# 432 AND ABOVE EME NEWS
# APRIL 2009 VOL 37 #4

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**CONDITIONS:** March was one of those in between months. There was still plenty of EME, but the "big" activities were either just before or after. The 10 GHz (and 2 m) European Worldwide EME (DUBUS/REF) Contest occurred at the very end of March. There was unfortunately bad weather in many places during this contest weekend. It will be reported on in the next newsletter (NL). Coming right up is the 432 DUBUS Contest (4/5 March). Because of this contest, there will be no 70 cm CW Activity Time Period (ATP) in April. The March ATP was actually on 28 Feb/1 March and had a reasonable turnout. The official EME Activity Weekend (AW) was on 7/8 Feb and produced additional activity and good conditions. DJ8MS ran a mini 1296 grid dxpedition this weekend – see Tor's report. April will have a lot of dxpedition activity - see the reports from 5N0EME and 5Z4EME below. There will be even more dxpedition activity in May from MI/DL1YMK in Northern Ireland and 4O/PA2CHR that were reported on in the March NL and OK1DFC, who plans to operate from E7 or GU, reported on in this NL.

**5N0EME:** Bodo (DL3OCH) dl3och@gmx.de reports that he is already in operation on 2 m and has made many EME QSOs there -- I plan to be QRV on 23 cm most probably on the weekend of 4/5 April. My equipment will be a 2.4 m dish with patch feed (like what I used as BY4RSA). I will have about 100 W out of my transverter (by DJ9YW). I will operate in JT65C but will be happy to answer calls on CW. If you hear me, call please. If I hear you on CW, I will answer in CW. I will be on 1296.090 in JT65C, TX first. I will listen on my own echo frequency, so please make sure you call on the right frequency. I will be also be QRV on 70 cm, but as I announced, my priority is 23 cm. My equipment for 70 cm is a 21 el yagi and 100 W. Please watch the logger on HB9Q. My call will be 5N0EME and the grid is JJ38QX.

**5Z4EME:** Rene, PE1L moonnet2@cqdx.nl reports that prospects for 70 cm EME operation from Kenya look much better. The system is still marginal, but they now have besides the 23 el yagi, a 100 watt brick with preamp, and will be able to rotate polarization by hand. Operation will be concentrated on 6 April on 432.084 using JT65B. 5Z4EME will always TX first. If all works as planned, they will have an Internet connection and be on the HB9Q and NØUK loggers. The team is PA3EWP, PA3CEE and PE1L.

**DJ8MS:** Tor's dj8ms@web.de mini 23 cm QRP dxpedition to OZ (JO56 and JO66) was a modest success – I was active 7 and 8 March using a single 67 el yagi and 100 W. I QSO'd as OZ/DJ8MS on the 7th from JO56 DJ9YW and G4CCH both on JT65C and copied K2UYH at -21 dB, and on the 8th from JO66 G4CCH on JT, ES6DO on JT, OE9ERC on both JT and CW and K2UYH on JT. Unfortunately nothing was heard from JA/VK (or other NA stations). I am not familiar with the activity from there in general, but had hoped for more. The QSO with OE9ERC was my first on 23 cm EME using CW. Erich was about -21 dB on JT and only possibly a bit louder than the other signals. Copying his CW for me as an untrained EME CW OP was a bit tricky, but worked. I'm really happy about this QSO! In the future I plan to be active on 1296 from JO63/53 as soon as I have everything ready again, but first want to do some TX-RX measurements. I know my IC706IIg has a severe drift on 23 cm. It looks like my "older" 706IIg is drifting at least 3-4 x as much as my newer 706IIg. Both TX and RX are modified in the newer 706. With the newer 706, my short time drift is now only 5 Hz during 70s of RX-period instead of about 22 Hz from the older 706. What a difference! I could not even consistently decode JT65B signals on 70 cm. I hope to have a more reliable setup real soon.

**DK3WG:** Jurgen dk3wg@online.de was active on 432 in Feb. He reports a CW QSO with 8J1AXA and JT65B initials with EB3DYS, UA4API, UT6UG, OH2BNH, OK2POI, 7J1ADS, JN4VAX and JH7PAV to bring him to mixed initial #461*. He also had a near miss with JE1TNL on JT. [TNX to Jurgen for the Russian station reports in the NETNEWS].

