

## 432 AND ABOVE EME NEWS DECEMBER 2017 VOL 46 #10

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**CONDITIONS:** While the pace in Nov seemed to be a little less than in Oct, it was still a very *Moon-intensive* month. There was plenty of activity during the last weekend of the **ARRL EME Contest** on 4-5 Nov. On 432, **DL7APV** ended up with an impressive tally of 80x41 in mixed mode. **NC1I** was very close with 75x43. On 1296, **W6YX** completed a remarkable 75 QSOs from the US west coast and with CW only! Who says CW is dying on 23 cm? Before, during and after the contest, the dxpeditions kept the bands through 3 cm *hopping*. The full report on the **3DA0MB** dxpedition follows in this newsletter (NL). They ended on 70 cm with 47 initials and on 23 cm 66 initials. **D44TVG/TVD** had some problems on the microwave bands but still provided QSOs on 2 m, 70, 13, 9 and 6 cm – see their report along with **DX7EME's** report, later in this NL. And, there is more to come... **N1H** will put the State of NH on 1296 EME starting on 30 Nov. **V31EME** will be QRV from Belize on 144 and 432 starting on 26 Nov. All is on schedule. See their report in last NL for details. The 2018 EME contest season will begin on 26 Jan with the SSB Funtest – see below. The first **DUBUS** Contest for 2 m & 70 cm is on 24/25 Feb. The next 70 cm CW Activity Time Period (ATP) will be on 15 Jan 0400-0600 (EU/NA) and 2000-2200 (EU/VK).

**SSB FUNTEST:** The 1296 SSB Funtest will start at 0400 on 27 Jan (Saturday Z) and end at 0500 on the 28 Jan (Sunday Z). This year there will not be a 432 SSB contest. Instead there will be a 13 cm SSB Funtest starting at 0400 on 26 Jan (Friday Z) and ending at 0500 on the 27 Jan (Saturday Z). These events are intended to be fun. You do not need to transmit on SSB to participate. CW to SSB and vice versa exchanges are encouraged and count for points. (Only one QSO between stations is allowed, i.e., you cannot work a station SSB to SSB and SSB to CW for extra points). Scoring is contact points x number of two letter Grid Sectors (IO, JM, FN, EM ...) worked. SSB to SSB contacts count as 2 points. SSB to CW (or CW to SSB) count as 1 point. The exchange is your Sector (IO, JM, etc.). Only the 2 sector letters need to be sent and copied by EME. The exchange of signal reports and/or 4 character grids is optional and not required. Operation may be by single or multiple operators from one location. No distinction for scoring will be made. Assisted operation is not encouraged. All skeds/operational announcements should be made prior to the start of the contest. Communication on reflectors is OK, but **not regarding QSOs**. [No "TU FB QSO". "GM..", "73", etc. at start and end of presence is OK]. Logs should be sent to the 432 and Up EME NL by email to [alkatz@tcnj.edu](mailto:alkatz@tcnj.edu) ASAP after the end of the contests. (All logs for contest awards should have been received within the month following the contest). The top scoring station on each band will receive an attractively framed certificate that will be presented at the next International EME Conference (Holland 2018).

**3DA0MB:** Chris (PA2CHR) [post@pa2chr.nl](mailto:post@pa2chr.nl) reports on 432, and Dan (HB9CRQ) [dan@hb9g.ch](mailto:dan@hb9g.ch) reports on 1296 and up – On 70 cm we worked 47 initials with HB9Q (12DB - H/H pol), OK1DFC (24DB - H/H), OK1KIR (23DB - H/H), OF2DG (25DB - H/H), DK3WG (26DB - H/H), UA3PTW (18DB - H/H), UT6UG (27DB - H/H), UX5UL (25DB H/H), DL7APV (23DB - H/H), LZ1DX (23DB - H/H), I1NDP (24DB - H/H), DL8FBD (26DB - H/H), SM7THS (26DB - H/H), NC1I (16DB - H/H), G4RGK (27DB - H/H), DL9KR (CW - H/H), PA3CSG (20DB - H/H), ON4AOI (24DB - H/H), G4FUF (27DB - H/H), OZ4MM (18DB - H/H), YL2GD (27DB - H/H), DL6SH (19DB - H/H), FR5DN (24DB - H/H), JS3CTQ (25DB - H/H), JE1TNL (27DB - H/H), UX0FF (22DB - V/V), DL8GP (21DB - V/V), OH6UW (27DB - V/V), G4EZP (24DB - V/V), UT5DL (26DB - V/V), ES3RF (26DB - V/V), ON4GG (20D B - V/V), ON4IQ (15DB - V/V), PA0BAT (29DB - V/V), PA3DZL (26DB - V/V),

DK4RC (25DB - V/V), UR3EE (24DB - V/V), W5LUA (22DB - V/V), SM7GVF (25DB - V/V), DL8DAU (27DB - V/V), PE1ITR (26B - V/V), PA5Y (28DB - V/V), UR5DWW (27DB - V/V), K2UYH (20DB - V/V), DJ4TC (25DB - V/V), SM4IVE (CW - H/H) and JA6AHB (25DB - V/V).



**3DA0MB - Dan (HB9CRQ) and Sam (HB9COG) by 1.5 m dish**

Our equipment was 2 x 9 WL M2 yagis with 400 W at the feed point from an SSPA and FT857 transceiver with GPSDO. During the first 2 days all signals were horizontal and after that the pol turned vertical. This seemed strange, but was not a problem because we could easily turn from H to V pol; the 2 yagis were mounted on a plastic mast. On the microwave band the equipment consisted of 1.5 m 1x2 mm mesh dish with homemade automatic AZ and EL control, with on 23 cm 100 W to a circular feed, on 13 cm 90 W at circular feed – QRV on all sub bands, on 9 cm 80 W at circular feed, on 6 cm 80 W at circular feed, on 3 cm 50 W at V-pol feed. This was our first dxpedition with our brand new "portable" station. It was tested during very wet (very heavy drizzle, all was soaked) WX, strong wind (up to 40 km/h gusts) and hot temperatures (30 deg C in full sunshine) and even in "heavy" RF environment. Our only tech problem was at the very beginning when a fuse in the TRV input was blown due to the high RF levels close-by. Overall we were very happy with the performance of our new station. On 1296 we made 66 QSOs (4 on CW and 62 on JT65c) of which 60 were initials in 22 DXCC (DL6SH, G4CCH, HB9Q, IONAA, JA6AHB, W5LUA, LZ1DX, OF2DG, OK1KIR, ON4AOI, OZ4MM, PA3FXB, SP3XBO, T12AEB, UA3PTW, UA9YLU, UN6PD, VA6EME, VK4CDI, YL2GD, YO3DDZ and ZS1LS). The smallest station was LZ4OC (28DB/28DB) with a 2.35 m dish and 150 W at the feed. On 2300 we made 29 QSOs (4 on CW and 25 on JT65C) of which 25 were initials in 14 DXCC (DL7YC, ES5PC, G3WDG, HB9Q, IK5QLO, JA6AHB, W5LUA, OF2DG, OK1KIR, ON4AOI, OZ4MM, PA0BAT, SP3XBO and UA3PTW). The smallest station was PA7JB (23DB/23DB) with a 2.4 m offset dish and 150 W at the feed. On 3400

we made 16 QSOs (2 on CW, 11 on JT65C and 3 on JT4F) of which 14 were initials in 9 DXCC (DL7YC, G3WVG, HB9Q, W5LUA, LX1DB, OF2DG, OK1KIR, PA3DZL and VK3NX). The smallest was PA7JB (18DB/14DB) with a 2.4 m offset dish and 50 W at the feed. On 5760 we made 27 QSOs (6 on CW, 3 on JT4F and 18 on QRA64D) of which 22 were initials in 16 DXCC (ES5PC, G3WVG, HB9Q, JA1WQF, W5LUA, LX1DB, OF2DG, OK1KIR, OZ1LPR, PA3DZL, PY2BS, SM6CKU, UA3PTW, UR7DWW, VK3NX and YO2BCT). The smallest station was PA7JB (18DB/20DB) with a 2.4 m offset dish and 30 W. On 10 GHz we worked 23 QSOs (4 on CW, 4 on JT4F and 15 on QRA64D) of which 19 were initials in 13 DXCC (DF1OI, G3WVG, HB9Q, JA1WQF, W5LUA, LX1DB, OF2DG, OK1KIR, OZ1LPR, PA0BAT, S57RA, VK7MO and YO2BCT). The smallest worked was OK2AQ (20DB/19DB) with a 1.2 m offset dish and 40 W at the feed. We used WSJT10 on 23, 13 and 9 cm (JT65C) and WSJT-X for 6 and 3 cm (JT4F and QRA64D) including Doppler control (CFOM and full Doppler). It is a great help to use CFOM. Hopefully more people will start to take advantage of automated Doppler control. Especially on 6 and 3 cm, it is a must for successful QRP operations. Although it was not easy we worked on all bands some CW QSOs with a few of the big-guns. Looking at the smaller stations worked per band, it is obvious that we could have worked many more if they were QRV. It is great to see that on 23 cm we can work stations using less than a 3 m dish and less than 200 W. On 13 and 9 cm we can even work stations of about our size and on 6 and 3 cm even smaller than us. These results are very promising for the future and we hope they will generate more interest in dxpeditions. We are looking forward to working even more stations during our next dxpeditions! Stay tuned for our 2018 activity! QSL please direct with SAEs and 2\$ to PA3CMC, Lins Berben, Simonshoek 2, 5768 CS Meijel, Netherlands. Thanks to all who have called and worked us, and sorry to those we could not work!

