

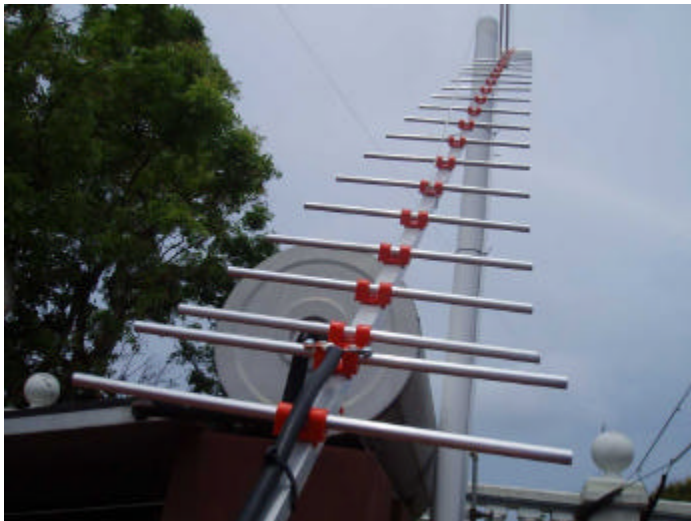
## 432 AND ABOVE EME NEWS MAY 2006 VOL 34 #5

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

**CONDITIONS:** 13 cm was the center of attention in April for the DUBUS (EWW) EME Contest. Judging by reports the turnout was excellent, if not the conditions. There ARI *New Modes* Contest also attracted a goodly amount of stations using JT65 – primarily on 70 cm but also on 23 cm. DL3OCH also completed his most ambitious dxpedition to date, providing JT 23 cm QSOs from YU (2 grids), ZA, Z3 and 9T – see Bodo's report. Congratulations also go to CT1DMK for his reception of Voyager1 orbiting Mars. The pace is not slowing. The DUBUS EME contest moves to 1296 on 6/7 May. HB0/HB9FX will be on from Lichtenstein during the contest. On 1 June CT3/DL1YMK will set up for business from Maderia on both 70 and 23 cm.

**70 CM ACTIVITY EVENT TIMES:** The dates/times follow for May and the summer 432 CW EME Activity Events (AEs): 21 May 0200-0400 and 0800-1000, 4 June 1300-1500 and 2030-2230, 15 July 2330-0130 and 16 July 0600-0800, and 12 Aug 12 2130-2330 and 13 Aug 0530-0730.

**4S7CCG:** Bob (ZL1RS) [zl1rs@yahoo.com](mailto:zl1rs@yahoo.com) is now QRV on 432 from Sri Lanka (MJ96wv) with a modest system consisting of a 32 el 10 wl FO yagi (YO optimized), IC706 and 70 W PA. Presently he has no preamp and about 8 m of feed line, but expects to receive one from DL9KR. Thus far he has QSO'd only HB9Q on JT65B (-20dB/-23dB). They also had a partial on CW. Bob will be in 4S until Nov.



4S7CCG's 32 el 70 cm yagi aimed at the moon

**CT1DMK:** Luis [cupido@mail.ua.pt](mailto:cupido@mail.ua.pt) besides losing sleep over EME has been looking for some *real* DX. Recently he was able to receive the Voyager I Mars orbiter satellite's signals on 8.4 GHz at a distance of 243 million Km using his 5.6 m EME dish and a HB 45 deg K LNA and a surplus image rejection mixer. Full details can be found on Luis' web page at <http://w3ref.cfn.ist.utl.pt/cupido/dsn.html>.

**CT3/DL1YMK:** Michael [DL1YMK@aol.com](mailto:DL1YMK@aol.com) sends news on his forthcoming dxpedition to Madeira Island on 23 and 70 cm -- Our CT3 EME dxpedition is getting closer and closer. As it looks now, we will be QRV from IM12 on 70 cm and 23 cm EME [and also 2 m (Es, FSK441)]. We solved our 70 cm power amp problem with the kind support of BEKO. We will have a 600 W LD-MOSFET amp as a loan from Bernhard for the trip. The antenna for 70 cm will be the 4.1 m dish (we were thinking of a yagi array, but it is too much weight for the airlift), which is an improved version of the one used in EI last year. The feed is

a 1 wl loop and reflector. We will be able to switch from hor to vert. pol, which hopefully will compensate for the marginal antenna gain and power on 70 cm. Power on 23 cm will be 500 W into a lightweight version of the Septum feed. As I had to compromise in the course of time, I decided to include a 2nd band for this trip, rather than increasing the power on 23 cm to 1 kW. (This improvement is on the list for next year, hi)! We have to change feeds manually, and will operate 23 and 70 successively, according to the following schedule: 1 June arrival and setup, 2 June start operation on 1296 at 1800, and continue on 23 cm through 6 June (Tuesday) whenever the moon is in sight. 7 June (Wednesday) change to 70 cm and begin 432 operation at 1800, and continue until 10 June (Saturday morning). On 10 June we will switch back to 23 cm and operate from 2000 until 0400 on 11 June. Then switch back to 432 beginning operation at 2100 – (including JT65B although CW is preferred mode by dinosaurs like myself). We will remain on 70 cm until 14 June at 0400 when we have to dismantle the antenna and close down. This schedule is of course subject to change due to conditions, weather, etc. We have an improved rotator system and tracking capabilities, but you never know when Mr. Murphy will visit. I have asked K1RQG to arrange a sked list. Monika as my logistics manager is still struggling with the airline etc. We'll have www-access on the site by WLAN, so we will post on Moon-net and via K1RQG, when we actually will be ready to go.

