432 AND ABOVE EME NEWS MARCH 2003 VOL 31 #3

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THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT http://www.nitehawk.com/rasmit/em70cm.html

CONDITIONS: I am afraid that the EME SSB contest on 1296 dominates much of the reports this month. Conditions were not bad, but were certainly not the best I have seen for SSB on 1296. Despite this fact, I think this was one of the best SSB contests thus far. Everyone seemed to be in the right spirit and having fun operating the contest. 432 was far from dead. Several new stations showed up including KE2N and IN3AGI to keep things interesting. This month the focus will definitely shift to 70 cm for the 1st part of the DUBUS/REF EME Contest on 15/16 March. This part covers 432 MHz and the 2.3-5.7 GHz bands. (On 12/13 April the contest moves to 1296, 10 GHz and 144 MHz.)

F9FT A SILENT KEY: EME and amateur radio has lost one its patriarchs. Marc, F9FT, father of Franck (F5SE) and VHF/UHF pioneer passed away on March 2nd at the age of 91. Marc will probably be best remembered for the F9FT yagi. When I visited him this past summer on the way to the Prague Conference, he was still active and working on a new antenna designed using patch antenna concepts.

HIGH EME SSB CONTEST SCORES: It looks like HB9BBD has taken the top fun maker spot this year with 756 points. The next highest score was from HB9Q with 580 points followed closely by G4CCH with 561. F2TU was next at 405. There are still possibilities for more entries, as I will allow another month for late arriving reports.

3B8/ON4AME FIIC-EN FLAC DXPEITION: Tnx to Johan, ON4ANT on4ant@pandora.be and his team we have the first true 70 cm dxpedition in some years. Johan with the help of DH5FS and DH1DM will be operating from LG89 from 14 to 19 March on 70 cm with a 2 x 38 el M² yagi array, GS31 amp (500 ~ 700 W), DL9KR LNA and TS2000. The actual start of operation will depend on setup time and it is possible that they could be on the moon by the 13th. The available moon times for skeds are as follows: Friday 14 March 1150 to 2240, Saturday 15 March 1240 to 2345, etc. K1RQG K1rqg@aol.com is arranging skeds. Contact Joe by e-mail or preferably by the 20 m net. Feedback during the expedition can be obtain via ON4AOI and ON4GG, who will be on line most of the time - see http://chat.dxers.info/?b=eme or http://chat.dxers.info/?b=eme or http://chat.dxers.info/?b=eme or http://chat.dxers.info/?b=eme or http://chat.dxers.info/? <u>?b=6m</u> or e-mail to <u>ON4GG@pandora.be</u>. They will TX on 432.035 and listen for skeds on 432.045 and for random contacts on 432.055. If no signs are heard after 15 minutes in skeds, they will respond to random calls on .055. When skeds are complete they will listen on both RX frequencies for calls. They will also take JT44 skeds on 432.144 RX/TX. [There is quite a bit of expense in putting on a dxpedition like this one. Besides the cost of airline tickets and transportation, the weight of the equipment required for 432 EME (the PA and power supply are quite heavy) adds considerable expense. Johan and company are hoping for some donations (\$\$) to help with these extra expenses.]

F2TU: Philippe F2TU.Philip@guideo.fr joined in on the fun during 1296 SSB Contest -- I was not able to be QRV all the night, but still worked a few stations. QSO'd were at 1548 HB9BBD JN, 1614 I0UGB JN, 1700 F6KHM IN, 1715 G3LTF IO, 1758 HB9Q JN, 1818 OZ6OL JO, 1856 F6CGJ IN, 1914 DL1YMK JO, 1917 G4CCH IO, 1920 LX1DB JN, 1923 ZS6AXT (559/55) KG - one way, 1929 DJ5NW JO, 1951 GW3XYW IO, 2011 OE9ERC JN, 2149 OE5EYM JN, 0219 K2UYH FN, 0226 K0YW DM, 0228 DF4PV JN, 0234 W5LUA EM, 0236 OE9XXI JN, 0244 W7BBM DM, 0259 WA6PY DM, 0332 VE7BBG (549/549) on CW and 0358 N7AM CN for a total of (22x2 +1x1) x 9 = 405 point. Heard were IK2MMB, I3COJ, HA5SHF, HB9BHU and K7XQ, but without answer. I was very surprised to contact on CW VE7BBG, a ghost of the beginnings of 1296 EME! I shall be QRV for the European Worldwide EME Contest on 70, 13, and 6 cm. The feeds on the dish will be 70 + 13 cm or 70 + 6 cm. I plan to be active for NA on 15 March from 0000 to 0200 on 2304.1 (RX also on 2320.1), and on 16 March from 0100 to 0300 on 5760.1, and for JA/Asia on 15

March from 1500 to 1600 on 2304.1 MHz (RX 2424.1 and 2320.1) and 16 March 16 from 1700 to 1900 on 5760.1. Other arrangements are also possible. Who will be QRV? Pse reply by e-mail.



