432 AND ABOVE EME NEWS
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CONDITIONS: Your probably have heard the sad news already VK3UM is a silent key. Doug passed away unexpectedly from a stroke. Most of us are still in shock. It is hard to imagine the VK Moon window without his signal. He will be more than missed. He is irreplaceable. There are tributes to Doug in some of the reports and later in this newsletter (NL).

VK3UM is now a SK – but still contribution

The 13 cm DUBUS/EU CW EME Contest produced a good turnout on 13/14 Feb. The top reported score is from OK1CA with 47x42. HB9Q reports 48 QSO but Dan says that he was not in the contest and made thus made extensive use of his reflector. Coming up almost immediately is **the DUBUS 23 cm Contest weekend on12/13 March.** Expect a huge amount of 1296 CW activity! On 16/17April will be the 9 cm contest. The only dxpedition activity of interest in Feb was KH6/KB7Q in HI. Gene was 70 cm and enabled OZ4MM to complete WAC - see his report. RI will be on 432 EME in April. See AA1KK's report. Also coming up is the spring leg of the **ARI EME Contest 9/10 April. The next 70 cm CW activity time period (ATP) is 19 March from 1500-1700 and 2300-0100 (20 March).**

AA1KK: Frank (NC1I) <frank@NC1I.COM> sends the latest on his team's Rhode Island dxpedition plans -- Please note there is a significant change from what was posted on Moon-Net a few weeks ago. Unfortunately we have run into a major snag for the second weekend (17/18 April) that we had planned to operate. We have thus had to drop our plans of operating 1296 and will operate 432 only on 8, 9, & 10 April. There is a chance that we will be on Thursday 7 April starting around 2000. The call will be AA1KK and the grid is FN41. Equipment will be the same as we used in VT (4 x FO25 yagis with about 1 kW at the feed). We will provide updates on Moon-Net and will include a couple of CW activity time periods. We apologize for the change in plans and loss of our 1296 activity. There may be an opportunity for us to go back in mid-summer to operate 1296.

DK3WG: Jurg dk3wg@web.de reports on his Feb/March EME activity – I was very pleased to work on 432 using JT65B KH6/KB7Q (#) for DXCC 124* and grid sector 72. On 1296, I added on CW I5YDI (#) and JH1KRC (#), and with JT65C RA3DGP and RA3DRC (using the same equipment) {#}.

DL7LJ: Per dudek@per-dudek.de reports that he took a major lightning strike on 8 Feb -- It put nearly all the electronic equipment at my house out of service including the 10 GHz EME Beacon. However, I am pleased to report that after much repair work the 10 GHz dish tracking and related EME equipment is functioning again and the beacon should be on barring some surprise. Before the strike, I was busy building an EME beacon for 24 GHz. I have received some new TWTs for 1.25 cm and now also a PSU from CPI for the tube I have. I need help to find information about the PSU. It is a CPI EN61010. [Can anyone help]?

DL7APV: Bernd dl7apv@gmx.de is pleased to announce that he completed 432 WAS -- I could complete my WAS thank to KH6/KB7Q. Gene was QRV from HI with a big signal. I heard him (17DB) and we completed very fast. (K2UYH was my first state back in 1983). I also worked this month MX0CNS who was using a single 4 el yagi and 60 W – 500 W EIRP only! Due to rain on both sides signals were low, but after about 15 minutes, I was able to complete with him. Tom was only (28DB) and with averaging I finally saw all the information on screen. He is so far my smallest station, but we will try again with better condx.

F1PYR: André andre_f1pyr@yahoo.fr was on 13 cm EME for the DUBUS Contest --
Conditions were relatively good. I put 21 stations in the contest log, plus 4 after the contest ended. I am quite happy with this result. I am using on 13 cm a 3.5 m dish and about 250 W. I have since switched back to 3 cm, but soon hope to be again QRV on 23 cm with 400/500 W. [For the DUBUS contest]?

G3LTF: Peter g3ltf@btinternet.com sends his Feb report -- I took part of the 13 cm DUBUS Contest and worked the following, all on random CW of course. I worked on 13 Feb LA9NEA, JA4BLC (XB to 2400), HB9Q, OK1KIR, SP6OPN, G4CCH, DF3RU, HB9SV, UA3PTW, SP7DCS, OH2DG, IK3COJ, S59DCD, F1PYR, F5JWF, OZ5G, ES5PC, OK1CA, PA3DZL, S53MM, OK1YK, HB9BCD, SM3BYA, SV3AAF, SP3XBO, G4BAO, PY2BS, WA9FWD (XB) and VE6TA, and on 14 Feb only UA3PTW on SSB and LX1DB for a total of 30x27. Due to the start of our holidays, I had to leave before the US window and so missed some of the regulars such as K2UYH, WD5AGO and WA6PY. I heard (XB) N4PZ (559) and called many times but I think all his X band QSOs were being logger arranged and as I am planning to enter, I was not on the logger. [Peter's memories of VK3UM can be found near the end of this NL].

