432 AND ABOVE EME NEWS
MARCH 2006 VOL 34 #3

EDITOR: AL KATZ, K2UYH; ENGINEERING DEPARTMENT, THE COLLEGE OF NEW JERSEY, PO BOX 7718 EWING, NJ 08628
TEL (W 609-584-8424) OR (H 609-443-3184), FAX (609-631-0177), E-MAIL a.katz@ieee.org
PROD/MAIL: BRIAN MULLANEY, KB2TIS/TOM KIRK, KA2VAD (609-584/8424), E-MAIL mullaney@mccc.edu/kirkt@lintech.com
NETNEWS EDITOR: G4RGK, DAVID DIBLEY, E-MAIL g4rgk@btinternet.com (based on K1RQG's Netnotes and Reflector News)
EME NETS: 14.345, 10 AM ET SATURDAY AND SUNDAY (AFTER VARO NET ENDS ON SUNDAY)
NET CONTROL AND SKEDS CORDINATOR: JOE, K1RQG, TEL (207-469-3492), E-MAIL k1rqg@aol.com
EME DIRECTORY: http://www.dl4eby.de/, DL4EBY/DK0TU, KLAUS TIEDEMANN, TEL (49-30-7955467), E-MAIL: tklaus@snafu.de
NL EMAIL DISTRIBUTION and EMAIL LIST CORD: WARREN, W2WD wbutler@comcast.net [TXT OR PDF OR "ON WEB" NOTICE]
EME STANDINGS: DAN GAUTSCHI, HB9CRQ/HB9Q E-MAIL hb9crq@hb9q.ch OR SEE HIS WEBPAGE AT www.hb9q.ch.
THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT http://www.nitehawk.com/rasmit/em70cm.html.

CONDITIONS: I cannot think of a time in my more than 35 years of EME operation when there was so much going on! This month we had a very successful SSB EME Contest, the first DUBUS EME Digital Mode Contest, the first 70 cm Activity Time (AT) period, which generated a greater turnout than anyone anticipated, and the 3Y0X Peter 1 dxpedition on 70 cm EME all going. The only negative was that the gang on Peter 1 Island were never able to get their 432 system operating. This was disappointing, but they certainly did an outstanding job on 144 MHz. Hopefully this success will encourage more dxpeditions to try EME including 70 cm… But, I suspect we will have to do a better job of generating our own dxpeditions. Next month will not be a *sleeper* either with the DUBUS 432 CW and 5.7 GHz up EME Contest on 11/12 March – see the complete rules in the Jan NL. The regular activity weekend (AW) will be on 4/5 March and include the new 70 cm ATs.

SSB CONTEST RESULTS: The French appear to be the ***top fun makers*** this year. The F6KHM group has the highest score by far, although logs were not received from 2 major contributors, LX1DB and DL0SHF. Reported scores from highest to lowest were: F6KHM (31x2+7x1)16 = 1,104, F2TU (25x2+6x1)15 = 840 points, G4CCH (26x2+6x1)14 = 812 points, K2UYH (17x2+6x1)14 = 560 points, ON7UN (20x2+2x1)13 for 546 points, OK1CA (19x2+3x1)12 = 492 points, RW1AW (19x2+1x1)10 = 390 points, VE6TA (14X2+0x1)8 = 224 points, WA6PY (11x2+0x1)7 = 154 points, IK3COJ (8x2+3x1)5 = 95 points, W9IIX (0x2+8x1)6 = 48 points, JH1KRC (5x2+0x1)3 = 15 points, WW2R (2x1+1X2)3 = 12 points, OZ4MM (2x2)2 = 8 points. With 14 complete logs, this was one of the best EME SSB Contests participation wise.

70 CM ACTIVITY TIMES: Under the leadership of SM2CEW, DL7APV and K1RQG, regular activity time (AT) periods will be announced to generate increased CW activity on 432. The concept is similar to the time period already in use on 144 MHz. The 432 activity time periods will normally on the second day of the activity weekend (AW). The first ATs were on 5 Feb from 1200 to 1400 and 2100 to 2300 and had a great turnout as confirmed by this month's reports. The times for March will be 5 March 1000 to 1200 and 2000 to 2200, although with a 70 cm CW EME contest the following weekend, I am sure we will not lack for 432 activity in March. ATs will be announced at http://www.sm2cew.com/dubus-aw-70.html, in K1RQG's Netnotes, this NL and via the reflectors.

DL3OCH: Bodo dl3och@gmx.de writes that his plans are on track to activate ZA, Z3, Y U and T9 for the very first time on 23 cm EME in April. Bodo will be again using his "single yagi" portable station and concentrating on JT65C QSOs, but will also take skeds on CW. He feels JT65C is the best JT mode, but is still wary of his recent experience in 9A where only JT44 worked. He has a new IC-7000, which is very stable in frequency.

F2TU: Philippe f2tu.om@guideo.fr sends info on his recent EME activity – I QSO'd on 70 cm on 20 Nov GM4ISM for initial #245, 10 Dec FR5DN #246 and G4RGK and on 5 Feb SV1BTR, JA6AHB, RW3PX #247, SM3CEW, I4NDP #248, G4RGK, UA3PTW, OZ4MM, K0RZ, N9AB, NC1I and G3LTF. On 23 cm, I worked on 11 Dec OZ6OL, K5JL, WW2R for initial #228, IW2FZR, G3LTF on SSB, W7BBM on SSB, K9SLQ on SSB, VE6TA on SSB and G4CCH on SSB, on 17 Dec HA5SHF and SP6JLW #229, between 7 and 14 Jan ES5PC, IK3COJ, OZ4MM, G3LTF on SSB, LA9NEA, ZS6AXT, LX1DB on SSB, SM3LBN #230, IK2MMB on SSB, K5JL on SSB, IW2FZR, G4CCH, SM2CEW on SSB, GM0ONN #231, G4DDK #232 and VK4AFL #233. I was also active in the SSB Contest in Feb and found good activity and very good signals. I ended with 31 QSOs (6 CW to SSB) in 15 sectors for 840 points, and 2 initials (K5SO #234 and W6IFE #235), but was not QRV all the time. On 3 cm on 20 Nov I contacted SP7JSG (529/O) for initial #37 and on 5 Feb LX1DB (559/559) during a test of circular polar.

3Y0X EME 144 yagis -- too bad 432 never made it up

F6KHM: Xavier f5ttu@club-internet.fr reports that his group (F5TTU and F1AKK) had great fun and found activity quite good during the 23 cm EME SSB Contest. They ended with a score of 1,104 points with 31 SSB-SSB QSOs and 7 SSB-CW QSOs in 16 grid sectors. They caught DJ9YW, OZ4MM, G3LQR, N2UO, K5PJR, W7UPF, WA5WCP and JH1KRC to increase their QSO total.

