or more were at the same time. I worked 27 stations in this first hour! And then I did some 6 and 3 cm and went back to 23 cm for another 2 hours. I worked a total of 42 stations, all on SBB; 2 of them were initials: F6ETI (53/59) and M0DTS (53/52). The sectors worked were DM, EK, FN, IO, JN, JO, KO, KP and LO for a total of 9 and a final score of 756 points. (For more information about our equipment, capabilities and the complete logs please visit www.hb9q.ch band sections). If you did not work us on one of the bands, please email me for skeds or look for us on the HB9Q-loggers. We are always watching there when QRV. We are very happy to sked with you or to inform you prior to our next activity.

**I0NAA:** Mario mario.natali@gmail.com is progressing well with his 1296 EME station -- Fine tuning of my 23 cm EME setup is progressing well. I have made several JT65 contacts. The mechanical stability of my unique (stealth) dish system is much better now, and I am working on the feeder to improve sensitivity. I also decided to increase my output power going from my current 18 W (transverter output) to 250 W. I suspect this change will be quite noticeable off the Moon. I will be ready by the middle of Feb. I have been looking at various cosmic noise sources and have improved my reception, but I am still under VK3UM predictions. Cygnus A for example is measured at 0.5 dB vs. 0.63. (Pretty good DX at 700 millions light years)! One discrepancy is Taurus A, which I measure too high. I have repeated the measure a few times, but I always had similar readings. I am looking forward to seeing many of you at the EME Conference in Venice.

**I1NDP:** Nando i1ndp.nando@gmail.com had some WX problems during the 1296 Funtest -- I completely lost my eastern moon window because of strong high winds. I could not unlock the dish for several hours. Even with the loss of moon time, it was still lots of fun and a great pleasure to hear all the voices coming out of the noise. I ended working 44 stations with a few on mixed SSB/CW mode. I QSOed at 1539 OK2DL (59/59) JN, 1542 DL3EBJ (58/59) JO, 1545 9A5AA (57/57) JN, 1547 F5SE/p (58/55) JN, 1551 PI9CAM (59/59) JO, 1553 UA3PTW (59/59) KO, 1554 UA4HTS (58/59) LO, 1556 G3LTF (58/58) IO, 1558 LX1DB (59/59) JN, 1600 DL1YMK (57/58) JO, 1603 ON5RR (57/56) JO, 1606 DJ8FR (56/59) JO, 1607 RA3EC (56/59) KO, 1609 SP5GDM (56/57) KO, 1611 OH2DG (56/57) KP, 1613 I5YDI (55/55) JN, 1616 M0DTS (55/53) IO, 1619 SP3XBO (55/55) JO, 1623 SP2HMR (57/57) JO, 1630 DG5CST (58/59) JO, 1633 IK3COJ (58/58) JN, 16 36 SP6JLW (58/58) JO,1637 DC9UP (56/57) JN,1650 SP6ITF (56/57) JN, 1657 PE2TV (54/52) JO, 1708 DF1SR (55/55) JO, 1720 G4CCH (58/58) IO, 1722 IK5VLS (55/57) JN, 1725 DF3RU (56/58) JN, 1726 DL6SH (58/58) JN, 1755 HB9Q (59/58) JN, 1847 F6ETI (44/53) JN, 1852 PE1CHQ (54/53) JO, 1907 OK1CS (58/58) JO, 1915 K2UYH (57/55) FN, 1952 S59DCD (58/58) JN, 2031 XE1XA (57/57) EK, 1720 WD5AGO (55/55) EM, 2137 WA6PY (55/55) DM, 2151 PA2DW (33/55) JO, 2207 G4YTL (579/25) IO CW/SSB, 2208 WB2BYP (55/55) FN, 2225 W6YX (579/55) CM SSB/CW and 2225 VE4MA/W7 (559/55) DM SSB/CW for a total of (41x2+3)x12 = 1,020 points. I was expecting more stations from NA, but I closed down early when the band was deserted in EU. I tried also the 70 cm SSB Funtest on Saturday, but did not hear a single signal.

**IK3COJ:** Aldo had some fun on 1296 EME SSB in Jan – In the Funtest I was running a 4.15 m dish with 400 W. I worked at 1511 PI9CAM (58/57) JO, 1522 OK2DL (58/57) JN, 1556 F5SE/p (55/54) JN, 1634 I1NDP (58/58) JN, 1652 DL6SH (57/57) JN, 1708 DG5CST (56/56) JO, 1728 HB9Q (58/54) JN, 1733 SP6JLW (54/55) JO, 1750 OH2DG (53/54) KP, 1752 DL3EBJ (55/55) JO, 1754 RA3EC (54/55) KO, 1801 DF3RU (54/56) JN and 1806 LX1DB (58/56) JN with all on 2-way SSB. My overall score was 13x2x4 = 104 points.

**IK5VLS** Gabriele tuccigabriele@alice.it was QRV in the 1296 SSB EME Funtest – I used a 4 m dish with an estimated gain of 30 dB, TX cable loss of 1 dB and SSPA an with output power of 400 W. All my QSOs were SSB to SSB and also on SSB to CW. I worked at 1642 OK2DL (57) JN, 1703 PI9CAM (57) JO, 1722 I1NDP (57) JN, 1735 HB9Q (59) JN and 1920 DG5CST (55) JO. My score was 5x2x2 = 20 points.

**JA4BLC:** Yoshiro ja4blc@web-sanin.co.jp reports on his Dec/Jan activity -- I worked on 10450 on 14 Dec JA1WQF (O/O) and on 22 Dec F6DRO (O/O). I also QSO'd on 1296 using CW on 16 Jan G4CCH (579/569), UA9YLU (549/559) for an initial (#), OH2DG (569/569), JA6AHB (579/579), DK3WG (O/O) (#) and SP6ITF (569/559). Unfortunately during the EME SSB weekend, I had a terrible storm and could not be QRV on any band. I plan to be QRV on 13 cm (on 2400) in Feb for the DUBUS EME contest on both days.

**JH1KRC:** Mike jh1krc@syd.odn.ne.jp (QM06aw) had good success in the 23 cm EME SSB Funtest – I had all 2-way SSB contacts. I worked on rising moon at 0432 K2UYH (55/55) FN, and during my EU window at 0955 DF3RU [?] (56/55) JN, 1000 SP6JLW (56/55) JO, 1008 OK2DL (57/56) JN, 1021 PI9CAM (59/56) JO, 1028 VK3UM (56/54) QF, 1044 DK7LJ (55/55) JN, 1103 G3LTF (55/55) IO, 1117 UA3PTW (56/55) KO and 1127 LX1DB (57/56) JN. I believe may have heard RA3EC, OH2DG and others. My final score was 10x2X5 = 100 points. I really enjoyed the very good SSB conditions, especially during my west window. Heavy snow fall began just before my window ended at EL 15 degs. My station consisted of a 4.4 m TVRO type dish with OM6AA round septum feed with super choke ring, 500 W @ feed and HB9BBD LNA.