G4RGK: Dave g4rgk@btinternet.com did not have a good month in Feb – Storms hit me prior to the 13 cm DUBUS Contest and damaged my dish for the second time this year. I had major damage to repair. This was not completed until after the contest, so I was not able to be QRV. However my yagis were still intact and I was able to work KH6/KB7Q on 432 with quite good signals. The next weekend was taken up straightening out and recovering the dish. I think the profile is probably only good enough for 23 cm now. It is probably time to build a new one. With the repaired dish, I worked on 1296, on 22 Feb RA3DGP with excellent signals from his 2 m dish and 70 W. The news that VK3UM had died came as an enormous shock as I had only been talking to him a couple of days previously. Doug and I first met on the 20 m net around 30 years ago. In those days Doug was running a 24 yagi array on 432 and I had just built a group of 4 NBS yagis. We made many 432 EME skeds, but could never make it. Doug was not convinced his array was working well and mine certainly wasn't, so when DJ9BV designed a new 8 yagi array using open wire feeder, Doug built one, the results were remarkable. I still have the plot of Sagittarius he did with his array using

his software. Shortly after, I built my own version using the experience that Doug had gained in building his. Once they were both running properly, we were easily able to exchange reports via the Moon using these two arrays, at the time we were both using K2RIW amplifiers. Doug managed to get more out of a K2RIW than anyone else; probably by using the knowledge he gained in keeping Radio Australia's transmitters on the air. Over the years we continued to meet up on the 20 m net and at various EME conferences. Doug would keep us all entertained with his stories of his time in Darwin working with Radio Australia, his time in the Middle East. Alice Springs and working for the ACMA. Doug's speciality was the effects of EMR. The EMRcalc program he wrote is used by professional bodies to assess radiation risks. In the late nineties he was able to buy a piece of land and build Tikaluna on top of a hill in the wilds of Victoria, which he did despite severe health problems. Wanting to get back on EME, he then built a substantial mount and hydraulic system, on which he mounted a 28' Kennedy dish. As well as being a first class software engineer, he was also a first class mechanical and electrical engineer. As can been seen from his many magazine articles, papers at conferences and the pictures on his website. Doug and Bev came to England in 2001 and again in 2012. My wife and I were pleased to be able to spend four days with them. Our last QSO was during the DUBUS CW EME contest last month as the Moon rose in England, there was Doug calling CQ on 432.018 - he was always on .018 on any band. Although the 20 m net was abandoned over the last few years, we had continued to meet up a couple of times each week on TT or Skype to discuss the latest innovation to his software and generally put the world right. Doug was a smashing bloke and I'm going to miss him a great deal. My condolences to Bev and the family.

HB9Q: Dan shack@hb9q.ch was QRV with a big signal in the 13 cm DUBUS Contest -- During the contest weekend, we worked a total of 48 stations all on CW – (we did not participate). Out of these were 3 initials: N4PZ (529/569), VE6BGT (549/579) and VE4MA/W7 (519/569). We are now up to mixed initial #137*. It was a lot of fun to see that much activity on 13 cm! Any new station on any band wanting to work us is welcome to email or to look for us on the HB9Q loggers. We will be QRV during the 23 cm DUBUS Contest (also not participating in the contest). As always we are stand-by on the 1296 logger announcing our CQ frequency. We are also QRV for QRP stations on JT65c on 23 cm and any mode on any other microwave band including 70 cm. Just let us know by e-mail or online in the logger if you would like us to QSY to any other band.

JA4BLC: Yoshiro ja4blc@web-sanin.co.jp reports on the DUBUS 13 cm Contest -- On 13/14 Feb I worked on 13 cm TXing on 2400 and listening 2304 and 2320, K5GW (559/569), WA6PY (559/559), JA6CZD (559/559), JA8IAD (559/559), JA6XED (559/449) for initial #66 and his first ever on 13 cm EME QSO, UA4HTS (569/579), SP6OPN (569/569), OK1KIR (569/569), OH2DG (569/569), OK1CA (569/569), ES5PC (569/569), HB9Q (589/579), G3LTF (579/579), PA3DZL (569/559) and VE6TA (569/559). My total was 15x13. I am very sad to hear Doug VK3UM passed away. RIP Doug.

JA8IAD: Michinori ana11142@yahoo.co.jp was on 13 cm for the DUBUS Contest. He worked WA6PY, K5GW, W5LUA and VE6TA crossband 2304/2424 during his rising Moon on Saturday. [Thanks to JA4BLC for forwarding this report].