**DL3OCH:** Bodo [dl3och@gmx.de](mailto:dl3och@gmx.de) has successfully completed his "Grand Tour" by providing 1296 EME (JT65c) QSOs from YU (2 locations), Z3, ZA and T9! - I was able to obtain a valid license in all countries and therefore I could activate four new DXCC locations. Even so I had some trouble with police and local people. I made 24 EME QSOs on 23 cm. As far as I know Z3, ZA and T9 has never before been on the air on 23 cm EME. All QSOs were done in JT65B/C from different locations (KN04go and KN02ug as YU/DL3OCH, from KN01ie as Z3/DL3OCH, from JN91tm as ZA/DL3OCH and from JN92ep as T9/DL3OCH). K2UYH, OE9ERC, HB9Q, DJ9YW, G4CCH and OH2DG can be happy about first contacts. I used the transverter from DJ9YW, my new IC7000 and a 59 el yagi. Everything worked well without any problems. In Serbia, we stayed the first night in Lubljana and the second night in Belgrad. Belgrad is a very noisy and dirty town. The people are nice. I went to the ministry of telecommunication and got my license. We then headed South of Belgrad, where we found a nice little place for camping and ham radio. I had a clear sky most of the time, but was troubled by bad QRM. Somehow JT worked. I QSO'd K2UYH (-25 dB), DJ9YW (-25 dB), G4CCH (-26 dB) - really weak, OE9ERC (-19 dB) - great signal, and HB9Q (-24 dB) - had problem with frequency drift. At the second location in Serbia, I made only 3 QSOs as conditions were extremely difficult. The moon was not visible and it was windy. I also had a lot of trouble with the local people. I was staying just about 10 km away from the border to Macedonia. This area is actually not considered to be Kosovo, but it's very close and the conflict doesn't seem to be over. Half of the villagers were visiting us, drinking our beer and discussing the situation. However, the police came and solved this diversion. I then QSO'd K2UYH (-26 dB) - nice decoding, DJ9YW (-25 dB) - stronger than AI and OE9ERC (-24 dB). Partial was made with G4CCH (-26 dB) but really weak - we tried JT65B with no improvement, HB9Q (-26 dB) - no decoding of the calls, and the same for OH2DG (-26 dB). I operated in Macedonia from lake Ohrid, near the border to Albania. It took me an extra day to get a license, but I feel safer here. I was more successful in Z3, but QSOs were not easy. I worked DJ9YW after switching to JT65B (-28 dB), OE9ERC (-21 dB) - usual good signal, G4CCH required a second try, HB9Q (-23 dB) in 5 minutes and K2UYH (-23 dB) - nice decodes despite "/" in call. Unfortunately nil was copied from OH2DG who I am told he was low in frequency. Things were really strange in Albania and not easy. The roads were awful and we could not drive at night. It was just too dangerous. There are huge holes and bumps in the roads or a piece of the road may be missing. There are just a few lights and people and animals are running on the streets. The countryside is beautiful and the people are nice. GPRS did not work in ZA (no mobile internet), so I had to find an internet cafe, which is quite

difficult in Albania. A local ham helped me get a license, but it still took several days. 1296 operation was not allowed in ZA, but many things have changed and I was able to obtain a license. All skeds were successful in ZA and QSOs made with DJ9YW, G4CCH – very weak, OE9ERC – usual (-22 dB), HB9Q – followed Erich, OH2DG – used wrong format for calls and K2UYH – (-23 dB). Our final location was in Bosnia. Everything there looked so clean and modern compared to Albania. The landscape is beautiful. We found a house used for scouts up on a mountain. I did almost as well from Bosnia as Albania. There was an absolutely clear sky and the moon was very nicely visible. It was almost perfect for EME. I QSO'd G4CCH - easiest even though only (-28 dB), DJ9YW, OE9ERC - strong as usual, HB9Q - very weak but nice decoding and K2UYH – my longest JT65 QSO ever (73 minutes) with very weak signals in the beginning that became much stronger (-23 dB) at the end. I only missed with OH2DG. At first I could not decode him. Later when I was decoding him (-25 dB), Eino did not seem to hear me. More information about my trip should be added to my website [www.dl3och.de](http://www.dl3och.de) soon. I plan to published an article on the trip in DUBUS magazine. Many thanks to Heinrich for his support and help during the trip. Please contact me, if you are QRV on JT65 on 23 cm and would like to QSO me on one of my further Dxpditions.



**Route of DL3OCH's Grand Tour 1296 JT EME Dxpdition**

**DL9KR:** Jan bruinier@t-online.de in April worked GD0TEP for an initial. He is looking for K5GMX and W3CMP to arrange skeds. He will be cleaning the driven elements of his 16 yagi array to try to lower his system noise temperature.

**G4RGK:** Dave [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) was ill this month, which limited his moon activity a bit -- I was active on 8 April for the 70 cm activity time period. Echoes were pretty good considering the Moon position. I worked FR5DN, UT2EG, DL9KR, N9AB and W8TXT for an initial. The following weekend I got on for the ARI digital contest and worked a lot on JT65b mainly by calling CQ on 432.060. QSO'd were OK1DFC (-19 dB), HB9Q (-9 dB), JA6AHB (-11 dB), SV1AWE (-22 dB), K3MF (-13 dB), N9AB (-7 dB), W7AMI (-16 dB), KI0LE (-22 dB), KL6M (559/549) on CW, IN3KLQ (-19 dB), PE1ITR (-23 dB), UT3LL (-21 dB), SM2ILF (-17 dB) and W7ALW (-21 dB).

**F2TU:** Philippe [f2tu.om@guido.fr](mailto:f2tu.om@guido.fr) sends his DUBUS Contest results to date -- On 70 cm I made 20 QSOs and initials with SM3YBA #250, OK1DFC #251 and SM2ILF #252. On 6 cm I made 3 QSOs and heard W5LUA. On this band, signals are like an oasis in a desert! On 3 cm I made 8 QSOs and also heard W5LUA with solid copy. On 13 cm there were many stations with solid signals. I QSO'd on 8 April WD5AGO, WA6PY, OK1CA, VE6TA, ES5PC, WW2R, OK1KIR and W5LUA, and on 9 April JA8IAD, JA4BLC, JA6CZD, SK0UX, OZ4MM, HB9SV, OH2DG, OH2AXH, G3LTF, G3LQR, IK2RTI, OE9ERC, NA4N, WA9FWD, HB9JAW for initial #48 (and the last!), W9IIX #49, DL4MEA #50, LX1DB and G4DDK #51. CWNr were OH6NVQ and JA8ERE. Congratulations to DL4MEA and G4DDK who worked hard to be QRV before the end of the contest. On 4 April I also QSO'd GW4DGU (O/O) for initial #39 on 3 cm.

**F6KHM:** Xavier (F5TTU) [f5ttu@club-internet.fr](mailto:f5ttu@club-internet.fr) reports on his group's effort on 70 cm in the European WW EME Contest -- We were QRV in spite of some very high winds. We worked 50x30, but we decided not to send in our log for this band after winning 3 times the first place on this band during the past 3 years. Activity and conditions were quite low, but I had a good time (I was single-op). NC1I had really a great signal. I'm testing a new setup with an IC756pro3 and transverter for 70 and 23 cm. We are building a new (very) high power amplifier and feed for 432 too. We plan to be QRV for the 23 cm part of the contest. I will be in Wuerzburg this summer to shake hands with all my EME friends. Jay, K5JL has promised to buy me a beer!

**G3LOR:** Simon [G3LOR@aol.com](mailto:G3LOR@aol.com) writes about his 13 cm activity during the DUBUS Contest in March -- I operated for some while on 13 cm, but only QSO'd 6 stations. The required crossband operation making life difficult without a sked. Stations worked were OK1CA, OH2AXH, F2TU, OK1KIR, G3LTF and SK0UX. Many others were heard including new ones, WA9FWD and NA4N. I was running my dish 4.2 m dish and 150 W. My 2424 RX seems in poor shape, so I plan build something better for the ARRL contest. Another problem is that my window is poor to east. My first preamp was not ok and was producing only 11 dB sun noise, but I have now improved it to 12.3 dB at an 81 flux. This is still a bit down, so the feed position and choke ring may need some adjustment. I have made some progress on 9 cm. I have 40 W, but need some dry/hot WX to set up the system under dish and see if I can copy some echoes.

