

## 432 AND ABOVE EME NEWS MAY 2015 VOL 43 #5

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**CONDITIONS:** The big news this month is the excellent conditions during the **EU-REF/DUBUS 23 cm CW EME Contest**. Based on the reports received **HB9CW** is in the top spot with a score of **79x68**; however **ES5PC** is also reporting **79 QSO** and could be ahead, tied or behind **Dominique** depending on his multipliers. In the **9 cm DUBUS Contest** leg **OK1CA** reports the top score with **21x21**. The same weekend as the 1296 CW contest, there was also an ARI all band, all modes EME Contest. I apologize for not announcing this contest, it is in DL7APV's Moon Calendar, and not my intention not to publicize it. I do feel it is not a good idea to run multiple EME contests on the same weekend. I hope in the future we can better coordinate contests to avoid similar conflicts. There were only a few reports of activity during this contest and all with relatively low numbers. The April and March 70 cm Activity Time Periods (ATPs) both also suffered from conflicting with the EME contests – no reports were received of ATP activity. Unfortunately the May (17 May 0430-0630 & 1300-1500) and June (14 Jun 0300-0500 & 1200-1400) ATPs conflict with the 3 cm DUBUS Contest on 16/17 May and the last of the series, the 6 cm Contest on 13/14 May. Possibly we can all concentrate on the 70 cm ATP in July. **There was also great dxpedition activity**. The **S79EME** was a tremendous success with QSOs on 144, 432, 1296, 2320 and 3400, and **KP2/W3XS** also did well on 1296 – see their reports in this NL. **HB9Q** also made a mini dxpedition **EA6/KT6Q** to the Balearic Islands back on 23 cm. Coming up almost immediately is the **7Q7EME** dxpedition to Malawi – see below.

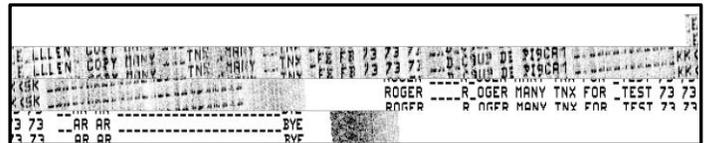


**KP2/W3XS - K2UYH (L) and W3XS (R) with 7' dish**

**7Q7EME:** Rene (PE1L) [renehasper@gmail.com](mailto:renehasper@gmail.com) reports that he, Hermann (DL2NUD) and Eltje (PA3CEE) will put **Malawi on EME between 9 and 22 May**. Operation will be on 200, 70, 23, 13 and 9 cm. 2 m and 70 cm will share operating time, while the 23 cm and up operation by Hermann will be in parallel. 432 is planned to be QRV on 15 and 16 May, on 432.090 using 23 el DK7ZB yagi with more power from an ITALAB SSPA than in their previous locations. The days for the specific microwave bands have not yet been decided but should start soon after

arrival and will be posted at <http://www.emelogger.com/malawi>. Look also on the **HB9Q** Reflector. They will use a 1.5 m RF Hamdesign dish with similar power as used in **JW**. Rene notes that even though Malawi is the poorest country in Africa, this dxpedition will be their most expensive. Thus donations are more than welcome.

**DC9UP:** Hermann [radio.dc9up@googlemail.com](mailto:radio.dc9up@googlemail.com) has been experimenting waterfall display writing (DUPLO-Hell) modulation on 1296 -- Besides lots of JT and CW QSOs, I worked **PZ5UD** and **JW/DF8DX** for new DXCCs a "new comer" (Hi) **W5LUA** û all on JT. I also added **DK0ZAB**, who is operating with a 10 m dish from the east part of Germany (Dessau). They plan to improve their equipment and to show up on the band more often. Of most interest are probably the 2 QSOs I completed with **PI9CAM** using DUPLO-Hell and the original **FELDHELL** modulations. These modes produce readable text or graphics on a waterfall display. The first QSO took place on 23 March with DUPLO and the second on 25 April with DUPLO and then in **FELDHELL**. Both times and modes were very successfully (529 and 579). We believe these are the first QSOs done via EME in these modes. [I have seen **FELDHELL** copy before, but I do not remember anyone claiming a QSO].



**DC9UP's copy of PI9CAM's DUPLO-HELL modulation**

**DJ8FR:** Juergen [juergen@dj8fr.de](mailto:juergen@dj8fr.de) sends his **23 cm DUBUS CW** contest report -- This year I had to live with a visit from Murphys at the beginning of the contest. I lost 3 hours working in the rain make repairs at my dish. Of course the rain stopped after repair was done! I ended with a **score of 42 x 36**. I used my 4.93 m dish and 300 W at the feed. My initial count on 23 cm CW (all on random) is now 106 after some 4 years of activity. I still need Africa for WAC. [Try writing **7Q7EME** for a CW sked].



**DJ8FR's 4.9 m dish**

**DK3WG:** Jurg [dk3wg@web.de](mailto:dk3wg@web.de) is improving his 1296 EME system -- I am replacing my 2 x 55 el yagi array with a 1.5 m dish with circular pol. During the past month on 23 cm using JT65C, I added initials with RD3DA, ES5PC, SM7FWZ, YO3DDZ for DXCC 34, W6YX, ES6FX, VK4CDI, DJ9YW, UA9YLU for DXCC #35, DC9UP, OK1DFC, GM4PMK, PE1LWT, YO2BCT, PE1CHQ, JA1WQF, PA3DZL, I5YDI VK3NX, PA0BAT and ON5GS. On 432 using JT65B, I added initials with **S79EME for DXCC 118** and field 69 and EA5CLH.

**DK7LJ:** Per [per@per-dudek.de](mailto:per@per-dudek.de) writes that he is rebuilding his 24 GHz EME station. He wants eventually be able to run it also as a beacon. Presently his PA is not sufficient for beacon operation. Regarding the 10 GHz beacon, it was off on 26 March and on 1 and 4 April. Per will turn it off in May around the time of low declination but can quickly turn it on if he receives an email request.

**EA6/KT6Q:** Dan [dan@hb9g.ch](mailto:dan@hb9g.ch) put **Balearic Islands back on 23 cm EME** -- I was QRV using my US-call for several hours on each of 3 days during my vacation on Ibiza Island (JM08ov) this April. It was a great experience to be again the DX and of course to be QRP. I was using Bodo's (DF8DX) equipment of 1x49 el yagi horizontal, 2.5 m above ground, no preamp, 5 m cable and about 90 W at the dipole. I worked the following stations: HB9Q (14DB/17DB), UA3PTW (27DB/22DB), DG5CST (27DB/25DB), PA0BAT (29DB/27DB), DJ9YW (28/27DB), I1NDP (26DB/22DB), OK1DFC (22DB/23DB), JA6AHB (29DB/26DB), OK1KIR (22DB/21DB), UA4HTS (27DB/25DB), OK2DL (23DB/25DB), DF3RU (28DB/26DB), PA3DZL (29DB/26DB), PY2BS (25DB/27DB), OE5JFL (23DB/21DB), G4CCH (26DB/26DB), K2UYH (25DB/23DB), DL6SH (27DB/23DB) and ES5PC (26DB/27DB). I also decoded but did not work W5LUA, ES6RQ, YL2GD and OH2DG. Many thanks to all those working me or trying to work me. Since it was a great pleasure to be QRV QRP EME, I will try to use my next vacation for another short activity.



