**CONDITIONS:** Feb has turned out to be one of the slower months. The DUBUS 70 cm CW Contest had a reasonable turnout, but did not produce many reports. I found conditions poor with one-way Faraday much of the contest. The bad weather (WX) in many places also did not help. OK1KIR has the highest reported score with 23x22. Coming up in March is the 13 cm DUBUS CW EME Contest. It is a growing contest and one I expect more stations are looking forward to. I have received a few more 1296 EME SSB Funtest reports, but PI9CAM with 912 points remains the top funmaker!

There were no expeditions in Feb. Hermann’s FR/DL2NUD expedition to Reunion Island is taking place as this newsletter (NL) is being written. I was on 70 cm on 10 Feb testing the system in preparation for the 70 cm Activity Time Period (ATP) in Feb because of the DUBUS contest. There did not seem lower than usual. Since Jan on 1296, I have not had RX reports to WALTER (ON4BCB), DK7LJ or PI9CAM with 912 points. I should have the full story in the April NL. Send QSLs to his home call at the above. Donations are also appreciated and may be sent to dan@hb9q.ch by PayPal.

**W2HRO’S 1.8 m Toki umbrella dish with linear feed used to work HB9Q on 1296**

**DK3WJ:** Jurgen, dk3wj@web.de remains very active off the Moon. I have QSOed on 70 cm using JT65B in Jan JA4UMN, JH7OPT, TK8DO and KH7OC, and in Feb UA4AAV, RV0LDL, NF7W, WD4EGF and US8GT. On 23 cm I worked in Jan using CW IK2RTI and with JT65C I0IIAR/5.

**FR/DL2NUD:** Hermann as I write this NL is QRV on 1296 EME from Reunion Island. He had some initial problems with the collapse of a rock wall that hit him and the dish. Fortunately his injuries were minor and he was able to repair his dish. With only a few hours of operation on 2 March, he worked 22 stations, and on March another 15 on 1296. QSO’d were HB9Q, OK1KIR, UA3PTW, YL2GD, PA3FXB, OAT9LU, Y33DDZ, PA4AO, ZS4MM, PA3C5G, DK3WJ, IN1DP, IK3CJO, PY2BS, OZ6OL, G4RGK, RA3EC, PE1CHQ, SP5GD, DF3RU, VK4CDI, OK1DFC, OK1CA, ES6LO, OK2DL, VK2JS, VK2ECU, YO2BC, DJ9YY, OK1YK, PA0BAT, LX1DB, G4CH, DL6SH and ES5PF. He switched to 13 cm (both 2320.100 and 2304.100) on 4 March but had WX problems with dusty wind and heavy rain and had to stop operation early. Despite the WX, Hermann worked 12 stations on 13 cm: OK1KIR, HB9Q, OA2GD, OZ4MM, OK1CA, UA3PTW, PA0BAT, OK1DFC, ZS6EME, OZ5G, IK3CCJ and YO2BC. He will be back on 13 cm on 5 March and move to 9 cm on 6 March. Due to the high number of stations missed on 23 cm, he has decided to use his last day, 7 March for another try on 1296. He hopes his neighbors (next door bungalow) will have left by then so that he can place the dish in a better position for moonset. Hermann is TXing first on 100 and listening on his own echo. See the last NL for more details. Send QSLs to his home call at the above. Donations are also appreciated and may be sent to dan@hb9q.ch by PayPal.

