

432 AND ABOVE EME NEWS APRIL 2002 VOL 30 #5

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

CONDITIONS: 70 cm provided mixed results for the DUBUS/REF EME Contest. Signal quality was generally good, but Faraday required a near 90 deg rotation between RX and TX to be heard much of the time. The turnout on 432 seemed good, although WX was a problem in some parts of Eur. There was also a reasonable showing on 13 cm, but more stations would have been nice. No 13 cm activity from NA was reported. Despite the contest, there was still plenty of activity on 1296. In April the focus moves to 1296 and 10 GHz. Based on the comments in this month's reports, there should be plenty of contest activity on both these bands.

WSJT/JT44: This past month the 1st reports of successful EME QSOs using WSJT on 144 MHz were received. WSJT is digital transmission mode developed for high-speed CW meteor scatter (MS) communication. It is based on multiple frequency FSK. At first thought such a scheme might not seem appropriate for EME. MS is normally a high signal strength transmission mode. MS's principal challenge is not signal level, but that signals exist for only very short, intermittent periods of time. However, there are a number of WSJT modes, one of which (JT44) is designed for weak signal conditions. It operates at a relatively slow transmissions rate, and yield readable copy by synchronously comparing many transmissions of the same information. This mode seems more appropriate for EME on 432 and above than 144. On the higher bands signals are actually stronger, but more difficult to copy. (When I operate 144 EME, I am amazed how weak the signals are in comparison to 432 or 1296.) On 432 and even more so on 1296, it is not uncommon to know a very weak signal is present, but not be able to copy it. JT44 may offer a solution to obtaining better copy of these marginal signals.

DK3WG: Jurgen was only active in the contest on 432 on 24 March. He made 20 QSOs and added one initial with DL4KG (new QTH) to bring him to #386.

DL0EF: Manfred, PA3GLB/DL5FAB Manfred.Lugert@inter.NL.net reports his club will be QRV on 10 GHz EME for the April contest weekend and is Looking for skeds -- Due to logistic constraints, we will be able to accommodate skeds from around 1100 on 20 April to around 1400 on 21 April. For more info please look at <http://www.astropeiler2.de/as/index.html>

DL1YMK: Michael DL1YMK@aol.com. Writes -- I participated in the contest for quite some time on 70 cm on Saturday and Sunday. I am now using an array of 6 x 8.5 w1 yagis. They seem to be a huge improvement over the old 4 yagis. I also brought the preamp closer to the power splitter, and replaced the TX feed coax with Cellflex. I now have 150 W at the antenna. I still have the option to extend to 6 x 11.5 w1, which I may try when weather is better. On 24 March, I closed down before the NA window, ending up with 30 contacts. UA3PTW, VK3UM and OH2DG were initials. I missed DL7APV and JJ1NNJ - I could not the call dig out of the mud at the time - sri! Conditions seemed to be pretty good. I worked KL6M with a lovely signal on both days in the JA-window, and never heard VK4AFL so loud before. I now am looking forward to the 23 cm lg. I still have some problems with the cathode bias supply of my YD1336 PA. I don't think it will be running smoothly for the contest, but I'm trying another option - Ian's TL431-controlled cathode supply. It seems, as if it shunts the bias voltage to ground potential, when the PTT is operated, resulting in an anode current safety lock-out. Maybe someone has had experience with a similar problem? The TL431 possibly is oscillating, when operated at a voltage of 35 volts? Any hints will be appreciated.

DL4KG: Gerald znoyek@t-online.de had a great time during the DUBUS Contest -- I was QRV from time to time depending on family duties. I worked on random VK3UM, HB9Q, DJ5NV, DL9KR, K1FO, OE5EYM, UA3PTW, F2TU for initial #71, DL1YMK, KL6M, DK3WG and K0RZ for a total of 10,800 points. I heard and CWNR VK4AFL, G3LTF, JA6AHB, PA0AVS,

K4QI, F6KHM and EA3DXU. These would have given another 5 initials if worked - hi hi! Especially F6KHM was called several times, but without success. Sometimes I thought there were only one-way conditions. A sked with K9SLQ was nil. He was on, but there was absolutely nothing. Equipment is now a Kenwood TS-2000, preamp ATF 36077 (NF ~ 0.4 dB), GS-23B PA (640 W at feed) and 4 x 8.5 WL DJ9BV yagis. Skeds are welcome, please mail to <dl4kg@qsl.net>. My ham radio web page can be found at www.qsl.net/dl4kg.

