

432 AND ABOVE EME NEWS DECEMBER 2011 VOL 39 #12

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CONDITIONS: The 2011 ARRL EME Contest is over and despite the low declination, it provided many QSOs and a good time for all who participated. There seems to be a good consensus that the decline in 70 cm CW turned around this year, and is now in an up-swing! Let's hope we can keep this trend going. Although the Newsletter (NL) reports are far from complete, it seems certain that **SM4IVE will have the top score on 432 with a total of 80x42**. The picture is not as clear on 23 cm. This month **F2TU has the highest reported score with 109x42**. Both Lars' and Philippe's totals were made exclusively on CW – quite an achievement. The 8P9HP dxpedition was going on 70 and 23 cm before and during the contest to keep things interesting. TNX to Herrman and company for another great dxpedition – see the reports his recent exploits below. 11 Dec was the final 70 cm CW activity time period (ATP) of the year. It had a good turnout considering its late hour. **The next ATP is on 29 Jan from 1000-1200 and 1800-2000**. I have not included in the reports the many "TNX for QSOs" and Holiday Greetings received this month. Instead, I am forwarding them here along with my personal very best Seasons Greetings and wishes for a wonderful 2012!

7P8EME/7P8HP: Herrman (DL2NUD) [TNX to K2TXB] has an update to the report on his Lesotho dxpedition that appeared in the Oct NL. QSOs confirmed on 23 cm, all with JT65C are on 15 Sept at 0950 HB9Q and 2258 LZ1DX, on 16 Sept at 0900 JA6AHB (19DB) and 2001 OK1KIR, on 23 Sept at 0947 K2UYH, and 24 Sept at 0720 PY2BS for a total of 6 contacts. QSOs on 70 cm with JT65B are on 18 Sept at 2251 DL7APV and 2306 JA6AHB, on 20 Sept at 0446 OK1KIR, 0456 I1NDP and 0504 HB9Q, and on 21 Sept at 0047 LZ1DX and 0203 G4FUF and 0259 DL8GP for a total of 8 contacts. [I also heard them work DL9KR on CW, but this report appears to only reference JT QSOs]. QSL cards should be sent to Hermann, DL2NUD direct and will be answered by him.

8P9HP: Herrman (DL2NUD) has put on another much appreciated dxpedition on 432 and 1296; this time to Barbados. But I am in a similar position with regard to QSOs as I was in Oct for his previous effort. Herrman again had problems on 1296 with his TS2000X. The 1296 module went bad, which delayed 23 cm activity until a replacement was shipped in. Once the model arrived their systems worked well and a number of QSOs were completed. Everything worked well on 432 where they had a single 12 el yagis and 300-500 W. They remained active through the Nov. ARRL Contest weekend. I hope to have a more complete report for the next NL.

DF1VH: Ingo [diegaspards\(x\)aol.com](mailto:diegaspards@aol.com) is setting up for 23 cm EME -- This summer I started building a small stressed dish for 23 cm EME. I finished just before the first leg of ARRL EME competition. My setup consists of a 3.5 m (f/d 0.45) dish and septum feed without choke ring followed by a G4DDK preamp. Without any focus alignment or Sun noise measurement I was able to receive OK2DL, HB9BBD and G4CCH on CW in 1 hour of listening. (I am only interested CW EME.) Unfortunately I was too busy to do any optimization before the second leg, but received with strong signals OK2DL (again), F2TU and I1NDP. This was again over a very limited listening period. I did measurement Sun noise on Sunday morning at 7 dB, so there seems to be a lot of room for improvement. I hope to finish my PA in the spring 2012 and be fully QRV soon.

