432 AND ABOVE EME NEWS DECEMBER 2006 VOL 34 #12

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CONDITIONS: The Nov contest weekend produced some very divergent views on conditions. The divergence was greatest in regard to 70 cm, but also existed on 1296. Some reports indicated truly outstanding conditions while others found conditions to be just terrible. I found conditions to be somewhere in the middle, not outstanding, but not terrible either. There was no disagreement on pre-contest weekend conditions, which were universally hailed as excellent, and generated a significant show of activity on 23 cm. In addition to the EME contest, there were 3 dxpeditions taking place. DL3OCH's trip to Montenego, which include both 70 and 23 cm operation - see the 4O6EME report, the 5A7A dxpedition which was highly successful on 2 m, but did provide some QSOs on 70 cm, and a PA dxpedition to LX using primarily JT on 432 during the contest weekend. Unfortunately this last dxpedition was not well publicized. I know nothing of it, until it was over and thus was unable to promote it. Things will slow down a bit in Dec, but not for long. DL3OCH has another 70 and 23 cm dxpedition to the Bahamas scheduled for Jan - see the C6AOC report. Come Feb, the contest season will begin again with the DUBUS Digital EME Contest on the weekend of 24th/25th. I planned to run the 1296 SSB Contest this same weekend, but have decided to move it to 27/28 Jan to avoid a conflict of contests. The DUBUS EME Contests continue with 1296 and 5.7 GHz up on 24/25 March, 2.3/3.4 GHz on 21/22 April and 1296 on 19/20 May. See the 2007 Moon Calendar at the end of this Newsletter (NL) for more contest information. Among all the future contest activity, please don't miss the 70 cm Activity Time Period (ATP) on 2 Dec from 1345 to 1800 and 2300 to 0230.

ARRL EME CONTEST LOGS: The ARRL has asked our own Marc, N2UO luddw@yahoo.com to do this year's EME contest write up for QST and the extended web report. If you would like to contribute with pictures or comments, please upload them to the EME contest soapbox, www.arrl.org/contests/soapbox or send them directly to me. Don't forget to send your log to the ARRL as well. Email entries should be submitted to: EMEcontest@arrl.org and paper/diskette entries should be submitted to EME Contest, ARRL, 225 Main Street, Newington, CT 06111, USA. Cabrillo format is not required. Entries must be postmarked no later than 12 Dec!

406EME: Bodo, DL3OCH's DL3OCH@gmx.de report on his Montenegro dxpedition -- My first 23 cm and 70 cm EME dxpedition operation was not always fun. The QTH was on a mountain on the Adriatic Sea at JN92hj, and is also the contest location of Ranko (YT6A). He arranged everything for my stay including the license with a special callsign. Bad weather and frequent loss of electricity made it difficult to arrange skeds and be on the moon. The first day went well and I was able to do 23 cm EME from the roof of the building where I also enjoyed a breath taking view. The second day was planned for 70 cm activity was windy and cold. Only one QSO was made. I planned to work DL9KR and HB9Q on CW. There was nil from DL9KR but HB9Q was visible on the WSJT spectral display. I QSO'd HB9Q with JT65 since I could not hear him. I tried 70 cm the next day in front of the building as it was too windy and cold to operate from the roof anymore. No other 70 cm QSOs were done. I did not receive anything and came to the conclusion that my 70 cm RX had died. However, I extended my stay for one day to have another chance to work at least OK1DFC and OH2DG on 23 cm. After 5 days of activity 9 EME QSOs were completed. I QSO'd on 23 cm DJ9YW, OE9ERC, HB9Q, G4CCH (sked and random), K2UYH, OK1DFC and OH2DG. All these QSOs are done in JT65B or JT65C. On 70cm, HB9Q is unfortunately the only lucky guy who worked this new DXCC. More information can be found at www.dl3och.de. In addition to my 4O6EME activity, I was on 70 cm from Bosnia as T9/DL3OCH from JN92ep and on 23 cm again from Croatia as 9A/DL3OCH from JN83do. From T9 on 29 Oct I QSO'd HB9Q on 70 cm EME on CW. This was a first T9-HB9 QSO. I also tried to work DL9KR on CW, but signals were too weak. I saw Jan's CW signal at -24 dB on SpecJT. It might have worked, if I would have chosen vertical polarization. From 9A on 4 Nov I QSO'd on 1296 DJ9YW (-25dB), G4CCH (-24dB), HB9Q (-22dB) for a first 9A-HB9 QSO, OE9ERC (-21dB) and K2UYH (XXdB). All these QSOs were done in minimum time

(approx 7 min). It also spent some time with DJ9YW to investigate the difference between JT65B and JT65C – [see DJ9YW's report].



406EME 1296 Operating position

5A7A: Frank <u>DL8YHRFRANK@aol.com</u> (at the time writing) is back in Germany, but the dxpedition will continue until 28 Nov. Wolfgang, DK2DO has taken over as the EME operated. Frank, during his operating time, made > 250 QSO on EME! Most were on 2 m, but several were on 70 cm and two on 6 m. On 432 he QSO'd DL9KR on CW and HB9Q on JT65B. I hope to have the complete story for you in the next NL.

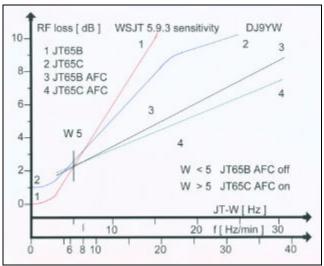
C6AOC: Bodo (DL3OCH) dl3och@gmx.de writes that the fun is not over and that he will put the Bahamas on 70 and 23 cm EME in Jan − My planned a trip to the Cay Sal Bank (Bahamas) is definite. The group will consist of 5 German operators. Cay Sal Bank, Bahamas is an extremely rare island group located between Cuba and the Florida Keys with the IOTA reference number NA -219. The exact QTH is the island Elbow Cay in H₂93sw. 70 cm and 23 cm EME activity is planned on CW and JT65. Much of the equipment will be provided by K2UYH. It will be shipped to Key West, FL, where DL3OCH will do tests on 30 Dec. We are still looking for some financial support due to very high costs for transportation. The Bahamas will on the air on 1296 for the first time. Please visit our website www.qslnet.de/na219 or contact me for more information.

DJ3JJ: Andreas di3ji@gmx.net is QRV on 70 cm with 4 x 13 el DK7ZB yagis (20.5 dBd) and a 100 W RF Concepts amp at the base of the antenna. He is using the preamp built in to his PA, which is rated at a 1.5 dB NF. This may explain his low sun noise of only 2 dB. During the contest in Nov he heard OH2PO, DL9KR and HB9Q, but received no answer to his calls.



DJ3JJ's 4 x13 el 70 cm EME array

DJ9YW: Heinrich DJ9YW@T-Online.de has been studying the relative performance of JT65B and C on 1296. He has found that JT65B is only better with W<5 or a Doppler < 7Hz/min. Also the AFC in JT65B is only better when there is no noise/QRM present (Radar, SNT, carrier, etc.). Heinrich found from on air EME tests that JT65C with AFC gives Sync 2 to 4 for levels -26 to -27 dB, JT65C with no AFC gives Sync 2 to 3 for levels -26 to -28 dB, JT65B with no AFC gives Sync 1 to 2 for levels -28 to -29 dB, and JT65B with AFC gives Sync 0 to 1 for levels -29 to -30 dB – see graph



JT65C vs. JT65B trades on 1296

DL7AFB: Bodo bodo.woyde@web.de is back on 70 cm EME - After more than 2 decades I decided to set up my EME antenna in my backyard again. I'm using 4 x 22 el DJ9BV yagis and a K2RIW amplifier with 2 x 4CX250s. The station has been placed provisionally in the garage on a workbench. Since I'm living in the forest, my moon window is quite small (AZ 160° to 260° for EL > 20°). During the ARRL EME contest I worked a number QSOs including DL7APV and am interested in skeds.