DL7APV: Bernd DL7APV@t-online.de wrote -- I didn't work on the 432 antennas this weekend. Last night the 6th storm of the year with speed >100km/h hit us. I do not remember this happening during the last 30 years.



F6KHM 34' DISH

F6KHM: Xavier (F5TTU) f5tu@club-internet.fr sends the following info for the F6KHM group -- After 18 months of work, we (F6KHM club station) are now QRV with our new 10.3 m dish (34'). All the system are working fine, mechanical (elevation is hydraulic) and auto tracking with VE1ALQ interfaces and F1EHN software. A web site at <www.qsl.net/f6khm> is in construction to show how we did it. The station includes a dual-dipole with 500 W at the feed from a TH-F6007 coaxial cavity PA with DX11503 LNA in DJ9BV design. We measure 4.5 dB CS/G noise. During the 1st part of the Eur contest we worked VK3UM (559/559), JA6AHB (569/569), SM2CEW (549/549), DJ5NV (559/559), UA3PTW (O/O), G3LTF (O/O), DL1YMK (539/O), F2TU (449/559), OK1KIR (449/439), K1FO (569/559), ON5OF (449/539), OE5EYM (559/569), K9SLQ (449/449), EA3DXU (O/O), OH2DG (549/549), PA0AVS (449/539), HB9Q (569/549), K5WXN (449/549), K2UYH (449/569), G4YTL (449/549), UA6LGH (449/559), VE6TA (449/559), WA6PY (O/O), KL6M (549/549), WB0GGM (O/O), S52CW (549/559), SM3AKW (559/559), KU4F (569/569), DJ3FI (449/549), K4QI (559/559), EA8FF (559/559), VK4AFL (449/539), JH4JLV (O/O), RA3LE (O/O), DF3RU (559/569), OE3JPC (O/O),

PA2CHR (O/539), G4ERG (O/O), DK3WG (449/O), DL8OBU (449/O), SK0CC (449/O), K0RZ (549/559), DL7APV (539/539), YO2IS (339/569), UT3LL (339/539), G4RGK (449/449) and WA4NJP (449/559) for a total score of $47 \times 31 = 145,700$ points. Heard were 7M2PDT, DL/OM9AME/P but missed. I'm working on the 23 cm equipment and hope to be QRV for the 2nd part of the contest. Hopefully there will be not too much disruption from F6CGJ, who is separated by only 5 Km. I'll be in Prague and hope to meet all of you.

F/G0VBA: Graham built a 432 feed (a pair of dipoles) for his 4 m dish and is hearing the bigger stations. He plans to try calling on random bigger stations as DK9KR and DJ5NV. Graham was on 23 cm during the SW and worked SM2CEW, G4CCH, W5LUA and OZ6OL.

G3LQR: Simon G3LQR@aol.com drops a line on his activity – Progress has been slow on my new PA for 23 cm using a GS35b. Others seem to report only 500 W out, but I will be happy at that power. My new PA for 432 MHz using an RCA 4661 runs nicely at full power. I now need to improve my 432 antenna. At present sun noise is only 12 dB. I removed the open wire from each bay of 4 yagis and replaced it with LDF4-50 to check both bays and adjust SWR. I have 9% reflected at present. I just need some warmer WX and time. The 4.2 m dish is still ok after some big storms during winter. Operating has been slow, but I did get on 13 cm for the DUBUS contest. I worked 7 stations and heard 2 others. QSO'd were OE9XXI, SM3AKW, F2TU, OH2AXH, OK1CA, G3LTF and OK1KIR. The RX was bit deaf on Saturday, but the sun noise was close to 16 dB on the Sunday. My power is only 80 W out in shack from a YD1050. Some more would help. I'm looking for a GS34. My 9 cm EME project is still on hold, but I will try harder this year. I will be on 23 cm for the DUBUS contest.

