432 AND ABOVE EME NEWS JULY 2006 VOL 34 #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 <u>a.katz@ieee.org</u>

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

CONDITIONS: Considering the conflict with all the other summertime activities and the lack of any really good weekend for EME during June or July, EME activity has done amazingly well. The real secret to high summer activity is of course dxpeditions. It is the dxpeditions that get antennas turned to the moon no matter what other activities may be taking place. Our TNX must go to Michael and Monika at CT3/DL1YMK, who turned the beginning of June into an EME event with 45 initials on 23 cm and 13 on 70 cm. What an accomplishment for just two people, and what pleasure to those that worked them! There was another 70 cm dxpedition in the middle June, but almost no one knew about and thus there was little or no activity generated by it - what a waste! The effectiveness of dxpeditions in getting people off the beaches and on the moon makes getting the information out that a dxpedition is taking place -20 m EME Net, Newsletter, etc. - so important. Thus far I know of no dxpeditions in July - so don't miss the Activity Time Period on 70 cm on 15 July from 2330 to 0130 and 16 July from 0600 to 0800. For Aug, we have a 23 cm spectacular to the states of RI, CT, MA and VT. See WA5WCP/1's report below and get your skeds request into K1RQG. If you don't leave to early, you can work all 4 states and can still make it to EME2006 in Wurzburg - it is shaping up to be a record event.

CT3/DL3YMK: Michael and Monika's DL1YMK@aol.com have done it again! Here is their report on their Madeira 23 and 70 cm EME dxpedition --We've arrived back home safely with us all equipment stuffed in 4 aluminum boxes and two plastic tubes. The total weight was 181 kg. We found wonderful conditions and even the WX was on our side this time with low winds and no storms. We arrived on Madeira on 1 June late in the afternoon. The next morning, we unpacked the rig and built up the dish. By early afternoon all systems were go. K1RQG had arranged 5 skeds for us in case we managed to get on the moon by 19000. As it was overcast, we arranged for DL6LAU to operate DL0SHF (by remote control) in order to provide a strong and stable signal for us to calibrate the moon tracking system. Thus our 1st QSO and the 1st ever from CT3 to DL on 23 cm was with DL0SHF. After this QSO, we had worked LX1DB, G4CCH, HB9Q, OE9ERC, DF3RU, OK1DFC, DJ9YW, PA3CSG, OK1CA, ON7UN, OZ4MM, F2TU, G3LTF, OZ6OL and K2UYH for 16 the first day - not too bad a start! The next day we did some modifications to the f/D of our stressed dish, which give us an improved illumination with the septum feed and improved our hearing. On Saturday, 3 June, we added initials with RW1AW, OH2DG, K5JL, OK1KIR, W5ORH, W5LUA, VE6TA, WW2R, and W7UPF, besides dups with OE9ERC, OK1KIR and F2TU. On Sunday we completed with KL6M on the very last second of our mutual window, followed by another 11 initials with LA8LF, ES5PC, SM2CEW, IK3COJ, IW2FZR, SM6CKU, K5GW, DF9QX, W2UHI, K0YW and K5PJR to bring us to #37 and dups with DF3RU, G4CCH and ON7UN. On the 5/6 June we managed to add another 5 with SM3AKW, IK2MMB, G3LQR, G4DDK (our first and only JT65 contact) and ES6RQ before we changed the feed to a 1wl loop with switchable polarization for 432 operation. On 7 June we worked SM2CEW the 1st ever CT3 and CT3/SM OSO on 70 cm. Peter was followed by OK1DFC, DK3WG, DL9KR, OZ4MM, G4RGK, F2TU and OE9ERC to bring us to initial #8. It took us 3 attempts to complete with VK3UM on 8 June resulting in an earth surface distance of 18354 km. We missed the distance record [K2UYH] by only 300 km. Doug was followed by HB9Q, OK1CA and DL9KR - a second time with his smashing signal. We added after a nil attempt, very early on 9 June K2UYH. I never got so little sleep in any of our other holidays, hi! On the 10th we changed back to 23 cm for easy #3 with WA6PY and #44 with VK3UM. On the evening of 12 June we made our last 23 cm QSO with HB9BBD #45 before changing back again to 70 cm. The switch took us less than 15 min - even at night. After 3 nil skeds, completed with DL7APV for #13 on 70 cm - TNX Bernd for hanging on. Our switchable feed made this QSO possible as Bernd's signal was vertical. The station was a 4.1 m preloaded/stressed dish with 0.43 f/d with on 1296 450 W at a septum feed from a DB6NT SSPA and a HB 3-stage 0.38 dB NF LNA, and on 432 500 W from MOSFET-HPA HLV 700 (courtesy B. Korte of BEKO - TNX to Bernhard) into 1 wl loop feed (H/V pol) and ATF54143 F5VHX 0.4 dB LNA, both to an IC 910-H (500 Hz filter, analogue