**DL7APV:** Bernd dl7apv@gmx.de reports on his March 432 activity – During the pre-AW I added new stations, JH0RNN who is using a 20 el yagis and 50 W and DF6SM with a 19 el yagis and 140 W. Earlier I QSO'd JA7PAV and 7J1ADS. All were worked on JT mode. During the ATP on CW I QSO'd DF3RU, SM2CEW, I1NDP, K1RQG, G4RGK and N4GJV. Heard were DL9KR, K2UYH and UA3PTW. Conditions seemed changeable, bad on Sunday moonrise, but better during the NA window. I also tried without success with CT2GUR, who has a 19 el yagi, and BX1AD with 2 x 8 el yagis. I worked I1NDP with only 3 W at my feed point on JT and still got a (25DB) report from Nando. I also tried with WA2FGK in PA. He was (10DB) but huge drift. He didn't hear anything from me. We had very enjoyable visit with KA7V and his XYL.

**DL9KR:** Jan bruinier@t-online.de QRV on 432 during the March pre and AW weekends – I worked on 28 Feb JA0TJU, IK6EIW, OK2POI for initial #884, K1RQG and N4GJV (579!). On 1 March worked OK2POI again, OZ4MM, DG1KJG and G4RGK, but was on for only a little time. Condx were good on Saturday, but only mediocre on Sun. On 7/8 March I managed to listen on 432 from 2150 - 2200 and heard NC1I (599), I1NDP, DF3RU, SM2CEW and K1RQG (589), LZ1DX 569 and VE2ZAZ with a respectable (559) but I was too tired to produce signals myself. It was great news to learn that present-day-Phoenix, VK3UM, is rising out of the ashes.

**OZ/DJ8MS's mini 23 cm EME dxpedition (JT & CW) QTH**

**EA8/LA8LF:** Anders anders@LA8LF.com sends good news -- I received a positive answer for my application for renewed authorization of 23 cm operation from the Canary Islands from the MINISTERIO DE INDUSTRIA, TURISMO Y COMERCIO. Their letter was short and explained that I no longer needed a special authorization to operate within 1240-1300 MHz and 2300-2450 MHz from my house at Lanzarote, Canary Islands. Previously I had authorization to operate on 23 cm. Unfortunately, due to the previous denial of my request for operation on 13 cm, my wife brought back with her to Norway in Feb most of my 13 cm equipment. I will return to Norway on 6 April and shall be back to Lanzarote in late Oct for 6 weeks. I hope to be QRV on 23 cm then and on 13 cm in Feb 2010.

**G3LTF:** Peter pkb100@btinternet.com writes on March EME -- We were away on holiday during the last EME activity period but before we left I had a nice QSO with SV3AAF on 13 cm on 26 Feb for initial #67 and DXCC 27. Signals were (559/549) and we also exchanged (44/44) on SSB. This is the first SV/G 13 cm QSO. I'm sure Petros will be able to work many of the gang on 13 cm. I'm slowly working on projects on 3 and 6 cm and also on improvements to my 1296 and 13 cm systems, and looking forward to the spring activity.

**HB9BBD:** Dominique dfaessler@bluewin.ch had some 23 cm QSO during the pre AW – I QSO'd LA9NEA, VE3KRP, SM6FHZ and GW3XYW - all with excellent signals. My time for EME is still limited. This coming week I will move my Laboratory, which is packed in 90 containers to our new home on a

hilltop next to Zurich. Dismantling and packing everything kept me busy for the last couple of weeks. There was piles of material, tubes and bits and pieces of which I did not know about anymore. I guess I have more cavities than I thought and tubes for generations of EMEers. I will be travelling in the being of March, but hope to install my shack and lab from mid March onwards. My EME site, of course, remains where it is and does not need to be moved.

**I4BER:** Tom tomasset@ira.inaf.it reports that he will be QRV on 10 GHz EME with a big 32 m dish at Medicina (Bologna) on Monday, 30 March. The frequency is likely to be 10368.150 and the power out about 35W. [Unfortunately this announcement arrived too late to included in an earlier NL].

**IK6EIW:** Stefano asmag@libero.it is now a regular on 432 EME -- I had fun with my small system during the March CW ATP and added initial QSOs with JJ1NNJ, JA5NNS and PI9CAM. During the North American (NA) period, I CWNR K1RQG, K0RZ and N4GJV. Regarding the relative disparity of activity levels between 70 and 23 cm, in my opinion the availability of small [TVRO] dishes usable on 1296 but not on 432 is a major cause of the preference for 23 cm.

**K1RQG:** Joe k1rqg@aol.com reports -- I was on the moon on 432 for a while on 7 March and heard very good signals on CW from OK1TEH and UA3PTW, but never heard them call CQ. I called CQ for quite a while in European window with no result. Later I worked K5JL, K3MF - very nice CW signal (H-H), VE2ZAZ - FB signal (H) and WA4NJP on SSB. I heard NC1I work WA4NJP. NC1I had a (589) signal sometimes peaking (599), again horizontal. I also copied at 0345 VE2ZAZ again calling CQ (549). My activity was better the second day and I ended the weekend with a total of 23 contacts with a couple of dupes. It is nice to see all the true random operation. I also had a very nice visit from K2UYH and XYL Sally.