KH6/KB7Q: Gene (KB7Q) geneshea@gmail.com reports on the 70 cm part of his successful EME dxpedition to HI -- I was able to get two partial moon passes in using a single 9 wl yagi and 500 W. 13 stations were worked. The most important contact of course was giving DL7APV his 50th state for 70 cm WAS. It finished off his 35 year quest. K5DOG was the most persistent station, and I finally worked him after several hours of trying. Next time I try this I'll use a non-metallic mast so I can rotate the yagi and change polarity if needed. Ground gain out over the Pacific Ocean was spectacular, but I lost use of that favored location after the first pass. The second location didn't get me a clear moon until +5 degrees, and even then a huge Norfolk Pine was blocking my moon shot, at about a 100 m away. All QSOs were on JT65B. Stations logged were DF3RU (23DB), DL7APV (13DB), HB9Q (17DB), DK3WG (13DB), WA4NJP (24DB), N4QH (21DB), DL5FN (18DB), G4RGK (25DB), OZ4MM (20DB), OK1KIR (25DB), OK1DFC (23DB), K5DOG (30DB) and K2UYH (22DB). Wyoming will probably be my next 432 dxpedition location this spring, if there is any interest? [I am sure there will be! WY has not been active off the moon on 70 cm in many years].

MX0CSN: Tom (M0ABA) m0aba1970@gmail.com reports on his end of his amazing QSO with DL7APV – I am continuing with my tiny antenna experiments. On 13 Feb I managed to work Bernd using a DG7YBN 4 el yagi and 62 W at the feed point. Two days of pouring rain and our old friend Faraday rotation didn't stop us – Hi. I thought working Bernd with 7 elements was good, but this was truly amazing.

NC1I: Frank frank@NC1I.COM writes on his Feb operation -- I was not active in Jan due to travel. The following stations made it into my 1296 log during Feb; all QSOs were using JT65C: On 13 Feb at 1632 RA3DGP (25DB/15DB), 1652 GM4PMK (15DB/6DB), 1700 RD3RA (11DB/4DB), 1715 PE1CHQ (11DB/7DB), 1722 IK2MMB (10DB/8DB), 1731 DC9UP (11DB/6DB), 1738 DL6SH (4DB/5DB) and 1745 DK0SF (19DB/O) - Slawek was running just 7 W, on 13 Feb at 1818 UA4LCF (18DB/7DB), 1831 SP5GDM (12DB/6DB), 1845 G4YTL (12DB/6DB), 1906 PA3FXB (15DB/5DB), 1915 PA2DW (15DB/10DB) and 1945 RN4AT (30DB/7DB), on 14 Feb at 1636 DL6SH (11DB/7DB), 1707 RA3DGP (26DB/19DB), 1726 DJ2DY (22DB/14DB), 1734 PE2TV (22DB/11DB), 1806 VE3KRP (13DB/6DB), 1820 UA4LCF 17DB/8DB), 1854 DL6SH (6DB/7DB), 1859 PA3FXB (13DB/6DB), 2017 IK5EHI (16DB/9DB), 2032 VE4MO (27DB/15DB), 2047 W3HMS (18DB/11DB), 2101 IK2MMB (15DB/O) and 2125 K5DOG (22DB/10DB), on 20 Feb at 2231 SM7SJR (13DB/10DB) and 2240 PY2BS (5DB/4DB), and on 21 Feb at 0039 OE9GLV (18DB/9DB) and 0106 VE4MO (28DB/17DB). I plan to be active for the DUBUS 1296 CW contest. It will probably not be a full out effort, but I will be on a fairly significant amount of time. W1QA and I will be spending some time over that weekend preparing all of the 432 equipment for our RI dxpedition – [see the AA1KK report in this NL].

OK1CA: Franta strihavka@upcmail.cz operated the DUBUS 13 cm Contest -- I prepared during Friday by checking the radio sources. My results were Sun = 22.4 dB (SFU 112,6), Moon = 1.5 dB, Cassiopeia = 0.8 dB, Cygnus = 0.65 dB, Omega 0.7 dB, Taurus 0.45 dB and Sagittarius 0.9 dB. I start on Saturday by QSOing JA6CZD, JA8IAD and JA4BLC, but there was no activity from VK. I worked 37 QSOs during the Saturday part of the contest. Initials were OK1YK for #132 and N4PZ #133. I added 10 more QSOs at Sunday and initials with VE6BGT #134 and VE4MA/K7 #135. There was very good activity from NA. I worked during Contest 9 W stations and 2 VE stations. I only missed W6YX. My final score was 47 x 42.

