432 AND ABOVE EME NEWS
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THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT <http://www.nitehawk.com/rasmit/em70cm.html>

CONDITIONS: The 2002 EME Contest will be remembered for some of the "Best of times" and some of the "Worst of times":

The unexpected death of W6HD was a shock. The absence of CA from many logs on 23 and 3 cm is a result of Tay's "silent key" during the second part of the contest. He was killed in an aircraft crash on Nov 13th. The engine of his private plane failed during a routine takeoff. Tay was not only a leading EMEer, but also a noted microwave engineer and educator. He was considered the father of Satellite Television. While a professor at Stanford University, he helped found Chaparral, Inc. and developed the scalar feed and polar rotator for satellite reception.

W6HD, Tay's 6 m HB dish

Propagation on 70 cm was reported by many to be some of the worst ever experienced. I found copy very difficult, yet WA6PY and DL9KR were able to achieve a truly amazing QSO. Paul was able to work Jan purely on random using only his dipole – see WA6PY's report. This contact proves that EME is not limited to stations having big antennas. It is also a tribute to DL9KR's operating and technical ability. Jan is a master of detail and has left no stone unturned to insure that his station is optimum. But a big signal and a low noise system is not enough to achieve this one! It also required exceptional operating skill. It is no wonder that Jan is number one on the initials list. Congratulations to Paul and Jan. I hope this QSO receives the recognition it deserves!

Nov also included the first of great significance, the first10 GHz EME QSOs from Asia. JA7BMB worked OK1UWA and F2TU on 3 cm – see Hiroshi's report.

HIGH COTEST SCORES: Unfortunately I cannot give a full picture of *big gun* scores as many are missing. This may be due to poor showings resulting from this year's WX and conditions. OH2PO is still in first place with 83x32, followed now much more closely by DL9KR with 77x32. Next is DJ5NV with 71x31. On the other side of the world VK3UM has made a very impressive showing with 58x30. On 1296 HB9BBD reports the top score with 63x29 followed by OZ6OL with 56x27, F2TU 51x26 and HB9Q 50x24. From Asia JA6ABH reports 26x16. On 2.3 GHz OZ4MM reports 10x10 followed by F2TU with 10x9. On 10 GHz W5LUA leads with 9x8 followed by F6KXS with 9x7 and F2TU with 7x6. Philippe also reports 4x3 on 6 cm.

EME Directory Survey: Klaus, DL4EBY ktiedemann@bmt-berlin.de has been circulating a survey in an attempt to update the EME Directory. It took 400 emails with nearly 80% replies and lots of time. The result can be found on his Website http://www.dl4eby.de. If there are any EMEers that read the Newsletter, but didn't received a request for an update from him, please email Klaus at tklaus@snafu.de, and also to W2WD wbutler@comcast.net if your email address has changed. Klaus sends his thanks for your help with this project, but we all must thank Klaus for all that he has done for EME as a Sked Coordinator in the past and his work on the EME directory!

AA5C: Greg writes -- I was saddened to hear of the death of W6HD. We had worked on 10 GHz EME several years ago and maintained an email dialog on TWTs. He was very much a learned gentlemen and had my utmost respect. He will be missed. In prep for the contest I tried several different preamps for 10 GHz. I have issues with low level out of band oscillations when connecting the preamps to the waveguide transition. I was not able to do better than my original configuration. My sun noise is holding at 12 dB and with 1 dB of moon noise.

CT1DMK: Luiz was on 10 GHz exclusively, but had problems because his moon window is limited at very high moon declinations. The moon is too high for Luis. He tried to call WA7CJO about 5 minutes before he lost the moon without success. He ended with a total of 5x4.

DF4PV: Gunter df4pv@yahoo.de reports on his 23 cm contest activity -- Very strong winds in the first part of the EME contest and QRL every weekend prevented me from making a lot of contacts. I also still have some tracking problems, which I hope to solve next spring. I ended with 45 QSOs. In Oct HS2JFW visited me to get some impressions about EME. It was able to give him a nice demonstration of 23 cm echoes with only 500 mW in WSJT. He was very motivated to try 2m EME, and with HS2CRU and others made the first EME contacts from Thailand with W5UN and KB8RQ! [How about 70 or 23 cm?]

DK3WG: Jurgen <DK3WG@DARC.DE> operated on 144 and 432 in the EME contest as usual. He plans to send in a contest only check log because of the bad WX conditions this year. On 432 he worked on sked OK1DIG (539) for initial #389.

DL4KG: Gerald's znoyek@t-online.de EME newsletter report – Weather was cooperative for the 2nd leg of ARRL contest. I worked 3 hours in the first pass (NA window) and 4 hours in the second pass (JA window and a short time in NA window). Unfortunately my time was limited by a local exhibition, which I had to attend on Sunday. But I was pleased by 16 QSOs in this short time. I worked on 432 DJ5NV, K2UYH, W7CI, OH2PO, UA3PTW, DL9KR (moving my S-meter to 579/589, normally the meter on the TS-2000 does not move!), HB9Q, DJ3FI, F6KHM, VK3UM, HB9JAW for initial #79, DF3RU, JL1ZCG #80, PA3CSG, SM2CEW and finally DL7APV for a score of 16x11. I called N9AB many times for long periods, but he never came back. Also heard were G3LQR, DJ6MB, DL1YMK and HA1YA. I did not hear some *big ones* like K1FO, N2IQ, OE5JFL and OE5EYM... My equipment was Kenwood TS-2000, GS-23B PA with 700 W at the feed, and ATF36077 and CF300 (second stage in shack) preamps. The antenna is still 4x29 el DJ9BV array with coax feed. I wanted to change to open tube feeder, but WX didn't permit. Everything is ready, so I will get the job done in the spring. See my web page at www.qsl.net/dl4kg for more details.

DL5LF: Frank's frank.dobert@gmx.de (JO54af) contest news – Conditions seemed poor, and only one US station was heard on 70 cm during the Nov contest weekend. Signals from known stations were found weaker than usual, as in the 1st leg. I only heard OH2PO every time with a really good signal. I heard DL9KR on 23 Nov loud, but on the 24th his signal was not nearly as readable. I had a partial QSO with DJ5NV, but did not receive his 'R'. There was only one new this weekend, HB9Q. His signal was very weak, but they copied me on my first call. I also heard DL7AVP really strong, but he vanished. The WX was foggy and rainy, 4 deg C, but improved on Sunday afternoon when I heard JL1ZCG and N9AB, and CWNR OE5JFL. My station is a single 8 wl yagi with 800 W PA and a 0.4 dB NF LNA.

DL7APV: Bernd reports that his station didn't worked very well this time around – After missing the first leg of the contest because of the storm, this time I had hoped for better luck... But on Saturday morning I had wet feed lines with high SWR and on Sunday night at 0200 my HV transformer gave up and 10 minutes later my TR-7 stopped working. As a result I went to bed after only 20 QSOs. The HV transformer is now replaced and I am working on fixing the TR-7. Contest conditions were mixed, but activity was less then last year.

DL7UDA: Dietmar's dl7uda@t-online.de report for the 2nd leg ARRL EME contest -- I was QRV on Saturday from 0200 to 0800 and 1900 to 2300 and Sunday from 0200 to 0800. WX here was bad. On Saturday there was heavy rain and on Sunday 100 percent humidity. I also feel the conditions were bad. I worked only DL9KR (449/549) and DJ5NV (O/O). Heard were OH2PO, HB9Q, DL7APV, HA1YA, N9AB, K1FO, VK3UM, OE5JFL and DL5LF? Because of the bad condx and activity, I checked my rig with JT44 echo mode with results ranging from -32 to -19 dB. It looks like I will not be QRV for the Dec SW because of visitors, but will be active in the future and are interested in skeds.