**K1RQG at operating position**

**K2DH:** Dave k2dh@frontiernet.net now has his 500 W SSPA working well -- I had a great time during the March AW on 23 cm. On Saturday there was lots of activity. On 7 March, I QSO'd on random CW at 2006 OZ4MM, 2011 SM6FHZ, 2019 SM2CEW, 2118 G4CCH, 2158 NA4N, 2210 VE3KRP, 2217 LA9NEA, 2231 SV3AAF, 2244 HB9MOON, 2303 K2UYH, 2310 VE6TA, 2324 DF3RU and 0321 K5SO. For the most part signals were strong, but I noticed a lot of deep libration QSB, sometimes taking out whole letters. I did some SSB echo testing and at times the SSB echoes were quite good, but others had big holes in the return. The new SSPA is finally fully integrated into the station and is working very well after a few "glitches" getting it going. It worked without a hitch the whole time and produces a very nice 500 W+ (I can saturate it at almost 600 W, but what's the point) and it is so nice not having to worry about tuning drift, high voltage arcs or water leaks, etc. I owe a big TNX to AD6IW! My next goal is to get 13 cm and 9 cm going.

**K5AZU:** Ray k5azu@yahoo.com is planning the be more active and make LA available on 23 cm to new stations that have not worked him in the past -- I checked out a new preamp and will install it along with a new relay at the feed of my dish this week. I will then be back on 1296 with 150 W, but I am working on a higher power amplifier that should give me more than 500 in the near future.

**K5JL:** Jay k5jl@hughes.net was on 70 cm during March, but did not spend a lot of time on the air and reports not hearing a lot of activity the first day of the March AW. Jay found more activity the second day and made a few QSOs. Get your 70 cm contacts in with Jay ASAP as he plans to switch back to 1296 in April after the DUBUS contest. Jay asks if anyone else has seen a difference in signal strength when rotating V to H? Vertical always seems to be better. He felt the difference was due to a wire support but after eliminating the support still saw the effect. Jay sees as much as 1 dB difference when looking at sun noise. SM2CEW did polarity tests with K1RQG on 70 cm EME and reports seeing a similar effect.

**K5PJR:** Tony k5pjr@centurytel.net was QRV on 1296 during the March AW with his new horizon to horizon polar mount -– My new mount is working great. I did not hear much on 1296 but did work K2UYH with a nice signal. Later I did hear a weak one. There was really not much activity for the time on moon rise. I was not able to be on later due to storms and high winds.

**KA7V:** Barry vihraw1@gmail.com is back from his trip to Eur -- I have the new preamp/relay installed, but I can't really say at this point if the system is performing any better than with the old preamp/relays. It has been very windy here and my azimuth control is off. I do detect weak echoes, but I have to look out the window and visually align the antennas with the moon. Once I get my tracking system back in calibration, I can evaluate the new preamp. Right now it is cold with very high winds and I will not be able to do this myself. I will have to get someone to help physically align the array, but I am basically QRV again and will be active in the DUBUS 432 contest. I am also setting up for 13 cm. I have a 400 W PA purchased during my recent trip to Eur and expect to be QRV there as well before too long.

**N1KI:** Phil n1ki@arrl.net wants everyone to know that he is still QRV on 432 EME and interested in skeds -- I have not been very active lately, but I am still QRV on 70 cm. I run approximately 700 W to 2 x 9 WL yagis horizontally mounted with full AZ/EL. I have a high noise level due to several local sources, so I can usually only hear the larger stations on CW. I have had more success with JT65 and monitor the JT65 web site when I am QRV.

**N4GJV:** Ron qstdemb@yahoo.com sends news on his recent EME activity -- I was QRV for the 28 Feb 70 cm ATP, when I logged QSOs with DL9KR, DF3RU, I1NDP, UA3PTW (I had a HV fuse blow as I was sending final Rs), K2UYH, SM2CEW, DL7APV and K1RQG. IK6EIW was heard and called without success. Conditions were good, despite a steady rainfall that increased the VSWR on my antenna system. Mutual polarization alignment with fixed polarity Eur stations was better than it has been for several months! I attempted to be QRV the following day, but strong gusty wind and heavy rain frustrated my effort. My light duty, brakeless azimuth rotator was unable to hold even my small 4 yagi array on the moon. K1RQG was the only station that went in the log before I gave it up. During the following weekend, I was able to be QRV only during the Sunday evening/early Monday moon pass, when I logged contacts with NC1I (lost another HV fuse, as I was sending final Rs), K5JL (It was great to have a QSO with Jay again after many years!), K1RQG and W8TXT. I am looking forward to the DUBUS contest and the activity that I hope it will spawn!

