**432 AND ABOVE EME NEWS**

**FEBRUARY/MARCH 2017 VOL 45 #2**

EDITOR: AL KATZ, K2UYH; DEPT. ELECTRICAL/COMPUTER ENGINEERING, THE COLLEGE OF NEW JERSEY, PO BOX 7718 EWING, NJ 08628, TEL (W 609-584-8424) OR (H 609-443-3184), FAX (609-631-0177), E-MAIL alkatz(x)tcnj.edu

ASSOCIATE EDITOR AND NETNEWS (based Reflector News) Matej Petrzilka, Simunkova 1609/21, 18200, Praha 8, Czech Republic, TEL (+420 603 489 490), E-MAIL ok1teh(x)seznam.cz

CW INITIAL LIST G4RGK, DAVID DIBLEY, E-MAIL zen70432(x)zen.co.uk, AT: <http://www.zen70432.zen.co.uk/Initials/index.html>

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**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 know many stations are looking forward to.** **I have received a few more 1296 EME SSB Funtest reports, but PI9CAM with 912 points remain the top funmakers!** There were no dxpeditions in Feb. Hermann’s FR/DL2NUD dxpedition to Reunion Island is taking place as this newsletter (NL) is being written – see the following partial report. I should have the full story in the April NL. I see no othe dxpedition activity for March or April. There is no 432 CW Activity Time Period (ATP) in Feb because of the DUBUS contest. The next 70 cm ATP is on 12 Mar 0100-0300 and 1800-2000 and conflicts with the 13 cm contest.



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

**DK3WG:** Jurg dk3wg(x)web.de remains very active off the Moon primarily on JT -- I QSOed on 70 cm using JT65B in Jan JA4UMN, JH7OPT, TM8DO and JH7LOC, and in Feb UA4AAV, RW0LDF, N7NW, WD4EGF and US8IGT. On 23 cm I worked in Jan using CW IK2RTI and with JT65C II0IAAR/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 3 March another 15 on 1296. QSO’d were HB9Q, OK1KIR, UA3PTW, OH2DG, YL2GD, PA3FXB, UA9YLU, YO3DDZ, PA3DZL, ON4AOI, OZ4MM, PA3CSG, DK3WG, I1NDP, IK3COJ, PY2BS, OZ6OL, G4RGK, RA3EC, PE1CHQ, SP5GDM, DF3RU, VK4CDI, OK1DFC, OK1CA, ES6RQ, OK2DL, VK2JDS, VK2CU, YO2BCT, DJ9YW, OK1YK, PA0BAT, LX1DB, G4CCH, DL6SH and ES5PC. He switched to 13 cm (both 2320.100 and 2304.100) on 4 March but had WX problems with gusty wind and heavy rain and had to stop operation early. Despite the WX, Hermann worked 12 stations on 13 cm: OK1KIR, HB9Q, OF2DG, OZ4MM, OK1CA, UA3PTW, PA0BAT, OK1DFC, ZS6EME, OZ5G, IK3COJ and YO2BCT. 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 QRZ.com address, and be sure to include an SAE and 2 US$ for postage. Donations are also appreciated and may be sent to dan(x)hb9q.ch by Paypal.

**G3LTF:** Peter g3ltf(x)btinternet.com EME report Jan and Feb follows -- On 5 Jan I was on 6 cm to try and work VE4MA/W7, but Barry’s signal was just too weak. I did get my call, but that was all. I have 3dB less power than Barry and he reported no copy from me, although he could just see an SDR trace. I did have good solid QSOs with LX1DB, KL6M and WA9FWD, who were also on the band. All these stations are now (569) signals here on 6 cm. It is a prompt for me to try and improve my 6 cm receive system a bit. I was on 70 cm on 10 Feb testing the system before the contest, and was delighted to work FR5DN after a long absence. **During the** **DUBUS 432 CW Contest on 11 Feb I worked** ES5PC, LZ1DX, OF2DG, OK1KIR, OK1CA, SP7DCS, G4RGK, VE6TA, UA3PTW, WA6PY, W5LUA, K2UYH, N8CQ, DL6SH, FR5DN and SM7GVF, and on 12 Feb DF3RU, PA2V, LX1DB ( CW and SSB!) and finally DL9KR **for a contest total of 20x19.** It was quite fitting to end with QSOs to Willie and Jan as this will almost certainly be the last 70 cm CW contest. We were there at the start and still there at the end. The only other station I heard was K4EME and CWNR. Weather was not bad in the UK, but I know elsewhere it was pretty grim. My rebuilt 4CX250B driver worked brilliantly!