G4CCH: Howard howard@g4cch.com has sent his Feb 23 cm activity reports and log for the SSB contest – I QSO'd on 3 Feb at 1319 RW1AW (579/579) and (56/56) on SSB, 1807 W2UHI (569/569), 1950 OZ4NN (589/569), 2005 K5PJR (539/559) and SM2CEW (569/569). In the SSB Contest I worked on 4 Feb F2TU, OK1CA, LX1DB, ON7UN, F6KHM, RW1AW, ES5PC, LA9NEA, DL1YMK, IW2FZR (CW/SSB), SM3LBN, OZ6OL, IK3COJ, G3LQR (CW/SSB), G4DDK (CW/SSB), F1ANH, ZS6AXT, LA8LF, K9SLQ, K5GW, K4QI, CT1DMK, DJ9YW, K2UYH, VE6TA, K5SO, WA6PY, W6IFE, W9IIX (CW/SSB), DL0SHF, K5JL and VA7MM (CW/SSB). Getaways were VK4AFL, G3LTF, HB9Q, JA6AHB and OZ4MM. I made a total of 32 QSOs with 26 SSB and 6 CW/SSB for a score of 14 x 58 = 812 points. I added on 5 Feb at 1144 VK4AFL (559/559), 1635 LA8LF (569/569), 1822 ZS6AXT (569/579), 2019 IK2MMB (579/579), 2053 K5JL (589/579) and 2100 VE6TA (569/569), and on 9 Feb 2250 SM5LE (O/O) for initial # 221 and 2320 ES5PC (559/569). I was also active on 11 Feb during the DUBUS Digital Only EME Contest and QSO'd at 1835 ON7UN (579/569), 2054 F2TU (579/579), 2131 SM5LE (O/-19) on JT65C – this was my first JT65 QSO and 2350 ES5PC (559/559), and on 12 Feb at 0021 K5JL (589/569) and 0122 IK2MMB (569/579).

G4RGK: Dave g4rgk@btinternet.com was very please with the activity during the first 70 cm AT period – I missed some of the first part, but did QSO OZ4MM, SV1BTR, SM2CEW and G4YTL – the PA was tripping during this QSO, so may not have been complete. I had to QRT before the end of the period. I did even better during the second time period and QSO'd OZ4MM, SM2CEW, SV1BTR, UA3PTW, RW3PX, OZ6OL, I1NDP, SM2CEW - called again for a chat, F2TU, I5CTE, G3LTF, NC1I, N9AB, F3VS, K0RZ and SM3JQU. Getaways were KL6M, DK3BU, K2UYH and probably a few more I can't remember.

GM4ISM: Mark gm4ism@blueyonder.co.uk was QRV on 70 cm during the 5 Feb activity time period -- I QSO'd NC1I and heard lots, but it was hard to be heard in what seemed like a "contest" situation. With skeds I could have worked a dozen! During the Feb AW I also worked on sked SV1BTR for the first GM to

SV 70 cm QSO and K2UYH. I hope to get back on 23 this year. I have a septum based feed and a 80 W SSPA under construction. I plan to have a pair combined to start with maybe 150 W, which is better than I managed from my old 2C39 amp (still not fixed). This SSPA mounted on the back of the dish with no feeder loss should be fairly effective. I am also working on solid state for 70 cm too. I have a single amp running 200 W at the moment; potentially the devices should run 300 W. I hope to combine 4 of them.

HB9Q: Dan dan@hb9q.ch was be unable to be QRV during the DUBUS WSJT Contest but was active at other times, particularly looking for the Peter 1 dxpedition -- I worked in Feb the following new QRP stations on JT65B: 9H1TX (1 x 8.5 wl yagi at 140 W), OM5CM (1 x 18 el yagi at 75 W), RA3GES (1 x 19 el yagi at 100 W), F6HTJ (1 x 19 el yagi at 45 W), 9H1PA (2 x 8.5 wl yagi at 70 W), YL2HA (4 x 30 el yagi at 50 W and OH8LRB (1 x 24 el yagi at 200 W). I used JT65C in the past, but since WSJT 5.x I have switched to B. I have the impression that B performs better given the signal is stable enough, which of course is sometimes a problem. [I don't see much difference and feel C is safer, but most station know B from 2 m and prefer to use it]. I think it would make sense to set a standard (especially for random operation). The up-coming EME-meeting would be the place to obtain agreement. When active I always monitor the JT-logger at http://www.chris.org/cgi-bin/jt65eme. We can be contacted there for band/mode information and to arrange skeds! I am trying to talk the following stations into 432 EME: KG6DX, 5B4AD, TA1D, SV5BYR, SV9/SV1BTR (CW only, HI), GD0TEP, CN/HB9HLM and XP6ET. All have at least 1 yagi and 50-100 W. So basically they are capable of EME on 70 cm!

IK3COJ: Aldo's ik3coj@inwind.it 1296 EME report – Activity was very good in both Jan and Feb. I made 35 QSO in the two months. I operated with my new 3.8 m dish and 300 W at the feed from JN65bn. In the SSB Contest I QSO'd DL0SHF (55/44) JO, F6KHM (54/53) IN, LA9NEA (539/559) JO, HB9JAW (53/53), LX1DB (56/56) JN, OK1CA (53/559) JO, ON7UN (54/559) JO, G4CCH (53/52) IO, F2TU (53/53) JN, OZ6OL (44/54) JO, DJ9YW (53/549) JO, LA8LF (549/549) JP and K5GW (55/54) EM for 8 SSB to SSB QSOs and 3 CW to SSB QSOs in 5 sectors for 95 points. Heard during contest were W9IIX, WA6PY, RW1AW, K9SLQ, VE6TA and DL1YMK. I worked on random back in Dec VK4AFL for initial #109 and on 3 Feb K5PJR #110.

JA1BGU: Tadashi t-konosu@kc5.so-net.ne.jp is a new station on 23 cm EME in QM06ca that should be easily worked. He has a 4.8 m dish and 190 W at feed with 0.3 dB LNA. During the Feb AW he QSO'd K2UYH (339/449). Tadashi is interested in skeds. Contact him via e-mail.

JA4LJB: Masayuki ja4ljb@lime.ocn.ne.jp in PM74bt is QRV on 1296 EME with a 5 m dish (f/d=0.45) and Septum horn feed. He has a 100 W PA at the feedhorn using 8 x FLL-300s. Although his PA is at the feed, he still has to move his LNA to the feed. He uses an FT-847 with a down converter on RX and an IC-910 on TX. Masayuki worked G3LTF in Jan and K2UYH in Feb. He is interested in more skeds and can be reached by e-mail.

JA4LJB's 5 m dish with 100 w PA at Septum feed

JH1KRC: Mike jh1krc@syd.odn.ne.jp operated the SSB contest on 23 cm for only about 20 minutes on 4 Feb during his Eur window and QSO'd OK1CA, F6KHM, OZ6OL, and ON7UN. He was on again briefly in the NA window on 5 Feb and worked only K2UYH. He also may have had a call from W9IIX, but is not for sure. Mike did not operate Sunday night. He also tried some echo tests on 15 m, but was unsuccessful.

K0RZ: Bill k0rz@comcast.net reports on his 432 activity in Feb – On the 4th he called CQ on 70 cm CW for several hours and QSO'd NC1I and I1NDP initial #327. On the 5th he called CQ for several hours in the Asian window with nil results, but during the two hour DUBUS activity period he QSO'd SM2CEW, OZ4MM, OZ6OL, F2TU, G3FTL, N9AB and, G4RGK and SV1BTR. Bill also heard I5CTE and NC1I. He much appreciates and wants to thanks DUBUS for two hour AT period as it eliminates many hours of CQ without results. He would like to see the designation of a two hour AT period for the NA – Asia moon window.