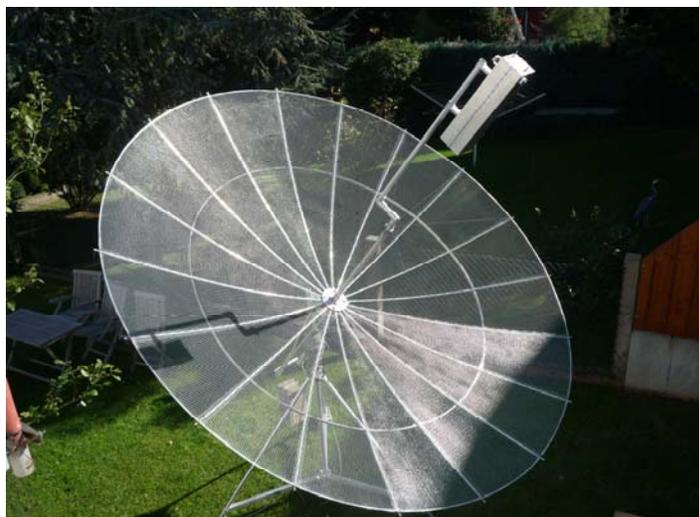
DJ8FR: Juergen [juergen\(x\)dj8fr.de](mailto:juergen(x)dj8fr.de) sends his report on the EME Contest -- After hard work and very little sleep for two nights, my result for my very first ARRL EME Contest were encouraging. I operated 1296 CW and had a total of 42 x 26. I worked OK2DL, LA8LF, SV1BTR, F2TU, F5SE/p, G3LTF, SM4DHN, SP6JLW, HB9BBD, I1NDP, G4CCH, K5GW, IZ1BPN, I5MPK, OZ4MM, DL0SHF, N2UO, RA3AUB, LZ2US, N4PZ, K1JT, DF3RU, ES5PC, SP7DCS, IK1MTZ, CT1DMK, DL6SH, S59DCD, SP7JSG, K2DH, ON7UN, OE5JFL, WA6PY, OK1DFC, OZ6OL, HB9Q, DL3EBJ, SD3F, SM4IVE, LA9NEA, OH2DG and P19CAM. My station consists of a homebrew 4 m stressed dish with a septum feed and about 350 W of TX power at the feed. In the first leg, I could hear only the big ones. I changed from an N to SMA relay and built a new G4DDK preamp because of the SMA connector. This gave me 5 dB more Sun noise and a new world opened! I enjoyed the contest, but missed some rare stations, including some big ones that came on the band and worked

only stations calling CQ. I did not call CQ, thus I no chance to work them. I will try some CQs next time.



DJ8FR's HB stress 4 m dish

DJ3JJ: Andreas [dj3jj\(x\)gmx.net](mailto:dj3jj@gmx.net) was active on 432 in the contest with 4 x 15 YU7EF 4.9 w/ yagis and 750 W. He worked on 23 Oct DL7APV, SM4IVE, SV1BTR, OH2PO, K5GW and G3LTF all (O/O) and on CW for a score of 6x6. Andreas was also active for about 1 hour on 70 cm CW EME on Saturday 10 Dec between 1700 and 1800 for a special ATP. Some smaller stations were also expected to be QRV. [I have no report on how the session turned out.]



DF1VH's new 3.5 m dish for 1296 EME

DL5MAE: Wolfgang [dl5mae\(x\)yahoo.de](mailto:dl5mae@yahoo.de) was QRV during the ARRL EME Contest with single yagi – During the first part I used a 21 el F9FT yagi with no elevation and worked K5GW and SM4IVE at moonset. In the second part I build up a single 38 el M2 yagi with elevation and added OZ4MM, OH2PO, SV1BTR, DL7APV, SM2CEW, DL9KR and G3LTF for a total of 9 QSOs. The antenna is no down, but I will be back for future contests.



DL5MAE used a 38 el M2 yagi on 70 cm in Nov

DL9KR: Jan [bruinier\(x\)T-Online.de](mailto:bruinier(x)T-Online.de) continues to add 70 cm CW DXCCs -- On 14 Nov I had a quick and easy QSO with 8P9MS for CW for DXCC #114. The second part of the ARRL contest provided excellent conditions and increased CW activity during the brief periods I was on. Another 25 old friends were worked for a total of 43 in 6 hours on the radio. Special pleasure was working LX1DB and DL5MAE after ages. G4EZF was an initial. Family commitments and low dec were restrictive, so the contest was more like 2 enjoyable ATPs.