DL8OBU ham shack at 3 m dish for 1296 in JO42xi

EA8/LA8LF: Ander's MILCOM@tiscali.no report his 23 cm dxpedition from EA8 – I was somewhat disappointed by activity on 23 cm the weekend prior to the contest. I made only 1 initial and worked all the stations I could hear. QSO'd on Saturday 16 Nov were G3CCH, G3LTF, ZS6AXT and OZ6OL. On Sunday 17 Nov I worked G3LTF, SM2CEW, OZ6OL, K5GW, K0YW, K5GW, K5JL, N2IQ and WA6PY for my initial #. I thought everybody QRV on 23 cm EME, which were not worked when I was QRV in Oct 2000 would be very anxious to work me before the contest. I did do reasonably well in the contest. I contacted on Saturday G4CCH, HB9BBD #, DF4PV #, ZS6AXT, OZ6OL, F2TU #, IK2MMB #, OK1CA #, N2IQ, KA0Y #, W2UHI, K5JL, HB9Q, OE9XXI, G3LTF, K0YW, N7AM #, K2UYH, W7BBM #, OE5JFL, DL4WUP #, OE5EYM # and HB9SV, and on Sunday GW3XYW #, G3RQG # [?], KU4F #, W7SZ #, F5HRY #, SM2CEW, F6CGJ #, DJ9YW, OE9ERC, JH5LUZ # and JA6AHB #. My score was 34x18 and my initial total from EA8 is now 47. I could hear weakly several small stations calling me, but due to a local continuous FSK signal centered at 1295.998 with several harmonics every 3 kHz up the band and a noise floor 2-3 dB above sky noise, I had difficulties copying small stations. At 1296.015 kHz, I measured on the following Monday 15.2 dB of Sun noise and 4.1 dB CS/G. At 1296.500 I measured 6.3 dB CS/G noise and 17.8 dB Sun noise. The Island of Lanzarote is usually a windy place, and so it also was during the contest. But my HB developed *linearAZ* drive using an 18" screw jack and a large garage door spring took care of this problem. More details can be found at www.qsl.net/LA8LF. I also want to make clear that I am not connected with EA8FF. He resides on the Island of Tenerife. I will not be QRV from EA8 on 23 cm for some years, maybe never. I will bring my 40 kG HPA back to Norway on 29 Nov plus all the other 1296 gear. Left will be the dish taken off the mast, the feed stored inside the house as well as the tower. Maybe I will try 13 cm EME in the European EME contest next spring, but I am not for sure. I hope to be QRV again from Norway on 23 cm soon.

F2TU: Philippe F2TU@guideo.fr reports on his contest results and the 1st 10 GHz QSO between France and Japan – On 24 Nov I worked at 2230 JA7BMB (M/M) on 10.4501 GHz for initial #26 and DXCC 14. We also tried on 10.450 to 10.368, but had dispersion > 100 Hz. In the EME Contest I ended on 70 cm with 26x17 and one initial with F5FLN for #231, on 23 cm with 51x26 and initials with DL8OBU #188, EA8/LA8LF #189 and N2UO #190, on 13 cm 10x9, on 6 cm 4x3, and on 3 cm 7x6. My overall total was 98x6 all with the same dish and single operator.

F6KSX: J-Jacques (F1EHN) <jjm_f1ehn@wanadoo.fr> reports on his group's 3 cm contest log -- The F6KSX EME group was active on 10 GHz during both legs of the ARRL EME Contest. Our activity was good only during the Eur/NA windows. All QSOs were made on random activity (no skeds!) with good reports. We contacted on 26 Oct at 0455 W5LUA (549/O), 0530 WA7CJO (569/549), 0535 I5PPE (O/O), 0710 OT1DMK (O/O) and 0855 OK1UWA (549/559), on 27 Oct at 0425 I4TTZ (539/O) for initial #38 and 0830 F2TU (M/O), on 23 Nov at 0425 WA7CJO (569/549) dup and 0715 PA0EHG (O/O) #39, and on 24 Nov at 0420 I4TTZ (539/519) dup, 0500 I5PPE (O/O) and 0610 OK1CA (559/M). CWNR were DK7LJ on SSB, IK2RTI, DJ5MN and HB9BHU. We ended with a score of 9x7 for 6,300 points and 2 initials. The operators were F1EHN, F6DLA and F6ECX. Our station consisted of a 3.3 m dish with vertical polar and automatic tracking with the F1EHN EME System, 50 W TWTA with 40 W at the horn and a 0.7 dB NF LNA. We received about 16 dB of sun noise and 2 dB of moon noise. We were pleased by all the random activity. We feel the current contest rules damage activity on the microwave bands by promoting skeds and not encouraging random activity. It is now probably the right time to modify the rules (reward the random QSO and separate the bands to improve the random activity). We believe there should be separate contest weekends for different bands. Because the number of active stations on microwave bands is still low, perhaps 2 separate weekends might be a good compromise. For example there could be one weekend for 2.3 and 10 GHz and the other for 5.7 GHz and 24 GHz. F6KSX will not be active during the winter period because we have not permanent electricity at our station. We have removed the RX/TX to protect and improve the system for the next year.

G3LTF: Peter 100633.1656@compuserve.com had a little better luck with WX in Nov -- It was a relief to have no wind during the weekend, but the rain tested the waterproofing and feed changing wasn't pleasant. Activity was up and I added considerably to my score for the multiband entry. Conditions were quite variable and there were definitely periods when 23 cm exhibited absorption probably as much as 2 dB. One could observe this easily on the weaker signals. 70 cm conditions also varied with polarization changing between well defined and spread. Conditions and activity were particularly good on the final leg on Sunday evening. On 13cm there was more activity than last year, but several regulars were missing. I worked the following stations on 432 on 23 Nov DJ5NV, S52CW, HB9JAW, OK2BDQ for initial #359, DL9KR, UA3PTW, K1FO, G4RGK, DF3RU, RA3LE, N9AB, OK1DIG #360, OH2PO, K4EME, K2UYH, K0RZ, DJ3FI, F2TU, F6KHM, HB9Q, SM2CEW and K5WXN, and on 24 Nov KJ7F #361, W7CI, OH2PO, S51ZO, VE6TA and HA1YA, and on the final pass VK3UM, EA3DXU, DL7APV, F5FLN, JA4BLC, JA6AHB, G3LQR, ЁCTE, G4ALH, DK3WG and DB6NT #? - checking. Heard were OE5EYM, CWNR was F/ON5FF, K9SLQ, DL1YMK and SP6JLW for a total of 39x22. I worked on 1296 on 23 Nov W2UHI, K5JL, DF4PV, HB9BBD, KA0Y, N2IQ, OK1CA, ZS6AXT, N2UO, HA5SHF, W7SZ, EA8/LA8LF, WA4NJP, I0UGB, ON5RR, JH5LUZ, OE5EYM, HB9SV, HB9BHU, DF3RU,

DL1YMK, JA6AHB and G3LQR, and on 24 Nov GW3XYW, W9IIX, W7BBM, W7SZ, PA3CSG, F5HRY, SM2CEW, F6CGJ and OZ6OL. Heard was OE9ERC and CWNR was JA6CZD for a total of 48x23. Contacted on 2320 on 23 Nov were W5LUA, F2TU, OZ4MM, OE9XXI, JA4BLC and LX1DB - all crossband except OE9. CWNR were OH2AXH, OK1CA, DK7LJ on SSB and WA6PY. Missing those 4 multipliers really hurt! My total was 6x6. I also had one QSO on 2 m, so I did manage to work 4 bands again.

G4RGK: Dave had the 1st contest weekend wiped out due to the storms that blew through Eur -- The 2nd weekend was better, but activity was much lower than in previous years with very few North American stations worked. The station for once performed without any problems. Some stations seemed to have problems hearing. I called K2UYH for 25 mins just getting QRZ back, and like wise EA3DXU. Stations worked from here were: OH2PO, DF3RU, K0RZ, N9AB, F6KHM, K5GW, DL9KR, JL1ZCG, DJ5NV, HB9JAW, K1FO, G3LTF, I5CTE, UA3PTW, RA3LE, HB9Q, S52CW, OK1DIG, VK3UM, DL7APV, SM2CEW, DJ6MB, HA1YA, F5FLN, OE5EYM, DK3WG and ON5OF. CWNR were K4EME, K9SLQ, F2TU, DL1YMK, WA6PY and EA3DXU. Heard but not called were VE6TA, PA3CSG, G4ALH, G3LQR and JA6AHB.

