432 AND ABOVE EME NEWS
JULY 2007 VOL 35 #7

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
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) & CW LISTS
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@ieee.org [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: The past month produced some good times! The conditions and activity during the 1296 CW part of the European (DUBUS/REF) EME Contest were some of the best I have experienced. Certainly the number of BIG signals was unprecedented. The recent dxpedition activity was also unprecedented. TF/DL1YMK achieved the first tri-band (70, 23 and 13 cm) EME dxpedition ever! Almost every report includes praises for Michael and Monika. DL3OCH put China (BY4RSA) on 1296 EME for the first time and provided both CW and JT QSOs. WY6G from Hawaii stirred up 432 activity and gave a new state and country to a few stations. The 3456 activity day on 17 June was also a rousing success and is sure to be repeated – TNX goes to G3LTF for promoting this idea. The first 13 cm JT QSO between OK1KIR and VK7MO was also made in June. There was a surprise appearance by the Jodrell Bank 300' dish on 70 cm EME during the June 70 cm CW EME Activity Time Period (ATP) under the special call GB50EMJ in celebration of their 50th year – see report. The next 70 cm ATP will be 7 July from 2300-0100 and 8 July from 0700-0900. I expect things to slow down during July and Aug, but to heat up again in Sept with the ARRL EME Microwave Contest on 29/30 Sept. The 50 to 1296 weekends will 27/28 Oct and 24/25 Nov. There are some significant rule changes this year. The highlights of which are listed toward the end of this newsletter (NL).

AD6IW: Rex (KK6MK) rexa@sonic.net reports on the actives of the Jamesburg 30 dish group during 23 cm part of the DUBUS/REF EME Contest -- Things went beautifully on 1296 for the EME CW contest. We were running 120 W with a 0.6 dB NF preamp with the 29.6M dish from CM96ek. A new 1296 feed was installed and worked great. Problems with the dish drive system were worked out, so we had full computer control of the dish for the first time. The excellent F1EHN software (see http://www.f1ehn.org/) controlled the dish through our custom software interface and kept us right on the moon all weekend - much better than turning knobs. We used Goran's call, AD6IW. Goran and Jim, N9JIM, were our operators. We ended up working more than 50 different stations on 6 continents! A good number of people showed up for a look-see during the weekend and we had a big meal after the contest Sunday evening.

TF/DL1YMK, Michael & Monika, Iceland dxpedition QTH

AL7RT: Dan k5wxn@aol.com was active on 23 cm EME. He was very happy with the activity during the Eur Contest and worked 13 stations. After the contest Dan added OZ6OL and AD6IW to bring him up to initial #25. He has also added a new WD5AGO preamp.

DD7PC: Marco marco.scholz@citi.com is setting up for 23 cm EME – I have heard before 2 big guns on CW and copied on JT65 G4CCH at -24 dB and K2UYH at -26 dB. I came close to a CW QSO with HB9Q. My Rig is just 170 W and a single 1x48 Flexa yagi, 18.5 dBd with KR400 and KR500 rotator. I am motivated by the little success I had so far to improve my system.

DJ9YW: Heinrich DJ9YW@t-online.de had a good time via EME on 23 cm with JT65 –- I added new DXCCs on 23 April with OY/DL3OCH, on 24 April TF/DL3OCH, on 12 May TF/DL1YMK on CW and on 20 May with very rare BY4RSA to bring me to DXCC #67. I also ran my own mobile mini QRP EME test in May and QSO'd K2UYH and G4CCH on JT65C.

DJ9YW/p mobile 1296 EME from JO41qw

DL3OCH/BY4RSA: Bodo dl3och@gmx.de adds another of firsts on both JT and CW with his China dxpedition -- I worked 4 stations on CW: HB9Q, OE9ERC, OZ4MM and F2TU. The dish makes a big difference ~5 dB). I also worked in Eur most of the regulars on JT65C: DJ9YW -22 dB, G4CCH -19 dB, HB9Q -14 dB, etc. In NA only W5LUA was QSO'd with a -22 dB signal. You can not imagine what interest our activity has created. When we first started EME operation there was somebody from the newspaper, a team from a TV station and a lot of local hams. Michael, BD5RV told me that he has been snowed in with e-mails and congratulations directly from the President of the Chinese Amateur Radio Club. BA1RB is publishing a book and wants to include the EME story. We have awakened a sleepy giant! Michael told me that our activity created a huge interest. They want to invest a lot of money to become VERY active on EME... and not just 23 cm, but also 2 m and 70 cm. I gave 2 lectures about EME. Michael says that they plan to be on air in about one month. They have applied for the call sign BT4EME and have located a huge dish for a special activity, similar to 8N1EME. Michael is just as crazy as I am and we talked already about activating XX9 and VR2 on 23 cm. We would use his small 1.8 m portable dish.

BY4RSA dish and operating position

WY6G - K2UYH operating while WY6G tries to keep the shack from blowing away

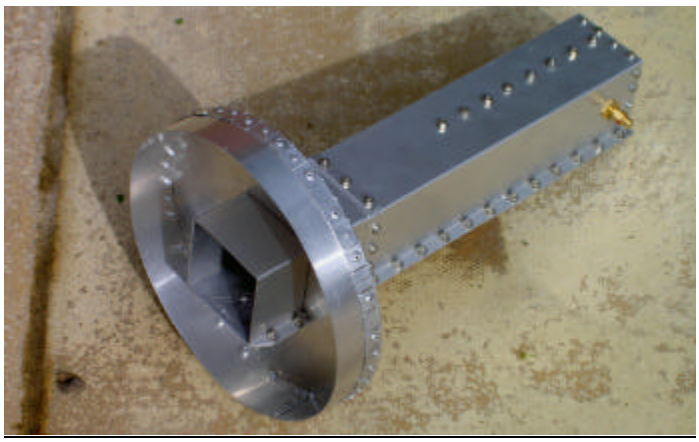
DL4MEA: Günter guenter.koellner@nsn.com sends the following thoughts on 9 cm -- The majority of the activity appears to be on 3400, so might we agree that 3400 is the primary goal of 9 cm EME? I am currently fixing problems with my 23 cm and 13 cm gear, but I have all parts at home in order to become QRV on 9 cm. As long as there are just a few now QRV, this might be a chance to create the norm. I know how complicated it is to have three bands going on EME. On 23 cm I measured 11 dB of sun noise without having the feed perfectly in the focal point. This is nearly 4 dB more than during that recent (frustrating for me) contest, so there is definitely some progress here.