K7XQ: Jeff k7xq@secure.elite.net writes -- I managed to work NC1I for the first time on 432 CW in Feb with his (529) signals after fixing a phasing line that had an open connection to one of my yagis.

KL6M: Mike had a near dish disaster -- I was put out of commission in the midst of a 70 cm sked with 9H1PA. I only got in one sequence before a huge gust of wind broke my azimuth drive. I suddenly lost echoes, so I stepped outside to see if the dish appeared to be aimed wrong, and I saw it twirling in the wind like a 7000 pound top! I managed to get my locking pin in place. Fortunately my azimuth drive was not damaged and I managed to get it lined back up and am QRV again. The WX here has been terrible. Otherwise I have been having great fun on 70 cm. I worked in Feb UA3PTW (559/559), OZ6OL (539/559), DJ6MB (559/539), YU1EV (439/559) #164, OH2DG (559/559), I5CTE (549/449), F2TU (559/559), NC1I (579/569) and DL9KR (579/579). I'm still not QRV 23 cm. I just need one good day to myself to get my PA on the air. My goal is to be QRV for the DUBUS 23 cm contest.

LX1DB: Willie wbauer@pt.lu made 33 contacts on SSB in 23 cm contest. He observed that W6IFE had distortion on his SSB, while WW2R was easy copy in comparison. He worked 15 stations in NA (11 US and 2 Can), K2UYH (57), K5JL (56), K9SLQ (57), W9IIX (56), VE6TA (56), W7BBM (56), K5GW (57), K5PJR (44), WW2R (44), WA6PY (57), VA7MM (55), W7UPF (55), W6IFE (59). No Japan or South America were heard. RW1AW as well as DL0SHF were very loud. [Willie most likely has one of the top scores in the SSB contest, but a full log has not been received].

NC1I: Frank frankp@gcq.net writes -- With all of the recent talk of revitalizing 432 EME activity, I felt the time was right to point the big array at the moon and make some noise. It had been a full year since I elected to stop my EME activities. At around 0200 on 3 Feb I checked my system and echoes were very good. I heard and called N4PZ several times with no response. Later (~2030) on 3 Feb I started calling again CQ with very strong echoes, but only worked after more than four hours at 0052 K2UYH (579/589). It took nearly two more hours before I worked another at 0220 W7AMI (579/569). I got back on shortly after moonrise on Saturday and again found activity to be very low, but signals very strong. Eight hours of activity yielded just 4 QSOs. The following stations were logged on 4 Feb at 1757 I5CTE (449/559), 1952 K0RZ (579/569), 2035 SM3JQU (549/559) and 2046 I1NDP (549/559) - heard later at (579) when I found the correct polarity. Unfortunately Sunday was a very busy day here with family activities early and guests after 2300 for the Super Bowl. I did manage to be active for almost 2 hours during the second period of the activity event. I found both conditions and activity during this period to be nothing less than OUTSTANDING! I had quite a pileup and unfortunately missed some as I had to shut down when guests arrived. I worked 10 stations between 2126 and 2227. Logged were OZ4MM (579/579), G3LTF (569/579), G4ALH (539/O), SM2CEW (579/579), 2152 UA3PTW (559/579), G4RGK (569/579), 2206 SV1BTR (579/589), 2213 OZ6OL (569/569), 2222 F2TU (569/569), 2227 N9AB (589/559), 2236 GM4ISM (549/559), 2245 F3VS (579/559) and 2310 SM7GEP (O/O). Throughout the weekend my echoes were consistently S7 or better. I finally have a good preamp (cavity at 0.23 dB NF) back in the system. This has not only resulted in stronger signals, but much of the junk I had been hearing is now gone. I did have one serious problem. Two weeks prior to the activity weekend I snagged my array on a guy wire and broke something in the azimuth drive. The slightest breeze will spin the array. The array tends to park itself at about 65 degrees azimuth. I had to fight this during the activity period as winds were averaging 5-10 mph. Hopefully the array does not spin past north as this could destroy all of my cabling. I will try to get the array tied down in the next week or so to prevent any additional damage. I will not be able to attempt repairs until the end of the month. If I can get repairs done in time, I will try and put a serious effort into the contest next month. I would like to thank Peter, SM2CEW and the others for taking the initiative to organize the AT period. Hopefully this is just the first step to revitalizing 432 EME activity.

OK1CA: Franta ok1ca@ges.cz was QRV on 1296 for the SSB Contest – On 4 Feb I made my first SSB EME contacts with DL0SHF, HB9Q, F2TU, LX1DB,

G4CCH, OZ6OL, ON7UN, F6KHM, JH1KRC, ES5PC, RW1AW, DL1YMK, CT1DMK, K5JL, K5SO for initial #140, K2UYH, W6IFE, WA6PY, VE6TA, IK3COJ (SSB/CW), ZS6AXT (SSB/CW) and LA8LF (SSB/CW). I ended with 19 SSB and 3 CW/SSB QSOs in 12 sectors for 492 points. I made CW contact with VK4AFL #141, SM3BLN # 142 and WW2R # 143. It was a very nice Sunday for EME with some snowfall during day and the temperature at minus 17 deg. in the evening.

OK1DFC: Zdenek ok1dfc@seznam.cz, JN79gw, in Feb moved his new dish to 70 cm in hopes of catching 3Y0X -- I initially tested with SM2CEW on CW (559/559) and made some JT65 QSOs. My own JT echoes were -8 dB peak. I worked on 12 Feb using JT65B UA9FAD (-18/O), SM2ILF (-22/O), OK1KIR (-21/O), DL7APV (-25/O) - Bernd was running QRP, JA6AHB (-17/O) - big signal, S54T (-22/O), SM2CEW (559/559) on CW, SV1AWE (-17/O), S51ZO (-26/O) and DL7UAE (-21/O). I have had the whole time very strong echoes. I plan to be QRV during CW EME DUBUS Contest in March.

ON7UN: Eddy ejespers@on7un.net sends his log for the SSB contest -- Activity seemed to be on the low side, nevertheless I worked 20 stations SSB/SSB and 2 CW/SSB for a total of 42 QSO points and 13 multipliers. Worked were OK1CA, HB9Q, G4CCH, F6KHM, DJ9YW, ES5PC, F2TU, DL0SHF, LX1DB, RW1AW, JH1KRC, LA9NEA, DL1YMK, HB9JAW, SM3LBN, OZ6OL, IK3COJ (CW/SSB), W7BBM, K2UYH, VE6TA, W9IIX (CW/SSB) and W6IFE. I had some problems with the amplifier protection tripping once in a while. Since I optimized the driver amp, the TH327 protection trips on IG2 current. I need to re-calibrate the circuits or I may be pushing the tube to its limit? It was fun and I'm looking forward to the next event!