HB9BBD: Dominique's dominique.faessler@csam.com ARRL Contest results -- My final score is 63x29 on 23 cm. Conditions seemed fine, this in contrast to some other observations. Many regulars were missing; no CT, LX and very few SM, PA and ON were heard. The rig was doing fine, so I really enjoy the contest. My initials count went up to #187 tnx to JH1EFA. Also note that I will be in Dayton in May and be looking forward to seeing many of the EME gang.

HB9Q: Dan's (HB9CRQ) group hb9crq@hb9q.ch was disappointed by their Oct results, but improved stations worked and RX in Nov -- We finished the contest on 432 with 57x28 and on 1296 50x24. Our full EME Contest Logs for 144, 432 and 1296 MHz can be found on our homepage at www.hb9q.ch. During the first leg of the contest we had a RX problem on 1296 MHz. After the contest we found out that our sun-noise was only 15 dB. It used to be at approx. 22 dB before. HB9BBD helped us to optimize our 1296 MHz RX before the second leg of the contest. The result is great. We now have 25 dB of sun noise, 3 dB more then Ever before! We used a HB9BBD designed and built preamp. For more detail see www.hb9bbd.ch. We are very thankful to Dominique for his help.

I5PPE: Pietro, I5PPE and Alex, IK5WJD ikcsg@tin.it operated 10 GHz during the EME Contest – We worked on 26 Oct WA7CJO (559/569), F6KSX (O/O), W5LUA (549/559), CT1DMK (O/O) and OK1UWA (559/559), and on 27 Oct I4TTZ (529/549), on 23 Nov WA7CJO (569/579)- dup and OK1UWA (O/O) dup, and 24 Nov I4TTZ (529/559), F6KSX (O/O), HB9BHU (O/O), F2TU (O/O), PAOEHG (559/559) and W5LUA (559/569) dup for a total of 14x8 in the contest. We have noted a remarkable level of activity despite the bad WX in Eur with never-ending rain and wind. We are very satisfied with our results. We reached initial #21 during the contest. We also now have made 45 EME QSOs since 1999 on 10 GHz band with our 3 m dish.

JA6AHB: Toshio ja6ahb@nifty.com had good WX, but found conditions not very good with much QSB -- I was able to work K1FO in both my west and east windows on 23 Nov. I QSO'd on 70 cm on 27 Oct 0037 OE5EYM (559/559), 0042 UA3PTW (559/559), 0056 HA1YA (559/559), 0104 OH2PO (579/559), 1524 K1FO (569/559), 1534 N9AB (569/569), 1540 JL1ZCG (569/549), 1549 VK3UM (559/549), 1558 K5WXN (439/559), 1623 VK4AFL (449/559), 1631 K0RZ (449/559), 2255 EA3DXU (O/O), 2313 RA3LE (539/539) and 2336 JH4JLV (549/449), on 23 Nov at 0005 K1FO (559/549), 0012 DL9KR [?], 1208 JJ1NNJ (339/449), 1223 JA2TY (559/449), 1311 K1FO (569/449), 1424 JH0WJF (559/559), 1450 VE6TA (549/449), 2127 DJ5NV (579/579), 2135 HB9Q (559/439), 2210 SM2CEW (559/559), 2215 DF3RU (569/559), 2225 DL7APV (559/559), 2241 OK2BDQ (O/O), 2258 F5FLN (559/559) and 2307 DJ3FI (559/449), and on 24 Nov at 1518 K9SLQ (O/O), 2212 DL9KR (589/579) [for sure], 2238 S52CW (559/559), 2244 G3LTF (559/559), 2310 F2TU (559/559) and 2322 DK3WG (559/559) for 32x19. On 1296 I worked on 26 Oct at 0014 OZ6OL (559/559), 0022 HB9BBD (579/569), 0031 G4CCH (569/559), 0103 OE9ERC (589/569), 1434 K0YW (559/559), 1445 KU4F (569/449), 1455 K5GW (569/569), 1500 VE6TA (O/O), 1515 K5JL (579/569), 1522 N7AM (559/459), 1558 W7BBM (549/559), 2220 DL4MUP (O/O), 2234 OE9XXI (579/569), 2316 IK2MMB (559/549), 2329 DK0ZAB (449/439), 2344 HB9Q (579/429) and 2353 DF4PV (579/579), on 27 Oct at 1359 KA0Y (569/559), 1439 K2UYH (O/O) and 1450 W5LUA (559/559), on 23 Nov 2338 GW3XYW (559/559), 2349 ZS6AXT (559/569), 2353 G3LTF (559/559), 24 Nov at 0004 F2TU (579/559), 1355 KA0Y (569/569) – dup, 1403 N2IQ (569/569), 1422 WA6PY (O/O) and EA8/LA8LF (O/O) for 26x16, or a total on 70 and 23 cm of 58x35.

JA7BMB: Hiroshi has become the 1st JA station to become QRV on 3 cm. He operated on 10.450 GHz during the 2nd Part of the ARRL contest and made 2 QSOs. His 1st contact was with OK1UWA (M/O) and his 2nd with F2TU (M/M). He also tried working F2TU on 10.450/10.368 GHz but was not sure of the final Rs. Besides 10 GHz, Hiroshi was on 2.424 GHz and worked W5LUA (549/559) on 2.304 GHz. He heard JA4BLC on 2.424 GHz and 10 other stations. He CWNR OK1CA, ZS6AXT and G3LTF on 2.304 GHz and 2.320 GHz. Hiroshi reports that his echoes were 10 dB weaker than those of JA4BLC, but still at a reasonable level.

JJ1NNJ: Seki's BYD01531@nifty.ne.jp Nov ARRL contest report – I worked on 70 cm on 23 Nov JH4JLV (O/O), JA6AHB (449/339), K1FO (459/439), VK3UM (559/449), JL1ZCG (579/449), OH2PO (O/O), DL9KR (O/O), HB9JAW (O/O) for initial #77, PA3CSG (559/449), DJ5NV (O/O) and HB9Q (449/339), and on 24 Nov UA3PTW (O/O), DF3RU (O/O), DL7APV (O/O) and OE5EYM (O/O) for a total of 15x9. Condx were unstable and caused many CWNRs. I was not QRV in Oct. My station is 16 x 13 el yagis LR with 250 W and FHX35LG LNA.

K1JT: Joe writes – Many thanks to all who have sent reports and screen images with examples of successful use of the EME Echo mode in WSJT. In my shack, and evidently in many others, this new tool has already established itself as a very useful way of evaluating station performance. Results seem to be excellent up through 432 MHz. At 1296 MHz and above, you must compensate for most of the predicted Doppler shift as follows: 1. Enter 1296 (or whatever) in the "Freq MHz" box in Setup | Options. 2. Check the predicted Doppler shift, say X Hz. 3. Enter a round number close to X in the RIT box. 4. Put that same offset X into your receiver tuning, relative to the transmitter frequency you will be using. 5. Then hit Auto Mode On to start running. I would be most interested to hear of successful echo tests on 1296 MHz and above. Several small bugs have shown up and have been fixed. More importantly, a few people using older and slower computers have reported that echo mode does not work properly on their machines. Although the program seems to cycle through TX and RX periods, they never see any gray and red curves or any text displaying echo measurement results. I have now been able to reproduce this problem on an old 100 MHz Pentium that I keep in the shack, so I should be able to diagnose the problem as soon as I get some time to work on it. I do not think that it should be impossible for Echo mode to run on a machine as slow as 100 MHz – but I have not yet proven this hypothesis. The Doppler calculation in WSJT needs to be made more accurate. There is no reason why echoes should not always come back at DF = 0, at least within the measurement uncertainty. Please keep the reports coming in, and be patient in waiting for the needed improvements! [For complete details of the echo mode see http://www.dk5ya.de/wsjt/jt44.htm].