**OK1DFC:** Zdenek ok1dfc@seznam.cz is preparing another summer dxpedition for 2009. He will again be joined by OK3RM (another Zdenek) and a new team member OK3VM (Vaclav). We have plans to operate for E7 or GU. We now better understand the about licensing and expect to be able to use EME QRO. We plan to be QRV on 432, 1296, 2320 and 3400. I have prepared a new web site with links to 3.4 GHz EME information at http://www.ok1dfc.com/EME/3400/3-4ghz.htm. I also want to share info with all of you about a new 432 feed I am building now. More info and pictures are at http://www.ok1dfc.com/EME/technic/432feed/432feed.htm.

**OK1TEH:** Matej ok1tehlist@seznam.cz despite his his small antennas is one of the most active stations on EME – 70 cm during Jan I worked on CW in addition to K2UYH already reported, DL7APV and with JT65 F2TU for an initial. During March I repeated nice CW QSO with UA3PTW and heard NC1I and saw on JT65 UA4AQL (2 x 23 el yagis and 700 W) at (26DB), UT6UG (28DB), W7AMI (26DB) and K7XQ (27DB); however, no QSOs were completed. I'm now QRV with new 100 W solid state driver (TNX OK1VPZ) for my GS31B PA. So I am now able to the use full horse power for CW tests. In March I added DK3WG on JT to bring me to digital initial {#27}. On 23 cm after my first 2 contacts with K2UYH and G4CCH 2 years ago, I finally worked in Jan new JT65 initials with HB9HAL (27DB), OE9ERC (24DB), HB9Q (28DB) and F2TU (23DB). I had also had few CW skeds with OZ4MM and OE9ERC. They heard me fine, however due to my bad RX we didn't make it. After some more tests I finally completed on 7 Feb my first 23 cm CW EME QSO with PI9CAM. They were using 110 W at the big dish's feed. The signal at my end was about 3 dB above the noise. I also had near JT65 QSOs with ES5PC and DJ9YW. The signal levels were near (28DB), but the frequency drift of my old DB6NT transverter was against us. I am hoping for better results after June when the near by Czech TV switches from analog to DVBT with much smaller power levels, we'll see. I am comparing my RX situation here in the Czech capital city

with OK2POI's quiet mountain QTH. OK2POI (Jiri) is a new 70 cm EME station. He is QRV since Nov from his home with 4 x 12 el OK2POE yagis 300 W PA and 0.5 dB LNA. He has already worked over 12 initials (JT65+CW). More about his EME activity can be found at http://www.ok2kjt.net/ok2poi/eme_logs.htm. Jiri has the same NF LNA with 1 dB less cable losses to his antenna feed, but about 2.5 dB more antenna gain. Measurements during EME contacts (at the same time) show I lose on RX because of local QRM and industrial city noise less then -3.5 dB. It is almost the same on the 2 m, but much worse on 23 cm where I am down about 5 dB. Many EMEers ask me why I do not have my LNAs at my antennas' feed. I admit this would be a great help; however, the feed of my small dish is also very small, and cannot support the weight of a heavy relay with an LNA. My dish isn't easily accessible. It is on a remote roof location at the 8th floor. It is the second highest point of surrounded terrain, and thus a likely place for lightening to strike - LNA would be destroyed. More information on my activity and photo of the stations he has worked on QRP can be found at http://ok1teh.nagano.cz/eme_log1296.htm.

**PA3FXB:** Jan jvmmap@bart.nl was active on 1296 in March during the pre-AW -- I was QRV 1/2 March and tried with K8EB, but he still had RX problems. To "compensate" for not working K8EB, I QSO'd 3 new ones! Worked on 1 March were SM6FHZ on CW, VA3TO on JT for his initial #2 and on 2 March JA1WQF on JT. I will not be QRV for the AW because we have a terrestrial VHF/UHF contest here on that weekend. I take part with the club station PI4GN, and the PAs that I use for EME are needed. [Jan received the 1296 first place mixed mode (JT & CW) award in the ARRL EME Contest.

**SM2CEW:** Peter sm2cew@telia.com was QRV on 432 and 1296 in March – I had a very nice QSO with K1RQG on 432 last night. We were cross-polarized, but signals were still very good. Besides K1RQG, I also worked I1NDP, UA3PTW (both CW and SSB), NC1I and LZ1DX - super signals from all. I also Heard I1NDP and K1RQG on SSB, both were a solid (57). Earlier I was on 1296 where I found OK1DFC, SM6FHZ and K2DH. Dave had visitors in the shack, and we had a nice conversation via the moon on CW. I also heard a very loud station test on SSB, but he never gave his callsign. My equipment has been behaving very well and I am all prepared for some DUBUS Contest EME fun.