G3LTF: Peter writes -- At last we got some decent WX and I could operate EME again! I went on 1296 on 21st March to try out my system as I have been making a number of changes, new relay, higher edge illumination, -12 dB, realignment of polar axis and auto follower system. Echoes were good, especially on SSB and I worked OZ6OL and G4CCH. I was on for the contest and on 432 worked on 23 March SM2CEW, VK3UM, VK4AFL, JA6AHB, DL1YMK, F6KHM and WA6PY for initial #355, and on 24 March PA0AVS, #356, F2TU, UA3PTW, UT3LL, DK3WG, YO2IS, SM3AKW, K0RZ, WA4NJP, K1FO, RA3LE, DJ3FI and G4YTL #357. CWNR were K9SLQ, WB0GGM and SK0CC - got report but no completion due to QRM. On 13 cm, I worked (x means crossband QSO) on 23 March OZ4MM x, OH2AXH x, SM3AKW, F2TU x, OE9XXI, OE9ERC x, and on 24 March G3LQR and OK1KIR. CWNR were OK1UWA and JA4BLC x. Nothing was heard from NA. I measured sun noise on all 3 bands with a 2.8 GHz sun flux at 175 with the following results: 432 = 15 dB, 1296 = 21.3 dB and 2320 = 17 dB. This is with a 6 m dish. I have been doing some interesting work on dish illumination measurement, which I will report later. I missed about 4-5 hours of operating on Saturday when a motor relay burnt out. My apologies to K9SLQ and W4ZRZ for missing our skeds.

G4RGK: Dave in March spent some time on his array and all damage has now been repaired -- I was able to get on 432 for the DUBUS/REF Contest and worked HB9Q, K1FO, OH2DG, OE5EYM, SM2CEW, G4YTL, K2UYH, K0RZ, DL9KR, SM3AKW, and F6KHM. All were worked with only 350 W out of my EMFD PA. The following were CWNR: DJ5NV (2 hours), SK0CC, PA0AVS, S52CW, DL8OBU, ON5OF, AA3GW, DJ3FI, K5WXN and F2TU. Head were G4ALH, UA3PTW, EA3DXU and WA4NJP. I hope to get the P/S for the new PA finished soon, QRL permitting.

GM4ISM: Mark's dc2light@bluevonder.co.uk recent activity has been a little intermittent – I was QRV for the SSB Contest, but true to form the PA was giving me trouble. A water leak prevented me from joining in on the Saturday. Many good signals were heard. On Sunday I managed to work K5JL and OE9ERC with reduced power output. ZS6AXT got away. I arranged a sked with Ivo for the following weekend (2 March), but heard nothing. During the week whilst I was away, a storm had bent the support for the actuator arm, and I was about 8 degs off - just enough to stop me from finding Ivo. The weekend of 23/24 March was again disappointing. On Saturday there was little activity heard, but I did work G4CCH on random. On Sunday the PA sprang another leak and gave up again. I heard HB9BBD (549) at times and (52) on SSB, IK2MMB (529), K5JL and a few weaker stations that I did not have time to identify. I was too busy trying to dry out the PA valves. I am getting a screw on heat exchanger put together. De-ionized water seems to eat through the solder. I may even just use good old Scottish tap water. The leakage current is not too bad - Hi. I have made some improvements to the dish positioners, and the materials will take a lot more to bend them! Work is progressing slowly on a TH328 amplifier. I am also working on a VE4MA feed with polarizing screws. I measured a large increase in sun noise - from 8.6 dB to over 11 dB when I bypassed the hybrid. It has to go! The preamp is improved and now has a 0.35

dB NF thanks to G3WDG. I can be QRV from now through the Easter period, any skeds are welcomed.

JJ1NNJ: Kouichi's BYD01531@nifty.ne.jp March contest report -- I worked on 70 cm on 23 March at 0430 WB0GGM (O/M) in V on sked for initial #75, 0622 JA6AHB (O/M) V, 0641 VK3UM (559/339) V, 0705 KL6M (449/549) V and 1301 RA3LE (O/O) -20/+40 deg pol, and on 24 March at 1238 UA3PTW (559/549) V, 1347 F2TU (559/449) V #76, 1421 DL9KR (579/559) V and 1429 SM2CEW (559/539) V for a total of 9x8. Also heard were K1FO, W5WXN, K9SLQ, VE6TA, DL1YMK, DJ5NV, F6KHM, OK1KIR, UT3LL, SM3AKW, VK4AFL, 7M2PDT, JS3SIM, JH4JLV and JH0WJF. Condx were good during the night. Many Eur stations were active. I was very happy to complete QSOs with RA3LE on random and WB0GGM on sked. My equipment is 16 x 13 el (2.7 wl) yagis LR with a 250 W solid state PA (3x MRF176GU) and FHX35LG LNA.

JH0YSI: Yoahiro, JA4BLC reports that JH0YSI cannot be QRV on 432 because their yagis were badly damaged. They have no plans to repair. JH0YSI has a single 2C39 PA with an output of 100 W on 23 cm. They hope to get a better tube and more power soon. As their dish is manually controlled, they are not interested in sked requests before they get their tracking solved.