F2TU: Philippe <[f2tu.philippe\(x\)orange.fr](mailto:f2tu.philippe(x)orange.fr)> had an excellent month. Besides amassing a very impressive score in the ARRL EME Contest, he added QSOs with IS0/OK5EME in Sardinia on 432 (539/559) for initial #277 and DXCC 52, on 1296 (559/559) for initial #375 and DXCC 61, and on 2320 (559/579) and (43/55) SSB for initial #123 and DXCC 37, and on 10 GHz with on 16 Oct PA7JB, on 24 Oct DL7YC (559/529) for initial #65, on 25 Oct OH2DG (539/539) #66 and F2CT (M/O) #67. During the contest, he scored on 23 cm 109 x 42 (all CW). The low declination caused operation toward NA for several hours with half of the dish in the trees and 2 dB of ground noise. His last QSO was W7JM with 5 dB of ground noise and the Moon behind a forest! Initials were DJ8FR, OK1CS, IZ2DJP, I1NDP, IK1MTZ, IS0/OK5EME, UA3MBJ, SP7JSG, SP6GWN, SM7FWZ, RA4A, UA4AAV, N4PZ, VK2JDS and ON5TA to bring him to #380. On 70 cm, Philippe was disappointed with his first part results. The band was disturbed by carriers and periodic noise increases of 10 dB and more! He abandoned 432 for the second part and thus ended with only 16x 15. Initials were ES5CT and SP7DCS for #276. He ended with a total score of 184x101.

FSSE/p: Franck [kozton\(x\)free.fr](mailto:kozton(x)free.fr) operated the contest on 23 cm from his portable location (home of his 10 m dish). In the contest he finished with 82 QSOs in 38 multipliers. I could only operate 15 hours out of the overall 48 available this year at my location. I worked the following initials: EA3UM (569/559) for #100, IK2RTI (569/579) #101, OK1CS (559/559) #102, SP7JSG (429/579) #103, IZ2DJP (429/559) #104, RD3DA (559/589) #105, DL3EBJ (559/579) #106, SM3JQU (539/599) #107, DK0ZAB (559/579) #108, ES6RQ (559/579) #109, WB2BYP (549/559) #110, VE4SA (439/559) #111, HB9Q (579/579) #112, IK6EIW (539/569) #113, IK3GHY (439/559) #114, F5HRY (429/539) #115, W4OP (559/589) #116, ON5TA (429/559) #117. The most surprising QSO was that with ON5TA. Here, the Moon was setting just at "tree level". ON5TA was probably in the same situation. It is all the more surprising that my echoes were very faint and ON5TA is a QRP station on 1296. I hope to have more time available next year. On 2 Dec I randomly worked I5MPK, I1NDB and OK1DFC.

FG4KH: Phil (F1DUZ) [duz\(x\)orange.fr](mailto:duz(x)orange.fr) and F6APE will be QRV off the Moon on 432 from Guadeloupe Island (FK96hf) from 28 or 29 Dec to 12 Jan -- The setup, consisting of 2 x 17 el DK7ZB yagis, 300 W SSPA, SP7000 LNA and a FT897D, is tested and ready to go. The operating frequencies are expected to be 432.075 for JT65 and 432.040 for CW, but could change depending on birdies at the site. The activity will be holiday style with more on the weekends. The Internet connection is good at FG4KH, so I will try to give information daily on the next day activity. The main activity will be on JT65B mode, but I hope to catch some of the big guns on CW, so skeds will be welcome. Please, if you are interested in a CW QSO, send email at [duz\(x\)orange.fr](mailto:duz(x)orange.fr). More info can be found on NOUK chat, on Make More Miles on VHF and our web-site at <http://FG4KH-EME-70cm.monsite-orange.fr>.

G3LTF: Peter [g3lft\(x\)btinternet.com](mailto:g3lft(x)btinternet.com) reports on his Nov activity -- Before the contest I was active on 23 cm keeping an eye on the HB9Q logger. I worked on 12 Nov S59DCD, G4CCH, OK1DFC, G4RGK, SP7JSG for initial #344 and IW2FZR, and heard JA1WQF, and on 13 Nov AL7RT and S59DCD. In the