DL9KR: Jan had good results in May/June. He added initial with TF/DL1YMK, OK3RM, K5QE - on the horizon, ZB2/DH7FB in Gibraltar and CU2E to bring him to DXCC 95 and initial #855. He was not able to work WY6G in HI despite two tries due to tree blockage. During the June 70 cm CW ATP he QSO'd Jan QSO'd SV3AAF with good (559) signal and then GB50EMJ on 432.065. He copied GB50OEMJ first on lower SSB first and then worked them on CW.

F5JWF: Phil f5jwf@wanadoo.fr writes on his recent 23 cm moon activity -- I was active during the 1296 DUBUS EME Contest on 19 and 20 May. There was very good activity with a lot of new stations. I worked VK3UM, OK1CA, HB9Q, OZ4MM, OH2DG, G3LTF, G4CCH, HB9BBD, IK2MMB, IK1BPN, K5JL, K4QI, VE6TA and WA6PY. I have had a problem with my TX driver and my output power decrease to about 70 W. Thanks to WA6PY and OZ4MM who make their best to detect my signal with such low power. My station is a 3.7 m dish with 120 W at the focal point and a 0.7 dB NF on RX.
I expect to be QRV on 13 cm for the fall ARRL Microwave EME Contest with about 200 W.

F5HRY: Herve F5HRY@wanadoo.fr writes about his renewed 23 cm operation -- I have been off 23 cm EME for a while as I had several problems: Instable output power from my TH338, which I fixed with an extra piece of PTFE, and Bad reception from a bad solder joint in my quadrature hybrid. Everything now seems ok. I worked on 21 April LX1DB for initial #54 and K9SLQ #55 (very loud), on 13 May RW1AW #56, and 19 May SM3AKW, G4CCH, HB9Q, K2UYH, K5JL, AD6IW #57 (not that loud), OZ4MM, VE6TA #58, K4QI and LX1DB. The rig is a 2.6 m dish (old F1ANH prototype for his 8 m dish) with 450 W at the feed. I am thinking about changing this dish (despite its human value for me) to a bigger one, but have reservations because of how the digital stuff is growing, even on 23 cm. The fact is that I have no desire to work hard to see things change as they have on 144 and 432 (i.e. death of CW). So, you guys, 23 cm EME operators, if you mean to move to massive computer QSO parties, please let me know, this will save my time. [I do not think it is correct to equate the situation on 70 cm to 2 m. The majority of QSOs are still by CW on 70 cm. On 23 cm you can make many QSOs on CW even with a modest antenna (2.6 m dish for example). For this reason, I do not believe we will ever see JT has the impact on 1296 that it has had on 144].

G3LTF: Peter g3ltf@btinternet.com comments on May and June EME – First I want to congratulation Michael and Monika for a fantastic effort with the first 3 band EME dxpedition. A tremendous lot of time and preparation went into it and it paid off. I worked on 12 May on 1296 LA9NEA and then TF/DL1YMK for initial #254 DXCC 45, on 13 May on 432 TF/DL1YMK for initial #401 and OK3RM #402 - a new station with a good signal from 4 yagis, and on 16 May on 2320 TF/DL1YMK for initial #45 and DXCC 21. I stayed around to give M&M a beacon signal and also worked GW3XYW, G3LQR and VE6TA. In the DUBUS 1296 contest there was high activity and good conditions. I worked on 19 May VK4AFL, KL6M, OZ4MM, RW3BP, SP6JLW, VK3UM, HB9BBD, SM5LE, JA4BLC, ZS6AXT, PA3CSG, SM3AKW, DL4DTU, JA6AHB, LX1DB, HB9SV, IK2MMB, ES5PC, F5JWF, LA9NEA, RW3PX #255, RW1AW, OK1CA, OH2DG, G4CCH, IW2FZR, IZ1BPN, DL4MEA, HB9Q, DK0ZAB, VE6TA, AD6IW #256, K5JL, WA6PY, NA4N, K4QI, PY5ZBU (making WAC in just 10 hours operation!), K2UYH, WW2R, AL7RT #257, OZ6OL, IK3COJ, and on 20 May VK4TL, OK1KIR, GW3XYW, LA8AV, LA8LF, K5SO, ES6RQ, K9SLQ, G3LQR, G4CCH (SSB chat), ON4BCB and W7UPF. This is virtually the same score as I achieved in the ARRL contest, but with a few more initials. Got-aways were OE9ERC, UA3DJP (I never heard him call CQ), W2UHI, JA8ERE, JA4LJB, and ON7UN. On 20 May I also had an incomplete QSO on 1296 with another new station,RA3EC who has a bad chirp and drift and was in the QRM. I copied him as RA3RCC as did others. He will be easily workable (3 m dish and 100 W) when he gets the system improved a bit more. I'm still puzzled as to why there are not more new stations coming on 1296 from the US and Canada. On 9 cm I now have a circular polarized feed working using a square septum design - see picture and http://www.w1ghz.org/antbook/conf/septum_feed_with_ring.pdf. I will have some notes on my own septum experiments for the NL soon. During the activity day on 17 June I QSO'd on 3400 VK3NX, OK1KIR, IX1DB and G4NNS, cross band VE4MA and on 3456 W5LUA and OK1CA.



G3LTF's 9 cm Septum feed

GB5EMJ: Dave, G4RGK, g4rgk@btinternet.com reports that those active on 70 cm EME on 16/17 June weekend may have heard or worked GB50EMJ -- This was a Special event station set up to provide uplink capabilities to the Jodrell Bank Literary Festival celebrating 50 years of the Lovell Telescope, http://www.jb.man.ac.uk/viscen/events/FirstMove.html. The main focus was to uplink the audio from the Auditorium to the Moon where it was then received by the Lovell Telescope (Earth-Moon-Jodrell) and replayed to the audience in the Auditorium. Those of you who were pointing at the Moon at the time will have heard some strange sounds transmitted on LSB as the poems were read in succession and relayed to the Moon. The Poems were written as part of a Times competition, http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/books/poetry/article1839649.ece. In addition EME stations were invited to call Jodrell Bank so that their signals could be heard live in the hall and recorded. The results of that are posted at http://www.jb.man.ac.uk/public/im/eme.html. During free time CW EME QSOs were made with VK3UM, DL9KR, SM2CEW, UA3PTW, DL7APV, OZ4MM, KL6M, SV1BTR and SM3AKW using the uplink station. All station heard/worked will be sent a special card from Jodrell Bank. [I believe Dave was instrumental in making this all happen and show be recognized for his effort]!

GM3SBC: Ed is a new stations on 23 cm using a 3.2 m dish, circular patch feed and a 125 W SSPA. He worked a number of stations during the Eur EME contest on CW and can also operate JT65. Ed is interested in skeds and can often be found on the ON4KST EME reflector, although he currently has e-mail problems. [Tnx G4CCH for this info].