**K5QE:** Marshall k5qe@k5qe.com (EM31cj) was QRV on 432 EME during the ARRL's Jan VHF Contest from 1900 30 Jan to 0400 1 Feb with 16 x 28 el M2 yagis all H-pol and a TX power of 600 W with a tower mounted preamp. He planned to CQ on 432.080 on JT65B during the second period, and to be on the reflectors. Unfortunately his announcement arrived after the Dec NL. I have received no reports on his results.

**KB7Q/KH6:** Gene geneshea@gmail.com is in HI and writes -- The 432 gear made it over to the Big Island FB, and I have access to a dandy site with a great Pacific Ocean eastern horizon for ground gain in BK29om. I'll get set up 10 Feb and plan two sessions of 432 operating from my moonrise onward starting on 12 Feb at 2015 and again on 14 Feb at 2145. More info can be found at http://kb7qqrid.blogspot.com. The gear is a 9 wl yagi and 500 W. KH6LC has been a tremendous help in getting a good location and helping supply various bits and pieces to help the set up.

**KL6M:** Mike melum@alaska.net sends the following EME news – I was sorry to miss SSB Funtest weekend. I wanted to bet on, but I had azimuth motor problems. I think, I have the motor fixed should be QRV for 70 cm DUBUS contest. [Ihave seen no reports that Mike made it]. I also plan to try for echoes on 5760 soon. This will be first ever 5760 from Alaska. I have had MANY problems with my 6 cm system, but I think I now have them all resolved. [Mike was QRV in 70 cm DUBUS Contest].

**LZ2US:** Marko moon@moonbounce.info sends bad news -- Instead of operating the 70 cm (and 2 m) DUBUS contests, I am still recovering from the surprise (and shock) that winter brought me. My EME yagi arrays were destroyed. (Photos are at www.qsl.net/lz2us). [We are all very sorry. Please keep us informed of your plans and progress].

**M0DTS:** Rob rob@m0dts.co.uk is on now (back?) on 1296 EME, his story follows – I was QRV on 23 cm during the 17/18 Jan weekend and participated in the EME Funtest. After a few years, I have finally re-painted and re-assembled my 3 m dish. This took much longer than I had hoped. It is finally back up and running. Initially I did some tests on 13 cm to RX the International Space Station video downlink (2395 MHz DVBS), which went very well. After watching a blank test picture from the ISS for a few days, I decided to get the 23 cm setup ready for the SSB Funtest. RX tests went well with just over 13 dB of Sun noise. After a bit of temporary re-wiring, I got the TX up and running. I was using VE4MA feed with 300 W power from an XRF286 based PA, a G4DDK LNA and F1EHN tracking hardware/software. On the evening of 17 Jan, I managed to work 8 stations random on JT65C. Hopefully I caught some people by surprise with my fairly unknown callsign on EME! On 18Jan, I added 7 SSB QSOs, (and many QRZs!); all of which was new to me because I have only had one non complete SSB QSO in the past. This was great fun! With help from some bigger stations, you can play EME without much CW or JT65 – Hi! Thanks to all stations worked. I hope to be QRV again more often from now on.

**M0MTS 3 m dish used in SSB Funtest with 300 W**

**M0ABA/MX0CNS:** Tom m0aba1970@gmail.com is on 432 EME with a modest station -- I have been testing very small 70 cm antennas off the Moon. This is really an exercise in how well modern optimized yagi antennas perform in the real world. Currently on test is a DG7YBN GTV 70-7 element yagi. Myself and Hartmut are pleased to announce the results of my brief test over the last week after just a few hours of on air testing, mainly RX testing. HB9Q was an easy station to RX with a nice (20DB) signal. Next was DL7APV with a best of (21DB). Hearing the larger stations was not a problem. Watching the logger, I saw Bernd was interested in trying with me. I found his echo and when my first call was answered, I nearly fell off my chair for an easy QSO (my best 26DB). This was with 80 W at the feed.

**N2MO:** Dan (K2QM) marlow@princeton.edu writes the celebration of the 70th Anniversary of Project Dianna was a great success -- It has taken over five years, many man hours, and a lot of blood, sweat and some tears. I was very worried that we wouldn't even hear our own echo. On 2 Jan at 1500, we made our initial TX test and did it! Using the TLM-18 Space Telemetry Antenna, we bounced a signal off the Moon. Then to be just that more over the top, we QSO'd K2UYH using both CW and SSB. We were able to hear ourselves clearly running only 25 W, which was the lowest available power. Of course, the big day was on 10 Jan, 70 years after the first echoes were copied here. We were on 1296.020. All QSO were on CW unless noted. We started looking for signals at about 1350 and almost immediately worked at 1352 SP3XBO (599/579), 1357 PI9CAM (599/579), 1401 LX1DB (559/579), 1403 I1NDP (579/599), 1405 SP6JLW (599/599), 1411 IK3COJ (589/589), 1413 DL6SH (579/599), 1416 OK1KIR (599/589), 1420 G3LTF (589/579), 1438 DK0SF (519/599), 1442 G4CCH (589/559), 1455 F5KUG (599/599), 1527 HB9Q (59/59) on SSB, 1532 DL6SH (57/56) on SSB, 1545 W7JM (589/579), 1555 VE3KRP (529/599), 1615 N0OY (599/599), 1619 IK2MMB (589/589), 1734 WB2BYP (599/599), 1750 VE6BGT (579/559), 1755 VE6TA (457/579), 1820 WD5AGO (459/559), 1827 WD5AGO (23/57) on SSB, 1840 W7JM (35/55) on SSB. We made 21 QSOs with 4 on SSB. This demonstration is just the begining. We will be back on the Moon better organized to make more QSOs soon. Thanks to all who worked us and helped make the celebration a great success. Special certificates will be sent to all we QSO'd on EME. [W2AEW compiled a video of the event and posted it on YouTube – see https://www.youtube.com/watch?v=oEYAz2_Rz0c.

**NC1I:** Frank frank@NC1I.COM reports on his Dec/Jan EME -- Due to the holidays and family activities I only made a few contacts in Dec, all on 1296. More family activities are preventing me from operating in Jan. If the weather cooperates I expect to be back on 1296 in Feb. I have had a couple of problems with my 432 array the last few months and have come to the conclusion that after 21 years with the current array, it is time to take it down and completely rebuild it. When I put the array up in

1994, I had hoped to get 10 years of use out of it. So based on that, I feel very fortunate to have been able to use the array for more than 20 years without any major problems. My goal is to take the array down in late April and have it back up by Aug. I'm not sure how realistic that is with my busy work and family schedule, but I feel I need to set that as a goal. This leaves a couple of additional months before the weather becomes a major issue.

