432 AND ABOVE EME NEWS
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CONDITIONS: There is not much good news this month. Terrible storms hit Europe and have put many EME stations off the air. Among the hard hit are OK1DFC,SM6CKU and DL1YMK. I also regret to report the loss of another EMEer. WA4OFS is now a silent key. Harry passed away on 12 Jan from a heart attack. He was a regular on 432 and then 1296 EME for many years. Although not very active recently, he still showed up for the contests. Harry willed be missed. Much of the activity in Jan centered around DL3OCH's dxpedition to Cay Sal Bank in the Bahamas. Bodo made 11 EME QSOs all on JT. His report follows. Conditions were especially good at the end of Dec and pretty good for the early Jan activity weekend (AW) and 70 cm CW activity time period (ATP), but activity did not match the conditions. The next 70 cm CW ATP is on 3 Feb from 1900 to 2100 and on 4 Feb from 0400 to 0600. Let's all make an effort to be there! Also coming up toward the end of Feb is the DUBUS Digital EME Contest on 24/25 Feb. Closer is the Annual 23 cm SSB EME Contest from 1000 on 27 Jan to 1000 on 28 Jan. Full rules appeared in the last NL. Please come join the fun!

C6ARI: Bodo dl3och@@gmx.de reports that his Bahamas dxpedition (EL93sw) did not work out as well on EME as he had hoped -- We had to fight with strong winds and some power loss. We also did not have much shade on the island and plenty of sun, which made it hard to build up the stations during the day. It was very hard to read the display of my laptop during the day. We had to watch our steps due to tons of cactus that peeked right through our shoes. But our biggest problem was the loss preamps. During testing of the 1296 EME system on the Florida Keys before leaving for Cay Sal Bank, we lost both of our good preamps. Fortunately I was able to get some backup preamps from K9BCT/4 – TNX Randy. Even these preamps died on the island. Despite these problems I was able to make 10 QSOs on 1296 with JT65C. I logged on 4 Jan at 0245 G4CCH (-28 dB, weak but very nice decoding), 0259 K5GW (-20 dB with a very nice signal), 0308 OK1DFC (-24 dB), 0317 HB9Q (-23 dB), 0345 OE9ERC (-23 dB), 0445 DJ9YW (-27 dB weak, I heard Heinrich calling earlier but he disappeared), 0508 PA3CSG (-24 dB), 0520 W5LUA (-24 dB), 0531 K2UYH (-20 dB and heard me -22 dB) and 0557 OE9ERC (-19 dB and heard me -15 dB). During my sked with K2UYH after two lines of decoding our generator went off. However, we got it going again after a few minutes, but when the power came back on we found that the preamp had failed. I exchanged it with a spare preamp and was able to complete the QSO and another with OE9ERC. I also tried CW with Erich, but did not hear him respond. I never heard anything from OK1KIR. The next day (5th) the equipment looked the way it was left the day before, but when I switching on the power I found that another preamp had gone bad! There was only one preamp left, but I never heard anybody with that one. I had hoped to QSO OH2DG and also try some CW. I left the SpecJT running all the time in hope that I would see a CW station calling. I am sorry, but no luck. We installed the 70 cm equipment the next day, but had big problems on this band. The winds made it difficult to point the long yagi to the moon. My laptop also created noise in the spectrum. I saw DL7APV (-29 dB) in the spectrum, but he did not seem to hear me. I never received a confirmation. Only one QSO was made on 432. I worked HB9Q (-24 dB). I don't think that I could have worked anyone on CW judging by Dan's signal level. However, we still kept trying and left the SpecJT still running and kept calling. I did not see anybody else in the spectrum nor heard anybody in the speaker. It was a quite time consuming EME activity. Two operators were needed all the time. Five preamps were needed, Al's TS2000 got quite some scratches and the 23cm feed needs to be fixed. We really tried everything on the island to get somebody else in the log. Daniel/DL5SE encouraged me always to keep trying. This will not be my last EME operation from the Bahamas.

DL1YMK: Michael DL1YMK@aol.com suffered much damage from the wind storms that ravaged Eur –- I had tremendous winds of 200 kmh and my antennas were not very lucky. My dish as well as my 70 cm array were seriously damaged. And as a result I will be off the moon for quite some time. There were many deaths from this storm. It was worse than the one in 1999. These problems will not affect my dxpedition plans. There will be a dxpedition at the end of May and it will include 13 cm as well as 70 and 23 cm. The trip will coincide with the DUBUS contest weekend as well as weekend before.