DL7APV: Bernd <u>dl7apv@t-online.de</u> writes -- I worked in ARRL 60x35 on 70 cm. Condx were ok during the Nov weekend, but activity was low. There were 2 stations that I could not identify in the noise. I may send in my log only as a checklog.

F2TU: Philippe f2tu.philippe@orange.fr reports his Nov activity — I was QRV only during the second part of the ARRL EME Contest on 1296 because I had surgery on my right thumb to repair Osteoarthritis condition. It is one of the fingers I use for CW, and I could not use it for one month. I was QRV for only 9 hours and achieved a score of 46 x 30 with initials from DL1HYZ, UR5LX, UA3DJG, LA2Z and ON4BCB for initial #260. Conditions were good and I received an RST of 569 or better for 43 of the 46 QSOs. I was also active 4 Nov and QSO'd on 23 cm 9H1ES (439/549) for initial #245, SM4LE (549/559), N2UO (559/579) and G4RGK (O/O) #255, and on 5.7 GHz with good SSB echoes, but nil from VK3NX. I hope to finish new feeds for 23 and 13 cm in Jan, if my thumb cooperates – hi. Please note my new e-mail address.

FR5DN: Philippe fr5dnpm@wanadoo.fr sends news of his contest operation -- I found condx during the Nov contest weekend to be quite difficult with both fast and slow Faraday and much signal spreading. No signals were heard for long periods of time. I wondered if I had a RX problem, but my echoes showed that all was ok. At other times strong stations were hard to identify and I could not identify stations answering my CQs. Signal strength was changing in just seconds or less. It was very frustrating! Some stations replied just a few times with too little time to get their call, and giving up too fast. I'm using audio filter and need time to tune the signal in the audio bandpass. On Sunday morning my echoes were nil for almost 2 hours. UA3PTW was constantly strong and did not seem much affected by polarization. QSO'd were on 14 Oct at 0010 VK3UM (549), 0055 DL9KR (559/559), 0124 OH2PO (559/559), 0134 OK1DFC (549/559), 0201 UA3PTW (539/559), 0219 HB9Q (549/529), 0230 DL7APV (O/O), 0311 RW3PX (O/O), 0315 G4RGK (O/O), 0341 YO2IS (O/O), 0355 DL1YMK (O/539), 0447 NC1I (549/569), 0520 N9AB (549/559), 0550 K1FO (O/559), 0635 DF3RU (549/549), 0643 OH2DG (O/O) and 2320 JA9BOH (O/O), on 15 Oct at 0224 7M2PDT (O/O), 0355 G3LTF (559/559), 0406 JA6AHB (O/O) 0411 UT2EG (O/339) and 0646 SM2CEW (539/559), on 11 Nov at 0009 JJ1NNJ (O/O), 0111 SP6JLW (O/O), 0117 SM3BYA (O/O), 0122 G3LQR (O/O), 0130 UT2EG (O/O), 0213 YO2IS (O/O) dup, 0217 SV1BTR

(O/O), 0337 N1BUG (O/O), 0402 PA3CSG (539/559), 0530 K2UYH (O/559), 0540 K5GW (539/569) and 2246 VK3UM (O/549) – dup, and on 12 Nov at 0022 JH4JLV (O/O), 0121 JJ1NNJ (O/O) dup, 0208 SM3AKW (O/O), 0213 UT2EG (O/O) dup, 0529 KU4F (559/579), 0649 VE6TA (O/O) and 0659 SM4IVE (O/O) for a total of 37x21 = 77700 points. Despite the poor conditions, 1 still had a good time and ended with 3 more contacts and the same multiplier as in 2005

G3LQR: Simon G3LQR@aol.com reports on his ARRL contest efforts – I decided to try my old 30 year feed in my 4.2 m dish on 432 for the contest. My yagis seem to have just become to old. To my surprise this arrangement worked quite well. With the use of a electric screwdriver, I was able to rotate between Horz and Vert polarization. I QSO'd in Oct DL9KR, OH2PO, G3LTF and NCII, and CWNR N1BUG. In Nov I added DL6APV, UA3PTW, FR5DN, HB9Q and DF3RU. After a change to the yagis I worked only OZ4MM. The last day I switched to the 23 feed and worked G4CCH, VK3UM, SM4DHN, JA4BLC, HB9BBD, DF3RU, OZ6OL, K5JL, OK1KIR, OK1CA, OZ4MM and WA6PY. I had to leave off to go to Microwave Round table, so there was not enough time spent to work everyone. New stations added were FR5DN on 432 and VK3UM on 1296. I now have 9 cm feed in the dish and heard G3LTF on 3400 of the moon. Unfortunately my Toshiba PA has died, so I have no TX at present but hope to find something else to use soon.

G3LTF: Peter g3ltf@btinternet.com was on for part of the second leg of the contest but strong winds kept him off the moon over Saturday night and the next day I went to the UK microwave meeting instead of operating. I probably missed a few QSOs by doing this. I worked starting on 11 Nov on 432 SM3BYA, JH4JLV, and JA9BOH but after 2.5 hours could find no one else so I changed to 1296 and QSO'd ES5PC, DL4DTU, EA3UM (great to hear Magin on again), SM3AKW, ON4BCB #250, OH2AXH, K9SLQ, DF3RU, WA6PY, WA5WCP, K0YW, I0UGB, F2TU, LX1DB on SSB and OE5JFL. I then returned to 432 for about 3 hours before moon set and worked EA3DXU and K3MF. CWNR on 1296 were WB2BYP, SM5LE, W7UPF and DL1HYZ. DL1HYZ called me at the same time as ON4BCB, but didn't wait around! I was sorry not to hear UA3DJP on this weekend as I missed him earlier. My final score is 64x33 on 1296 and 34x25 on 432. It was great to work many really old friends as JA9BOH for example, but at the end of it all I do feel a bit depressed about this contest. I am sorry to note the heavy use of loggers to set up digital QSOs and also to see people on the loggers that I can work on CW, but that I never heard on CW in the contest. I note that K1JT was able to work a lot of 2 m stations without the Internet and so does K2UYH [I operated only CW in the contest], so why do we need a class called "assisted" at all? I note that many of my fellow competitors from prior years have given up on this contest and unless the rules and more importantly their enforcement can be improved then so shall I. On a brighter note, I got my 3.4 GHz system working this month. I copied echoes immediately at about 5 dB over noise in 500 Hz with 27 W at the feed. The whole system with the exception of the 101 MHz oscillator is mounted at the feed and the PSU is at the base of the dish. Moon noise is 1 dB, which make finding the moon fairly easy! Apart from the two PA units everything is home built. There is a bit of tidying to do and then I can start on a number of areas where I can improve the signal, mainly with the dish profile and the feed system, which is linear at present. I have repeated the tests several times and was also copied by Simon G3LQR. I also need to convert my 144 MHz IF TX/RX to 200 MHz to cover 3456 MHz. I have already proved this out when I copied W5LUA earlier this year. I am looking forward to making QSOs on my 5th EME band.