**SM6FHZ:** Ingolf ingolf.fhz@gmail.com reports on his 1296 EME March QSOs -- I was on the moon both on 1 and 7 March. On the 1st, I set up after some repair and improvement work and snagged a few QSOs at 1436 HB9BBD, 1520 G4CCH, 1634 GW3XYW, 1553 PA3FXB and 1640 VE6TA - all on random CW on my CQs. On 7 Marc I dared to put back in service my repaired G4DDK NE325 preamp. I got back the same performance as with the original one: >6 dB cold sky to ground noise. And that was without tuning the preamp at all, just a new NE325. On random CW, I QSO'd at 1412 VK4AFL, 1422 IW2FZR, 1549 G4CCH, 1555 LA9NEA, 1642 SV3AAF, 1732 OZ4MM, 1849 DF3RU, 1953 SM2CEW, 2012 K2DH and at 2207 NA4N. A lot of these were on my CQ. I also called CQ on SSB when my echoes were at their best, but had no response. I found the libration to be quite aggressive and deep at times. Some characters were just lost. Getaways were HB9MOON (579) at 2255 - they never got my call OK. I quit at 2300 as the moon started to hide behind a pine tree. I am working on that pine tree - HI. I also managed to burn my repaired preamp at 1900 and set a new record in switching preamp in total darkness - just 34 minutes! This time a non familiar sound came from my sequencing unit at the time for the accident. The unit is now on my work bench for examination. I hope to see you all on the moon in April.

**UK/DL9LBH:** Hans-Walter HW.Orths@web.de in Tashkent/Uzbekistan, grid MN41OG, is taking both JT and CW 432 EME skeds, but is having difficulties arranging times due to his work situation. He now has 2 x 23 el yagis and a BEKO PA. [TNX SM2CEW for forwarding this info].

**VA3TO:** Hugh hughd@cogeco.ca in FN03 is now QRV on 1296 -- I've been slowly assembling a modest 23 cm EME station over the past few months. I am still working through some technical difficulties, but I'm happy to report on 1 March initials #1* with G4CCH (15DB) and #2* PA3FXB (19 DB) were completed in JT65c mode. On 8 March I worked K2UYH for #3* JT65c and my #1 CW contacts. My equipment is a 2.3 m dish, VE4MA feed, 75 W SSPA (~ 60 W at feed), G4DDK LNA and TS-2000X. I'm working on a 300 W SSPA and hope to be QRV with it soon. The ultimate goal is regularly make CW and SSB contacts off the moon on 23 cm.

**VE3KRP:** Eddie eddie@tbaytel.net sends news of his recent 23 cm operation. He worked on 28 March on 23 cm HB9BBD and HB9MOON, and on 7 March VE6TA and heard K2UYH, and on 8 March K2DH.

**VE6BGT:** Skip macaulay@red-deer.oilfield.slb.com is new on 23 cm EME and is hearing echoes and has made his first QSO -- After spending the last year or so building up my 2 x 4 x 7289 tube 1296 amplifier and then getting my receive problems worked out, I finally heard my reflections from the moon though very weak. I did some testing and finally for the first time had a QSO with VE6TA. So I am now going to work on the RX section at my feed, which is on my TVRO 10' dish. Unfortunately my dish and drive system was built for the AO-40 satellite operation and not for EME work into Europe, where I have a tree problem. So until I get the dish moved I am really only good for the North American area operation. It was VE6TA that finally got me concentrating on the moonbounce stuff. I bought a 1296 transverter board from DEM around 10 years ago and it wasn't until AO-40 launched that I got around to building it up. That really sparked my 1296 interest and I built a little 2C39 PA. It worked like a charm. Then AO-40 went dead and that was it for the 1296 until Grant, who lives over 100 miles away, made a contact with me direct. I was using my helical satellite ant. I was amazed. I never thought a microwave signal would get that far. So I then dove into building up the "twin" amplifiers, a dual cavity amp. The two power supplies are PIC controlled with a real fancy PIC controlled sequencer and temp monitoring of each tube plus two separate water tanks that get displayed on two LCD displays, PIC circuits of course. There are all sorts of control circuits that monitor this and that and won't let the HV come on if this isn't right, etc. It was a lot of fun building and of course, but the real treat was that it works so well! I get between 700-800 W out. I was told to use the Russian tubes because they are so much more efficient, but I have close to 60 brand new 2C39 tubes, so I couldn't see buying new Russian tubes. So now I just have to get my receive side working better. I bought a good preamp from WD5AGO. EME is a lot of fun and a good technical challenge.