contest on 19 Nov, I started on 432. The very low declination meant that I was looking through thick trees to VK and JA. I worked OK1DFC, VK3UM, SD3F, OH2DG, JA0TJU, G4FUF for initial #445, OK2POI, UT2EG, SM6FHZ, DF3RU, N4GJV, WD5AGO, DL9KR and G4RGK. On 20 Nov I worked PI9CAM, G4ALH, DL5MAE #446, and DK5MB (2nd op at DL5MAE). These last two calls were using a single yagi. In the DK5MB QSO, we estimate that there was about 2 dB of ground gain. CWNR was K3MF and heard RK6MC. Faraday was at times very sharp and at 90 degrees. I know I missed at least one station that called me, DJ8MS. I worked on 1296, on 19 Nov VE6TA, W4AF #345, SM3JQU, K2DH, WB2BYP, DL3EBJ, VE3KRP and CT1DMK, and on 20 Nov G4RGK, DL6SH, HB9Q, SM4IVE, SD3F, IK6EIW, SP7JSG, OK1YK #346, OK1DFC, ON7UN, PI9CAM, F5HRY, PA7JB, W4OP W5LUA, and K1JT. CWNR were W7JM and W3HMS (called me but lost in QRM). Heard were VE4SA, DK0ZAB and ON4TA. After the contest on 21 Nov I tested with ON4TA. He was a good signal with his small system, but he lost the preamp before we completed. My final score on 23 cm was 83 x 36 and on 70 cm 44 x 24. Activity was slightly up on 70 cm CW this year, but there were some significant calls missing. 23 cm seemed about the same. My contest ended with the dish touching the ground and 40% blocked before I could work the last few US stations that were audible. We must go for higher declination weekends! I have been making measurements of Taurus with my wideband noise receiver. On 23 cm I see 0.5 dB and on 70 cm 0.9 dB. These numbers match up very well with what I expect from my system parameters. [Peter would like to hear from others who have made similar measurements].

G4RGK: Dave [zen70432\(x\)zen.co.uk](mailto:zen70432(x)zen.co.uk) reports on his Nov/Dec activity -- I was back in G-land for the second leg of the ARRL contest. I decided to get on 70 cm Saturday and 23 cm on Sunday. The weather forecast was reasonable for a change and actually turned out to be good. It was not a high dec weekend, so my time was limited. I got on 70 cm and worked the first day VK3UM, OK2POI, DJ8MS, OH2PO, LZ1DX, SM6FHZ, SV1BTR, K5GW, SM4IVE, DG1KJG, G3LTF, SD3F, LX1DB, F6HLC, N4GJV, OK1DFC, OZ4MM, SP7DCS, SM2CEW, DL7APV, WA6PY, AE6EQ, W7MEM, K1JT and EA5CJ. I moved up to 23 cm on the second day. The dish had bad tree blockage, which lost me all of the VK window and most of the JA window. I have to wait until the Moon clears the conifers. I then worked starting at 0245 OZ4MM, I1NDP, SV1BTR, RA3AUB, G4CCH, F2TU, DL6SH, UA3PTW, OK1DFC, SD3F, DL3EBJ, IK1MTZ, SP6JLW, SP7DCS, LA9NEA, OZ6OL, I5MPK, HB9Q, PY2BS, ON7UN, SM4IVE, G3LTF, F5SE/P, OH2DG, N2UO, SM4DHN, IZ1BPN, K5GW, DF3RU, OE5JFL, HB9Q, IK5QLO, LU8ENU, G4CCH, OK2DL, IK3COJ and OK2DL. Then I went back to 70 cm for PE1RDP. At the beginning of Dec I had made some changes to the feed lines and wanted to test these out. I came on 70 cm on 3 Dec and worked F1DUZ testing his FG4 Dxpediton station followed by ES5PC (549/559), and then K5DOG at a new QTH (EM00) and DL5FN. The next day, I reworked the elevation actuator on the 70 cm array and testing it out I found DK3WG, K0DSP and DF3RU. I added 432 QSOs on 9 Dec with PE1RDP, on 10 Dec JA6AHB and YO2LAM, and on 11 Dec during the 70 cm CW ATP starting at 0300 LZ1DX (449/559), K2UYH (559/559), N4GJV (449/449), K5GW (579/569) and VE6TA (559/449). Unfortunately for the next APT period, I was unable to see the Moon and could not operate until after the end when I added JA6AHB, PA3DZL, DF3RL, and UA3PTW all on JT. The station remains the same on 70 cm: 8 x 27 el BV yagis, open wires lines, 1 kW and MGF1302 cavity preamp. On 23 cm I use a 3.8 m stressed dish, 150 W PA and an NE325 DDK preamp.