OZ4MM: Stig vestergaard@os.dk reports on the Feb activity weekend -- I was QRV only few hours on 1296 and 432 during the AW. I couldn't be on for long during the SSB contest and only worked F6KHM and W6IFE at my moonset. The 432 AT period was great! I spent only a few hours, but worked RW3PX, KL6M, SV1BTR, SM2CEW, G4RGK, UA3PTW, DK3BU, I1NDP, F2TU, K0RZ, NC1I, N9AB, G3LTF and W7AMI for initial #281. On 1296 CW, I worked during weekend K5PJR for initial #249, G4CCH, G4DDK #250, F6KHM, W6IFE, VE6TA and K5JL. I wish I would have had more time to operate, and hope to do better in March.

RW1AW: Alex rw1aw@skylink.spb.ru in KP50da was active in the SSB EME Contest for the first time –- Weather in St. Petersburg (KP50da) during competitions was very cold (-23 deg C). Because of the cold WX, my automatic tracking did not work and I had to use manual tracking for my 6 m dish. Despite the problems we did pretty good and worked DL0SHF (59/55), F6KHM (58/56), ON7UN (58/57), G4CCH (57/56), F2TU (58/55), OK1CA (56/55), DL1YMK (55/54), LX1DB (59/56), OZ6OL (55/55), ES5PC (55/54), K9SLQ (58/56), ZS6AXT (579/54) – CW/SSB, K5JL (57/55), W7BBM (58/57), K5GW (58/57), K2UYH (58/56), WA6PY (57/56), W6IFE (59/59), VE6TA (57/56) and DJ9YW (54/52) for 19 SSB QSOs and 1 CW/SSB QSO with 10 sectors for 390 points. I also QSO'd on 4 Feb on CW LA8LF (579/569) for an initial (#), and on 5 Feb SM3LBN (559/559) (#), LA8LF (569/559) and ZS6AXT (569/569). I am now using a new MKU13500A SSPA from DB6NT and am very pleased with its performance. The rig is now a 6 m HB dish (f/d = 0.52), 580 W DB6NT SSPA (~450 W at the feed), 0.18 dB NF W7CNK LNA (ATF36077/SPF2086). Special thanks to Michael, DB6NT, for a very nice SSPA design – 22 W in and 580 W out!

SM2CEW: Peter reports on the DUBUS 70 cm CW EME Activity Event he helped organize -- Activity during AT period on 5 Feb was WAY beyond expectations. It was a real pleasure to operate. NC1I reported QRM from stations on and around his frequency. Echoes were very good all the time, however Faraday was anywhere between 45 and 90 degs at my QTH. I worked the following stations: UA3PTW, OZ4MM, RW3PX, G4RGK, F2TU, F3VS, I1NDP, N9AB, K0RZ, OZ6OL, G3LTF, N4PZ, SV1BTR and NC1I – Frank was incredibly loud! Heard were VK4AFL, KL6M, G4YTL, SM3JQU, DK8VS, I5CTE, G4ALH and GM4ISM. Dates for coming AT periods and more info can be found at http://www.sm2cew.com/dubus-aw-70.html.

SM5LE: Sven sven.o.nordin@telia.com is back on EME from JO99bd; this time on 23 cm after many years of absence [Sven was among my first 70 cm EME QSOs back in the 70's] -- After two years of building, my 23 cm EME station is in operation. I completed it just in time for the DUBUS Digital Contest. I am using a HB mesh dish. The dish is 2.2 m and only 9.5 kg - (modified SM6CKU parabola). It was assembled in my living room – I have an understanding wife! It was then slightly disassembled and carried outdoors. My wife helped me put it in place on a tripod/Spid RAS rotator with MoonSked software by GM4JJJ. The installation was sort of an *anti-Murphy* job - everything fit in place and worked the first time! I have 200 W at the feed and a 0.38 dB NF LNA. 11 QSOs were made from 10 to 13 Feb. 9 were on CW and 2 on JT65C. Worked were G4CCH, LA9NEA, G3LTF, DJ9YW (JT65), G4CCH (JT65), F2TU, OZ4MM, SM3LBN, OZ6OL, ON7UN and OE9ERC. UR5LX also decode my JT65c, we did not complete a QSO.

SM5LE working on his 2.2 m (9.9 kg) dish for 1296 EME

SV1AWE: Bob bkou@cpi.gr reports on the DUBUS DIGITAL 432 EME Contest -- I was active both days. On Saturday, I found the conditions bizarre! I tried with G4RGK and GW3XYW, but detected nil. On Sunday conditions were better and I completed QSO with HB9Q (-18/O) and OK1DFC (-20/O). This was my first Digital EME Contest experience and even though the activity was low, it was FUN. I plan to be active in March for the 4322 CW contest.

SV1BTR: Jimmy jimmyv@hol.gr was QRV for the DUBUS 70 cm CW AE -- Despite the short notice there was fantastic activity, especially in the NA window. I worked on random 15 stations in 4 hours - OZ4MM, KL6M, G4YTL, G4RGK, F2TU, GM4ISM (429) - sked just before AE, I5CTE, G3LTF, I1NDP, UA3PTW, SM2CEW, NC1I, F3VS, OZ6OL, N9AB and K0RZ. Almost all had tremendous signals and my echoes were up to S4.

VA7MM: Mark's lunarlink@hotmail.com was QRV on 1296 for the DUBUS Digital EME Contest from CN89og. They looked for random QSOs or skeds and operated JT65C 1296.033 with TX on odd minutes and RX on even minutes. Operators were VE7CMK and VE7CNF. The station is comprised of a 3 m dish with circularly polarized feed, 400 W PA and 0.4 dB NF LNA. I know they QSO'd K2UYH, but I do not have reports of other contacts. They were also active during the SSB contest, but primarily worked stations CW to SSB.

VE6TA: Grant ve6ta@telusplanet.net sends his SSB Contest results from DO33gs -- Conditions seemed a bit down for the contest, but it was very enjoyable nonetheless. It took a bit of amp tuning to get the SSB quality where I wanted it. There are few terrestrial stations here in VE6 to work on 1296 SSB, so it's rare for me to have the mike plugged in - HI. I managed to work the following stations with most having absolutely great signals for SSB: F6KHM (55), LX1DB (56), K2UYH (55), F2TU (55), G4CCH (55), ON7UN (56), K5GW (57) - armchair copy, RW1AW (56), WA6PY (44), OK1CA (55), W6IFE (55), DL0SHF (55), K5JL (55) and OZ6OL (44). I also worked VA7MM, WA6PY, and OK1CA on CW and heard LA8LF, K5SO and K9SLQ. To date this is the best score I have achieved in this contest (14 SSB QSOs in 8 sectors) and it was great to hear so many on. I had high winds Sunday and was not be able to change over to my 432 feed for the CW AT, but hope to participate in the future.

VK4AFL: Trevor tbenton@bigpond.net.au writes - 1296 is still a very good band! I have been active over recent weeks working HB9BBD, SM2CEW for an initial (#), OZ4MM (#), G3LTF, K5JL, OZ6OL, G4CCH, SM3LBN (#), HB9Q on SSB, OK1CA (#), F2TU SSB/CW, IK2MMB, IW2FZR (#) and LA9NEA (#). There is quite a bit of activity outside of AWs and although my dish is not in a location to take full advantage of this, I am able to make contacts for about 50% of each month. During the recent 432 CW Activity Time period, I listened near moonset. I was too late to work anyone, but did hear some excellent signals with about 60 degs of Faraday correction required. [Was this with the dish]?