**K4EME:** Cowles candrus(x)mgwnet.com **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 pull them out. I fixed the relay on Saturday morning 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 CQ’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 NC1I, K4MSG and KH6TY. KH6TY, Skip, is from SC and a new state for me. I also had a partial with N4CNN also in SC. Since Jan on 1296, I have worked VA6EME, SP5GDM, OE9GLV, I5YDI, 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.

**KD3UY:** Bob kd3uy(x)comcast.net in MD is QRV on 13 cm -- I now have 9 initials on 2304. I have worked W5LUA, 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 homebrew pre-stressed dish with OK1DFC feed, G4DDK preamp and about 80 W at the feed. I can RX on 2304, 2302, 2320 and 2400. I am still working on improving the 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.

 **NC1I:** Frank frank(x)NC1I.COM remained very active in Feb -- The following stations were worked in the past month on 432: On 3 March at 2016 RA9CHL (18DB/O), 2027 OK2AQ (16DB/12DB), 2045 PA2V (4DB/15DB), 2055 EW7AW (22DB/O) using a 18 el yagi and 250 W, 2207 DL8DAU (12DB/15DB) and 2213 I5CTE (7DB/O); on 4 Feb at 1651 FR5DN (22DB/5DB) - Phil was running 35 W, 1713 EB5EEO (15DB/7DB), 1723 DL6SH (11DB/5DB), 1730 PA2V (22DB/O) - running 15 W, 1745 DL8DAU (17DB/15DB), 1752 G6HKS (18DB/8DB), 1805 DL6YBF (28DB/11DB), 1924 PY2BS (6DB/7DB), 2103 DL9OBU (14DB/16DB), 2117 LZ1DX (6DB/O), and 2224 DL7APV (3DB/6DB); and on 5 Feb at 0047 PA5Y (10DB/10DB), 0132 N7NW (5DB/23DB), 1741 F6CPI (24DB/13DB), 1813 DL6SH (10DB/5DB), 1859 TM8DO (22DB/13DB), 1907 GM4FIZ (24DB/O), 1913 DF6SM (24DB/15DB), 1945 YL2FZ (20DB/14DB), 2133 K9MRI (13DB/12DB), 2157 S51WX (26DB/O) and 2211 WD4EGF (13DB/O). On 1296, We were active and QSO’d on 3 Feb at 2237 PA2DW (11DB/7DB); on 5 Feb at 0150 N5BF (14DB/9DB); and on 6 Feb at 2207 G4BAO (20DB/13DB), 2215 PA2DW (14DB/10DB) and at 2223 EW1AA (27DB/14DB). All these QSOs were made using JT. **I had planned to be on for the DUBUS 432 CW Contest, but bad weather and high winds forced me to tie the array down in the stow position for the weekend.** To make matters worse on the Monday following the contest weekend, I found the array free spinning in the wind. The array had been stowed pointing straight up. The recently rebuilt polarity drive had failed. All of the flex lines and control lines were destroyed. I later found that the prop-pitch used for polarity had actually come loose and dropped down disengaging from the mast. It appears as though the hardware simply came loose. Only two of the six bolts were still in place and the nuts on those bolts had loosened up significantly. There was some damage to the spline gear on the output of the prop-pitch, so I will be putting my backup prop-pitch in. At this point I’m not sure what surprises we may find when we get back up the tower. My best guess is that it will be mid-April before everything is repaired. I have no idea how the hardware came loose. This had never happened before. Because of the damage to the 432 array I will focus on 1296 in March and early April. On Saturday 25 Feb, we had some very strange weather. The high temperature reached 23 degs C, which is the highest temperature ever recorded in MA in Feb. Our normal high for the date would be around 3 or 4 degs C. Later that day an F1 tornado touched down just 40 km from my town. There was extensive damage, but fortunately no injuries or fatalities. This was the first time a tornado was ever known to touch down in MA in Feb. [Frank is QRV again on 432 as of the writing of this NL].