I1NDP: Nando [i1ndp.nando\(x\)gmail.com](mailto:i1ndp.nando(x)gmail.com) ended up with a total of 102 QSOs. I have a nearby cellular phone repeater that saturates my LNA, especially at low Moon declination as this one. I had to skip about 20 degrees at moonrise and probably missed some JA stations as a result. I also found low activity from the US. I was expecting more, but my experience on 23 cm is very limited. In the first leg, I was running less than 100 W with an indoor SSPA. The same SSPA is now installed directly on dish, giving a bit more than 200 W at the feed.

IK3COJ: Aldo [ik3coj\(x\)gmail.com](mailto:ik3coj(x)gmail.com) [new email address] writes on his Nov contest operation -- I have participated for many years in the ARRL EME Contest on the 1296 band single op, CW only category. This year after implementation in my station of JT65C, I wanted to participate in the all modes category. I had 40 QSOs on CW and 20 on WSJT with 30 multipliers. My big surprise was 2 QSOs with stations using only a single yagi on JT, 8P9HP and SM0ERR. I increased my initial count to #239* on mixed mode, #207 CW/SSB and #59 on JT65C. 8P9HP brought me to DXCC 59*. Anyone interested in a sked with me on either CW or in JT65C can email me.

IK3GHY: Giorgio [ik3ghy\(x\)hotmail.it](mailto:ik3ghy(x)hotmail.it) was QRV on 23 cm in the contest with 2.8 m dish, IMU feed, TX 180 W and G4DDK LNA -- In Oct I worked in just 2 hours G4CCH, HB9BBD, OK2DL and IZ1BPN; and heard: LZ1DX, EA3UM, VK3UM, I5MPK, JA6CZD and F2TU. In Nov I had no more time but added I1NDP, SV1BTR, OK1DFC, F2TU, SM4IVE, ON7UN, G4CCH, HB9Q,

F5SE/p, OZ4MM, SM4DHN, SP6JLW and K5GW. I heard S59DCD, PY2BS, I5MPK, RA3AUB, I5MPK, LZ2US, OK2DL, LX1DB, DL6SH, SM6FHZ, LZ1BP, OH2DG, N4PZ, W5LUA, EA3UM, N2UO, WA6PY, SM2CEW, OZ2OL and CT1DMK. I ended with a total of 16 worked and another 21 heard with a lot of QRZs. I need 3 DB more ERIP!
I plan to remain QRV will be checking the HB9Q chat for skeds on JT65C.

IK5QLO: Andrea [ik5qlo\(x\)gmail.com](mailto:ik5qlo(x)gmail.com) had great fun in the ARRL contest with his small dish – In Nov I missed both JA windows, but I am still quite happy with my results. I added 20 more stations and ended with a total of 35, only 2 less than 2011 but I missed almost all the first leg due to hardware glitches. The band was quite crowded, but I found conditions below average. Last year I could hear and work CW stations using 2.8 m dishes and smaller. This year I heard QROs only, and as a result spent more time on the JT mode. I worked 19/20 Nov on CW SP7DCS, I1NDP for an initial (#), ON7UN, K5GW, F5SE/P, OK1DFC, SM4IVE and PI9CAM, and on JT65C ES6RQ, PA3FXB, HB9Q, RD3DA, PA3DZL, LZ1DX, OK1KIR, DF3RU, OK2ULQ (#), G4RGK, VA7MM (#) and DL6SH. My station remains a 2.4 m dish and about 300 W at the feed.

JA9BOH: Kimio [kmaegawa\(x\)fukui-nct.ac.jp](mailto:kmaegawa(x)fukui-nct.ac.jp) was active on 2 m and 70 cm in the contest – On 432 I worked 22 QSO all on CW with 16 multipliers including 2 initials with LZ1DX and ES5PC. I was also QRV for the 11 Dec 70 cm CW APT. I called CQ for more than 1 hour without hearing any reply except for my own weak echoes.