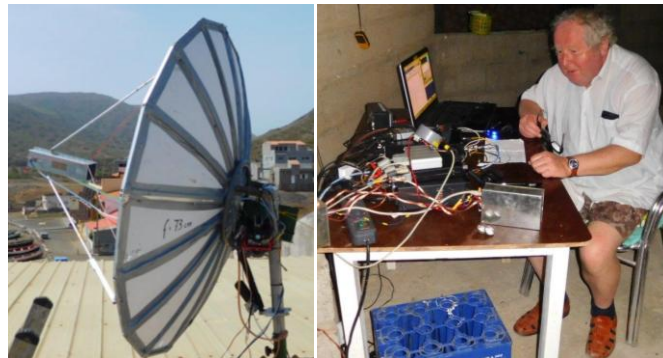


D44TVG's 432 2 yagis & RX box (DL1RPL below)

**D44TVG & D44TVD:** Peter (DL1RPL) [peter@dl1rpl.de](mailto:peter@dl1rpl.de) send news on their results from Cape Verde Island (HK85) – Because of weight limitation we decided not to operate on 23 cm (and used a smaller PA on 2 m). We began operation (D44TVD – Hermann op) on 13 cm on 3 Nov but ran into technical problems that delayed our start until later in the moonpass. We worked using JT65C on 3 Nov at 2234 ZS6EME (18DB), 2240 OK1KIR (18DB), 2244 HB9Q (12DB), 2248 PA7JB (24DB), 2258 ON4AOI (25DB), 2356 OZ5G (23DB), 2310 PA3DZL (21DB), 2318 G4CBW (25DB), 2340 YO3BCT (26DB) and 2344 G4RGK (26DB), and 4 Nov at 0238 W5LUA (19DB) for a total of 11 QSOs. The next day we switched to 9 cm. We worked on 4 Nov at 2004 OK1KIR (21DB), 2008 HB9Q (13DB), 2050 PA0BAT (21DB), 2126 PA3DZL (19DB) and 2126 OF2DG (15DB), and on 5 Nov at 0146 K2UYH (21DB) and 0150 W5LUA (20DB) for a total of 7 QSOs. On the 4 Nov, we also began operation on 70 cm (D44TVG – myself op) offering both DXCC and ARRL contest contacts. All QSOs were on JT65B except one with DL9KR on CW. We worked on 4 Nov at 1954 OK1DFC (22DB), 1958 DF3RU (21DB), 2002 HB9Q (9DB), 2006 LZ1DX (22DB), 2010 DL7APV (14DB), 2014 JA6AHB (18DB), 2018 OZ4MM (15DB), 2022 DK3WG (16DB), 2026 ON4GB (22DB), 2030 ON4IQ (20DB), 2038 UA3PTW (24), 2044 OK1CA (25DB), 2054 DL5FN (21DB), 2114 DL9KR (539) CW, 2126 OK1KIR (17DB), 2134 DL8GP (26DB), 2138 PA0BAT (24DB), 2148 UT6UG (27DB), 2200 UX5UL (32DB), 2228 UT5DL (26DB), 2234 YL2GD (20DB), 2246 NC11 (17DB), 2302 SM7THS (28DB), 2312 ON4AOI (28DB) and 2320 UX0FF (25DB), and on 5 Nov at 0024 PI9CAM (23DB), 0036 K3MF (26DB), 0054 K2UYH (18DB), 0108 DJ4TC (29DB), 0124 G4FUF (29DB), 0152 FR5DN (16DB), 0238 G4EZP (26DB) and 0414 DL8DAU (24DB) for a total of 33 QSOs. On 5 Nov, Herman tried 3 cm but could not get his system working and never identified the cause. No contacts were completed on 3 cm. We were on 6 cm for our final day for microwave operation. We worked on 6 Nov at



2240 HB9Q (15DB), 2256 PA3DZL (18DB), 2304 PA0BAT (21DB), 2314 OF2DG (20DB) and 2324 OK1KIR (18DB), and on 7 Nov at 0030 OZ1LPR (21DB) for a total of 6 QSO. Equipment used was on 432 2 x EF7017 yagis with 380 W at feed, om microwave bands a 1.5 m dish with 100 W at feed on 13 and 9 cm and 55 W at feed on 6 cm. For more information see [www.dl1rpl.de](http://www.dl1rpl.de).



D44TVD 1.5 m dish with 13 cm feed / DL2NDD at op position

**DL7APV:** Bernd [dl7apv@gmx.de](mailto:dl7apv@gmx.de) reports on his experiences on **432 during the ARRL EME Contest** – I finished this year with **30x41** mixed mode. I completed only 12 CW QSOs and 1 on SSB. All the others were on JT65B. Due to bad storm (124 km/h winds) prior to the first leg (Oct) of the contest and another (>80 km/h) two days before the 2nd leg (Nov), I had to repair and re-bent my current array. Luckily the new array really ignored the high winds and is still in fine condx. But due to the repairs, I could not sleep before contest. During the 2nd leg my wife had a birthday party, so my overall operation time was pretty short compared to last year. Some interesting initials found their way into my log during Nov. UB4UAA and US8ICM prior to the contest, and during PA0BAT (3.7 m and 500 W), US6IF, S51LF (possibly the same as S59DGO), A11K (horz only), KD4FOV (on SSB), K1DS (at his FL winter QTH), NU6O, JF3MKC, DL1SBY (single 16 el yagi and 600 W – horz only) and **D44TVG**, RW9ST and after contest **DX7EME for DXCC 140**. I mounted 8 x 11 el yagis on small mast set to vert pol. The Sun noise and noise from other sources showed performance very close to the theoretical values predicted by the VK3UM software. It was a nice surprise to see so many stations on this small vertical antenna. I will continue work on my new array and hope to have it running very soon.

**DX7EME:** Udo (DK5YA) [udo@dk5ya.de](mailto:udo@dk5ya.de) was disappointed with his 432 results from Panglao Island in the Philippines (PJ19vn) -- We were QRV at moonrise on 7 Nov, but found our preamp and RX feed line to have at least 12 dB of loss. This might have been caused by t-storms, which were around almost 24/7. Either a relay or pin diode switch inside our transverter must have died. This island is the world's capitol of t-storms. Since we had no spare, we had no choice but to QRT and dismantle. We make 14 QSOs on 70 cm before we gave up. We were especially happy to give DL9KR another DXCC on CW. Thanks to all your patience and support via PayPal. [See the last NL for more details on the station and team. Udo is looking for ideas on where to go next!]

**F6HLC:** Christian [f6hlc@free.fr](mailto:f6hlc@free.fr) was very disappointed with the drop in CW activity during ARRL Contest this year – It was particularly frustrating to need to arrange contacts on the reflectors. I was happy to add 3 initials on 432 CW without any sked. However, this was for the whole contest! Having separate points for CW and JT might help. 2017 will be the last ARRL contest log from me.

**G3LTF:** Peter's [g3ltf@btinternet.com](http://g3ltf@btinternet.com) Nov EME report – I was active this month on 70, 23, 13 and 6 cm. On 1 Nov, I worked on 6 cm YO2BCT for initial #76 and DXCC 34. **On the contest weekend**, I was mainly on 70 cm working random CW. It was good to find some initials. Three of them were true random QSOs; and would have been missed by those who only use the logger rather than call CQ. On the first pass, I worked I2FHW, SP7DCS, SP6JLW, F6HLC, DL6KAI for initial #472, OZ6OL, K2UYH, K3MF, IK2RTI, OF2DG, DL8UCC #473, DL9KR, KD4FOV #474 on SSB from the 150' Millstone Hill dish in MA, UA3PTW, NC11 and K9MRI #475. On the second pass, I added DF3RU, DL7APV, JA6AHB and OK1CA **for a total on 70 cm of 20x12**. At 2230 I changed the feed to 23 cm and worked IK1MTZ, ON5GS, EA8DBM, DL6SH, OF1LRY and IK1FJI. I shut down at 2400. I know that I missed some of the NA stations, but I am not entering the contest and I worked most 23 cm



stations on the first leg. On my final pass I worked on 23 cm KL6M (with so much tree blockage that I couldn't even see my echo on the SDR) and later VK4CDI, G4CCH, LX1DB on SSB and SP6ITF for a final total on 23 cm of 59x30. CW activity was quite a bit down from previous years. Hopefully next year with the more optimum dates, it will recover. On 13 Nov, I worked on 13 cm N4PZ (569) with his improved system.