K4EME: Cowles reports not a good ARRL Contest on 70 cm – Copy was not good and I had to replace a preamp the 2nd night. The 1st night I worked 5, but did have an initial with HB9JAW. I only added only 2 more stations the last night (HA1YA and K2UYH). I was hoping to work some JAs, but my noise level came up too high to copy. I worked more in one night last year than the whole contest this year.

K7XQ: Jeff k7xq@elite.net is making improvements to his 23 cm system – I have a LT-23S on the way that I will use with my HF rig for improved 1296 RX performance. My old Icom-1271A did not seem to work very well for EME. The 23 cm system is 3.1 M Dish and 200 W on TX. I have also optimized my 1296 dish and am running tests with K5JL. Jay has been a great help. I have not completed a QSO on 1296, but hope to soon. On 70 cm I have completed 5 initials with 2 x 9 wl yagis (soon 4 x 9 wl yagis) and 800 W. My web page is at http://www.elite.net/~k7xq/k7xq.html. [Jeff has since completed a 1296 QSO with K5JL].

K9SLQ: Wayne shares his contest frustration over the very bad 70 cm conditions that many of us experienced this year -- I throw this report on the table because sometimes it helps others to share the bad along with the good. Like Bob Dole, I think I have EME dysfunction seemingly unable to get it up during a contest weekend. This was my 2nd ARRL contest. I had twice the antenna, 500 W more power (16 FO-22s and 1.5 kW) and a 10 x better receiver than last year, but only made 3 contacts the 1st night. Last year I had 9 contacts at this time. I ended with a pitiful 15 contacts. On a more pleasant note I would also like to announce that next summer I will also be joining the 1296 ranks as K9ZZH Dick has generously given me his 5.5 m dish antenna system. It was delivered during the night and my wife has not noticed it stacked behind my shack yet, so I am still alive to publicly thank him. My TNX to W9IIX who helped arrange the exchange.

KL7HFQ: Roger reported working on 70 cm on 1 Dec VK4AFL (O/O) and running with K9SLQ with nil results. Roger is not sure if will be around for the Dec SW.

LX1DB: Willie was only on in the contest for a few hours. Bad WX the first weekend and work the second weekend limited his operating time. The bad WX has slowed his progress, but he will have a new dish for 24 GHz on soon. He will use on both 10 and 24 GHz.

N2UO: Marc lu6dw@yahoo.com was active in the 2nd part of the contest on 1296 using only 2 x 7289s -- I was only able to operate on Saturday for a couple of hours. On Sunday, I had N0YMV visiting, for his first EME experience and we didn't pay too much attention to the contest, but we worked a few more stations anyway. The total with 90 W and my 10' dish was 12 stations (HB9BBD, HB9Q, N2IQ, KA0Y, K5JL, W2UHI, G4CCH, F2TU, G3LTF, K0YW, K2UYH and OE9XXI). I am still working on a 2 x GI7B amplifier. I finished the first cavity, and right now I am in the process of testing it.

N7AM's 30' dish – Jack's 23 cm contest score was 43x25

OK1CA: Franta ok1ca@ges.cz reports on the 2nd leg of ARRL EME Contest-- I was active on Saturday morning on 23 cm and I worked 9 stations with initials from EA8/LA8LF #101 and a new country for first OK-EA8 on 23 cm, and F5HRY #102. I worked on 13 cm on Saturday evening JA4BLC, F2TU, LX1DB and DK7LJ (55/549) for initial #19 - very good SSB signal. I QSY to 3 cm on Sunday morning, but I worked only F6KSX (559/M) and CWNR PA0EHG. I heard OK1UWA, F2TU, I4TTZ, I5PPE, WA7CJO and W5LUA. I consistently heard my own echoes on 10 GHz with only 12 W out.

OK1DFC: Zdenek was not on during the second leg of the ARRL contest. His AZ readout was broken and could not be repaired in time. He may be QRV in Dec, but due to his move there is still a lot to be done. A 5 m mast is being constructed for a 10 m dish to be used from his new QTH in JN79fw – about 20 km south of Prague. Zdenek hopes to have the dish on in the spring.

OK2BDQ: Ivo in JN99hq was active in the 2nd leg of the ARRL EME Contest on 432. He used a new antenna system consisting of 4 x 28 el yagis designed by OK2ZZ, GS35b PA at 1 kW and MGF1302 preamp with a 0.4 dB NF. Ivo QSO'd on 22 Nov DL9KR, G3LTF for initial #27, OH2PO, UA3PTW and DJ5NV, and on 23 Nov VK3UM, DF3RU, OK1DIG #28, RA3LE #29, PA3CSG, HA1ZA #30, DL7APV, JL1YCG #31 and SM2CEW, and on 24 Nov K1FO, HB9JAW #32, HB9Q and F2TU. [Tnx OK1CA for forwarding this report.]

ON5FF: Dirk's Vanoffel@village.uunet.be contest report follows – The first part of the contest I operated 70 cm with the help of ON7WP and ON4CDF. We used my 16 23 el FlexaYagis with coax feed and 1.6 kW from Belgium (JO21ff). QSO were on 26 Oct 0331 HB9Q (432/449), 0356 K2UYH (559/O), 0407 K1FO (559/569), 0422 OH2PO (579/579), 0542 DF3RU (O/O), 0910 K5GW (559/559), 2120 JL1ZCG (559/O), 2130 DL9KR (569/579), 2140 VK3UM (559/569), 2148 DJ5NV (569/569), 2237 SM2CEW (559/559) and 2347 DF3RU (559/559), and 27 Nov 0108 HB9JAW (559/559), 0118 HA1YA (559/559), 0317 N9AB (559/559), 0410 K4EME [?] (559/559) and 0557 K5GW (559/579) for a score of 15 x 12 = 18,000 points. There was a storm on Sunday 27 Oct with hurricane force winds of 130 km/h and much damage. Luckily I cranked the tower down at moonset that morning. I was not active on my moonrise that evening as it was still too windy! Nothing was damaged on my antennas, but my neighbor's roof went flying away. The second weekend I operated alone from France as F/ON5OF with the 8 x 11 wl BV open feed yagis and 600 W in (JN33mr). I QSO'd on 23 Nov at 0317 K1FO (O/O), 0318 DL9KR (569/569), 0323 OH2PO (569/569), 0324 DJ5NV (559/569) and 2246 HB9Q (549/O), and on 24 Nov at 0045 HB9JAW (449/O), 0529 S52CW (O/O), 0555 OH2PO (O/O) dup, 0827 heard N9AB, 0828 heard OE5JFL, 0847 N9AB QRZ, 2202 DL7APV (559/O), 2303 F5FLN (559/O), 2345 UA3PTW (O/O) and 2353 G4RGK (O/O) for a score of 11x8 = 8,800 points. I found very low activity compared to other years. It seems that everybody is moving to 23 cm or on JT44? In Nov the first night I had good visibility, but the second night I had high winds and it was difficult to keep the antennas on the moon. Has anybody a readout pot mechanism for a chain driven elevation motor?

OM6AA: Rasto om6aa@stonline.sk is a new EME enthusiast – I am using 3m solid dish with 0.29 f/d, VE4MA feed horn, quadrature hybrid, YD1270 PA with 150 W from about 10 m of 7/8" and 5 m of 1/2" coaxial cable. On RX I have a 0.5 dB NF LNA with ATF 36077. I was hearing HB9BBD, HB9Q, KA0Y, OE9ERC, OE9XXI, F2TU and W7SZ during first part of ARRL contest. I was then not quite ready for transmission, and was looking forward to the second part, but strong gusting wind broke my azimuth gearbox a week before. I took the drive apart and turned the antenna manually. I received HB9BBD, HB9Q, HB9SV, G3LTF, ON5RR, F2TU, G4CCH, K5JL, KU4F, OE9ERC and OE9XXI, but am sorry to write that I was not able to establish a QSO. One problem was that I did not appreciate the Doppler's shift affect and I was calling stations on the same frequency as I was receiving them. I have parked my dish for the winter, but I will try again in the spring.