W2DRZ: Tom w2drz@madbbs.com reports -- I was on 23 cm SSB for a bit Saturday 4 Feb at about 2300, but made no contacts. I had 500 to 600 W (protection trips at 600 W) in shack with 250 to 300 W at the dish. I think 3 dB

more power would have yielded some SSB contacts. Signal levels were down. Big signals heard were K5GW, K5JL, LX1DB, K2UYH and many others. I had a partial SSB QSOs with LX1DB and K2UYH. They did not copy my call. K2UYH asked me to go on CW, but I did not. I was copying my echoes about 3 to 6 dB out of the noise off moon with a bunch of broad signal spreading at about the same strength. I my signal did not show normal peaking on moon as I swept back and forth across the moon's position. At the time we were in a big pressure LOW with strong winds out of the south.

W6IFE: Doug (K6JEY) dougnhelen@moonlink.net reports on OVRO operations in Feb -- At the last moment, we had the opportunity to operate the OVRO dish for the SSB contest. Chuck had made extensive modification of the transverter module. We were hoping for the best and the best happened. It worked flawlessly on both 23 and 3 cm. We got on 1296 on 4 Feb at about 1900 and started a pile-up immediately. We had to wade through the cacophony of voices. I operated about an hour and then the plan was to rotate operators. WA6NIA, KG6JKJ and KN6VR all took a turn. All went fine until the wind came up and we had to stow the dish for 2 hours. I also got a call from my daughter in LA that she was going into labor, so I left to be with her - (a girl, Ava, all are doing well). Eventually the wind died down and the crew went back to operating. We ended the contest with 18 SSB contacts (SM3LBW, F6KHM, DL1YMK, F2TU, G4CCH, DJ9YW, W7BBM, OK1CA, RW1AW, LX1DB, ON6UN, K5GW, W7UPF, VE6TA, DL0SHF, K5JL, K2UYH and OZ4MM). As the moon was in an optimum position, we were able to do the moon mapping at 10 GHz, which went well and gave us some interesting results. We are going to do the mapping several times so that we have reliable data. SSB was also tried on 10 GHz and found to be quite pleasant in quality. We have a *phase B package* in the works so that if a planned experiment by the university takes up the main slot at the focus, we can still be on the air. However, this is a single band module for 1.2 GHz. Work on the experiment seems to be progressing slowly, so we may have several more months with the current arrangement. We are planning to be on for the 11/12 March DUBUS contest on 10 GHz. We may work some 1296, if things get thin on the high band. We only have 2 W, so signals will not be real strong. We are also planning to be QRV for the 6/7 May weekend on 1296. We also still want to squeeze in a QRP weekend, but are not sure when.

W9IIX: Doug iix1@comcast.net sends his Jan/Feb EME report -- in the 23 cm EME SSB Contest I worked 8 stations in 6 sectors in cross mode (CW to SSB). All stations worked had good signals. I also added initials with LA9NES for #27, ON7UN #28, LA8LF #29 and ZS6AXT #30. Everything has come together for the 13 cm band. I just need some warmer spring WX to install it and be QRV there as well. Equipment includes an IC847, DEMW xverter, Spectrian PA and homebrew VE4MA style LNA for the 3.7 m dish.

WA6PY: Paul was active in the SSB contest on 23 cm from DM13la on 4 Feb. Using his 3.6 m dish with IMU feedhorn, TH327 PA with 1 kW at the feed and ATF35076 LNA, he worked on SSB F6KHM, G4CCH, RW1AW, K2UYH, LX1DB, F2TU, K5GW, OK1CA, VE6TA, DL0SHF and OZ6OL for a total of 11 contest QSOs in 7 sectors. Paul also QSO'd on CW W9IIX, K5JL, DL1YMK and VE6TA.

WW2R: Dave robinda@nortel.com has rebuilt his dish mount -- The dish was sawn off the mount after the Jan AW and after 3 weeks of metal bashing, a declination adjustment was added using a car scissor jack (suggested by G4DDK). I didn't realize how essential this *angle grinder* is for EME! The dish now tracks the moon well and I can now find the moon when I can't see it. On 4 Feb, I worked ZS6AXT on a CW sked, and in the SSB contest thanks to the perseverance of LX1DB, I had my 1st 2 way SSB QSO off the moon. I also worked F6HKM (SSB/CW) - no response to my calling on SSB, K5GW (SSB/CW) - too close for SSB/SSB due to direct QRM. On random CW, I worked LA8LF and OK1CA. CWNR were W6IFE, WA6PY and DL0SHF. On 5 Feb, good sigs were heard from ZS6AXT at moonrise, and I CWNR for 40 minutes WA6PY, so reworked K9SLQ to make sure my equipment was still ok! On 11 Feb nil on sked with LA9NEA, but in the following sked I worked RW1AW. I also CWNR SM3LBN and WA6PY. K5JL was heard suitably loud peaking 17 dB above my noise floor. On 12 Feb in sked I worked IK2MMB for initial #20 and DXCC 11. I am pushing to get my gear in order and be QRV on 13 cm for the 8 April contest – this includes locking my LO to GPS.

ZS6AXT: Ivo's zs6axt@telkomsa.net Feb report -- My Saturday, 4 Feb, started bad with heavy thunderstorms and a cloud burst. This delayed my operation. When I finally was QRV on 1296, the first station heard and QSO'd was LX1DB with a booming signal. I have CW only so all contest contacts were CW/SSB. Willie was followed by contacts with F6KHM, F2TU, G4CCH, OK1CA, RW1AW and K2UYH. Before my last QSO, I worked WW2R with good signals on a CW sked for initial #212. Also heard were IK2COJ, LA8LF and others. Not much activity was copied from NA before my moon set. I also observed that some of the stronger SSB stations were difficult to read due to signal distortion and talking very fast. Others, although weaker were easily copied. I think that signal processing does not help. It may in fact decrease the readability. On Sunday, 5 Feb, there were no thunderstorms so I started earlier, but still no JAs were heard. I did work on 23 cm RW1AW, LA8LF, IK2MMB, SM3LBN (still seems to have an RX problem), G4CCH, IK3COJ, G3LQR, VE6TA and W9IIX #213. Heard was K5JL. Conditions were good, especially on Sunday, but activity from NA was poor, at least in my moon window. Most of my QSOs were from my CQs. [Ivo is scheduled for heart surgery in the next week. This may slow him down for a bit. I am sure he would enjoy hearing from his friends during his convalescence].