IF filter and HB sequencing unit). We want to thank the gang for giving us a wonderful African island adventure. We apologize to those whom we missed. More info on CT3/DL1YMK can be found at http://www.ok1dfc.com/Peditions/ct3/DL1YMK can be found at http://www.ok1dfc.com/Peditions/ct3/DL1YMK can be found at http://www.ok1dfc.com/Peditions/stable stable sta



CT3/DL1YMK 4.1 m dish in Madeira

DL9KR: Jan Bruinier@t-online.de is closing in on the first 70 cm DXCC with all his QSOs on CW - On 7 June I caught CT3/DL1YMK from Madeira. The pol was neither V nor H, but a good random QSO resulted in DXCC 93 and initial #837. A dupe took place with (549/559) signals on 8 June. (This expedition was a resounding success and kudos go to Mike, Monika and DL7YS! OK1DFC has to be commended for his excellent Madeira web site). My first 3 skeds with 4S7CCG were plagued by adverse polarity, but the one on 2 June was complete and yielded initial #834 and DXCC 92. Bob has to be applauded for his persistence. He even removed 10 m of his xmit line to gain about 1 dB. Back on 5 April I made an easy QSO was made with GD0TEP #833. The Activity weekend (if one could call it that) brought contacts on 8 April with W8TXT, G4RGK and N9AB, and 9 April SP6JLW and OZ6OL. From the end of May through 5 June I had 3 skeds with LAOBY, which all were negative due to 90 deg offset pol during a southerly moon azimuth. As a "windfall" of the vertical pol situation DH8BQA was worked on 4 June for #835. Olli was preparing for his upcoming LY expedition, and was testing his rig with single yagi mounted vertically. I also had QSOs with VK4AFL (579/579) and OE5JFL (589/589) on 4 June. It was nice to have OE5JFL back after his long pause. On 6 June I expected nil from a sked with 9H1MRL/P, but surprisingly Faraday was aligned and enabled an easy contact for #836. The LY expedition arrived in KO23 on time and was worked as LY/DH8BQA on 18 June for #838 with respectable signals. Faraday was vertical again! Some time ago, Dan HB9Q asked me for a list of my DXCCs. His idea was to see if any of them could possibly be "rejuvenated". This caused me to have a look at DXCC rules, especially concerning so-called deleted entities. It turned out (and was confirmed by the ARRL DXCC board) that the "old" OK's (e.g. OK3CTP) and Y's (e.g. Y22ME) are given credit as the Czechoslovakia and German Democratic Republic. We also can expect YU7 as a new one soon, at least on paper.

G3LTF: Peter <u>g3ltf@btinternet.com</u> reports his 13 cm system is working really well and that he now has 250 W at the feed and getting excellent SSB echoes. I worked on 24 June PA3CSG for initial #36 and called WA6PY who had a good (569) signal but Paul did not reply. I also heard SM3AKW (559).