C6ARI's 7' dish set up for 1296 EME on Cay Sal Bank

DJ9YW: Heinrich DJ9YW@t-online.de reports on his QSO the C6ARI dexpedition -- I worked Bodo in the morning o 4 Jan), but I need 3 hours with my 4.5 m dish and IMU circular feed and with 360 W at feed to complete the contact. The signals on both sides were very very weak. He used a ~7" dish with a septum feed and a 200 W DB6NT PA. Normal with a 2.1 m dish, circular feed and ~150 W (ERP 37 kW) a CW QSO is possible. But the signal was only -29 dB with JT65C. In past QSOs with his 5 m (linear pol) yagi (~5 kW ERP), he was always -25 dB. The dish to yagi delta should ~8 dB + ~4dB = 12 dB worse. I think the dish and feed are not optimal... What a pity! In my QSOs with other new stations with a septum feed, I have also had a level problem??

DL9KR: Jan bruinier@t-online.de reports on his Dec/Jan active on 70 cm EME –- I heard K6UCI in Dec and worked N1KI for my initial #850 and first EME of 2007. I missed C6ARI on 70 cm. I also ran several skeds with HK1DX, but no QSO yet. HK1DX has heard me.

G3LTF: Peter pkb100@btinternet.com writes -- We have been having some very stormy weather in Europe this winter. Every time the moon declination has been northerly, we seem to get high winds. So I was not active from 11 Nov until the 432 CW activity periods in early Jan. I was then able to be QRV in both sessions. Even with the 1.6 dB of extra loss, conditions seemed quite good with little Faraday rotation and a low rate of libration. I worked on 6 Jan VK3UM, RW3PX, UA3PTW, FR5DN, SM3BYA, OZ6OL and F3VS. I heard DL7APV and EA3DXU calling VK3UM, but never heard them again. On 7 Jan I worked NC1I, DL7AFB for initial #401, F2TU, K3MF, OZ6OL, DF3RU and OZ4MM. Maybe the WX in the USA was bad as I was sorry not to find many active from there. I'm still looking for K5SO among others. I hope the WX will be a bit kinder to us in late Jan. I'm working on improvements to my 3.4 GHz system so

that it can instantly switch from 3400 to 3456. I use a single oven controlled LO (like on 2304/2320) and convert 144 to 200 MHz on transmit and vice-versa on receive. I've found that you can make very nice 4 and 5 section Interdigital Filters for 3.4 GHz using standard 1" x 0.5" X-band waveguide as the case and the curves in the ARRL UHF/Microwave Experimenters' Manual. I am very sorry to hear about WA4OFS. I visited Harry in 1994 and saw the excellent gear that he built. He was a real EME experimenter and operator, RIP.

HB9Q: Dan hb9q@hb9q.ch brings us up to date on his activity – Sorry I forgot to send you my scores. On 432 we worked 92x40 (CW and JT) and on CW 50x25. We spent a lot of time on JT and enjoyed very much working many QRP stations. On 1296 we were QRV for only 6 hours, since we concentrated on 432. The result was only 35x19 (CW and JT) and on CW 31x16. We sent our logs to the ARRL as check logs. In Jan I easily worked C6ARI on 23 cm on the 4th at 0316 at -24 dB and on 70 cm on the 6th at 0652 at -21 dB. I agree with recommendations that both calls and reports be sent on JT during dxpeditions to avoid confusion. I also recommend the QRP 1296 EME logger http://www.emeham.com/1296/. It is used by a growing number of the digital population. It would be great if it would become the place where the people meet to coordinate skeds and activities on both JT and CW!

HB9BBD: Dominique dfaessler@bluewin.ch was on looking for C6ARI -- I was listening on 4 Jan to the QSO in JT between G4CCH and C6ARI. I am not set up for the JT mode, but followed the process of this QSO. During the first minutes, I just got audio from G4CCH and monitored Howard's signal on a waterfall display. Later I also heard the tones from C6ARI with quite good audio. At this time it would have been easy to QSO on CW with them on my side. On the morning of 5 Jan I had CW sked with C6ARI, but received nil. Later, OH2DG started his sked in JT, but C6ARI was not detected on my side. After 10 minutes monitoring with nil, I quit and went back to sleep. The good news is that this marginal station was clearly good copy here. The bad news is no QSO was unfortunately achieved.

K5JL: Jay k5jl@hughes.net was active in late Dec and for the Jan AW on 1296. He reports he worked on 30 Dec K9SLQ - very good signal, SM5LE and WB2BYP (559), and about a dozen stations on the 31th including F2TU and G4CCH from Eur and W2DRZ and KA0Y in NA. On 5 Jan he also found lots of activity on 23 cm, but heard nil from WA5WCP. Regarding his comment in the last NL, Jay says he was inquiring as to who was using SMA relays and running high power and not saying to not use SMA relays at the RX port. [If you are running lots of goo, there can be considerable power at the RX port of a circular feed. It depends on how well the feed is adjusted for isolation. I suspect even in Jay's case you can still get away using an SMA preamp protection relay].