**OH2DG:** Eino metsamakieino@gmail.com writes -- The SSB EME on 23 cm was really fun! It was great to meet many friends on phone. There were big guns and small ones. I succeeded in QSOing 20 stations in 6 sectors. There was only two stations that I can´t copy on SSB. Condx were good and WX also in spite of a -22 deg C temperature. I used an SSPA close to feed with about 400 W a´la W6PQL. My old tube PA is near dead. Emission of the cathode is quite low and I have not been able to find a new YL1050. QSO'd were at 1140 OK2DL (59/55) JN, 1220 UA4HTS (56/55) LO, 1230 UA3PTW (56/55) KO, 1235 VK3UM (55/56) QF, 1240 DK7LJ (59/33) JO, 1253 PI9CAM (58/57) JO, 1256 DL6SH (58/56) JN, 1311 SP6JLW (55/55) JO, 1408 DL3EBJ (57/57) JO, 1605 I1NDP (57/56) JN, 1620 G3LTF (57/57) IO, 1625 RA3EC (55/55) KO, 1635 LX1DB (58/57) JN, 1655 DG5CST (55/55) JO, 1722 HB9Q (59/55) JN. 1735 DF3RU (56/57) JN, 1740 F5SE/p (57/54) JN, 1745 IK3COJ (55/53) JN, 2020 K2UYH (56/56) FN and 2028 DJ8FR (55/55) JO. All QSOs were on SSB and my total was 20x2x6 = 240 points.

**OK1KIR:** Vlada and Tonda vladimir.masek@volny.cz report on their club's Moon activity in Jan – On 70 cm in the 1st weekend of the EU (DUBUS) EME contest, we worked using CW on 23 Jan at 1611 SP6JLW (569/569), 1626 VK3UM (569/569),1631 OH2DG (569/569), 1642 SP7DCS (559/579), 1751 G3LTF (569/569), 1814 OZ4MM (569/569), 1847 VK5MC (569/439), 1858 LZ1DX (569/559), 1913 ES5PC (559/559), 2000 I1NDP (569/579), 2006 DL7UDA (559/559) for initial #386, 2033 LX1DB (569/559), 2131 SV3AAF (O/439) #387, 2152 I2FHW (579/449), 2206 DF3RU (559/559), 2223 PA2V (O/O), 2307 G4RGK (O/O), 2340 F6HZL (559/559) #388, and on 24 Jan at 0112 W5LUA (569/559), 0253 VE6TA (559/559) and 0401 RW4HW (0/0) #389. K5DOG was heard well (O) but was unable to copy us. Our total was 21x21. With JT65C we worked on 23 Jan at 2358 E77T (26DB/26DB) for digital initial {#154}, on 24 Jan at 0013 partial LU7HI (18DB/lost), 0023 K9MRI (18DB/18DB) {#155}, 0340 RW4HW (16DB/20DB), 0457 N0IRS (16DB/20DB) and at 0533 W5LUA (13DB/15DB) {#156}. On 23 cm we worked on 10 Jan using CW at 1415 N2MO (589/599) for initial #390. On 6 cm we worked on 18 Jan at 1750 using CW UR7DWW (O/O) initial #83 and a new DXCC, 1820 OZ1LPR (13DB/12DB) using JT65C for digital initial {#16} and 18:29 on CW (569/569). On 3 cm we QSO'd on 30 Dec at 0643 G3WDG (549/549) using CW when Charlie testing new software (SW) for automatic Doppler compensation and at 0728 using JT4F (9DB/8DB). The Doppler SW test was repeated on 17 Jan at 1316 with (569/569) signals. Later at 1418 we worked DB6NT (559/559) for initial #104. We think that a 5-band WAC for EME could be a good exciting idea for the ARRL to consider.

**OK2DL:** Marek ok2dl@seznam.cz sends his log for the 1296 Funtest – I worked on 2-way SSB unless noted UA3PTW, UA4HTS, DL6SH, OH2DG, VK3UM, RA3EC, DF3RU, DK7LJ, SP6JLW, SP3XBO, PI9CAM, SP6ITF, DL3EBJ, JH1KRC, G4YTL (CW to SSB), 9A5AA, OZ4MM, G3LTF, M0DTS, DF1SR, F5SE/p, I5YDI, LX1DB, DL1YMK, DJ8FR, SM4DHN, IK3COJ, ON5RR, I1NDP, DC9UP, SP5GDM, DG5CST, SP2HMR, IK5VLS, HB9Q, OK1CS, S59DCD, K2UYH, WB2BYP, WA6PY, VE4MA/W7 (CW to SSB) and PA2DW (CW to SSB). My final score was (39x2+3)11 = 891.

**ON5RR:** Marc (ON5RR) and Michel (ON7EH) moonbouncer@skynet.be were QRV for the 1296 SSB Funtest – Conditions were quite good during the SSB contest on 1296. The outside temperatures were quite low, just above or below 0 °C. Getting the feed and preamp in the dish was tricky. Luckily, we could warm up again in the shack, near the tube PA. In the limited time, we were active (about 3 hours), we logged the following stations: PI9CAM, OK2DL, G3LTF, F5SE/P, I1NDP, DG5CST, DL6SH initial (#), UA3PTW, RA3EC, DL1YMK, HB9Q, LX1DB, OH2DG and SP6JLW – all SSB to SSB. Stations heard but not worked were SP2HMR, UA4HTS, IK3COJ, DL3EBJ and DF3RU. Our total was 14x2x5 = 140 points. We hope to work most of you on 13 cm in Feb!

**PA0PLY:** Jan pa0ply@pa0ply.nl was among those whose antenna was effected by the bad WX -- After more than 10 years, the wind finally caught up with me. A section of my 70 cm array was blown out of place. I was lucky enough to be able to bring this particular section down safely as the wind ceased a bit. Cutting the coaxes was the only way, while just 2 elements were damaged. The unfortunate thing is that I cannot easily reach the mast to remount this section. On the other hand, it's now time to change my setup a bit as Faraday is always playing around on 432. I intend to put one half in vertical pol, while keeping the other horizontal pol. [This would not be my choice]. I have had some discussions on whether or not to directly couple the sections rather than using a coaxial relay. My idea is that once the polarity is moving away from horizontal there will be a certain overlap, while approaching the vertical polarization and finally catch up with vertical only signals. Some other guy guessed that the pattern of such an arrangement might be quite rare. We could not end up clearly, if I decide to just connect both boxes to the splitter and see how it behaves. Changing the splitter for a coaxial relay can be done later if needed. Any experience and suggestions on this arrangement would be appreciated. [The response of circular, linear and other forms of polarization are well documented]. In the meanwhile, I was able to solve my problem with the GS35B amplifier. It turned out to be a misalignment of the anode section. I received a tip to use a resistor representing the Anode voltage/current and connect it between the anode circuitry and ground. Running RF power into the RF output connector and monitoring the VSWR gives you an indication on the resonance of this section. No high voltage or whatever needed here! Mine did not resonate, and the length of the anode needed to be extended some 10-15 mm to become resonant on 432. Now it runs at > 1 kW easily and is in use at Conrad G0RUZ/PA5Y.