UT3DL's 70 cm EME array

F5VHX/G8MBI: Graham Graham.D@wanadoo.fr updates his report of last month -- I finally got around to tidying up the pages for my Ulti-track project. The mess is gone, the navigation is faster and easier, and all documents are now in a 'library'. I put some screen shots of the new G4XBF full PC front-end software up there (UThost). It is 4 systems, capable of any sensor combination, mixed on any axis, live real-time file swap or DDE software interface capable, setup and calibration 'wizards', etc. It is very close to done. The new GM4JJJ palm tracker software is available for download (run time limited shareware) along with the other F5VHX free stuff at http://www.rfham.com/newulti/index.htm. The new dual axis (AZ/EL) speed controller is currently on the bench being tested. When completed the new G4XBF UT host software will support this with acceleration/deceleration and pan speed. If anyone needs a low cost 'pro' solution, the entire system is now available configured and in 19" 3U rack — see R.F. Professionals http://www.rfpa.com, Radio Amateurs http://www.rfpa.com, Ra

FY5DG: Hervé f5hry@wanadoo.fr reports that FY5DG (GJ35) is planning to come on 70 cm EME soon. He has built an array of 4 x opt 8.5 lambda BV yagis, but has problems with the phasing lines. Herve is going to FY for the ARRL DX SSB contest (leaving Paris on 25 Feb) and will bring some brass 6x5 (mm) lines to him as well as a 4:1 heavy-duty balun. FY5DG already has a PA from HA1YA with a Russian tube. He needs to build it up (it's a kit) and find a power supply. He also has an LNA, but did not measure it. Sun noise is around 10 dB with his present (unmatched) phasing lines, which is not too bad. Herve promises to keep us informed of FY5DG's progress.

G3LTF: Peter's 100633.1656@compuserve.com Feb EME report -- I was operational in the 1296 SSB Contest for a short while, about 3.5 Hours. Although I have over 500 w at the feed, I still have problems with stations that I can copy fine but who cant seem to hear me! I thought activity was low, but I did miss the Eur time slot in the evening. I worked on 15 Feb at 1610 HB9BBD (56/57) JN, 1713 F6KHM (55/55) IN, 1715 F2TU (54/54) JN, 0014 K2UYH (55/55) FN and 0025 W2UHI (54/54) EN, and 16 Feb at 0027 K0YW (55/55) DM, 0032 HB9Q (56/56) JN, 0035 OE9XXI (57/55) JN, 0042 G4CCH (55/55) IO, 0052 GW3XYW (55/55) IO, 0057 K5JL (57/56) EM, 0108 OZ6OL (54/55) JO, 0122 W5LUA (55/55) EM and 0130 W7BBM (54/55) DM for 14x2x8 =

224 points. CWNR was I0UGB and heard were N2UO, KU4F, DL1YMK and WA6PY (RS33)! At 1842 I worked ZS6AXT on CW and heard JA6AHB and LX1DB. I was also on 432 on 15 Feb and worked at 1821 UA3PTW and at 2300 KE2N for initial #365. (I rechecked my last 20 initials and found I'd left some out of the total). CWNR was SM5IOT and heard were G4RGK and ON5OF/F. I have been doing some measurements of radio stars. On 23 cm I get 1 dB from Cygnus and 0.5 dB from Taurus, and on 13 cm I get 0.35 dB from Cygnus and 0.4 dB from Taurus. This calculates back to a system temperature of 40-47 deg K on 23 cm and 50 deg K on 13 cm. My wideband measuring system has a resolution of about 0.1 degrees K. On the basis of this, I think I can improve my sensitivity on both bands by about 1 dB.