OK1KIR: Vlada and Tonda vladimir.masek@volny.cz report on their club's Moon activity in Feb – On 70 cm we worked using JT65B on 12 Feb at 1602 RA9DA (28DB/24DB) for digital initial {#157}, 1649 K3GNC (27DB/24DB) {#158}, 1859 N0IRS (17DB/18DB), 1949 PA2CHR (22DB/16DB) {#159}, 1957 DL8DAU (18DB/24DB) and 2056 at only 3 degs el partial KH6/KB7Q (25DB/lost) - not finished due to a sudden PC failure and after reboot too weak, on 15 Feb at 2113 UT5DL (14DB/14DB) {#160} and at 2304 KH6/KB7Q (23DB/25DB) {#161} for 1st KH6-OK QSO and 49th US state. For WAS on 432 we are missing just SC and a QSL card from KD7YZ (KY). Gene was our 200th first from OK (178 EME and 22 tropo) on 432 up to 24 GHz (tropo from 1973 and EME from 1976). On 23 cm we contacted on 12 Feb at 1105 SP5GDM (54/56) for initial #392. On 13 cm in the 13 cm part of EU EME Contest, we were active only on Saturday 13 Feb and QSO'd using CW at 0937 JA8IAD (569/579), 0946 JA6CZD (569/569), 1002 UA3PTW (569/589), 1013 JA4BLC (569/569), 1030 SP3XBO (559/579), 1035 SP7DCS (549/579), 1042 HB9Q (589/599), 1049 IK3COJ (569/579), 1100 OH2DG (569/589), 1158 G3LTF (569/569), 1203 LA9NEA (559/569), 1210 OK1CA (579/589), 1218 SP6OPN (589/589), 1232 OZ4MM (579/579), 1239 F1PYR (569/569), 1246 HB9SV (579/589), 1258 F5JWF (569/599), 1306 DF3RU (569/579), 1318 ES5PC (579/579), 1326 G4CCH (579/589), 1338 UA4HTS (579/599), 1345 S59DCD (569/579), 1417 OZ5G (549/559),1442 OK1YK (549/569) for initial #146, 1913 SM3BYA (559/569), 1919 PY2BS (579/589), 1933 PA0BAT (579/579), 1949 S53MM (569/569), 1958 WA9FWD (569/559), 2020 VE6TA (569/579), 2037 W5LUA (579/579), 2102 N4PZ (559/549) #147 and 2115 PA3DZL (569/569). Our total count was 33x31. We were off from 1500 to 1900 investigating a VSWR problem and changed a TX jumper in the feed compartment. 6 cm we made on 12 Feb a strong signal nice easy JT4F QSO at 0941 with JA1WQF (12DB/7DB) for digital initial {#17}.
On 3 cm, on 24 Feb, we performed a test with CP at HB9Q and G3WDG that we received with rotatable LP. The idea was to investigate the axial ratio of the CP received signal. Unfortunately little usable information was gained because of non-precise pointing to the Moon's center at OK1KIR (3.3 dB noise on Moon center, while under 2 dB at ± 0.23 deg off). Test is planned to be repeated later in March. After that test HB9Q tried a JT4F QSO with Hermann DL2NUD. Hermann was testing a new 3

cm rig dedicated for next dxpeditions. He used 90 cm dish with vertical LP and 35 W at the feed. We watched the whole long test and decoded Hermann on WSJT10 at 221100 6 -15 0.5 -39 74 # HB9Q DL2NUD R-16 1 0 E and at 221900 8 -13 0.7 79 77 # HB9Q DL2NUD R-16 1 0 D. Unfortunately Hermann was not logged on HB9Q, so calling him on random without proper QRG with automatic Doppler correction produced no response.

PA3DZL: Jac sends his 13 cm EME Contest results -- I was QRV during the 13 cm EME contest and made 34 CW QSOs X 32 mult with 3 initials. Conditions were very nice; most signals were (559) and several (569) and (579)! Crossband (XB) QSOs were made 2320 to 2400 and 2320 to 2304. I worked on Saturday JA4BLC (XB), SO6OPN, OH2DG, ES5PC, HB9SV, UA3PTW, HB9Q, UA4HTS, OK1CA, IK3COJ, G4CCH, G3LTF, F1PYR, SP7DCS, SV3AAF, DJ3FI, S53MM, DF3RU, PY2BS, HB9BCD, S59DCD, VE6TA and OK1KIR, and on Sunday OK1YK for an initial (#), LA9NEA (#), PAØBAT, ON5RR, WA9FWD XB, K5GW XB and WD5AGO (XB), SP3XBO (#), LX1DB, W5LUA XB and K2UYH (XB) - distorted signal but good copy! On Monday, I was also QRV and worked JA6CZD XB (#), WA8RJF XB (#) and a nice SSB QSO with DF3RU. I was very pleased to make these 2 initials outside the contest. This was my first activity this year. The last 3 months we had very bad weather with lots of wind, which made it difficult to be QRV. Had my dish has been in the "storm position" for quite some time. Thanks to all for the great fun and hope to see you again during the 23 cm contest in March.

PY2BS: Bruc bruce@zirok.com was QRV in the 13 cm contest – I made 17 QSOs the first day including an initial with WA9FWD (#) and also VE6TA. On the second day I added an initial with N4PZ (#) and ended with W5LUA. I am building a new station using a solid 3.7 m Andrew dish for 3 and 6 cm. Originally intended to put it at my coastal QTH (PY1KK), but I later choose to install it here in Sao Paulo, as we're not going that often to the coast. I can't install a second dish on the top of the building without running into troubles with the neighbors, so I built for it on a 2.5 m above the ground platform, to clear the closest obstacles. Even so, I'll loose about 15 degrees on moonrise and a bit less on moonset.

PY2BS's new solid dish in prep for 3 cm EME

RX8XR: Vlad rx8xr@mail.ru is a new station on 432 EME using a single 19 el yagi and 400 W. He made his first 70 cm EME QSO using JT65B with HB9Q {#1} followed by UA3PTW {#2}. [TNX DK3WG for relaying this report].