G3LTF's 3.4 GHz feed with TX/RX mounted behind

G4RGK: Dave g4rgk@btinternet.com was only QRV on 23 cm during the precontest weekend in Nov. He QSO'd HB9Q, ES5PC, OE9ERC, G4CCH, GW3XYW, F2TU and LX1DB, CWNR OH2DG and had a partial with K2UYH. In the contest he worked 43 over the two weekends on 70 cm, and 3 on 23 cm. High winds limited his moon time on 23 cm during the contest weekend.

G8VHI: Reg Regwoolley@aol.com found a bad power divider in his 70 cm array feed system. He now has a new one in place and hopes to be regularly on 432 with a better moon signal in the future.

HB9BD: Dominique dfaessler@bluewin.ch added on 1296 in Nov on the Saturday contest moon pass another 2 initials and 20 QSOs. The initials were ON4BCB (57/58) on SSB for #254 and DL1HRC (559/559) #255. He worked 2 stations through the 10' slot between two steel farm silo buildings and notes that he never before made a QSO to the west with only 25 degs of elevation. On the Sunday moon pass Dominique was disappointed as he was only able add 6 QSOs and 2 initials with IK5LJD (549/569) #256 and PA0BAT (519/559) #257. These contacts give him a total QSO count of 94! Dominique says all QSOs were truly random, unassisted and great fun.

HB9Q: Dan (HB9CRQ) dan@hb9q.ch reports on ARRL EME Contest activity -- We (HB9DBM, HB9DRI, and myself) had a lot of fun during this year's contest. As we announced, we chose not to participate in the contest. Our objective was to enjoy EME and work as many new stations (the more QRP the better) as possibly and all old friends! We did use loggers, clusters and we did self-spotting, this in an effort to help newcomers and QRP-stations to join the party and enjoy working EME. On 432 we focused on CW during the first leg and on JT during the second. The activity-level seemed to be more or less the average of the last 6 years. The only outstanding year was 2003, thanks to SM3BYA activating from JW with a 30 m dish. Never the less, we enjoyed working many new and old QRP stations. It was a special pleasure to work unexpectedly PA for WAS state 37 and NV for state 38 on random. 432 is a great EME-band, it needs very little room for antennas, power and preamps are easily accessible, but the activity is on a relatively low level. 432 deserves much more activity! We do our best to help to bring back the activity to this SUPER EME band. We spent very little time on 1296. CW was the main mode. During the second leg, we only spent a short time on Saturday running CW and some JT. For the few hours we were on 1296, the result compared to the prior years was definitely above the average. This band enjoys growing activity witch is great! I was surprised by how many stations were active on JT! Adding the results of the 3 bands we operated together shows that 2006 yielded our second best score. Only 2005 generated more points thanks to more multipliers. I was working as single operator during the 11/12 Nov weekend, I was somewhat limited and we definitely could have done a little better during the last 24 hours of the contest. But who cares, we had great fun! Our detailed log can be found at www.hb9q.ch.

HK1DX: Maximo (also EA1DDO) <u>EA1DDO@Hotmail.com</u> is preparing to put Columbia (FJ29em) back on 432 EME after 30 years! He has a single 31 el yagi and 150 W on 70 cm with no elevation at the moment. He wants to start on JT65b, but will not use the reflectors. He does not have Internet available at home. So the skeds must be arranged in advance, preferably by e-mail.



IK5WJD 3 m dish with 1296 Septum feed

<u>IK5WJD:</u> Alex <u>ikcsg@tin.it</u> says that he has "broken the ice on the 23 cm EME band" — My great teacher Piero, I5TDJ lost his life due to cancer some years

ago, but his left in my heart a great enthusiasm for EME activity. I was active on 432 with a 4 x 26 el yagi array and 8877 l kW PA. Then I was on 10 GHz with the I5PPE team. I now have my 3 m solid dish set up for 1296 with a square Septum Feed based on a design of OK1CA and Chaparral ring. The PA is an old cavity with a ceramic tube 2C39 modified for water cooling with an output power of about 60 W. My cable loss is about 3 dB, therefore I only have about 30 W at the feed, but I am working on a new TH338 cavity Amplifier. My LNA is a HB PHEMT in a cavity with a 0.3 dB NF. During the 2^{nd} leg of the ARRL Contest I tried this equipment for the first time with these encouraging results on CW. I QSO'd HB9BBD (579/549) for my initial #1 followed by SM4DHN (569/O) #2 and K5JL (569/O) #3. I called K2UYH and OK1CA but only received QRZs in reply and heard some other stations before my moon window ended.

JJ1NNJ: Kouichi's jjlnnj@extra.ocn.ne.jp 70 cm EME report for Nov — I participated in 2nd part of the ARRL EME Contest. I worked following stations: on 11 Nov FR5DN, K2UYH and SP6JLW for initial #87, and on 12 Nov SV1BTR, SM3BYA #88, FR5DN (dupe), K5SO #89 and KL6M (dupe). I finished the contest with a total of 24 QSOs x 19 mults. Heard were G4RGK, KE2N and K5GW. I CWNR K4EME. The station remains 16 x 13 el yagi array with rotatable pol and GS23B (700 W) PA.

K0YW: Bruce k0yw@frontier.net was active on 23 cm during the Nov part of the contest and worked 52x30 before the wind and snow came. Five initials, DL4DTU, SM4DHN, LA2Z, UA3DJG and JA4LJB, were added. RW3BP was heard but got away. Before the contest Bruce had a visit from K5JL and they operated for a while on the moon and worked 6 stations: WW2R, WA4OFS, W7UPF, K5PJR, OZ6OL and WB2BYP the first night. The second night I put 10 in the log with N2UO, G4CCH, OZ6OL, K5SO, W7BBM on SSB, VA7MM, VE6TA, WB2BYP (549), KL6M (up and down) and WW2R.

K4EME: Cowles <u>candrus@rica.net</u> was active during the Nov contest weekend on 70 cm. On Saturday night he worked 7 stations including an initial with W8TXT, but on Sunday found conditions poor and did not have much success.

K5SO: Joe k5so@valornet.com was QRV in Nov during the pre-contest weekend on 1296 -- Conditions were great and I had a good time. I QSO'd the first night WB2BYP with a great signal, VE6TA, W7UPF, OZ6OL, OE9ERC, G4CCH, K0YW and WW2R, and on the second N2IQ, WW2R, VE6TA, K0YW, N2UO, KL6M, WB2BYP and OE9ERC. I also had good copy from the SETI EME beacon (1296.000). It appears to be up and running fine these days. I could easily detect the beacon in the Spectran waterfall display, but it was a bit too weak for me to copy the CW identification directly. I could hear the beacon signal in the noise with no problem but I couldn't quite make out the keying by ear because rapid libration fading chopped the weak signal up too much. I was on 70 cm during the contest weekend and worked 7 stations, but did not succeed with N8CQ. I want to encourage stations to stay on the moon later for stations in the

K6UCY: Vic nyman@mindspring.com is now QRV on 70 cm with an array 4x25 K1FO yagis and a GS-31B PA, but the tube is in a bad way and putting out only a few hundred watts. (Vic is looking for a replacement tube). He has already worked a number of stations and is available for skeds on both JT65 and CW. Vic notes that he has some tree limitations to the east on moonrise, but otherwise is flexible on times.