GW8IZR: Paul paul@greenrover.demon.co.uk is QRV on 70 cm with 4 yagis and a GS23 PA. He has worked HB9Q and heard VK3UM and is looking for skeds on CW.

K4QIF: Russ K4QI@aol.com was on 1296 for the European EME Contest -- Conditions seemed good with echoes very strong at times. The following were worked: IZ1BPN, DL4DTU, G4CCH, W2UHI, SP6JLW, ZS6AXT, IK2MMB, RW3BP, VE6TA, KL6M, ES5PC, IK3COJ, ES6RQ, OH2DG, K5JL, WA6PY,

AD6IW, F5JWF, SM3AKW, PY5ZBU, G3LTF, IW2FZR, OK1CA, K2UYH, OZ4MM, ON7UN, HB9SV, IK2RTI, N0OY, F5HRY, OZ6OL, LX1DB, WW2R, AL7RT, JA8ERE, JA4BLC, JA4LJB, JA6AHB, VK3UM, RW1AW, LA8LF, OK1KIR, K5SO, GW3XYW, DL4MEA, ON4BCB, OE9ERC and W7UPF. All QSOs were on random. My total was 48 QSOs and 42 multipliers. Earlier I worked KH7X on random.

K5SO: Joe k5so@valornet.com had some HV problems during QSO with TF/DL1YYMK -- I imagine that Michael [DL1YMK] was pretty confused during our QSOs. During our first QSO my HV supply decided to kick off intermittently as we were concluding our QSO. It had never done that before so I was confused as to what was happening on my end! I thought it had settled down when I called him later to explain, but it kicked off again while I was sending, and I gave up trying to explain via the moon. Later I discovered that my drive to the final amp had crept up and was causing my HV supply to kick its circuit breaker. I was pushing it too hard – hi. It was great fun hearing Michael from Iceland. On behalf of all EMEers I send my thanks for the wonderful effort in putting Iceland on the moon. I also worked SP6JLW.

KL6M: Mike kn6m@aol.com is working on numerous projects – I have my azimuth improvement project ~ 10% complete, new 1296 PA ~ 15% and 2304 system permanent installation ~ 95%. I also picked up a couple 25 W SSPAs for 5760 and a 100 W TWTA, but still to build a 5760 transverter and feed. During the DUBUS Contest I made on 432 - 38 QSOs, 1296 - 39 QSOs and 2304 - 17 QSOs.

LX1DB: Willie wbauer@pt.lu was active on 9 cm in May/June and made the first VK-LX 9 cm contact with VK3NX, which should be a distance record. He has now worked VK on all bands from 80 m to 10 GHz. During the 9 cm EME tests on 17 June he worked OK1CA, G3LTF and G4NNS and possibly others. The moon was too low for VK3NX. Willie says 9 cm is a very nice band when using CP. During the 23 cm part of the DUBUS Contest he made 28 QSOs.

N2UO: Marc n2uo@arrl.net now in NC was active in May on 23 cm and added K0YW, TF/DL1YMK, K2UYH, W7BBM, VE6TA and W5LUA. Marc is Working on a bigger dish – probably 20' for his new QTH.

OK1CA: Franta ok1ca@ges.cz sends news on his recent 1296 activity -- I was QRV on 19 May for the TF expedition, and worked TF/DL1YMK on both 23 cm and 13 cm – TNX Michael for nice contacts. I also worked 41 QSOs during DUBUS EME Contest on 23 cm with 5 initials from RW3EC, YO2IS, TF/DL1YMK, AD6IW and N0OY. I heard BY4RSA on 20 May. The signal was strong enough for a CW QSO, but Bodo was QRV on JT at the time.