JH1KRC: Mike <u>ihlkrc@syd.odn.ne.jp</u> sends news about the annual JA EME meeting, which this year was held in Tsuyama, Okayama on 27/28 May -- The attendants were JH3ERQ, JF3HUC, JA4LJB, JA0EIV, JR4AEP, JA6DZI,

JR3JLL, JS3SIM, JH4JLV, JH1KRC, JA4BLC and JA4HZN. Hata, JA4HZN, who is sometimes active on 1296, runs the guesthouse where the conference took place. An Agilent N8975A precision NF analyzer was used for NF measurements. All attendants received UHF/SHF isolators from the silent key JA1AUH's estate. JA1AUH, who passed away in April of last year, was a major contributor to the development of JA amateurs' technology. His precision NF meter design is still used by many JA EMEers. An Advantest R3767CH network analyzer was used to measure the isolators and hand-made filters. JA4BLC presented his feed-mount 20 W HPA/LNA/converter system for 5.7 GHz and discussed how he and JR4AEP (JR4ZZS owner) improved the azimuth control mechanism for their 9 m dish. JH1KRC showed the results of his experiments on 15 m EME and played recordings of his echoes. JA4DZI reported on the severe 23 cm noise generated from satellite TV converters, which are very common in Japan.



JA Conference: (L-R) in rare, JH3ERQ, JF3HUC, JA4LJB, JA0EIV, and JR4AEP, in front, JA6DZI, JR3JLL, JS3SIM, JH4JLV, JH1KRC, JA4BLC, and JA4HZN

KODJV: Paul <u>dswebmaster@deep-space.org</u> will be listening on 1296 with a 60' dish. He is VP of a nonprofit group in Longmont, CO similar to OVRO that has control of two 60' dishes with a mission to use them for educational purposes - see <u>www.dses.org</u>.

<u>K3MF</u>: Wayde <u>k3mf@aol.com</u> writes that the 432 4 x 19 RIW EME array loaned to 3Y0X is back in the states and available to any dxpedition that would like to set up a 432 EME station. He would like to see more 70 cm EME dxpeditions and the array used frequently. Contact Wayde to arrange for its loan.

K5JL: Jay plans to spend most of his moon time in July on 432. He has already worked K5SO, VE6TA (569/579), N9AB and KL6M (S7) and will be looking for any active stations on 70 cm EME preferably in West window due to a noise problem toward the East.

K5SO: Joe <u>k5so@valornet.com</u> has built several feeds for 70 cm for his 28' dish, which he has been using to receive Pulsars on 436 MHz. He is also using the feeds on 70 cm EME with 50 W and thus far has QSO'd K5JL, KL6M and SM2CEW. He has heard and called N9AB and VE6TA. N9AB did respond with a QRZ. Joe is putting on a bigger (8938) PA very soon and is available for skeds on 432.

K7XQ: Jeff writes – On 432 I am modifying my 4 x 9 wl yagis for cross polarity (only 2 antennas for now and the other two later). I really think this is where the problem lies in my not hearing too well on 432. I believe that many would see a huge improvement in signals, if they had the ability to switch polarity. This may explain why activity is low. I have seen a overwhelming improvement on 144 where I have made a similar change. I am also QRV on 1296 and 2304/23202424. I will be hooking up a 180 W Spectrain SSPA to a 75 amp power supply very soon and hope to complete my first 13 cm contacts later this coming week.

KL6M: Mike <u>kn6m@aol.com</u> reports his 23 cm system seems to be working very well -- My feed is very close to optimum. I get 21.5 dB of sun noise and a solid 0.8 dB of moon noise. I am doing my measurements off the 10.7 MHz IF using a HP 3586B Selective voltmeter. Tree blockage is a problem this year, but fortunately at peak declination I still have a great view, nearly horizon to horizon. I just barely worked CT3/DL1YMK through about a 3 deg window in the trees. It was an exciting QSO. On 24 June I added RW1AW (569/569),

F2TU (589/569), IW2FZR (579/539), IK3COJ (549/529) and a partial SM5LE – heard but not QSO. These contacts bring me to initial #40 while still running only 100 W. On 70 cm I added K5SO plus 3 others at low declination.

LX1DB: Willie <u>wbauer@pt.lu</u> made his first EME tests on 24 GHz in June with 20 W at the feed. He worked G4NNS, W5LUA and DF1IO.