G4CCH: Howard howard.ling@g4cch.com sends his 23 cm SSB Contest report -- I was QRV in the contest, but unfortunately tree blockage limited the start of my moon window to >90 deg Az. This meant starting after 1830, even then 1/2 of the dish was still in the trees and wasn't clear until 2 hours later. Keeping awake in the early hours of Sunday morning was a problem - note the lack of QSOs between 0100 and 0400. I fell asleep while sat in front of the rig for at least 2 hours! Hopefully, I didn't miss too much. Despite this I still managed to make 27 QSOs for a score of ((24x2)+(3x1))x 11 = 561 points. The log reads as follows: 15 Feb at 1836 IK2MMB (53/53), 1845 F6CGJ (55/55), 1848 F6KHM (55/55), 1902 HB9Q (56/57), 1916 F2TU (54/54), 1920 I0UGB (53/54), 1930 ZS6AXT (559/55), 1950 HA5SHF (529/55), 1955 HB9BBD (58/58), 2003 GW3XYW (55/55), 2016 DL1YMK (53/55), 2024 LX1DB (58/56), 2032 HB9BHU (54/55), 2034 OZ6OL (55/55), 2155 OE5EYM (55/55), 2246 IK3COJ (529/53) and 2319 N2UO (32/32), and 16 Feb at 0014 OE9XXI (58/55), 0031 W2UHI (55/55), 0037 KU4F (55/56), 0039 K0YW (55/56), 0042 G3LTF (55/55), 0047 K5JL (57/57), 0100 K2UYH (55/56), 0105 W7BBM (52/55), 0017 W5LUA (55/55), 0400 N7AM (54/54) and 0410 K7XQ (539/539). Gotaways were DJ9YW, DF4PV, K9KFR and WA6PY. For more information check my web site http://www.g4cch.com.

GW3XYW: Stu's gw3xyw@thersgb.net EME activity for 23 cm in Feb follows − I worked on 8 Feb ZS6AXT (559/569) and K5JL (569/569), and on 15/16 Feb during the SSB Contest HB9Q (JN), HB9BBD (JN), F6KHM (IN), LX1DB (JN), ZS6AXT (559/44)(KG), F2TU (JN), G4CCH (IO), DL1YMK (JN), OE5EYM (JN), OZ6OL (JO), F6CGJ (IN), OE9XXI (JN), K2UYH (FN), W2UHI (EN), K0YW (DM), G3LTF (IO) and K5JL (EM). This gives a score of (2x16 + 1x1)x 9 = 297 points.

HB9BD: Dominique dfaessler@bluewin.ch had an outstanding signal in the 1296 EME Contest and ended with what is probably the top score. He worked I0UGB JN, F2TU JN, OZ6OL JO, G3LTF IO, F6HKN IN, HA5SHF JN, HB9Q JN, IK2MMB JN, IK3COJ JN, DL1YMK JO, F6CGJ IN, DJ9YM JO, GW3XYW IO, ZS6AXT KG (CW.SSB), G4CCH IO, LX1DB JN, HB9BHU JN, JA6CZD PM (CW.SSB), 0E9ERC JN, OE5EYM JN, N2UO FN, W2UHI EN, OE9XXI JN, K2UYH FN, KU4F EL, K0YW DM, K5JL EM, W7BBM DM (CW.SSB), K9KFR EN, WA6PY DM, W5LUA EM, DF9PV JN and K7QX CM (CW.SSB) for a score of (30x2 + 3x1) x 12 = 756 points. He has gotten many cavities into the EME community and recommends the following information on cavity (TH327) modifications by Eddy, ON7UN and Marc, ON5OT on his website http://www.hb9bbd.ch/article.php3?key=24. ON4BCB has related information at http://www.hb9bbd.ch/article.php3?key=24. ON4BCB has related information at http://wsers.skynet.be/on4bcb/EME/23cm%20EME/ Power%20shopping/index.htm.

HB9JAW: Michel HB9JAW@Kaktus.ch reports that the SSB Contest was a absolute disaster -- First I was unable to get all the snow out off the dish (the park position is at 90 deg elevation). I had to get about 50 cm of snow out off the dish, but some remained and I couldn't get it out. Then I did not get back my 1296 preamps from IK2MMB - (IK2MMB was repairing them, when his wife gave birth to there 3rd child. From all the partying, Sergio caught the flu and could not get out of bed – hi.) I inst alled some others, but did not get the result I wanted. Signals were very weak and just the "big guns" heard. I only worked 2 stations: HB9Q (57/52) and OE9XXI (57/52). Heard were KU4F and K2UYH. My setup on 1296 is still temporary and I hope to improve it in the springtime. On 70 cm I heard G4RGK and UA3PTW. Both were very strong. No other activity was heard.

HB9Q: Dan, HB9CRQ hb9crq@hb9q.ch sends his group's 1296 SSB Contest results — We have worked 29 stations on SSB and one mixed. They were in 10 multipliers. This gives us 580 points. Due to technical problems we lost 3 hours at moonrise and due to low activity and a very tired operator, we went QRT 3 hours before moonset. We had a great time talking to all our friends and did reasonably well. Stations QSO'd were HB9BBD JN, F2TU JN, I0UGB JN, OZ6OL JO, HA5SHF JN, F6KHM IN, F6CGJ IN, HB9JAW JN, IK3COJ JN, DJ9YW JO, G4CCH IO, DL1YMK JO, LX1DB JN, GW3XYW IO, ZS6AXT KG (CW/SSB), HB9BHU JN, IK2MMB JN, OE5EYM JN, N2UO FN, W2UHI

EN, KU4F EL, OE9XXI JN, KOYW DM, G3LTF IO, K2UYH FN, K5JL EM, W7BBM DM, WA6PY DM, W5LUA EM and DF4PV JN. See www.hb9q.ch for our detailed log.