RX8XR's single 432 yagi is in middle of 2 m array

UA3PTW: Dmitry ua3ptw@inbox.ru in Feb/March was on 432 using JT65B and added initials with SK5AA {#}, RX8XR {#} and G4VKT {#}. Dmitry worked initials on 23 cm using JT65C with RA3DRC {#} and G4YTL {#}, and on 13 cm using CW with LA9NEA (#) and WA9FWD (#). [TNX DK3WG for relaying this report].

UA9YLU: Victor ua9ylu@mail.ru in Feb/March worked on 1296 using JT65C RA3DRC and RA3DGP (using same equipment) for an initial {#}. [TNX DK3WG for forwarding this report].

VE3KRP: Fast Eddie's eddie@tbaytel.net report for Feb/March follows – I worked using JT65C on 14 Feb OE9GLV, IK2MMB, NC1I, PE1CHQ, G4YTL for a digital initial {#}, PA3FXB, K5DOG and W3HMS, and on 15 Feb PA2DW. The days are getting longer but there is still a lot of snow and cold around. Hopefully spring will bring us two weeks of bad skiing this summer – HI.

VK3KRP – winter EME from snow country

VE4MA/K7: Barry ve4ma@shaw.ca is in AZ and writes -- Nice hot weather here this month, but very cold back home. I returned from a short trip to VE4 just in time to quickly finish up a 2.3 station, but did not have my TX going on the first night of the 2.3 GHz DUBUS contest. However, I did copy VE6TA, WD5AGO, K5GW, HB9Q, OH2DG, OK1CA, ES5PC, SP6OPN, DF3RU, OK1KIR, G3LTF, W5LUA and VE6BGT all with very good signals (449-569). On the second night, I did work ES5PC, HB9Q, K2UYH, OK1CA and W5LUA on CW for a total of 5x5. I missed OH2DG, K5GW and heard LX1DB, F1PYR and W6YX. I was hearing very well with over 8 dB of Sun noise using a G4DDK preamp on the 5' offset dish, but my 160 W TX signal seemed to be low. I later discovered a bad 2 m long Heliax jumper that was losing 25 W (good return loss?). So my TX at the feed was only about 65 W and is now at 100 W. This jumper would have also been hurting my 5760 and 3.4 signals. On 21 Feb, I completed a 5760 JT4 QSO with UR7DWW (14DB/17DB). I had solid copy on him, but he was having trouble decoding me. Not sure if this is the K/VE4MA call problem still? I will do some local testing to confirm. On 22 Feb I had a nice 13 cm CW QSO with VE6TA (559/O). I will be looking for additional contacts on 2.3 and 5.7 GHz until I leave for the summer on about 28 March. I will be active on 23 cm for the DUBUS contest.

VE6BGT: Skip macaulay.skip@gmail.com had a fun time in the DUBUS 13 cm contest -- This was my first real workout of the new equipment other than a few QSOs here and there for testing. My new water cooled Spectrain amps worked flawless, but the driver section, which consists of two Spectrain boards running at a lower output to drive the bigger amps would slowly creep up in temperature until my built in high temp circuit would shut it down. It would cool down just as fast using the fan, but as soon as I keyed up, it crept up in temperature just as fast again... So this

is something I will have to fix for better cooling. So a few of the pile ups that I had were tense, but it worked out OK. I was able to work the following: SP6OPN, ES5PC, HB9Q, W5LUA, VE6TA, K5GW, G4CCH, OK1CA, DF3RU and finally WD5AGO for at total of 10x10.

VE6TA: Grant ve6ta@xplornet.com updates on his recent activity – On 10 Jan, I worked the special event station of N2MO on 1296 CW with very good signals. Declination was low, so I had to work them through my trees. Despite the blockage, they sounded very good. On 17 Jan, I had to work on the weekend, so was only able to get on for a short western window in the 1296 SSB Funtest. I worked WD5AGO, VE6BGT and K2UYH. On 23 Jan, I switched to my 432 feed and was on for the DUBUS 70 cm CW contest. The following stations went into my log: I2FHW (kudos - they were a great beacon all weekend long), G3LTF, OH2DG, G4RGK, SP7DCS, W5LUA, KL6M and VK5MC and VK3UM, and on 24 Jan DF3RU, OK1KIR and ES5PC for a score of 12x12. The 13 cm feed went into the dish for the DUBUS 13 cm Contest. I worked W5LUA, K2UYH, K5GW, WD5AGO, WA6PY, JA8IAD, HB9Q (S9+10 most of the pass), ES5PC, G4CCH, OK1CA, DF3RU, PA3DZL, OK1KIR, UA3PTW, G3LTF, SP6OPN, S53MM, WA9FWD, OH2DG, VE6BGT, PY2BS, N4PZ, JA4BLC for a total of 23x22. I had to QRT for the second pass due to family commitments, but was back on the 15 Feb, after the contest, for a few skeds. I worked F1PYR for initial #86, WA8RJF, and G4BAO #87. All in all a lot of fun over the two contests. I plan to be on for the 23 cm CW leg in March.