**HB9Q:** Dan (HB9CRQ) [dan@hb9q.ch](mailto:dan@hb9q.ch) updates us on operation from HB9Q -- Initials worked from Sept to Nov on 70 cm are K3GYK, KC5WX, IK0IXO, N6DLH, SM5EPO, EA9LZ (CW), PY2RN, KG7P, OZ1SKY, 3DA0MB (CW), UB4UAA, US8ICM, ON4CGX, US6IF, IK1FJI, DL1SBY, CT1CAK, D44TVG, S59DGO, ON4GG, VY2EME, KD4FOV (SSB), KU8Y, K1DS (EL96), S51YL, NU6O, WD4EGF, DX7EME for mixed initial 1001\* and DXCC 160; on 23 cm are LZ4OC, F1RJ, UN7PDP, W1PV, IK1FJI (CW), 4X1AJ, OK8WW (CW), PA5Y, SV3KH, DL8FBD, EA9LZ (CW), RU4HU, DG0FE, 3DA0MB (CW), DL9LBH and K5DN for mixed initial #611\* and DXCC 119; on 13 cm are KN0WS, EA9LZ (CW), 3DA0MB (CW), D44TVD for mixed initial 163\* and DXCC 60; on 9 cm are 3DA0MB (CW) and D44TVD for mixed initial #67\* and DXCC 31; on 6 cm are WD5AGO (CW), EA9LZ, 3DA0MB (CW), ZS6EME and D44TVD for mixed initial #71\* and DXCC 32; and on 3 cm are WA3LBI (FM28), S57RA (CW), K6QPV, EA9LZ (CW), 3DA0MB (CW) and ZS6EME for mixed initial 129\* and DXCC 32. On 1296, I still need the following 12 states to complete WAS: AL, AR, DE, KY, MS, MT, NV, OR, SD, UT, WV and WY. We can work easily stations running 1 yagi (40-70 el) and 15 W or 1.5 m dish and 10 W. Any help is very much welcome!

**IK1FJI:** Valter [valter\\_dls@yahoo.it](mailto:valter_dls@yahoo.it) is QRV on 1296 CW -- Prior to the contest weekend, 1 worked on 3 Nov DF2GB (559/559) for initial #50. In the contest, I had a total of 65 x 28 -- all on CW or SSB. I was especially pleased to work PI9CAM with a fantastic signal on CW (599) and SSB (57). I was also pleased to work KL6M (569/569) #69 and Alaska, and my friend for many years IK1MTZ - we last QSO'd on 2 m CW EME. After the contest on 432 using a single HB 7.7 wl BV yagi and 180 W, I made my first 70 cm EME QSO using JT65B with HB9Q. I also heard well NC11 and some others.

**JA4BLC:** Yoshiro [ja4blc@web-sanin.co.jp](mailto:ja4blc@web-sanin.co.jp) sends news from JA -- I now have a 2.4 m offset dish and tower, which was used on EME by JA6CZD in operation. My first test transmissions were done on 26 Oct, on 3 cm with JA1WQF (549/M). After some measurements to check the blockage on my east window, I worked JA6XED (559/559) at a Moon EL of 13.9 degs and JA8ERE at an EL of 16 degs. On 6 Nov I worked JF3HUC and JA6XED and I tried with K2UYH. All JAs heard AI (449-559) but AI heard none of us. The new offset dish has a much better window to the east. It seems useable at EL down to about 15 degs. My 3 m Cassegrain dish needs minimum EL of 35-40 degs to east. On 9 Nov, I worked JA6XED (559/559) on 10 GHz on random. I now hope to work more NA stations on the microwave bands.

**JA6XED:** Hisao [htk3138ja6xed@kumin.ne.jp](mailto:htk3138ja6xed@kumin.ne.jp) is now QRV on 3 cm -- I am using my 5 m 6 mm mesh dish on 3 cm. Over only the center part (~3 m), laid 2.5 mm mesh. I made my debut on the 3 cm band on 6 Nov. I had a schedule with K2UYH arranged by JA4BLC. I could hear his signal, but I regret that he could not hear me. On 3 cm, I have 70 W, and see 11 dB of Sun noise and 0.9 dB of Moon noise.



JA6XED's 5 m dish with extra screening for 3 cm

**K1DS:** Rick [rick1ds@hotmail.com](mailto:rick1ds@hotmail.com) was QRV on 70 cm EME from his winter QTH in Florida (EL96) -- I was able to erect a single 5 wl yagi on the patio of my condominium. I only operated for a few hours each night during the Nov ARRL contest weekend. The lake here is home to lots of wildlife including a family of alligators. With some help from other Packrats to fix my antenna, cable the gear and then get the JT65B program working, I was on the air. I had only 150 W from an amp that sagged to 100 W when the power supply got warm. On my first pass I worked NC11 (12DB), DL7APV (18DB) and K2UYH (23DB). On the second pass, I added PI9CAM (17DB), HB9Q (16DB), DL7APV (17DB) - DUP, UA3PTW (19DB), DK3WG (21DB) and DF3RU (20DB) for a total of 8x6. All were initials on 70 cm. I copied CW from DL9KR and decoded ON4GG for an hour, but he had no decodes from me. Many thanks to all the QRO big guns who make it possible for a pistol like me to have moonbounce fun.



5 wl yagi used by K1DS in contest on 70 cm

**K4EME:** Cowles [candrus@mgwnet.com](mailto:candrus@mgwnet.com) ARRL EME Contest report -- I had a great time achieving my personal best this year. I worked more stations in the contest than ever before. I am sad to say I did not have a 2 m sister station, AD4TJ, with whom I usually operate. His station was hit by lightning before the contest, but the show must go on! In the first leg, I worked on 70 cm FR5DN, NC11, HB9Q OF2DG, YL2GD, SM7THS, K5QE, OK1CA, K2UYH, DL8FBD, EA9LZ, DK3WG, W7MEM, LU8ENU, N7NW, KN0WS, JA6AHB, K3MF, UA3PTW, DL7APV and VK4EME, and on 23 cm OK2DL, PA3FXB, VA7MM, RA3AUB, DL7UDA, RA3EC, K5DOG, W5LUA, IK5VLS, WA3RGO, OK1CA, ES5PC, HB9Q, NC11, KN0WS, LU1CGB, and N5BF. During the second leg I added on 70 cm SM7THS, ON4GG, K5DOG, OK1DFC, HB9Q, PI9CAM, I1NDP, UA3PTW, and DF3RU, and on 23 cm VE3KRP, SP5GDM, DL0SHF, VA6EME, WA3GFZ, EA8DBM, PI9CAM, UA3PTW, K5DOG, and OF1LRY. I worked PI9CAM and DL0SHF on CW. I had some minor tracking problems due to a rotor issue during the first leg of the contest, and on the second leg, I had a circuit breaker on the power strip powering the 23 cm system repeatedly trip. I had to replace the power strip to correct the problem. Also during the second leg, I had no visible moon due to rain and cloud cover. This took some of my attention away from actually working stations especially on 23 cm. There were many loud stations this year on both bands! On 23 cm in CW mode, both PICAM and DL0SHF were loud even on my 10' dish! I really enjoyed the contest, but missed many stations that I know I could have worked!