OK1KIR: Jan (OK1VAO) writes about their (his, Vladimir and Jan's) spring activity — On 10,368 we worked in EU Contest on 25 March at 0850 OK1CA (559/569), 0908 VK3NX (549/549) for initial #34, 2212 IQ4DF (579/559), 2216 F2TU (559/569), 2227 SP7JSG (O/O), 2309 RW1AW (569/569) and 2312 RW1AW (54/55) on SSB. On 1296 we worked on 19 April at 1741 LX1DB (579/579), 1931 OZ6OL (559/559) and 2004 F2TU (569/569), on 20 April at 0606 RW1AW (569/569), 2110 WA5WCP (549/569) for initial #234, 2127 G3LTF (559/559), 2157 G4CCH (569/569), 2202 AL7RT (549/549) #235 and 2202 KL6M (549/569) – heard was WB2BYP, on 21 April at 0634 KH7X (549/559) #236, DXCC 46, BL field and the 1st KH6-OK 23 cm QSO, and on 12 May at 0547 HB9BBD (589/579), 0630 RW1AW (579/579) and 0807 TF/DL1YMK (559/559) #237, DXCC 47, HP field 37 and the 1st TF-OK 23 cm QSO. In EU contest we worked on 19 May on 1296 at 1501 IZ1BPN (549/549) #238, 1408 OH2DG (569/559), 1418 TF/DL1YMK (559/559), 1448 SM3AKW (559/559), 1641 AD6IW (579/559), and on 20 May at 0636 AD6IW (579/559) for our first CA via an east moon window - elevation was 2.5 degs at start of the QSO, 0649 ES5PC (559/559), 0815 BY4RSA (21dB/23dB) on JT65C for JT {#18} and the first BY-OK 23 cm QSO, 0849 VK3UM (569/559), 0932 DL4MEA (559/559) #239, 1100 DJ9YW {8dB/7dB} JT65C for {#19}, 1201 JA6AHB (O/O), 1212 G3LTF (559/569), 1215 RW1AW (569/559), 1219 ZS6AXT (559/569), 1315 IW2FZR (549/559), 1330 OZ4MM (579/569), 1413 GW3XYW (559/569), 1444 SP6JLW (549/559), 1449 LA8AV (559/559), 1542 SM5LE (M/M), 1555 RW3BP (549/559), 1600 ES6RQ (569/569), 1604 K5JL (579/559), 1650 W2UHI (559/559), 1657 OZ6OL (559/559), 1710 IK2MMB (559/569), 1715 K4QI (559/559), 1718 VE6TA (569/559) and 1724 K2UYH (569/569). We heard new stations: F5HRY, F5JWF and W7UPF. On 9 cm we made our first tests on 17 May and worked at 0833 G3LTF (O/569) for initial #1 and 1615 OK1CA (O/549) for #2. We heard VK3NX (O) and our own echoes. Signals were better on 3456 than on 3400, but we have no license for this frequency. We used our 4.5 m solid dish with horn and had the possibility to rotate our polarization. On TX we had 20 W out (OK license limit) and on RX (3400/3456) a bad LNA about 4 dB NF. On 3400 MHz we had Moon noise of 0.35 dB, Sun noise of 7 dB and G/CS 2 dB and on 3456 G/CS 2.2 dB. All figures were slightly lowered latter on during the sunny day. We found problem directly in our LNA, when we excluded all RF cables and the relay. The NF of NE32584C LNA was ~ 3.5 dB because of "low-loss" pseudo-PTFE PCB. This explains noise temperature of system of about 450 K. On 13 cm we were active and QSO'd in EU contest on 21 April at 0811 ES5PC (559/569), 0850 F2TU (559/559), 0932 IW2FZR (549/559) for initial #61, 1028 OH2DG (569/559), 1047 OZ4MM (569/569), 1105 DL0SHF (579/559) #62, 1133 OE9ERC (569/559), 1154 G3LTF (569/559), 1204 RW1AW (579/569), 1225 DL4MEA (549/539), 1232 G3LQR (549/549), 1250 HB9SV (569/569), 1300 IK2RTI (549/559), 1350 SM3AKW (559/559), 1455 OH2AXH (569/559), 1625 VE6TA (549/559), 1721 NA4N (549/559), 1807 WD5AGO (549/559), 1819 WA6PY (559/559), 1943 K2UYH (549/559), 2304 WW2R (O/O) and 2316 KL6M (O/O) #63, DXCC 23, BP field and 1st KL7-OK 13 cm QSO - moon was near our west horizon. On 22 April we worked at 1922 W5LUA (559/559), 2009 LX1DB (579/559), 2039 K5GW (559/559) and 2114 OK1CA (559/559). Unfortunately we were not able to QSO any JAs due to local QRM (S7-9) on 2424 MHz from a local community WiFi network. On 24 April we worked at 0019 KH7X (449/449) #64, DXCC 24, BL field, OK ODX 12044 km and our 5th continent. Our moonset was 2 minutes after QSO with Bruce. On 16 May at 1146 we worked TF/DL1YMK (549/549) #65, DXCC 25, HP field 19 and 1st TF-OK 13 cm QSO. 22.5. We worked in initial sked WA5WCP 549/549 for #66. We worked 13 June using JT65C on 2301.965 at 0207 VK7MO (-18dB/-25dB) for 13 cm JT #1, first VK-OK 13 cm EME QSO, QE field and a new OK ODX of 16,383 km. It seems that there is the fourth frequency sub-band on 13 cm in VK. For all we had problem with QRH ~ 120 Hz during one JT period and mutual Doppler, but were able to decode Rex's signal. Om 16 June we worked again at 0540 VK7MO (O/O) (-15dB/-18dB) after improving the stability of our Local Oscillator. The mutual Doppler was also only several Hz. This QSO was very easy. We were in QSO for almost one hour. Signal went down to "no visible trace" on waterfall and back up to -20 dB because of trees on Rex's site. (The day went bad late in the afternoon when we lost the tracking system. The power relay for motion control produced a well known unwanted electric smell). To complete WAC on 13 cm and on 6 cm, we are missing only South America. Are there any dxpeditions planned? On 70 cm we achieved on 14 May at 1114 only a partial with TF/DL1YMK (M/M), but no Rs, and had similar results with WY6G. We copied them best -19 dB on vertical pol, but did not receive any reports. Special TNX to all the dxpedition operators (Bruce, Bodo, Monika and Michael and their support teams).

OK3RM: Zdenek z.hofbauer@centrum.cz is a new station on 70 cm EME. He has 4 yagis and 300 W. He had problems with winds (about 100km/h) in May but had a good QSO with and VK4CDI (-26 dB). He is interested in skeds.

OZ4MM: Stig vestergaard@os.dk notes the middle 10 days of May were great on EME with very good conditions and filled with dxpeditions and contests -- I worked the following initials on CW: on 432 on 13 May at 0633 TF/DL1YMK (O/O) for initial #285 and DXCC 50, on 2320 on 16 May at 1317 TF/DL1YMK (O/O) for initial #63 and DXCC 24, on 1296 on 12 May at 0813 TF/DL1YMK (559/559) UFB, and in the DUBUS contest RA3EC (O/O), RW3PX (O/O), EA2LU (449/O), AD6IW (589/589), AL7RT (549/559), YO2IS (M/O) and LA8AV (559/569). During the contest I got 61 stations in the log and still need to count the multipliers. On Sunday I heard DL3OCH as BY4RSA working JT skeds. We arranged a sked for Monday, and he was easily worked on CW with (O/O) giving me #279 initials and 54 DXCC on 1296 EME CW. Many thanks for the outstanding effort to Mikael & Monika from TF and Bodo from China.

RW1AW's new 1296 dual mode Septum feed

RW1AW: Alex rw1aw@appello.de worked the following stations on 23 cm random CW on 12 May at 0458 DK7LJ (58/58) on SSB, 0504 HB9BBD (58/58) on SSB, 0543 G4CCH (57/56) on SSB, 0634 OK1KIR (579/579) on CW, 0716 F2TU (58/57) on SSB, 0802 TF/DL1YMK (569/559) on CW – big pile up, 0930 SM3AKW (579/579), 0937 IZ1BPN (579/579) on CW (#) initial. He end the DUBUS Contest on 432 with 14 QSO x 14 mult for 1,400 points, on 1296 with 45 QSOs x 37,mult for 4,500 points, on 2304 25 QSOs x 22 mult for 5,000 points, on 5760 9 QSOs x 9 multi 9 for 1,800 points, and on 10368 14 QSOs x 12 mult for 2,800 points and a total on all bands (including 2 m) of 123 x 109 = 17,100 points. Alex added a new 23 cm dual mode septum feed of his own design that provides more than 34 dB of isolation and give > 1 dB improvement in sun noise. He used this feed in the DUBUS Contest. Information on this feed can be found on his web site at http://www.vhfdx.ru. Since the contest he has upgraded his 8 m dish to 9 m (f/d is now 0.5).

RW3BP: Sergey rw3bp@co.ru writes -- This year we participate in the 1296 part of the EU EME Contest as multi operator QRP station. The second operator (really the first) was Dmitry, RA3AQ. My dish was the same as before - partially extended 2.4 m offset with an equivalent diameter of about 2.8 m. But it was the new feed and new preamp that made the difference. The feed is two mode horn with a stepped section and improved septum polarizer designed by RA3AQ. Details can be found at http://www.vhfdx.ru/component/option,com_remository/Itemid,0/func,download/id,220/chk,e0cd0427c413c19a4bc39cf267a1abc2/. The preamp is my HB with an NE334 in front. It gives from 2 to 3 dB improvement in S/N. Sun noise to cold sky ratio improved from 10.5 dB to 13.6 dB for an SF=75. The system temperature is better then 30 deg K. As a result 500 W (GS34) with 1 dB coax loss was too small a power. There were few stations we called many times with no reply. Heard and called were SM5LE, LA8AV, NA4N, JA8ERE, PY5ZBU, F5JWF, PA3CSG and W7UPF. We worked a total of 44 stations. A prize was working TF/DL1YMK on random.