KL6M: Mike kl6m@qsl.net had mixed results in Nov. He was on 23 cm with his old 2 x 2C39 PA running at about 200 W in the shack. During Saturday of the pre-contest weekend he heard little activity during his first moon window, but did better on Sunday with contact to K5SO (569/549), VE6TA (569/549), KØYW (569/569), WW2R (O/O) and OE9ERC (579/559). He also heard SM5LE and IW2FZR. Mike called Sven (539) for about a half hour or more with no QRZs and IW2FZR (579) many times and got QRZs but no completion. He also had good results during the contest weekend and worked 22 on 23 cm and 36 on 70 cm.

<u>KL7HFQ:</u> Roger rkh@alaska.net found conditions very poor on 70 cm during the Nov contest weekend – I heard just a few of the big guns. I could not get SV1BTR's attention no matter what I tried. Sometimes his signal was loud, and then

other times weak. Signals appeared and disappeared. After 3 hours, I called it quits.

LX1DB: Wilie wbauer@pt.lu was on 23 cm during the contest in Nov and had lots of fun. He found big signals out of USA from K5GW, K0YW and K2UYH. N2IQ, NA4N and others were also on from NA. F2TU was worked on SSB. Wilie was QRV on Saturday for 4.5 hours and made 32 contacts. On Sunday he

was on 70 cm and worked KL6M, K5GW, DL9KR, OZ4MM, DF3RU and others, about 12 in all worked.

N1BUG: Paul paul.kelley.n1bug@gmail.com reports having fun on 70 cm in Nov. During the pre-contest weekend I worked NC1I, UA3PTW, and K3MF. I was surprised to get answers to my CQ at 2330 on 4 Nov, but couldn't make out even partial calls. I wonder who called me? I have a problem with carriers on and around 432.010. There is one very strong and several weaker ones. All tend to jump around in frequency a bit. I will try to track down where they are coming

from. I still have a few other technical issues to work on, but the 8 x 21 el yagis and 600~W is doing well.

N2UO: Marc lu6dw@yahoo.com was quite active on 23 cm CW EME in Nov – I worked G4CCH and K2UYH on 3 Nov, WW2R for initial #78, K5PJR #79 and F2TU on 4 Nov, K0YW, VE6TA, K5SO and VA7MM #80 on 5 Nov, and NA4N #81 and WB2BYP #82 on

6 Nov. Signals were good thanks to the moon perigee. During the last part of the ARRL EME contest I added K9SLQ, OH2AXH, K0YW, JA8ERE #83, PA3CSG, DF3RU, WA6PY, F2TU, ES5PC and ON4BCB #84 for a final score of 40x27 mono-band (1296 only), unassisted. All QSOs were on random CW with 350 W at the feed of my 3 m dish and 100% homebrew EME system. I could not stay up late on (Friday) 11 Nov because of recovery from a medical procedure performed earlier in the day. As a result I missed a few stations/multipliers that only showed up for a short time (i.e. LX1DB and EA3UM). My equipment performed fine except that I lost the remote power monitor due to a squirrel attack to the dish feed. Fortunately, the vital wires were not cut and I was able to operate. I knew I had power at the feed since I had good echoes!

NCII: Frank's frankp@gcq.net 432 operating time was limited during the Nov contest weekend and he found activity and conditions poor. He worked only 3 stations in 5 hours on the moon. Frank was on for 6 hours during the first night of the pre-contest weekend. He QSO'd UA3PTW with strong signals, W8TXT, K6JEY, K2UYH, K3MF and N1BUG. Frank heard N1BUG work UA3PTW and PTW was vertical. Echoes were a good (O) copy at 5 W. The second night he called CQ for 3 hours but worked only at 0105 K6UCY (O/O) and 0135 K4EME (579/599)! Conditions seemed outstanding but only the 2 stations on. Frank also send the following list of 432 stations QSO'd in Oct. He worked on 7 Oct at 0035 UA3PTW (579/579), 0054 W8TXT (549/579), 0152 VE6TA (579/589), 0353 K3MF (559/559), 0403 K2UYH (53/55) on SSB and 0410 VE6TA (54/55) on SSB, on 8 Oct at 0115 N9AB (579/579) and 0144 UA3PTW (579/579), and on 9 Oct at 0612 W8TXT (569/589) and 0227 K4EME (579/579).

OK1KIR: Jan (ok1vao) for OK1KIR team ok1vao@o2active.cz updates their recent activity - On 23 cm we worked in ARRL EME contest on 14 Oct at 0003 G3LTF (559/559), 0025 G4CCH (559/559), 0030 LA8AV (559/559) for initial #220, 0040 HB9BBD (579/579), 0047 JA4BLC (549/559), 0057 ZS6AXT (559/569), 0119 DL4DTU (O/O) #221, 0130 HB9SV (579/569), 0135 HA5SHF (O/O), 0157 SP6JLW (549/559) #222 and DXCC 44, 0213 RW1AW (569/569), 0220 EA3UM (559/559), 0229 DL1YMK (559/559), 0235 OZ6OL (559/559), 0245 JA6AHB (559/559), 0253 IW2FZR (549/559), 0307 SM6CKU (559/559), 0328 LA2W (549/549) #223, 0713 K2UYH (559/559), 0723 K5JL (569/569), 0820 LX1DB (579/579), 0828 LA9NEA (549/569) #224, 0834 HB9Q (559/559), 0842 W2DRZ (539/549) #225, 0857 N2IQ (559/569), 0935 F6KHM (569/559), 1038 N2UO (549/549), 1101 VA7MM (O/M) #226, 1120 SM4DHN (569/559), 1157 K4QI (569/559), 1208 IK3COJ (O/O), 1218 K5GW (579/569), 1225 NA4A (549/559), 1244 WW2R (O/O), 2227 VK4AFL (549/549), 2243 OK1CA (569/559) and 2320 VK3UM (569/569), and on 15 Oct at 1118 K1RQG (569/579) #227. We heard IK2MMB, JA8IAD, JH5LUZ, OE9ERC, OK1DFC, OZ4MM, SM2CEW, VE6TA and WA5WCP. A total 8 initials among 38 QSOs and another 9 stations heard. We added in the Nov part on 11 Nov at 0018 JA8IAD (559/559), 0040 JA8ERE (559/559), 0122 ES5PC (559/559), 0136 SM3AKW (559/559), 0143 DF3RU (559/549), 0205 ON4BCB (559/549) for initial #228, 0622 K0YW (579/579), 0708 K9SLQ (569/569), 0714 VE6TA (559/559), 0729 W5LUA (559/559), 0810 KL6M (549/559) #229, 0829 F2TU (569/559), 0925 OK1DFC (569/559), 0933 I0UGB (549/559) and 2220 UR5LX (549/O) #230 and DXCC 45, and on 12 Nov at 0808 G3LQR (549/549), 0820 OZ4MM (569/559), 0930 WA6PY (559/559), 0937 EA3UM (559/559) dup and 1011 OE9ERC (579/569). We heard JA4LJB, JA6CZD, ON7UN, RW3BP, OE5JFL and W7UPF during this weekend.