**K5QE:** Marshall [k5qe@k5qe.com](mailto:k5qe@k5qe.com) discusses his nefarious plans to complete 432 WAS -- I still need CO, IA, MT, NV, SD, UT, and WY in the west for my 432 WAS. There are some eastern states too. I have come up with the following idea/plan: I will have K7RSM at Communication Amplifiers build up a small single palette amp for 432. It should make about 600-700 W. With that, I will package 2 x 28el M2 with phasing lines and a power divider, along with IC7000 for the rig with a WD5AGO cavity preamp or a WA2ODO preamp, all the changeover relays, and a sequencer with a breakout box. Finally, a feedline of some sort (the host station may be able to provide this). The idea is that I can ship this to a willing host in one of these states and he can put that state on the air on 432 for a few weeks. Everyone that needs that state would have a chance. After some time, then the gear could be repacked and shipped to the next host. I am sure that this idea is certainly not new, but I don't think that it has been done recently. When N5YA and I went on our LA, MS and AL dxpedition, this is essentially the gear that we used -- 650 W (+ or -), 2 x 28 el yagis, and a preamp. We were able to work everyone that needed those states, except for some reason, K9MRI. We did work OK1DFC in all three states, to enable Zdenek to finish WAS. I am sure that I will find that this project is a lot harder to do than it should be, but I can't see getting my WAS on 432 any other way. Please let folks know

about this plan. It will be next spring before anything really happens here, because it is getting really cold in a lot of those places. I welcome advice from others. I chose most of this gear because I have it and don't have to buy it. The IC7000 is the one that I took to the Falklands. I already have a couple of guys that are enthusiastic and want to help. I am anxious to find others that want to be involved. I can create a second setup for the northeastern states that I need CT, NH, RI, and VT. For the host stations, it is very cheap way to get on EME, pass out their state, and see if they really like what we are doing. My phone is 409-787-3830 if you want to talk.

**K8ZR:** Tony (x- WA8RJF) [temanuele@ebulent.com](mailto:temanuele@ebulent.com) has taken on the task of organizing a 902 EME Activity Weekend -- Picking a weekend in the spring that does not conflict with a major VHF Conference, Dayton or the DUBUS EME events presents a bit of a challenge but there seems to be sufficient interest in North America. Since I have limited experience in what constitutes a good EME weekend, suggestions or some ideas/discussion are invited. [I had suggested combining both 902 and 220 on the same weekend. Since the stations involved are primarily in region 2, high declination may not be as important].

**KA1GT:** Bob [ka1gt@hotmail.com](mailto:ka1gt@hotmail.com) reports on [the EME contest](#) and plans for 1296 -- [worked 10 stations on 432](#) the last weekend of the EME contest, [making 30 contacts in all](#). I now have a 2.4 m dish operational on 1296 (RX only) using an OK1DFC style septum feed. I'm currently working on preamps, sequencer and switching before moving on to the TX phase of the project. I have cavity amplifiers, but they haven't been fired up in a several decades! Though it's very small, I may also try to use the 2.4 m dish on 432 when I take down my backyard tripod mounted 2 x 28 el yagi array for the winter.

**KNOWS:** Carl [carlhasbargen@q.com](mailto:carlhasbargen@q.com) writes about the [Nov contest weekend](#) and the end of his 2017 EME season -- I know there was some controversy about the ARRL EME contest dates this year, but I was hoping the earlier dates would let me compete without having to worry about a snowstorm this year. Alas, I only got 5 hours of activity in before I had to shut down for the final weekend. The weight of snow collapsed the roof of my operating tent during a QSO with DK3WG! I figured I needed to pack up before I got snowed in and could not get home. It was a good reminder of why I took the mesh off my flimsy 20' 432 dish before the last week of the contest. This meant [I had less 23 cm QSOs this year than last, but my 13 cm QSOs from Sept mean that I ended up with a higher final score this year](#) anyway! My 5 hours this month resulted in JT65C QSOs with EA8DBM (19DB), YL2GD (15DB), SP5GDM (15DB), WA2FGK (14DB), DK3WG (14DB) and VA6EME (12DB). I had initials with G4E2P (24DB), G4CDN (16DB), DL6SH (10DB), OF1LRY (13DB), W1PV (18DB), EW1AA(26DB) and VE4SA(15DB). My thanks to W6YX for enduring a VERY sloppy CW QSO using JT software. Those 14 QSOs brought [my total contest score up to 11x10 on 13 cm, 18x17 on 70 cm and 36x29 on 23 cm for a total of 65x56](#). In 2017 I was only on the Moon for 7 days - 70 cm x 2, 13 cm x 2 and 23 cm x 3, but they were mostly contest days, so I added 108 QSOs into the log book in 2017, including 46 initials. Dec will mark the 5th anniversary of my first EME QSO. It was with OH2PO on 70 cm, so I was sad to not work him for the first time this year. My initial (mixed) counts are up to #11\* on 13 cm, 66\* on 70 cm and 91\* on 23 cm. I'm still not sure if it would be worth setting up my gear next year for 6 cm or 3 cm, as I might only have 7 days on the Moon again in 2018 to divide between all bands. If I win the lottery, I may just retire AND upgrade my equipment. Thanks to you all for a rewarding 2017. I won't list too many specific goals for next year, but OK1DFC?? I did not get you on 23 cm in 2016 or 2017 from your home. Perhaps if we are both free the same weekend and neither one is doing a dxpedition, we can make it work in 2018. And if G3LTF has not given up on me, I would love to try CW again at some point. Have a blessed holiday season, everybody.

**N1H:** Frank [frank@NC1I.COM](mailto:frank@NC1I.COM) sends last minute information on his 1296 dxpedition to NH -- As long as the WX cooperates we will be on 23 cm from NH (FN33sa) on 30 Nov. The entire station including the dish has been set up and tested and all looks good. Everything is packed and ready to go. We made a second visit to the site to confirm our actual setup location on the property. The system is a 2.4 m dish, KL6M Septum feed, G4DDK preamp, Kuhne 1 kW LDMOS amp (500-600 W at the feed) and Kuhne TR 1296 H transverter, GPS locked. On Thursday 30 Nov, we plan to be operational for our moonrise at 1945 and will stay on at least up until moonset in EU. If there is enough activity/interest we will try and stay on later. On Friday, 1 Dec, we plan on being operational for our entire moon pass. Moonrise is at 2017 and moonset is at 0909

Saturday 2 Dec. Finally on Saturday, we plan on being operational from our moonrise at 2058 and will stay on at least until moonset in EU. Our location is somewhat remote (dirt/gravel roads) with a fairly steep incline. If the WX is not good we may need to cancel the operation. The current long range (very long range) forecast is favorable but forecasts out that far are obviously not that reliable. It appears as though there will be at least one other 23 cm dxpedition over these same dates, so we are planning on operating lower in the band than normal for a dxpedition. [I see only a 432 dxpedition]. Obviously we will need to see how the band looks once we are set up but as of now we plan on operation on 1296.072. We will automatically send cards to every station worked. We will use qrz.com addresses unless informed otherwise. It may take us a few weeks to get cards printed, but we will get them out as soon as we can. If anyone would like to send a return card they can send it to my qrz.com address. Updates will be posted on MoonNet. We will be logged into HB9Q during our operation.

**N5BF:** Courtney [courtney.duncan.n5bf@gmail.com](mailto:courtney.duncan.n5bf@gmail.com) discusses recent 23 cm EME happenings -- My Microwave Update paper "Working out the 23 cm EME Band" was well received. The presentation was on 27 Oct in Santa Clara, CA. I enjoyed eyeball QSOs with several EMEers and microwave luminaries including AD6FP, AD6IW, KG6NUB, W6NL with the W6YX (Stanford University) EME group, W1GHZ, VE4MA, WA9FWD, W5OM, KC7SUW, WA1MBA, WA6KBL, W6DQ, K6JEY and N6MN. In addition to meeting with Mike, KL6M, we also exchanged QSLs. I will publish my paper and presentation on my website and will announce the link next month. A big thanks to N9JM and K6ML for running such an excellent conference. New stations worked on 23 cm EME since my last report are K5DN for mixed initial #105\*, then [in the final weekend of the ARRL Contest](#) DL0SHF #106 - the only *un-chopped* solid-copy CW signal I've ever heard off the Moon, EA8DBM #107 and new DXCC, UN6PD #108 - a tough one to the west for DXCC Kazakhstan, OF1LRY #109 for DXCC Finland and 9A5AA #110 for DXCC Croatia. Overall, after removing DUPs, [my final score was 49x34 for 166,600 points](#). Heartbreaking were near misses this year with VK4RF, a QRP station on JT, who had to QRT in a thunderstorm, and VK5MC who answered my JT CQ on CW. I switched quickly over to CW, but was not able to copy the full callsign in 45 minutes of trying. I'm currently QRT while I have my W6PQL solid state amplifier serviced and update the station to a more robust control system in preparation for RX improvements and an updated PC. I plan to be back on the air in a few weeks.