I8CVS: Domenico domenico.i8cvs@tin.it, who use to be active on 70 cm EME from the Naples area, sent an e-mail to let us know he is still around. I expect he can be reached via AO40. Possibly we can get Domenico to try some JT44 skeds, if not CW off the moon again.

K0YW: Bruce k0yw@frontier.net had a great time in the SSB Contest, but was not going for the Gold. He still has some issues with his TH-327 PA that he is slowly resolving and was using his driver amp, 2 x 7289s, which is finally playing well at a reliable 300 W out. Bruce is thinking of going to GS-15B Tetrodes in a X4 configuration. Matts, KD5FZX supposedly has his prototype working well at almost the legal limit. During the contest Bruce had 21 QSOs (17 on 2X SSB) including 2 initials with VE7BBG #124 and K7XQ #125, both on CW. Stations worked were OE9XXI, HB9Q, HB9BBD, OZ6OL, K2UYH, G3LTF, W2UHI, K5JL, G4CCH, GW3XYW, W7BBM, KU4F, W5LUA, DL1YMK, N2UO on CW, F2TU, DF4PV, W9IIX on CW, VE7BBG on CW, K7XQ on CW and N7AM for a contest score of $17 \times 2 \times 9 = 306$ points. After the contest he QSO'd ZL1KA on both CW and SSB for initial #126 on 1296. **<u>K5JL:</u>** J <u>cliebman@ionet.net</u> reports several new stations on 1296 – The weekend prior to the SW, I worked ZL1KA (539/579). I was his first EME contact and also his first CW contact. He is a bit reluctant to make a lot of sked due to his CW or lack of CW experience. I told him get on and have fun. I think he did a super job and understands the "T M O" procedure. I found on SM5FCS with good signals. Then I heard a "weaky" calling me. Low and behold it was Cor, VE7BBG with a 7.5' dish (529). During the SSB Contest I had to secure after only a short time due to high winds. As a result I only ended with a score of 15x2x9 or 270 points. QSO'd were 0029 HB9BBD (59/58) JN, 0037 K0YW (57/58) DM, 0042 HB9Q (58/58) JN, 0044 OZ6OL (56/56) JO, 0047 G4CCH (57/57) IO, 0048 OE9XXI (58/59) JN, 0050 K2UYH (54/56), 0054 G3LTF (54/57) IO, 0059 W2UHI (55/57) EN, 0102 KU4F (55/56) EL, 0105 GW3XYW (56/57) IO, 0109 W7BBM (55/55) DM, 0129 W5LUA (56/57) EM, 0135 DL1YMK (54/54) JO AND 0136 DF4PV (57/58).

K5WXN: Dan after many year of 432 EME operation from his present QTH in TX is moving to Fairbanks, Alaska. He requests no more skeds as he will take down the array shortly for the move. [Hopefully Dan will be back on the moon soon from KL7].

K7XQ: Jeff k7xq@elite.net was QRV during the Feb SW and participated in the SSB Contest -- I had a pretty good weekend on 1296 including my first SSB EME contact. On 15 Feb I didn't get on air until 0600. I called CQ for one hour with no response and found no one active. The 16th was much better. I QSO'd at 0237 HB9BBD (529/549) for initial #11, 0307 OE9XXI (549/559) #12, 0315 OE9XXI (33/44) for my 1st SSB EME QSO ever on any band, 0336 W5LUA (529/O) #13 (nice solid QSO), 0413 G4CCH (539/539), 0425 K0YW (O/O) #14 and 0445 N7AM (339/529) #15. I also heard K2UYH but I think my antenna got misaligned and I lost Al's signal. I called CQ mainly on CW the whole weekends. During 1296 SSB Contest, I heard several stations trying to come back to me on SSB. Unfortunately, I did not hear enough syllables in the noise to make out any callsigns. I'm sorry for all those who called me on SSB, but I was not able to make anyone else out. I barely made it on SSB with OE9XXI, however he had a huge 559 (real S5) on CW. I can also be QRV on 432 CW or JT-44 EME. Note to all the Eur stations: I have a minimum dish elevation of 20 degs, which means I miss out on a lot of the Eur EME window.

KL6M: Mike <u>kl6m@qsl.net</u> is QRV again on 432 EME -- I am now in operation on 70 cm. I am still doing some refining (like everyone) and am working on a GS35B PA, which won't be ready for the DUBUS/REF Contest, so I will be on with only 600 W again.