**W6ZN:** Rein rein0zn@ix.netcom.com is working with K6JEY to put together a 1296 EME demonstration station to be used as an educational sight for introducing students to STEM (Science, Technology, Engineering and Math). The station will use a 4 m TVRO dish and is supported by the San Bernadino Microwave Society. It will be used during the Apollo celebration in June. We will have kids here as part of this event. Ria (my XYL) will also play as hostess.

**WA4NJP:** Ray wa4njp@bellsouth.net was active on 432 in March. During the AW he worked K1RQG on SSB - started out (53) but peaked to (57). He also worked NC1I and heard VE2ZAZ and K3MF, but no success.

**WW2R:** Dave g4fre@g4fre.com sends his EME report March -– It is time for a new challenge, 902 EME. After failing with an attempt to scale a W0PW 2.4G design to 902, I finally got the W0PW 902MHz dimensions. Built it with a 7/16 DIN connector and got 30 dB return loss. A G0MRF preamp gave 0.42 dB NF on 902, but needed cavity filter on output to remove local cellsite. I had already converted a Motorola SGTF1019B 300 W amplifier based on the VHF South Conf. instructions but with power and TX LEDS. I also had an unconverted one. Dusting off the working one, I cracked the output combiner making it unusable. I borrowed a pair of combiners and a 300 W loaner amp from W5LUA. Following W5LUA's example, I fitted both amps with a RG142 input lead fitted with an SMA allowing connection to the input combiner and an RG142 output lead fitted with an N type plug allowing direct connection to the output QRO combiner. I worked W5LUA for 902 EME QSO 1. I now have EME QSOs on 4 bands. I found out afterwards that due to a wiring error, I only was running 350 W output. After fixing the fault and juggling cables/combiners, I now have 600 W output, which making echoes detectable. My station consists of a 3.1 m dish, W0PW linear feed, 2 x Motorola SGTF1019B PA (600W), ATF54143 preamp (0.42 dB NF) and homebrew transverter. My next challenge will be 5760.

**ZL1WN:** Ross rbiggar@ihug.co.nz reports that everything is now in place and he has his 500 W SSPA working well -- I have been tracking the moon and calling CQ on JT (without success), although I saw VE7BBG calling CQ on 1296.070 with a good signal, virtually SSB quality. I have been letting the DB6NT amp only just idle with about 200 W at the dish. I can see my echoes perfectly. I can wind the power up, but it looks like 200-300 W will be plenty. Kuhne did an extremely good job of fitting the GPS input. Frankly I cannot say enough good about that company. I am very interested in skeds and should be quite active in April.

**K2UYH:** I a.katz@ieee.org helped K1JT check out a new version of MAP65 for use on 432 and 1296. MAP65 is an expanded form of JT65 that interfaces with SDR receivers as SDR-IQ, and allows the simultaneous display of JT signals over a wide frequency range. For example, it can display all the stations operating JT between 1296.050 and 1296.100. We tested MAP65 on 28 Feb on 1296 and had QSOs with at 1700 PA3FXB (O/O), 1710 RA3DA (O/O), 1720 K8EB (O/-) – called but no reply and 1730 W7UPF (O/O). We had a problem with a 300 Hz spurious signal that was getting coupled into the system and were able to correct it. The help during this test was appreciated - TNX. After completing the MAP65 test, I operated during the 70 cm CW ATP and QSO'd at 1902 SM2CEW (559/559), 1912 N4GJV (559/549) – I had to TX at 90 deg pol to RX, 1925 I1NDP (559/569), 1943 G4RGK (559/449), and 1955 DF3RU (559/559). Later on 1 March I switched back to 1296 and QSO'd at 0115 K2DS

(569/569) – his new SSPA sounded excellent. During the week, I tried again on 432 with BX1AD on JT65B. On 5 March Edwin was finally able to decode my signal (28DB), but I did not decode him. After our sked on 6 March with the dish very low and looking into the trees, I worked on JT at 0615 VK2JDS (11DB/17DB) and 0625 VK2DAG/2 (16DB/O) – I believe using Dave's (VK2JDS) station. During the next moon pass I worked on 1296, still 5 March, at 2252 K5PJR (559/559) CW and 2301 N2UO (559/559) CW, 2322 VE7BBG (11DB/5DB) JT65C, 2340 VA3TO (17DB/16DB) JT65C for mixed initial #339* and 2356 K8EB (13DB/12DB) JT65C #340*, and on 7 March at 0012 K8EB (559/559) CW for initial #289 and 0035 VA3TO (449/O) CW #290, and later on 432 at 0600 JA6AHB (11DB/9DB) JT65B, 0619 K7XQ (16DB/16DB) JT65B and 0652 VK4CDI (23DB/25DB) JT65B. The next day on 23 cm, I contacted still on 7 March at 2302 K2DH (569/569) CW, 2310 SV3AAF (579/579) CW, 2320 NA4N (569/579) CW and 2329 LA9NEA (569/569) CW, and on 8 March at 2315 OZ/DJ8MS (25DB/O) JT65C #341*. I had tried to work Tor the previous day from a different grid, but failed because of QRN. I hope this is not the start of a noise problem similar to what I face on 70 cm. Some of this new interference that consists of many closely spaced carriers was also present on the 8th, but at a lower level.