**K4EME:** Cowles, candrus@mgw.net was QRV during the 70 cm CW DUBUS contest -- I had a misbehaving relay on the large array that limited me to RX on the first day (Friday LT). I worked only K2UYH by listening on my small 4 vertical yagi array and TXing on the larger horizontal array. I heard several stations but with the small array could not call them out. I fixed the problem on Saturday and was on at moonrise (Saturday evening LT). My CW skills are not the best and recent medical treatment has degraded my ability. I decided to listen and wait for CQs enabling me to take my time coping calls before replying. I did not hear many CQs. I CO’d one time and heard a reply, but could not hear them well enough to make out the call. Activity seemed lower then on some non-contest weekends. In Dec using JT65B, I worked on 70 cm NG5C, G4DDK and KH6TY. KH6TY, Skip, is from SG and a new state for me. I also had a partial with N4CNN also in SG. Since Jan on 1296, I have worked VA6EME, SP5GD, OE9GLV, IS5DI, N4PZ and DF2VJ all with JT65C. I recently uncovered the 16 segments of my 6.1 m dish. They appear in good shape. I plan to construct a base for this dish and have a turntable that should work with it. Thank to those who sent me QSL cards. I getting close to WAS on 432.

**K3DZ:** Bob, kd3uy@comcast.net in MD is QRV on 13 cm -- I now have 9 initials on 2304. I have worked W5LJA, HB9Q, PY2BS, OK1KIR, OZ4MM, PA0BAT, K2UYH and OK1DFC and ES5PC. All QSOs were with JT65C, but trying, so far unsuccessfully for a CW QSO. My CW has been copied but I have been unable to decode. My station is a 2.7 m homewbrew pre-stressed dish with OK1DFC feed, G4DDK preamp and about 80 W at the feed. I can RX on 2304, 2310, 2320 and 2400. I am still working on improving my station. I believe I have my frequency pretty accurate, but I am less certain about my pointing. When the Sun gets higher, I should be able to improve it significantly. I am interested in sked using both JT65C and CW.
NC11: Frank frank@NC11.COM remained very active in Feb -- The following stations were worked in the past month on 432: On 3 March 2016 RA9CHL (18DB/O), 0207 OK2AQ (16DB/12DB), 2045 PA2V (4DB/15DB), 2055 E67AW (22DB/O) using a 18 el yagi and 250 W, 2207 DL8DAU (12DB/15DB) and 2213 I3CTE (7DB/O); on 4 Feb at 1651 FrAsDN (22DB/15DB) - Phil was running 35 W. 1713 EB5EEO (15DB/O), 1723 DL9DV (10DB/15DB), 0015 VA3ELE (22DB/O), 0517 PA5Y (12DB/0). Signals suffered from fast fading. I did not check the Sun. I hope to have 14DB/O) {#28} for digital initial #28} and later on CW at 1240 JA6AHB (O/O) for initial #94.

PASY: Conrad g0ruz@g0ruz.com is QRV on the horizon on 70 cm EME with a single yagi and 1 kW. He can operate on both JT and CW and planned to be QRV on both his moonrises and sets during the DUBUS CW EME contest.

RW0LDF: Serge rwoldf@mail.ru is now active on 432 as well as 1296. In Feb he made his first 70 cm EME QSOs using JT65B with DL7APV, DK3WG, HB9Q and UA3PTW. He used for his first 3 QSO x 2 el DL8WU yagis and 50 W. He has now increased his array to 2 x 25 el DL8WU yagis. [TNX DK3WG for forwarding this report.]

SP6ITF: Gregory's gmi@warr.pl log for the 1296 EME SSB Funtest has arrived -- This year due to an unexpected family visit, I was only about to operate for 6 hours, on Saturday. I very rarely work EME on SSB; however, despite my relatively low power (300 W) and relatively small antenna gain (1.5), I was able to make a number of EME QSOs on SSB and had great fun. I ended with 19 QSOs including 1 CW (O/W) and 1 CW /SSB (1 point). All the rest were SSB/SSB for a total of (17x+2x1B) = 280 points. QSO's were at 1245 HB9Q (59/54) JN, 1248 OK2DL (55/55) JN, 1356 1N0DP (55/55) JN, 1359 PiC9AM (55/57) JO, 1405 HB9CW (55/59) JN, 1639 G3LTF (57/56) JO, 1654 DJ5FR (55/55) JO, 1700 DL3EBJ (55/55) JO, 1733 SP6JLW (55/55) JO, 1751 PA3DZL (55/55) JO, 1751 PA3DZL (55/55) JO.