**G3LTF:** Peter's <g3ltf@btinternet.com> EME report for April -- There was good activity last weekend on 13 cm, especially from Europe. My new PA worked FB. It was located at the base of the dish in a new, enlarged, enclosure and gave about 180 W at the feed. Further improvements to the feeder and the PA PSU should give me another 1 dB at least. It certainly made a difference. I was not able to be on for the first moon pass, but later on 8 April I worked JA8IAD for initial #35 crossband (X), JA6CZD (X), OZ4MM, F2TU, OK1KIR, OE9ERC, OH2AXH, OH2DG, (X), HB9SV(X), SK0UX, ES5PC, G3LQR, OK1CA and VE6TA, and on 9 April WW2R #36 (X), W5LUA (X), JA4BLC (X) and DL4MEA #37. CWNr cross band, were WD5AGO, WA6PY, WA9FWD, NA4N and IK2RTI. I also heard HB9JAW. I ran a test with G4DDK, who was running 50 W to a 2.3 m dish. I copied him at "T" level, I copied my call and his "O" reports, but couldn't dig out his call. On 10 April I made a set of sun noise measurements on the three bands. The 10.7 cm flux was 89. The results were 2304 16.4 dB, 2320 16.7 dB and 2424 15.8 dB. I think that the 2424 result is low because the feed match has degraded to a 10 dB return loss. My apologies for the slow cycling in frequency on my 13 cm signal, I need to build a proper oven and will elevate that up the job list. From the point of view of a UK operator restricted to 2320 on transmit, the 2320/2304 cross band working method of calling on the corresponding frequency, (i.e. 16 MHz above or below) is working out well, especially with the European stations. My own system allows me to listen virtually simultaneously on all three bands after a CQ. Having now got the 2320 PA sorted out, I shall now return to my 3.4 GHz project. I also want to try out, on one of the bands, some of the variations in the VE4MA feed suggested in the recent paper by W1GHZ and WD5AGO.

**G4DDK:** Sam jewell@btinternet.com reports a new one (#) during the April AW -- I worked SM5LE on JT65C. The QSO was difficult and Sven reported me as (-25 dB) whilst he averaged (-29 dB). The QSO took a while to set up properly, but was solid after I found Sven's signal on SpecJT. Since Sven uses a 2.2 m dish and I use a 2.3 m dish, I felt this was a good achievement. My thanks to Sven for his patience in setting up the QSO. After re-building my feed cage so that it was less likely to twist with strong winds, etc., I have added an adaptor for my OK1DFC 2.3 GHz septum plate polarizer feed. With this I now measure 7dB sun noise. This is still a few dB below what VK3UM predicts, but it is an improvement of several dB over the sun noise measurement from my earlier improvised mount arrangement. I plan to add a cavity ring choke shortly as it is clear that with this feed I have significant spill-over.

**GD0TEP:** Andy [gd0tep@safe-mail.net](mailto:gd0tep@safe-mail.net) is a new station from the Isle of Man (IO74qd). He is actually operating from the same location as where GD4IOM operated from, but it is a new system and all his own station. Andy has already made 5 CW EME QSOs 6 JT contacts including HB9Q and OK1DFC on 432 EME. Andy is using 4x20 el yagis and an 8938 PA. His web page is <http://gd0tep.com>.

**GW4DGU:** Chris [chris@chris-bartram.co.uk](mailto:chris@chris-bartram.co.uk) reports on his 10 GHz EME activity -- The 40 - 45W I now have at the feed gives good echoes, and I'm concentrating on improving the dish illumination and reducing the overall noise temperature. I reckon that I can obtain another 3 dB of system improvement. The current 1.88 WL aperture W2IMU feed over illuminates my little 2.4 m (0.935 f/D) dish (about -8 dB at the edges of the dish) resulting in poor sidelobes. Paul, W1GHZ has given me details of a more recent dual-mode feed design using a step to generate the higher order mode, and a conical flare to



generate the phase shift, and appropriate aperture. I'm currently having this made, and hope to have it on the antenna this month. I've designed and built a new preamp using an NE3210 HEMT. This is giving a NF of ~0.6 dB measured using lab equipment on the bench and inferred from cold sky/ground measurements. It's also close to the predicted levels. That compares to the ~1.1 dB measured from a number of FH35 and 05 preamps. One consequence of the improvement in receiver threshold has been that the noise temperature contribution of the antenna sidelobes has become more noticeable at lower elevations and has resulted in at least one lost QSO. The polarization tests organized by G4NNS with the AMSAT-DL guys at their 20 m dish in Bochum (DK0SB) were very interesting, if only to confirm that the only advantage of big dishes on 10 GHz EME is the reduced spectral decorrelation stemming from the smaller reflection area! Correcting the S+N/N for power differences and a minor feed problem (now fixed), the signal was broadly comparable within a dB or two to that I receive from IQ4DF's 7 m antenna. Brian's measurements of cross polar losses with linear polarization are very interesting. I think we now need to arrange some cross polar tests with CP. I made a simple CP feed consisting of a dielectric slug polarizer pushed into an existing feed for the DK0SB tests. It was quite simple to do empirically and appeared to show < 1 dB deviation from circularity and good cross polar discrimination. However, the problem I had with my linear feed meant that I couldn't get any meaningful figures during the tests. In terms of QSOs, the month was fairly sparse. I missed any activity after the DK0SB tests as I was busy fixing the feed, and updating the PA/Preamp box. Activity on 8/9 April was strongly effected by the DUBUS 2.3 GHz contest. Heavy rain prevented me getting-on in the early hours of 9 April to look for the W6IFE group. My control/TWT power umbilical isn't long enough to operate with the dish pointing beyond azimuths of 240 degs unless I put the power supply outside, but the weather needs to be dry for that! On 4 April I worked GW3XYW (O/O) for the first GW/GW on 10GHz EME QSO and F2TU (O/O). A test with G4NNS, close to apogee on 9 April was only a partial with Brian hearing me OK, but only very marginal copy at my end due to the 'roof sidelobes'. A sked DL2LAC a couple of hours after failed for similar reasons at my end, although we both heard each other. Over the next 3 months the 'traditional' high northerly declination sked weekends are around apogee. While that makes sense for UHF operators, it might be worthwhile moving microwave activity to the preceding weekend, which is close to perigee.

**HB0/HB9FX:** Fred (HB9BHU) [hb9bhu@bluewin.ch](mailto:hb9bhu@bluewin.ch) reports on plans to put Lichtenstein on 1296 during the DUBUS Contest -- As a results of requested from various OMs, I will take part of the DUBUS 23 cm EME contest on 6/7 May from Mauren, Lichtenstein using the call HB0/HB9FX. We will run the same rig as used in the 2nd weekend of the ARRL EME Contest last year. The mobile station has 1.8 m dish and good power. [I suggested Fred make arrangements with K1RQG to coordinate skeds, but have not seen any thing with this regard. Thus I suggest you e-mail Fred directly].