W6YX: Gary ad6fp@lbachs.com reports on his group's contest plans -- Although we expected to be QRV for the whole weekend on 13 cm, Murphy had other plans for us.
Starting Saturday morning we put the 13 cm feed on the dish, moved the LNAs from the 23 cm feed to the 13 cm feed, hooked up the 13cm PA and the transverter and thought we were ready for the contest. For the first 45 minutes after moonrise, we listened for and looked for signals and heard nothing. Several hours of debugging ensued: testing sun noise, replacing LNAs, adding filters (Silicon Valley WIFI interference is considerable at our site), etc. Unfortunately, we weren't able to find/fix the problems within the EU window, so we gave up and planned to make another attempt on Sunday morning. Bench testing the transverter on Saturday evening resulted in the discovery of a hairline crack in one of the microstrip launch SMA connectors. Sunday morning, we reinstalled the transverter and again listened/looked for signals at moonrise but much to our chagrin heard nothing. Several hours of more debugging finally revealed that the receive feed line from the LNA down to the transverter had evidently reached it's limit of being flexed by the movement of the dish and developed an intermittent open condition. After quickly jury rigging a replacement feed line, we thought all systems were go. But once again we heard no signals off the moon. A quick check of sun noise exposed the final problem: the 13 cm sits alongside the 23 cm feed and requires an offset in the azimuth tracking. We had neglected to use the proper tracking configuration file. Finally we heard signals off the Moon! At this point we had missed most of the EU window and were beaten down by Murphy, but we did manage to complete 5 QSOs: WA9FWD, ES5PC, W5LUA, HB9Q and WD5AGO. Next time we will be better prepared! Building, operating and maintaining a multi-band (144,432,1296,2304 and 10 GHz) EME station is no small task and requires constant effort. We are constantly learning lessons in system design and construction in the process, that's part of the fun of EME!

WA6PY: Paul pchominski@maxlinear.com sends his EME report for Feb/March -- I was QRV in 13 cm DUBUS Contest and QSO'd JA4BLC, JA6CZD, JA8IAD, K5GW, VE6TA and W5LUA for a total of 5x5. All signals were very strong; K5GW was the strongest. I was getting from time to time some QRM bursts in 2400 MHz band that were probably spill over from WiFi. The JA's signals were still easy to copy. One day before the contest, I checked old 2424 and this band was completely jammed. I was QRV only 1.5 hours before leaving for the entire weekend. I plan to be on for 1296 contest weekend.

WA8RJF: Tony temanuele@ebulent.com reports – I had intended to operate Saturday of the DUBUS 13 cm EME contest, but extremely cold temps (-15° C) and winds in excess of 40 kph prevented me from installing the feed and running the cables to the shack. The weather improved on Sunday – no wind and temperature -7° C. Worked were HB9Q, W5LUA, OK1CA, WD5AGO and ES5PC for a score of 5x5. CWNR were K5GW, W6YX, OH2DG, WA9FWD, K2UYH and VE6BGT. On Monday after the contest, I worked DF3RU crossband. I heard someone testing on 2320. It was Karl DF3RU. While testing he switched to SSB and was 4X1. A bit later we easily worked on CW for a new one. Then in rapid succession I worked PA0BAT and PA3DZL both initials. Then worked VE6TA followed by F1PYR also an initial. Two hours well spent: 4 out 5 QSOs were initials. Weather permitting I will be QRV for the 23 cm weekend.

WA9FWD: John jstefl@wi.rr.com operated in the DUBUS 13 cm contest with the following results – During the first pass, I worked IK2RTI, OK1CA, G3LTF, OH2DG, W7JM, K5GW, ES5PC, UA4HTS, W5LUA, OK1KIR, HB9Q, PY2BS, VE6TA, and SP6OPN. I missed a call at 1810 when my computer locked up causing me to lose the Moon. In the second pass I worked UA3PTW, PA3DZL, DF3RU, LX1DB, G4CCH, WD5AGO, K2UYH, F1PYR and W6YX; resulting in a total score of 23X22. This is the first operating I have done since installing an INRAD filter in my TS200, and I was very pleased with the results. The radio definitely seems quieter on receive. I have installed my 23 cm feed and plan on operating in the next DUBUS event.

K2UYH: I alkatz@tcnj.edu do not have a lot to report this month as I had little time due to many conflicting responsibilities. I had planned to operate the DUBUS 13 cm contest, but had some WX problems. I was QRV the first night with K2YY on 13 Feb and worked at 0032 VE6TA (569/559), 0038 W5LUA (579/569) and 0058 K5GW (579/579). I listened and called for JA stations on the new 2400 freq but heard none. I am wondering if all was OK. The next day it was very cold, but otherwise the WX seemed OK. I untied my dish, but just prior to moonrise the winds increased tremendously and before I could tie down the dish, the chain holding my dish broke. I was able to get the dish tied down with the assistance of NE2U, who came over quickly in response for help. I tried, but it was just too cold and windy to fix the chain. The next day, I was able to make repairs and worked on 14 Feb at 2024 OK1CA (579/579), 2028 HB9Q (589/579), 2033 ES5PC (579/579), 2041 N4PZ (449/449), 2250 UA4HTS (569/579), 2053 UA3PTW (579/589), 2058 PA3DZL (569/569), 2106 OZ4MM (559/559), 2123 WA9FWD (559/569) and 2130 G4CCH (579/579) for a total of 13x13. I also had stability problems with my transmitter during the contest. There was a big whoop on my echoes. Although GPS locked, it had a less than clean note that still needs to be troubleshot. On 16 Feb, I was on 432 to work at 0310 KH6/KB7Q (20DB/22DB) for mixed initial #910*. I have been having big problems with noise on 70 cm, > 20 dB of white like noise. At the start of this sked, the noise was back and a QSO seemed impossible, but after about 10 minutes the noise disappeared and a QSO was easily achieved. I plan to be on for the 23 cm DUBUS Contest.