KL7HFQ: Roger rkh@alaska.net writes -- I guess that I will have to wait till warmer weather to get on. The array is coated in ice and heavy frost and the SWR is high. I dropped the array today to check the cables and everything is ok, so I guess that I will wait until the big thaw comes, hopefully soon. I have never had this much ice and frost on the antenna before. The array was working perfectly before this past weekend, so guess that I will have to wait until everything thaws out.

N2UO: Marc lu6dw@yahoo.com was active during the SSB contest on 23 cm - I worked HB9Q, HB9BBD, OE9XXI, K2UYH and G4CCH on SSB. I also worked K0YW on CW. I did not spend much time, though, otherwise I could have worked one or two more stations that showed up for a little while (like K5JL). I got my 2 x GI7B PA up and running. It produces 500 W of output power (so now I have up to 400 W at the feed). Details on its construction can

be found at http://www.nd2x.net/N2UO.html I was not very happy with my receive performance during the contest, but later I checked sun noise (12 dB with a flux 80) and ground noise (5 dB), so my antenna gain is fine, same for the NF. The conclusion is that maybe conditions were not too good. This weekend I installed the new feed to receive AO-40 on 2401 MHz. Right now I am checking the NF of the downconverter, and it seems to be 1 dB. The feed is just a helix on the side of the 23 cm feed. The down converter just fits behind the helix in a weatherproof container.



N2UO's Daul GI7B 1296 PA

N7AM: Jack jackriggs@attbi.com got his first taste of EME SSB during the contest and says it is "neat" – Thanks for some fun with the SSB Contest. We learned a lot about the use of our transceiver (TS2000X) for SSB on 1296. All SSB contacts had to be copied in the CW mode as the SSB receive was nothing but hi noise on SSB. I am going to change the setup here to allow SSB to be used on 1296 receive. [I use a TS2000X on 1296 SBB with excellent results.] Stations probably had to tune for us, as we were not zero beat when we went to SSB from CW. The guys worked during the contest on 2-way SSB were K2UYH, F2TU, OE9XXI, G4CCH and K0YW. HB9BBD was heard only on SSB. I also had a CW only initial with K7XQ. We stayed up late until 5 am LST to try for some JAs, but heard nothing after calling CQ every 10 minutes.

<u>NU7Z:</u> Rick has a 222 MHz EME station just about ready to go. He needs only some 4CX250s, and will go portable to OR, ID, MT, UT with 4x16 DL6WU yagis. He was not on for the EME contest. He notes that the Microwave Update Conference 2003 WEB page is up at www.microwaveupdate.org and that he is looking for papers and presentations.

OZ6OL: Hans 6ol@get2net.dk SSB Contest log follows: He worked on 1296 at 1550 HB9BBD (55/56) JN47, 1735 F6KHM (55/54) IN78, 1806 HB9Q (57/57) JN47, 1816 F2TU (54/54) JN38, 2012 DL1YMK (54/54) JO31, 2022 LX1DB (57/56) JN39, 2034 G4CCH (55/55) IO93, 2051 OE9ERC (56/55) JN47, 2109 ZS6AXT (569/44) KG33, 2142 GW3XYW (55/54) IO71, 2159 OE5EYM (55/55) JN68, 2216 F6CGJ (55/54) IN78, 0011 OE9XXI (56/54) JN47, 0019 K0YW (55/55) DM67, 0026 K2UYH (55/55) FN20, 0046 K5JL (56/56) EM15, 0107 G3LTF (55/54) IO91, 0159 DF4PV (55/54) JN49, 0204 W5LUA (54/54) EM13 and 0306 W7BBM (44/55) DM42. Hans ended with (19(SSB/SSB)x2 + 1(SSB/CW)) x 8(sectors) = 312 points.

SKOCC: Sven, SM5LE sven.o.nordin@telia.com reports on his group's 70 cm EME activity during the Feb SW -- I QSO'd on 15 Feb DJ5NV (O/O) and heard VK4AFL calling CQ (539), but nil in sked with HA1YA, and on 16 Feb sked with KL7HFQ canceled, and KL6M - excellent sigs. The rest of time I enjoyed WSJT echo testing. It is very useful for measuring different parameters like man made noise, checking frequencies (the RIT), azimuth/elevation calibration, etc - thanks to K1JT.