K6JEY: Doug dougnhelen@moonlink.net sends news about OVRO and his own activity -- At OVRO we are continuing an equipment redesign project, but have no open windows for operation in near time. I did take a group of teachers and students out to OVRO for a science trip on 28 Dec. It was very windy and pretty cold, but all had a great time. We got a tour of the dish and a demonstration of the uses and characteristics of liquid nitrogen. At home, I am going to try to be on 70 cm EME for the DUBUS contest using the JT mode with 2 x 55 el yagis and 300 W.

K7MAC: Mac k7mac@safelink.net is QRV on 70 cm EME from Idaho with a modest station consisting of a 32 el yagi and 100 W on moonrise/set only as he no elevation. Because of his station size he is primarily interested in JT65 skeds. He also has capability for EME on 220 and is working on a system for 1296. He has worked HB9Q and in Jan worked K2UYH.

KC3RE's mobile EME (432 on left, 144 on the right)

KC3RE: Martin kc3re@yahoo.com writes that he is set up for mobile EME operation on 432 with a single 28 el M^2 432-9WL yagis, a 100 W PA (soon to be doubled) and a ARR preamp. The PA runs on a separate deep-cycle marine battery. All is mounted on the car, ready for CW EME attempts with larger stations.

KL6M: Mike kl6m@qsl.net reports his big antenna is back to normal after his mount problems –- I worked on 30 Dec on 70 cm VK3UM (559/569), W8TXT (539/569), and on my Eur moonrise OE5JFL (569/569), VK4AFL (559/559) and RW3PX (549/559). The next night was similar except no one on from Eur. I worked on 31 Dec W8TXT (549/559), KU4F (569/569), N1KI (O/O) for initial #171 and my 7th for the year! I almost had initial #8 for this year, a partial with DL7AFB (he was the only one awake). We heard each other, but the moon went behind trees on his end before we could complete. It was a very poor turnout, but very excellent conditions! Regarding CW, if it had not been a requirement back when I got my ticket, I probably never would have learned it. I am so glad I did! My life would not have been the same without it. I feel bad for the newcomers. It is incumbent upon us all to try to interest newcomers in CW. The first step is to lobby our organizations (ARRL, DUBUS, etc) to continue to have meaningful CW contests, and for all of us to participate to the fullest extent possible.

NC1I: Frank frankp@gcq.net was active during the end of Dec and for the early Jan AW -- I worked on 70 cm on 30 Dec at 0023 KU4F (589/589), 0545 VK3UM (589/579) and 0551 W8TXT (559/589) - conditions were outstanding, and on 6 Jan RW3PX, OZ6OL, W8TXT and OH2DG between 0200 and 0300. I also called CQ from 0630 to 0715, but only heard KL6M (briefly testing). I would describe conditions as average. During the 70 cm ATP on Sunday (7 Jan) I added W8TXT, K3MF, G3LTF, SM3BYA (I had the receive polarity wrong for this one), SM3JQU, F2TU, OZ4MM, OZ6OL and DF3RU. I was called twice by DL7AFB and I went back to him both times, but he just kept repeating his call and then disappearing.

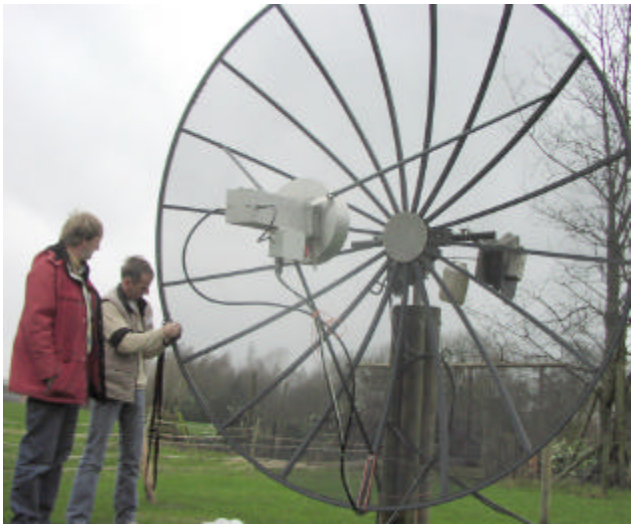
OH2DG: Eino eme.oh2dg@dnainternet.net sends his Jan report -- WX conditions here on the gulf of Finland have been quite different this winter with little cold and no snow. Normally we have -10 deg C temperatures and half a meter of snow – hi! I followed the C6ARI dxpedition skeds and QSOs on 23 cm with interest. Perhaps I missed making a QSO because the sked frequency was changed later by -5 kHz. Our hobby is wonderful with happy times when there is success and not so happy when there is no success, but this is the salt for life. TNX Bodo for another great effort. I am looking forward to the next chance to work him in another dxpedition location.