UA3PTW: Dmitry ua3ptw@inbox.ru during the past month reports working many new stations on 432 using JT65B. He QSO’d USBIG [in Jan], KF8MY, RD3FD, RW0LDF, DL8OBU, DF7AP, G3WZT, GI6ATZ, JE1YEM, JA4UHM and JH3BBH. He QSO’s on 1296 using JT65C-G4KVT. [TNX DK3WG for forwarding this report.]

VE4MA7: Barry ve4ma7@shaw.ca is in AZ for the winter and reports Murphy's Law problems -- I have been trying to work KL6M on 6 cm. I discovered I took the wrong sized horn for 6 cm operation with the dish here in AZ. I fabricated a fix tin sheets purchased at our local hardware store, but then found that my boresight was too low. Then I had heavy cloud cover and could not check for Sun. I hope to have success with Mike soon.

VE6TA: Grant ve6ta@xplornet.com spent his EME time on 70 cm in Feb -- I worked on 4 Feb, on 432 using CW N7NW for initial #161 - Hal has a great signal with his 4 yagis, and on 5 Feb ES3RF #162. I was also on for the DUBUS CW Contest. Activity seemed to be better than last year and the declination was more favorable than last year as well. Stations worked were LZ1DX, SP7DCS, UA3PTW, OK1CA, OX2DG, DF3RU, G3LTF, OK1KIR, DL6SH #163, WA6YPY #164, N8CW, K2UWH, ES5PC, W5JLA, N7NW, G4RGK, DL6SH and PA2V. I found conditions to be very good with many strong signals on the band. Polarity was very cooperative as well with good well defined polarity peaks. I certainly missed those on the westward facing window. I ended with a total of 18x17. I plan to be on for the 13 cm DUBUS contest as well, and hope to see many stations active that weekend as well.

ZS6EME: Alex zs6eme@linkrf.ch has set up a 13 cm QRA64 Beacon – I plan to have an experimental beacon using QRA64 codes active as ZS6EME during some contest weekends. The first operation will be on 4 March. The Beacon will transmit the string "ZS6EME KG44 B". The letter B is a reference to a "beacon" and the operation will be fully automatic. Power will switch between 60, 120 and 250 W. It should be a great opportunity to test the QRA64 mode with different power levels under non-optimal propagation conditions. I would very much appreciate reports, if you are able to decode the beacon. Please email any record tiles and screen shots. The beacon specifications are 3.6 m solid dish with a 0.5 f/d; automatic tracking system using DRIACS-G2 OE5JFL; 400 W SSPA using 2x MRF21180 (Erickson modified) with variable power level from 400 to 60 W on demand; TX mode QRA64D; and TRV Khune 13 cm G4 with 10 MHz GPS lock. I will also be available in CW/SSB/JT/QRA64 when the beacon is not on. Look for me on the HB9Q logbook.