**PA0PLY storm damaged yagis**

**PA2DW:** Dick qtc@kpnmail.nl reports on his 23 cm SSB EME Funtest experiences -- It was a fun weekend, although I had just few hours because of a conflict between family affairs. I would have expected much more activity and the low Moon was a problem in beginning because my window is blocked by some trees toward the east. I made only 2 SSB-SSB QSOs with HB9Q and I1NDP. Nando was an initial for me on SSB. LX1DB and OK2DL could not figure out my call on SSB in spite of the fact they were quite loud, so we made cross mode SSB/CW QSOs. This was fun too. I hope next time to make it on 2-way SSB with them. All the stations I and heard/worked were FB copy. HB9Q was almost S9 - and my S-meter is well calibrated! I also worked SP6ITF for an initial on CW. I noticed my SSB signal was not as powerful as on CW, which maybe why it was hard for me to get through. I had many QRZs… Or maybe the problem is the rather bass level of my voice. I need to investigate how to increase my SSB talk power. As I hardly ever use SSB, I did not notice it before.

**PA2V:** Peter peter@pa2v.com discusses his EME results for the last month – Conditions were quite good in Jan and resulted in some nice contacts and initials. The 432 DUBUS contest weekend was not bad. I worked 8x8 CW stations. I don't know if others have had the same experience, but I often have problems reading the CW because characters breaking up all the time. This was particularly the case on Saturday in the contest. It took me nearly 15 minutes to get the call of SP6JLW and he was strong. I worked on 15 Jan using JT65B unless noted as CW at 2009 OH6UW (24DB/18DB) and 2020 N0IRS (26DB/23DB), on 16 Jan at 1759 UX0FF (24DB/22DB), 1807 DF3RU (14DB/12DB), 1846 N0IRS (24DB/19DB), 2044 RW4HW (23DB/22DB), 2112 DL7APV (8DB/8DB) and 2153 K5DOG (26DB/18DB), on 17 Jan at 1554 PI9CAM (15DB/10DB) and 1602 PI9CAM (42/53) on SSB, on 18 Jan at 1813 HB9Q (13DB/7DB), 1942 K9MRI (23DB/25DB) for mixed initial #104* and 2044 N0IRS (28DB/23DB), on 19 Jan at 2013 DL8DAU

(30DB/26DB) and 2049 N0IRS (26DB/23DB), and on 22 Jan for the 70 cm contest at 1930 F6HZL (439/539) on CW #105*, 1957 DL7APV (11DB/6DB), 2025 DL8DAU (26DB/25DB) and 2050 G6HKS (24DB/18DB), on 23 Jan at 2113 SP6JLW (429/539) CW contest #106*, 2130 G3LTF (559/569) CW for contest, 2139 LZ1DX (339/539) CW for contest, 2212 OK1KIR (339/439) CW for contest, 2252 I2FHW (449/449) CW for the contest, 2034 LX1DB (449/539) CW for contest #107* and 2047 DF3RU (449/539) CW for contest.

**PI9CAM:** Jan (PA3FXB) jvm@netvisit.nl writes that Dwingeloo dish team focused a bit more on the 23 cm SSB Funtest this year and ended with 44 QSOs in 10 sectors for a score of 880 points – our best score ever. We used the 25 m dish with only 125 W at the feed. Unfortunately the elevation of the dish got 'stuck' around 1730. The azimuth was working OK, so we waited for the Moon to pass our beam while going down and were able to make one more QSO. But then the party was over. We are sorry for the NA stations. It was too cold and too dark to investigate the elevation system at the time. We think it might be a frozen micro switch. Anyway it was big fun to work so many stations in SSB on EME! We QSO'd at 1222 OK2DL (59/59) JN, 1226 DF3RU (59/59) JN, 1230 DK7LJ (59/59) JO, 1233 DL6SH (58/59) JN, 1235 SP6JLW (58/58) JO, 1237 UA4HTS (59/58) LO, 1241 VK3UM (58/58) QF, 1249 9A5AA (57/55) JN, 1253 OH2DG (58/57 KP, 1256 (59/59) UA3PTW KO, 1258 RA3EC (59/57) KO, 1300 DL3EBJ (58/57) JO, 1320 SP3XBO (57/56) JO, 1305 G4YTL (52/53) IO, 1321 JH1KRC (59/56) QM, 1324 OZ4MM (59/59) JO, 1345 M0DTS (52/56) IO, 1353 OE5JFL (55/52) JN, 1408 DF1SR (55/52) JN, 1411 G3LTF (58/58) IO, 1417 BD4SY (55/52) PM, 1424 G4CCH (58/59) IO, 1430 F5SE/p (57/56) JN, 1439 PE2TV (55/52) JO, 1457 I5YDI (54/55) JO, 1503 DL1YMK (56/56) JO, 1509 DJ8FR (55/59) JO, 1511 IK3COJ (58/55) JO, 1517 SM4DHN (57/57) JP, 1520 ON5RR (56/55) JO, 1523 F6ETI (53/54) JN, 1550 I1NDP (59/59) JN, 1615 SP5GDM (57/54) KO, 1528 IK5EHI (55/51) JN, 1633 DG5CST (59/57) JO, 1637 S59DCD (59/57) JN, 1641 SP2HMR (56/56) JO, 1645 DC9UP (58/56) JN, 1654 SP6ITF (57/57) JO, 1701 HB9Q (59/59) JN, 1703 IK5VLS (59/57) JN, 1726 G4BAO (51/52) JO, 1736 OK1CS (55/53) JO and 1900 PE1CHQ (55/55) JO.