NC11: Frank frankp@gcq.net reports on his lack of recent activity – The system is still up and working FB. Unfortunately this time of year I have no time for EME or ham radio. It is unlikely that I will be heard off the moon until late Oct. My interest is still there, but family and other commitments must come first. I have been receiving quite a few requests for skeds (which I do appreciate), however I'm just not able to take any right now. Once things settle down this fall there should be plenty of time for EME again. Due to my busy summer schedule I will not be able to make it to Germany in Aug. This was something I really wanted to do. W1QA (a frequent operator of my station) will be attending and is planning to propose a Western Mass as the location for EME2008. Bob is someone that can put together/organize a wonderful conference. Obviously the effort will take many others, but I'm sure Bob has this support including obviously me. I hope everyone attending EME2006 has a wonderful time.

OK1DFC: Zdenek <u>ok1dfc@seznam.cz</u> reports that full details of the CT3/DL1YMK dxpedition can be found on his web page at http://www. ok1dfc.com/Peditions/ct3-dl1ymk/indexct3.html, and that he is considering a dxpedition of his own – I just returned from trip to T9, Z3, and potentially new DXCC locations in Monte Negro and Kosovo. I found good places and friends to help realize future EME dxpeditions for 432 and 1296 with QRO and a serious antenna setup.

SM4IVE: Lars sm4ive@telia.com reports on a mini SM EME meeting — On 1 June we had a small meeting at SM4DHN's QTH to discuss the future of EME. We (SM6CKU, SM4DHN and I) were trying to motivate ourselves to become more active on EME. As for myself, I feel right now is the time to start assembling the dish. I have talked to my wife about this year vacation, and she accepted to stay at home. So if all goes well and my inspiration holds up, I will be back on EME with my dish later this year.



Swedish EME Group

SM5LE: Sven's <u>sven.o.nordin@telia.com</u> 1296 June activity – Since my last report in May I have worked VE6TA for initial #25, VK4AFL #25* on JT, HB9Q #27, F6KHM #28, DL0SHF #29, SM3AKW #30, JA6AHB #31, SM6CKU #32, VK7MO #33* on JT, RA1AW #34, OK1KIR #35 and DL6LUA (not counted as I think it is the same as DL0SHF). My total is (#34 CW and #7* on JT). I was very sorry to miss CT3/DL1YMK as I need Africa for WAC, but It was to low a declination. I am getting many encouraging reports and am very pleased that my 2.2 m dish and 250 W seems to be working UFB! Inspired of Rex, VK7MO and others, I have added a choke ring to my feed. I gained 0.7 - 0.8 dB more sun noise and the best - less in band spurious because of better side lobs. I am "surrounded" of high speed PCs making spurious. The ring is made of 1.5 mm single clad epoxy laminate and 0.4 mm Cu sheet soft soldered together. All Cu material is sprayed with silicon to prevent oxidization. I have 2.3 mm space in between the septum (Al.) and the (Cu) laminate to avoid Al contact with the Cu.

VE1ALO: Darrell reports that he is finally making progress on his new dish -- I have the prop pitch gear box completely rebuilt with drive motor attached. This was a terrible job and also very costly obtain the bearing, etc. Anyone looking for a prop pitch gear box, I strongly recommend acquiring one that is fully

functional. The 10' 11" dish and tower is finally down and carted away. Charlotte and I lugged home approx 1/2 ton of angle iron and a 4.5" id mast pipe - 240 pounds of that alone. WX has been terrible, which has not helped. Please STOP sending us your rain. I am not sure if I will have the feeds installed before fall WX arrives. I still have a lot of welding to be done plus rising the dish to the 26' level of the mount. I plan to run 23 cm to 3 cm, including 13 cm, 5 cm and possibly other bands as time progresses. Most important will be the improved moon window to Australia and Japan.