OK1DFC: Zdenek ok1dfc@seznam.cz brings us up to date on his EME activity -- I been traveling a great deal for work and have fallen behind in my reporting. In the ARRL EME Contest I was QRV on 432 and 1296 in single operator assisted class. My result is 432 were 28x18 and on 1296 61x33 for a total of 453,900 points. I continue to have massive QRM on 432 from a local digital TV transmitter, and consequently did not make so big a noise on 432. In the second part of the contest we had a strong wind storm and I was not able to operate my dish. This is the primary reason my results are not where they should be. On 432 I worked on 4 Oct LU7DZ (559/449) for a new DXCC, the first OK-LU QSO, and my last continent to achieve WAC on 432 after my 10 year EME anniversary – hi, on 14 Oct on CW RW1AW (559/559), KL6M (579/569), DF3RU (559/559), JA6AHB (O/O), SM3AKW (559/569), 7M2PDT (539/539), DL7APV (559/559), OH2PO (579/569), G4RGK (559/579), EA3DXU (O/O), FR5DN (559/549) for a new DXCC, DL9KR (579/589) - huge signal, DL1YMK (559/559), UT2EG (O/559), RW3PX (O/449), UA3PTW (559/559), OH2DG (559/559), YO2IS (559/559), K1FO (559/559), VE6TA (559/569), NC1I (579/579) - very strong, SP6JLW (559/539), G3LTF (559/569), HG1W (O/O), SM4IVE (O/O), K2UYH (559/559) and OE5JFL (559/559, on 2 Dec on JT65B UT3LL (O/O), OH3KLJ (O/O), DF4UE (O/O), EA7HG (O/O), F6APE (O/O), JS3CTQ (O/O), JO1LVZ (O/O), DL7AFB (O/O), OE3FVU (O/O), PE1ITR (O/O), OE5MPL (O/O), YO9FRJ (O/O), PA3DZL (O/O), KE2N (O/O), W7AMI (O/O) and I1NDP (O/O), on 27 Dec on JT65B ZS6WAB (O/O) new DXCC, on 28 Dec on JT65B OK1YK (O/O), and 30 Dec HK1DX (O/O) new DXCC and first OK-HK QSO. I worked on 1296 on 14 Oct on CW VK3UM (559/559), HB9BBD (589/599) - huge signal, ES6RQ (559/569), JH5LUZ (559/569), OZ6OL (559/569) and SP6JLW (559/559), on 15 Oct on CW IW2FZR (559/569), OK1CA (569/579), VK4AFL (559/559), RW1AW (589/589), SM4DHN (589/569), JA8IAD (559/569), G4CCH (579/579), HB9SV (599/589), G3LTF (579/579), OH2DG (569/569), HB9Q (579/559), LA8AV (559/579), ZS6AXT (559/589), LA9NEA (559/579), IK3COJ (559/579), LA2Z (O/O), N2UO (559/569), ON5RR (559/549), SM3LBN (559/569), IK2MMB (559/579), K5JL (579/579), K1RQG (579/589), F6KHM (579/579), I0UGB (559/549), DF9QX (559/549), SM6CKU (559/569), DL1YMK (559/569), W5LUA (559/559), VE6TA (559/579), G4DZU (O/O), K5GW (579/579), VA7MM (O/O), OE9ERC (579/569), EA3UM (559/559),

W2DRZ (559/559), K4QI (579/569), K2UYH (579/579), SM2CEW (559/569) and NA4N (559/559), and 11 Nov on CW LA9NEA (559/579), K0YW (559/579), SM3AKW (569/579), DF3RU (569/559), UR5RX (559/559), I0UGB (559/579), DL1HYZ (O/549), SM4DHN (579/569), DL4DTU (559/559), OK1KIR (559/569), WA6PY (559/559), F2TU (569/569), ES5PC (559/569), KL6M (559/569), WA5WCP (O/O), OE5JFL (539/569) and W7UPF (O/O), on 31 Oct on JT65C G4CCH (O/O), UT3LL (O/O) and OE9ERC (O/O), on 3 Nov UT3LL (O/O), 4O6EME (O/O) new DXCC and first OK-YU6, on 3 Jan on JT65C HB9Q (O/O) and C6ARI (O/O) new DXCC and first OK-C6 QSO, on 6 Jan on JT65C VK7MO (O/O), PA3FXB (O/O), DF0MFG (O/O), UT3LL (O/O) and RW3BP (O/O), on 7 Jan on JT65C ES5PC (O/O) and 8 Jan GM3SBC (O/O). TH347. I hope in Feb for not so windy weather that may damage my dish. Last week we had 100 km/h wind speeds! [Since receiving this report, Zdenek experienced a terrible wind storm that peeked to 146 km/h. It was the worse storm of his life. He never expected such wind speed in his area! As a result he has damage to both his dish's azimuth and elevation drives. The dish hit the mast and has two broken ribs. All the other surfaces look well. Zdenek also had damaged to his house. The good news is that he and his family are all ok. The other good news is that he will work hard to be back on the moon in a few months.