K0RZ: Bill [wmccea\(x\)comcast.net](mailto:wmccea(x)comcast.net) (DM79jx) reports that using vertical polarization on 432 CW, he QSO'd on 22 Oct K4EME, K1JT, OH2PO, LZ1DX, SM4IVE, DG1KJG, SM2CEW, N4GJV, JA6AHB, JA9BOH and W8XTX, on 23 Oct F6HLC, G3LTF, DL7APV, DJ7GK, F6DRO, K3MF, VK3UM and K5GW, on 20 Nov SV1BTR, DF3RU and OZ4MM. High winds kept Bill off EME on 19 Nov. Initials included F6HLC for #345, DJ7GK #346 and F6DRO #347. Bill found condx good, but didn't hear many of the regular EME contest stations, maybe due to the Moon declination being near the equator. DJ3JJ emailed Bill in Oct reporting hearing him (539) to (549), but Bill is sorry to report he never heard DJ3JJ. Hi ARRL contest score was 22x15.

K1JT: Joe [k1jt\(x\)ARRL.NET](mailto:k1jt(x)ARRL.NET) reports on his groups Nov contest activity on 70 and 23 cm – Operation was primarily by K2UYH with the assistance of K3TUF on Sunday. The dish was more than 75% blocked by trees at the start and virtually 100% blocked (to the west where the trees are thinner) at the end of activity both days. Because of the tree degradation, we tried using JT at the low elevations to make up for the high noise and signal attenuation. We QSO'd on Nov 19, on 1296 LZ1DX (15DB/12DB) JT65C, DL6SH (11DB/O) JT65C, OK2DL (8DB/9DB) JT65C, UA3PTW (569/579), SM4DHN (579/569), N4PZ (569/579), DK0ZAB (559/569), K2DH (559/559), SD3F (559/559), SP8JSG (559/569), F5JSW (59/579), ON7UN (579/599), OZ4MM (589/579), PA7JB (559/579), VE4SA (559/559), OK2ULQ (559/579), 1037 K5AZU (569/579), IK3COJ (559/579), CT1DMK (569/569), ES5PC (569/569), DH3EBJ (559/559) and WA3GHZ (O/O) JT DUP, on 432 G4RGK (9DB/O) JT and 1228 LU1C (23DB/O) JT, on 1296 K5AZU (11DB/O) JT DUP and AL7RT (559/579) CW DUP, back on 432 N1KI (17DB/O) JT, W7IUV (14DB/O) JT, K4EME (18DB/O) JT, on 1296 JA1WQF (559/559), and on 20 Nov on 432 RA3LE (25DB/O) JT65B, PA3DZL (7DB/O) JT65B, DL9KR (589/579), SV1BTR (569/579), 0945 F6HLC (O/O) and DL7APV (2DB/O) JT65B, on 1296 W4OP (559/559), OZ6OL (559/569), SM2CEW (559/579), LU8EMU (15DB/O) JT65C, W3HMS (10DB/O) JT65C, G3LTF (569/589), W5LUA (569/579), W6YX (10DB/O) JT65C, VE3KPR (459/559) DUP and 1530 W7JM (569/569). We ended up with on 432 12 CW and 27 JT QSOs for a total of 39x29, and on 1296 57 CW and 19 JT QSOs for a total of 76x40.

K4EME: Cowels [candrus\(x\)mgwnet.com](mailto:candrus(x)mgwnet.com) reports on his 70 cm EME contest results -- With the help of KR4V during the first leg of the contest on 70 cm CW, and AD4TJ on the 2 m, we had our personal best as far as number of contacts. I had a very good time in the first leg of the contest working 70 cm, but had several technical glitches due a lightning hit on the low EMI computer I used last year. In its place, I temporarily used an old Dell Laptop. When I connected it up to my Rig Blaster, I could not get it to work. It had some RS-232 port issues. I tried a USB to RS-232 adapter. The system seemed to work great until I checked for birdies. The 70 cm band had many! I found a metal and shielded the whole adapter. I also soldered the grounds of both connectors to the metal can, filled up all the holes to get rid of the birdies! I then remembered I had to find a clock sync program. I found a free one called Atomic Clock Sync. It worked great, so I was set to EME. I work several stations on JT65B and CW the week before the contest, so I thought I was ready to go. The night of the contest, I discovered the freeware had expired that day! I then found the NIST program that worked great on my other computers and loaded it up. It appeared to sync my computer, so I set my alarm for moonrise and went to bed. At moonrise KR4V arrived and we got the EME equipment up and running. We