ON4BCB: Walter walter.crauwels@skynet.be is a new station on 23 cm EME and sends his first activity report -- After much experimenting with feeds (we tried VE4MA, Square septum w/wo ring, 0.71 lambda round and finally the new OM6AA round septum feed) and a lot of work and fun with OM6AA, ON7UN and ON5OT our Mechanical Guru, It was time test it in real life. Assisted by

Jan, ON4CO, we participated in the Nov part of the ARRL EME contest. We were active on 10 Nov from 0000 to 0400, on 10/11 Nov from 2300 to 0100 and on 12 Nov from 0700 until 1130. All QSOs were initials. We worked on 10 Nov HB9BBD (57/59) on SSB and (557/559) on CW, G4CCH (569/549), IW2FZR (559/339), OK1KIR (559/549), ES5PC (559/419), OZ6OL (559/549), SM3AKW (449/339), G3LTF (559/549) and OH2AXH (549/569), and on 11 Nov OK1CA (559/549), JA4BLC (559/549), SM4DHN (549/549), VK3UM (559/549), DF3RU (539/559), K0YW (569/559), LA9NEA (549/419), WA6PY (549/549), OZ4MM (559/559), EA3UM (559/559), HB9SV (579/559), F2TU (549/549), OZ4MM (559/549), OE9ERC (579/559), K2UYH (559/559) and ON7UN (559/559). Heard but not worked were VK4AFL, G3LQR, IK3COJ, K9SLQ, JA8IAD, K5JL and DL4MUP. The station is a 4.8 m dish with OM6AA round septum feed and TH-308 PA with 350 W out.



ON4BCB's 4.8 m dish with round septum feed for 23 cm

ON7UN: Eddy portable@on7un.net reports — Unfortunatly I was not ready in time to fully participate in the ARRL contest. This summer we started to fine tune the system. I constructed a new transverter and wanted to fine tune the antenna. After removing the old VE4MA feed I noticed that the 7/16 connector was burned inside. Return loss however, was still the same as 3 years ago when we constructed this feed. Since we where working together with Rasto, OM6AA to construct round septum feeds for 13 and 23 cm, I decided to replace the long style VE4MA by a new round septum feed with a super VE4MA choke ring. The new feed was in the antenna by Saturday of the second leg of the contest, but we were not ready until Sunday morning. We then gave out some points. Details on our new round septum feed can be found at https://www.on7un.net/round-septum-feed.htm

OZ4MM: Stig vestergaard@os.dk was not veryactive in the contest this year—As expected I had very limited time for EME during the 2 contest weekends because of my house project. During the first part I was only at 1296. In the last leg I split my time between 432 and 1296. Activity was found best on 1296 compared to 432. On Sunday, 12 Nov, I heard the LX expedition on 432 very well. I tried to get their attention on CW, but they stayed on the JT mode. The PA group was doing a great job in LX and I was sorry not to work. I ended with few initials on 1296, but none on 432 this time. Initials were LA1Z, DL1HYZ, UA3DJG and ON4BCB all with great signals. I ended contest with 17 stations on 432 and 46 at 1296 with about 8 hour of operation. In both legs I had my Softrock V7 baseband receiver connected. It works great. Using the Rocky software I can watch the activity across the band. I still have a long way to go on the house, but hope during the next months to be more active.

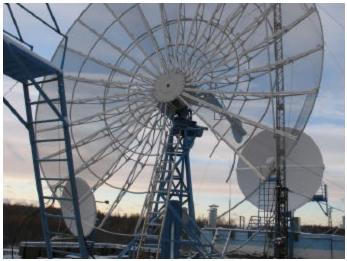
PAOBAT: Gerard geesi005@planet.nl in JO31fx has recently become active on 1296 EME. He is using 3 m dish with a septum feed and 200 W. Gerald has a RX NF of about 0.8 dB, but is working on "real" preamp. He has already worked 14 stations, 3 on CW and the rest on JT. He is available for skeds on both CW and JT.

RW1AW: Alex was hit by high winds on 28 Oct that damaged his 8 m dish and also caused him to break his arm in two places -- I managed to repair all the damage prior to the beginning of the second leg of ARRL Contest. It was necessary to work with my arm in a plaster cast, but I was QRV on 5 bands (2)

m, 70, 23, 13 and 3 cm). I made a total of 134 QSOs with 68 on 23 cm. On 26 Nov I also made 6 cm EME contacts at 1438 OK1KIR (559/559) for initial #2 and 1445 IK2RTI (579/569) on random #3. My 6 cm system consists of a 6 m dish, VE4MA circular feed, SSPA with 120 W to feed and 0.7 dB LNA.



Repair work on rib of RW1AW's 8 m dish



RW1AW's damaged 8 m dish

SM2CEW: Peter sm2cew@telia.comreports that severe weather prevented him from operating during the Nov contest weekend except for one hour on Saturday morning -- I spent that hour on 432 and conditions were excellent. I worked K5GW, N1BUG, K5SO, K4EME, UT2EG, K3MF and KE2N. Heard were SP6JLW and YU1EV plus a number of stations I had worked before in the first leg. All QSOs were on CW. I called the LX dxpedition on 432.060 on CW when they were on JT65, but unfortunately they kept going on JT. Good signals however, congrats to the PA group for another fine expedition.

<u>SP7DCS:</u> Chris' <u>sp7dcs@o2.pl</u> 70 cm report for Nov -- No good luck this month. At the start of second weekend of the contest, I found that my 70 cm transverter had broken. Consequently I could not be on and I am temporarily QRT on 432. I will let everyone know when I am available for skeds again.

UA3DJG: Oleg (UA3ATS) kaz@networks.ru who was active portable during the EME contest on 23 cm − (see picture in the last NL) wants our opinion on if there would be interest in a 23 cm dxpedition to the north pole − In spring of 2007, I plan to take part in the Transpolar Arctic Expedition "Polar Ring" from Severnaya Zemlya Archipelago to Canadian coast over the North Pole point (www.ec-arctic.ru). I'm considering the possibility of working 1296 EME on this trip. Activity would be possible from Severnaya Zemlya Archipelago, North Pole point, Greenland Arctic coast, Canadian Arctic Archipelago and several points in between. Preparations for such a dxpedition (arranging for gear that could be carried, mounting, etc.) would not be easy and would be time-consuming and costly. Do your think it be interesting enough to obtain support

for international EME community? [This trip would certainly be a true EME adventure! What do you think?]

VA7MM: Mark (VE7CMK) va7mm@rac.ca reports on recent activity of his moonbounce team (VE7CMK and VE7CNF) -- The station was active in the ARRL EME contest on 1296 multi-op on the Oct and Nov weekends. We logged thirty seven contest QSOs of which 11 were initials. The initials include random CW contacts with SM4DHN, RW1AW, SM6CKU, K1RQG and VK3UM, and random digital mode contacts with JA6AHB, SM5LE, ES5PC and others. The station was also active on the weekend of 5 Nov and completed a schedule with N2UO and logged random CW QSOs with VE6TA and K0YW.