YE7BBG: Cor <u>ve7bbg@shaw.ca</u> (who was the original EME skeds coordinator back in 1972) is QRV again on 1296 EME – It has been some time since I've sent anything like this. I finally have a modest EME station going again on 1296. I started out a few years ago to mainly be on AO40, but with the addition of a DL2AM 160 W solid state amp (120 W at the feed) it has became EME capable. I tried first to dual polarize a 23 cm patch feed with poor results and then went back to a modified W2IMU horn, which has always worked well on my 7.5' dish. (Yes, that's feet not meters!) I put the old MGF 1302 pre-amps back on and we were ready to go. Instant echoes appeared with the JT44 echo mode and several evenings later (on 8 Feb) I completed the first EME contact

with K5JL. Jay probably thought he was hearing long delay echoes. On the following weekend 15/18 Feb stations worked were K5JL, W5LUA, DJ9YW on JT44 - my 1st EME contact on that mode, OE9XXI, F2TU, K0YW and W2UHI. Many others were heard, mostly on SSB. It certainly brought back memories hearing and working some of the old calls again. I have to give credit to K1JT's software, which allows me to detect my echoes down to 10 W at Perigee – very impressive. I have a 12' commercial dish assembled to replace the present one. It has an F/D of 0.3 and I need to find a suitable feed. Trying to illuminate it effectively on 23 cm may present a bit of a challenge [see the VE4MA scalar design].

VK3FMD: Charlie ibnkarim@bigpond.com has been running on the horizon CW and JT44 skeds with me [K2UYH] on 432 EME. He is also interested in 23 cm. Charlie has 110 W at the feed point and a NF of less than 1 dB with 20.4 dBd antenna that is horizontally polarized and has no elevation.

VK3UM: Doug tikaluna@ycs.com.au was active on 432 on 15/16 Feb -- I managed to get on briefly and worked on the 15th on Moon set and worked at 1635 VK4AFL (569/569) H/H (loud!), 1657 RA3LE (548/559) H/HV (distinctive!), 1704 UA3PTW (559/569) H/H (good as always), 1717 IN3AGI (549/449) H/HV for initial #267 (a long QSO!) and 1752 DF3RU (559/559) H/H (2 min QSO). Also heard were SK0CC (539) and DJ5NV (569) both H. Conditions appeared quite stable with no libration fading detected. Polarization changed at about 2 degs el to about 45 degs of Faraday, but I had excellent alignment with VK4AFL. It is unusual to have H/H into Eur. On the 16th at moonrise, I worked at 0939 JA6AHB (549/559) H/H. I called for 30 minutes afterwards, but nobody else was on! Libration fading was detected and Faraday was about 90 degs. All the above QSOs were conducted without skeds, without loggers or spotting, with legal authorized power and in the true dinosaur mode!

W2UHI: Frank had an exciting evening during the SSB Contest on 1296. He worked on SSB HB9BBD, OE9XXI, HB9Q, K2UYH, G3LTF, K0YW, G4CCH, GW3XYW, K5JL and W5LUA. He also tried with DF4PV, but no QSO resulted. He has updated his WEB site and added lots of good information and pictures. Check it out at www.w2uhi.com.

WA6PY: Paul pchomins@san.rr.com reports on the SSB EME 1296 Contest—I was a little bit active during 1296 SSB EME Contest. I had skeds on 144 and I jumped from time to time to 1296 between those skeds. Stations worked were on 16 Feb at 0103 HB9BBD JN, 0108 HB9Q JN, 0155 OE9XXI JN and 0256 F2TU JN for a total of 4 QSOs and 1 sector for a score of 8 points. My station consisted of a 2.4 m dish f/D 0.36 with a W2IMU circular polarization feed, 1 kW out and 2 stage resonator input LNA with ATF35076 and ATF35176. I can copy very weak CW signals, but I cannot copy SSB signals as well. I am using variable IF selectivity and try to optimize my filter bandwidth for the best copy, but I have a feeling that I am not optimal. I would appreciate comments on how other stations copy and operate SSB. I'd like to improve my SSB capability. On 22 Feb I QSO'd at 1500 VE7BBG in a sked. Cor was very weak, but readable.

ZS6AXT: Ivo zs6axt@global.co.za reports on his Feb activity – I am very sorry to hear about W1ZX's death. It is another great loss to our EME community. I had a sked on 8 Feb with K7XQ on 23 cm. We heard each other, but our common window was too short to complete a QSO. Before this sked I worked GW3XYW and K5JL, as usual with good signals. On 15 Feb during the 1296 SSB Contest I worked on CW/SSB F2TU, G4CCH, HB9BBD, HB9Q, GW3XYW, LX1DB, IK3COJ (CW/CW), OZ6OL, OE9ERC, IK2MMB (CW/CW), OE5EYM, GW3XYW and F6CGJ. Heard were I0UGB, DL1YMK and HB9BHU. Being very tired, I closed down early. I still do not dare to transmit on SSB. Last time it cost me two 2C39s. On 16 Feb I worked on 23 cm G3LTF, LX1DB, JA6AHB and DJ9YW. Activity was poor, so I again closed early. For the last two weeks I was busy working on a septum horn for 6 cm. The first one I built worked, but not to full satisfaction. I then received hopefully, the correct size for the flare suitable for f/D 0.5 dish and built a second horn, this time with better results. However, doing all measurements with my limited instrumentation, I am not fully sure how good is the circularity. Return loss on both inputs is well over 30 dB. I want to install it well before the DUBUS Contest and do some measurements and tests to see how it compares with my present W2IMU horn. I now have procedure on how to build it with a minimum of difficulties and reasonably accurate. Note that I have quite limited mechanical workshop facilities at home for such metalwork. If the weather here permits I hope to work 6 and 13 cm during the contest.