K2UYH: I alaktz@tcnj.edu had more cooperative WX in Feb. I was on 1296 on 3 Feb and QSO'd using JT65B at 2000 partial LA3ANA (20DB/10DB) JT65B due to a computer port problem at my end -- by time fixed he was gone, 2019 LA3EQ (16DB/10DB), 2033 VE4MA7 (12DB/22DB) and 2044 DJ2DY (20DB/17DB). I then switched to 432 CW, but conditions were poor and only had a partial at 2145 STM6HFL (59/57). 2245 ISCTE (55/59) marginal and 2302 nil N7NW; I switched to JT65B and QSO'd
I tried again on 432 the next day, 4 Feb, with SM6FHZ and had the same results. I did make a quick QSO at 2120 DL9OBU (18dB/73) using JT65B, but had to leave for a 13 cm sked. On 2304 at 2130 I tried KD3UY on CW and then JT with nil results. However, then next day, on 5 Feb on 13 cm I worked easily at 2152 KD3UY (21DB/23DB) with JT65C for mixed initial #93*. On 6 Feb, I put the 6 cm feed in the dish and worked using CW at 0209 KLM4 (59/59), on 7 Feb at 0750 JA4BLC (O/O) for initial #50 – success after many attempts because of the very limited moon window between us – and 0808 JF3HUC (559/549), and on 8 Feb at 0730 JA6XED (O/O). I was QRV for the 432 DUBUS CW contest with N2UE. We QSO’d on 11 Feb at 0159 OK1KIR (569/59), 0232 K4EML (559/569), 0239 OZ2DG (559/559) first called as OZ2DG, 0240 K5QC (559/459), 0302 OK1CA (569/579), 0306 UA3PTW (579/599), 0345 DL3RU (559/59), 0417 DL5SH (559/559), 0427 G3LTL (559/569), 0440 LZ1DX (559/599), 0448 VE6TA (559/549), 0453 N8CO (569/579) and 0549 W5LUA (559/559), on 12 Feb at 0235 OF2DG (559/559) DUP, 0323 7SP7CS (559/579), 0357 G4RGK (559/569), 0450 ES5PC (559/559), 0514 WA6PY (559/559), 1122 VK5MC (559/559) and 1203 JA6AHB (O/O). We ended with a total of 19×18. I did not find the conditions particularly good. We had to call antenna many times to get a reply, but only if we get away – PA2V. I think the Moon set on Peter. Although more activity and better conditions would have been good, it was still very enjoyable. We plan WX permitting to be QRV for the 13 cm contest in March. Back in Jan, I was QRV on 432 during the ARRL’s Jan VHF tropo Contest on 22 Jan and QSO at 0939 DL9KR (579/59) CW, 1002 PA2V (14DB/20DB) JT65B, 1011 E85GP (16DB/17DS) JT65B for mixed initial #93*, 035 F6CPI (18DB/20DB) JT65B #932*, 1041 PASY (16DB/19DB) #933* and 1124 K5QC (16DB/O) JT65B.

**NETNEWS:** FR5DN is QRV again on 70 cm after a number of years absence with an excellent signal on CW and JT. Phil is also working on getting on 1296 with a 3.6 m dish. NACNN. John, is QRV from SC on 432 and 1296 using a 10’ dish on both bands. On 70 cm he has a few hundred watts. On 1296 he has 70 W in the shack with a low loss feedline (80’ of 1.5” Heliax). KH6TY. Skip, is also QRV on 70 cm from SC.

**SALE:** G0FDZ has for sale a Keltec 200 W 10 GH TWT model VTX528F1. Model Keltec knows it has a power supply problem, but has the manual. It is in a 19” rack case and weighs about 200 lbs. Contacted Chris at chris@g0fdz.com and make an offer. K4EML has for sale ExtrMEME Low Noise 70 cm Preamps – see http://www.aracape.com/drf.html. MA4CWC has BIG TAIFUN 1000 1 kW 432 PAs from VH ELECTRONICS vh@kenwood.sk for sale at a reduced cost – see http://tlatlab.sk/index.php/en-special-offer. Vlado reports that it is the smallest and lightest 1 KW PA available. SM4DHN still has very excellent LABETECH 1 kW and 500 W 1296 SSPAs for sale. He will bring some to the Swedish EME Conference in May.

**GALILEO SATELLITE INTERFERENCE BY VE4AMA:7** – It does appear to be present. I am in Arizona USA now and have noticed a couple of times where a signal will come drifting through the frequency - once on 1296.060 and recently on 1296.100. The carrier was very clean and smoothly moving slowly across the frequency. Today I captured a screen picture of the carrier trace. Its was stronger when I pointed the terrestrial antenna more closely. There appears to be multiple carriers about 12 kHz apart so not a big problem for interference potential, however with an EME antenna pointed at it, maybe the potential for overload is there? See the link below for more information on the satellite system http://www.gfg2.eu/sites/gfg2.eu/files/Gfg2_Terry%20Moore_Galileo.pdf.