K2UYH: I a.katz@ieee.org had a good time in the 1296 SSB Contest even though contrary to many other reports I found conditions to not be at there best. I QSO'd on 5 Feb at 1758 F6KHM (55/54) IN, 1800 F2TU (55/55) JN, 1804 K9SLQ (56/57) EN, 1819 K5JL (55/56) EM, 1837 DL1DMK (54/55) JO, 1855 W7BBM (54/55) DM, 1906 LA8LF (559/55) IN, 1915 LX1DB (58/57) JN, 1924 VE6TA (54/55) DO, 1928 ZS6AXT (559/55) GA, 1935 K5GW (58/57) EM, 1943 G4CCH (56/56) IO, 1950 RW1AW (56/58) KP, 1956 OK1CA (55/57) JO, 2001 IK2COJ (549/53) JN, 2012 WA6PY (56/55) DM, 2025 ON7UN (56/56) JO, 2111 K5PJR (549/55) EM, 2136 OZ6OL (54/54) JO, 2203 W9IIX (549/56) EN, 2221 W6IFE (56/55) DM and 2245 VA7MM (549/59) CN, and 5 Feb at 0322 JH1KRC (55/53) QM for 17 SSB QSOs and 6 CW/SSB QSOs in 14 sectors. Before the contest I worked on 432 at 0052 NC1I (589/579) on both CW and SSB, and then on 1296 at 0230 JA4LJB (549/559) on CW for initial #258. The next day I missed the new AT because of family commitments, but did QSO'd on 5 Feb at 2315 GM4ISM (559/539) for initial #716, 2325 OZ6OL (559/559), 2335 N9AB (579/569). The next weekend I missed the first part of the digital contest, but did work on 11 Feb on 1296 at 0800 JA1BGU (O/O) #259 and 0920 partial VA7MM (-20/?) on JT65B/C, and on 12 Feb using JT65B on 432 at 0120 N9AB (-08/-09) and 0149 OH2DG (-11/-12), and on 23 cm using JT65C at 0405 VA7MM (-13/-10). Unfortunately I found no other digital activity despite calling many CQs. I also tried several times in Feb on JT on 70 cm with VK4CDI, but no success. Murphy did his best to thwart my attempts to QSO 3Y0X. We had a record snow fall (>16") on Saturday night/Sunday 12 Feb. I decided to leave my dish pointed to the horizon to avoid it filling with snow. This was a near disaster. We had a freak thunder storm in the middle of the blizzard and the AZ drive was damaged. Fortunately the dish survived and after a day of work, I was able to be QRV for my 3X0Y sked on the 13th. I was also on for all my other skeds, but did not TX on the 15th because a 4CX250 shorted in my driver right at the beginning of the sked. Nil was of course heard on all skeds, since they never made it on. At least I had the satisfaction of making it on at my end!

NETNEWS BY G4RGK: **K5PJR** worked 4 on 23 cm on 3 Feb, OZ4MM (559/589), G4CCH (529/559), W2UHI (439/339) and IK3COJ (O/O), but had problems with the wind was moving the dish. **K6JEY** has bad news. Doug's 432 array blew down. Fortunately there is not too much damage and he is using this disaster as an opportunity to make some upgrades. **N8CQ** now has both GS-15B amps running separately on 1296 at 500 W out. When driving them with their inputs combined he sees about 400 W out of each. He now needs to combine the output. Gary notes that there is a great deal of interaction when combining the inputs! Gary is also looking at antenna modeling programs and could use some assistance. **K7LNP** reports that the WX has turned bad and his dish recovery and 70 cm yagi work project has been delayed by the snow, but he has been able to work on the dish mount. He also received the 23 cm amp from W9IIX. **W4TJ** is planning a come-back on EME. Bill says it may take a while for everything to come together but he plans to be on 432, 1296 and 2304 within the year. **LU8EDR** has a new e-mail address lu8edr@yahoo.com.ar. **W2UHI** could not get on for the SSB contest because of snow and high winds. He was active on 23 cm at other times during Feb. **K5JL** worked over 27 stations in the SSB contest including W6IFE, but found that signals were down. **K5SO** was active on 23 cm toward the end of the EME SSB contest and worked about a 1/2 dozen stations. **WA5WCP** worked only 1 station in the SSB contest, F6KHM on CW/SSB and heard others and could not get their attention. **N7AM** had big wind storm - no damage, but was not QRV during the SSB contest or AW. **W4SC** did about 1.5 hours of wide band recording and listening during the SSB contest. He heard a lot of great signals, but could not transmit. He was a bit disappointed with W6IFE's signal as it was quite distorted. DL0SHF, LX1DB, K9SLQ, K5GW and K5SO were the loudest. VE6TA had a very good signal on SSB. **W7CI** was on 70 cm in Feb, but heard nil. **DL1YMK** will use GM4JJJ polar control for his CT3 expedition. He now has lightweight feed for his 23 cm portable setup. Michael made 13 SSB contacts in the SSB contest with his SS PA. He plans to combine 2 SSPAs for 1 KW. He has seen 600+ W out of his amp. **G4ALH** was active on 70 cm during the AT worked NC1I. **N1BUG** expects to have 70 cm back up and running soon. **WB0GGM** hopes to be active for the DUBUS 70 cm CW Contest.

FOR SALE: **N8CQ** has Septum feeds available for anyone needing one for 23 or 13 cm. Gary can get more fabricated <gabercr@nc.rr.com> if necessary. **KF4YOX** has 4x7289 1296 K2AH PA on a rack panel, meters, bias, filament transformer for sale for $US500. Call Sam at 239-464-3683. **W5LUA** is looking for any information on a TWT, Hughes 881H89. Hughes 9225HA04 is the overall assembly number.

WHAT IS AN INITIAL: This question was asked on the 70 cm net this past month. The 70 cm & Up answer has been thoroughly discussed in past years. I need to do some archive searching to locate the actually NL dates, but I believe my memory is still good enough to answer the question – actually confirm and supplement G4RGK's response – *a) If I move QTH, do I have to start the count at zero, or can I carry the count with me?* As long as you do not move further than a 50 mile (80 km) distance, you can continue your personal initial count. But to count as a new initial, you move outside the grid you are in (say move from FN32 to FN31) or across a significant political boundary (new state or province in US, Canada or Australia, or new DXCC location). *b) If I work a station and another operator takes over the controls [same station] and signs a different call, how is this counted?* Just counts as one initial. The same applies to husband and wife, or father and son – just one initial. (They can of course have their own initial counts). Also call changes (i.e. special event calls) do not count as initials. The only exception is for different stations. For example if someone brings his own transmitter and antenna to your QTH and operates from there under his own call portable, this would count as a new initial. Or a son at the same QTH could have his own separate station.

GUIDING PRINCIPLES: The following statement was sent to All Radio Amateurs with a serious interest in EME by K1JT and F5VHX/G8MBI: We write to ask your support for a document entitled "Some Guiding Principles and Recommended Actions for Promoting EME". The document is appended below in plain text, and a "living" online version has been posted at http://pulsar.princeton.edu/~joe/K1JT/EME_Principles_and_Actions.PDF. The document was drafted by K1JT and F5VHX, with additional input from N1BUG and SV1BTR (who will continue to work on refining the recommendations contained in it). Over the past few days the four of us have asked many EME operators to "sign" the document. The over-whelming majority enthusiastically agreed, and the document now contains 168 supporting callsigns in addition to our own. Our contact lists are surely incomplete, and our memories are faulty as well. If we have not yet contacted you, we apologize; we are doing so now, through this broadcast message. We are confident that many will agree with the principles expressed in the document, and you can help all of us by lending your support. Please, send a brief email to the special account from which this message originates: eme.sign.on@free.fr. Your message can be as simple as "I support the EME document. K1ABC." We know that there are many EME operators who do not subscribe to reflectors. If you know of such people, please help us to spread the word to them. The online version of the "Guiding Principles" document can be viewed by anyone, and it will be updated regularly with new callsigns. We have devoted much energy, time, and good will to put this simple statement together. We believe that the guiding principles, the proposed actions, and the sentiments behind them will serve to inject much positive energy and unity into the EME community. We hope you will join us in supporting it enthusiastically. Joe Taylor, K1JT and Graham Daubney, F5VHX/G8MBI

Some Guiding Principles and Recommended Actions for Promoting EME:

We, the undersigned, make the following statement in an effort to promote increased recognition that there are many ways to enjoy the wonderful hobby of Amateur Radio.