**HB9Q:** Dan (HB9CRQ) [dan@hb9q.ch](mailto:dan@hb9q.ch) reports on his activity on 70 cm during ARI Digital EME Contest -- It was very nice to find a lot of activity with many new stations. We reached a total of 139 points (41 stations) in category E - assisted. We worked GD0TEP for DXCC #65, 3 more states to bring our WAS total to 35, and 12 initials in 7 new grids during just 2 days of operation. We are very happy with our results which can be found at [www.hb9q.ch](http://www.hb9q.ch).

**JA4BLC:** Yoshiro's results on 13 cm on 8 April were QSOs with OK1KIR, ES5PC, F2TU and OZ4MM, and heard were HB9SV, SK0UX and OH2DG. On 9 April he added JA6CZD, OE9ERC, LX1DB and G3LTF, and heard HB9SV, SK0UX, DL4MEA, OH2DG (559) - called many times). Yoshiro also reports that JA6CZD worked 9 stations: W5LUA, VE6TA, OK1KIR, F2TU, OZ4MM, G3LTF, OE9ERC, JA4BLC and ES5PC, and heard OH2DG; and that JA8IAD worked 7 stations: OK1KIR, F2TU, G3LTF, OE9ERC, WA6PY, ES5PC and OZ4MM, and heard W5LUA, OH2DG, HB9SV, JA6CZD and JA4BLC. JA8ERE had RX trouble on Saturday and worked on Sunday only OK1KIR and a partial with OE9ERC.

**K0YW:** Bruce [k0yw@frontier.net](mailto:k0yw@frontier.net) was QRV in April on 1296 and worked OZ6OL (569/579), K5JL (589/579), LA9NEA (559/569), G4CCH (589/579), W6IFE (35/58) on SSB with K16DBR at the mike but with massive overdrive and distortion, K9SLQ (599/579), VE7BBG (559/579) and W6IFE on CW (599/599). A new station was supposed to be on LA8AV, but nothing heard. Signals are definitely better after fixing the transmit coax. I still need to do some further optimization.

**K3MF:** Wayne [K3mf@aol.com](mailto:K3mf@aol.com) has greatly improved his station on 70 cm and sends the following report -- On 18 March I worked W7IUV (1 x 33 el yagi and 250 W) then VK7MO (1 x 35 el yagi and 120 W). Both were JT65 mode. I worked a lot of JT contacts between 1 and 5 April before my AZ drive gave up the ghost - 17 total JT QSOs, 12 of which were initials: HB9Q, OK1DFC for initial #37, G4YTL #38, G4RGK, UT3LL #39, PE1IIR #40, W7AMI, OH4LA

#41, IN3KLQ #42, SM5ILF #43, N9AB, K7XQ #44, K7XQ (again), K10LE #45, GD0TEP #46, W2WD #47 and W7ALW #48. I have rebuilt the whole array including the frame, which is now constructed out of 1.5" square aluminum tubing... Now all the antennas point at the moon. Also I rebuilt the AZ drive and have a stronger mount to the tower. On 20 April we had a mini EME conference in Alexandria, VA with Mike (KL6M), Ken (KE2N), Greg (NA4N) and myself. We had a good time discussing EME

**K5JL:** Jay [k5jl@hughes.net](mailto:k5jl@hughes.net) has a new e-mail address. He reports working 10 stations on 23 cm during the post AW. He was looking for LA8AV but didn't find him.

**K5PJR:** Tony [k5pir@centurytel.net](mailto:k5pir@centurytel.net) reports hearing only a few stations off the moon on 1296 during April post activity weekend. I heard none from Europe. I worked only K9SLQ who was (599) on SSB.

**K7XQ:** Jeff [k7xq@secure.elite.net](mailto:k7xq@secure.elite.net) was able to get on for a short while during ARI Digital contest -- I worked on 432 OK1DFC for an initial #9\* and KE7NR #10\*. This also proves my antenna problem has been solved as well. The preamp on 432 is a MGF-1302. (I am not sure if this is really the best choice for this band). The GS35B seems to work well on 432 with the only exception that there is a slight power drift on every sequence, but is stable enough to achieve the same power every time. I also was able to copy my very first echoes on 432 tonight. I hope to work more of you soon.

**KL6M:** Mike [kl6m@qsl.net](mailto:kl6m@qsl.net) reports that the DC "Mini-conference" was a great Success -- Attending were NA4N, KE2N, K3MF, W4AF (non-EME) and KL6M. Unfortunately K4EME and W4TJ had last minute conflicts. Greg brought some terrific show & tell consisting of a 3456 amplifier and a 1296 septum feed and some 2304 feeds. I brought a couple milled LNA enclosures. We all walked down King St. in Alexandria to an Italian restaurant for dinner and some very interesting conversation. I will post some pictures here at <http://cworthy.net/kl6m/dc/dc.html>. I am now back home, and working hard to get the amp ready for 23 cm DUBUS Contest.

**LA0BY:** Stefan [la0by@darq.de](mailto:la0by@darq.de) in JO59FW reports that he is QRV on 70 cm EME for CW contacts -- My station is very small, comprising a 38 el M2 yagi with manual AZ/EL rotator and 100 W RF at the dipole. The setup is only temporary, but I can put up the antenna again at short notice. I have thus far worked HB9Q with good signals (O/O) on CW. I plan to be QRV again on 21 May from 0600-0900 when conditions should be more favorable. I operate only CW, not JT65. Any skeds with big guns would be appreciated; otherwise I will look for random catches.

**LA8AV:** Egil [skudsvik@online.no](mailto:skudsvik@online.no) is QRV 1296 EME with a 3.1 m dish with a VE4MA feed and approx 400 W from a water-cooled GS35B cavity and DB6NT preamp. He has some work to do on the RX side, but will soon be making a new Transverter.

**LA9NEA:** Viggo [la9nea@online.no](mailto:la9nea@online.no) sends his report for April -- I worked on 23 cm during the AW on 1 April at 1326 G4CCH (559/559), 1412 HB9SV (569/569), 1418 F1ANH (549/549) and 1551 SM3LBN (549/559), and 2 April at 1351 SM2CEW (569/569), 1404 IW2FZR (559/559), 1425 G4CCH (559/569), 1448 F1ANH (549/549), 1514 LA8AV (549/599) for an initial and 1522 K9SLQ (579/569). After April I will be QRT from 1296 EME until the first part of Sept.