ON4BCB: Walter's walter.crauwels@skynet.be Jan input -- No QSO activity, but a lot of work and suffering – hi. I changed my electric installation to 380 V 3 phase at 32 A. The up coming project is to get my TH327 on-air! Meanwhile I'm changing my feed support to a sturdier version that will allow quick change of my new 23 cm round septum feed with super VE4MA choke feed for 13 cm. My goal is to be QRV this summer on 2304/2320/2424 EME. I plan to be active on 1296 in Feb.

PA3FXB: Jan jvmmap@bart.nl is now QRV on 23 cm EME -- My station consists of a 3 m dish with DFC Septum feed (obtained from Zdenek at Würzburg), FHX35 0.35 dB NF preamp and a PA giving 150W at the feed. My first attempts at listening were during last year's (2005) ARRL EME Contest. My first QSO was with G4CCH on 12 Nov. Since then I have made 12 initials all on JT65C. I have also made one 70 cm EME contact. My moon window is very limited. Approximately 14 days a month my dish cannot see the moon. I am also involved in Dwingeloo project. We are restoring a 50 year old 25 m astronomical dish near Würzburg. We hope to do EME with it in a few years. See www.camras.nl and click on "fotogallerij" for more details.



PA0BAT's 3 m dish (PA0BAT and PA0PLY in picture)

PA0BAT: Gerard pa0bat@amsat.org has recently started activity on 1296 EME from JO31fx. He uses a 3 m dish with 400 W at his Septum feed. He is QRV on both JT and CW and made a number of QSOs – [see my report in last month's NL].

SM2BYA: Gudmund gudmund.wannberg@telia.com writes -- I was QRV from SM3BYA last week as advertised on the 20 m net. Nowadays I always feel a bit apprehensive driving up to the farmhouse after not having been there for months. Is the array still in one piece and will it work? Surprisingly, it is and does, year after year. So does the rest of the rig, although many parts of it can be classified as antiques. The keyer is the old all-tubes W9TO keyer I built back in the summer of 1967. The 28 MHz exciter is a homemade unit I put together in 1976 and the receiver is a 1976 vintage Drake R-4C. I guess this proves that CW EME does not require cutting-edge technology. Although I did use VK3UM's software on my laptop to get the pointing data. I also tested an 80 W SSPA that I was hoping to use to replace my old 4X150G driver cavity. Everything worked fine until I made the mistake of trying to adjust the input circuit of my K2RIW under power and promptly blew out one of the final transistors! The SSPA was an early 1970s unit and the transistors of that age were not rated to withstand more than 10:1 VSWR at full power. I was lucky to have another unit of the same type collecting dust in the barn that had not been re-tuned to 432 yet. Got it out, hooked it up and had 35 W out without doing anything at all; this was just right to drive the K2RIW to 850 W. So I left everything like that. I worked on 4 Jan at 2100 DL5FN on sked on the first try - we completed in 12 minutes, on 5 Jan UA3PTW, 6 Jan at 0500 partial K3MF - copied only a few letters probably a result of of Faraday lockout. In the DUBUS activity period that evening I worked KL6M, G3LTF, DL7APV, VK3UM and UA3PTW. Also heard was EA3DXU. At times the band appeared so dead that I began to suspect the preamp, but it was probably just more Faraday lockout. In the morning of 7 Jan.7 at 0500 I ran a second sked with K3MF that went a little better. Wayde's signals were now there all the time, just readable. After three overs I had both calls complete and started sending Os, but Wayde apparently never heard me at all. Eur-US fixed yagi- fixed yagi contacts can be a pain! In the 70 cm CW ATP I went on to work NC1I, OZ4MM, F2TU and DF3RU. I heard OZ6OL at the end, but copied nobody else. All in all, some enjoyable evenings and early mornings!