K0YW: Bruce <k0yw@frontier.net> had multiple equipment problems in March -- Murphy visited my shack. After fighting another dead elevation board, I had low drive to the rig – a bad attenuator, power was down to 200-250 W before back up, and the PTT line to the foot switch quit too. Despite these problems, I had good results on 23 cm. I worked W4OP (569/549) and (55/55) on SSB, W2UHI (559/569), WA1JOF (519/539), K5JL (559/589) and W7BBM (559/559) and (55/55) on SSB. The dish now tracks fine. I'll have the rig back to full goo soon. I was hearing my own echoes (579) consistently even with low power. I ran some real low power checks. With only 2 watts out, my echoes were Q5 on CW. Jay can do the same with 1 W, but has 1/4 My TX feedline loss.

K5PJR: Tony k5pjr@earthlink.net will have trailer mounted 4 m dish on 23 cm in a short time – I am waiting for VE1ALQ amp and feed. My TX power should be around 200 W from a two 2C39 PA. This is the dish I was using to work W4HHK on 2304. Later in year I will be back on 2304 with about 300 to 350 W on 13 cm. I also plan to be back on 5760 with 70 W, if activity is there. I have a 16' Scientific Atlanta dish that I would like to put on, but that will not be a while. By the way, I have moved from Grove, OK (EM26 to EM37), near Springfield, Mo. My plans are to pull the dish to AR, KY, etc to help with states.

K5WXN: Dan found lots of activity on 70 cm during the Eur contest, but had to shut down part of the time due to high winds. He worked quite a few stations including initials with F2TU and VE6NA. DL1YMK was called, but on his reply at least 3 strong stations also replied causing much QRM! Dan asks about where to send DUBUS/REF contest logs. [Send them to Patrick Magnin, F6HYE Marcorens, F74140 BALLAISON France, or email logs in ASCII format to f6hye@ref-union.org]

K9SLQ: Wayne in March worked SK0CC with good signals, but heard nil from 7M2PDT. K5AZU, K4QI and VK3UM were also worked for new ones. He has taken his antennas down to be upgraded, but expect to have them back up for the April SW.

KL6M: Mike is back from a vacation in Hawaii -- Thanks to WL7BQM, Mike, in Sterling, Alaska. I plan to be QRV on 1296 in time for the DUBUS Contest. He is loaning me a VE4MA feed, tuned by Darrel and a 160 W brick, which we plan to mount at the feed. My preamp is a 0.4 dB NF DEMI. I have to get the whole thing operational during a 3 day weekend next week. I still don't have my improvements finished to my position indicator. I will be trying to get it operational also, but I plan to operate even if I don't finish it. I will just have to spend a lot more time tweaking the dish without it. WL7BQM is working on a 23 cm system of his own with a 16' dish.

OK1CA: Franta's " ok1ca@ges.cz report from March -- I was QRV on 13 cm on 23 March and QSO'd F2TU (559/559), OE9XXI (559/559), OE9ERC (569/559), F1ANH (449/439) for initial #16, OH2AXH (559/539), SM3AKW (449/439) - all on 2304 MHz and G3LQR (O/O) #17 on 2320 MHz. It was very cold with snow, and activity only from EU was possible. There were 3 stations on 13 cm from OK (OK1KIR, OK1UWA and OK1CA), together with the activity from OE (OE9XXI and OE9ERC) it was possible to fulfill the conditions for the Johannes Kepler EME Award in one evening on 13 cm!

OK1KIR: Tonda, OK1DAI antonin.jelinek@eurotel.cz reports on the 1st part of Eur Contest by his club – We worked the following stations on 432 MHz, on 23 March at 1244 KL6M (549/549), 1257 VK3UM (559/559), 1312 UA3PTW

(O/O), 1339 VK4AFL (539/539), 1405 HB9Q (569/559), 1610 F2TU (559/559), 1722 F6KHM (439/449) for initial #354, 1733 DL1YMK (439/449) #355, 1800 ??GC? QRZ, 2247 OK2BDQ (439/429) #356, 2324 K1FO (559/559), 2326 DJ3FI (449/539) #357 and 2351 DJ5NV (559/559), and on 24 March at 0022 KU4F (569/569) #358 (from EL99), 0033 K9SLQ (439/439), 0044 partial K5WXN (439/lost) and 0102 OE5EYM (559/559). We heard JA6AHB, K4QI, OH2DG and RA3LE. On 2304 MHz we worked on 23 March at 1500 LX1DB (559/449), 1511 OZ4MM (449/449), 1520 OE9XXI (569/559), 1535 OE9ERC (569/559) and 1934 F2TU (449/449), and on 24 March at 1646 G3LTF (O/449) and 1906 G3LQR (O/M). We heard on 13 cm SM3AKW and Moon noise of 0.6 dB. Due to poor weather, we were not active on 6 cm. In April we plan to be QRV on 23 and 3 cm. We have prepared a new 4.5 m microwave dish with f/D of 0.42 from meteorological radar for used on 10 GHz. We plan to enlarge this dish to 6.4 m with an f/D 0.3. To reduce tree problems it will be centered 10 m above the ground on a steel tower.