**NC1I:** Frank [frank@NC1I.COM](mailto:frank@NC1I.COM) send an update on his recent EME operation -- We were active on both 432 and 1296 in Nov, especially [during the contest weekend](#). Bob (W1QA) was able to get here for moonrise on 4 Nov and add many QSO's on 1296, while I continued to focus on 432. Our totals for the two contest weekends were [75 unique calls with 43 multipliers on 432 and 46 unique calls with 31 multipliers on 1296](#). [The total for both bands is 121x74 for a score of 895,400 points](#). I think what surprised me the most was to see 22 unique NA calls in the 432 log. Hopefully that is a sign of renewed interest! On 432 we worked starting on 31 Oct DL8DAU, LA3EQ (17 el yagi and 100 W) and ON4CGX (4 x 13 yagis and 100 W), on 1 Nov K5DOG, on 3 Nov UB4UAA (2 x 10.5 wl yagis and 400 W), VA3ELE, K9MRI, US8IMC (8 x 18 el yagis and 500 W), VA3ELE, DL8DAU, G3LGR, OK2AQ, DK5SO, MX0CNS, DL6KAI, US6IF (8 x 18 el yagi and 1000 W), and G6HKS, on 4 Nov VY2EME, PY2RN, K1DS (1 x 5 wl yagi and 150 W), US6IF, VA3ELE, OZ6OL, S51LF (2 x 39 el yagi and 800 W), N4BH, G3LTF (CW), I2FHW (CW), DL8UCC (CW - 2 x 9 wl yagis and 500 W), F6KBF, W7MEM, LU8ENU, JE2UFF, JA6AHB, [D44TVG](#), OK1CA, S59DGO, DF3RU, G3LGR, OK2POI, UB4UAA and OK2AQ, on 5 Nov G6HKS, DK1KW, YO2LAM, W5RZ (4 el yagi and 60 W), KD4FOV (150' Haystack dishand 50 W), S51YL (believed to be the same station as S59DGO), KF8MY, DL8DAU, AE7OV, W5RZ (3 el yagi and 60 W), WD4EGF, PI9CAM, SM7THS, PA2CHR, KD4FOV, SM5EPO, RW0LDF (2 x 25 el yagi and 250 W), JS3CTQ, JH7OPT, VK4EME, and VK3NX (4 x 26 el yagi and 150 W), on 6 Nov N1DH, on 9 Nov HB9Q and DK0TE, on 11 Nov DL8DAU, DD0NM, PY2RN, PA3DZL, IK0IXO, GI6ATZ (2 x 28 el yagis and 500 W on horz only) and JA7AHB, and on 12 Nov IK0IXO, OK2AQ, ON4CGX and HA1YA (16 x 32 el yagis and 40 W). We worked on 1296 starting on 2 Nov N5BF and W1PV, on 4 Nov PA3FXB, LU1CGB, WA3GFZ, K2UYH, ES6FX, OK1YK, OK2ULQ, I0NAA, RA3AUB, and DL7UDA, on 5 Nov EA8DBM, SM3KPX, UA9FA, UA3TCF, RU4HU, EW1AA, OF1LRY, ON5GS, LZ4OC, VE4MO, WA3GFZ, UA3PTW, VE4MA/K7, G4FUF, HB9Q, N5BF, W1PV, ZS1LS, K2UYH, K5DOG, RA3EC, WA6PY (CW), KL6M (CW), I5MPK (CW), W4AF (CW), SP6ITF (CW), VE6TA (CW), N8CQ (CW), 9A5AA (CW),



IK1MTZ (CW), and PA0PLY (CW), and on 9 Nov F1RJ. All QSOs were on JT unless noted otherwise. I do not expect to be active from home the first weekend of Dec due to our planned 23 cm dxpedition to NH.

**OK1CA:** Franta [strijavka@upcmil.cz](mailto:strijavka@upcmil.cz) reports on the **ARRL Contest** -- I was QRV on **70 cm in the Nov** part of the contest only during the night from Saturday to Sunday. **I worked 9 CW QSOs** and added initials with VK4EME #182, F6HLC #183 and KF4FOV #184. I had to the repair my old notebook computer to operate JT. It had a problem with time synchronization. **I worked 7 QSO using JT65B** and added digital initials with VK4CDI {#18}, **D44TVG {#19}** and LU8ENU {#20}. **My overall result in ARRL EME Contest was on 70 cm 36x23.**

**OK1KIR:** Vlada [vlada.masek@volny.cz](mailto:vlada.masek@volny.cz) and Tonda send a shorter report than usual on EME in Nov – We QSO'd on 13 cm with JT65C, on 2 Nov while waiting for D4 dxpedition at 1828 JA6AHB (15DB/4DB) XB, 1845 ON4AIO (9DB/6DB), 1911 G4CBW (2DB/1DB) for digital initial {#53} and 1920 ZS6EME (8DB/1DB), and on 3 Nov at **2236 D44TVD (16DB/18DB)** for the new DXCC; on 9 cm using JT65C, on 4 Nov at 2002 **D44TVD (15DB/21DB)** for digital initial {#27} as the 1st OK-D4 QSO and new HK field; and on 3 cm with QRA64D, on 5 Nov while waiting for D4 dxpedition at 19:27 S57RA (15DB/15DB) for digital initial {#152} and 2100 PA3DZL (16DB/11DB) {#153} – **we spent almost two hours calling D44TVD without finding a trace on either sides, so, no 3 cm QSO from D4;** on 6 cm, 6 Nov at 2144 PA3DZL (18DB/16DB) with JT4F for digital initial {#35}, 2201 OF2DG (18DB/16DB) {#36} JT4F, 2236 saw D44TVD but not able to decode with JT65C (wrong decoder settings in WSJTX) and finally **at 2322 D44TVD (23DB/18DB) {#37} for 1st OK-D4 QSO and new HK field;** on 70 cm with JT65B, on 4 Nov at **2124 D44TVG (19DB/17DB)** for digital initial {#215} new DXCC and HK field, and **on 8 Nov at 2034 DX7EME (19DB/19DB) {#216}** and PJ as new field – both these QSOs were made very easy thanks to our ability to steer linear pol of our feed.

**OK1TEH:** Matej [ok1teh@seznam.cz](mailto:ok1teh@seznam.cz) had a conflict in Nov between tropo and EME – The ARRL's Nov EME contest was running parallel with the very popular Marconi Memorial Contest, which is the biggest 2 m telegraphy contest in EU. I took part as I love CW and **only went on EME when the tropo contest was over.** I worked **on 70 cm** with my small 23 el yagi VK4EME (27DB), SM7THS (26DB) for mixed initial #116\*, DL5FN (23DB), UA3PTW (16DB), ES5PC (22DB), DL7APV (23DB) and JA6AHB (23DB). VK4EME produced a surprisingly strong EME signal at times. I hope Allan will apply for a high power license soon, and we'll then make it on CW too. SM7THS was also a nice surprise; he upgraded his antenna to 8 x 25 el DG7YBN yagis and had a very nice signal.

**ON5RR:** Marc [moonbouncer@skynet.be](mailto:moonbouncer@skynet.be) was **not active during the Nov contest weekend** – I had planned to be QRV but bad WX - rain, wind and even hail kept the dish tied down. This year there has been real low activity from my side, but I have been building/programming to have an improved station in the future. (In May, we had to put to sleep our two dogs, Luna and Moonlight. They were with us for 14 and 15 years. We now have a new pup, an Akita Inu called Yagi). Surely, I will be more active the coming months.

**PA0PLY:** Jan [pa0ply@pa0ply.nl](mailto:pa0ply@pa0ply.nl) sends info on his **activity during the ARRL contest in Nov** -- I was active during both the Saturday and Sunday moonpasses. I spent most of my moon time on 23 cm where I use a 3 m dish with an OK1DFC septum feed, 150 W PE1RKI SSPA and G4DDK LNA. Toward the south, my house blocks the dish. During this period, I moved to 70 cm. All QSOs were on JT unless noted otherwise. I worked on 4 Nov, on 1296 RA3AUB (15DB/O), OK2DL (18DB/22DB), F1RJ (17DB/16DB), OK1YK (14DB/14 DB) for an initial (#\*), RA3EC (14DB/O) (#\*), ES6FX (13DB/17DB), OF1LRY (17DB/18DB) (#\*) and YL2GD (21DB/O), and on 432 YL2GD (21DB/O), OK1DFC (28DB/O), HB9Q (13DB/O) and SM7THS (23DB/O), and on 5 Nov, on 1296 UA3PTW (14DB/18DB), WA3RGQ (24DB/24DB) (#\*), DL7UDA (21DB/20DB), EA8DBM (11DB/O) (#\*), EW1AA (26DB/O) (#\*), K5DOG (19DB/12DB), ON5GS (16DB/10DB), W6YX (599/569) CW (#\*), 9A5AA (559/539) CW (#\*), K2UYH (15DB/17DB), N5BF (21DB/25DB) and NC1I (599/539) CW. I missed ZS1LS as he was heard just at the end of my Moon window. His sign dropped very rapidly from (24DB to 28DB) before he found me. Also VE4MA/K7 had good signal here (23DB) from only a 1.5 m dish and 250 W, but Barry could not copy me. I made some CW QSOs, but need to work on my rhythm after not touching the key for years. [There are many easy to use freeware CW keying programs available... Jan provides a free directory of active EME stations at [www.pa0ply.nl](http://www.pa0ply.nl). Thank you – this is great service to the EME community].