**EA6/KT6Q 49 el yagis used by HB9Q**

**ES5PC:** Viljo [viljo.allik@estcube.eu](mailto:viljo.allik@estcube.eu) sends his report on the **23 cm DUBUS Contest** -- I was QRV using my new 2 x 500 W SSPA setup. It took quite a lot of effort to finish it before the contest weekend. The individual 500 W SSPA modules are made by SM4DHN's company. To combine them, I built a high power combiner using DJ9BV's design. Initial tests indicated quite good performance at least at about 600 W power level. (This was because I did not have the right power supply when I did the integration and testing). RF power misbalance was less than 5 W at 600 W output.

The amplifier was mounted inside the outdoor housing, which I used with my old PA. The TX cable length between the combiner output and my septum feed TX port is only about 50 cm. It is made of 1/2 inch Heliax. Before the contest, I also changed the TX connector on the feed to 7/16 type. On Friday morning the new power supply (50V/50A) finally arrived and I was able to get everything ready for the contest. Before I had only about 250 W into the feed, now I estimate at least 900 ~1000 W. I still have to make the final verification of the output power later when I take the SSPA down again. The difference was quite noticeable. In last year's 23 cm leg, I worked 52 stations. **This year made 79 QSOs**. Some weeks before the contest, I also rebuilt the LNA (according to the latest recommendations from RW3BP & G4DDK), so it probably also contributed to the number of QSOs. My dish size is still 4.5 m. Activity

was very good during both days. My own echoes were at least as good as on 13 cm with a 500 W SSPA. I worked several new ones including JH3EAO, NC11, ES6FX, LX90IARU, VE6BGT, OK1YK, PA3CQE, N8CQ, VE4MA, PA2DW (new on CW).



**ES5PC's new 1 kW SSPA mounted by his dish's feed**

**G3LTF:** Peter [g3ltf@btinternet.com](mailto:g3ltf@btinternet.com) reports some interesting activity in March/April despite much bad (windy) weather -- On 22 March, I was on 1296 and worked on CW SP6ITF, SM7FWZ, PI9CAM (SSB), LZ1DX, PA2DW, and NC11, on 23 March KL7UW (559) for initial #401, and on 24 March G4CCH and SP6ITF. On 27 March, I was testing out my 3.4 GHz gear before the DUBUS contest and worked PA7JB, PA3DZL, W5LUA and OK1CS. After the contest started at I QSO'd ES5PC, WA9FWD, VE6TA and W5LUA and that was it as for the rest of the weekend it blew a gale and rain. On 17 April, I was delighted to work on **23 cm CW KP2/W3XS for #402 and DXCC 61**. It's a great pity more small dish expeditions don't set aside time to work CW stations. Many of us can work 2 m dish stations that use 200 W or more if the station has a competent and EME experienced CW op. Since the advent of JT, I have pretty much given up on the goal of a CW DXCC, but it's still good fun to work a new one. I was again on 23 cm, random CW on 24 April to work G4CCH, PA2DW and SP6ITF, and in the **DUBUS/REF CW contest** on 25/26 April. I contacted on 25 April due to tree blockage and a social engagement which limited my Moon time to about 2 hours only ES5PC, SP6JLW, I5YDI, JA4BLC, VK5MC, UA3PTW, PA3DZL, OH2AXH, I1NDP, JA6AHB, VK3NX, SP6ITF, S59DCD, I5MPK, SP7DCS, OK1CA, G4CCH and 9A5AA, but on 26 April was able to be more active and added OK1KIR, OK1DFC, OE5JFL, F5SE/P, S53MM, RA3EC, HB9CW, DL3EBJ, DG5CST, OK2DL, SM7FWZ, SP3XBO, OZ6OL, DJ8FR, YO2BCT, OH2DG, IW2FZR, IK6EIW, LX90IARU, DF3RU, HB9BCD, SM2CEW, OZ4MM, IZ1BPN, OK2ULQ, DL6SH, PA3CQE, OK1CS, IK3COJ, W4OP, YL2GD, K2UYH, VE4SA, WA9FWD, N8CQ, IK5VLS, F5JWF, WA6PY, ON5GS, VE4MA, PA2DW, VE6TA and VE6BGT. **My total looks like 61x49**. I think activity was a little less than last year but its hard to judge until the full reports come in. Following the contest, on 27 April, I was pleased to work **UA9YLU, #403 and DXCC 62** with a nice (559) signal and also hear ES6FX. As I was involved in the date selection for the DUBUS contest series, I was surprised by the reminder from ARI a few days before the 23 cm event that they had organized an all band contest for the same weekend. I'm sure I must have seen the announcement last June, but the fact that it was a departure from their "normal" date pattern did not register; my apologies. My own view on the EME contest calendar is this: We have 3 sets of contests, all with different rules and classes, this is fine and healthy. However, IMHO, we should stick to the time pattern that has served us well for a number of years, DUBUS late winter-spring, ARI summer, ARRL autumn-winter.

**HB9CW:** Dominique (also HB9BBD) [dfaessler@bluewin.ch](mailto:dfaessler@bluewin.ch) sends news on his activity during the **DUBUS 23 cm CW contest** -- **My score is 79x68** with some 15 initials due to my low activity during the last 12 months. I had a pretty difficult QSO with UA9YLU, who was keying pretty fast so dots were mostly not there. Some folks seem not to interpret QRS.

Building LNAs for 3 cm is taking much of my time. I am also upgrading my dish for 3 – 6 cm with solid stainless steel reflector and some other 3 cm projects.

**HB9Q:** Dan's [dan@hb9q.ch](mailto:dan@hb9q.ch) group has received the first 1296 DXCC certificate as reported last month. [At least 2 more 1296 DXCC applications at the ARRL]. His group is now up to 1296 DXCC 107. They added in the last month or two JW, S79, EA6 and KP2.

**IONAA:** Mario [mario.natali@gmail.com](mailto:mario.natali@gmail.com) was recently in the Princeton area to visit his daughter who is doing PhD research at the university. [I had the opportunity to meet with him and his family at dinner hosted by K1JT]. Mario is almost ready with a 5 m dish and in the next month should be QRV in 23 cm EME.

**I1NDP:** Nando [nando.pellegrini@tiscali.it](mailto:nando.pellegrini@tiscali.it) send some bad news -- I have lost my 70 cm array during several days of strong winds at the end of March. The antennas are not badly damaged, but i have lost the elevation system, cabling and LNA. I have dismantled the array and am now considering whether is worthwhile to rebuild it. My other news is my participation to the **DUBUS 23 cm contest**. My final score is lower than last year. I had a total count of 76x60 and a calculated score of 456,000 points. I lost a few hours at moonrise and set because of relatively low declination and local obstacles. There were lots of EU stations but not much from NA.