ON5RR: Marc moonbouncer@pi.be contributes the following – On Saturday 23 March Michel and I were active on 13 cm for some hours in the contest. We worked F2TU, OE9XXI, OE9ERC and OH2AXH for an initial. We also CWNR OK1CA, F1ANH, SM3AKW and OK1UWA. We were only running 70 W in the shack and a 3.7 m dish. By 1800 most stations had shutdown, otherwise we were sure that we could have added some more stations during the evening. Due to a little accident with my left hand, I could not finish of a bigger PA. It should be on for next time. We will be active in the 23 cm part of the contest, but still running the small dish and OZ9CR amp.

OZ6OL: Hans 6ol@get2net.dk sends his contest reports for Feb and March – In the SSB Contest on 23 cm, I QSO'd at 1407 HB9Q (54/44) JN47, 1420 F2TU (42/54) JN, 1739 IOUGB (54/44) JN, 1848 IK2MBB (54/54) JN, 2045 OH2DG (54/53) KP, 2124 K5JL (56/55) EM15, 2206 K2UYH (56/55) FN20, 2210 OE9XXI (58/54) JN47, 2215 OZ4MM (54/54) JO55, 2354 LX1DB (57/56) JN39, 2358 K0YW (56/55) DM67, 0004 OE9ERC (55/54) JN47 and 0015 K4QI (54/53) FM06. We had bad WX during the contest. Four hours into the contest, the dishes elevation control was broken by high wind. In March on 432, I contacted on the 16th W2UHI (559/549) with the moon only a few degs above the horizon, on the 17th F6ETI (O/O), on the 21st G3LTF (569/559) - very strong signal, on the 23rd (during the Eur EME contest) W7BBM (559/559), W4OP (559/449) and W7SZ (549/549), on the 26th HB9DDO (56/56) - visitor at HB9BBD on SSB, and the 29th W4OP (559/559) and N2IQ (569/559).

OZ4MM: Stig wrote – During the 1st part of the DUBUS contest I had very limited time. So I spent the available time 13 cm and worked 10 stations as follows: OH2AXH (559/449), G3LTF (O/O), SM3AKW (549/549), OE9ERC (569/559), F2TU (559/559), OE9XXI (579/559), OK1UWA (O/O), JA4BLC (529/549), LX1DB (579/559) and OK1KIR (449/449). Several of the regular 13 cm stations were not found and no 13 cm stations was heard here! On Saturday signals was weaker than normal as I didn't have time to remove my 144 dipole feed, which was causing blockade of the 13 cm feed. On Sunday after the 144 feed was put in the rest position, signals was much better, and in addition I got the amplifier working more stable than on Saturday. I hope to put in some time on 1296 in the last leg of the contest.

RA3LE: Valeri has finished his new Antenna. He had bad WX - snow and wind during the contest weekend, but did make initials on 432 with JJ1NNJ, K4EME and PA0AVS. G3HUL was heard. Valeri ended the contest with 23 QSOs.

SM2CEW: Peter reports working about 30 stations on 432 in the 1st part of the DUBUS/REF Contest. Among those QSO'd was OE1SOW (2x19 el yagis and 300 W) for an initial. He also reports that FR5DN is working on 1296 EME – see the NETNOTES.

SM3AKW: Carl sm3akw@mail.bip.net reports on the 1st weekend of the Debus contest on 432 -- I made on 13 cm a score of 11x7 and on 70 cm 35x26. On 70 cm most stations heard during the contest weekend came in on vertical pol. On Saturday, I spent quite some time on 13 cm. F1ANH was the only new one! Where were the US and VE contingent? None were heard.

WI1PL: Wilt n0ipl@webtv.net from (DN62uu) WO reports – My antennas were destroyed in the wind last Nov. I have new ones started, and hope to be back on the moon in about a month, maybe less. I also have started to gather 1296 equipment. I have a transverter and 6 x 2C39 amp, so I hope to be QRV there by the fall. There are no 20" or better dishes available around here, so I may build one. I will advise when I am ready on 70 cm.