SM2CEW: Peter sm2cew@telia.com had WX problems in Jan –- I could try on 70 cm CW with C6ARI because of bad WX. My dish was stuck in wet snow that had frozen. I was unable to elevate the dish. I tried in -17 deg C temperatures to get it going with no success - too much ice.

SM6CKU: Ben ben@parabolic.se reports that the big Eur storm hit him quite badly -- I am now forced to take down the dish for repairs. I will also change the mount so it will take some time before I can get back on again. It has been there for a while and needed some treatment anyway.

SP6GWB: Stan sp6gwb@netgate.com.pl is working on a 6 m dish for 70, 23 and 13 cm EME and plans to be QRV next year. At present he has on 70 cm 4 x 23 el yagis, but with only a QRP 30 watts at the array. Stan has worked with JT65 HB9Q and will take skeds with big stations, but asks people to be patient until he finishes his dish.

VK3UM: Doug tikaluna@bigpond.com reports on his Jan AW activity -- Regretfully I was unable to get on for both moonrises (NA window) due to extremely strong winds (>75 kph). On both days the winds did abated sufficiently for moonset operation. On 7 Jan 70 cm produced Faraday ~45° an hour before moonset down to ~0° at moonset with occasional rapid and deep fading commensurate with rapid polarity changes. On 23 cm, signals were very steady early, but experienced similar fading towards set. Echoes were > 20 dB on 23 cm and > 16 dB on 70 cm. On 8 Jan on 70 cm Faraday was ~CCW 75° and remained seemingly constant to moonset. Signals were steady with little Libration. Echoes were > 20 dB on 23 cm and > 18 dB on 70 cm. Sun noise both days on 23 cm was ~19.5 dB and on 70 cm ~16.8 dB (SFU ~ 80 VK3UM EMECalc). Moon noise on 1296 was >0.8 dB. Overall conditions seemed quite good considering the additional +1.8 dB path loss. Eur activity was not great, but I QSO'd on 7 Jan on 23 cm IK3COJ (549/559) and SM6CKU (569/579), and on 70 cm UT3LL (539/539) H/H, F2TU (559/559) H/H, SM3JQU (549/559) H/H, RW3PX (549/559) H/H, G3LTF (549/549) H/HV (in his trees), DL7APV (559/559 H/H, SM3BYA (549/559) H/H, EA3DXU (549/449) H/H, G3LTF (559/559) H/V (clear of his trees and now vert!) and OZ6OL (549/559) H/H - all in just on an hour. On 8 Jan Eur activity was even worse. I called on both 23 and 70 cm for 1½ hours and worked on 70 cm only RW3PX (549/559) H/H and OZ6OL (549/559) H/H. No CW was heard on 23 cm despite the video games [translation JT65] running on .065 and .067 at S3/S4!

W7MEM: Mark w7mem@msn.com in Idaho writes that he is presently QRT on 432. His preamp is down and he wants to move his array to a tower near the house so that his feedline will be under 50'. Mark also plans to change his phasing lines to lower loss LMR600 and add a better AZ-EL system. After this project is completed he will work on 1296 EME. I already have a 10' TVRO dish.

W8TXT: Mike <no e-mail> reports on his post contest activities. On 2 Dec he worked on 432 UA3PTW and N4PZ, on 9 Dec DL9KR, on 30 Dec NC1I, KL6M and FR5DN - Phil was on a long time with very good signals, and on 6 Jan NC1I. Mike is running 4 yagis and 800 W, but is having some problems with position feedback. He is now up to initial #31 on 70 cm with all random.

WB2BYP: John storyavenue@hotmail.com reports on his 1296 activity at the end of Dec/Jan – I am now running 400-500 W. I worked on 30 Dec K5JL and K9SLQ, on 31 Dec K5JL, K2UYH and KA0Y, but did not hook up with

G4CCH, and during the Jan AW K5JL and LA8LF. John also heard a few others before having to shut down.

YO2IS: Szigy yo2is@wa7v.ampr.org was active in the recent EME Contest and sends the following report –- I was QRV for the 17th time in row in the ARRL EME Contest and passed the 775 QSO mark with my low ERP 70 cm EME station. I made 14 QSOs, two of them were dupe's with FR5DN and OH2PO. I am afraid the activity on 70 cm EME has declined. The aging equipment and operator did perform as expected - hi. I have not changed my mind regarding the human operator which must NOT be driven out by a digitized robot operation competing on an equal level. Regarding the 70 cm CW Activity Time Periods, the selected times are usually out of my Moon window. I can only operate at elevations > 40 degs. I'd like to participate, but the current times make it impossible. I am also troubled by the EME QSL situation. It is no more a gentlemen agreement! It's ridiculous to need to 'fight' to get an 'initial' QSO confirmed from some of the 'elite' moonbounce operators! Sometime ago I started my new 23 cm EME project and have already up and running a Septum-feedhorn with a 2 m TVRO dish with an f/d of 0.3, preamps and GI7B PA - all is homebrew. TNX is deserved by VE4MA, DL1YMK, RW3BP and SM5LE for all the very useful information and help. I hope to be QRV sometime in the spring. I will be CW only, XO on around 1296.012.