**RA3EC:** Anatoly ra3ec@inbox.ru (KO82pt) sends his log for the 23 cm EME SSB Funtest – In the contest, I ran a 3.7 m dish with 650 W. I worked at 1124 VK3UM (55/55) QF, 1136 UA3PTW (57/57) KO, 1140 UA4HTS (57/54) LO, 1148 DK7LJ (59/33) JO, 1201 DF3RU (55/55) JN, 1204 OK2DL (57/57) JN, 1206 DL6SH (56/56) JN, 1212 SP6JLW (55/55) JO, 1259 PI9CAM (59/57) JO, 1314 9A5AA (44/44) JN, 1337 DL3EBJ (55/55) JO, 1447 LX1DB (59/57) JN, 1452 G3LTF (57/55) IO, 1510 F5SE/p (58/53) JN, 1517 DL1YMK (57/55) JO, 1521 DJ8FR (55/55) JO, 1524 G4CCH (58/55) IO, 1608 I1NDP (59/56) JN, 1632 OH2DG (55/55) KP, 1640 DG5CST (57/55) JO, 1646 ON5RR (55/54) JO, 1720 HB9Q (59/55) JN, 1755 IK3COJ (55/54) JN, 1822 SP2HMR (55/55) JO, 1915 OK1CS (55/55) JO, 1925 SP6ITF (55/55) KO, 1930 K2UYH (55/54) FN and 2024 S59DCD (55/55) JN. All QSOs were on SSB. My final score was 28x2x8 = 448 points.

**RW0LDF:** Serge rw0ldf@mail.ru added initials on 23 cm in Dec/Jan using JT65C with I5YDI, LZ1DX, BD4SY and DJ9YW. [TNX DK3WG for forwarding this report. Jurg has Serge's logs and QSL cards].

**SP2HMR:** Marcel m@e.pl (JO94fk) reports on his first 23 cm EME SSB Funtest – I made only SSB to SSB QSOs using a 3 m dish with OK1DFC feed, 500 W @ feed PA, 0.5 dB NF LNA and FT-817 place HB xverter. I QSO'd at 1612 OK2DL (58/58) JN, 1624 I1NDP (57/57) JN, 1641 PI9CAM (56/56) JO, 1645 DL6SH (55/55) JN, 1705 HB9Q (53/57) JN, 1748 DL3EBJ (55/51) JO, 1803 SP6JLW (55/55) JO, 1820 RA3EC (55/55) KO, 1827 LX1DB (56/57) JN and 1945 G4CCH (54/54) IO for a total 10x2X4 = 80 points.

**SP5GDM:** Jan sp5gdm@wp.eu (KO02mm) reports on the 1296 EME SSB Fun Contest – I worked at 1730 HB9Q (59/54) JN, 1656 DL6SH (57/54) JN, 1621 UA3PTW (56/54) KO, PI9CAM (57/54) JO, 1609 I1NDP (57/56) JN and 1555 OK2DL (57/55) JN for a total of 6x2x3 = 36 points.

**SP6ITF:** Gregory sp6itf@neostrada.pl (JO81lb) was QRV on 1296 for the SSB Funtest – I used a 4.5 m mesh dish with a 0.38 f/d with a 300 W SSPA (4x MRF286 - W6PQL kit) drive by TS2000 and DB6NT transverter. All QSOs were 2-way SSB unless noted. I worked at 1234 OK2DL (55/55) JN, 1259 DK7LJ (55/33) JO, 1322 VK3UM (57/549) SSB/CW QF, 1650 I1NDP (57/56) JN, 1653 PI9CAM (57/57) JO, 1835 HB9Q (57/55) JN, 1850 LX1DB (58/55) JN, 1907 DG5CST (55/53) JO, 1913 SP6JLW (55/54) JO, 1924 RA3EC (55/55) KO, 1950 K2UYH (55/54) FN, 2013 DF3RU (55/55) JN, 2019 DL3EBJ (55/55) JO, 2024 F5SE/p (55/53) JN, 2035 S59DCD (53/55) JN and 2044 G3LTF (55/54) IO for a total (15x2+1)x6 = 186 points.

**SP6JLW:** Andy sp6jlw@wp.pl has submitted logs for his group (himself, SP6OPN and SP6OPG) for the 70 and 23 cm SSB EME Funtests and the 70 cm DUBUS Contest – In the 70 cm Funtest they worked UA3PTW, VK3UM and G3LTF for a score of 3x2x3 = 18 points. They made many more QSOs the next day during the 23 cm Funtest. They worked 31 stations on 2-way SSB in 9 grids for a total of 558 points. Unfortunately their logs was submitted in a PDF format that I cannot copy from. Their 70 cm DUBUS Contest information is in a normal format – We had extremely unfavorable weather conditions (strong wind, snow alternating with freezing rain) for the 432 DUBUS weekend. Our participation was consequently limited to not quite one moonpass, and we did not hear any station's from NA. The propagation seemed good and overall activity at a level similar to the previous year. We QSO'd OK1KIR, OH2DG, KL6M, VK3UM, SP7DCS, DF3RU, G3LTF, OZ4MM, LZ1DX, VK5MC for an initial (#), DL7UDA, F6HZL, G4RGK, I1NDP, LX1DB, PA2V (#), I2FHW and ES5PC. We ended with 18 QSOs and 18 multipliers. We plan to be on for the next DUBUS Contest weekend on 13 cm.

**UA3PTW:** Dmitry ua3ptw@inbox.ru in Dec/Jan on 432 using JT65B added IZ5TEP, RA4SD, R6CS, KB7Q, IK0BZY and RM1W. On 1296 he worked using JT65C ZS1LS, K3GNC, VA6EME and RM1W. On 13 cm he QSO'd on CW OZ1LPR and with JT65C UA4HTS. Dmitry also was on 6 cm and worked using CW UA4HTS (O/O). [TNX DK3WG for forwarding this report].

**UA9YLU:** Victor ua9ylu@mail.ru in Dec/Jan worked on 1296 using JT65C ZS1LS, VA6EME and OE5RBO. [TNX DK3WG for forwarding this report].

**UR7DWW:** Dmytro (UZ5DX) uz5dx@ukr.net sent out news that UR7D/UR7DWW is QRV on 6 cm EME. [They has been worked by several 6 cm stations – see reports]. The system is 3.7 m, LNA and QRO. This was not a one time event. Dmytro says that the WX has been bad, but the will be QRV again and will send out the news in advance.

**VE3KRP:** Fast Eddie's eddie@tbaytel.net Jan activity report --
I was too active due to the weather; thanks to the polar vortex. I worked on 1296 using JT65C on 16 Jan SP59DCD for a digital initial {#}, VA6EME, M0DTS {#} and PA2DW, on 17 Jan UA4LCF and SP3XBO, and on 22 Jan UA9YLU, OE9GLV {#} and RD3DA. QSLs arrived from the PJ7/PE1L and TO2EME effort and they are beauties. Thanks again to the team!