We believe that many diverse paths lead to great satisfaction and high levels of achievement in amateur Earth-Moon-Earth or "moonbounce" communication.

We believe that the EME community, an inherently cooperative common interest group, must do its utmost to ensure that the satisfaction and achievements of some will not limit or reduce the potential for enjoyment by others.

We believe that long established guidelines specifying minimum requirements for valid VHF/UHF contacts apply equally well to all propagation modes and to all coding and modulation techniques, despite the different methodologies that may be employed.

We believe that criticisms of one mode of communication by proponents or practitioners of another are detrimental to our hobby. We deplore and disassociate ourselves from any such actions that extend beyond technical and quantitative evaluations or comparisons.

We propose the following recommended actions as being positive for our hobby, and we undertake to carry them out and support them actively:

1. We will recommend to the American Radio Relay League that the ARRL International EME Contest should henceforth present its results so as to display numbers of contacts by each transmission mode, for example "CW" or "Digital", for all entries; and moreover that the contest rules pertaining to permissible types of "assistance" (if any are retained) should be revised and clarified.

2. We will further recommend that the American Radio Relay League and other organizations offering awards or recognitions of achievement for amateur EME communication should consider adding mode-specific "CW" and "Digital" subcategories for their awards.

To further the aims of our principal recommendations, some of us will solicit input from the EME Community with the goal of distilling it into more detailed recommendations consistent with those presented above. The results will be presented openly, together with advisory notes, as representing to the best of our ability the views of a unified EME community.

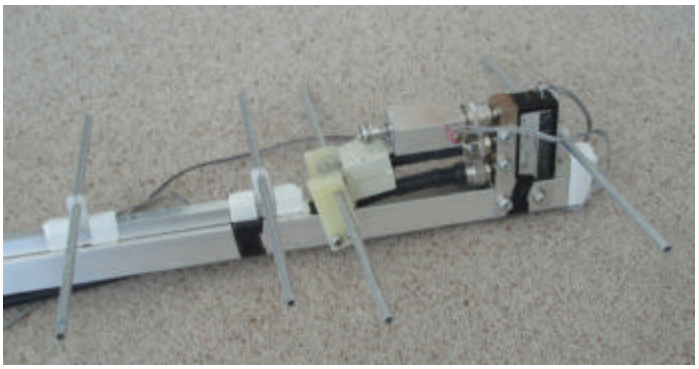
Signed on February 12, 2006: K1JT F5VHX N1BUG SV1BTR

The following operators have also declared their support: 9H1BN, DL8EBW, G4IGO, K0RZ, N1KI, PA3CMC, SP2OFW, W4WSR, 9H1PA, DL8YHR, G4RGK, K0YW, N2UO, PA3CSG, SP5CJT, W5UN, 9H1TX, DL9KR, GD0TEP, K1RQG, N5BLZ, PA4FP, SP6GWB, W6AT, AA1YN, DM2BHG, GM3SEK, K1SG, N9AB, PA5DD, SV1AWE, W7ALW, AF6O, EA2LU, GM4ISM, K2TXB, OE3FVU, PE1L, UR5LX, W7AMI, T1DMK, EA3DXU, GM4JJJ, K2UYH, OK1DFC, PE1LWT, UX3LV, W7EME, T1HZE, EA6VQ, GW4DGU, K3MF, ON4IQ, PY2BL, VA3TO, W7GJ, F2ZC, F1DUZ, HB9JAW, K4EME, ON4KNG, RA3AQ, VE4MA, W7QX, DF6NA, F1EHN, HB9Q, K6MYC, ON7EH, RU1AA, VE6TA, W8PAT, DF9CY, F2TU, I2PHD, K7MAC, ON7UN, RW1AW, VE7BQH, W8WN, DJ6MB, F5FLN, I3DLI, K7XQ, OZ1EME, RW3BP, VK2KU, W9IP, DJ9YW, F5HRY, I5WBE, KD3UY, OZ1HNE, S52LM, VK2SN, WA3BZT, DK5EW, F6DRO, IK1FJI, KD5FZX, OZ1LPR, SM2CEW, VK3UM, WA4NJP, DK5YA, F6KHM, IK1UWL, KL6M, OZ1PIF, SM2EKM, VK4AFL, WA6KBL, DL1EJA, F8DO, IK2DDR, KL7FH, OZ4MM, SM2ILF, VK7MO, WA6PY, DL4DTU, FR5DN, IK3MAC, KL7UW, OZ5IQ, SM3LBN, W0HP, YO2AMU, DL4EBY, G0RUZ, IK7EZN, KM5PO, PA0JMV, SM5BSZ, W2DRZ, YO3FFF, DL4KG, G3ZIG, JH2COZ, LA8LF, PA0V, SM5CUI, W2WD, YO9FRJ, DL4MEA, G4CCH, JH5FOQ, LU6KK, PA2CHR, SM5LE, W3SZ, YU1CF, DL6LAU, G4DHF, JR3REX, LZ1DP, PA2DW, SM6CKU, W4SW, YU7XL, DL7APV, G4HGI, K0AWU, LZ2US, PA3BIY, SM7WSJ, W4TJ, ZL3TY

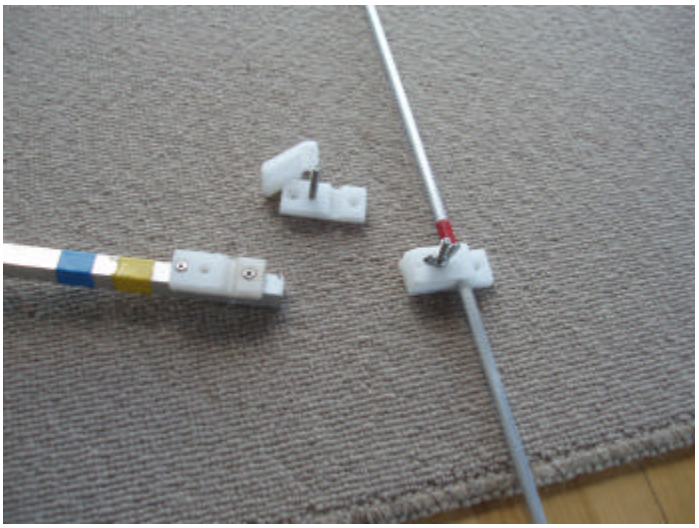
TECHNICAL I – TX-2000 on 23 cm SSB: As a result of preparations for the 23 cm EME SSB Contest, there was a considerable discussion of the operation of the TS-2000X on 1296 SSB. There is no problem on CW, but when the TX2000 is operated on SSB, it produces considerable distortion and the ALC appears to be suppressing the signal to produce a lower average power. WA6PY learned that Kenwood has the wrong bias voltage (6.5 V vs. 8/9 V) on the TS-2000X 23 cm output module. Kenwood is suppose to has a modification kit available, but there appears to be difficult in getting Kenwood to supply this kit. N2UO noticed that the 8 V regulator is located in the power amplifier board, on top of the radio and came up with a relatively simple fix.. Its output is exactly 8 V. This voltage is routed out of the board through an extremely thin PCB trace and a flat ribbon (very flat!) cable into the main signal board, located on the bottom of the radio. If you measure the voltage there while transmitting on 1296, it will be probably 7.5 V. This board has a switching transistor (PNP bipolar) that when it is on has a voltage drop across the collector-emitter of around half a volt. So, we are at about 7 V. Then the voltage goes again through a very thin PCB trace, flat ribbon cable, etc., to the 1296 module. There it measures 6.5 V. Marc's solution was to cut the PCB trace right before the switching transistor on the main signal board, and place a 7809 fed from the +12 V. In that way he guarantees 9 V at the switching transistor. There is still the rest of the voltage drops, but the voltage is now 8.2 V at the module and seems to be very linear at this level. Marc checked the output power and it still corresponds to the display readings, so no adjustment of the power calibration is needed. The gain has changed, so that may be where adjustment might be needed.