K2UYH: I a.katz@ieee.org squeezed in a little more EME before the end of the year and QSO'd on 70 cm on 29 Dec at 2230 DF5FN (559/559) for initial #731* {#694 CW only} and 2256 KU4F (579/569), on 30 Dec at 2110 K7MAC (23dB/O) on JT65B #732* and 2150 SP6BLW (559/559) – excellent CW copy, then switched over to 1296 at 2337 K9SLQ (579/579) – big signal and 2345 K5JL (569/589) – cut short by telephone call from Bodo, and continued on 31 Dec 0405 W2DRZ (559/559), 0012 WB2BYP (559/529), 0140 W4/DL3OCH (27dB/23DB) JT65C - Bodo testing on Grand Key for initial #285*. I was a little disappointed by the results of the C6ARI dxpedition. There should have been more than sufficient signal for CW contacts on 1296. Despite some reports to the contrary, I copied their 23 cm signals on CW and when they where going well could hear their JT signal in my audio. Unfortunately during my sked with Bodo, he lost one of his preamps and it took him several minutes to make a replacement. We completed a contact, on 4 Jan at 0528 C6ARI (22dB/O) on JT65C for initial#286* and DXCC 57*, but I did not know why he was having difficulty copying me and did not try on CW. I heard others trying on CW with huge signals, but no replies from C6ARI. Bodo has no idea why the preamps kept failing. I suspect it had something to do with their generator and power supplies. One thing I forgot to send was extra FETs for the preamps! 432 was another mystery. With 100 W and a good yagi, they should have easily worked many stations on JT, if not CW. I had only Friday (6 Jan Z) to try with them because of a business trip and actually had QRT early to get to the airport on time. I listened/watched on most of his skeds. I was unable to even locate his signal on SpecJT until his sked with HB9Q. Dan was obviously easily copying Bodo, but C6ARI was just detectable on my system (no decodes). After Dan's QSO, I located Bodo calling CQ, called him and received a nice decode of calls, but signals went back down after that and we did not completed a QSO. Because of my C6ARI activity I missed the 70 cm ATP. While in CA, I met with WY6G who has a home on Hawaii, and we discussed plans for a 1296 EME dxpedition there. The dxpedition would be around the weekend of the 16/17 June. Herb is going to find a suitable location and see what equipment is already there. I would love to get permanent 23 cm EME going from KH6. I will keep you informed of our progress.

NETNOTES BY G4RGK: WA8RJF has worked HB9Q twice on 432 with a single yagi with no elevation and 100 watts. Tony WA8RJF@ARRL.net is willing to try on his horizon skeds with well equipped stations. **WB7QBS** is waiting for weather to improve to allow work on his 432 array. **RW3PX** QSO'd on 432 with VE6TA, SP6JLW, OZ6OL and SM3JQU on CW at the end of Dec. **UR5LX** worked in Dec on 1296 with JT65C RW3BP, SM5LE and LA8AV for initial #58. **VE1ALQ** is making progress on his 13 cm EME system. **VE4SA** has his 12' dish up and is now able to move it. QRV on 23 cm is not far off. **W4TJ** has new e-mail address w4tj@comcast.net. **DL7UDA** has a new e-mail address DL7UDA@versanet.de. **K5PJR** working on new dish. **VE4MA** was listening on 23 cm during the Jan AW. **K2DH** says there will be no progress on dish until the spring. **SV1BTR** was not QRV on 70 cm in early Jan/end Dec because of Flu. Jimmy is also preparing to be QRV on 23 cm with 3.6 m dish. K0WLU is interested in 23 cm EME and has found a 12' dish. **LX1DB** reports all his antennas have survived 136 kmh winds.