RW3PX: Yuri rw3px@yandex.ru made his first QSOs on 23 cm during the DUBUS contest. He worked OZ4MM, G3LTF and HB9Q. Yuri is running a 4 m dish, GI7B water cooling PA with about 170 W out and an ATF54143 pre-amp.

SM2CEW: Peter was active off the moon in May/June. On 23 cm he added initials with YO2IS, and 70 cm with TF/DL1YMK, but did not have good luck with WY6G. He copied them with an excellent signal – listen at http://www.sm2cew.com/wy6g.html, but when he went to transmit there was a glitch in the PA and he could not reset the protection circuit again - (3 Zeners in the bias had blown). Peter now has a 13 cm DB6NT transverter and looking forward to getting on EME on this band too.

SP7DCS: Chris sp7dcs@o2.pl was an SWL in DUBUS contest on 23 cm and just about QRV -- After some long hard work, I am happy to announce my first SWL success on 23 cm CW EME. I managed to put up a 3 m solid dish (0.34 f/d) with an OK1DFC design Septum Feed. I use an RAS rotator that is doing FB job and can handle this dish without any problem. I had only about 4 hours of time to listen during the contest, but I managed to hear HB9Q, HB9BBD, OH2DG, HB9SV, K2UYH, K5JL and OZ4MM. All signals were good, but some were just HUGE. I also heard many other signals that I could not identify. Most of them were strong but with QSB. I must get used to this type of signals on 23 cm EME. It was also difficult to catch callsigns during very short RX/TX periods during the QSOs of the big guns. My system is not optimized yet. Even my feed may not be placed in the best position. For a first trial I am satisfied. By the next contest I hope to have a better feed mounting, improved my RX and finish my GI7B PA. I have only 35 W at present.

SV3AAF: Petros sv3aaf@yahoo.com is located in KM17ko and now QRV on 432 CW -- I completed my 1st EME QSO with SV1BTR (419/429). On 17 June I was on for the CW ATP and worked at 0716 VK3UM (O/O), 0752 KL6M (O/O), 0759 DL9KR (559/559), 0820 UA3PTW (O/O), 0831 OZ4MM (539/549) and 0857 DL7APV (O/O). All stations worked were during the first slot. In the second slot conditions deteriorated after 1740 and I made no QSOs. This is my first run at 70 cm EME system. I found that improvement is needed on the RX audio side and have already started working on it. I am using 4 x 11 wl crossed yagis, GS23 PA and a 0.4 dB NF preamp.

TF/DL1YMK: Michael (& Monika) dl1ymk@aol.com had a hugely successful trip to Iceland providing EME QSOs on 70, 23 and 13 cm -- This year our EME CW dxpedition was bound for TF-land. It was planned to do it as a 3-band event, but until the very last minute it was questionable, if we really would be active on 70 cm as a starting band, whereas the equipment for 23 cm and 13 cm was all ready in time. It was only due to perseverance of our friend Bernhard Korte (BeKo-SSPA's) that one day before we left for TF a brand new very light-weight prototype of MOSFET-HPA arrived with an integrated SPS from him to test it in the rough EME-field. We were active from 12 May to 20 May with a storm break of two days. During the whole of our operation we had to fight against high gusty winds with quickly changing direction and hail/snow showers. For the two storm days, we had to remove the mesh panels from the dish; otherwise without doubt we would have lost the antenna. On the 19th in the morning during the DUBUS Contest, Monika stood in the cold at 2°C for not less than 5 hours to stabilize the dish against the heavy gusts by clinging on to the counterweight, while I gave out a multiplier as TF/DL1YMK to those interested. The trip was precisely planned and organized by Monika as in the previous years. The location was thoroughly chosen for a maximum of moon window. Our holiday home in HP84us was again close to perfect and we got a lot of support by our landlords. The equipment from 70cm to 13 cm worked flawlessly without any defect from start to finish. Especially on 23 cm we worked many stations on random before their sked slots; unfortunately for the 13 cm skeds, we had to rearrange some of them by mail, as we could not make it for the scheduled activity on Thursday the 17th because of storms moving in from the North. Last year's operation from CT3 was a highlight, but this year we were even able to outperform last year's score. In total we made 94 QSOs via the moon, which split up to 13 initials on 70 cm, 53 initials on 23 cm (with 14 dupes during the contest) and another 14 initials on 13 cm. All stations worked are listed on <www.dl1ymk.de> - (many TNX to DF6NA). A big thanks also to K1RQG, who gave the basis to this successful dxpedition by arranging the skeds for us, as well as to all moonbouncers, who waited patiently for us to show up on the moon.

UN8GC: Mike mike.chirkov@un8gc.com is planning on being the first station on 23 cm from Kazakhstan. Mike has a septum feed and an IC910. He is looking for a LNA and PA.

VE4MA: Barry ve4ma@shaw.ca was active on 1296 and 2300 in May looking TF/DL1YMK with out success, but did hear on 1296 N2UO, K2UYH and W5LUA very FB. Barry is also working on his OZ9CR PA that has been acting up and needs to be re-neutralized. He did get his 3400 system running and copied W5LUA and G4NNS the first day of the 9 cm tests.

SP7DCS's new 3 m dish for 1296 EME

VE6TA: Grant ve6ta@telusplanet.net had a very good month. On 23 cm he worked N2UO in NC for initial #148, LA9NEA, TF/DL1YMK #149 (also worked on 13 cm) and heard W5LUA before the DUBUS Contest. He worked a lot in the contest on 23 cm despite some degradation when the moon was below 20 degs. The loudest station was HB9SV. F5HRY was a new one, but Grant missed a lot of NA stations. He is now up to initial #152. He is also working on 3 cm and has almost everything ordered for this band.