W2UHI: Frank is back in operation after his squirrel attack. All systems are go again. He replaced all the chewed through cabling and tweaked up his drive system. During the SW, Frank found 23 cm activity reasonably good for a 70 cm

contest weekend. He worked G4CCH, W4OP, F6ETI, IK3COJ, W6HD, K5JL, OH2DG, W5LUA, W7SZ, W7BBM, K0YW and WA1JOF. Several more were heard, but no connection. Frank is looking for info on GR-1236 IF Amplifier. He needs to calibrate it. Where are the adjustment points to calibrate linearity?

W5LUA: Al had a FB visit in March from K5GW, K5JL and K0YW. During the SW he had windy conditions, but did get on 1296 and worked W4OP, W2UHI, F/G8MBI, G4CCH, K9KFR [?] and JH0YSI.

W7SZ: Larry was QRV on 23 cm in March and worked K9KFR [?] with a big signal. He was also on 10 GHz and worked G4NNS. G4NNS was running only 9 W!

WA1JOF: Don QSO'd on 1296 during Saturday of the SW K5JL, W2UHI, K0YW, OH2DG, G4CCH and W4OP. He now has GR-1236 for noise measurements.

WB0GGM: John worked 4 new ones during the March contest weekend. He QSO'd G4HUL, W4ZRZ, JS3 SIM, JJ1NNJ, PA0AVS and F6KHM for an initial #107. Altogether 10 were worked, 23 other stations were called.

ZS6AXT: Ivo zs6axt@global.co.za writes -- I was really looking forward to the DUBUS Contest and during the prior week checked my 13 cm equipment. My Sun noise was just 12 dB, but after few operations of the TR relay, it jumped to 18 dB. There was heavy thunderstorm before the contest. The 1st station heard was OE9XXI. I called him and he came back. We made it (I hope) and then my power meter went haywire. Measuring VSWR showed that there was a fault in the TX cable. Sunday morning I could not find the fault. So started to check the 6 cm equipment. Sun noise was just 7 dB! Again, after a few operations of the TR relay, it increased to 14 dB. This was less than before, but good enough. Output power was 20 W. The 1st station heard was F2TU, just before his sked with JA7BMB. He was good copy. In their sked, I heard both. JA7BMB was a bit weaker than F2TU. I could not find my own echoes at that time. Later I found that the EME program shows 1.2 kHz lower value of Doppler. At that time I was tracking only by Moon noise. It was just 0.5 dB. (Lower than before). After the F2TU sked, I called him and he came back with a (449) report. He was (559). JA7BMB did not respond to my calls. No wonder, I was off frequency. Then I installed the CCTV camera and found my own echoes (up to 529). I again worked F2TU (569/559) and F1ANH (O/O). After that I called LX1DB for close to 2 hours with just QRZ in reply. No other stations were heard. I spent all my time calling Willie for a new initial. So there went my contest, Hi! On Saturday 30 March, we made it with JA7BMB (O/M) on 6 cm EME. This was the 1st ever QSO on this band between Africa - Asia and JA to ZS, and my initial #12. I am quite happy about it. There was good conditions, but unfortunately no reply for skeds with LX1DB. Thus I took my CCTV camera out and will take the 6 cm feed assembly down too. BTW - the screening cover of the 6 cm horn fell off unnoticed, thus I was operating on 23 and 13 cm in past months and no apparent damage was done to the 6 cm equipment. So the permanent installation of the 6, 13 and 23 cm horns with 6 and 13 cm horns offset seems to be working well. I can change between bands in a few minutes.

K2UYH: I spent most of the weekend on 70 cm participating in the contest, although my operating time was limited on Saturday night by a family activity. QSO'd on 23 March at 0018 K4QIF (449/449), 0027 KL7HFQ (449/549), 0032 OE5EYM (569/559), 0046 PA0AVS (559/559), 0051 F2TU (559/559), 0108 KORZ (559/559), 0119 ON5FF (549/539), 0149 W7CI (559/569), 0200 EA3DXU (559/O), 0214 K1FO (569/559), 0226 VE6TA (559/569), 0322 K5AZU (569/559), 0457 K5WXN (559/559), 0504 KL6M (559/559), 0518 K9SLQ (559/559), 0613 JA6AHB (O/O), 2040 SM2CEW (569/549), 2052 HB9Q (569/559), 2200 SM3AKW (559/559), 2145 G4ALH (O/O), 2155 F6KHM (569/449), 2210 S52CW (559/559), 2227 G4RGK (559/559), 2237 DF3FI (559/559), 2243 DL1YMK (559/559) and 2304 G3HUL? – had to leave as the XYL was waiting. The next I switched to 1296 for my GM00NN sked. I head listened during the earlier sked and heard consistently a signal I believed was GM00NN but nil from VE1ALQ. At the start of my GM00NN sked at 2230 I felt pretty confident, but nil was heard – frustrating. At 2250 I gave up and worked OZ6OL (559/569) followed by at 2300 N2IQU (56/55) on SSB and 2310 W7BBM (55/55).