**JA4BLC:** Yoshiro JA4BLC [ja4blc@web-sanin.co.jp](mailto:ja4blc@web-sanin.co.jp) report of the March 13 cm DUBUS contest and other activity follows -- I worked on 13 cm, on 8 March JA6CZD (549/569), UA4HTS (O/O) for initial #64, and on 24 GHz on 23 March had partial with PA0BAT but on the next day finished (M/M) for initial #10. On 26/27 March I also tried skeds with W5LUA on 24 GHz but only achieved partials. W5LUA was heard (O) but he heard nil from me both days. I changed the feed to 10 GHz on 27 March and worked JA1WQF (559/569), JA6CZD (559/569) and again JA1WQF (559/559) on 10450. Careful echo testing on 10 GHz showed that my window to W5LUA is affected by my neighbor's house.

**KL7UW:** Ed [kl7uw@acsalaska.net](mailto:kl7uw@acsalaska.net) appears to have his 1296 system working well (125 W to 4.5 m dish) – Since getting back on 23 cm, I have worked W2LPL (28DB/28DB), NC11 (13DB), TI2AEB (19DB), G4CCH (6DB/8DB) and on CW, and G3LTF on CW. I also tried with KD3UY, but later discovered I had a dummy load connected to my PA instead of the antenna - duh! I now have 18 initials, 12 DXCC and 3 WAS. Most are using JT65C but I have two CW QSOs: G4CCH and G4LTF. My CW copying has gotten very rusty with disuse, so it will take some patience of the stations I try to work until I get better at it. I am using keyboard to send so that should be FB. I am interested in skeds (JT and CW) and will be looking for QSOs on the HB9Q reflector. I am also working on the 3400 EME and hope to QRV with 60 W soon.

**KP2/W3XS:** Bill (W3XS) [billw3xs@gmail.com](mailto:billw3xs@gmail.com) and I (K2UYH) where QRV from US Virgin Island on 17 and 19 April. We QSO'd on 17 April at 1040 HB9Q (O/O), 1046 OK1KIR (O/O), 1052 OK1DFC (O/O), 1059 OK1DL (O/O) 1145 I1NDP (O/O), 1154 OZ4MM (O/O), 1200 UA3PTW (O/O), 1207 PY2BS (O/O), 1210 LZ1DX (O/O), 1223 DG5CST (O/O), 1234 ES6RQ (O/O), 1249 PA3CSG (O/O), 1253 DJ9YW (O/O), 1300 PA0BAT (O/O), 1305 DF3RU (O/O), 1313 PA3DZL (O/O), 1317 G4CCH (O/O), 1333 G3LTF (O/O) on CW, 1339 LX1DB (O/449) CW, 1346 OZ4MM (O/O) CW, 1405 K2UYH (O/O), 1421 W5LUA (O/O), 1500 IK3COJ (O/O), 1530 PA3FXB (O/O), 1205 UA3HTS (O/O), 1250 G4RGK (O/O), 1312 PA1LWT (O/O), 1420 K5GW (O/O) and 1448 NC11 (O/O). QSLs should be sent to Bill Blazina, KP2/W3XS, Box 6306, Charlotte Amalie, USVI 00804. Things did not turn out quite as we had planned. The dates were determined by a business trip to Puerto Rico. A major problem was the closeness of the Sun to the Moon. I had planned two days of operation, Friday and Saturday with Thursday to be used for setting up and testing. It turned out that Saturday was useless because the Sun was within 2 degs of the Moon most of the time. (I did not realize how bad it was because I looked at Sun-Moon for my QTH). The loss of Saturday caused us to discard our planned schedules and try to work as many people as possible on Friday. I also added a few hours of operation on Sunday right before I needed to fly out. (We were still QRV at 1510 even though my flight was at 1715, but made it!) On both Friday and Sunday, the Moon was only about 10 degs from the Sun much of the time. I am not sure how badly this degraded our receive. We also had a near disaster on Thursday. The feed support/center pole of our stress dish broke shortly after we had the system up and working on Thursday. Bill had used a wooden pole and it was unable to handle the

stress with the dish horizontal when we were trying to optimize the feed position on Sun noise. (Moral – leave well enough alone). The dish folder up and many of the pedals were damaged. I thought we were done! We replace the wood pole with aluminum one, and replaced or glued back together the broken spokes. We had everything running again just before we lost light. We were back on shortly after our moonrise. The big signals from HB9Q and OK1DFC were heartening. We used them as a beacon for tracking. (Our position readouts need to be improved for future dxpeditions). No signals were heard during our VK/JA window. I am not if this was a pointing problem or that there were just no stations on. There were several stations we decoded that we lost and never completed QSO, among these was YO3DDZ. There were also stations we were not able to decode. At the time we quite on Sunday, there were 2 traces the we could see, but that just would not decode. Had we not had the time constraints, we would have spent more time on CW. I am sure we could have worked more stations on CW. [Bill, W3XS is x-K3EAV and an old time EMEer. He was on for WA6LET test in 1965, but lost his preamp. He made his first EME QSO using a 96 el colinear array on 432 with K2UYH in 1989. He then built a 24' dish and was QRV on 432 until an ice storm broke the elevation mount and folded the dish in half. Next he was active with a16' rebuilt Paracclipse dish that he used for 7 yrs on 1296 and 432. Then Bill retired and bought a sailboat, which limited his moonbounce operation. He did work KP4AO on 432 and made some contacts on 2 m in 2010-2011].