OZ4MM: Stig vestergaard@os.dk was on 13 cm during the ARRL Contest-- I have been very busy with my house and was only able to spend a little time in the contest. As a consequence I decided to only participate on 2304. I had hoped for better activity this year, but apparently only a few stations put in the extra effort to change their feed to 2304 during the contest. 10 stations were worked here. Unfortunately my 2424 receiver was broken and I couldn't work to JA. I QSO'd on 26 Oct at 0610 F2TU (549/569) and 0621 OK1CA (539/559), on 27 Oct at 0632 ES5PC (O/O), on 23 Nov at 0454 W5LUA (559/569), 0524 WA6PY (429/559), 0552 G3LTF (449/559), 0626 DK7LJ (54/54) for initial #42, 2016 LX1DB (569/559), 2038 OH2AXH (549/559) and 2124 OE9XXI (569/569) for a score of 10x10.

OZ6OL: Hans 6ol@get2net.dk was QRV on 23 cm in the second part of the contest – I was on full time and did the best I could! I worked DF4PV, ZS6AXT, EA8/LA8F, HA5SHF, W4AD, DL1YMK, W9IIX, OE5EYM, PA3CSG, JH5LUZ, OE5JFL, HB9BHU, ON5RR, F5HRY, G3LQR, GW3XYW, WA4NJP, DF3RU, OZ4MM, F6CGJ and LX1DB for an overall score of 56x27. I was using a new IF xtal Q multiplier I constructed on 10.7 MHz. I can get 100 Hz BW with nearly no "ringing", so after a short time I switched my DSP off and went back on analog processing only.

PA0EHG: Hans pa0ehg@amsat.org writes about IRAU action on a 24 GHz EME freq -- I just found out that during the IARU region 1 conference last Nov a decision was made to move narrowband activity on 24 GHz from 24,192 to 24,048 MHz. I would like to know what the worldwide EME frequency will be after this decision. If the EME frequency stays on 24,192 MHz, than I don't want to move to 24,048 MHz, even for the normal tropo work. I don't know if IARU region 1 has taken any steps to coordinate this decision to become a worldwide EME frequency. I am very interested in learning how other 24 GHz EMEers feel about this action? I was QRV on 10 GHz EME during the recent contest. PA5DD did most of the operatin g because I am not a very experienced CW operator. We managed to make 7 QSOs all on random. 5 of these were initials. We had some problems with HB9BHU who we copied as "HK9KHU" as first. After listening to the audiotapes we realized our mistake. There are audio recordings from all our QSOs on my web page at http://home.wxs.nl/~alphe078/ehgoneme.htm. We heard several other stations, and CWNR OK1KIR and DK7LJ on SSB. We missed F2TU who copied us and CT1DMK because the moon elevation was too high for him. I hope to be more active with the help of PA5DD, who did a great job as our CW operator.

RA3LE: Valeri was active on 70 cm in the contest and added initials with HB9Q, OK2BDQ and HB9JAW to bring him to initial #175.

PA0EHG with 3 m dish – has 150 W on 10 GHz

SM2CEW: Peter sm2cew@telia.com writes -- The second leg of the contest treated us with calm but cold weather and a light snowfall. But what really caused problems was the aurora that created a lot of QSB and Faraday rotation. 144 MHz was especially badly affected by this. As usual I did not burn the midnight oil, the old body is too tired these days, but I had good fun in the contest and found activity quite decent. I think we will have to accept somewhat lower scores on each band as people sure spread out more among all EME bands these days. So, rather than complain I am thankful for all the contacts made and the enhanced activity that the EME contest produces. The following stations were worked on 432: VK3UM, DL9KR, DF3RU, HB9Q, JL1ZCG, ON5OF, DJ5NV, UA3PTW, OH2PO, K5GW, OE5EYM, HB9JAW, K5WXN, HA1YA, DJ3FI, SM3BYA, SP6JLW, UA6LGH, S52CW, N9AB, EA3DXU, F6KHM, DL1YMK, G3LTF, SK0CC, DL4KG, DJ6MB, DL7APV, I5CTE, G4RGK, JA6AHB, JA4BLC, OK2BDQ, YO2IS, VE6TA, S51ZO and K2UYH. On 1296 I worked the following: K5JL, HB9BBD, K0YW, N7AM, WA6PY, K2UYH, W5LUA, KA0Y, OZ6OL, I0UGB, OE9ERC, OE9XXI, VE6TA, F2TU, IK2MMB, G3LTF, EA8/LA8LF, LX1DB, F5HRY, F6CGJ, KU4F and JH5LUZ. Some more QSOs were made but they were dupes in the contest. Special thanks to Anders, LA8LF who despite health problems made a huge effort to put EA8 on 1296 MHz EME in the contest. We need more people with that kind of ham spirit! I will not submit my log to the ARRL any more since they lost my personal record high score (>2 million points) a few years back, but I urge people who send in their log to consider the rules as plenty of coordination/scheduling was being done on clusters, reflectors and loggers and this is not allowed in the single op category. I will be active on 432 and 1296 during the Dec activity weekend if the weather permits. Skeds are welcome on CW or JT44.

SM3BYA: Gudmund gudmund.wannberg@telia.com reports that the ARRL Contest was pretty much a disaster – The first leg on 432 was spoiled by my wife having to work overtime, so we didn't get to the farm until late Saturday night. We found a water leak in the bathroom that took all evening to fix. After that was so beat I only managed to work a few QSOs before sacking in. After the contest on 2 Nov I worked PA4FP on sked with excellent sigs for an initial. The second leg was wiped out by a sudden weather change bringing freezing rain. On 22 Nov (Friday pm), I checked out the rig. The VSWR was 1.1, Pout 850 W and everything just fine. I went to bed early and set the alarm for 0200. I was up at 0200 and at the rig by 0300. The outdoor temperature was - 4 C. Tuning the band, I heard only DL9KR with a weak, watery signal. The antenna pattern was all screwed up and about 40 deg wide between -3 dB points. I powered up the TX, hit the key and the screen current meters on the K2RIW went off scale! Looking out the front door, trying to see the antennas, got me soaking wet. Everything had iced up overnight. The tower was encased in 5 mm thick clear ice. There was no way to tell how much was on the antennas, but the VSWR was 3.0. I backed off the drive until the screen currents were down to 20 mA each. At that point with 250 W going to the antenna and 65 W coming back, I eventually managed to raise DL9KR, who had great trouble picking out my call. DJ5NV was barely copyable and CWNR for a little while. The rain continued to fall all Saturday and there was more ice forming all the time. On Sunday morning I had to leave for a business trip, but understand it rained until late Monday. I consider myself lucky to not have lost the antennas. My grand total for both weekends was a puny 10 QSOs (1 dupe). I was pleased to work HB9JAW for another initial. I will be back at the farm for the holidays and plan to be QRV on 26-28 Dec. If anyone wants skeds, please email.

UA3PTW: Dima was QRV during the contest on 432 and ended with a score of 55x27. He added no new stations.

VE1ALQ: Darrell ve1alq@nbnet.nb.ca sends his greetings and is sorry that he was unable to be QRV for the contest. He has had some medical problems and is recovering surgery. He also is trying to get things back in shape after a recent storm that broke all existing records in this area for the past 115 years!

VE4MA: Barry made it on 1296 during the 2nd part of the contest and worked about 7 stations during the 1 hour he was active. These included 2 initials with DF4PV and N7AM. He is looking for 23 cm skeds on the 21/22 Dec SW. Barry may also get on 24 GHz for the Dec SW.