NETNEWS BY G4RGK: FR5DN is no longer active on 70 cm EME due to QRM, but he is hoping to get on 23 cm with a 1.8 m dish, and needs info on feeds etc. You can contact Philip at <fr5dn@oceanes.fr>. G3SEK has a new e-mail address g3sek@ifwtech.co.uk and the new website is <http://www.ifwtech.co.uk/g3sek>. W4JBB w4jbb@amsat.org is interested in 1296 EME. DK5MV is QRT till the end of April. VE1ALQ was all iced up during the March contest weekend and could not TX. W4OP has repaired his 23 cm SSB xvtr – the 78L09 regulators were in backwards. He is now looking for info on bias

adjustment for the ON921 output device. **W7CNK** is working on mounting a new bigger dish. He has installed a 1152 PLL in a DEM module and it is working fine. **KA0Y** is still off the air. **W2DRZ** is working on a W6HD controller. **K5GW** just took down his 14' dish and will be putting up a bigger dish. **VE4MA** is working on a on feed mount and TWT P/S for 47GHz. **DJ5MNP** was QRV from a new grid for the March contest weekend using a 2 m dish. He worked HB9Q on random and CWNR DJ5NV many times. **VK3UM** reports low stateside activity on 70 cm during the contest. Doug worked 43 stations. **AASC** will be active on 10 GHz during the contest in April. **WA0WPJ** hopes to be QRV on 23 cm EME with a 9' dish soon. **K4EME** was not successful on 432 with RA3LE, but did work KL6M again in March. **N2IQ** has his 23 cm PA going again and is now back on. **DL7APV** was active during the Eur contest and worked PA2CHR for a new initial. **LX1DB** was active on 13 cm and 6 cm in March. **W7MEM** worked on 432 in March HB9Q and K0RZ. He is interested in skeds and would like to try WSJT/JT44. **WD5AGO** is moving to a new QTH and is QRT until the move is completed. Tommy will be in the same grid and so will not be a new initial. **G3LTF** had to cancel his March skeds due to drive system failure. **ON5OF** reported not good conditions on 70 cm. His score was 12x10 after the 1st day. **K0RZ** worked 26 during Eur EME Contest including initials with W7MEM and G4YTL. **WA9FWD** is trying to come up with a design to easily fabricate a 23 cm cavity for a GS35B. A GS-31 is a similar tube and appears easier to cool. **NU7Z** is QRT on EME until further notice. Rick is in a rebuild mode and working on 47 GHz. **N7AM** ran tests on 23 cm with K5JL, but is having illumination problems and needs to readjust his feed. **K1FO** is working on a 222 PA conversion. **WA4NJP** worked 13 and 3 initials on 432 in the 1st part of the Eur contest. Ray will be on 23 cm and 70 cm for the next SW. **WL7BQM** is working on a 23 cm station – see w7bqm@pci.net. **VE6NA** is back on 23 cm with a new PA. **PA3CSG** was testing on 10 GHz and will be on for the contest in April. **K6IBY** should be back on 432 in May. The array is now back on his tower. **W1ZX** will be on 23 cm next SW. Look for Willie at Dayton and then Rochester. **HB9BBD** is getting 0.7 dB of moon noise with his new preamp. **WA6PY** will be on 23 cm in April. **FSSDD** had problems with their 70 cm PA. He hopes to have the amp fixed and be available for skeds again for the April SW.

FORSALE: **WD5AGO** has for sale a 1296 35w solid-state driver for \$US160, and a FT726R with 2 and 70 cm modules for \$US500. Contact Tommy at THenders@tulsa.cc.ok.us. **WI1PL** is looking for a 20' or larger dish. Contact Wilt at n0ipl@webtv.net. **SV1BTR** has for sale a 70 cm Siemens 4 pole BPF centered on 432 with a 500 KHz BW and > 100 dB rejection. The return loss is 20 dB and the insertion loss is 2.3 dB. It is quite heavy, around 10 kg. Jimmy prefers to ship within EU and is asking 140 Euro with shipping included. **W7CNK** has 16' dish that he needs to be dispose. **W4SC** is looking for repair info on the reference oscillator in HP-435, 6, 7, 8 power meters. **VE6NA** is looking for 7289 tubes with screw on caps. **W2DRZ** is looking for absolute position encoders.