**OH2DG:** Eino [eme.oh2dg@dnainternet.net](mailto:eme.oh2dg@dnainternet.net) reports on his 13 cm results in EWW EME Contest -- I used my 8 m dish and for the first time a new PA producing about 200 W at feed. I was surprised that the conditions did not co-operation and my echoes were quite poor, but I made many enjoyable QSOs on 13 cm in the contest. I also used a new RX for 2320 and 2424 MHz and was able to QSO G3LTF. Stations worked were on 8 April OK1KIR for an initial (#), WA6PY, ES5PC, SK0UX, HB9SV, F2TU, OH2AXH (#), OZ4MM, G3LTF, IK2RTI, OK1CA and OE9ERC, and on 9 April HB9JAW, VE6TA, W5LUA and LX1DB (#). Heard was JA4BLC. My final score was 16 x 14 with 3 initials.

**OK1CA:** Franta [ok1ca@ges.cz](mailto:ok1ca@ges.cz) sends his 2.3 GHz contest results -- I was QRV during the DUBUS Contest on 8/9 April. I had a conflict with my work and I could only be active only 5 hours during the NA windows. I worked VE6TA, OK1KIR, F2TU, ES5PC, WD5AGO for an initial #30, WW2R (#), W5LUA, OH2DG, OH2AXH, DL4MEA #31, G3LQR, SK0UX, OE9ERC, HB9SV, IK2RTI, OZ4MM, NA4N #32, G3LTF, WA9FWD #33, HB9JAW #34. I tested a new feed configuration with my dish. I have of my septum feed in the centre of my 10 m dish. The results are better than for the Cassegrain arrangement I used previously.

**OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) reports about his activity in Italian New Modes Contest on 70 cm -- I was basically QRV most of Saturday (1 April), because on Sunday I had a lot of work to do in the garden and also the weather was very poor. Conditions were good on Saturday. I worked 3 stations on sked, but all other found me on the band during my CQs on 432.073. I have worked G4RGK, HB9Q, UT3LL, KI0LE, K3MF, KE7NR, G4YTL, IN3KLQ, OM3WBC, DL2NUD, OH4LA, KP20LG and GD0TEP for JT initial #30-JT and DXCC 37. I can say that for somebody as me with a dish and power, it is possible to easy work random contacts. The station on the opposite side can find you because the can hear you speaker copy, and also see you signal on the Spectran screen. It is very similar situation from classic CW traffic with *big guns*. I also have some observations on the latest version of JT. It can not to operate in "OWN ECHO" mode, why? [Joe tells me he plans to add it but did not have time. The built in spectral display does not go below 500 Hz and thus can not be used for CW operation. I have asked him to correct this limitation]. The latest version also produces CW from time to time randomly. My recommendation is to set up this CW CALLSIGN in each second transmitting period. [It should do this at the end of every transmission for CW ID]. It also produces form time to time random switch between TX and RX in a very short time. A friend lost his LNA as a result. [I have not seen this problem, but believe it has been corrected in the new revision]. I changed my web and links for JT65 traffic. They are now: 432 MHz JT65 - <http://www.ok1dfc.com/EME/432/JT65432.htm> (I have a similar link for 2m), and whole MPS gallery is here - <http://www.ok1dfc.com/EME/mp3files/MP3.htm>.

**OK1KIR:** Tonda, Vladimir and Jan of the OK1KIR team [ok1vao@quick.cz](mailto:ok1vao@quick.cz) write on the their April activity -- We tried a sked on 57601 with JA6CZD on 1 April, but the QSO was not confirmed. On 2 April we participated in the 10 GHz polarization tests. Our results can be downloaded from [http://www.qsl.net/ok1vao/10GHz\\_pol\\_test/](http://www.qsl.net/ok1vao/10GHz_pol_test/). Then we were active in DUBUS contest on 13 cm on 8/9 April. There was a lot of activity, the weather was nice and we did not have any serious problem with equipment except that our LO could use some more stability. We used our 4.6 m dish with a septum polarizer. Our output power was about 250 W. All together we worked 25 stations and added 11 initials -- all on CW. We worked on 7 April at 2328 before the contest VE6TA (O/O) for initial #45. In the contest we QSO'd on 8 April on 2304/2304 at 0003 OH2DG (559/559) #46, 2304/2304 0009 OK1CA (559/559), 2304/2304 0018 WD5AGO (O/O) #47, 2304/2304 0026 VE6TA (O/O), 2304/2304 0054 ES5PC (549/559), 2304/2304 0104 W5LUA (559/559), 2304/2304 0114 F2TU (559/559), 2304/2304 0204 WW2R (M/O) #48, 2424/2424 1305 JA4BLC (559/559), 2424/2424 1321 JA8IAD (O/449) #49, 2424/2304 1359 JA6CZD (449/549) #50, 2304/2304 1441 HB9SV (559/559), 2320/2320 1457 SK0UX (559/559) #51, 2304/2304 1545 OZ4MM (559/559), 2320/2320 1607 G3LTF (549/549), 2320/2320 1614 OH2AXH (569/569), 2320/2320 1632 OE9ERC (579/559), 2304/2304 1744 IK2RTI (539/529), 2320/2320 1930 G3LQR (439/449), 2304/2304 2238 WA9FWD (439/449) #52 and 2304/2304 2253 HB9JAW (569/559), and on 9 April 2304/2304 0058 NA4N (449/559) #53, 2424/2304 1528 JA8ERE (449/449) #54, 2320/2424 1603 LX1DB (569/569) and 2320/2320 1706 DL4MEA (O/O) #55.

**OK1TEH:** Matej [ok1teh@karneval.cz](mailto:ok1teh@karneval.cz) is QRV on 70 cm EME and recently worked VK3UM on CW -- I made my 1<sup>st</sup> QSOs in last year's ARRL contest with HB9Q and DL9KR on CW. Since then I have added HB9Q on JT65 (-22 dB) with no preamp and only 50 W, N9AB on JT65 (-25 dB), K2UYH on JT65 (-24 dB), OH2PO on CW (419) and DL9KR on CW (539) a 2<sup>nd</sup> time. I have heard and tested many times 7M2PDT (25 dB) on JT65b but no QSO, and copied K3MF (28 dB) on JT, KE2N (23 dB) on JT, KL6M on CW and SM2CEW on CW. However, on 25 March on a 2<sup>nd</sup> attempt I QSO'd VK3UM (M-519) for a new odx of 15,913 km, 3rd continent and 4th DXCC! Doug gave me my initial #6 with my single 23 el DK7ZB yagi.

**OZ4MM:** Stig [stv@bsd.dk](mailto:stv@bsd.dk) reports on his April 2.3 GHz activity -- I was QRV for the 13 cm part of the DUBUS EME Contest. I found very good activity. It seems that many have got access to SSPAs at flea markets resulting in improved signal strength. I worked JA4BLC, F2TU, JA6CZD, OK1KIR, ES5PC, G3LTF, HB9SV, OH2DG, SK0UX, OK1CA, VE6TA, OE9ERC, WW2R, IK2RTI, NA4N, WD5AGO, WA9FWD, HB9JAW, W5LUA, WA6PY, JA8IAD, LX1DB and DL4MEA. CWNr were OH2AXH and JA8ERE. I am now looking forward to the 23 cm part of the contest.