**PA2DW:** Dick [gtc@kpnmail.nl](mailto:gtc@kpnmail.nl) reports on his 23 **cm operation during the ARRL EME Contest** – In Oct, I worked using CW PA0SSB (Jan is back and planning more activity), G3LTF, SM4IVE (loud), SP6JLW and W6YX (super signal). I also tried JT to QSO EA9LZ for new DXCC. Unfortunately the sigs were not strong enough for CW. My thanks to Zdenek for an outstanding dxpedition. In Nov, I tried to add more contest QSOs, but had a problem with my moon tracking and the Moon was not visible. I only added RA3AUB. I heard DL6SH and ON5GS on CW. Both had good signals even with the dish off the Moon! My rig is a 2.4 m dish with 250 W SSPA and K3/TR1296H with GPS-locking. I am preparing for 3 cm EME. I already have 18 W on TX and a 0.6 dB NF for RX, but still need to improve my tracking system.

**SM7STHS:** Sverker [sm7ths@live.se](mailto:sm7ths@live.se) writes about his return to **432 for the ARRL contest** -- Inspired by last year's good results using 2 yagis, I built an additional 6 yagis for a more permanent setup. I finished the new array of 8 x 25 el DG7YBN yagis just days before the first part of the ARRL contest. I had some problems during the Oct weekend, but nothing I could not fix fairly quickly. All QSOs were on JT65D unless noted otherwise. I easily worked before the start of the contest on Friday EA9LZ (13DB). During the Oct weekend, I worked NC1I (4DB), OF2DG (9DB), 4Z5CP (21DB), K3MF (10DB), KN0WS (20DB), K4EME (16DB), HB9Q (8DB), DL7APV (8DB), DF3RU (7DB), VK4EME (15DB), DD0MN (20DB), OZ4MM (559) on CW, UX0FF (13DB), DL9LBH (22DB), JE1TNL (23DB), JE2UFF (21DB), LU8ENU (16DB), K5QE (12DB), KA1GT (16DB), PA0PLY (16DB) and UA3PTW (10DB). The following weekend, the 3DA0MB expedition was on the air and I worked them fairly easily (19DB) followed by G4FUF (12DB), FR5DN (17DB), I1NDP (9DB), ON4GG (9DB), SM7GVF (15DB), DK4RC (17DB) and DL8DAU (20DB). On the final weekend, I worked ON4GG (8DB), G4EZP (18DB), K2UYH (9DB), K5DOG (18DB), YL2GD (13DB), OZ6OL (11DB), VK4CDI (20DB), OK1DFC (6DB), RW0LDF (21DB), JA6AHB (15DB), LX1DX (9DB), DL9KR (579) on CW, OK2POI (20DB), G6HKS (20DB), YO2LAM (20DB), I1NDP (9DB), DK5SO (27DB), PI9CAM (4DB), DL8DAU (16DB), KD4FOV (14DB), DL5FN (15DB), OK1TEH (20DB), ES5PC (13DB), PA0BAT (18DB) and D44TVG (dxpedition) (21DB) for an **overall result of 46x27**. I tried to work the DX7EME dxpedition, but did not hear them at all. Not even the slightest trace.

**VA3ELE:** Peter [va3ele@gmail.com](mailto:va3ele@gmail.com) was **QRV on again 432 EME for the Nov contest weekend**, but had many obstacles -- Within a few minutes of starting operation a power supply in my PA blew. I lost quite a bit of time connecting up a spare, just to find that it was cutting out from overheating half way through a sequence. Frustrated, I started trouble shooting the first amp and found it was just a small resistor that had blown open. Searching through all my parts, I could not find a suitable replacement. At that point, I was even more frustrated. I started picking through my junk box of crispy/fried components and found one on a PS board that was fried about 3 years ago when my amp arc'd. The board was thoroughly cooked, but the one and only resistor that was not well done was the one I needed. I got a meter on it, and it was within tolerance. After the resistor swap, I was back in business – I thought. After a couple hours of listening to CW signals, I decided it was time to give TX a try, and promptly blew my cavity preamp. Grrr, now I was really frustrated! I pulled out my spare and quickly swapped it out. On the first transmission there was a bang and another preamp was toast. By then, the steam was rising off my head. I had operated so many tropo QSOs with this system and had not blown a preamp in a long time. After digging around, I found my last spare, not the lowest NF, but, better than the TS2000 with 100' of RX line. I decided to stop trying CW and returned back to JT65. From then on, things ran fine. I worked on 4 Nov at 0204 DL7APV (10DB), 0220 ON4GG (15DB), 0227 NC1I (7DB), 0443 K3MF (20DB) and 1028 VK4EME (23DB), and on 5 Nov at 0044 HB9Q (16DB), 0105 DF3RU (17DB), 0112 UA3PTW (17DB), 0146 OK2POI (25DB), 0154 YL2DG (24DB), 0209 G4FUF (22DB), 0221 K2UYH (12DB), 0230 FR5DN (23DB), 0252 DK3WG (15DB), 0355 KD4FOV (20DB), 0524 PI9CAM (9DB) and 0710 SM7THS (20DB) for **a total score of 17x14**. Afterwards, I realized that I did not have my spare TS2000 set up for CW. My regular TS2000 was out for repair; it has its RX and TX lines split.

**VA7MM:** Mark (VE7CMK) and Toby (VE7CNF) [va7mm@rac.ca](mailto:va7mm@rac.ca) send their EME contest activity report – We were **QRV on 1296 for both legs of the ARRL EME contest**, multi-operator, all mode. **Our overall summary for the two weekends is 60 QSOs (11 CW, 29 digital) x 33 multipliers for 198,000 points.** This score was our second highest in 15 years of participation. During the two weekends we added 9 initials (JA8SZW, VK3NX, ZS1LS, G4YTL, W1PV, IK1FJI, ON5GS, F1RJ and XE1XA) and

bring us to mixed initial #213\*. We're noticing a continuing decline in CW contacts relative to digital with this year being our lowest CW QSO ratio since we started in 2003. I hope this is not a telling indication of the future modes to be used for EME. We're running an OZ9CR cavity amplifier that produces about 200 W at the feed of our 3 m dish. On receive we have a 0.33 dB NF preamp with about 35 dB gain. We're planning to operate next in the 1296 SSB contest in the new year and are otherwise available for scheduled contacts, please e-mail.

**W3HZU:** Tim (W3TWB) [barefoot.tim@gmail.com](mailto:barefoot.tim@gmail.com) writes that the W3HZU Keystone VHF Club (FM10pa) has put up a 4.5 m dish and expects to be QRV on 1296 EME very soon. They have a 100 W SSPA, and plan to bring a 600 watt amp on line after initial testing. The club Facebook page is <https://www.facebook.com/groups/311697959703/>.



**W3HZU's 4.5 m dish with 23 cm feed**

**W6YX:** Gary [ad6fp@lbachs.com](mailto:ad6fp@lbachs.com) reports on the Stanford Club's [results for the Oct and Nov ARRL EME Contest weekends](#) – We [operated on 1296 CW only](#). Conditions were excellent the Oct weekend but not as good as Nov. AD6IW was the operator for both weekends. [We ended with 76 QSOs](#) with OK2DL, OZ4MM, SM3AKW, RA3EC, N8CQ, K5DOG, OK8WW, UA3PTW, 9A5AA, I5MPK, SP6JLW, G3LTF, IK5VLS, F1PYR, W4AF, SP3XBO, VE4SA, WA6PY, DF3RU, VE6BGT, PA3FXB, N5BF, SM6PGP, VA7MM, LU1CGB, G4CCH, K2UYH, WA2FGK, VK2JDS, JH1KRC, VK3NX, JA4BLC, VK4CDI, JA1WQF, VE4MA, IK1FJI, IZ1AEM, EA9LZ, OF2DG, RA3AUB, IK2RTI, XE1XA, SM4IVE, SM2CEW, PA0SSB, SP6ITF, ES5PC, PA2DW, OK1KIR, IK3COJ, NC11, WA9FWD, YL2GD, DL6SH, VE6BGT, K5DN, VE4MA/K7, DK3WG, DL0SHF, EA8DBM, N4PZ, VE6TA, KL6M, IK1MTZ, K8WS, WB8HRO, VA6EME, WA3GFZ, VK5MC, I1NDP, ON5GS, OF1LRY, P19CAM, DL7UDA, OK2ULQ and PA0PLY. More details can be found at <https://w6yx.stanford.edu>. We're looking forward to the 23 cm SSB Funtest, as well as the DUBUS contest series.