VE3NXK's 3 m dish used on 23 cm

**VE3NXK:** Bill ve3nxk@gmail.com (FN05ns) is a newbie on 23 cm EME -- After a 2 year process, I now have 25 contacts in my log from signals off the Moon. From finding a 3 m TVRO dish and getting a 23 cm feed from my long ago friend VA3TO, it has been quite a journey. Between making the dish fit the rotor, getting the dish balanced, fabricating the feed mount, and wiring all the pieces together was a bit of a frustrating process. But it was an enjoyable time considering I did it without any great engineering process, just threw the parts together and tried it. My old IC-970 drifts a bit (well maybe a lot) and does not like long time

operation but it does the job for now. When the snow goes and the weather is warmer, I have to peak the dish a bit and find a couple of intermittent issues. Currently I just have to figure out the software and the process of a QSO. I am using a DEMI 100 W brick, but I have a 400 W amp that I purchased from HB9HAL that will come online when I am more comfortable with the equipment and software. I regularly check in to the HB9Q logger, so if you see me, I am always willing to try for the contact. So a GREAT BIG thank-you to all those who helped me get this far… And please be patient!

**VE4MA/7:** Barry ve4ma@shaw.ca reports on his Dianna Celebration QSO – N2MO had a nice signal here (8 dB/N - 449) on my 5' dish, but it's too bad there were not more QSOs today, which as I understand was the 70th anniversary. I made a special effort to get on, and struggled with marginal WX. I can understand the lure of the big signals and SSB and don't blame them for the excitement! I do not plan to be on for the 23 cm SSB Funtest; with a 5' dish, there is not much SSB signal to be heard. [Barry did make at least CW to SSB QSOs]. I will be getting W7JM with his 30' dish on. His CW skills have deteriorated but he really enjoys the SSB contacts. John tried to work N2MO today but had some mysterious narrowband QRM right on frequency that seriously hurt the signals for him. I will be looking for CW and JT QSOs on 1296, and also 6 cm stations. I may get on 2304 for the DUBUS Contest with W7JM. John offered for me to operate him. I want to get on 13 cm with JT as there are many that will not get an AZ contact otherwise. [The DUBUS Contest is CW/SSB only]. I am sure John will be on with CW. I am trying to make some improvements to my feed for 3.4 GHz. 1.8 WL IMU feed is too sharp and will build a new 1.2 WL IMU.

**VE6BGT:** Skip macaulay.skip@gmail.com is now QRV on both 23 and 13 cm – I am now up to initial #4 with a QSO to K2UYH. My dish is the one I used for AO40 way back and is in a rotten place for EME with little eastern window. Since my QTH is not great for EU, the farmer next door is going to let me go on his land a bit farther south so that I can look around the blocking trees. I am also building a bigger dish (21') - right now! I have the ribs finished and hopefully by next summer will have it installed.

**VK3UM:** Doug tikaluna@bigpond.com reports on the SSB Funtests and DUBUS 70 cm CW weekend-- I was on 70 cm Funtest and called for hours. Nobody was on in my US/VE or JA. I worked only SP6JLW, UA3PTW, DL7APV and G3LTF in my EU window for a total of 4x4. I did a little better on 23 cm SSB the next day during my eastern window; I worked 3: K2UYH, WD5AGO and VE6BGT. However, my western window was alive with SSB signals. At times it sounded like 20 m during the WW SSB contest. QSO'd were VK4CDI CW to SSB, RA3EC, UA3PTW, UA4HTS, DL7LJ, DF3RU, OK2DL, SP6JLW, DL6SH, 9A5AA, OK2DG, PI9CAM, DL3EBJ, SP6ITF CW to SSB, OZ4MM, JH1KRC and G3LTF. My total was (18x2+2)x8=304 points. I missed many in the QRM, which was due to a few stations chasing me all over the band. it seemed more like dog eat dog then Funtest to me! [Doug was not happy]! Regarding SSB contest weekend, in my view it was a good choice. It was close to perigee. We should have more like it. Yes, the previous week was good, but the EU 70 cm CW Contest with no loggers, no skeds, no side channels, just pure random operations was even better! I worked VE6TA, K7/VE4MA (note full call signs exchanged), OH2DG, OK1KIR, SP7DCS, SP6JLW, DF3RU, G4RGK, G3LTF, DL7UDA, LZ1DX, OZ4MM, F6HZL and ES5PC for a score of 14x14. Come on guys, less time concocting QSO's on loggers will result in more real QSO's. Just call CQ. We will hear you and respond. You may be surprised to find that its bigger than you think, your signal that is!

**W6YX:** Gary ad6fp@lbachs.com updates us on his club's activity during the past month – We were active on 23 cm in a limited fashion, and used the 1296 SSB Funtest to demonstrate ham radio to students interested in and currently studying for their ham radio license. Approximately 20 people attended. Station failures kept us from TXing SSB, so we listened via SSB and transmitted using CW. We made four contacts in the half hour we operated: I1NDP, OK2DL, F5SE/P and G3LTF for a score of only 4x1x3 = 12 points. For the DUBUS Contest, we are planning to participate in the 23 cm, 13 cm and 3 cm weekends.

**WA6PY:** Paul pchominski@maxlinear.com was QRV for a short time in the Fun SSB Contest on 1296 -- I QSO'd I1NDP, F5SE/p, HB9Q, OK2DL, LX1DB, G3LTF and WB2BYP. I heard RA3EC, but he disappeared before we could work. I called I1NDP with blockage of my dish and still gave him a (55) report. One hour later I1NDP was very strong. The strongest was HB9Q. WB2BYP was not so strong with me but solid 100% copy. My score was 7x2x4 = 56 points. I will have very limited time for EME during the 13 cm DUBUS EME Contest weekend. I hope to be QRV for the first JA/VK widow.

**WB2BYP:** John storyavenue@hotmail.com Jan EME report – On 23 cm CW I worked the special Dianna Anniversary station N2MO on 10 Jan (599/599). They had a really nice signal. I think it was their op's, Gerry's first EME contact. [It was]! A neat video was made on the N2MO side of the contact, and an edited version is on Youtube. [See their report]. I was also QRV on 17Jan for the 1296 SSB Funtest. I was poised to begin at 0000 but my first keyline closure spiked the preamp. The next day in daylight, I replaced the LNA and was able to operate for a few hours. I worked OK2DL (56/57), HB9Q (57/53), F5SE/p (54/54), I1NDP (55/55), LX1DB (56/56), G3LTF (52/53), DL3EBJ (53/56) and WA6PY (52/52) for a total of 8x2x4 = 64 points. I also heard W6YX calling but lost him.