**NC1:** Frank's [frank@NC1.COM](mailto:frank@NC1.COM) report for March/April -- I was able to devote quite a bit of time to EME activities in March. Highlights include working **S79EME on both 70 and 23 cm**. On 23 cm I worked them with my moon at just 7 or 8 degs. I was seeing several dB of ground noise and I was looking through the trees. I was shocked and quite pleased to easily work them (24DB/22DB) under these conditions. 30 minutes later (with my moon above the trees) they were (21DB). I was also able to catch S79EME on 70 cm. I heard them on 70 cm as soon as my moon came above the horizon and easily worked them (15DB/16DB) with my moon at 3 degs. They later peaked at (13DB). Their operation generated a lot of additional activity even though it was a weeknight. Immediately after working them I added 7 more stations to the log including 3 initials! I would like to thank and congratulate the S79EME crew for running yet another very successful dxpedition! Another March highlight was working KG6NUB on 70 cm. Sawson was using a 7 element yagi (<1-meter boom) mounted on a tripod and sitting on his deck. Signals were (23DB/20DB), so there was several DB of margin at each end! I worked on 23 cm on 1 March at 0033 VE3KRP (15DB/8DB), 0410 K5DOG (20DB/11DB), 0637 JA6AHB (9DB/8DB), 2111 PA2DW (18DB/13DB), 2128 PA3FXB (13DB/7DB) and 2136 DL6SH (6DB/6DB), on 21 March at 1550 PA3FXB (11DB/5DB), 1633 TI2AEB (15DB/7DB), 1645 CT7AFN (16DB/11DB), 1705 VE3KRP (14DB/7DB), 1731 W2LPL (19DB/16DB) and 1803 W6YX (5DB/2DB), on 22 March at 1323 LZ1DX (16DB/11DB), 1346 SM7FWZ (10DB/6DB), 1354 PA2DW (16DB/11DB), 1413 G3LTF (569/589) CW, 1425 GM4PMK (15DB/9DB), 1516 OE5JFL (17DB/O), 1539 DK3WG (25DB/21DB), 1601 CS7AFN (called and disappeared), 1609 YL3AEV (17DB/10DB), 1623 CT7AFN (17DB/13DB), 1653 W2LPL (21DB/15DB), 1706 DJ2DY (22DB/17DB), 1724 EA3HMJ (18DB/12DB) and 1734 DL6SH (6DB/6DB), on 24 March at 2114 PA3FXB (12DB/6DB) and 2136 G4CCH (3DB/4DB), on 25 March at 2107 TI2AEB (16DB/13DB), 2113 W2LPL (24DB/O), 2143 EA3HMJ (14DB/12DB), 2151 EA1RJ (23DB/14DB) and 2201 SP6ITF (559/559), on 26 March at 1650 S79EME (24DB/22DB), on 27 March at 2120 PA3FXB (13DB/7DB) and 2138 TI2AEB (16DB/9DB), on 28 March at 1926 LU8ENU (20DB/15DB), 2009 partial SP6ITF (12DB/disappeared), 2040 PA3FXB (14DB/18DB), 2049 DK0ZAB (O/O) with a really bad drift and 2301 PA2DW (20DB/13DB), and on 31 March at 0114 KL7UW (16DB/13DB). I worked on 70 cm on 27 March at 2221 KG6NUB (23DB/20DB) and 2241 PY2BS (6DB/8DB), on 28 March at 0136 VA3ELE (21DB/14DB) and 2338 K3MF (6DB/10DB), and on 30 March at 1921 S79EME (15DB/16DB), 1931 F6APE (17DB/17DB), 1937 DK3SE (20DB/19DB), 1948 G6HKS (17DB/15DB), 2045 EA1PVC (14DB/28DB), 2057 DL6KAI (8DB/15DB), 2119 PY2BS (10DB/7DB) and 2128 EA5CLH (24DB/23DB) running 2 x 21 el yagis and 50 W. I added on 432 on 1 April at 0206 LU7HI (9DB/10DB), 0221 K5DOG (14DB/O) and 0235 VA3ELE (19DB/26DB). Amy other April activity was on 1296. The following stations were worked prior to the DUBUS contest, on 19 April at 1443 KP2/W3XS (O/O) on JT – TNX for the new DXCC and 1513 KD3UY (20DB/20DB), and on 24 April at 2306 W7SZ (20DB/16DB). These last 3 were all initials. In the **DUBUS 23 cm CW contest**, I worked on 25 April at 0001 K2UYH, 0006 W6YX, 0018 KL6M, 0102 VE6TA, 0115 K6JEY, 0214 N6OVP, 0251 JA8IAD, 0308 JA6XED, 0325 JA6AHB, 0333 VA7MM, 0351 VK5MC, 1711 ES5PC, 1745 ON5GS, 1751 HB9CW,

1757 11NDP, 1801 OK1KIR, 1806 UA3PTW, 1812 S59DCD, 1820 DF1SR, 1826 F5SE/P, 1830 S53MM, 1837 DJ8FR, 1841 OH2AXH, 1846 9A5AA, 1852 SP7DCS, 1858 ON5RR, 1905 IK3COJ, 1911 I5MPK, 1919 OH2DG, 1924 WA9FWD, 1930 OE5JFL, 1935 DF3RU, 1940 RA3EC, 1945 SP6JLW, 1951 W4OP, 2000 DL3EBJ, 2012 HB9BCD, 2020 PA3DZL, 2047 G4CCH, 2051 DG5CST, 2106 SP6ITF, 2113 I5YDI, 2119 SP3XBO, 2138 VE4SA, 2151 PI9CAM and 2224 N8CQ, and on 26 April at 0040 WB2BYP, 0051 VE6BGT, 0410 VK3NX, 1831 OK1DFC, 1848 OZ4MM, 1854 IK5VLS, 1903 YO2BCT, 1934 PA3FXB, 1948 OK1CA, 2006 OZ6OL, 2028 OK2ULQ and 2047 F5JWF for a contest total of 59/50. I found both conditions and activity good over the contest weekend and 10 initials were added to the log. Post contest I worked on 28 April at 0052 W7SZ (23DB/12DB) and 2158 G4FUF (26DB/17DB). The weather has FINALLY begun to improve here so hopefully I can remove my 70 cm polarity rotor (prop-pitch) before the end of the month. With the polarity motor out, the array will need to be tied down. Thus, I will be temporarily QRT on 70 cm. If all goes well I should have repairs made and be back in operation sometime in June.

**NC1I/p:** Frank's [frank@NC1I.COM](mailto:frank@NC1I.COM) writes on plans for a states expedition -- W1QA, KA1QFE and I have been working on portable 23 and 70 cm EME stations to take to Connecticut, Rhode Island and Vermont. All of the hardware and equipment has been obtained and we are making good progress preparing everything. W1QA and I are both dealing with some physical ailments, which are slowing us down but we still hope to activate Connecticut (23 cm), Vermont (70 cm & 23 cm), and Rhode Island (23 cm & 70 cm) this summer or early fall. Our first remote operation will be from CT. At this time we are planning 23 cm only from CT as I do not believe many people need it on 70 cm. We have a location in CT that is less than 30 minutes from my QTH that will offer an excellent moon window (anything above 10 degs from moonrise to moonset). If all goes well with the CT effort, we will finalize plans for Rhode Island and VT. We will probably try and do both 23 cm and 70 cm from Rhode Island and only 70 cm from VT based on anticipated need and recent activity from those States. If there is a lot of interest in doing both bands from all three locations, we will consider that but let's see how the first effort goes. Both stations will be setup and tested at my QTH prior to activating the States noted above. I will provide an update next month.

**OA4TT:** Jack [n6xq@yahoo.com](mailto:n6xq@yahoo.com) now live in Peru half time and has been active on 6 and 2 m EME and is now considering 432 -- I have a pair of FO 22 el yagis for 432 and am wondering if it is worthwhile to transport these to Peru and try EME. If it is feasible, I will keep an eye out for a SSPA with sufficient goo to make the grade. I am in the country with lots of corn and veggies growing all around so I am assuming I may get some ground gain on 432 like I do on 6 and 2 m? [I wrote Jack that EME is easier on 432 because of the greater gain of a smaller antenna. Ground works on 432 as well as 2 m, but ground noise is a greater degradation because it is much lower to start. But, he should not need the ground gain. Some of you may also wish to write Jack about life on 70 cm EME].