**PE1ITR:** Rob [rob@itr-datanet.com](mailto:rob@itr-datanet.com) reports on his 432 activity in March and April -- I worked on 14 March G3LTF on CW for initial #24 and on 18 March using JT65 EA3DXU (-21 dB) for #25, and on 2 April HB9Q (-13 dB), G4RGK (-22 dB), K3MF (-24 dB) #26, N9AB (-16 dB), W7AMI (-22 dB) and KI0LE (-27 dB) #27. I also had a partials with OK1DFC, but he had power supply problems and our QSO broke off in the first sequence, and with IN3KLQ and K7XQ, but we found only a one way propagation path. My setup on 70 cm consists of a 2 x 28 el yagi array with manual AZ & EL control, an IC-910H

with a 400 W PA and a 0.35 dB pre-amp. I was QRV on Sunday evening in the Italian New Modes Contest with JT65b. It was nice to see a lot of JT65 activity on 70 cm and work some initials. Now I'm working out a plan on turning the antennas on the z-axis to have some polarization control.

**SM5LE:** Sven [sven.o.nordin@telia.com](mailto:sven.o.nordin@telia.com) was active in April -- I had a wonderful EME weekend 1/2 April on both CW and the digital on 1296. I operated in the 1st Italian EME New Modes Contest in the "assisted" assisted class as I am a small station and no other small stations could have heard or seen me on a Spectran. I made 5 JT65c QSOs with G4CCH on random CW, G4DDK on JT65c for initial #20\* on JT and CW, VA7MM on JT65c #21\*, DJ9YW on JT65c, G4CCH on JT65c, JH5LUZ on CW sked for initial #22\*, SM2CEW on random CW #23\*, HB9BBD on random CW #24\* (also heard 55 on SSB) and K2UYH on JT65c. My initial total breaks down to #19 CW and #5\* on JT.

**UA3ME:** Nikolaj (UA3MBJ) [ua3mbj@rambler.ru](mailto:ua3mbj@rambler.ru) reports that UA3ME was QRV 23 cm with a 1.2 m dish and 300 W, but now has preamp problems. They burned out an NE32584C and are looking for a replacement. QSLs for UA3ME are being handled by DK3WG.

**VE6TA:** Grant <ve6ta@telusplanet.net> writes -- I had a lot of fun during the April on 13 cm. I have optimized my feed horn on echoes and implemented a rudimentary speed control on my azimuth drive. During the AW my first schedule with WW2R did not work out as Dave had some technical problems with his transverter, but I was called by IK2RTI at the end of the sked period and worked Gianfranco for a new 13 cm DXCC and initial #24. I then listened in on WA6PY's sked freq with Dave and worked Paul just before his sked. Dave and I set a second schedule after his equipment problems were solved and despite some chaos, we worked for Dave initial 13 cm QSO. He has a great signal with his 10' dish and super-VE4MA feed. During the DUBUS contest weekend, I worked 14 including 2 initial. WD5AGO was worked on random with a good signal and JA6CZD.

**VK4AFL:** Trevor [tbenton@bigpond.net.au](mailto:tbenton@bigpond.net.au) writes -- I found activity down a bit this month, but on 1296 I worked [ON CW] IW2FZR, VK3UM, G4CCH, VK4TL and SM3LBN. DL0SHF was worked on SSB for a good contact and was very strong at my end. I also worked VK7MO and G4CCH on JT65c. Both were running 50 W. Howard ran his power down 8 dB to prove he had far more power than was necessary. On 432 MHz I worked [on CW] GD0TEP for a new initial. I am looking forward to the last weekend of April and the first in May. Both hopefully will be excellent for conditions and activity. Hats off to CT1DMK for his reception of Voyager 1. This is a tremendous amateur radio achievement!

**W2UHI:** Frank was not active on the moon in April due to a combination of Flu and Emphysema. He is currently hospitalized at (Frank Lumney, c/o Mountain View Retirement Village of Grant, 50 South Maple Grant, MI 49327), but is slowly recovering. He needs to learn to use oxygen and regulate his medicine. I am sure he would enjoy getting cards and well wishes.

**W5LUA:** Al [al\\_ward@agilent.com](mailto:al_ward@agilent.com) had fun on 13 cm during the DUBUS contest and worked 16 stations including initials with HB9JAW and WW2R -- It seems that we have migrated the center of 2304 EME activity to around 2304.100, which is at the NA center of weak signal activity. I suggest that we migrate in band EME operation down to 2304.000 to 2304.050 as was done back in the days when W4HHK was around. Is there a reason that we have moved over the years? I suggest that 2320/2304 crossband operation should be between .050 and .100. I also suggest that if a station is calling CQ as an example on 2320.075 then the answering station would be on 2304.075 as close as possible. If the cross band were in a separate 50 kHz window then there would be less chance of sitting on top of someone trying to carry on an EME QSO in band at 2304. If the stations were transmitting in the crossband window on 2304 then it would be more obvious that they were going to listen up 16 MHz for a reply. Please consider that activity on 13 cm is increasing and the need to spread out and also be aware that there is tropo activity on each segment as well. A good noise-blanker can take out some of the part 15 "Garbage" in the 2400 to 2480 band. I use the noise blanker in my FT-920 and it does help when receiving JAs at 2424.

**W6IFE:** Doug (K6JEY) [doughnelen@moonlink.net](mailto:doughnelen@moonlink.net) reports that planned operation with the 40 m dish were thwarted by high winds on 7 April -- We also had a problem with the 1296 TR relay. It was stuck in the "TX" position. We did not have a replacement and are looking for a replacement miniature SMA relay, SPDT, 28 VDC, non-latching with SPDT auxiliary contacts. I can offer a trade of one of without aux contacts. It looks like we will back on high-power on 10 GHz. K6JEY has repaired his 30 W Logimetrics TWTA that we were using. We have also corrected the compression problem with our SSB on 1296. Our next



operation is scheduled for the weekend of 6/7 May. [They were active on 1296 on the 8<sup>th</sup>].

**W7AMI:** Terry [w7ami@cableone.net](mailto:w7ami@cableone.net) writes -- I was on for parts of the ARI digital contest on 432. I wish there had been more Italian stations on. I only saw one and did not work him. I did work HB9Q (-5 dB), OK1DFC (forgot renter level but very strong), G4RGK (-13 dB), F6FHP (-25) for initial #34, N9AB (-14 dB), UT3LL (-22 dB) #35, K3MF (-19 dB), PE1ITR (-23 dB) and K10LE (-24 dB). CWNr were S51ZO (-18 dB) - called for long time but no luck and IN3KLQ (-25 dB). I worked some stations on random and others were arranged on the EME Link. It was nice to see so many stations on 432. It made for lots of fun.