K2UYH: I <u>a.katz@ieee.org</u> have had more snow and cold WX this year than has been seen in this region for years. The snow has kept me off the moon as it fills my dish and makes tilting it over dangerous. (A weld broke a couple years ago when I tried to tilt it over with wet snow.) Because of the snow, I did not think I would be able to operate the SSB Contest. But it diminished enough by

Saturday that I was able to tilt the dish over and remove most of the remaining snow. I then removed the snow and chopped away most of the ice on the track the dish's wheels move on, but the dish still did not want to rotate in AZ more than a few inches. N2UO stopped by and observed that the wheels were not turning, but dragging along the track. He suggested heating them with a torch. We tried this and I was in operation. I QSO on 1296 on 16 Feb at 0004 HB9BBD (59/57) JN, 0010 W2UHI (56/54) EN, 0014 G3LTF (55/57) IO, 0019 GW3XYW (55/55) IO, 0022 K0YW (57/57) DM, 0026 OZ6OL (56/55) JO, 0039 HB9Q (57/56) JN, 0052 K5JL (56/56) EM, 0100 G4CCH (56/55) IO, 0105 OE9XXI (57/55) JN, 0120 KU4F (56/56) EL, 0124 W7BBM (55/55) DM, 0131 W5LUA (56/56) EM, 0201 DL1YMK (54/54) JO, 0215 DF4PV (55/55) JN, 0218 F2TU (55/55) JN, 0255 N2UO (52/44) FN and 0326 N7AM (55/34) CN for 18x2x9 = 324 points. N2UO and I can easily work on CW despite direct path signals. On SSB our signals are wide enough to cause interference between our direct and echo signals. To avoid this problem we had to space out our words in time. Since the contest I have had even more snow, which has kept me off the moon. Unfortunately I will be away on business during the DUBUS/REF Contest, but N2UO may operate my station to give out some 70 cm points.

NETNEWS BY G4RGK BASED ON K1RQG NETNOTES: DL7UDA is rebuilding his PA and not available for 70 cm skeds. W7MEM's array is in need of a major over haul and he will be QRT on 432 EME until the summer. RA3LE had initials on 70 cm in Feb with F/ON5OF and KE2N. DK3WG QSO'd on 432 F/ON5OF and KE2N for initial #393 in Feb. 7M2PDT has a new email address pdt_umesan@ybb.ne.jp. F6KHM made 13 QSOs in 3 hours during the 1296 SSB Contest. OZ9AAR's new dish is up and tracking almost done. He is waiting for a feedhorn and now need to work on his TH-327 PA. He will start out with a 2 x 7289 VE1ALO PA and hopes to be on the moon in a couple months with 200 W. **PA5KM** is planning a dish for 23 cm EME from his club station. W9IIX had a disastrous time in Feb. Wind caused the dish to do about 3 rotations and the PA blew up. All has now been repaired and he made a few contacts during the Feb SW. N6RMJ has 2 x 13 WL yagis on 70 cm, but is not QRV. He is also planning to try 10 GHz by the end of year with 30 W and a 3' dish. **KJ7F** worked EA3DXU on 70 cm using JT44 and W7CI for initial #51 and KE2N #52 using CW. He is trying to improve his receive system. **VE4MA** has obtained an RS-1054L Siemens amplifier and is looking for information. Barry is also looking for the drawings of DL9EBL's TH-327 cavity design and asks if K5GW has published his 23 cm cavity design? F6EYD is preparing a 3.5 m dish for 23 and 3 cm EME operation. 9H1ES is very busy at QRL, but is still working on a new cavity PA for 23 cm and hopes to be back on EME soon. W5LUA worked ZL1KA for initial #213 just before the EME SSB Contest.