**OK1KIR:** Vlada vlada.masek(x)volny.cz sends his club’s Feb EME report -- On 432 , we QSO’d on 10 Feb using CW at 2046 DL6SH (589/599) and 2054 FR5DN (549/519). **In the 70 cm part of the DUBUS CW EME Contest** we logged on 11Feb at 0020 OK1CA (579/579), 0026 G3LTF (569/569), 0030 OF2DG (569/569), 0046 LZ1DX (579/579), 0059 SP7DCS (569/579), 0107 G4RGK (559/559), 0114 W5LUA (579/559), 0127 DF3RU (569/559), 0136 ES5PC (559/559), 0159 K2UYH (569/569), 0210 N8CQ (569/559) #392, 0226 UA3PTW( 569/579), 0303 N7NW (O/O) for initial #393, 0324 DL6SH (579/579), 0400 VE6TA (569/569), 1902 VK4EME (O/O) #394, 2012 SM7GVF (O/O) #395, 2032 PA2V (549/429), 2045 FR5DN (549/519), 2102 UX4IJ (O/439) #396 and at 2206 JA6AHB (559/559), and 12 Feb at 0217 DL6KAI (O/O) and 0522 VA3ELE (O/O) #397 **for a final score of 23x22**. Conditions during the contest were poor and worse on Sunday. Signals suffered from fast fading. Dots were swallowed and dashes changed to dits quite often making callsigns hard to copy. During the contest we looked for the lunar eclipse, but the WX was uncooperative and nothing could be seen. Out of the contest, we worked on 70 cm using JT65B on 10 Feb at 1802 US8IGT (26DB/O) for digital intial {#199}, 1915 F6CPI (20DB/O) {#200}, 1931 OK2AQ (26DB/22DB), 2015 JH3BHB (23DB/18DB) {#201} and 2113 TM8DO (29DB/24DB) {#202}, and on 11 Feb at 0247 N7NW (15DB/18DB) {#203}, 0501 VA3ELE (22DB/O), 0521 WD4EGF (21DB/16DB) {#204}, 1846 VK4EME (18DB/14DB) and 2358 DL6KAI (19DB/21DB). On 1296, we contacted on 2 March FR/DL2NUD on Reunion Island at 1122 (22DB/15DB) for digital initial{#265} and first FR/OK QSO and 1320 special callsign II0IAAR (12DB/ O) {#266}. The next day on 4 March we worked on 2320 at 1124 FR/DL2NUD (18DB/19DB) for digital {#46} and first FR/OK QSO. We measured the moonnoise as 1.0 dB and sunnoise as 17.65 dB (SF 75). Then we changed the band 6 cm, still on 4 March to QSO at 1222 JA6AHB (12DB/DB13) on JT [?] for digital initial {#28} and later on CW at 1240 JA6AHB (O/O) for initial #94.

**PA5Y:** Conrad g0ruz(x)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 rw0ldf(x)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 2 x 16 el DL6WU yagis and 50 W. He has now increased his array to 2 x 25 el DL6WU yagis. [TNX DK3WG for forwarding this report].

**SP6ITF:** Gregory’s gml(x)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 (4.5 m dish), I was able to make a number of EME QSOs on SSB and had great fun. I ended with 19 QSOs including 1 CW / CW (0 points) and 1 CW /SSB (1 point). All the rest were SSB/SSB for **a total of (17x2+1)8 = 280 points**. QSO’d were at 1245 HB9Q (59/54) JN, 1248 OK2DL (55/55) JN, 1356 I1NDP (55/55) JN, 1359 PI9CAM (59/57) JO, 1405 HB9CW (52/59) JN, 1639 G3LTF (57/56) IO, 1654 DJ8FR (55/54) JO, 1700 DL3EBJ (55/55) JO, 1733 SP6JLW (55/55) JO, 1751 PA3DZL (559/569) on CW, 1955 SP2HMR (559/53) CW-SSB JO, 2110 OZ6OL (55/44) JO, 2121 DF3RU (55/55) JN, 2217 RA3EC (55/54) KO, 2323 N4PZ(59/59) EN, 2343 VE6TA (55/54) DO, 0004 N0OY (55/55) EM, 0011 VE6BGT (55/55) DO and 0034 KL6M (55/55) BP.