**OK1CA:** Franta [strijavka@upcmil.cz](mailto:strijavka@upcmil.cz) sends news on his March/April activity - I was QRV on 20 March during the eclipse on 24 GHz. I had a measured Moon noise of 2.2 dB and a Sun noise of 13.8 dB that dropped -3.3 dB during the partial eclipse. I worked 3 hours after OK1KIR (3DB/12DB) on JT4F; it was my first digital QSO on 24 GHz (#1), and the next day JA1WQF (13DB/14DB) (#2) and DL7YC (O/O) CW for initial #11 in the afternoon. These were very good days for microwave with a clear sky and low humidity. I prepared my rig for the 3.4 GHz DUBUS EME Contest on Friday 27 March and worked OK1CS for initial #52. It was Emil's first QSO on 3.4 GHz. I was active in the contest only at Saturday and worked VK3NX, OH2DG, ES5PC, SP6OPN, HB9Q, OZ6OL, DF3RU #53, PA3DZL, PA0BAT, DL7YC, S57NML, S53MM, OK1CS, SM6PGP, WA9FWD, W5LUA, PA7JB, K5GW, 9A5AA, VE6TA and WA6PY. I ended with a score of 21x21. The signals were better from NA than EU.

**OK1KIR:** Vlada and Tonda [vladimir.masek@volny.cz](mailto:vladimir.masek@volny.cz) report on their group's recent activity -- During the partial Sun eclipse we measured on 10 GHz Sun and Moon noise using our 4.5 m dish with a HPBW of about 0.45 degs. Our SDR-14 provided recordings in 15 min intervals with a scale of 2 dB/div. Each 10 min we made a relative calibration by switching to load (50 ohms) and to the sky (3 degs offset in elevation - unfortunately not enough to eliminate sidelobes noise). Being unsure about tracking accuracy to stay precisely on the Sun center, we corrected Az-El pointing to the summary (Sun+Moon) noise peak all the

time. The corrected maximum decrease of the total Sun+Moon noise was measured as 5.23 dB; the decrease of sun noise (without Moon noise) would give 7.33 dB. The pure optical eclipse predicted was 73% (-5.7 dB). The measured decrease is bigger because the dish HPBW is smaller than solid angle of Sun (Moon). At maximum of eclipse, the total noise background (Moon+Sun) was "only" 11 dB over standard our Moon noise at OK1KIR. So we could easily hear our own echoes or even try a QSO. However, we did not realize this test opportunity and did not arrange for it! After the eclipse, we switched to 24 GHz and at 1326 completed an easy JT4F QSO with OK1CA (12DB/13DB) for our digital initial #30. Later we worked dxpedition S79EME on 4 bands: on 25 March at 1500 on 23 cm in JT65C (18DB/20DB) for digital initial #212, LI field and 1st S7-OK, on 27 March at 1026 on 70 cm in JT65B (19DB/19DB) for digital initial #129 and LI field, later on the same day at 1520 on 13 cm in JT65C (20DB/20DB) for digital initial #28 and LI field, and the next day on 29 March at 1520 on 9 cm in JT65C (24DB/23DB) for digital initial #8, LI field, 1st S7-OK QSO and our 5th continent (Africa). We also worked on 29 March with JT65C on 9 cm (off the contest) at 1535 SP3XBO (23DB/O) (#9) and 1643 DF3RU (20DB/O) (#10). Due to the high QRH of about 100 Hz/min, standard decoding failed and both QSOs were completed only when careful semi-continuous manual adjustment of the RIT was utilized! In 9 cm part of DUBUS Contest, we participated only partially during the second moonpass. We worked on 29 March at 1605 DF3RU (549/559) for initial #58, 1609 ES5PC (569/569), 1658 SP3XBO (549/559) #59, 1705 S53MM (559/549) #60, 1711 PA0BAT (579/579) and at 1718 S57NML (O/O) for a total of only 6x6. We had windy and rainy WX, and the Moon noise was 0.9 dB. We worked on 23 cm with JT65C on 17 April at 1046 KP2/W3XS (17DB/O) (#213) and 1st KP2-OK 23 cm QSO, on 19 April at 1350 KD3UY (21DB/23DB) (#214), 1410 SP5GDM (12DB/O) (#215) and 1424 IK5EHI (9DB/8DB) (#215), and on 23 April at 1042 EA6/KT6Q (21DB/22DB) (#216). We QSO'd on 3 cm with JT4F on 23 April at 1612 N4EME (12DB/12DB) (#61) in NC for a new US state and 1647 OK1CA (11DB/11DB) (#62). We QSO'd with CW on 3 cm at 1631 OZ1LPR (569/579) and 1709 N4EME (O/O) initial #95 and our 7th US state on CW. In the DUBUS contest on 23 cm, we worked with CW 9A5AA, AX4CDI, DF1SR, DF3RU, DG5CST, DJ8FR, DL3EBJ, DL4DTU, DL6SH, ES5PC, ES6FX, F5JWF, F5SE/P, G3LTF, G4CCH, HB9BCD, HB9CW, HB9Q, I1NDP, I5MPK, I5YDI, IK3COJ, IK3GHY, IK5VLS, IK6EIW, IW2FZR, IZ1BPN, JA1WQF, JA4BLC, JA4LJB, JA6AHB, JA8IAD, JH3EAO, JR4AEP, K2UYH, K6JYE #375, LA9NEA, LX90IAR (2xSSB), N8CQ #374, NC1I, OE5JFL, OH2AXH, OH2DG, OK1CA, OK1CS, OK1DFC, OK1YK, OK2DL, OK2ULQ, ON5GS, ON5RR, ON7UN, OZ4MM, OZ6OL, PA2DW, PA3CQE, PA3DZL, PA3FXB, PI9CAM, RA3EC, S53MM, S59DCD, SM2CEW, SP3XBO, SP6ITF, SP6JLW, SP7DCS, UA3PTW, VA7MM, VE4SA, VE6BGT, VE6TA; VK3NX, VK5MC, W4OP, W6YX and WA6PY for a total of 77x62.

**OZ4MM:** Stig [vestergaard@os.dk](mailto:vestergaard@os.dk) was QRV on 1296 and reports -- I wasn't able to be too active in the DUBUS 1296 contest and only managed a few hours of operating. I had planned to be much more active, but on both Saturday and Sunday I had emergency calls from QRL during the best window times. It seems that Murphy keeps an eye on me. Anyway, I enjoyed the hours of operating and worked 40 CW stations on 1296. I had no initials, but lost a call from G4IDR(?) on Sunday afternoon. Prior to the contest, I worked KP2/W3XS and S79EME (JT65C) back in March for new (mixed) DXCCs. In the 13 cm part of the DUBUS contest, I ended with 24 stations. Again, I had limited time and so was quite satisfied; although, I found less activity compared to last year!