4th EME Conf Thorn 1992: VK3UM with post conference tour group. From L-R (Sally XYL & Al - K2UYH, Doug – VK3UM, Reg - G8VHI, ?, Bev XYL VK3UM, Russ – N7ART, ??)

NETNEWS: **RN4AT** is QRV on 432 with a single 9 wl yagi and 300 W, but no elevation – [TNX DK3WG for info]. **DK3NG** has a 2.4 m dish and is looking for feed suggestion for 23 and 13 cm. **WA3LBI**, now QRV on 3 cm, plans to add 13 cm by April. Jim hoped to make the DUBUS contest, but had transverter problems. **G4BAO** was active on 13 cm for the DUBUS contest, but made few QSOs. He will back on 23 cm for the 1296 contest. **N4PZ** has had some problems with a broken dish chain drive, but is now QRV again on 13 cm as well as 23 cm. Look for Steve in the DUBUS Contest.

FOR SALE: **F6AJW** has some NOS THOMSON UHF/SHF tubes available (in original packing) at low prices. I would by far prefer them to be on the air for EME than staying here. Some of these tubes are

already in use with success by "big guns" on 432 or 1296 EME. I have TH 293 (older than TH 347 but equivalent except different heater voltage). It operate well class AB, B and C with > 2.5 kW depending on which band; TH 313, bigger brother, same socket but will not fit in TH 293 cavity. It has 4 to 5 kW output; TH 290 (have a TH more recent equivalent) with 10 kW UHF capability - very heavy, no packing, nice looking tube for shack decorating! Jacques is not in business but wants to clear his expenses and is open to exchanges. If interested/more info email jack.f6ajw@gmail.com. **WA2ODO** has a new listing with info on his preamps that can be found at: http://www.kl7uw.com/WA2ODO_PayPal_Sales.htm.

TRIBUTE TO VK3UM BY G3LTF: Doug's death is a real loss to the EME community. I will personally miss him greatly as we were very regularly in touch on a wide range of topics including modifications to EMECalc and the EME Planner and of course the merits of our cricket teams and the quality of our beers! He was a real mate, we first worked on 432 CW EME in 1985 and on 1296 in 2006, but didn't meet in person until the Wurtzburg EME conference the same year. We last worked in Jan this year on SSB and CW on both bands. As many have said "Moonrise in Europe will never be the same again". Doug was a first class CW operator with a great signal on both bands and an excellent engineer. You don't get to erect a fully steerable 28' dish with excellent performance together with QRO PAs and PSUs and keep it all running without top class engineering skills in all departments. In addition his software skills enabled the development of a range of extremely useful software tools for EME and related areas, used by hundreds of people. He was continually looking for ways to improve them further and to add new ones and always ready to assist the newcomer to EME in making use of them. Doug and his XYL Bev stayed with us for two lovely (and hilarious!) days in 2012 after the EME conference, we listened to my 13 cm echoes and talked about 6 cm, a band he was preparing for but sadly never finished that would have been a whale of a signal! Our thoughts now are with Bev and the family; Doug you will be sorely missed, RIP old friend.