VE6TA: Grant <u>ve6ta@telusplanet.net</u> sends his contest results -- I worked all 3 contest weekends this year, which included the microwave weekend. I only had one or two meetings with Mr. Murphy! One was when the power supply for the 2304 PA decided to retire in the midst of the first European window. Then the elevation drive failed due to a broken wire. The balance of the contest was unmarred by severe weather or break downs. The Sept weekend on 13 cm produced a score of 14x12 with no initials. During the Oct weekend I operated 432 the first moon pass and 1296 the second. I then kept the 23 cm feed in for the first Nov pass and swapped over once again to 432 for the last moon pass. My total for 432 appears to be 31x24. New ones were N1BUG for initial #116, UT2EG #117 and SP6JLW #118. I had to work FR5DN through my trees on moonrise - tnx to Phil for sticking with me. CWNR was LX1DB. I also heard the PE1 dxpedition, but was not aware of the details of this dxpedition and was hoping they would answer one of my CQs. Activity appeared to be a little higher than last year, but there were a few noted absences. On 1296 activity was amazing again this year. I look forward to hearing the moonrises on this band as it truly sounds like the 20 m CW band.

My total on 23 cm was 59x34 for the two passes. Signals were generally extremely strong and boredom was not an issue - Hi. Initials were K1RGQ #132, LA8AV #133, JA8ERE #134, DL4DTU #137, DL2HWA #138, DL1HYZ #139 and JA4BLC #140. This contest for me far outstrips my QSO totals on the terrestrial contests in this part of North America unless we get a prolonged Sporadic E opening!

VK3UM: Doug McArthur tikaluna@bigpond.com writes -- This year I attempted to work both 23 and 70 cm and give out as many contacts as possible. I had only 2 complete windows to Eur, (4 to NA) and two other 'partials' - one of which turned out a total WX wipeout! There was always little chance of working even half of those that would have been there. I had several QSOs between 1.5 - 0.4° elevation and the bulk of all QSOs were made during the 2 hour (total) Eur windows. This proved to be just hard work and takes a lot of fun out of it. The NA window was the total opposite... great to see the regulars, but very disappointed not to have had the opportunity to work others seen logged during the Eur - NA window. You can only work all that were there... and we were there for all 4 complete windows (at ~0200 local!). Sure there are only a few of us (and why I only work JA's only on moon rise and set beats me?) but we are there, and the times were 'gentlemen' in NA. If I can work Al K2UYH through his forest on both bands, then I can work most all, if you come on! Conditions, (I love that word, which often is used for 'my gear is not performing or I can't switch polarization' or both), were AOK for both weekends. Little Libration on 23, none I can remember on 70. Faraday was never aligned (that can help or hinder fixed polarity stations), but was pretty well fixed at ~45° this last weekend. Sun noise was very high here on Saturday morning with bursts > 185 SFU by my calculations, which proved later to be correct, as shown on Learmonth (190 SFU). I did expect libration on 23, but it did not occur at this QTH. The following is an abbreviated list of stations worked. Isn't it amazing that you can always pick dupe's calls during a pile up (not shown below)! I QSO'd on 70 cm OH2DG, UA3PTW, DL9KR, FR5DN, EA3DXW, OK1DFC, OH2PO, VE6TA, NC1I, JH1KRC, KU4F, KL6M, JA6AHB, N9AB, W8TXT, K1FO, K4EME, JA9BOH, DF3RU, JJ1NNJ, K2UYH, JH4JLV, K5GW, SM3JQU, SM3BYA, YU1EV, SP6JLW, UT2EG, SM4IVE, LX/PE1LWT, SV1BTR, RW3PX, UT5DL, DL7APV, G4RGK and 7M2PDT. On 23 cm contacted were K5JL, VK4AFL, K5GW, OZ6OL, OK1DFC, SP6JLW, ES6RQ, HB9BBD, OK1KIR, JA8ERE, IW2FZR, OK1CA, G3LTF, UT3EG, RW1AW, UA3DJG, G4CCH, OE9ERC, JA8IAD, LA8AV, IK3COJ, HB9SV, ZS6AXT, SM6CKU, SM4DHN, K1RQG, K4QI, N2UO, K2UYH, K5SO, W2DRZ, VE6TA, JA6AHB, VA7MM, JA4BLC, K0YW, JA8IAD, JA6CZD, UR5LX, KL6M, G3LQR, ON4BCB, DF3RU, IZ1BPN, LA2Z, JR4AEP and WA6PY. Combined this gives a total of 83x57 for a claimed total of 473,100 points. As I have said else ware, we in the Southern hemisphere have limited Eur windows given the weekends chosen, and consequently we have to work under longer ground noise to make our QSO's. This has always been the case, but I make the point again that I prefer 2 weekends for the Contest to allow just a couple of hours operating, please. To those I just did not get time to work, I am sorry, but I did my best!

WB2BYP: John storyavenue@hotmail.com provides an update on his Nov perigee and ARRL EME Contest weekend activity on 23 cm – On 4 Nov I blew a tube in my 6 x 7289 amp, but still worked VE6TA, K5SO, OE9ERC, K0YW and G4CCH on lower power. I replaced the tube and burned bias transistor on 5 Nov and worked K0YW and K5SO again. On 6 Nov I QSO'd N2UO. I lost another tube and bias transistor due to an arc-over, but made repairs in time for next weekend. On 11 Nov I worked K5GW and on 12 Nov OK1CA. I also heard a lot of activity. I'm getting the hang of fixing the PA. I received some good suggestions on the 20 m net in this regard. I am making incremental improvements to the system, but I am still hampered by receive performance. The leaves are now off the trees, which should extend my operating window a little bit. Over the winter I am planning a changeover to a prop pitch az rotor and az tracking control.

WC8VOA: Dave (G4HUP/ND8P) g4hup@btinternet.com reports that the first 10 GHz EME signals have been received at WC8VOA -- Mike (KA8ABR) and myself received the 10 GHz EME signals from W5LUA on the 7.2 m dish at the VOA Park, Bethany, OH (north of Cincinnati). Al kindly provided the test source, and his signals were received solidly, peaking at 15 dB above noise, with a dispersion of approx 200 Hz. This for me was a wonderful climax to the work with Mike and Jim (N8ECI) over the 7 weeks that I was there and could not have been better timed. The same night I flew out to return to the UK! I'm also grateful for the experience. Although I have operated on 10 GHz terrestrially, this was my first foray into 3 cm EME, and I learned a lot from it! I look forward to the news that WC8VOA is ready to transmit on 3 cm. The PA and driver have been tested (TNX WA3ZKR), and now just requires integrating into the system. More information on this project including WAV files can be found on the West Chester ARA VOA site at http://www.wc8voa.com Now back in the UK, I expect to be on 23 cm for the Dec AW.

WW2R: Dave ww2r eme@g4fre.com sends news on his Nov activity – I was not on during the final contest weekend as I was in the UK giving my "Backyard Microwave EME" presentation at the Martlesham round table. I was QRV the weekend before the contest and worked on 1296 on 3 Nov VE6TA and OZ6OL, on 4 Nov K2UYH, N2UO for initial #50, K5PJR #51, K0YW (called by), OE9ERC and G4CCH, on 5 Nov K5SO, W7BBM #52, K0YW and KL6M all on CW and PA0BAT (-27dB) #53* and OE9ERC (-9dB) on JT65C, and on 6 Nov NA4N #54, K5JL and VE6TA all on CW. The extra 1.4 dB of signal of a perigee weekend sure helps a small station! I hope next year's contests will be more aligned to perigee to encourage smaller stations' operation. My last report missed mentioning that I CWNR for one hour VK3UM in the 1st contest weekend. Also I fixed my FT847 problem by putting opto isolator on computer PTT line.