VE4MA: Barry ve4ma@shaw.ca is setting back up for 24 GHz EME and is moving his operating freq to 24,048. He also needs to refocus his TWT back from 47 GHz. He has refurbished his 10 GHz gear and is back on 3 cm EME

VK2SN: Sean <u>sean@vk2sn.com</u> in QF56oc is now QRV on 70 cm EME He has 4 x 12 el M^2 yagis with 7/8" Heliax feedline, 400 W PA, 0.38 dB LNA and TS2000. See www.vk2sn.com for more details about the complete system. He can operate both CW and JT65 and has worked on 27 June at 0149 W7AMI, 30 June 0336 N9AB, on 1 July at 0410 W7AMI again and 1011 HB9Q, on 2 July at 0756 W7AMI a 3rd time and 1006 OH4LA, on 3 July at 0326 K3MF, on 4 July at 1119 VK4AFL, and on 8 at 0624 N9AB.

VK4AFL: Trevor tbenton@bigpond.net.au reports on his EME activity -- I have had some good contacts in June. On 1296 I QSO'd with KL6M for an initial #55, VE6TA, G3LTF, OZ6OL, OK1KIR, LX1DB on CW followed by SSB, DL7YC #56, DF3RU, RW1AW #57, DL0SHF and JA6AHB. I also ran a few QRP tests with VK7MO on JT65C. We achieved reliable copy with 20 W at each end (3.7 m to 2.3 m dishes) and one way copy with just 10 W. We feel that we should be able to get a completed contact with both of us running 10w. I now have 57 initials from 135 contacts on 23 cm. On 70 cm, I came on for the activity period and worked SV1BTR, DL9KR and JA6AHB, but was unable to complete with another station as my moon was disappearing. Overall it was a productive month, especially the QRP and SSB contacts.

W1QA: Bob EME@W1QA.COM is an operator of NC1I and will be going to Wurzburg for EME2006 where he will propose bring the conference to Western Massachusetts in 2008 -- I attended both conferences in Thorn when my call was PA3GCQ. Back at the Paris conference in 1998, NC1I and I proposed having something in western Mass, but Brazil was selected. This year we will try again. Frank won't be able to make it to Germany, but I will bring with me a Power point presentation on his station and will try to make a bid for the next conference. I will suggest holding the conference at the Red Lion Inn http://www.redlioninn.com in the Berkshires. Over the years I've done a lot of work there. This is a couple of hundred year old inn that would be a nice place for EME people to visit. (You'll recognize it as the building on a number of Norman Rockwell paintings). There's plenty for non-hams to do nearby - see the Berkshires link on the aforementioned web site. I would work out arrangements with the Inn to setup a web site to handle international wire transfers. Possibly I may be able to arrange for an airline group discount.

W5LUA: Al al.ward@avagotech.com report contacting on 24 GHz on 23 June LX1DB for initial #4 and on 25 June G4NNS #5. He writes that 24 GHz EME activity in Europe has migrated from 24,192 down to 24,048 due to 24,048 being a primary allocation for amateurs, while 24192 MHz is a secondary allocation in Region 1. The same is true in NA, but moving weak signal terrestrial work from 24,192 down to 24,048 may be difficult. None the less, VE4MA and Al have moved our EME equipment down to 24,048. Anyone planning 24 GHz EME activity is encouraged to gear up for 24,048.1 MHz.

W6IFE: Doug, K6JEY <u>dougnhelen@moonlink.net</u> sends news on OVRO EME activity in June – We had a great outreach on 24 June. About 30 people showed up including about 15 students from fifth grade through high school. We also had three teachers attend and were hosted by Dr. Mark Hodges from OVRO. He gave the group a tour of the dish and did various experiments with sun noise and liquid Nitrogen. Students also got to echo their voices off of the moon. The newly refurbished transverter, TNX to Chuck, WA6EXV, worked perfectly on both bands. It was an exciting event that also featured about three hours of visual astronomy under some very dark skies. We are planning another outreach and EME event for later in the summer, possibly on 12 Aug to coincide with the Perseid meteor shower. We will let you know about the EME part of the event and what our operating schedule will be.

W8TXT: Mike (no e-mail) reports great time during 3/4 June AW – I am looking for next activity weekends. I received a QSL from G4RGK, but needs FR5DN and SV1BTR. Please note my address is 401 West Bogart Road. It needs to be West Bogart Road as there is an East Bogart Road that can cause confusion. I am also been playing around with radio astronomy using a strip chart recorder and seeing Cas A very well.