**PI9CAM:** Jan (PA3FXB) [jvm@netvisit.nl](mailto:jvm@netvisit.nl) sends belated news of the Dwingeloo 23 cm SSB FUNTEST and other activities -- We indeed had a lot of fun, *Glimlach*, in the Funtest; SSB via the moon is always special! We made 30 SSB QSOs in 8 sectors and so ended with 480 points. I am sure we missed some as we also spent some time on 70 cm and we did some experiments bouncing 23 cm signals off of small satellites with DJ5AR -- see <http://www.dj5ar.de/?p=1862>. QSO'd were UA4HTS (59/58) LO, HB9Q (59/59), OK2DL (58/59) JN, SP6JLW (58/58) JO, UA3PTW (59/58) KO, DK0SF (59/58) JN, F5SE/p (57/57) JN, VK5MC (56/57) QF, DJ8FR (59/58) JO, I5MPK (59/58) JN, SP6ITF (59/54) JO, DJ5AR (53/41) JN, PA0BAT (57/58) JO, PA7JB (55/55) JO, SP3XBO (55/57) JO, SM7FWZ (57/57) JO, RA3AUB (58/57) KO, PA3CQE (57/55) JO, OE5JFL (59/58) JN, LX1DB (59/59) JN, DG5CST (59/59) JO, DL3EBJ (59/55) JO, DL1YMK (58/58) JO, IK3COJ (58/58) JN, DF3RU (59/58) JN, K2UYH (56/58) FN, I1NDP (59/59) JO, VE4SA (55/56) EN, W6YX (57/57) CM and SP5GDM (56/53) KO. PI9CAM was QRV on 22

March and 25 April on 70 and on 23 cm. [I have not yet received their 1296 contest reports].

**S79EME:** Peter (DJ4TC) [dj4tc@t-online.de](mailto:dj4tc@t-online.de) reports the Seychelles dxpedition (LI75) was a tremendous success. On 70 cm they worked on 27 March OK1DFC, UA3PTW, OK1KIR, DL5FN, OZ4MM, JA6AHB, DF3RU, HB9Q, DK3WG, G4FUF, ES3RF, YL2GD, LZ1DX, G4RGK, DL9KR on CW, ZS6JON, OH2DG, UT6UG, UT5DL, SP1JNY, DL7APV, OH6UW, G4EZP and WA4NJP, and on 30 March JE1TNL, I1NDP, DF3RU, PY2BS and NC1I for a total of 29 QSOs. On 1296 they worked on 24 March HB9Q, on 25 March UA3PTW, OK1KIR, I1NDP, OZ4MM, DJ9YW, DG5CST, ES6RQ, UA4HTS, OE5JFL, OK1CS, YL2GD, DF3RU, PA0BAT, PE1LWT, G4CCH, K2UYH and W5LUA, on 26 March OK2DL, YO3DDZ, OK1DFC, PA0BAT, PA3DZL, IK3COJ, OK1YK, G4RGK, PA3CSG, DL6SH, LZ1DX, P19CM, OH2DG, NC1I, PA7JB, PE1CHQ, PA3FXB and DK0SF, and on 31 March JA6AHB, PY2BS, SP3XBO and ES6FX for a total of 41 QSOs. On 13 cm they worked on 27 March HB9Q, OK1DFC, OK1KIR, UA3PTW, PA0BAT, IK3COJ, OH2DG, OZ4MM, UA4HTS, PA3DZL, PA7JB and PE1LWT, and on 28 March PY2BS and PA3CQE for a total of 14 QSOs. On 9 cm they worked on 29 March HB9Q, OK1KIR and PA3DZL for a total of 3 QSOs. QSLs should be sent to Peter Kuschke, Obstzuechterstr. 31, 14542 Werder, Germany with an SASE and enough funds (EU or \$) for return postage. More info and pictures can be found at <http://www.dl1rpl.de/index.html>.

**T12AEB:** Armando [aebonilla@ice.co.cr](mailto:aebonilla@ice.co.cr) is getting back to normal and is QRV again – Well, at last I feel 100% recovered. But, I lost 20 pounds! The Heart MD is happy with my weight lost, but not me – HI! Not after 4 to 5 months of QRT! As you know, my PA is on the roof, near my dish in a big box. Two blowers inject air and two remove air on the other side of box. I did not have filters to clean the air. It was not necessary. But it is now with a 10,000' volcano some 30 miles away. Presently, you can see just a small amount of steam coming out. My last activity was 180 years ago. Knowing that I was ready to make radio, (Hi), the volcano decided to wake up, sending a cloud of ashes, 3000' high. The ash has high conductivity to electricity and is acidic as well. The central plateau of the country, where the capital city is located, was covered with ashes. It was even necessary to close the international airport, for 24 hours. Now the volcano is sending clouds of just steam, and sulfur. So I spent a week designing dust filters to stop the ash from getting into my PA box. I am also keeping one eye on the volcano. Right now it is at rest. [Armando had hoped to QSO KP2/W3XS, but it turned out the Moon was even closer to the Sun at his QTH during the days we were QRV than in KP2].

**UA3PTW:** Dmitry [ua3ptw@inbox.ru](mailto:ua3ptw@inbox.ru) deserves congratulation for taking the top spot in the ARRL EME Contest for the single operator, multi band and mode class. During the past month or so he added 432 initials with S79EME and EA5CLH on JT65B, 1296 initials with OH2AXH, N8CQ and JR4AEP on CW and EA6/KT6Q, KP2/W3XS and KD3UY, SP5GDM and S79EME on JT65C, and 2320 initials with SP3XBO and DJ3FI on CW and S79EME on JT65C.

**VA7MM:** Mark (VE7CMK) and Toby (VE7CNF) [va7mm@rac.ca](mailto:va7mm@rac.ca) were active on 1296 on CW and digital modes on the contest weekend of 25/26 April – We have submit separated logs for the DUBUS European EME and the ARI EME contests. In 6 hours of operation 18 CW contacts were made with K2UYH, NC1I, JA6AHB, KL6M, VE6TA, W6YX, I1NDP, OK2DL, HB9CW, OE5JFL, F5SE/p, OK1CA, SP7DCS, G4CCH, DL3EBJ, ES5PC, OK1DFC and WA9FWD. In the same operation timeframe 4 JT65C contacts were made with AX4CDI, IK5VLS, W6YX and PY2BS. With an OZ9CR water cooled cavity amplifier, our power at the feed of our 3 m dish is 200 W. On receive, we have a 0.33 dB NF receive preamp with about 35 dB gain total in three stages. We are available for scheduled contacts by e-mail.

**VE3KRP:** Fast Eddie [eddie@tbaytel.net](mailto:eddie@tbaytel.net) has been active the past month on 23 cm, but missed the DUBUS contest -- Winter has finally left (I hope) and it is nice to see a bit of green rather than white, HI. On 21 and 22 March, I worked on 23 cm K5DOG, PA3FXB, NC1I, W2LPL for an initial (#), LZ1DX, LU8ENU, EA3HMJ (#), PA2DW and DJ2DY (#), all on JT65C. I also worked P19CAM on SSB. I was QRV again on 19 April and QSO'd G4RGK, PA3FXB and KD3UY (#) on JT65C. It's nice to see new smaller stations on 23 cm adding to challenge at this end.