**K2UYH:** I (AI) [alkatz@tcnj.edu](mailto:alkatz@tcnj.edu) reports -- Nov was again filled with [EME contest operation](#) and multiple expeditions. During parts of the contest, I was joined by NE2U. George's presence was greatly appreciated. We worked on 4 Nov starting on 432 using CW at 0105 I2FHW (559/0), 0111 G3LTF (569/569) and 0115 SP7DCS (559/559), switched to JT65B at 0151 SM7THS (16DB/9DB), 0207 DL7APV (O/O), 0231 OF2DG (O/O) DUP, 0246 OZ6OL (O/O) and 0250 K1DS (O/O) for mixed initial #957\*, back to CW at 0307 DL9KR (589/549), and then using JT65B at 0319 US6IF (O/O) for mixed initial #958\*, switched to 1296 CW at 0356 IK1FJI (569/579) for initial #384, 0401 EA8DBM (569/589), 0443 DL0SHF (589/599) and 0458 WA2FGK DUP, then on JT65C at 0512 NC11 (6DB/7DB), back to 432 on JT65B at 0605 F6KBF (20DB/O) #959\* - then had very high noise on 432 but it fortuitously stopped before our VK/JA window, 0857 VK4CDI (9DB/O) and 0903 VK4EME DUP, and on 1296 CW at 0950 VK5MC (559/559) to end the moonpass. On 5 Nov, we started [on 432 to enable a QSO at 0048 D44TGV \(19DB/O\) #960\\* and DXCC 132](#) – would have liked to try CW but no time, switched immediately to [9 cm at 0140 D44TVD \(24/O\) for mixed initial #48\\* and DXCC 28](#), then back to contest on 432 JT65B at 0211 G4FUF (O/O), 0217 VA3ELE (12DB/16DB) and 0239 DL9LBH (O/O) #961\*, switched to 1296 CW at 0324 XE1XA DUP, 0329 9A5AA (579/569), 0333 VE6TA (579/569), 0339 ON5GS (559/569), 0344 VE4SA (569/569), 0348 OK2ULQ (579/559), 0355 N4PZ (579/589), 0404 VE6BGT DUP, then on 1296 JT65C at 0413 F1RJ (4DB/O) mixed initial #558\*, 0420 K5DOG (10DB/O) DUP, 0425 NC11 (8DB/7DB) DUP, 0431 VE4MA/7 (7DB/13DB), 0437 VE3NXX (16DB/9DB), 0507 SP6JLW (579/579), and 0528 PA0PLY (17DB/15DB), switched to 1296 CW at 0546 IK1MTZ (569/569), 0555 KL6M (579/579) and 0558 NO0Y (569/569), back to 1296 JT65C at 0628 WA3GFZ (10DB/18DB), 0633 LU1CGB DUP, on 432 JT65B at 0945 JE2UFF DUP, 1110 JS3CTQ (11DB/9DB) and 1127

RW0LDF (23DB/16DB). [We end with mixed mode total on 432 of 46x29 and on 1296 66x39](#). After the contest on I ran 3 cm tests on 6 Nov with JH4HUC, JA6XED and JA4BLC on CW. They all heard me reasonably well, but I heard nil. I believe the problem is with my 10,450 RX. I am working on a fix for the next high Moon. I did work on 3 cm, on 11 Nov at 1710 VK3NX (O/O) for my first CW QSO with VK, initial #27 and mixed initial #32\*. On 7 Nov I worked on 432 using JT65B at 1340 DX7EME (21DB/23DB) JT65B #962\* and DXCC 133. I initially tried on CW, but they had problems. I was pleased to finally QSO the Philippines after years of trying before I had to QRT for QRL. [I also tried to QSO D44TVD on 13, 6 and 3 cm but not get a window when they could run with me.](#)

**NETNEWS:** [I0NAA](#) now detected 3 pulsars on 1300 MHz. Mario expects to reach more 10. [N4PZ](#) was QRV [on 1296 for the final contest weekend and made about 30 QSOs](#). Steve is now back on 13 cm with 300 W and new VE4MA Super feed, and is looking for skeds. [EA8/G4RGK](#) will be QRV on 432 EME during holiday from 29 Dec to 5 Jan. [V31EME](#) latest info has operation will start on 27 Nov, but not clear if this includes 432. [KD4FOV](#) was on 432 SSB with 150' Millstone Hill dish in MA and 50 W.

**FOR SALE:** [N4PZ](#) has for sale a DEMI latest version 1296/144 transverter, and a Kuhn 1296/144 transverter. Both work perfectly. Contact Steve at [n4pz@live.com](mailto:n4pz@live.com) if interested. [PA0PLY](#) is looking for order of his XLNAs (10 GHz LNAs). 25 PCBs have been tested and expects to have units available for shipping in Dec. Jan's KLNAs (24 GHz LNAs) are still in the prototype phase. He expects to be ready for delivery sometime in March. Write [pa0ply@pa0ply.nl](mailto:pa0ply@pa0ply.nl) or see [www.pa0ply.nl](http://www.pa0ply.nl) for more details.

**THE RADIOASTRONOMICAL CORNER:** In the last NL I wrote about the neutron star and gravity wave research taking place using the timing of arrays of pulsars. Since then I found some interesting articles on this topic. Check out: [https://gwic.ligo.org/thesisprize/2011/van\\_haasteren\\_thesis.pdf](https://gwic.ligo.org/thesisprize/2011/van_haasteren_thesis.pdf), [https://compstar.uni-frankfurt.de/files/lectures\\_barcelona\\_2014/Hessels\\_Barcelona2014.pdf](https://compstar.uni-frankfurt.de/files/lectures_barcelona_2014/Hessels_Barcelona2014.pdf), [http://www.pulsarastronomy.net/IAUS291/download/Oral/IAUS291\\_HobbsG.pdf](http://www.pulsarastronomy.net/IAUS291/download/Oral/IAUS291_HobbsG.pdf).

**FINAL:** This month we have the DL7APV's 2018 Moon Calendar and F5SE's 2018 Moon Tables that show at a glance what the EME conditions will be like any time during the year. TNX Bernd and Franck!

► The dates for the 2018 ARRL EME Contest has been confirmed, and are in DL7APV's Calendar: 29-30 Sept for 13 cm & Up, 27-28 Oct for 50 thru 1296 and 24-25 Nov for 50 thru 1296.

► **EME2018 CALL FOR PAPERS:** With less than one year to go, I want to invite you to submit papers and presentations for the conference. We will have three ways of for participants to present. 1) The classical presentation of about 30 minutes in the main conference room. Slides, small movies and sound examples can be presented during the talk. 2) Poster presentations are a way of presenting your story/information on a big piece of paper (the poster). Posters will be on the wall of the conference room during the whole conference so everybody can have a look and read them anytime they like. 3) Table top presentations are given from behind a table. You present your information, showing your stuff on the table before a relatively small but highly interactive audience. You choose when, for how long or how many times you want to do such a presentation. It's up to you. We offer all three of these ways of communicating because not all subjects are suited for a full size classical presentation; yet, they might be very interesting for a poster or a table top presentation. And, not everybody is happy to tell their story before a big audience. Using these three ways of communicating, gives you the opportunity to choose the way that suits you and your subject the best. For now it's good enough just to send an abstract. The deadline for abstracts is April 2018. The deadline receipt of the full presentations is June 2018. Please send your contributions to [jvm@netvisit.nl](mailto:jvm@netvisit.nl).

► If your interested hearing more about VK7MO fantastic 10 GHz Grid tour, Rex has put a presentation at [https://youtu.be/1czPqb\\_7k7Q](https://youtu.be/1czPqb_7k7Q). The talk is in four parts: 1. Perth Radio Group, 2. EME Propagation (5:38), 3. Grid Tour (27:20), 4. 10 GHz EME World Record (59:59). You can skip to the parts that interest you.

► DJ3JJ notes that feed shown in the Sept NL with 9K2YM's dish is a RA3AQ not an OK1DFC type feed.

► G4NNS writes that a video of the Goonhilly EME tests can be found at <http://www.txfilms.co.uk/txfactor/current-show.html>.