W9IIX: Doug <u>iix1@comcast.net</u> is now QRV on 23 cm and 13 cm, and is now working towards 10 GHz -- I had a good run on 23 cm the last few weeks. I added initials with KL6M, DF3RU, RW1AW, W7BBM and VK4AFL to bring my initial count to #40. My GS-15 PA runs like a dream on 23 cm. On 24 June I QSO'd on 1296 G4CCH, W7BBM and RW1AW. I will be attending the CSVHF Conference and am looking forward to seeing fellow EMEers there.

WA5WCP/1: Al, W5LUA al.ward@avagotech.com announces that the team of W5LUA, K5GW, and WA5WCP are planning a dxpedition to the states of CT, RI, MA, and possibly VT on 1296 EME between 13 and 21 Aug. WA5WCP has been working on a portable EME system for the past year. Many of you may have already worked Paul using the same installation that is going portable next month. Paul's work schedule makes it tough for him to plan such an event months in advance, but it does look like Aug should work out OK. The trip from Texas to the states in the northeast is a 1700 mile (2700 km) that should take 3 days. Assuming a successful trip to W1 land, the tentative plan at the moment is to spend 2 days or 2 moon cycles at each location. 13/14 Aug will be spent in Rhode Island where the moon will rise after 0145 on the 13th (evening of the 12th local NA time). 15/16 Aug will be spent in CT, 18/19 Aug in Mass and if all goes well 20/21 Aug in VT. This is a tough schedule of 8 days of operation with a day break in the scheduled on 17 Aug, which can be used if the schedule slips for any reason. The exact locations along with grid squares will be announced shortly. The call of W1AW will be used in CT, while WA5WCP will be used at all other locations. K1RQG has volunteered to coordinate skeds for each location and will update them on a daily basis. Knowing that this is prime hurricane season and the fact that Murphy can strike means that we must remain somewhat flexible, while Paul attempts to put these states on the air. At his moon rise at each location, there will be a CQ period where Paul hopes to get as many stations worked as possible. If you are unsuccessful in working Paul on random or would like to be put on a sked list, please email K1RQG klrqg@aol.com CT3/DL1YMK worked 40 plus stations on his 1296 EME dxpedition. It would be virtually impossible to sked this many stations in a 2 day period, so it is hoped that most of the bigger stations will attempt random operation at least on the first day in each state. If you would like to be on a distribution list for last minute information and skeds, please drop Joe K1RQG an email and he will add you to the list. Equipment consists of a trailer mounted 10' dish with Septum feed and scalar ring, 300 W WD5AGO 4 tube 2C39 PA, W7CNK preamp and IC-910H. He will have autotracking with US Digital encoders and K5GW software. All operation will be on CW. Paul has already worked 33 initials with this equipment, so we are optimistic for a very successful expedition.

WA6PY: Paul <u>pchominski@Jaalaa.com</u>has a short report for June – I QSO'd on 1296 on 10 June CT3/DL1YMK - very easy QSO with surprisingly good signals for new DXCC and initial. On 24/25 June I was on 13 cm and worked cross band PA3CSG for initial #31 and G3LTF on CW and SSB. I also called G3LQR, but Simon probably did not look on the 2304 band.

WB2BYP: John wb2byp@arl.net is now QRV on 1296 with a 3 m dish, VE4MA feed and 200 W. He made his initial QSO with K5JL. John worked on 21 June K2UYH, K0YW and K5JL again.

WW2R: Dave ww2r eme@g4fre.com writes on his June activity – During the AW I worked PA3CSG for initial #29 on sked even though the dish was misaligned over 5 degs and SM3AKW #30 on random, CT3/DL1YMK #32, KL6M #33, VK3UM #34 and VE6TA on random. I also was called by and worked K5JL, OE9ERC #31, G3LTF and G4CCH. Heard were VK4TL (sounded auroral), VK3UM (sounded normal at the same time), W50RH, OK1KIR and K0YW. It was a very successful weekend, but I didn't have time to deploy my new QRO PA!