VE6TA: Grant's ve6ta@telusplanet.net contest results – I found good conditions and activity during the Nov weekend of the contest. I tried to get on 222 for WA4NJP, W5AGO and VE3AX, but had too much ice on the roof. Instead I spent the time on 432 fighting Murphy in between QSOs. The majority of activity was once again vertically polarized, and I had to TX mostly at 90 degrees to the received signals. Most likely this was caused by the disturbed ionospheric conditions. We had a beautiful aurora to watch as well. Stations contacted this weekend were DL9KR (very loud), HB9JAW (initial #), DJ5NV, OH2PO (loud too), K2UYH, UA3PTW, HB9Q, F6KHM, N9AB, K5WXN, JA6AHB, K0RZ, JL1ZCG, VK3UM, UA3PTW (dupe), K1FO, OE5EYM, DJ3FI, DL1YMK, G3LTF, W7CI, OK1DIG (#), OE5JFL, SM2CEW and DF3RU for 24x17. This is probably on par or better than some of my previous years - so good to see the turnout. Coupled with my 27x22 score from 1296, it was a successful contest. My thanks to all who persevered and got on the moon despite difficult weather or equipment problems... After all if we wanted something easy to do, we would still be chasing DX on 20 m.

VK3UM: Doug tikaluna@ycs.com.au is safe and sound back at home although he reports a large increase in the local snake population -- The current snake score here is Doug 7 (6 tigers and a brown), the snakes 1. I was too slow for a black one... Not very pleasant as all have the potential to kill or make you very sick. Anyway we are thinning them out one by one even though summer has not quite arrived. The contest (EME) was a lot of fun. The first half was dominated by limited activity due to the WX. I was fortunate WX wise, apart from being in the mid 30'c, we had no wind to contend with. The second half saw quite an improvement in activity and I managed to work 2 new ones. The solar activity created some of the worst libration fading I have heard. Signals below a certain level were impossible to copy. They sounded like very high speed CW and were totally (for me) in comprehendible. Persistence was the order of the day waiting for signals to peak. I complement many guys who persisted with me for 20 minutes or so before I finally copied the call. I have never sent so many "Y"s in ages, but I don't think I missed anyone. My final score was 58x30, which was down on previous years, but reflects activity levels due to WX. There were a noticeable number of "regulars" that did not make it on this year. This was a shame. I would like to add my complements to the Prague boys (and girls) for a great job. It was a brilliant Conference and my only regret was that there was insufficient time to spend with all the "gang". Having it all under the one roof is the only way to go and hopefully this is considered most seriously for future conferences. Bev and I enjoyed our trip immensely, and the time we spent with Jan and Graham (F5VHX), Peter and Boel (SM2CEW) and Carol and Jay (K5JL) are treasured memories never to be forgotten. No was on 23 in Nov! This was wishful thinking by some one I won't name! But now that the contest is over I will spend some quality time getting it all put together.

W2UHI: Frank found condx good on 23 cm during both contest weekends, but activity a bit down. Frank finished with a score of 31x20. He worked among others F6CGJ and W9IIX, but missed VE4MA. He also heard WA4NJP, but not readable.

W2WD: Warren wbutler@comcast.net writes -- There is little to report on my MB activities in the contest. With the prospect of little activity from Eur because of storms during the first weekend of the ARRL contest, I did not get up at 4 am to even listen. The prediction of high winds here for the second weekend made me decide against putting up the dish. This was a good thing because the winds came as predicted and were high enough to damage my 9 wl CP yagi. The VSWR on the vertical array was so high, it was unusable and the sun noise on

the horizontal was a few dB below normal. I did some listening and heard your direct ground wave signal, but no echoes. There were four very weak signals, which could not be identified. DL9KR was Q5 and I called him several times, but not even a QRZ.

W5LUA: Al reports having a good time in Nov – Conditions seemed good on 3 cm. I ended with a score on 23 cm of 31x20, on 13 cm 6x5 and on 3 cm 9x8. [Al needs to arrange transportation of TWT and P/S for 24 GHz to G3WDG. If anyone going over that way can carry it, please get in touch with Al.]

W7SZ: Larry reports good condx on 23 cm during the last half of the contest – I added 14 this weekend for a contest total of 27 QSOs. DL4MUP and DL1YMK were heard well, but I was unable complete with them.

W7UPF: Don donsay2@cox.net writes -- I have a 3 m dish that is currently used for AO-40, but has the capability of being used for 432 EME. I would like to see if I can "monitor" any of the EME skeds. A few years ago I had reasonable success with 144 MHz EME, but had to take down the array due to neighborhood complaints. I am now using a less obvious dish and considering 432 EME. I'd like to receive information on 70 cm EME and activities.

W9IIX: Doug had a good time over the contest weekend – I added 8 contacts and ended with a final score of 17x8 in 24 hours of operation. I heard 8 others, but could not get their attention, and was unable to make it with W5LUA in a sked.

WA4NJP: Ray was active in the 2nd part of the contest. He worked DL4PV and N7AM, and called KU4F with no reply on 23 cm. He also worked K2UYH on 70 cm and VE3AX On 222 MHz.

WA6PY: Paul pchominski@mobilian.com was on 13 cm in the second part of the contest – On 23 Nov I spent some time on 13 cm. I QSO'd OZ4MM, F2TU and W5LUA. I did not hear G3LTF or JA4BLC. Performance of my RX system is down on 2320 and 2424 due to poor high signal level performance. 2424 is completely jammed now. Even on 2320 I have some extra noise, but 2304 is clean. On 24 Nov I switched back to 1296 and worked PA3CSG and DF4PV - libration was so bad that I gave only (459) reports to N7AM, JH5LUZ and JA6AHB. I was periodically checking 432 with dual my dipole - dual polarization feed as an antenna. I heard OH2PO, HB9Q, K1FO and DL9KR who was definitely the strongest. I got attention only from DL9KR. I heard Jan on horizontal polarization and called him few times. When I switched my TX to vertical polarization, I got an immediately response. This QSO gave me my fourth band in the contest as I was also on 144 MHz. I ended the contest scores on 144 of 9x11, on 432 of 1x1, on 1296 of 19x29 and on 2304 of 3x3. I hope to have bigger antennas for the next year.

ZS6AXT: Ivo zs6axt@global.co.za was quiet for few months – On 29 Sept I tried 23 cm and while working GW3XYW, G4CCH and IK3COJ found that the chain of my AZ drive was in danger breaking. Shopping around for used motorbike chain and replacing it with such did not work. I still worked G4CCH on 6 Oct, but did not manage to get another chain before the Oct leg of the contest. I finally got a new industrial grade of chain in Nov and installed it (with difficulties, thanks to my partially crippled left hand). On 16 Nov I worked on 23 cm G4CCH, IK3COJ, G3LTF, EA8/LA8LF and K9BCT. It was in apogee, but conditions were really bad with heavy QSB and on occasions I could hardly copy my own echoes! I suspected some fault in coax or a bird's nest in the horn, but nothing there. Peter G3LTF told me that he experienced similar conditions. Some auroras and solar flares were reported that day. On 23 Nov on 23 cm, I worked HB9BBD, OZ6OL, EA8/LA8LF, DF4PV, G4CCH, F2TU, HB9Q, N2IQ, W2UHI, F5FEN for initial #185, KA0Y, K0YW, K5JL, W5LUA, N7AM, W7BBM, G3LTF, W7SZ and OE9XXI. In the next pass of the moon, I got ready with my 13 cm gear, but could not lower the dish due to high winds. Only after 2200 did I managed to move the dish, by then wind was not so bad. With dish still waving in the wind, I worked on 23 cm ON5RR, OE5JFL, HB9SV, OE5EYM, DL4MUP, HB9BHU, JH5LUZ, F5HRY, IK2MMB, DL1YMK, JA6AHB and continued on 24 Nov with OE9ERC, GW3XYW, G3LQR, KU4F #186, K2UYH and PA3CSG. I also called CQ on 2304.100 from 0300 till 0400 with my own echoes (579), but no takers. I heard OE9XXI (589) calling 15 minutes of CQ on 2320.100, but he did not respond to my calls on 2304.100. Not a good show on 13 cm for me. I was hoping for more initials on 23 cm. Conditions were a bit up and down, but not as bad as the previous weekend. I hope to have some final plans before Christmas how to mount my 2.4 m solid dish for 3 cm. The equipment with the exception of horn is ready!