TECHNICAL II – He are some details on the single yagi used so successfully by VK7MO for 70 cm EME and pictured in last month's NL: The antenna is based on the rather old DL6WU design using a spread sheet that one of our VKs (VK3AUU) developed – see the following table. For this home version the gain is supposed to be almost 20 dBi. While the DL6WU design does not get you the last 0.5 dB that modern designs can theoretically produce it is more tolerant of small errors and thus much better for home brew construction and for portable dxpeditions where you need room for error on assembly. There are two special things I do with this antenna which while they would not make much difference to the gain do make sure that construction is repeatable and you at least get what you expect: 1. The elements are mounted on press fit offset spacers that are built from Kitchen chopping board material. This allows one to attach then to any boom material without worrying about boom corrections. Also this also allows one to attach to any material with insulation tape. I used this technique for my island dxpedition as I could not carry a boom on the aircraft and had to use what-ever materials I could find on site. 2. I use a split centre-feed dipole rather than a folded dipole and balun to simplify the design and do away with phasing errors and the small losses in the normal half wave balun. To overcome the

unbalance I use a clamp-on ferrite core (grey plastic box behind the driven element in photo) which I have measured on two meters to produce 17 dB of isolation and my guess is that it would be better than that on 432. This method requires nothing critical and is very repeatable. The mechanical construction of this larger design for home use is based on all the elements being attached to 12 mm square Aluminum via insulation tape, which is broken into 4 sections that can then be quickly mounted on a support boom as I need to put the station away when I am not using it to keep the neighbors happy. The support boom is made in sections with risers to offset the drop on a very light weight boom.



VK7MO 432 yagis driven element/balun details



VK7MO element mounting details

FINAL: So much has happened this month it is difficult to get everything in. The agreement between the CW and JT proponents shown earlier in this NL will hopefully bridge the difference between these two groups and form the basis for increased EME activity in all modes. In this regard, G4RGK has started a new listing of initials that will show CW, JT and combined tallies. His first attempt at a CW only list is shown below. This does not even contain my totals - I am still working on my list. In the future Dave will have lists for all modes.

432 Mhz EME Newsletter Initial List for CW ONLY
Sorted by: 70cm Then by: Total

	Callsign	70cm	23cm	13cm	9cm	6cm	3cm	Total
1	DL9KR	831						831
2	G3LTF	393	232					625
3	YO2IS	163						163
4	K4EME	93						93
5	JA4BLC		104	33				137
6	N2UO		70					70
7	JH1KRC		56					56
8	F2TU						37	37
9	G4DDK		8					8
10	WD5AGO			10				10
11	GM0ONN		7					7

I have also included in this issue of the NL information on what constitutes an initial. I had planned to run this in the last NL, but ran out of space. I do not see why these rules should not apply to JT 70 cm QSOs as well as CW and SSB.

The new 70 cm AT periods seem to be working very well, but I suggest that another time period should be added to encourage activity between NA/SA and VK/Asia.

Don't forget to register for the 2006 EME Conference, if you have not done so already at www. eme2006.com/index1024.html.

Please keep the tech material and news coming in. There is more to say this month, but it will have to wait for April. I hope to find you off the moon on 70 and possibly 3 cm during the March DUBUS contests. 73, Al – K2UYH

VK3MO's Yagi Data Table

Frequency MHz.	**432.1**		
Wavelength cm.	69.38		
Boom Diameter cm.	**0**		
Element Diameter mm.	**6.35**		
Element Thru Boom ("Y/N")	**n**		
Boom Length (Metres)	**8.4**		
Gain (dbd)	17.6	19.8 dbi	
Thru Boom Correction (cm).	0.00		
Useable bandwidth	423.458	to	440.7 MHz

ELEMEI	Length	Boom Position	Distance each Side of boom	Half element
REFL	31.95	2.00	15.97	16.0
DRIV	31.00	18.65	15.50	15.5
Dir 1	29.61	23.86	14.80	14.8
2	29.24	36.34	14.62	14.6
3	28.90	51.26	14.45	14.5
4	28.59	68.61	14.30	14.3
5	28.30	88.03	14.15	14.2
6	28.03	108.85	14.02	14.0
7	27.78	130.70	13.89	13.9
8	27.55	153.60	13.77	13.8
9	27.34	177.54	13.67	13.7
10	27.14	202.51	13.57	13.6
11	26.95	228.53	13.48	13.5
12	26.78	255.24	13.39	13.4
13	26.62	282.30	13.31	13.3
14	26.48	309.71	13.24	13.2
15	26.34	337.46	13.17	13.2
16	26.21	365.22	13.11	13.1
17	26.10	392.97	13.05	13.0
18	25.99	420.72	12.99	13.0
19	25.89	448.47	12.94	12.9
20	25.80	476.23	12.90	12.9
21	25.71	503.98	12.85	12.9
22	25.63	531.73	12.81	12.8
23	25.56	559.49	12.78	12.8
24	25.49	587.24	12.74	12.7
25	25.42	614.99	12.71	12.7
26	25.36	642.74	12.68	12.7
27	25.31	670.50	12.65	12.7
28	25.26	698.25	12.63	12.6
29	25.21	726.00	12.61	12.6
30	25.17	753.75	12.58	12.6
31	25.13	781.51	12.56	12.6
32	25.09	809.26	12.54	12.5
33	25.05	837.01	12.53	12.5
34	25.02	864.77	12.51	12.5
35	24.99	892.52	12.50	12.5
36	24.97	920.27	12.48	12.5
37	24.94	948.02	12.47	12.5
38	24.92	975.78	12.46	12.5
39	24.89	1003.53	12.45	12.4
40	24.87	1031.28	12.44	12.4
41	24.85	1059.04	12.43	
42	24.84	1086.79	12.42	
43	24.82	1114.54	12.41	
44	24.81	1142.29	12.40	
45	24.79	1170.05	12.40	
46	24.78	1197.80	12.39	
47	24.77	1225.55	12.38	
48	24.76	1253.31	12.38	
49	24.75	1281.06	12.37	
50	24.74	1308.81	12.37	