FOR SALE: N2LIV has available a 1296 MHz AGO preamp, NEC321, 0.43 dB NF, 15 dB Gain, used only in NF testing for \$US125 plus shipping. Contact Bruce at bdwood@erols.com. KSJL cliebman@ionet.net has for sale 6 x 7289 OZ9CR amplifier with input and output mods. PA includes 6 filament transformers, bias supply with metering and adjustment for each tube. Without tubes Jay is asking \$US1600. W9QQ has started a company called Watts Unlimited that may be of interest to EMEers. He is producing a 2.5 kW 3 kV power supply designed for tubes requiring 2500-3500 Vdc at an amp, which only weighs ten pounds. The price is \$US698 for the supply, built and tested. He expects to have the supply in kit form in a month or so for a reduced cost. For more info see his website at www.wattsunlimited.com or contact Tim at DXyiwta@aol.com. VE2XX (x-VE2FUT who was active on 70 cm EME) has for sale or trade 6' Andrews, 10' Aluminum heavy duty with heater and 12' 3 piece fiberglass dishes available. He is looking for several Transco N type relays (or equivalent) capable of a kW on 432 for use in getting on EME again. WA1JOF has lost of stuff for sale as result of his move. Among the items that may be of interest are W2GN PAs for 432 (single 4CX250) 300 W, for 220 (pair of 4CX250s) 600 W and 144 (pair of 4CX250s) 600 W, a 903 PA (pair of 7289 tubes built by W1RIL) if water cooled 250-300 W, Microwave module 222/28 MHz, 2 m Bricks TE Systems Model 1410G, Mirage Model B 108 and model B-310-G (NEW) and MAHA model MH-A104, JPS NIR-12 external DPS filter system, and Yaesu FT726 with 6, 2 and 432 modules. He has more. He will consider any price that is a reasonable best offer. Contact Don at waljof@ megalink.net. W9IIX is looking for a 1800 V @ 1 A plate xfmr.

FINAL: This NL is a "rush job" as a result of travel. I was away most of this week and will be in Puerto Rico from 8 to 16 March. As a result of the lost time I have not been able to include some of the material I had planned. It will be in the near future

Plans for the 11th International EME Conference to be held in New Jersey in 2004 are moving along, and can be found at www.qsl.net/eme2004. The dates were changed to 6, 7 and 8 Aug 2004 after a survey was conducted. The results were more than 20:1 in favor of the new date. If you visited the page in the past,

make sure you use your "refresh" or "update" button in your browser in order to get the latest version of the page.

EMEers are invited to the 11th annual WEAK SIGNAL BANQUET at the 2003 Dayton Hamvention. Tickets are now on sale please see www.wa8wzg.com for details. Email to Tom any questions and pse pass the word.

The *TOP10* of HB9Q's Top List are included at the end of this NL for 6 and 3 cm. Please help him keep the list up to date by updating your entry at www.hb9q.ch/database/search.htm.

Please keep the reports and technical info coming. Also send pictures! I will be looking for you off the moon. Don't miss the DUBUS/REF EME Contest! 73, Al-K2UYH

EME Schedules

0100z

3B8/ON-K0RZ

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(** See 3B8/ON4AME Dxpedition for frequency details)
14 MAR
Time
         432.045**
1230z
       3B8/ON-KL6M
       3B8/ON-DK3WG
1530z
1600z
       3B8/ON-HB9Q
1630z
       3B8/ON-PA3CSG
1700z
       3B8/ON-G4RGK
2130z
       3B8/ON-WA4NJP
2200z
       3B8/ON-K2UYH
15 MAR
Time
         432.045**
                        432.050
1300z
       3B8/ON-KL6M
       3B8/ON-DK3WG
1600z
1630z
       3B8/ON-HB9Q
1700%
       3B8/ON-PA3CSG
1730z
       3B8/ON-G4RGK
2230z
       3B8/ON-K2UYH
                      WB0GGM-SM5IOT
2300z
       3B8/ON-WA4NJP
                      WB0GGM-G4RGK
2330z
                      WB0GGM-OK2BDQ
16 MAR
Time
                        432.050
0100z
                      KJ7F -RA3LE
17 MAR
Time
         432.045**
0000z
      3B8/ON-KORZ
18 MAR
         432.045**
Time
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HB9Q TOP LIST			
Pos.	Callsign	Band	Initials
6 cm			
1	OE9ERC	5760	25
2	OK1KIR	5760	17
2	F2TU	5760	17
3	CT1DMK	5760	16
4	ZS6AXT	5760	13
3 cm			_
1	F6KSX	10000	39
2	AA5C	10000	34
3	F2TU	10000	26
4	OK1UWA	10000	25
5	CT1DMK	10000	22
6	OK1KIR	10000	19
7	I4TTZ	10000	16
8	W6HD	10000	13
8	G4NNS	10000	13
9	OE9ERC	10000	12
10	PA0EHG	10000	11