**WD5AGO:** Tommy wd5ago@hotmail.com reports on his Jan EME activity – On 10 Jan I was on 1296 to work the Project Dianna Anniversary station N2MO (559/459) on CW and (55/33) on SSB for initial #216. I then left the 23 cm feed in the dish for the Funtest. I had a good time, but with only limited time availability during the weekend. At the start on the setting moon pass, I worked on SSB VE6TA (33/44) DO, K2UYH (55/44) and VK3UM (55/44) QF. I heard no others, but my window to JA was only about 15 minutes at the low declination. On the moonrise pass, my dish would not move with the low temp's, so I went out and cranked it by hand. I heard several SSB stations, and talked to I1NDP (55/55) JN. I then took a break and came back an hour later to find no one else on the band, only my echoes. Just too short a window with the trees, other activities and dish problems. I ended with only 4x2x4 for 32 points. I had wanted to give the rebuilt and improved Big-Little Horn (13'x4'x4') a try but it was just too cold and the Moon below the building. Back in Dec on 13 cm, I added initials with W6YX #91 and WA2FGK #92 and also work UA3PTW. I will be back on 13 cm for the DUBUS Contest. I plan to attend the VHF Super Conference in DC in April, and hope to see many EMEers there. Sked's welcome!

**XE1XA:** Max's general.manager@corix.us activity report for 1296 follows -- Since my last report I worked on 27 Dec I5YDI (539/549), I1NDP (589/579) and (57/55) on SSB and RA3EC (549/559), on 16 Jan DJ9YW (559/559) and N4PZ (559/569), and on 17 Jan during the EME Funtest VE6BGT (549/449), K2UYH (54/559) SSB to CW, I1NDP (57/57) SSB and HB9Q (58/53) SSB. I also copied well VE3KRP, SP6JLW and other stations, but only received QRZ from them. After the QSO with HB9Q, I lost the LNA mounted at the feeder, so that the fun turned to sadness. I thus ended the 23 cm Funtest with a score of only (2x2+1)x2 = 10 points. I am doubly disappointed since I don´t have a replacement for the LNA and thus temporarily QRT. It has been working flawlessly for many months. I hope to be able to return active status ASAP.

**K2UYH**: I alkatz@tcnj.edu had a *fun* month on the Moon in more ways than one. I worked on 20 Dec on 432 at 2058 DL8DAU (18DB/O) JT65B, 2103 SM3KPX (18DB/21DB) JT65C for mixed initial #906*, 2110 DD0NM (18DB/21DB) JT65C #907* and 2124 KB7Q (19DB/21DB) JT65C #908*, then on 2304 at 2320 N4PZ (559/559) CW initial #81 and mixed initial #84* and 2339 VE6TA (569/579) CW, on 26 Decback on 432 at 0443 RW4HW (22DB/19DB) JT65B #909* and 0448 UT6UG (12DB/12DB) JT65B, on 27 Dec on 5760 at 0427 UA4HTS (449/539) CW for initial #40 and 0532 HB9Q (579/589) CW #41 and a new DXCC 21, on 28 Dec on 2304 at 0530 VE6BGT (O/559) CW Initial #82 and #84*, on 29 Dec on 2304 again at 0543 VE6BGT (569/339) CW– later at when clear of trees (549), on 2 Jan on 1296 at 0612 UA4LCF (27DB/19DB) JT65C - Moon in trees, 0706 ON4AOI (27DB/27DB) JT65C, 0822 SV1CAL (18DB/O), 0832 VA6EME (19DB/O) JT65C for mixed initial #538*, 0930 partial RM1W (26DB/16DB) JT65C – he lost Moon and 1548 VK5FA (22DB/16DB) JT65C #539*, on 3 Jan on 1296 with linear pol in dish at 0805 RM1W (24DB/18DB) JT65C #540*, 0817 YL2DG (11DB/11DB) JT65C, 1420 N2MO (579/589) CW and (44/54) SSB for initial #367 & #531 [60' Dianna dish – nice surprise, I did not they know they were going to be on, I was looking for a VK station], on 16 Jan on 1296 at 2135 S59DCD (559/569) CW and 2209 SP6ITF (559/559) CW, and on 17 Jan in the 1296 SSB Funtest 0215 VE6TA (55/56) SSB DO33, 0223 partial XE1XA (55/35) SSB – lost, 0223 VE6BGT (55/44) SSB DO, 0236 XE1XA (559/55) CW to SSB EK, 0248 WD5AGO (44/55) SSB EM, 0314 VK3UM (56/57) SSB QF, 0430 JH1KRC (55/55) SSB QM, 1912 I1NDP (55/57) SSB JN, 1915 LX1DB (56/57) SSB JN, 1927 RA3EC (54/55) SSB KO, 1938 DF8FR (54/54) SSB JO, 1943 DL3EBJ (55/56) SSB JO, 1948 SP6JLW (55/56) SSB JO, 1953 SP6ITF (54/55) SSB JO, 1956 OK1CS (56/56) SSB JO, 2001

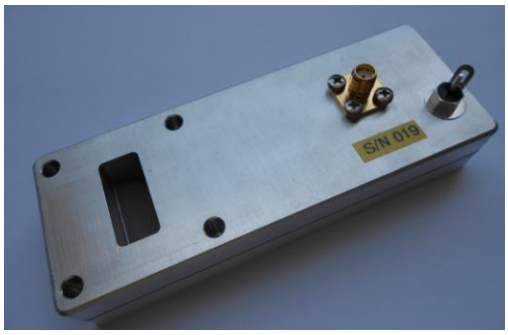
G4CCH (56/56) SSB IO, 2004 DF3RU (56/57) SSB JN, 2023 OH2DG (56/56) SSB KP, 2031 OK2DL (59/58) SSB JN, 2039 DG5CST (58/57) SSB JO, 2043 HB9Q (58/57) SSB JN, 2048 S59DCD (55/56) SSB JN, 2057 G3LTF (56/57) SSB IO and 2103 F5SE/p (57/55) JN. I had to close down early because of a family event. Activity seemed to have slowed down by the time I had to stop, but I suspect I could have added a few more QSOs if I could have remained QRV. I tried to be active in the 70 cm SSB Funtest the previous day, but was frustrated by an extremely high noise level (white and 10 to 20 dB above normal!). I have had this problem before on 432, but usually the noise goes away, but this was not the case. It persisted all weekend. I was away on business for the DUBUS 70 cm CW Contest, but was QRV briefly on 432 for the ARRL VHF (tropo) contest. The noise was back to normal, but I found little activity and only worked on 31 Jan at 1334 K5DOG (O/O) JT65B in EM00. A high point of the month was attending the Project Dianna 70th Anniversary Celebration. Althought I did not operate, I got to see the station in operation off the Moon and participate in the ceremony, which took place right in front of the EME station, while it was in operation. I plan to be QRV for the 13 cm contest.