ZS6AXT: Ivo zs6axt @telkomsa.net is making a good recovery after his heart operation and is planning to be at EME2006 -- I am still busy trying to repair all the damages ton my EME equipment from thunderstorm some time ago. It goes too slow for my liking - Hi. Otherwise I am now very close to my previous body fitness; it takes a lot of my time and walking, etc. I am looking forward to meeting everyone in Germany in Aug.

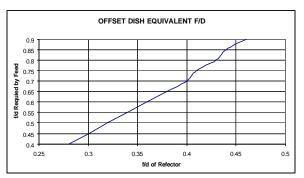
ZS6WB: Hal zs6wb@telkomsa.net reports that there was no 70 cm EME activity from 7Q7JE. He does say there is a possibility of very limited 432 EME operation from C9 with a very small station. This activity will depend on Hannes' work schedule and also the arrival of some antenna hardware that is still needed. Hal promises to keep us informed of any new 432 EME possibilities.

K2UYH: I <u>a.katz@ieee.org</u> do not have a lot of activity to report for June. We had a great deal of rain and server thunderstorms that resulted in a lightning strike that took out my digital readout system. This calamity nearly caused me to

miss working CT3/DL1YMK. I did not realize the readout had been damaged and had no way to position the dish. Fortunately I was able to get my XYL (38 years) to stand on chair by the dish with an umbrella and cell telephone to tell me the dish's position. I worked them on 1296 on 2 June at 2315 CT3/DL1YMK (559/559) for initial #268* and mixed DXCC 55. They were more difficult to work on 70 cm. On my first attempt, I had terrible interference right on their frequency and although I copied them, we did not complete. I tried again the next day 8 June and almost had a repeat of my 1296 experience. It was raining again and the TV camera I was using for AZ readout failed. I had to call the XYL again at the last moment for help with the readout. This time the interference was gone and we completed (O/O). The following week I QSO'd on 23 cm on 21 June at 1100 WB2BYP (449/O). I was running lower than normal power (~300 W), but we still had a good QSO. He was a bit weak at the start of our sked, but came up later. I also ran on 3 June with UA3MJB and UA3ME with nil results probably because of tree blockage. Unfortunately I am leaving early for EME2006 to visit Austria before the conference and will not be able to try with the WA5WCP/1 dxpedition at all their locations.

NETNEWS BY G4RGK: W2UHI was QRV on 23 cm EME in June and did work CT3/DL1YMK. All systems go. W7MEM is QRV on 70 cm EME now and needs only to calibrate his controller. K5PJR confirms QSO with CT3/DL1YMK with a lot of trying. VE6TA worked CT3/DL1YMK on 23 cm, but only had a partial on 70 cm. PA3CSG is now also QRV on 13 cm and has made a few contacts. He can TX on 2320 and RX on 2320 and 2304, but needs notice to do so. SM2CEW worked CT3/DL1YMK on both 23 and 70 cm. G4NNS is QRV on 24.048 GHz (not 24.192 GHz) and worked LX1DB for his initial QSO, DF1OI and W5LUA. OK1KIR is also coming on 24 GHz. K7LNP has been tie up at work, but still has all his equipment and will get the 432station on this fall. KORZ reports that June EME activity on 70 cm is definitely down. DL7APV reports working CT3/DL1YMK on 70 cm in June. WA9KRT is mounting 8 yagis 70 cm EME at 100'. WD5AGO will be looking for skeds on 13 cm in July, but will be on 23 cm during Aug. DK3WG worked CT3/DL1YMK on 70 cm CW for DXCC #81. W7IEW has a 3.6 m dish and 4 x 22 el FO yagis on 70 cm from Olympia, WA. He can be reached at w7iew1@comcast.net.