K2UYH: During the 2nd leg of the EME contest, I was joined by K1DS the 1st night. Rick edits the Pack Rat Newsletter (W3CCX) and had attended the Prague EME Conference. Conditions again seemed very poor on 70 cm. I had to QRZ just about every station that called. Part of the problem may have been my preamp. I checked it on Saturday afternoon and found the NF had degraded to 1.75 dB! I was able to retune it back to the 0.3 ~ 0.4 dB range. To be safe, I switched preamps. Copy seemed better on Sunday, but still was not very good. We worked on 432 on 23 Nov at 0224 G3LTF (449/559), 0218 DL9KR (589/589), 0245 OK2BDQ (449/339) partial – had call wrong, 0300 OK1DIG (O/O) for initial #654, 0310 G4RGK (449/559), 0340 RA3LE (449/539), 0419 I5CTE (449/449), 0430 DL1YMK (449/539), 0444 W7CI (449/559), 0511 VE6TA (449/559) and 0530 DL4KG (O/O), then switched to 1296 at 0606 EA8/LA8LF (559/559), 0613 W7BBM (569/559), 0623 OK1CA (559/559), 0630 HA5SHF (549/559), 0638 N2IQ (579/579), 0643 DL1YMK (569/559), 0652 DF3RU (559/O), 0701 W9XXI (449/559), 0707 F5HRY (559/449), 0116 HB9BHU (559/559), 0723 DL4MUP (559/539) dup, 0730 N7AM (569/559) and 0815 K0YW (55/55) on SSB dup, and on 23 Nov on 432 at 0215 HB9Q (569/569), 0314 K4EME (559/-) partial, 0945 SP6JWL (549/O) dup, then switched to 1296 for at 0445 N2UO (449/559) – no trace of tropo in RX BW, 0453 DF2PV (579/579), 0459 ZS6AXT (569/569), 0510 VE4MA (549/449), 0616 K9BCT (559/569), 0634 WA4NJP (447/559) and 0638 OE5EYM (56/559), then back to 432 at 0719 S51ZO (459/559), 0729 YU1EV (449/559) #655, 0846 K4EME (559/549), 0905 DJ6MB (559/549), 0943 SM2CEW (569/569), 1251 JA6AHB (O/-) - lost and 1309 JH4JLV (O/559), then to 1296 to catch at 2034 JH5LUZ (O/O) as the moon disappeared in the brush. Although the leaves were off the trees, I did not do as well during the JA/VK window as expected. I called for several hours on Saturday on 432 with nil results. My echoes were always heard, but little else. Results were better on Sunday (2 QSOs). We ended with 36x24 on 432 and 47x24 on 1296. A number of people have reported problems reaching me by postal mail at my home QTH. I have not moved, but my mailing address has changed due to a change of zip codes for my town. My home mailing address should now read (Allen Katz, 1621 Old Trenton Road, West Windsor, NJ 08550).

NETNEWS by G3RGK (based on K1RQG's Netnotes: **K0YW** caught JH0YSI for an initial in the contest. **JA8IAD** is not QRV until next spring. **JA4BLC** was QRV in the contest on 2424.080, **JA7BMB** operated on 2424.090, and **JA6CZD** on 2424.100. All listened on 2304 and 2320. **VK4AFL** has a new e-mail address bentont@acenet.net.au. **KD4LT** has a new email address cscott@emecom.com. **F5HRY** has a new email address f5hry@wanadoo.fr. **UA9FAD** added no new stations on 70 cm during the contest. He can be reached by email at rosmet@perm.raid.ru. **F6KHM** is currently running a 34' dish (10.3 m) and 2.5 kW on 70 cm. On 23 cm they have only 100 W but will be upgrading shortly to TH-313 PA (getting 700 W Out). In the 2nd leg of the contest, they made only 12 QSOs because of the bad WX. **DL9KR** finished the contest with a score 77x32. **K5JL** says that the propagation on 1296 was good, but the population bad during the last part of the contest. Jay has sent a preamp for 23 cm to ZL1KA. **RA4AOR** (LN29la) is working on a 70 cm array consisting of 12 x 6 m BV yagis and hopes to be QRV on EME by Jan or Feb. **WA1JOF** is making good progress at his new location. **W1ZX** is looking for 23 cm skeds for Dec and 432 skeds for 2003. Willie did not make it on in Dec because of bad WX. **DL1YMK** is looking for LU8EDR to complete WAC on 23 cm. Can anyone help him contact Danny? **VE6NA** has not be active lately because Brian is dealing with chemo therapy. **DJ5NV** ended the contest with 71x31 on 432. He plans to be QRV next year on 23 cm with a 7 m dish. **PA3CSG** was QRV in the contest and worked DL4MUP for a new one on 23 cm. Geert was also active on 70 cm and reports that 432 was very good during his JA window, but activity low. **K0RZ** ended with 42x23 on 432. SP6JLW had a good signal, but was never worked. Bill did add an initial with OK1DIG. **W7MEM** did not work anyone during the 2nd part of the contest on 432. K0RZ, K1FO, N9AB were all heard, but no contacts. **KU4F** was only active on Sunday during the Nov contest weekend on 1296. **N2IQ** did not have good WX, but was active on 23cm and worked a bunch. Mark felt the activity was nothing to rave about, but notes that he picked up a few JAs. **F5VHX** was not on 23 cm in Nov because of the bad WX.

FOR SALE: **W0RAP** <w0rap@mchsi.com> has decided to sell his EME equipment because of health reasons. It is probably best to contact him by e-mail. Among the gear available are for 1296: 1 x 7289 PA, 2 x 7289 PA, TH328 PA, K2AH/VE4MA cir pol feed horn, a feed horn with hybrid for cir pol and FT 736R with 1296 module, for 903: transverter and 1 tube PA and for 432 N7ART 2 x 3CX800a7 PA, K1FO 1.5 kW with power supply, various 432 LNAs of W7CJO type and others, and lots of other goodies. **UR4LL**, Alex alex@zcrb.kharkov.ua has for sale new (NOS) power tubes: GS35b (1500 W @1000 MHz) - $US105, GS9b (> 100 W on 13 cm) - $US30, GI7b (350-300 W on 23 cm) - $US30, GS15b (280 W on 23 cm) - $US25, GS23b 1.5 kW on 70 cm - $US150, GS36b - $US50, GU74b - $US70 plus sockets, REW-15 coaxial 1500 W relay - $US20, and much more – See http://www.nd2x.net/rew15.html. **W9IIX** has for sale for 2304 2 x 45 el loop yagis, a SSB Electronics xverter (144 IF) and 3 W amp - needs a 1302 GaAs FET in receive for $US250 plus

shipping. **KJ4SO** kj4so@nc.rr.com has for sale three 4 port, WR-90, switches with 4-hole choke flanges, that were made by Microlab AB/FXR for RCA. The Microlab AB/FXR model # is RQ-A96 and the RCA part # is 1711576-2. The switches are 1 - 15/16" square, excluding the control cable connector, which protrudes an additional 1", and they are 4 - 3/8" high. There are 2 microswitches inside of each switch that can be used to determine what position (T/R) the switch is in. The switches are in excellent condition. Woody has checked all of them out and will sell them for $US125 each, or all three for $350 plus shipping.

TECHNICAL: CT1DMK, Luiz has developed a simple circuit to lock any microwave local oscillators to a reference (10 MHz, 5 MHz or 1 pps signal from a GPS receiver. The circuit can be quite useful for the upper EME bands and JT44 operation. It is orders of magnitude smaller and less complex than any previous designs. You can find it on Luiz's web page at http://w3ref.cfn.ist.utl.pt/cupido .