**NETNEWS:** **CX2SC** (GF15wc) is QRV on 432. Pedro is on JT65 with 800 W and 2 x 18 el yagis. His email address for sked is cx2sc.base@gmail.com. [TNX OK1TEH for this info learned on (N0UK chat)]. **W0DRL** is looking for skeds on 70 cm EME al.tyler@sbcglobal.net. Al is running 500 W out into 8 x 15 el yagis. VE4SA making progress on the OZ9CR amp. **N8CQ** has received TH-327 1296 cavity and is making good progress. Gary is planning on being QRV for the DUBUS Contest on 432 with his 12 x 16 el yagi array. **WA8RJF** has 23 cm feed back in and is available for skeds. Tony added QSOs with HB9IZ and DJ9YW. **UA3PTW** in Feb worked on 432 CW UA4AQL and OK2POI, and on JT65B JO1LVZ, GM4CXM, JH7PAV, ZS6OB, OK2POI, OH2BNH, SV8CS and OE5MPL. **UA4API** in Feb on 70 cm with JT65B QSO'd UT6UG, DK3WG, G4RGK, PI9CAM, WA4NJP and HB9Q. **UA4AQL** in Feb on 432 CW added UA3PTW, I1NDP and DL7APV, and on JT65B UT6UG, RW6AG, F6APE, RA6DA, JA6AHB, G4RGK, EB3DYS, WA4NJP, K7XQ, DL5FN and OK2POI. **RW6AG** worked in Feb JT65B HB9Q. **VE6TA** was on 23 cm during the March AW and worked two new ones, W3HMS and VE6BGT (DO32) on schedules. **W5LUA** worked WW2R on 902 in March. Al will remain on 902 until he has worked the active stations there. **N4PZ** has repaired his antenna system and is seeing better sun noise. Steve recently worked K1RQG a couple times got an SWL report from K5JL of (569). **W8TXT** on 70 cm worked NC1I and heard DF3RU. **KL7HFQ** had a FB random QSO with K1RQG on 70 cm in March. **K7XQ** was active on both 70 and 23 cm during March. **WD5AGO** was not able to get on during the AW due to high winds. Tommy planned to be on 5760 for the DUBUS contest. **K5SO** was QRV on 23 cm in March and worked K2DH among others. **WB7QBS** has encountered a major problem with his azimuth rotator and needs to take the rotor out for repair. He has no idea when the repair will be completed. **VE4MA** expects to have 600 W (4 x 150 w modules) going on 902 very soon. **NA4N** has feed back in for 13 cm operation.

**FOR SALE:** **WA9FWD** has a supply of 7650 tubes for sale. If you need some contact John at jstefl@wi.rr.com. **HB9BBD** has moved and is having a big sale clean up sale. Over the years there has been tons of equipment collected, which I need only a fraction of for my own activities. If you need power amps of medium or big power including power supply, ceramic tubes from TH306, 316, 326, all the way up to TH327, TH347, TH298, YD1333, 1302 or 1304 series, Eimac Y125 155 or y730, directional couplers, 1 5/8" cable and connectors (brand new), 7/8" cable connectors, N, BNC Suhner connectors (all new), radial blowers, and cavities for TH347 or TH328 series He also has a lot of 10 GHz stuff, all the finest quality in 19" chassis. Dominique says "You dream of something, I may have it for you. All is given away for little money as these items have been collected to give you a good time, not to make money". Send Dominique an e-mail dfaessler@bluewin.ch telling what you are looking for. **N4GJV** has for sale an Eimac CV-2800 cavity amplifier (900 MHz). If your interested contact Ron at qstdemb@yahoo.com. **K0KE** has a variety of connectors (7/8" Andrew), dummy loads, ground kits and other misc. stuff for sale at good prices. Contact k.r.ericson@att.net or call 303-506-7575 cell or 303-841-9582 home. **WD5AGO** has some new 432 LNAs available. **N4PZ** is looking for GS-23B tubes - (one or two). **NA4N** still have a couple of 2304 class "A" amps for sale. They are combination 2 W, 16 W and 50 W amps mounted on a large heat sink and operate on 12 Vdc, and need -5 Vdc bias. They come with a fused bias protection board and full documentation. He is asking $US300 plus shipping. Contact Greg at na4n@hughes.net.