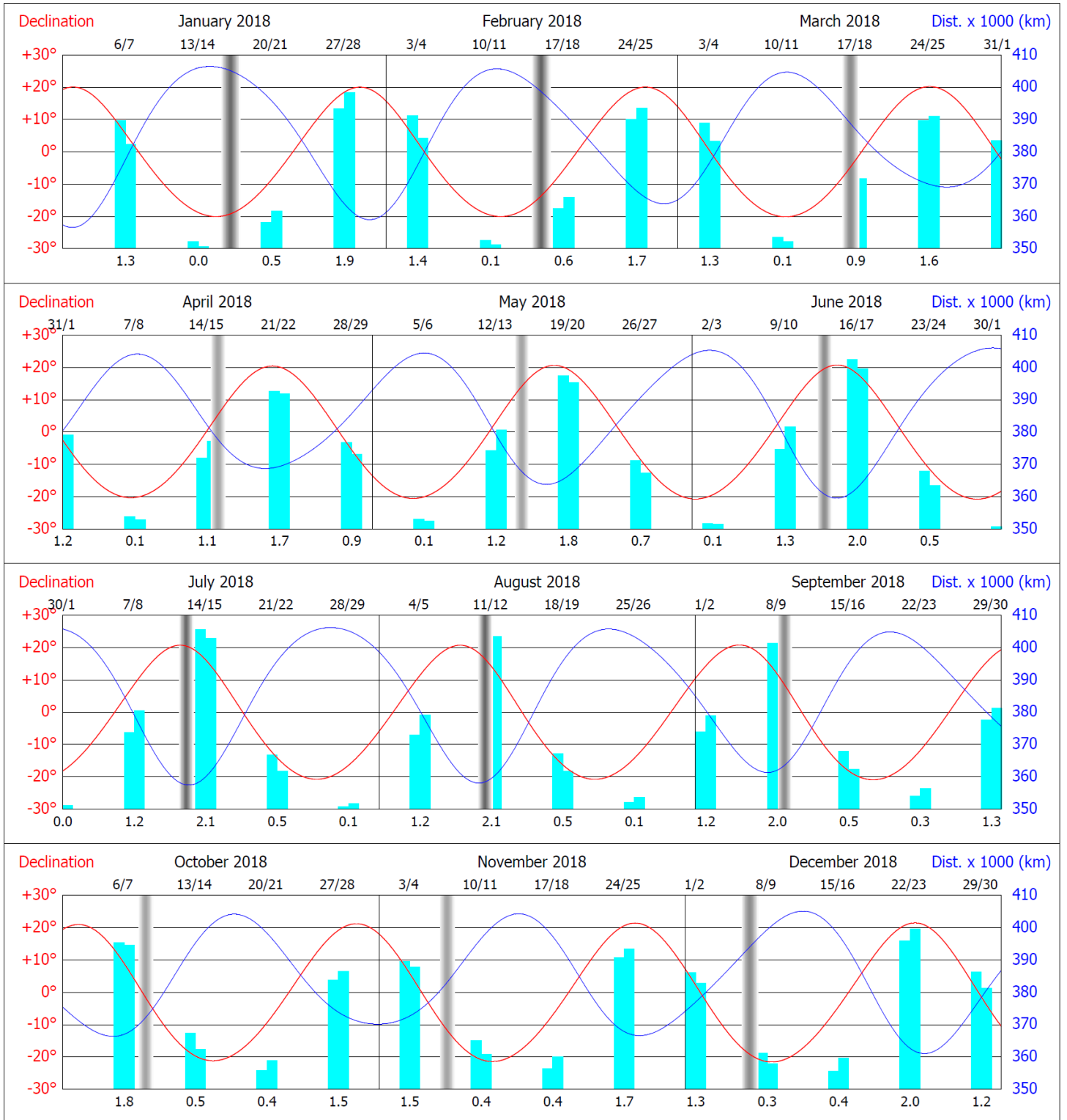
► Please keep the news and reports coming. Despite many negatives, EME continues to grow. We hope to CU of the Moon. 73, AI – K2UYH & Matej, OK1TEH.

**Lunar Weekend Calendar 2018 by DL7APV**

2400_Sat/ 0000 Sun	Decl/ deg	Loss (dB)	Sun off- set/°	Temp 432	contest	Comments
Jan 06/07	+5,0	-0,9	112	20		Day PM
Jan 13/14	-19,4	-2,2	34	100		Day PM
Jan 20/21	-9,3	-1,7	-46	25		Day AM
Jan 27/28	+17,8	-0,2	-130	40	SSB Cont Sat 13 Sun 23 cm	Night
Feb 03/04	+2,3	-0,8	131	25		Night
Feb 10/11	-20,2	-2,1	52	180		Day PM
Feb 17/18	-6,3	-1,5	-27	25		Sun close
Feb 24/25	+18,9	-0,4	-113	40	DUBUS CW 2m/70cm	Day AM
Mar 03/04	-0,5	-0,8	152	30	<a href="#">Eu VHF/UHF Tropo</a>	Night
Mar 10/11	-20,7	-2,1	71	160		Day PM
Mar 17/18	-3,2	-1,3	-8	25		Sun noise
Mar 24/25	+19,4	-0,6	-97	35	DUBUS CW 13cm	Day AM
Apr 00/01	-3,3	-1,0	172	30		Night
Apr 07/08	-21,0	-2,1	90	80		Day PM
Apr 14/15	-0,3	-1,1	11	25		Sun close
Apr 21/22	+19,3	-0,6	-81	30	DUBUS 23cm & ARI EME mtg	Day AM
Apr 28/29	-6,3	-1,2	-169	25		Night
May 05/06	-20,8	-2,2	110	45	<a href="#">Eu VHF/UHF Tropo</a>	Day PM
May 12/13	+2,5	-1,0	31	30		Day PM
May 19/20	+18,5	-0,4	-65	20	ARI & DUBUS 6cm & Dayton	Day AM
May 26/27	-9,4	-1,5	-150	30		Night
June 02/03	-20,2	-2,2	128	35	<a href="#">EU 23&amp;up Tropo &amp; HR (DL)</a>	Night
June 09/10	+5,1	-0,9	51	30	<a href="#">ARRL VHF Tropo</a>	Day PM
June 16/17	+17,1	-0,2	-48	15	DUBUS CW 3cm	Day AM
June 23/24	-12,3	-1,7	-132	35		Night
July 00/01	-19,0	-2,2	147	30		Night
July 07/08	+7,9	-1,1	70	30	<a href="#">Eu VHF/UHF Tropo</a>	Day PM
July 14/15	+15,3	-0,1	-29	20	DUBUS CW contest 9cm	Sun close
July 21/22	-14,9	-1,7	-114	40	<a href="#">CQ WW VHF</a>	Day AM
July 28/29	-17,3	-2,1	165	30		Night
Aug 04/05	+10,7	-1,0	89	30	<a href="#">ARRL UHF ES &amp; Tropo</a>	Day PM
Aug 11/12	+13,2	0	-10	20		Sun close
Aug 18/19	-17,0	-1,7	-95	40	<a href="#">EME conf in PA0</a>	
Aug 25/26	-15,1	-2,0	-176	30		Night
Sept 01/02	+13,7	-1,0	107	30	<a href="#">Eu VHF Tropo</a>	Day PM
Sept 08/09	+10,9	-0,1	9	20	ARI EME <a href="#">ARRL Tropo</a> Weinheim	Sun close
Sept 15/16	-18,8	-1,7	-76	50		Day AM
Sept 22/23	-12,6	-1,9	-157	25		Night
Sept 29/30	+16,5	-0,8	124	35	<a href="#">ARRL I 2.3G &amp;up</a>	Night
Oct 06/07	+8,2	-0,4	28	20	<a href="#">Eu UHF Tropo</a>	Day PM
Oct 13/14	-20,2	-1,7	-57	100		Day AM
Oct 20/21	-10,2	-1,9	-137	25		Night
Oct 27/28	+18,7	-0,6	141	40	<a href="#">ARRL II 50-1296</a>	Night
Nov 03/04	+5,0	-0,7	46	20	<a href="#">Eu VHF CW Tropo</a>	Day PM
Nov 10/11	-21,3	-1,7	-38	180		Day AM
Nov 17/18	-7,7	-1,9	-117	25		Day AM
Nov 24/25	+20,1	-0,3	158	40	<a href="#">ARRL III 50-1296</a>	Night
Dec 01/02	+1,5	-0,9	64	30		Day PM
Dec 08/09	-21,9	-1,9	-19	180		Sun close
Dec 15/16	-5,1	-1,8	-97	25		Day AM
Dec 22/23	+20,8	0	176	40	XMAS	Night
Dec 29/30	-2,2	-1,0	82	30	HNY	Day PM



# Moon Ephemeris Overview for the Year 2018, by Franck F5SE



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