FOR SALE: WD5AGO has for sale a couple 13 cm circular feeds with scalar rings tuned and ready to run. One is even silver plated. **75 amp @ 18 V** power supply (available on Ebay) information can be found at <u>http://www.lambdapower.com/technical/lzs-se-series.htm</u> **W9IIX** is looking for an HP 8555A RF unit for an HP 141T display unit. **WA0WPJ** is looking for a dish.



TECHNICAL: For those of you experimenting with off set dishes the following graph was developed by M0EME from using the HDL_ANT program from W1GHZ. It shows the relationship between the *equivalent* dish f/d ratio for which the feed (of the offset dish) should be designed, in terms of the actual f/d ratio of the reflector from which the offset dish is formed. For example if an offset dish is made from a reflector with an f/d = 0.4, the feed should be designed as if it is feeding a much shallower dish with an f/d = 0.7



The difference between perigee and apogee

FINAL: Although the registration fee has increased, you can still register for EME2006 in Wurzburg Germany. I predict that it will have the largest turnout of any EME Conferences and will be one of the best.

Three weekends after EME2006, the 2006 ARRL EME Contest starts on 16/17 Sept for 2304 and above. (The 50 through 1296 MHz weekend are on 14/15 Oct and 11/12 Nov). The EME microwave weekend is the same weekend as the ARRL's 10 GHz up terrestrial contest, so there may be some opportunities for extra contacts. The ARI's EME Contest is on 9/10 Sept - the same as the ARRL Sept VHF QSO party and also offer some interesting opportunities for extra contacts as EME QSOs are valid contest contacts and count for grid square multipliers. The contest exchange is your 4 character grid square, i.e., FN20. (The 10 GHz contest exchange is your 6 character grid square, i.e., FN20qg).

TNX to Tonda, OK1VOA <u>ok1vao@quick.cz</u> we have another update of the All Time High ARRL EME Contest Record – see table at the end of this NL. It contains the records from 1978. There were a lot of new records this past year.

For those of you looking for a good dish feed for both 70 and 23 cm, you can now find VK3UM's excellent article on his dual dish feed at <u>www.sm2cew.com</u> via the link on the first page. This article appeared first in DUBUS 2/2006 and provides full constructional details including high resolution photos of the dual feed system.

That covers the news for this moon period. I will be looking for all of you off the moon and in Germany. Keep the news and tech material coming. 73. Al – K2UYH

A11	Time	Hiah	ARRL	EME	Contest	SCORES

AII IIME HIGH AKKI EME CONCESC SCOKES													
	Band	Score	Call	year	Score	Call	year	Score	Call	year	Score	Call	year
50	- 1296 MHz	1,532.200	K5GW	2005	806.400	SV1BTR	2004	3,402.000	HB9Q	2005			
2300 MHz and Up		101.500	F2TU	2005	92.400	F2TU	2004	57.200	OK1KIR	2005			
Multiband Overall		1,115.200	G3LTF	2005	3,263.500	OE5JFL	1993	3,684.400	K5GW	2003	6,496.000	VE3ONT	1993
Α	50 MHz				8.000	K6QXY-K6MYC	1993						
В	144 MHz	1,038.200	RU1AA	2005	1,920.000	SM5FRH	1999	1,563.500	KB8RQ	1999	1,554.800	VE3ONT	1994
С	222 MHz				5.600	К9НМВ	1982	3.000	WB0TEM	1982			
D	432 MHz	307.100	DJ6MB	2005	827.200	SM4IVE	1993	632.100	OH2PO	1997	307.100	OK1CA	1994
9	902 MHz				100	KD5RO	1988						
Е	1296 MHz	436.500	HB9BBD	2005	343.000	K5JL	2000	255.600	K2DH	1997	316.000	W6IFE	2005
F	2304 MHz	25.500	ES5PC	2005	19.500	OE9ERC	2003	6.400	OK1KIR	1991	9.000	SK6WM	1988
G	3456 MHz												
н	5760 MHz				200	OE9XTW-I6PNN	1995	600	OK1KIR	1999			
I	10 GHz	4.200	F5JWF	2005	15.400	DJ7FJ	1994	20.400	IQ4DF	2005			
J	24 GHz												
since 1978													
since 2004													

since 2005

3000 2000