TIME MACHINE: The ability to record the whole band so that you can go back in time to re-tune (but unfortunately no call) stations you may have missed has been a dream of hams for year – especially of VHF/EMEers. This dream has been accomplishable for sometime, but not easily or inexpensively. Rick, N4ESS < n4ess@tampabay.rr.com> has come up with an easy and inexpensive solution using the audio channels of HI-FI VCRs. He writes – I was reading some of your information on EME and wanted to introduce a means of listening to and capturing a large piece of a band, approximately 80 kHz. This can also be recorded and listened to, and tuned across at a later time. Roger Rehr, W3SZ, is already using a pair of our Time Machine receivers in his EME operation. The Time Machine is actually a high performance I-Q demodulator and modulator (another name for a phasing type SSB receiver and transmitter). For recording and playback functions, the usual audio 90 deg phase shift networks are not needed with a stereo recorder, because the relative phase is preserved in the left and right audio recording channels. So, in record, the Time Machine is a single sideband receiver, and in playback, the Time Machine is a single sideband transmitter. I must now clarify that "lower sideband" in this case means all signals, of whatever type, that fall below the LO frequency. Likewise, "upper sideband" is all signals that fall above the LO. With the 40 kHz audio bandwidth of a Hi-Fi VCR, signals can be recorded 40 kHz above and below the crystal frequency in the Time Machine's LO. Any type of signal can be recorded and played back. Pretty cool, eh? The link listed below will take you to our web site. The manual and schematics are also included on this page for download. http://www.expandedspectrumsystems.com/prod2.html.

FINAL: We received disappointing news that plans for 432 EME during the 3B8 dxpedition have been cancelled due to the loss of an operator. ON4ANT will continue his work on a portable 70 cm EME station that Johan on4ant@pandora.be hopes to use from another location in the future.

G3SEK's 2003 EME calendar is at the end of this NL with the recommended SWs marked with **. Ian and I are in full agreement on these dates. The weekends and proposed contest dates are 18/19 Jan, 15/16 Feb (SSB Contest on 1296), 15/16 March (REF 432 & 2.3-5.7 GHz), 12/13 April (REF 2 m 1296 & 10 GHz), 10/11 May, 7/8 Jun, 5/6 July, 23/24 Aug, 20/21 Sept, 18/19 Oct, (ARRL I proposed), 15/16 Nov (ARRL II proposed), and 13/14 Dec.

Please note that the EME SSB Contest will again be during the Feb SW. I will print the rules next month, but they will be pretty much the same as last year.

Please keep HB9Q www.hb9bbd.ch updated on your initials tally. Plans are to run the Top Initials List in next month's NL.

KU4F's mother passed away in Nov. Our condolences and that of the EME community to Les on his loss.

That about covers the news for this month. Please keep the reports and technical info coming. I hope everyone has a wonderful holiday. Season's greetings & 73, Al – K2UYH.

EME SKEDS – Latest update can be found at http://www.dl4eby.de/ltskd.htm.

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21 DEC
Time     432.034          432.040          432.050
0100z                     DL7UDA-K4EME
0130z                     K9SLQ -DL7UDA
0200z                     K9SLQ -G4RGK     LU7DZ -DK3WG
0230z                     K5WXN -DL7UDA    K4EME -G4RGK
0300z  DL7UDA-K2UYH       KJ7F  -RA3LE     K9SLQ -UA9FAD
1800z                     RA3LE -JR9NWC
1900z                     RA3LE -OE3JPC
2000z                                      KL7HFQ-DK3WG
2030z                                      OK2BDQ-DK3WG
24 DEC
Time     432.040
2230z  RA3LE -DL7UDA
26 DEC
Time     432.073
0600z  SM3BYA-K9SLQ
21 DEC
Time     1296.050
0130z  W9IIX -SM2CEW
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Prague EME 2002 Conference Group picture

Lunar Weekend Calendar for 2003 by G3SEK

At 2400 Sat/ 0000 Sun	Declination (deg)	Signals (dB)	Sun offset (deg)	Sky temp (K,432MHz)	Comments
4 / 5 Jan	-21.9	-0.2	+27	24	Moon in south.
11 / 12 Jan	11.3	-0.9	+106	24	Day(PM).Apogee.
**18 / 19 Jan	23.1	0.2	-172	14	Night.
25 / 26 Jan	-14.1	0.9	-82	26	Moon in south.
1 / 2 Feb	-19.6	-0.3	+8	20	Moon in south.
8 / 9 Feb	14.5	-0.9	+85	24	Day(PM).Apogee.
**15 / 16 Feb	21.1	0.3	+166	12	Night.
22 / 23 Feb	-18.2	0.9	-99	29	Moon in south.
1 / 2 Mar	-16.8	-0.4	-14	17	Moon in south.
8 / 9 Mar	17.6	-0.9	+65	24	Day(PM).Apogee.
**15 / 16 Mar	18.9	0.4	+147	13	Night.
22 / 23 Mar	-21.4	0.9	-117	66	Moon in south.
29 / 30 Mar	-13.5	-0.5	-32	17	Moon in south.
5 / 6 Apr	20.5	-0.8	+45	24	Day(PM).Apogee.
**12 / 13 Apr	16.3	0.4	+127	14	Night.
19 / 20 Apr	-23.8	0.8	-135	66	Moon in south.
26 / 27 Apr	-9.8	-0.5	-50	19	Moon in south.
3 / 4 May	22.9	-0.8	+27	29	Sun noise.
**10 / 11 May	13.1	0.5	+109	14	Day(PM).
17 / 18 May	-25.3	0.8	-154	166	Moon in south.
24 / 25 May	-6.0	-0.6	-68	19	Moon in south.
0 / 1 Jun	24.8	-0.7	+9	35	Sun noise.
**7 / 8 Jun	9.0	0.6	+92	15	Day(PM).
14 / 15 Jun	-26.2	0.7	-172	149	Moon in south.
21 / 22 Jun	-2.1	-0.7	-86	20	Moon in south.
28 / 29 Jun	25.9	-0.7	-9	35	Sun noise.
**5 / 6 Jul	4.4	0.7	+76	21	Day(PM).
12 / 13 Jul	-26.4	0.6	+169	149	Moon in south.
19 / 20 Jul	1.7	-0.7	-104	19	Day(AM).Apogee.
26 / 27 Jul	26.5	-0.6	-27	29	Sun noise.
2 / 3 Aug	-0.6	0.8	+60	20	Moon in south.
9 / 10 Aug	-26.1	0.5	+151	41	Moon in south.
16 / 17 Aug	5.4	-0.8	-123	20	Night.Apogee.
**23 / 24 Aug	26.5	-0.5	-46	20	Day(AM).Apogee.
30 / 31 Aug	-5.4	0.8	+43	20	Moon in south.
6 / 7 Sep	-24.9	0.4	+135	24	Moon in south.
13 / 14 Sep	9.1	-0.8	-142	20	Night.Apogee.
**20 / 21 Sep	25.9	-0.5	-65	20	Day(AM).
27 / 28 Sep	-9.7	0.9	+26	20	Moon in south.
4 / 5 Oct	-22.9	0.3	+118	24	Moon in south.
11 / 12 Oct	12.7	-0.9	-161	24	Night.Apogee.
**8 / 19 Oct	24.8	-0.4	-85	14	Day(AM).
25 / 26 Oct	-13.3	0.9	+6	26	Moon in south.
1 / 2 Nov	-20.0	0.2	+100	18	Moon in south.
8 / 9 Nov	16.1	-0.9	+179	24	Night.Apogee.
**15 / 16 Nov	22.9	-0.3	-104	14	Day(AM).
22 / 23 Nov	-16.5	0.9	-14	26	Moon in south.
29 / 30 Nov	-16.8	0.1	+81	17	Moon in south.
6 / 7 Dec	19.2	-0.9	+160	24	Night.Apogee.
**13 / 14 Dec	20.2	-0.2	-123	12	Night.
20 / 21 Dec	-19.5	1.0	-34	29	Moon in south.
27 / 28 Dec	-13.4	0.0	+61	17	Moon in south.