<u>K2UYH:</u> I <u>a.katz@ieee.org</u> had a relatively good month on the moon. I worked on 1 Nov Bodo on 1296 at 4O6EME (-28dB/O) in Montenegro on JT65C for DXCC 56* and initial 275*. Unfortunately I was never able to run with him on 70 cm due to bad WX at his end. On 3/4 Nov on 1296 I had a partial at 2330 with G4RGK on CW - too weak to copy and QSO'd at 0005 N2UO (559/559) and 0014 WW2R (559/55C). I then switched to 432 and worked at 0100 NC1I (579/569) and 0230 OH1JCS (O/O) for initial #727* on JT65C after more than a year of unsuccessful skeds - persistence does pay off - hi!; this contact was tailed ended at 0307 by K6UCY (14dB/O) #728*. The next day (5 Nov) back on 23 cm, I QSO'd at 0330 9A/DL3OCH (23dB/19dB) on JT65C in JN83 for #276*. On 6 Nov I worked again at 0500 K6UCY (O/M) on CW {#692}. In the contest I QSO'd on 432 at 0501 UT2EG (559/349), 0530 FR5DN (559/O), 0542 UT5DL (549/559), 0550 UA6LGH (559/559), 0557 K5GW (569/569), 0606 K5SO (559/559), 0622 HB9Q (559/559) and 0635 N1BUG (449/539), then switched to 1296 at 0657 K0YW (569/569), 0657 IK3COJ (449/559), 0710 LA2Z (559/539) #277* {#249}, 0720 WA5WCP (339/569), 0738 PA3CSG (559/559), 0745 UR5LX (449/549), 0755 IW2FZR (559/549), 0816 DL1HYZ (549/529) #278* {#250}, 0830 KL6M (449/549), 0845 LX1DB (579/579), 0853 DL4DTU (449/559) #279* {#251}, 0903 WA6PY (559/569), 0915 DF3RU (559/559), 0923 IOUGB (559/579) and 0930 ES5PC (559/569), then back to 432 at 1030 SM3BYA (559/539), 1044 K3MF (559/559), 1528 JA6AHB (O/O), 1541 JJ1NNJ (O/O) and 1557 VK3UM (549/549), and on 12 Nov on 1296 at 0745 RW3BP (549/569) and 0758 UA3DJG (449/549) #280* {#252}, then back to 432 at 0847 VE6TA (559/569) and 0911 KE2N (559/O), and on 1296 at 1009 F2TU (579/569), 1030 ON4BCB (559/559) #281* {#253}, 1100 W7UPF (549/559) dup, 1125 VA7MM (559/559) dup, 1522 JR4AEP (559/559) #282* {#254} and 1524 JA8ERE (559/549) for a total on 38x28 on 432 and 59x35 on 1296. N4HY joined me during on the 11th and demonstrated his superb CW contest ability. After the contest I was on looking for the 5A7A dxpedition. I copied them on 17 Nov, but when I responded a relay malfunctioned and the pin of the 7/8" Heliax connector burn up. By the time I had made a repair, my window was gone and despite hours of looking, I have not heard them since.

NETNEWS BY G4RGK: WB7QBS has taken delivery of N9AB's 70 cm array and is working on mounting it. K7XC is getting back on 70 cm from a new location, DM09nm, in Nevada. He is looking for on the horizon EME contacts. AL7RT is looking for activity on 23 cm. He still has no transmit yet, but will be on with several hundred watts in the coming months. **DL9KR** only received traces from 4O6EME. Apparently Bodo's the 70 cm gear was not working properly. K5JL worked 9H1ES and an initial with JA4LJB on 23 cm in Nov during the contest. **SM4IVE** was on 70 cm for the second leg of the contest and worked FR5DN, SM3JQU for an initial (#) and VK3UM. EB8CHG, Canary Islands, will be on 70 cm EME in a month with 600 W and 4 yagis. N8CQ has GS-35B 70 cm PA running at 1.5 kW out. F6KHM had a good time on the moon during the Oct contest weekend, but will not be ORV during Nov contest weekend. WA5WCP has improved his feed and reports signals were the best he ever heard during the contest. He made 12 QSOs on 1296. OK1DFC had WX problems during the Nov contest weekend - winds were 70-90 km/h and was QRV on 1296 for only 5 hours on Saturday during Moonset. Zdenek worked 18 stations. WD5AGO will be on 13 cm on 2/3 Dec.

FOR SALE: K6UCY wants to buy a GS-31B. Contact Vic at nyman@mindspring.com OZ4MM has for sale or trade 2 YL1052 and 4 YD1053 tubes. Contact Stig at vestergaard@os.dk. W7MEM is looking for VE4MA feed and preamp for 23 cm. He has a WD5AGO single 3CX800 70 cm PA for sale. Contact Mark at w7mem@msn.com. WA1JOF for 23 cm stuff for sale. Contact Don at wa1jof@megalink.net. F6KHM is looking for CRK-10000 tube information. VE1ALO has a 100:1 Gear Box available for anyone interested. It is brand new, has a 1" input shaft and a weight of 65 pounds. Darrell is looking for a service manual for HP-608F signal generator.

FINAL: You may have noticed that I did not include information on high contest scores this month. I could not do this because the likely leaders have not any information. On 70 cm neither OH2PO nor DL9KR gave any hint of their score. NC1I did not do well in Nov and only increased his Oct 60x28 score minimally. HB9Q appears to have done well on 432, but was using different rules and does not have his web log organized in way to easily determine his score (no dups are indicated). On 1296 I am fairly certain that HB9BBD will have the top score with QSO count of 94. No one else appears close.

On the 20 m net and the reflectors there has been considerable heated discussion on the contest rules. I have reluctantly come to believe that the best solution is the DUBUS (and ARI) Contest model of separate contests for the digital and CW modes with an agreement that no schedules will be allowed during the CW contests. I do not feel the use of reflectors and related scheduled operation should be eliminated the digital contest. It is not that digital contacts cannot be made without skeds, but that the use of reflectors is so inherent to most digital EME operators that their elimination will not be accepted.

I have more sad news this month. Long time VHFer and EME operator, K5UGM passed away on 22 Nov while taking a Nap. Bill's signal will be missed.

Please note that the annual 1296 EME SSB Contest sponsored by this NL has been moved from Feb to 27/28 Jan to avoid a conflict with the expanded DUBUS Contest weekends.

We have the 2007 EME Calendar in two different forms this year. One thanks to the efforts of DL7APV who did most of the work preparing this year's calendar and a second prepared by F5SE, which describes 2007 the moon conditions in a more graphical and very helpful form.

Please keep the news and technical material coming.