VK3UM: Doug tikaluna@bigpond.com reports on his DUBUS 23 cm EME Contest results -- The highlight of the 23 cm DUBUS Contest was working Michael and Monica at TF/DL1YMK in the gale force winds. The contact was even more memorable for it was accomplished via the 'long path' (my Moon rise and their Moon set) during our very limited window. The other difficult QSO was with RA3RCC. It took ~30 minutes to complete given his TX problem with drift, FM and Chirp. Took me back to copying a sounder! But we made it by sheer persistence! There were many stations with huge signals as can be seen from the reports. I also had several SSB chats during periods of diminished activity with AD6IW and K5JL. Again the activity during my window was a lot less than those reported else ware. You can only work those that are on, and I

don't think I missed anybody. Conditions were quite stable except for deep fading present for about an hour around 0030 on 19 May. QSO'd were on 19 May at OO11 VE6TA (569/579), OO30 AD6IW (449/579), OO34 K2UYH (549/549), OO37 K5SO (569/569), OO44 JA8ERE (559/569) OO48 JA6AHB (559/579), O105 VK4AFL (569/569), O112 KL6M (569/579), O537 ES5PC (559/579), O540 RW3BP (559/559), O549 RW1AW (569/579), O601 SP6JLW (559/559), O609 OK1CA (579/589), O620 HB9QGE (549/559), O628 OZ4MM (559/559), O637 SM5LE (539/549), O650 HB9BBD (579/589), O658 DL4MEA (559/569), O701 IW2FZR (559/579), 0707 JA4LJB (559/579), O715 OH2DG (559/559), 0731 JA4BLC (559/569), O748 G3LTF (559/569) and O755 F5JWF (549/559), and on 20 May at O120 TF/DL1YMK (549/549), O204 K5JL (579/579), O207 K4QI (569/579), O210 WA6PY (569/569), O215 N0OY (559/569), O734 ES6RQ (549/569), O739 IK3COJ (549/559), O805 OZ6OL (569/579), O828 IK2MMB (559/569), 0846 RA3RCC (O/O), O850 OK1KIR (559/569), O900 HB9SV (579/579), O908 DL4DTU (539/559) and O927 VK4TL (539/559).

VK7MO: Rex rmoncur@bigpond.net.au reports completing the first JT65C EME QSO on 13 cm with OK1KIR on 13 June -- There was a problem with stability of OK1KIR's LO, but the QSO was completed (-18dB/-25dB). OK1KIR improved the stability of their LO and make another test on 16 June. The signals were better on both sides (-15dB/-18dB). Uploaded recorded signals can be found at www.qsl.net/ok1vao/VK7MO. Unfortunately signal strength was not enough to complete a CW QSO.

W5LUA: Al al.ward@avagotech.com was QRV for the 9 cm activity day and writes -- I tend to agree that focusing on 3400 would be better than 3456, since it does appear that all countries who have 9 cm can operate down at 3400. In the US and I believe Canada as well we have 3300 to 3500, but 100% of all terrestrial activity in North America is at 3456. Getting new blood in the US to migrate down to 3400 by building an entirely new transverter except for the LNA might be a tough task. I have separate transverters for 3400 and 3456 and I expect to keep both in operation. I would also agree that CP is the way to go. I struggled trying to get the customary polarizer screw type feed to have good return loss, isolation and circularity on both frequencies, so there is no doubt that the septum feed is the way to go in the future in order to cover both parts of the band. In the US, WA9FWD and NA4N operate at 3456 and I believe are linear. I would be interested in their thoughts about moving to CP on 3400. It was a fun weekend, but I still have feed work to be done. I was able to work G3LTF on both 3400 and 3456. I also worked G4NNS, OK1CA and VK3NX on 3400. On 13 cm I worked WA5WCP and VE6TA.

WA6PY: Paul pchominski@maxlinear.com writes -- During EUR 1296 EME Contest on 19/20 May I QSO'd W2UHI, IK3COJ, ES6RQ, K4QI, K5JL, G3LTF, SM3AKW, IK2MMB, VE6TA, SP6JLW, RW3BP, OK1CA, AD6IW, OZ4MM, IW2FZR, HB9SV – super strong signal, PY5ZBU, F5JWF, ON7UN, KL6M, ES5PC, K2UYH, N0OY, G4CCH, IK2RTI, JA6AHB, VK3UM, VK4AFL, JA8ERE, K5SO, G3LQR, OZ6OL, partial GW3XYW - got away, DL4MAE, W7UPF, RW1AW, AL7RT and JA4LJB.

WW2R: Dave ww2r_eme@g4fre.com sends the following report for May – Disaster on 2 May, my dish was hit by 81 mph winds, which sheared the two bolts holding the actuator to the mounting post, releasing the actuator. The dish swung over smacking into the concrete supports, bending the rim and popping panels. On 5 May I spent the day straightening out dish with a steel angle, 3 C clamps and a bench vice. This effort paid off, as on 15 May I worked TF/DL1YMK on 1296 for DXCC #25, and on 18 May 18 worked him on 2304 as well. During the 1296 CW DUBUS Contest I worked 18. The new ones were RW3BP (previously only worked on JT65) and G3LQR to bring me to initial #69. Hearing G3LQR's signal, my wife decided she wanted to work him as well, so he also got to work N2NQI for her 1st 1296 CW
QSO; a rare honor! CWNR were JA8ERE, LX1DB, F5HRY and DL4MEA. During the contest, I interfaced my SDR-IQ to my 1296 transverter with a microwave modules MMC144/28 receive converter. I was very impressed with its performance and now have a lot of the activity from the contest recorded on my hard drive! I am currently working on getting 9 cm gear running for the activity day. I built a VE4MA Superfeed from 2.5" copper tube, retuned the tropo transverter to 3400 and will use a separate receive converter for 3456. My PA gives 45 W at the feedpoint. [Bad WX trashed Dave's 9 cm plans for the June activity day].