TECHNICAL: N2UO <lu6dw@yahoo.com> has completed assembly of a 10' stressed dish that may give others ideas on how to fabricate lightweight and inexpensive antennas for 1296. Marc's dish is picture above – It is made of 3/4

HB9Q TOP LIST

Pos.	Callsign	Equipment	Band	Initials
1	DL9KR		432	768
2	K2UYH	28" Dish 8938 PA	432	649
3	DK3WG	16x27el LY, kW	432	385
4	SM2CEW	8 mtr dish and 1.5kW	432	382
5	SM3AKW		432	357
6	G3LTF		432	353
7	KU4F	14.6 meter dish	432	326
8	K0RZ		432	301
9	JA4BLC	20ft dish, 2-3CX800A7s	432	261
10	VK3UM		432	256
Pos.	Callsign	Equipment	Band	Initials
1	OE9ERC	8 m dish	1296	252
2	K2UYH	28" Dish	1296	197
3	G3LTF		1296	187
4	ZS6AXT		1296	177
5	HB9BBD	10m Pb	1296	175
6	WD5AGO		1296	170
6	SM3AKW		1296	170
7	G4CCH	5.4m dish, 500W	1296	164
8	SM6CKU	8m Dish	1296	158
9	EA6/DF5JJ	5.5m-Dish, 900W, QRT	1296	148
10	SM2CEW	8 m dish and 600W	1296	140

Pos. Callsign Equipment Band Initials

aluminum tubing, using the same ideas K2RIW and K2UYH used in their dishes several years ago. The tubes follow the parabolic curve within ± 1/4", although the surface is a little worse than that because the aluminum screening is hard to "persuade" to take a parabolic shape. The screening was on sale and there was nothing cheaper than it. Chicken wire was not used because it was not suitable for 23 cm, and hardware cloth was too heavy and expensive. The antenna is controlled by an OE5JFL type auto tracker, and is mounted on casters, so it can be hidden between the house and the pine trees when not in use, to please the neighbors. I do not plan to be QRV soon due to time conflicts with required travel, work and graduate study.



N2UO Finishing assembly of his 10' stress Dish for 1296

FINAL: PRAGUE2002: Zdenek, OK1DFC reports that there are now more than 86 participants registered for the conference. The numbers break down as follows: DL-12, OZ-3, OK-12, OE-3, W-9, LZ-1, UA3-2, SP-2, HG-2, SV-1, LX-1, SM-5, PA0-2, F-11, HB9-2, ON-1, VK-3, G-11, S5-1, ZS6-1, EA-2, YO-2, OH-2, JA-1, I-1, GM-1 and VE-1. The conference needs papers for presentation and the digest. For more info see <http://www.emeconference2002.cz/acallfor.htm>.

Warren, W2WD, is now maintaining the E-mail list of 70 cm and up EMEers formally handled by KD4LT. Scott is still sending out the NLs by email. Up dates should be sent to Warren at wbutler@comcast.net.

Please keep the reports and technical info coming. I shall be looking for all of you in the DUBUS/REF Contest. 73, A1 – K2UYH

1	OE9ERC	8 m dish	2304	51
2	ZS6AXT		2304	31
3	JA4BLC	20ft dish, 0.6dB	2304	26
4	SM3AKW		2304	23
5	WA6PY	2.4 m dish	2304	10
6	ON5RR	3.7m dish, TX 70 W	2304	7

EME SKEDS For APRIL

20 APRIL

Time	432.040	432.045	432.070
0300z			JS3SIM-WBOGGM
0330z			JR9NWC-WBOGGM
0400z			JH4JLV-WBOGGM
1300z	UA4NM	-DL7APV	
1900z		LU7DZ	-DK3WG
1930z	WA4NJP	-DK7LJ	LU7DZ -DL7APV
2000z	WA4NJP	-PA4FP	
2030z	K5WXN	-EA3DXU	
2100z	W7MEM	-DL7APV	
2130z	WA6PY	-DL7APV	
2230z	WBOGGM	-UT3LL	

20 APRIL

Time	1296.070
0330z	JA8IAD-WA4NJP
21 APRIL	
Time	1296.050
2100z	WA4NJP-DC6UW