**TECHNICAL:** The secret behind RW3BP's amazing score in the SSB is the incretable noise performance he has been able to achieve with his system. Sergey has always had excellent noise performance, but he added some new RX improvements for the SSB contest. His Tsys is 2K better and now around 20K. He uses no relay to isolate his LNA at the receive port of his horn even though he is running more than 500 W. He has imprived the RX/TX port isolation by using a "coin". The coin is a metal disk placed inside dual mode section at some distance from horn output. Sergey reports that it is possible to find disk size and position on axis to get > 60 dB isolation. The coin is also useful to compensate reflection from feed aperture cover. He uses 2 mm plastic to protect the feed from crow attacks - HI. For previous feeds with a 300 mm aperture, the disk diameter was 35 mm and it was placed 50 mm from cover. For the new RA3AQ feed, it is a 49 mm disk placed 150 mm from aperture. Some illustrations can be seen at http://www.vhfdx.ru/faylyi/view-details/shemyi-i-opisaniya/dmh-septum-23cm

**FINAL:** My apologize for the delay in this NL. March and April are some of the busiest times for me. G4RGK also had a disaster and lost his hard drive along the netnews and other much more important stuff.

The 2008 ARRL EME Contest results were announced this month. The listing is at http://www.arrl.org/contests/results/2008/EME/errants.html.

Congratulations to G3LTF for the top single op CW multiband score. I1NDP received top honors for 432 and DL0SHF for 1296. For the microwave bands RW1AW was number one with recognitions for top band scores to WD5AGO for 2300, F5JFW for 10 GHz and DF1OI for 24 GHz. Multi-operator CW multiband first place goes to SP6JLW with OH2PO taking the honor on 432. In the mixed CW & JT mode all band class, the HB9Q team won top spot with by far the largest score. OH2DG was top in this class single op.

The results of the 1296 SSB EME Contest have not changed from last month with OK1CA regaining the title of Top Fun Maker for 2009!

A major EME related celebration of the Apollo 11 Moon Landing 40th Anniversary, "Echoes of Apollo," is planned for 27 June. It has been billed as World Moon Bounce/EME Day. EME amateur radio operators and large dishes from around the world are being recruited to put on demonstrations, science outreach programs – see W6ZN's report, and generally be active off the moon. It sounds like fun!

Planning for EME2010 in Dallas has begun. The tentative dates are as follows**:** Thursday 12 Aug 8 am to 5 pm Surplus Electronics Tour, Friday 13 Aug 8 am to 5 pm Welcome and Technical presentations, Saturday 14 Aug 8 am to 5 pm Technical presentations and 7 pm to 10 pm Banquet with speaker and prize drawing, and Sunday 15 Aug 8 am to 10 am Summary and Plans for 2012. There are also plans to have excursions for the spouses (and men if they want to tag along) on both Friday and Saturday and possibly on Wednesday the 11th for both husbands and wives. Although Dallas is not as old as the great cities of Europe such as Florence, it does have its own unique history. You will have an opportunity to experience a bit of the "old west". The DFW airport is a major airline hub that should allow good international flights into the US and also allow some air excursions either before or after the conference to other vacation areas in the US. The committee, W5LUA, WA8RJF and VE4MA) hope that you can fit the Dallas/Ft.Worth area into your vacation plans in Aug 2010. Further information as well as schedule information will be posted on the North Texas Microwave Society web page at www.ntms.org as it becomes available.

W2UHI is now QRT on the radio as a result of having moved to an assisted living facility near his son in the Columbus, OH. Frank is doing OK and I'm sure would like to hear from his friends - (Frank Lumney, Apt. C14 HillenVale, 1615 Yauger Rd, Mount Vernon, OH 43050). K8EB will be taking over Frank's dish.

Another old timer/EMEer, W0PW (x-W0EYE) is also no longer active. Don enjoys hearing from old friends and can be contacted at Don Hilliard, P.O. Box 271, Clayton, OK 74536.

We had the opportunity to visit K1RQG this past month and experience Joe's wonderful hospitality. He has quite a location and a very impressive setup. Some of the pictures this month are a result of this visit.

That covers the news for this month. Please help by sending your reports directly to me along with technical material. I plan to be QRV for the 70 cm DUBUS Contest and hope to hear you all off the moon. 73, Al – K2UYH

**K1RQG's Dish**