WY2G: Herb wy6g@hawaii.rr.com and I tried our best on 70 cm, but it seemed that the stars (and moon) were against this dxpedition from the beginning. Our problems started when we had to move the dxpedition from 23 to 70 cm. The sun and moon were very close, but no other week was possible. I was in Hawaii for business and a high moon was essential to sked Europe. I had no luck locating a high power SSPA for 432 and ended up using my old 7650 PA, which created considerable complications. Then the equipment was damaged in shipping (my TS2000 was nearly lost). Fortunately Herb was able to make repairs before I arrived. Next the power control relay failed during testing and delayed use of the big PA a day. This failure also caused the loss of our best preamp. (We used a backup 0.7 dB NF ARR Preamp). Frequent high winds made holding the yagi on the moon difficult. The worst problem was the unexpected birdies and noise. The .030 sked frequency had to be abandoned. The noise was worst when pointed west and we never heard a signal in this direction. Our object was to make both CW and JT QSOs, but we had problems with JT and never decoded a signal even though we copied CW signals. We started operation on setting moon on 13 June with DL9KR, and heard nil. I believe Jan missed this sked, but we found a terrible noise problem that made reception on .030 impossible. We wrote K1RQG to move the skeds to 022 where the noise was not as bad. We were on again at rising moon (east at 1630) and were buoyed to easily work HB9Q – TNX Dan. We then had nil from G3LTF, nil W7CI – missed?, partial K0RZ (O/T), nil KL7HFQ and partial KL6M (-/O). These skeds were all made with only our 100 W driver. After we worked to get the big PA going. Herb found a relay and we were able to QRV with the 7650 PA for our 14 June skeds. We had two setting moon skeds (west) with VK3UM and DL7APV on JT. Both were nil. (We may have had a tracking problem for these skeds as I later discovered that the wind had caused the yagi's U-bolts to slip, which would have throw our calibration off). Over night I upgraded the version of JT that was also used for our CW keying and control – once I figured how to set up the RX, this worked quite well. Unfortunately when I tried to TX nothing happened! It turned out to be a setting in JT, but because we made other changes it took 15 minutes to trouble shoot. We did not start calling OZ4MM until 1720. Fortunately Stig stayed around and we were able to QSO. (He later e-mailed that the moon was beyond his dish's azimuth stop when he first heard us). I was amazed we were able to work as the Sun was < 7 degs from the moon. Because of the delay, we ran over into DK3WG's JT sked (only 15 mins) and missed most of it. I started calling DL7APV on JT, but heard nil from him as well as EA3DXU. We were using WSJT4 because of the earlier problem with 6. Nil was also copied on CW from G4RGK who though we were going to be on CW and DL1YMK (missed sked). Part of the copy problem may have been Faraday as Stig wrote we were vertical pol. We arranged reskeds with Bill and Mike as they still had a moon window and had another partial with K0RZ (O/O) and QSO'd KL6M (O/O) despite the close sun. We had to take the next day off because the moon and sun were in sync. We started up again on setting moon on 16 June with DL9KR. The moon was at 10 degs and looking into a house. Nil was heard. The following rising moon was our last chance. We were very hopeful because of the improved sun and moon separation; new skeds had been added and everything seemed to be working. But it was not to be. Our first skeds (starting 1800) were all on JT (DLAPV, G4RGK and OK1KIR). We copied nil. Not even one detect! I suspect it was our noise problem. The JT green line looked like saw teeth. We switched to CW at 1900 for DL1YMK, but Michael had storms and could not operate. We instead found OE9ERC. We thought Erich was in the next slot as I had not received the latest sked info. I started calling OE9ERC toward the end of this slot and into the next. Unfortunately Erich stopped calling at the end of his time. EA3DXU was scheduled for this time period, but I did not know this and completely missed Jose. SM2CEW was next, copied us but had TX problems. Thus nil was heard from Peter and K4EME who followed. Then our only high of the day, we completed with K0RZ (O/O). (Bill needed HI for WAS). Our final sked was with VK3UM. Doug reported copying us well (549), but we heard nil from him. I left with WY6G the yagi, Heliax and the 7650 PA. Herb, although getting on in years, is very capable and persistent. He plans to get on 432 and also eventually 1296 EME. I am sure he will make it. He mainly needs to add rotators. He has an IC910 and pretty much every thing else to be QRV.

K2UYH with WY6G 13 wl yagi– operating shack is on left

ZS6AXT: Ivo zs6axt@telkomsa.net is back on 23 cm EME -- With the great help of ZS6CBQ my EL drive works at least temporarily. I am not sure for how long this fix will last. It was running on Friday prior to contest and my measured sunnoise was only 12 dB! At least the output power was close to the old value. With no visible moon on Saturday, it took me a while to find the moon. I was very pleased to hear and work OZ4MM followed by OH2DG, G3LTF, OK1CA, ES5PC, SM3AKW, SP6JLW, JA4BLC, RW1AW, LX1DB, HB9Q, DL4DTU, IK2MMB, TF/DL1YMK for initial #218, HB9SV, IW2FZR, HB9BBD, VE6TA, IZ1BPN #219, K5JL, K5SO, K4QI and G4CCH, and on Sunday OZ6OL, IK3COJ, JA6AHB, RW3BP, OK1KIR, JA8ERE #220, LA8AV, GW3XYW, G3LQR, ES6RQ, K2UYH and AD6IW #221 for a total of 35 contacts. CWNR were K9SLQ and DL4ZA. Also heard were W2UHI, PY5ZBU, ON4BCB and LA8LF plus others. During both days, I had very strong gusty winds from an approaching cold front and on elevations below 15 degrees to the west had very strong QRM - like "falling stones" that completely wiped out PY5ZBU, who probably called me. We have few commercial coms towers in that direction and I never experienced such noise before on 23 cm. Despite the poor RX performance, I worked four new ones. It will take some time to get back on 13 cm, but I am working on a 3 cm EME dish; the equipment is ready. (I am also working on extending my tropo record on 24 GHz, no EME here, sorry). And that is all from here... I am bit better after my doc finally listened to me and examined my lungs, which I complained about. Now he agrees that they are not right and gave me inhalator, which greatly improved my performance. But, I cannot expect miracles, hi.

K2UYH: I a.katz@ieee.org did find some time for EME before our trip to Hawaii. I QSO'd on 12 May on 1296 at 1213 N2UO (559/559) in FM06 for initial #295* and CW initial {262}, on 13 May on 432 at 1100 OK3RM (23dB/O) on JT65B for initial #735* - we tried on CW, but never found him which was a surprise as I was hearing his JT signal well, and on 14 May on 432 at 1200 TF/DL1YMK (O/O) #736* {#695} and on 1296 at 1305 TF/DL1YMK (559/559) #296* {#263}. In the Eur 1296 EME Contest on 18 May at 2352 JA6AHB (449/559) – started before contest and ran over, on 19 May 0000 JA6AHB (O/O), 0017 AD6I (559/559) #297* {#264}, 0034 VK3UM (549/549), 1522 K5JL (569/579), 1526 HB9BBD (579/589), 1530 IW2FZR (569/579), 1533 IK2MMB, (569/569), 1539 OH2DG (569/569), 1522 RW3BP (559/569), 1601 OZ4MM (589/589), 1606 SM3AKW (569/569), 1615 SP6JLW (559/569), 1623 DL4DTU (559/549), 1640 QRZ?, 1655 ES6RQ (559/569), 1658 VE6TA (569/579), 1705 KL6M, (569/579), 1716 W7UPF (559/559), 1726 NA4N (559/569), 1743 F5HRY (559/449), 1754 DL4MEA (569/569), 1804 G3LTF (569/579), 1811 N0OY (559/559), 1815 K4QI (569/579), 1830 DJ9YW/p (26dB/O) JT65B – non contest QSO #295*, 1900 IK3COJ (559/569), 1905 ES5PC (559/579), 1932 WA6PY (569/559), 1947 LX1DB (589/589), 2005 G4CCH (559/579), 2011 IK2RTI (559/569), 2017 TF/DL1DMK (559/559), 2030 OZ6OL (559/559), 2121 WW2R (559/559) and 2153 AL7RT (559/579) #299* {#265}, and on 20 May 0035 nil BY4RSA) - too much tree blockage, 1630 partial GM3SBC (O/O), 1639 W2UHI (569/569), 1647 ZS6AXT (569/589), 1652 LA8LF (569/569), 1705 K5SO (579/579), 1715 PY5ZBU (569/559), 1725 OK1KIR (569/569), 1728 RW1AW (589/589), 1736 LU8AV (569/569), 1758 GW3XYW (559/559), 1805 K9SLQ (589/579), 1818 HB9SV (589/579), 1908 ON7UN (589/589) and 1925 ON4BCB (569/559) for a total of 46 x 35. After the contest we tried again with BY4RSA with same nil results and added on 23 May on 1296 at 1930 GM3SBC (449/339) #300* {#266}.