**UA3PTW:** Dmitry ua3ptw(x)inbox.ru during the past month reports working many new stations on 432 using JT65B. He QSO’d US8IGT [in Jan], KF8MY, RD3FD, RW0LDF, DL8OBU, DF7AP, G3WZT, GI6ATZ, JE1YEM, JA4UMN and JH3BHB. He QSO’d on 1296 using JT65C G4KVT. [TNX DK3WG for forwarding this report].

**VE4MA/7:** Barry ve4ma(x)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 discovering I took the wrong sized horn for 6 cm operation with the dish here in AZ. I fabricated a fix from 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 the Sun. I hope to have success with Mike soon.

**VE6TA:** Grant ve6ta(x)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 432 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, OH2DG, DF3RU, G3LTF, OK1KIR, DL6SH #163, WA6PY#164, N8CQ, K2UYH, ES5PC, W5LUA, 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 activity from JA and VK. It was extremely quiet on my western 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(x)linkrf.ch has set up a 13 cm QRA64 Beacon – I plan to have an experimental beacon using QRA64 codes active as ZS6EME during activity 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 files 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 logger.

**K2UYH:** I alkatz(x)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/-) JT65B due to a computer port problem at my end – by time fixed he was gone, 2019 LA3EQ (16DB/10DB), 2033 VE4MA/7 (12DB/22DB) and 2044 DJ2DY (20DB/17DB). I then switched to 432 CW, but conditions were poor and only had a partial at 2145 SM6FHZ (559/T), 2245 I5CTE (559/M) marginal and 2302 nil N7NW; I switched to JT65B and QSO’d (9DB/21DB). 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 0029 KL6M (549/559), 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 NU2E. We QSO’d on 11 Feb at 0159 OK1KIR (569/569), 0232 K4EME (559/569), 0239 OF2DG (559/559) first called as OH2DG, 0245 K5QE (559/459), 0302 OK1CA (569/579), 0306 UA3PTW (579/559), 0345 DF3RU (559/539), 0417 DL6SH (559/559), 0427 G3LTF ((559/569), 0440 LZ1DX (559/559), 0448 VE6TA (569/579), 0453 N8CQ (569/579) and 0549 W5LUA (559/559), on 12 Feb at 0235 OF2DG (559/559) DUP, 0323 SP7DCS (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 19x18.** I did not find the conditions particularly good. We had to call stations many time to get a reply, but had only one 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 (579/579) CW, 1002 PA2V (14DB/20DB) JT65B, 1011 EB5GP (18DB/17DB) JT65B for mixed initial #931\*, 035 F6CPI (19DB/20DB) JT65B #932\*, 1041 PA5Y (16DB/19DB) #933\* and 1124 K5QE (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. **N4CNN**, 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.

**FOR SALE:** **G0FDZ** has forsale a Keltec 200 W 10 GHz TWTA model VTX528F1 model. Chris believes it has a power supply problem, but has the manual. It is in a 19" rack case and weights about 200 lbs. Contacted Chris at chris(x)g0fdz.com and make an offer. **K4EME** has for sale ExtrEMEly Low Noise 70 cm Preamps – see http://cowlesradio.webs. com/drrf.html. **OM4CW** has BIG TAJFUN 1000 1 kW 432 PAs from VH ELECTRONICS vh(x)kenwood.sk for sale at a reduced cost – see <http://italab.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 Interfereence by VE4MA/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 G3LTF:** 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 its 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 passed], 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 pointing the dish towards 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 G3LTF: Dave is a real loss. Always with a smile and a quip and always ready to help and advise. He played a big part in the success of the 2012 EME Conference, starting by pitching for it at Dallas (with Sam). I have a lovely memory of him, which others may recall, when at the end of the 2004 Trenton Conference banquet he walked up to the front holding a little German flag and explained that having worked in Germany he 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 inÖrebro are looking good. The preliminary program is now posted and includes: G4NNS - Studying the Shape and Motion of our Galaxy using Hydrogen radiation, G3LTF - 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 OE5JFL Antenna Controller, ON4BCB - SDR-isolator (Add SDR at 144 IF), UA3AVR - 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 Measurments of 10 GHz LNAs by DL3BCP, F1OPA, DB6NT and HB9BBD, OE5JFL - 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 VE6 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?elq\_mid=4676](http://www.nxp.com/assets/documents/data/%20en/data-sheets/MRF1K50H.pdf?elq_mid=4676). [TNX to DJ3JJ and PA5MS for forearding 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