**W8TXT:** Mike (has no e-mail but can be reached by post at 401 Bogart Road, Sandusky, OH 44870) sends us some info on his operation -- I became an EME SWL in Oct 2005 and QRV with a 350 W PA in Nov of 2005. Since then I have upgraded to a HB RIW PA with 925 W out and switched from my original ARR P432VDG preamp to a HB MGF1402 stripline preamp. My antenna is 4 x FO 24 el (6.9 w) horizontally polarized yagis. I have QSO'd thus far G3LTF, KL6M, HB9Q, DL9KR, OH2PO, VK3UM, N9AB, DL7APV, K2UYH, UA3PTW, OK1DFC, NC1I, F6KHM, OZ4MM, FR5DN and G4RGK. Heard only are K1FO, K0RZ, OK1CA, K5GW, K4EME, K3MF, J1IZCG, VE6TA, OE5EYM, SV1BTR, N8CQ, W7CI, 7M2PDT and another JA (?). I hope to complete WAC soon, but still needs SA and Asia. My summer plans include upgrading the phasing lines from FM-8 to 1/2 inch Heliax. I like the 70 cm Activity Times and hope to make good use of them for more QSOs (only CW a present).



**W8TXT and his shack**

**W9IIX:** Doug [iix1@comcast.net](mailto:iix1@comcast.net) was active during the 2.3 Ghz part of the DUBUS Contest -- I worked F2TU and SK0UX for my first initials on 13 cm, and heard OE9ERC, OK1KIR and partials of other calls. The WX did not

cooperate as did the PA power supply, but I had a good time for my first try with on 2304 with my 3.7 m dish and 150 W.

**WA6PY:** Paul [pchominski@jaalaa.com](mailto:pchominski@jaalaa.com) reports that he QSO'd VK7MO on CW on 1296 -- I think we should encourage Rex to run more CW QSOs. He is not great CW operator and I recommend that we should key relatively slow.

**WA9FWD:** John [jstefl@wi.rr.com](mailto:jstefl@wi.rr.com) was active on 2304 in the DUBUS contest for a bit Saturday night -- I worked the following: SK0UX, OK1KIR, HB9SV, F2TU, OK1CA, OZ4MM, and OE9ERC. I worked OE9ERC with a bit of difficulty as I was looking through my tower. It doesn't have a big effect on 1296, but it really seems to kill the signals on 2304. I heard WD5AGO just before the moon went behind the tower, but by then it was too late. I will not be on next weekend. I still do not have 2320 RX capability.

**WD5AGO:** Tommy [wd5ago@hotmail.com](mailto:wd5ago@hotmail.com) reports poor condition during the 1<sup>st</sup> night of the DUBUS 13 cm contest -- Apogee is hard on us little guys. I made it on for the JA window just to be greeted by S9 pulse noise on 2424. I worked 6. The only heard getaway was WA6PY. I only had limited operating time on the 2<sup>nd</sup> night and increased my QSO total to 9.

**WW2R:** Dave [robinda@nortel.com](mailto:robinda@nortel.com) is now QRV on 13 cm as well as 23 cm -- On 1 April I built a 13 cm VE4MA *superfeed* with tubing donated/shipped by PA3CSG -- TNX. On 2 April I had a sked with VE6TA at 1700 but my DB6NT xverter broke twice. We eventually worked at 2000 for initial #1. During the week I changed preamps to a WD5AGO style and changed the relay/adaptors, lowering the system NF by 0.35 dB. On 8 April I operated the DUBUS contest. Exceptionally loud signals were heard and my echoes copied 2 dB over the noise. I worked OK1CA, F2TU, W5LUA and OK1KIR. CWNr were ESSPC and HB9JAW. On 9 April signals weaker and no echoes copied. OK1CA seemed down by 10 dB. I CWNr HB9SV, OE9ERC (2 hours) and SK0UX (1 hour). I also heard but did not QSO WA6PY. I did work OZ4MM (weaker) and G3LTF crossband on sked. Using my softrock 7 RX, I simultaneously monitored 2320 and 2304 all weekend. G3LTF was the only signal identified on 2320. I also listened on 2424 during JA window, but heard nothing. On 11 April I worked OE9ERC for initial #8 (17 dB over the noise) on a sked on both CW and SSB. Echoes were 1 dB over the noise at this time. On 12 April I received nil on sked with NA4N, and heard WD5AGO on sked but did not complete. I have my 23 cm feed back in the dish in preparation for May contest activity. I have also started work on a 3456 system.

**ZS6WB:** Hal [zs6wb@telkomsa.net](mailto:zs6wb@telkomsa.net) reports that 70 cm South African dxpedition activity is on the way -- Thanks to K6MYC two of the new 432EME-12 yagis are one the way that will serve as the basis of a portable 432 MHz EME array that should be in use before the end of 2006. Hannes (ZS6JDE) is planning to get a TE Systems 4452G PA. This should happen over the next 2-3 months. We will start doing some 432 MHz EME tests from ZS around July or Aug followed by some 3DA or 7P activity later in the year. [On a personal note, Hal had his home ransacked by thieves. His house was cleaned out... TV, satellite decoder, clothing, food, etc. as well as all of his tools. Luckily they didn't take his radio and computer equipment. Unfortunately Hal doesn't have insurance.]

**K2UYH:** Murrpy visted on 1 April. I had a problem with the power supply that provides voltage to my preamps. While trying to optimize the preamp voltage, it jumped to the rail and blew out all of my good 70 and 23 cm preamps! This limited my activity during in ARI Digital Contest. I did work SM5LE on 1296 before the disaster. I was able to get operational again for DL3OCH's 23 cm JT dxpedition. Bodo did an outstanding job with his small station under difficult conditions and worked most of the stations that had skeds. I was able to QSO him from all locations (two grids in YU, Z3, ZA and T9), but it was not easy making all the skeds fit my tight professional and family schedule. The declination also moved south toward the end making the last QSO difficult with only 15 degs of moon elevation from my tree infested location. This brings my 23 cm mixed initial #266\* and my DXCC total to at least 54. On 70 cm I tried several times using JT65C with 9H1TX on Malta. We exchanged O and OR, but Dave did not get my final Rs before I had a TX problem and the moonset. David has a drift problem that makes decoding very difficult. (I have learned to compensate for his drift using the RIT). I was unable to be on for the April 70 cm activity event time because of a social conflict, but I was on early and caught UT5EG. Conditions seemed very poor. My echoes were weak and there was little polarization peaking. I did hear G4RGK with a good signal, but the XYL pulled me away before I could give Dave a call. After I returned, later in the evening (9 April) I finally QSO'd VK4CDI using JT65C after many tries. Tnx to Phil for sticking with me. On 24 April I added on 432 GD0TEP (-23dB/O) on JT65c and (549/439) on CW for mixed initial 720\*. I did not make it on 13 cm for the DUBUS Contest The WX was not good and I had other complications. My apologies to the 2300 crowd, but I am working on a new 180 W 13 cm PA and plan to be active in the fall.