**W2LPL:** Les [llistwa@gmail.com](mailto:llistwa@gmail.com) sends an update on his recent operations – I continue to play with my 2.4 m dish on 1296 and am now up to digital initial (#42). All my QSOs thus far have been on JT65C. A

highlight last month was working PA2DW running a highly optimized 2 m dish, as well as SM7FWZ and PA7JB both with 2.4 m dishes. These QSOs just goes to prove that small dishes are not limited to just working the big guns. And a special thanks to KL7UW for working me through my trees.

**WA6PY:** Paul [pchominski@maxlinear.com](mailto:pchominski@maxlinear.com) was QRV in the EU/DUBUS 9 cm contest – I was only able to be on during one pass. During my limited window, I QSO'd DL7YC, ES5PC, K2UYH, K5GW, OK1CA, S53MM, SP6OPN, VE6TA and W5LUA for a total of 9x9. I also CWNR DF3RU. [I had wanted to QSO Paul on CW from KP2, but he was at QRL on Friday and I had to leave on Sunday before his window].

**WA9FWD:** John [jstefl@wi.rr.com](mailto:jstefl@wi.rr.com) had an excellent signal during the DUBUS 9 and 23 cm contest weekends -- I was operational for the DUBUS 9 cm contest and worked G3LTF, W5LUA, OK1CA, SP6OPN, DL7YC, ES5PC, K5GW, OH2DG, PA0BAT and VE6TA for a total of 10x10. I was also operational in the 23 cm leg and worked K2UYH, KL6M, W6YX, VE6TA, OK1KIR, HB9CW, OE5JFL, I1NDP, UA3PTW, P19CAM, NC1I, HB9Q, OZ4MM, SP6ITF, G4CCH, DL3EBJ, ES5PC, SP7DCS, F5SE/P, W4OP, SP6JLW, S53MM, OH2DG, DL6SH, WB2BYG, DG5CST, I5MPK, OK1CA, SM2CEW, PA3DZL, OK1DFC, G3LTF, OK1CS, SP6JLW, PA3EC, OZ6OL, WA6PY, and VA7MM for a total of 38x33. I noticed exceptional conditions at the start of the contest. It was raining here, and I was getting the best echoes that I have ever heard. Sadly, conditions returned to normal soon after and stayed that way for the remainder of the contest.

**XE1XA:** Max [general.manager@corix.us](mailto:general.manager@corix.us) is currently QRV on 432 and plans to be on 1296 in about 2 months – My reception quality on 70 cm is not what I had 20 years ago. The cell towers, WiFi and MW links have proliferated around my QTH. I now have annoying low level birdies in the 432 passband, and it will be very difficult for me to fight to get them eliminated. A cavity in front of the preamp helps the birdies, but I get even lower Sun noise because of the filter's loss. My 5 m dish is working FB with a loop feed, polarity rotation, LUA cavity LNA, and an old FT726 followed by a good audio filter. Although I have not been able until now to measure the 13 dB of Sun noise that I had in the past (I have actually 11+dB), I have been able to hear my echoes even with the Moon quite close to apogee quite well. If you are interested in working me on CW on 432, please email for skeds.

**K2UYH:** I [alkatz@tcnj.edu](mailto:alkatz@tcnj.edu) despite my travels and the KP2/W3XS dxpedition, was able to be reasonably active from my home QTH. On 25 March, I contacted on 1296 at 1710 S79EME (26DB/22DB) JT65C for mixed initial #492\* and DXCC 98\*. I had problems during the 9 cm EME Contest. When I installed my system at the feed of my dish, I discovered that I had no power. By the time I had the problem (in the SSPA's power supply repaired, I had missed most the EU window and many were gone. The next day there was also little activity for my limited window at the end of the contest. I QSO'd on 28 March on 3400 at 2316 ES5PC (559/559), 2320 W5LUA (559/559), 2326 VE6TA (559/559), 2335 SP6OPN (559/559) and 2348 WA6PY (559/559), and on 29 March at 2221 OH2DG (559/569) for a total score of only 6x6. I added on 31 March at 2329 S53MM (559/549) CW for 9 cm initial #39 and DXCC 23. I QSO'd on 11 April 11 on 432 at 1313 VK4EME (15DB/11DB) on JT65B and on 17 April on 1296 at 1409 KP2/W3XS (25DB/O) JT65C mixed initial #493\* and DXCC 99\* - TNX to NE2U who operated my station, and on 23 April on 1296 at 1802 EA6/KT6Q (23DB/25DB) JT65C #494\*. Unfortunately I had several conflicts during the weekend of the 1296 DUBUS contest which limited my operating time. I was joined for the contest by NE2U and K2YY, but still was not able to operate the full contest. Conditions seemed very good. We QSO'd on 25 April at 0001 NC1I (589/569), 0019 W6YX (569/569), 0033 WA9FWD (599/579), 0047 KL6M (559/569), 0113 VE6TA (569/579), 0213 N6OVP (559/559), 0301 JA8IAD (559/559), 0314 AX2JDS (O/559), 0319 VA7MM (559/579), 0324 VK4CDI (559/559), 0332 JA6XED (559/559), 0337 JA6AHB (579/579), 0355 VK3NX (559/579), 0443 VK5MC (559/559), 1943 SP6ITF (549/579), 1947 HB9CW (579/589), 1952 UA3PTW (579/589), 1957 I1NDP (579/589), 2003 SP6JLW (569/579), 2008 G4CCH (559/589), 2013 P19CAM (579/599), 2017 I5MPK (559/579), 2021 DF1SR (549/559), 2026 SP7DCS (569/589), 2033 ON7UN (579/579), 2037 DL6SH (569/569), 2043 OE5JFL (569/569), 2047 DJ8FR (569/569), 2052 DF3RU (559/579), 2055 RA3EC (569/579), 2012 DG5CST (569/579), 2102 SV3AAF (569/579), 2110 DL3EBJ (569/579), 2116 PA3DZL (559/569), 2122 S59DCD (559/579), 2124 ES5PC (579/569), 2127 W4OP (579/579), 2129 S53MM (569/559), 2132 OK1KIR (569/559), 2138 IK5VLS (559/559), 2142 F5SE/P (579/579),

2146 F5JWF (559/589), 2224 OH2DG (569/559), 2240 OK2DL (589/589), 2246 OZ6OL (569/569), 2319 N8CQ (579/589), 2327 VE4SA (559/559), 2334 K6JEY (559/569), 2341 N8CQ (579/579) DUP and 2344 WB2BYP (579/579), and on 26 April at 0319 N6OVP (559/559) DUP, 0450 VK3NX? (33/55) on SSB, 2014 G3LTF (569/579), 2018 IK3COJ (559/579), 2025 OK1CA (579/579), 2032 OK1CS (569/579), 2056 LX90IARU (589/579), 2125 OK1DFC (589/579), 2157 WA6PY (579/579) and 2207 9A5AA (569/579) for a total of 57x50. We took a break during the contest to work on 432, on 25 April at 2200 XE1XA (559/559) – Max's station appears to be working well. I also attempted to work on 27 April on 1296 at 0300 RW0LDF with nil results both ways, and QSO'd on 432, on 2 May at 2347 G6HKS (22DB/20DB) on JT65B through my trees.