FOR SALE: NC1I may still have W1ZX's dish available for free – see the Jan NL. It would be a real shame for this dish to be scraped. Contact Frank at frankp@gcq.net. **K6JEY** has for sale three 7213 RCA tubes. These are 1.5 kW tetrodes for US$200 each plus shipping. They are NOS and still in the bag. Contact Doug at dougnhelen@moonlink.net. **VE6TA** has for sale a 4 tube 23 cm PA and a 13 cm 2320 converter. Grant is looking for a 222 transverter, a 3456 transverter and some GI7B tubes. **VE3KRP** is looking for a couple of 5 pin male connectors that fit on the Microwave Modules transverters, and also similar connectors that are 4 pin males that fit the Wiltron 560A scalar network analyzer. If anyone has some or know of a source please contact Eddie at eddie@tbaytel.net. **WA1JOF** still has some stuff for sale left – see last months NL. **W7MEM** is looking for a 23 cm preamp and VE4MA feed for 10' dish.

TECHNICAL - US Digital Readout Noise: Recently there have been a number of reports of noise from the digital readout systems. I am using W2DRZ/K2TXB's system and discovered the problem after I made repairs after my lightning damage. I thought the noise was part of the QRM/noise that has troubled me for years on 70 cm. I was amazed to see how much of the noise I had accepted as being externally generated was coming from the readout system. The noise is not present on 1296 and is only a problem on 432 (and 144). My short time solution was to shutoff the system and use it only when correcting the dish's position. W2DRZ suggested using a (6) wire telco splice adapter (available at my hardware/electrical supply houses) or a short telco (6 not 4) wire jumper with connectors – see http://www.w2drz.ramcoinc.com/rj11.htm In the J1-RJ11 chart it shows the plug wiring. The pin (4) wire carries the encoder positive voltage. You can cut just this wire and install a switch to turn this voltage on/off. Plug this jumper into the controller and use the splice to connect a new cable to the existing encoder cable. (In W2DRZ's system, this will cause only the "auto tracking" to shut down "if enabled" because the position update will fail and the controller auto protection will stop the auto tracking. When you switch "on" the encoders voltage, all will be fine). The principal cause of the noise appears to be the US Digital absolute inclinometer, so if you do not have absolute encodes you may not have this problem. W5SO is using the US Digital absolute inclinometer and managed to put his into a cast aluminum box w/cover. Doing so reduced the QRM from the inclinometer on 70 cm somewhat, but it was still present at a low level and still annoying. Joe believes that when he gets the metal box grounded and also shields the AZ encoder, the QRM will be reduced even more.

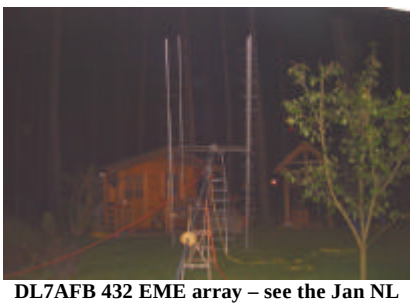
JT CHAT FOR 23 CM: G4CCH reports the QRP 1296 EME logger http://www.emeham.com/1296/ is used by a growing number of the digital population. I also use ON4KST's chats http://www.on4kst.com/chat/ start.php - uWave and EME chat. These also have real time links to DX cluster. Unfortunately on the EME chat you have no choice about which band you see or can spot on... Just 2 m, but maybe its possible to create separate chats for different bands?

NOTE on WSJT 5.9.5" tests data in Jan NL from DJ9YW: Heinrich adds to the information provided in the last NL that his measurement frequency was 69 MHz, so the delta f on the X-axis is valid for all bands, not only for 1296.

MICROWAVE UPDATE (MUD) is scheduled for 18-20 Oct Historic Valley Forge near Philadelphia, PA. On Thursday will be sightseeing and possible surplus tour with the conference on Fri & Sat; Flea Market Fri night. Vendors on site; Banquet Sat night; Door prizes and raffles Hosted by the Pack Rats--Mt Airy VHF Radio Club. Spouses, friends and family invited; hospitality room. Alternative family/spouse programs available $79 early-bird registration until 9/1 includes Conference, proceedings, and banquet is $89 from 9/1-10/1; $99 thereafter. Extra banquet tickets $39. Special hotel rate is $92 per night Full info and registration at www.microwaveupdate.org. Abstracts, papers and presentations may be sent to W2PED pdrexler@hotmail.com or N2UO lu6dw@yahoo.com. Questions to chairpersons K3TUF Phil@k3tuf.com or KB3HCL @arrl.net.

FINAL: Long time 70 cm EMEer WB0GGM wb0ggm@arrl.net had a stroke, but is doing OK except for trouble with right side. Hopefully it will come back. John will be in Hospital for about two weeks. John's home phone is 507-364-5633, his XYL is Deb.

That covers the news for this month. Please keep the reports and especially the techno info coming. I plan to be active in the SSB contest and hope everyone will turnout for it. Remember you do not have to TX on SSB to participate in the contest. 73, Al – K2UYH



DL7AFB 432 EME array – see the Jan NL