**NETNEWS BY G4RGK:** **VK3UM** has a new e-mail address [tikaluna@bigpond.com](mailto:tikaluna@bigpond.com). **WB7QBS** has attempted 2 skeds with KL6M, but no copy either way so far. **WA8RJF** has 12' solid dish and asks if 10' of Rohn 45 or 55 with 6' out of the ground is sufficient to hold the dish? [It depends on how many cubic yards of concrete is around the tower]. Tony plans to use this dish on 23 cm with a 500 W PA and on 13 cm with a 200 W PA. **SV1AWE** was active on 70 cm EME in April with 4 x 6 w1 yagis and a GS23B, but is fighting tremendous QRM in Athens. **W7ALW** is QRV on 432 from DN36 with 4 x 13 w1 and 170 W. He has worked 4 stations so far, and plans to increase his power soon. **K2DH** has a new 4.7 m .375 f/d dish and is now planning a mount for it. **VE4XC** is still working on his 12' dish for 1296 EME. **DK3WG** reports little activity in April but Jurgen is QRV on 70 cm CW. **K5SO** has a new e-mail address [k5so@valornet.com](mailto:k5so@valornet.com). Joe has been looking for pulsars lately, but in no way has given up on EME. Joe made some mechanical improvements on the absolute azimuth encoder such that now he can track very accurately within a few tenths of a degree. **W4TJ** has a 13 cm PA running at 190 W, but no dish to mount it on yet. **VE4SA** is trying to get on 23 cm EME using a 12' TVRO dish. **KU4F** is QRV on 432, however heavy winds limited his activity during the April activity time. **N7AM** has now received new YL-1050 cavity for 23 cm.

**FOR SALE:** **W9QQ** (Watts Unlimited) has a 2.5 kW (10 lb weight) 3000 VDC power supply for sale as a kit or finished unit that should be great for EME and other VHF/UHF high power PAs. See [www.wattsunlimited.com](http://www.wattsunlimited.com) for full specs. It's quiet, completely OFF in between dits and dahs. It follows the key or PTT switch. The Kit Instruction and User Instruction are attached are free for the asking by anyone. Just send e-mail asking for them. The power supply, model PS-3000A puts out 3000 VDC (or less) @ 700 mA. **N8CQ** has three 13 cm Septum feed kits available, and can also make scalar rings if required. Contact Gary at [gabercr@nc.rr.com](mailto:gabercr@nc.rr.com). **UA3MBJ** is looking for an NE32584C GaAs FET – see UA3ME's report. **DK3WG** is looking for Bird wattmeter slugs of 100 W or 250 W for 23 cm. (Check [www.nm3e.com](http://www.nm3e.com) for slugs). **NP4B** has a 15' Andrew's spun aluminum (solid) parabolic dish, f/D ratio = 0.33 for sale for \$Canadian600. He also has a polar mount available for the best offer. Contact Bob [np4b@arrl.net](mailto:np4b@arrl.net) or (905)525-3189. **K0YW** has available a DEM 1296/144 30 W vxtr. Bruce also has a 13' dish for sale. **K7XQ** has Hybrid for 1296 for sale ( Ebay Item # 9715077164).

**TECHNICAL:** PA0PLY's Double T-match - Since the performance of my EME antennas became remarkable poorer over time, I decided to investigate the reason for this degradation.



PA0PLY's Double T-match

As my antennas cannot be reached easily, I also decided to fix some of my yagis' other problems at the same time. Both 4-way splitters were replaced and all the phasing lines changed. To solve the yagi's degradation problem, I employed a Double T-match. Although known for lower frequencies, I found no practical information on using this type of matching for 432. Experiments and my results in applying this matching to my 70 cm yagis are described at <http://home.tiscali.nl/pa0ply/t-match.htm>.

**JT CONTROVERSY – SOME THOUGHTS FROM K2UYH:** There has been a great deal of discuss on DJ5HG's article on what constitutes a QSO. I am in general in full agreement with Klaus' concepts. I warned of the problems of block encoding more than 25 years ago. However, I can't help feeling that much of the present discussion on JT is more relevant for 6 and 2 m applications were the advantage of JT is greater. On 432 and even more so on 1296 as demonstrated by DL3OCH's recent dxpeditions, I have never been able to QSO a station without first identifying the signals on the spectral display. When significant interference is present, as I have on 432, it takes a significant amount of human pattern recognition to find the right signals. Once you see the patterns, the reports, ROs, Rs and 73s, can be better recognized by eye/brain than computer (JT does a reasonable job, but I trust my eye/brain more than the computer). I always know for sure that I am detecting a weak "ham" signal before JT actually decodes the calls. Of course, I can not decode the calls from the spectral display and often the signals are too weak (or distorted) for JT to decode them. I have on very rare occasions had false decodes, but the resulting characters have been always obviously in error. I have more often seen false decodes reports, but if one occurs it is easy to verify that it makes no sense from the spectral display. Maybe I am deluding myself, but there seems to be a lot more to working weak stations on JT than having the computer do all the work. One of the differences in my case is that I do not have a reflector on giving me feedback during the contact. I do not use the Internet in my ham shack. I still much prefer CW to JT, but it is increasing the number of new stations available to work.

**FINAL:** I am sorry to report the well known VHFer and 432 EME operator, WA4MVI is a silent key. Jim was 59, and died of cancer on 26 March.

? EME2006 – Rainer (DF6NA) [df6na@df6na.de](mailto:df6na@df6na.de) wants to remind those who want to attend the 2006 EME Conference in Wuerzburg, Germany that it is time to register. When you have pre-registered <http://www.eme2006.com/>, you should do the final registration now. The web page will show you the total fee and how to pay. The committee needs the funds. [US and Canadian stations may send their payment to me (Al Katz, K2UYH, School of Engineering, The College of New Jersey, PO Box 7718 Ewing, NJ 08628) to save bank processing charges. Please send checks in US dollars]. It is also recommended to book the hotel soon. It appears that the attendance at this conference will set a new record – see you in Wuerzburg!

? Tom WA8WZG, Tony WA8RJF and the VHF Weak Signal Group invites all weak signal VHF, UHF and Microwave enthusiasts to the 13th Annual VHF Weak Signal Group banquet to be held on Friday evening May 19th, 2006 at the Holiday Inn Dayton North, 2301 Wagner Ford Road, Dayton OH 45415. The cash bar opens at 6:15 PM. Dinner will be served starting at 7:15 PM and prizes drawn at 9 PM. Reservations are required. Cost per person is \$35. Send \$35.00 per person and SASE to: Tony Emanuele WA8RJF, 7156 Kory Court, Concord, Ohio 44077-2221. Please include the names and calls of all attendees as well as an email address.

? I have more, but I have run out of time. With so many EME related events, it is hard to keep up. I will have more next month and try to catch up then. I shall be looking for you all in the DUBUS Contest on 1296 and the 70 cm AE. 73, Al – K2UYH



WA6PY by his dish set up for 1296 EME