**NET/REF NEWS:** **UN6PD** was active on 1296 EME in April using JT65C and added initials with DG5CST and DC9UP. **DL1YMK/A** reports that he was QRV during the weekend of 18/19 April on 13 cm from his alternative QTH in JO33rp (CW/SSB only) for what will very likely be his last operation from this location. **F6AJW** is listening on 10 GHz with a 60 cm off-set dish and is measured about 5 dB of Sun noise. **G4IDR** is interested in 23 cm CW and JT skeds with his dish 2.4 m and reports copying KP2/W3XS. **JH1KRC** has moved to a new QTH only a 10 minutes drive from his EME shack. Previously, every time Mike operated EME, he had to make a 600 km round trip! **K6JEY** was QRV on 1296 the 25/26 April weekend for both the DUBUS (CW) and ARI (JT) contests. **YO2DDZ** copied KP2/W3XS well and gave up calling because he thought he had a QSO. [This was our error, because we did reply but lost Dan and switched to another caller]. **ZS6CCY** has a 3.6 m TVRO dish and is seriously considering getting on 1296. He appreciated hearing your thought. Bill's email is [bill@zambezi.ws](mailto:bill@zambezi.ws).

**FOR SALE:** **K6PF** has the following for sale: 4 new in the box 23 cm M<sup>2</sup> yagis (22 elements each) along with phase matched LMR-400 and power divider. He is asking \$US800 or BO. 4 x 7289 (2C39) tubes (condx is unknown). Asking \$5 each or \$20 for all 4 + shipping. RF deck for a 432 HPA consisting of a 8938 in a Eimac cavity. (This does NOT include the metering, blower, filament xfmr, or HVPS). You will need to furnish these & build a blower box of approx 11" x 12" for this cavity to fit on. The PA puts out in excess of 1.5 kW. Included is the 8938 & Eimac UHF Cavity (CV-2410) technical data brochures. Pictures are available. Asking \$1,090 or BO. It is ready or shipping. Contact Bob at [k6pf@sbcglobal.net](mailto:k6pf@sbcglobal.net). **DK7LJ** is looking for a TWT he can use to set up a 24 GHz EME Beacon similar to his 10 GHz Beacon. Contact. Contact Per [per@per-dudek.de](mailto:per@per-dudek.de). **PA3DZL** has for sale a PE1RKI 8 x MRF286 PA [1296?] see: <http://members.chello.nl/b.modderman/customerfotos.html>. It provides 600 W output with 40 W drive (500 W in JT is no problem). PA and High Power circulator both with water cooling. All in 19" rack with complete set for watercooling (12 V pump, water flow meter, digital water temp.meter, hose and radiator with 3 blowers). PA is 28 V @ 40 A. All complete working - plug en play for € 1,600. Contact Jac at [pa3dzl@ziggo.nl](mailto:pa3dzl@ziggo.nl). **DG0VE** has a PLL controlled 24 GHz converter available for Eu 289. Contact Jan [pa0ply@pa0ply.nl](mailto:pa0ply@pa0ply.nl) for more info. **LA8F** has for sale a 50 W TWT for 3 cm. It has never been used and comes with a CT1DMK PSU kit. See [www.LA8LF.com](http://www.LA8LF.com) for more details. Anders is asking Eu 280 plus postage. **SM4DHN** reports that his 500 W 1296 SSPAs are now ready for delivery. The first amps were sent to F1PYR and WB2BYP. The 1 kW version is a bit delayed. SM4IVE suggests you order your 23 cm SSPA now and pickup @ The 432 & UP Swedish EME meeting in May and save shipping cost. Order at <http://www.labetech.se/en/products.php>. At the bottom of the page you will find the order form.



SM4DHN's new 500 W 1296 SSPA for sale

**W8BYA** has for sale (2) Narda Model 3752, 1.0 GHz to 5.0 GHz phase shifter units, both in excellent but used condition. He also has a Narda Microline Model 791FM 2.0 GHz to 12.4 GHz variable attenuator, also used but very clean, and two uW circulators; a Western Microwave, Model 3JA-2088 and a E&M Laboratories Model U22Y (700 MHz to 1 GHz). If interested contact Gedas at [w8bya@mchsi.com](mailto:w8bya@mchsi.com).

**TECHNICAL:** The question of how to calculate NF from the cold sky to ground ratio is often asked. The correctness of your result depends on the cold sky value. If you assume an average noise temperature for 1296 of about 10 degs then  $NF = 10 \text{ LOG}(1 + [300R-10]/290)$  where R is the ratio corresponding to your cold sky to ground measurement in dB. R is about 0.32 for a 5 dB difference and a  $NF = 1.12 \text{ dB}$ . On 432 the sky noise is probably closer to 25 degrees. Then  $NF = 10 \text{ LOG}(1 + [315R-25]/290)$  or  $NF = 1 \text{ dB}$ .

**FINAL:** I have more sad news this month. Dave, K8WWW is a silent key. Dave was 71 and formally was K8UQA. I use to work him every night on 432 and later 1296 tropo. He was very active of 432 EME back in the 90s and has remained involved with VHF/UHF/Microwave since a teenager. He will be greatly missed by his many amateur radio friends. I also received notice that Guy, VK2KU a well known 2 m EME station also passed away recently. May they rest in peace.

The ARI has restructured its EME Contests, now called the EME - Trophy. They no longer separate CW/SSB from Digital and have two contest weekends. One is in the spring and the other is in the fall. The spring weekend unfortunately conflicted with the EU/REF/DUBUS 1296 CW Contest. The autumn weekend is on 26/27 Sept and does not appear to have any conflicts. The full rules are at <http://www.eme2008.org/ari-eme/Trophy%202015.pdf>. Alex, IV3KKW, encourages everyone even if it is only one QSO to send their logs to Enrico I5WBE [i5wbe@i5wbe.it](mailto:i5wbe@i5wbe.it).

VK3UM's latest version of his EME Planner Ver 2.11 is now available for download. Sun to Moon separation (in degrees) has been added to the Planner display as an additional option to the Monthly Data. Eclipse data now includes % of obscuration. You may increase the resolution as required from the Home data set up screen. As an example... select OY (Faeroe Island) for 20 March 2015 and set the calculation interval to 1 minute to display the full Sun eclipse. Monthly Data options now display the value of data for the selected day - (saves reading the value off the scale axis).

The 432 & UP Swedish EME meeting is coming up on 29/30 May and will be a great conference. The papers will be all on the web at [Moonbouncers.org](http://Moonbouncers.org). If you have pre-registered and do not plan to come, please let Lars know so he can adjust the participant list, ASAP.

I am pressed again for time to get the NL completed as I will be traveling again next week. I plan to be in Dayton Friday and hope to see some of you there. I plan to be back on Saturday and hope to get some time in for 3 cm contest. On Sunday I am off again on another business trip. Please keep the reports and technical material coming. 73, AI – K2UYH



Dish misuse as captured by PA0PLY on a university!