**NETNEWS:** **KI4M** is interested in 432 EME and wants to hear from anyone who has experience with UR4LL's 432 Cavity PAs. You can reach Shane shaneautrey@charter.net. **N4PZ** has improved his polar mount and 13 cm system, but can only operate when the Moon is a northern dec. Contact Steve at n4pz@live.com for skeds. **W8BYA** is active on 2 m EME and is working on a single yagi station to try on 1296 EME. **YL2DG** is looking for ideas on how to implement a dual 70/23 cm feed system on his is 6.0 m f/d= 0.42 dish. It can't be too heavy and he would like to not compromise his 23 cm performance. **W4OP's** 15' dish crashed to the ground in the last snow fall and is now QRT on 1296. But after much consideration, he has decided to rebuild and will be QRV again with a stronger dish, and his 700 W SSPA @ the dish.

**EME 35 YEARS AGO BY PETER, G3LTF:** From the 432 EME News Jan 1981. Noting the increase in activity on 1296 and preparations for 2304 by W6YFK and DJ4AU, Editor Al changed the NL name to "432 and above EME News". More reports from the SK2GJ Kiruna 32 m dish operation on 1296; Ben SM6CKU, worked them with only 10 W. They also had a QSO with Franck, F9FT (F5SE used his father's call from their joint station), who was using an array of 16 x 5' long yagis and 180 W. (First yagi QSO on 1296?) F9FT was also copied by LX1DB and G3LTF. The NL also contained details of a 2 m long yagi for 1296 by DL6WU. Bad weather in Europe limited operations (whats new!), but overall there were 33 stations reporting with almost half from North America. The first YL-YL EME QSO was reported between Petra (G4KGC) and Lina (I5UNA), who was using the 10 m dish at I5MSH on 432. The 85' dish at K3NSS was also operational, but having PA problems. Joe, W1JR reported that the 1981 Nautical Almanac was now available for $11 from the US Govt. bookstore, (essential for obtaining the moon position).

**EME 25 YEARS AGO BY PETER, G3LTF:** From the 432 and Above News Jan 1991. There were 8 reports from Russian stations this month including a report on the Sept.1990 432 dxpedition station UI2U to Uzbekistan, which used 8 x 7.5 m yagis and 700 W working 37 stations in 16 countries. Paul SM0PYP (now WA6PY) contributed a detailed description of his1296 preamp with a DC grounded source. The basic design of this, similar in some ways to the very early GAT5 designs by G3WDG, is still used in a number of LNAs today. There were 27 reports and a further 22 contributions from the 14.345 Netnews; the majority of QSOs were on 432 but several 1296 SSB QSOs were reported and many stations reported on preparing for 1296 including WD5AGO who had a 10' dish and 180 W ready for portable operation. The sked list for 2304 contained 10 calls, 5 of whom are still active on that band. W5LUA, VE4MA, LX1DB, SM0PYP (WA6PY) and SM3AKW.

**FOR SALE:** **DJ8FR** has forsale a horizontal/vertical rotor SPID RAS with control unit and mouse. It is unused and in original state and belonged to SK friend. Asking 790EU plus shipping. If interested contact Juergen at juergen@dj8fr.de. **N6ZE/F1FJM** has for sale a new Tonna 50 ohm 4-way power divider for 70 cm. The price to be negotiated. If interested contact Pete at K1FJM@AOL.COM. **PA0PLY** has for sale 3 fully working 432 cavities PA and one 2.4 kV PSU. He also has some news on the 10 GHz DU3BC LNAs. We have now produced and sent out almost 50 pcs and have ordered materials for another 28 pcs. All the units show a very stable 0.62 dB avg NF, which is state of the art. In the future we are looking into producing a 24 GHz version. For more info contact Jan at pa0ply@pa0ply.nl.




**DU3BC 10 GHz LNA**

**FINAL:** This month's NL covers both Jan and Feb. Time just got away from me, but all the contest info is basically still fresh and in time. I still have much technical material that I do not have time to properly prepare time month, but will be including in the near future. Thanks for all your support of the NL.

The 17th International EME Conference, Venice 2016 is on 19-21 Aug at the BHR Hotel near Treviso http://www.bhrtrevisohotel.com/it/bhr-treviso-hotel/home. website has been updated. Some minor bugs have been corrected. We added to the registration page, on the main menu, the participants list and updated with registration list. We added a description of special tour program excursion, along with the prices. The prices are based on a minimum number of participants. If the number is higher than the minimum, there is room for a reduction in price. Please book early! We are focusing on the tours in Venice on the first day, one in the morning and one in the afternoon to give everyone a chance. There is a possibility to extend the last tour in Trieste with a visit to the astrophysical observatory if the is interest. Let me know if it seems a good idea. We added the prices for the gala dinner, for the conference fee and the rooms. We remind you that we have fully booked the hotel, so you must deal with us for conference hotel reservations. We added information on transfers from/to the airports, with a shuttle service at your disposal that will allow you save considerable time. We already have some papers for the conference, but need more. Please send your talk plans now. Don't wait until the deadline. Send at least the title of the presentation as soon as you can. We have requested a special call for the EME Conference Station that will be active from the conference location. II3EME will be active on 144 thanks to I0JXX is providing the entire station. We are closing a deal with Costa Cruises for a nice Mediterranean cruise just before the conference that will departing and arrive back in Venice. Info is available upon request. 73 and CU in Venice, Giulio - IW3HVB

Registered for the conference so far are registered: G4RGK and XYL, ON7UN, F2CT and XYL, G4HUP, VK4EME and XYL, LA3EQ and XYL, IZ3NOC, G0MJW, K1DS and XYL, PA3FXB + XYL, F5IWN, DJ5AR + XYL, EI2FG + XYL +QRP, HB9BBD, UA4HTS + XYL, DL6ZAU + XYL, PE1LWT+XYL+QRP, PA3FPQ, IK1UWL + XYL, F5RRS + XYL + 2QRP and F5BQP + XYL, PA7JB. I know of many more that are planning to go including F5SE, K1JT and me.

Hermann's (DL2NUD) equipment arrived back in Germany mid Dec after the ill fated HK0 dxpedition. (The 144 and 432 equipment belongs to DF7KF and the 1296 and up equipment belongs to Hermann). Unfortunately, the equipment suffered a lot of damage, some of which looks like sabotage. Hermann`s toolbox did not make it back. It contained not only tools, but also the preamps, connectors/adaptors and relays and obviously was stolen. One of the segments of the 1.5 m dish is also missingver. Hermann estimates the damage for just his equipment at 900+ Euros. He already has repaired most of the equipment and ordered the missing pieces. He hopes to be QRV again in March/April from some nice place. In case you would like to help Hermann "absorbing" the cost of the damage you may send your donation to dan@hb9q.ch at paypal. Dan will make sure he gets it.

Some good news, the OE's have a new allocation that will allow them to operate EME again on 9 cm. VE4MA and W5LUA worked an OE station on 3456 back in the early 90's for the first Trans-Ocean EME on 9 cm.

I hope to find many of you on 13 cm during the DUBUS contest. GL and 73, Al – K2UYH