NETNOTES BY G4RGK: **WD5AGO** is now up to on 13 cm initial #27 and on 6 cm #7. **VE3KRP** is near QRV on 23 cm. Copied FB signals from W5LUA, VE6TA and N2UO. **W4TJ** now has 500 W on 23 cm from a single GS15B cavity, and is working on a mount for his dish. **K0YW** reports working TF/DL1YMK and N2UO for a new one. He also heard W7PUF. **F5SE** reports he hopes to be able to attach the mesh on his big dish at end of July and then to be QRV on receive only on both 432 and 1296 in Sept. **PA3CSG** worked TF/DL1YMK on 23 and 70 cm. **WA5WCP** is getting his 12' dish ready for portable deployment probably in mid Aug. He is operating currently on 13 cm at home and complete with OK1KIR. **WA9KRT** is trying to get act together on 70 cm with 150 W and 8 yagis. Don has worked DL9KR thus far. **K5JL** reports 23 cm conditions were excellent in the contest. Jay worked a lot of Europeans on moonrise, also ZS6AXT, PY5ZBU and many others including AD6IW, VK3UM and VK4AFL on SSB. **W2UHI** was on 23 cm in the contest and worked 9 stations the first day. **WB7QBS** has to move his 70 cm EME array due to neighbor problems. **WB2BYP** still does not have his dish back up yet. **K2DH** has completed the mounting of a solid 18' dish and should be QRV on the moon again very soon. **N8CQ** is setting up 4x16 yagis with 1 kW on 70 cm and looking for activity. **DK3WG** worked TF/DL1YMK on 432 for initial #423. **W8TXT** is making progress on expansion of his 432 array to 8 yagis. Mike will be temporarily QRT while he makes the change. **W7QX** is recovery from an emergency heart bypass operation and appears to be doing well. Jerry hopes to be QRV again on the moon soon. **SV1OE** is now QRV 23 cm EME and looking for CW contacts. He has worked G3LTF and G4CCH.

FOR SALE: **K2AH** is willing to construct 23 cm VE4MA style feedhorns, if he can get orders for 5. All horns need to be the same dimensions. The horns will not be tuned, but will include all parts except "N" connectors and will be made from brass. The price is to be determined and will require a deposit - contact Tom directly at tomd@brielle-nj.com. **VE4XC** vernjac@mts.net is looking for a 1296 preamps. **WA8RJF** is looking for 7289s. **DL7APV** is selling his 432 EME antennas: 8 x 13 wl (38 el.) 9BV yagis with open feed lines (longest is 6 m!), and a second array of 16 x 14 el yagis with coax lines and combiners (longest about 3 m) used for vertical mount mounting. For price and pictures contact Bern directly at DL7APV@t-online.de. He specifies self pickup only in JO62jr close to Berlin. **DF6NA** also has two 70 cm arrays for sale. One array is 6 x 33 el including phasing lines (in southern Bavaria) and the second is 4 x 13 wl I0JXX yagis including feedlines and couplers (in northern Bavaria). Contact Rainer at df6na@@df6na.de. **HB9JAW** has a big 432 for sale, a Thompson Cavity with TH331 in it, blower, G1/G2 supply, filament transformer, Ericson Compact 9000 driver (280 W), 3 spare tubes and lot's of spare cavity parts. Output power is in excess of 5 kW. Pick it up, bring it home and it is ready to go. If there is someone interested in serious EME power, please write to HB9JAW@Bluewin.ch.

ARRL 2007 EME CONTEST RULE CHANGE SUMMARY: 1) Separate award categories are provided for Analog, Digital, and Mixed-Mode entries on the 50-1296 MHz bands. No mode distinctions are made on bands at 2.3 GHz and higher. 2) All active or passive use of spotting aids (loggers, DX Clusters, etc.) is forbidden, with the following specific exceptions: A. On the 50, 222, and 902 MHz bands, and all bands at 2.3 GHz and above, it is permissible for any station to make real-time schedules, self-spot CQs, or otherwise coordinate activities by non-EME means. Non-EME liaison of any kind is forbidden during a QSO. B. On the 144, 432, and 1296 MHz bands separate "Assisted" award categories are offered for Single-Operator and Multi-Operator single-band entries, Mixed Mode only. These categories allow the same forms of liaison permitted on the three low-activity bands and the microwave bands. They are intended to encourage smaller stations and operators new to EME. [The complete rules are posted on the League's web site. The web link is http://www.arrl.org/contests/rules/2007/eme.html.

FINAL: ? I am sad to report that another 70 cm EME old timer, W0KJY, has joined the ranks of the Silent Keys. Jim was a regular, who provide CO on 432 to many of us. He lived alone and died at home a victim of Diabetes. Jim had been inactive for several years, but began to operate 432 with the locals a few Months back. He will be missed!

? Microwave Update (MWU) 2007 is looking for papers (1 GHz to light) and registration. Abstracts should be submitted ASAP and completed papers by 15 Aug to W2PED pdrexler@hotmail.com or N2UO lu6dw@yahoo.com in MSWord or as a PDF. Hard copies may be mailed to Paul Drexler, 28 West Squan Rd, Clarksburg NJ 08510. MWU 2007 is 18-19-20 Oct. in Philadelphia, PA. Registrant info and list is at www.microwaveupdate.org. Activities include historic Valley Forge, PA sightseeing or surplus tour on Thur; Conf. sessions on Fri & Sat; Flea Market Fri night with vendors on site; banquet Sat night; door prizes and raffles hosted by the Pack Rats, Mt Airy VHF Radio Club. $79 early-bird registration until 1 Sept (includes conference proceedings and banquet, $89 to 1 Oct and $99 thereafter. Special hotel rate $92 per night. Questions to Phil@k3tuf.com or KB3HCL@arrl.net.

? This NL is a little delayed because of my travels, but about on time for the July activity weekend on the 7th and 8th. We will be looking for you off the moon then. PSE keep the info coming. 73, Al – K2UYH

PA3FXB disassembling his dish for the summer. He will be back on 1296 for ARRL EME Contest in the fall