That covers the news for Dec. You won't want to miss the 70 cm ATP on 2 Dec (1345-1800 & 2300-0230) and the excellent moon conditions (AWs) on 2/3 and 30/31 Dec. CU off the moon and 73, Al – K2UYH

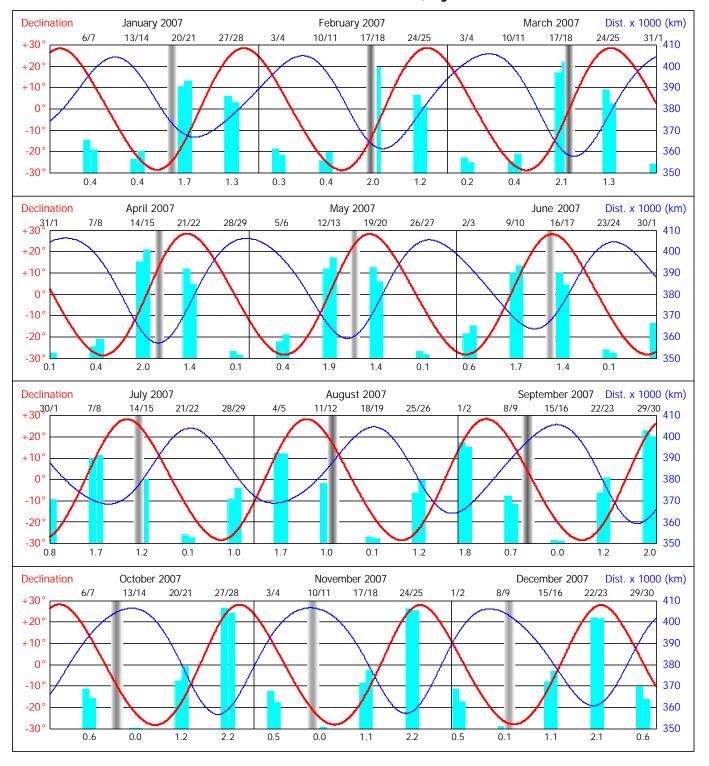


RW3PB's 77 GHz feed system - see Nov NL

Lunar Weekend Calendar for 2007

2400 Sat/	Decl.	Signals		Sky temp	Comments & contest dates
0000 Sun	(deg)	(dB)	offset/°	(K,432)	
06/07 Jan	+14.3	-1.63 A	-145 N	20	432 CW 6th 20-22 & 7th 6-8
13/14 Jan	-22.2	-1.63 A	+150 N	40	Moon in south
20/21 Jan	-15.1	-0.33 P	-13 S	30	Sun too close - ARRL VHF Contest
27/28 Jan*	+25.9	-0.43	+118 DP	35	1296 SSB
03/04 Feb	+10.7	-1.73 A	-155 N	20	432 CW 3rd 19-21 & 4 th 4-6
10/11 Feb	-24.6	-1.53	+164 N	45	Moon in south
17/18 Feb	-11.3	-0.23 P	-4 S	25	Sun too close
24/25 Feb*	+27.8	-0.53	+108 DP	45	DUBUS 50-1296 Digital
03/04 Mar	+6.8	-1.73 A	-177 N	20	432 CW 3rd 18-20
10/11 Mar	-26.6	-1.43	+157 N	70	Moon in south
17/18 Mar	-7.6	-0.23 P	+13 S	25	Sun close to moon
24/25 Mar*	+28.5	-0.63	+89 DA	40	Dubus 432 & 5.7up CW/SSB
00/01 Apr	+2.6	-1.73 A	+180 N	20	
07/08 Apr	-27.9	-1.43	-120 DA	140	Moon in south
14/15 Apr	-3.7	-0.13 P	+42 DP	25	
21/22 Apr*	+28.3	-0.63	+64 DP	40	Dubus 144 & 2.3/3.4 GHz CW/SSB
28/29 Apr	-1.7	-1.83 A	-179 N	25	432 CW 28th 16-18 & 22-0
05/06 May	-28.3	-1.33	+158 N	260	Moon in south
12/13 May	+0.7	-0.13 P	+67 DP	25	
19/20 May*	+27.2	-0.83	-34 DA	30	Dubus Contest 1296 CW/SSB
26/27 May	-5.9	-1.83 A	+172 N	30	
02/03 Jun	-27.9	-1.23	+147 N	180	Moon in south
09/10 Jun*	+5.6	-0.13 P	+83 DP	25	good weekend - ARRL VHF Contest
16/17 Jun	+6.8	-0.83	-19 DA	30	432 CW 17th 7-9 & 17-19
23/24 Jun	-9.9	-1.83 A	+149 N	30	
0/1 Jul	-26.8	-1.13	-173 N	80	Moon in south
07/08 Jul*	+10.7	-0.03 P	+95 DP	25	432 CW 7th 23-1 & 8th 7-9
14/15 Jul	+23.7	-0.93	-5 DA	20	Sun Noise
21/22 Jul	-13.6	-1.83 A	+110 DP	30	
28/29 Jul	-25.1	-1.03	+170 N	45	
04/05 Aug*	+15.6	-0.03 P	+105 DP	30	432 CW 4th 21-23 & 5th 9-11 ARRL Cont
11/12 Aug	+21.0	-1.03	+14 DP	20	Sun noise
18/19 Aug	-17.0	-1.83 A	-70 DA	35	
25/26 Aug	-23.0	-1.03	+158 N	35	
01/02 Sep*	+19.7	-0.03 P	-124 N	35	432 1st 21-23& 2 nd 6-8UT (EU 2m cont)
08/09 Sep	+17.6	-1.03	+37 DP	15	Sun is close - ARRL VHF Contest
15/16 Sep	-20.0	-1.83 A	-56 DA	35	
20/21 Sep	+26.4	-0.93	+140 N	30	
29/30 Sep*	+22.8	-0.03 P	-141 N	35	good weekend
06/07 Oct	+13.6	-1.13	+67 DP	20	Eu UHF Tropo contest 70&up
13/14 Oct	-22.7	-1.83 A	-42 DA	40	Moon in south
18/19 Oct	-17.3	-0.83	+120 DP	30	
27/28 Oct*	+25.0	-0.13 P	-160 N	30	good weekend ARRL EME Contes?
03/04 Nov	+9.2	-1.23	+100 DP	20	EU CW 2m contest CW
10/11 Nov	-24.9	-1.83 A	-23 DA	45	Moon in south
17/18 Nov	-13.4	-0.73	+98 DP	30	
24/25 Nov*	+26.5	-0.13 P	-178 N	35	good weekend ARRL EME Contes?
01/02 Dec	+4.9	-1.33	+132 N	20	
08/09 Dec	-26.6	-1.83 A	+4 DP	70	Moon in south & Sun noise
15/16 Dec	-8.9	-0.63	+73 DP	25	
22/23 Dec*	+27.6	-0.13 P	+163 N	45	432 CW 22nd 14-16 & 23-01
29/30 Dec	+0.8	-1.43	+124 N	20	

Moon Calendar for the Year 2007, by Franck F5SE



- Vertical blue bars show the overall "quality" of each week-end for EME. The higher the bar, the "better" the week-end.
- Figures below bars show expected signal improvement, in dB, referred to apogee path loss, for Sundays at 00:00 UTC.
- Full scale span: 2.4 dB. Scale step: 0.4 dB per division. 0 dB level = Band path loss figure at apogee, as quoted below:
- 144 MHz: 252.8 dB, 432 MHz: 262.3 dB, 1296 MHz: 271.8 dB, 2.3 GHz: 276.9 dB, 3.5 GHz: 280.4 dB, 5.7 GHz: 284.8 dB,
- 10.4 GHz: 289.9 dB, 24 GHz: 297.2 dB, 47 GHz: 303.0 dB. Data computed for an apogee around 406500 km.
- To get the week-end path loss on a given band, subtract to band apogee figure the value printed under the week-end bar.
- The shading pattern below shows how close the Sun is to the Moon, at any time the darker, the closer.
- Shading is only visible around New Moon date, appearing as a vertical gray bar.

Gray Scale calibration

Sun to Moon Distance, in degrees

0° 1° 2° 3° 4° 5° 6° 7° 8° 9° 10° >10°