**MICROWAVE EME ACTIVITY WEEKENDS (MWAWS) BY G3LTL:** For newcomers: The idea of MWAWS is to encourage activity on the higher microwave bands outside the contest weekends. There are no restrictions. If you wish to use the logger, telephone, HF, etc., it is OK. Experimenting with different modes is encouraged. It is not just for CW. It is not a contest. It enables everyone to make QSOs, test new equipment, feeds, preamps etc. The are usually several big guns stations around to provide signals for newcomers to look for. We try to have the MWAWS in the summer time (N hemisphere) when it’s easier to throw stuff together for an initial try; the best weekends (high dec/low loss) have already been selected for contests and there are other clashes as well. Looking at the weekends between March and August inclusive, I propose the following: 13 cm - 4/5 March [already pressed], 3 cm – 6/7 May, 6 cm – 17/18 June and 9 cm - 12/13 Aug. Its really hard to find suitable dates this year so if others have better suggestions then please make them. In past years these weekends have proved useful but there is no pressure to participate, maybe on 3 cm, there is now enough random activity to not need one?

**FINDING THE BORESIGHT OF AN OFFSET DISH FROM PA2DW:** Elevating and positioning the feed of an offset dish is not always so easy. I learned a very simple but effective way to find it. What we did was position the dish on the bright sun, then wetting the dish surface with a garden hose so it would be nice and shiny. Then you can calibrate the feed and elevation so that the sunbeams are right in the feed-center.

**FINAL:** I am very sad to report the loss of another member of our EME family, G4HUP. The following is from G3LTL: Dave is a great loss. It was standing in for the Germans, (who had go home early, I think), and put the case for the next conference being at Wurtzburg, which was carried with acclaim and was an outstanding event. The EME community will miss Dave greatly. Our thoughts are with Jean and his family.

► Plans for the Swedish EME Conference in Örebro are looking good. The preliminary program is now posted and includes: G4NNS - Studying the Shape and Motion of our Galaxy using Hydrogen radiation, G3LTL - 6 cm EME today and optimizing Multiband Microwave EME Operation, RW3BP - LNA cooling for EME on 77 GHz, ON7UN - Rebuilding My 6 m Dish for 23 13 and 6 cm EME, ON4BCB - DIY OESJFL Antenna Controller, ON4BCB - SDR-Isolator (Add SDR at 144 IF), UA3ARV - Calibrations of MM-wave Antennas Using Moon Noise, F2CT - Using Very Large Professional Cassegrain Dishes on 5.7, 10 and 24 GHz, DL1YMK - Bringing SA6BUN on the Moon on 10 G, HB9BBD - Comparison Measurements of 10 GH LNAs by DL3BCP, F1OPA, DB6NT and HB9BBD, OESJFL - Amateur Pulsar Detection with EME Equipment, For more info see http://sm4ive.com/ememeetingmay.php.

► OK1DFC announces that the OK 26th EME and Microwave Seminar will take place on 24-26 March. See http://www.vhf.cz/seminar-2017-eng/ for details.

► The N2MO 60’ dish Diana EME site now has it's own website at http://www.isec.space. ISEC is an acronym for InfoAge Space Exploration Center. http://isec-space/9162 panorama/ is a link to a 360 degree panorama of the dish building. The main console is visible and can be zoomed for more detail. InfoAge plans to have the site accessible to the public three days a week.

► Correction - VE3KRP. Fast Eddie reports I pull off a fast one by listing him as a V6E in the Jan NL.

► Looking for a single device for a 70 cm 1.5 kW SSPA? It is here! NXP has it with a 1 dB compression around 900 W and 3 dB compression at 1450 W to 500 MHz. See http://www.nxp.com/assets/documents/data/en/data-sheets/MRF1K50H.pdf?filemid=4676. [TNX to DJ3JJ and PASMS for forwarding this info].

► I had expected to get this NL out two weeks ago, but became very busy. I decided to combine both Feb and March. Please keep the operating news and tech material coming. I shall be looking for you off the Moon. 73, Al – K2UYH and now coming onboard Marej - OK1TEH