Peter's favorite picture of Doug during visit in 2012

VK3UMS EULOGY BY LONG TIME AMATEUR RADIO FRIEND -- Bev, Cheryl, Peter, Ben, Andrew, Scott, Daniel and Bianca, Doug's friends. I'm John VK5DJ and I've known Doug since 1956 when he lived with his mum in Francis Street, Fullarton a suburb of Adelaide. My pleasure is to chronicle Doug's interests in Ham Radio. Along with Brian Endersbee (Indochina we called him), and Brian Tideman (Tiddles) we attended Unley High School. Doug was one year younger than the rest of us. Our meeting marked the serious start of Doug's interest in radio, apart of course, from the spark transmitter and high frequency motor generator he had, and used. And of course his similarly less than legal broadcast band experiments! Brian Endersbee (now VK3WP) and his mate Frank Choate (now VK5CVZ) introduced the world of one m ham radio to us. We built our own equipment to get on the air with parts purchased from Walthams in Rundle Street, it was an army disposals store, painted yellow so we called it the Mustard Pot. We did neglect to hold licenses at the time, as did many others on the 1 m band, but we did follow the correct protocols and I think the radio inspectors appreciated that. Doug's pirate call was VK5ZDA. In those days any call beyond VK5ZBZ was a pirate call. We all studied hard, perhaps at the expense of our school work and received our full calls during 1957 or 1958. Photographs were few and far between in those days, but two that survived are of our bicycle mobile foxhunts in Brown Hill Creek and National Park Belair and of Doug assembling his tower. One incident that must be recalled from 1956 was the time that Indochina (Brian Endersbee) and I decided to go 1 m mobile in my new motorcycle and sidecar. Brian was in charge of the radio and we adopted an unused callsign, VK5SI. Our gear used very simple receivers that emitted a squeal that others could hear on their own receivers at up to a mile or so, this meant we could always tell if another person was listening. We called Doug just around the corner from his home and he replied. We exchanged a few pleasantries and then Brian explained that VK5SI stood for VK5 station inspector, which it did not of course. We put it over to Doug for his turn to transmit and we heard his receiver shut down. We thought it fun to go see Doug which we did. When he heard the bike pull up he came out to see and burst out laughing, called us names and then told us he'd dismantled his gear and hidden it under his mum's bed. We all had a good laugh and then Doug squeezed into the sidecar with Brian and we went off to try the same trick on others. One of the real RIs from that time was Rob Gurr who is unable to attend today but is also a longtime friend of Doug's.

VK3UM SOFTWARE UPDATES – Doug lives on. Even at such a sad time, his contributions remain. I received news on his latest version of EMECalc V11.10. Moon Noise values have been revised to reflect the latest findings. X and Ku bands have been incorporated. Data from Goldstone measurements confirms measurements from G3LTF for 6, 9, 13 and 23 cm. Source reference are provided in the help file. The accuracy of the Beam fill factor for very large apertures is still to be resolved with ongoing investigation, but for normal Amateur size dishes is adequate. The additions of: 1) a calendar date option now enables review of measurements taken at preceding or future dates. This option provides relative Moon data (phase, path loss, Moon noise etc.) calculations for the date in question. 2) A ground temperature slider to provide a means of measuring more accurately the Ground to Cold sky ratio by adjusting the temperature of the far field object to the temperature it will most likely exhibit. Settings for depression angle and type of reflective object (walls, trees, ground surfaces, etc.) has been covered in detail and is explained within the help file 'Measurement of Ground to Cold Sky ratio' by G3LTF - (a 'must read'). The accuracy obtained from actual measurements have proven to be most pleasing. And also info on EME Planner V2.18. For this package now included is a revised method of window calculations to provide user adjustable minimum and maximum elevation windows for both Home and DX stations. In the Planner option, the values may all be stored for recall if desired. It is now also possible to go down to minus 3 degrees if required. Doug acknowledges contributions of G3LTF for his considerable work on ground temperature, G3WDG for the date option, VK7MO for his persistence in Moon temperature and beam fill factor (ongoing) and 4Z5CP and DD0VF for their suggestions regarding window calculation requirements.

FINAL: This is another difficult month for me with travel and family complications. I still have much technical material that I do not have time to properly prepare time month, but hope include in the near future. Thanks for all your support of the NL.

The 17th International EME Conference Website has been updated. The registrations backlog is being closed. Quotations for the conference package have been sent to all that have registered. It is suggested that you register as soon as possible. [This will be of great help to the committee]. You can see who has already registered at http://www.eme2016.org/index.php/participants/. Many have asked to extend their stay to enjoy a vacation here, and we are happy to help! If you need any information just ask. A good number of papers have been proposed so far, but more are expected! PSE Keep an eye on the deadline. You can see on the schedule that we have already started to populate the talks, even if only with a small part of the proposals received. There will also be space for table-top (poster) presentations and to show things, or you can simply send a paper just to be published on the proceedings. The prizes from last year's ARI EME Trophy will be presented at the conference banquet. [Also to be awarded will be the Top Fun Maker from the last two SSB EME Funtests].

The results ARI EME Trophy 2015 can be found at http://www. eme2008.org/ari-eme/Results%20EME%20Trophy%202015.pdf.

OK1DFC announces that 25th EME and MW Seminar will be in OK this year – see http://www.vhf.cz/seminar-2016-eng/ for details.

Those interested in EME are encouraged to attend The VHF Superconference to be held 15-17 April at the Holiday, Inn Washington-Dulles Intl Airport. Among the planned activities will be a short course on Getting Started in 70 cm and Microwave EME. The will also be a

workshop on Loop Yagi Design. The conference information is at http://vhfsuperconference.com/. There will be FREE shuttle service to the Udvar-Hazy Air & Space Museum. Early Bird Discount! Sign up before 15 March and registration for both days will be $89. Saturday only attendance cost is $65. Sign up for the banquet before 15 March and the cost is $39. After, all registration costs above will increase by $10.

Please keep the reports and tech info coming! I shall be looking you on 23 cm during the DUBUS contest. GL and 73, Al – K2UYH

N4PZ dual 23 and 13 cm feed – see Netnews