made our first CW contact at 0658, a very very strong SM4IVE! After we worked, I realized I was receiving him on my small 4 x FO-22 array instead of the 8 x FO-33 array. His signal actually peaked at S-5 on my S meter with a noise floor of below S-1. I have never seen such a strong signal off the Moon before! (I missed the Arecibo tests.) Richard commented that the station seemed to be working better than ever before. We then worked DF3RU and OH2PO. When I tried to make a contact with another station, I mistyped and tried to stop the transmission. The computer glitches and I heard the relays clicked several times, and everything got way too quiet. The preamp had blown. I quickly climbed the tower and replaced it. After about 45 minutes, we were back on the air. I worked OZ4MM, K5GW, G3LTF, LZ1DX, I5CTE and K0RZ. After working everyone I could on CW, I tried JT65B, but even with good signals, I could not decode anything. I reloaded WSJT thinking maybe something happen to the program, same results, no decode. I ran the NIST sync program and the clock appeared to be in sync. By this time the Moon had set. Finally I got my old Sony laptop and I noticed that clock displays were off by several seconds between the computers even though both computers had both just been synced. Only one could be correct! I finally had to set the Dell's clock by hand. At moonrise the second day, I heard many of the CW stations I had already worked; however, I also heard the sound of JT65 on 432.065, so I figured I would try again. I copied DL7APV and worked him, and then EA5CJ, NR5M, UA3PTW, ES5PC, W7MEM, LU1C, N1KI, K3MF, PE1ITR, KA0FW and AE6EQ. I did have problems with the Dell locking up. (Sorry if you tried to work me on JT and did not succeed.) During the second leg on 432, I made 15 additional QSOs. I worked 19 Nov OH2DG, UT2EG, G4FUF, OK2POI, DJ8MS, G4EZP, F6DRO, DL8GP, K1JT and W7IUV, and on 20 Nov RK6MC, DL9KR, SV1BTR, SM2CEW and DK3WG. With 21 QSOs during the first leg, this brings the total to 36x25. (Team member AD4TJ ended with a total of 85x52 on 2 m.) I want thank everyone that work me, especially on CW! Also a big thanks to DL9KR for helping me with some rare transistors for my preamps and to W4TJ for a Strip line GaAs FET preamp design that got me on the air many years ago. I just got through building two new preamps that I tried in the second leg. The first was designed by G4DDK (model VLNA70). It uses a MGF4919 on the front end followed by an ATF-54143. The second preamp designed by VK3FLP was built around an ATF-54143 pHEMT. Both preamps measured NFs well below 0.4 dB. I do not trust my HP8970A to give absolute readings. I will say that compared to my other preamps, these two are now my lowest NF LNAs and gave very loud echoes! I now have a very low EMI type mother board. I went through several before finding one that did not have a lot of noise on the 70 cm band. I still have one noticeable birdie at around 432.034, but it is very quiet everywhere else. I still have a few other ideas yet to try to reduce the 432.034 MHz birdie before the next contest. On 19 Nov I heard stations off the Moon about 0.5 degrees before my moonrise! I have a tracking camera and the Moon was not optically visible. I did not have the computer booted yet and made the critical mistake of having my power amp on and my radio powered up before booting the computer. When my computer booted I heard my T/R relays chatter and knew my preamp may be at risk. After the computer finished booting, I no longer heard signals and knew I had lost a preamp due to my haste. I think most of you know how that feels! I had to go out of my warm house into the cold dark night, and make the repairs. I was back on the air before 3 degs el; and after this slightly rough start, the rest of the contest went without any other major issues.

LU8ENU: Juan [lu8enu\(x\)gmail.com](mailto:lu8enu(x)gmail.com) sends a summary of activity during his EME contest on 1296 -- I made 28 QSOs on JT and one on SSB. I worked on 1 Nov I1NDP (13DB/11DB) and IW2FZR (14DB/19DB), on 5 Nov PA3FXB (20DB/19DB), OK1CS (26DB/23db), IK1MTZ (16DB/16DB), DF3RU (13DB/8DB), G4CCH (11DB/16DB) and LZ1DX (14DB/20DB), on 6 Nov PA3FXB (22DB/19DB), on 7 Nov OK1CS (26DB/25DB), on 20 Nov PA3FXB (22DB/20DB), RD3DA (21DB/13DB), DF3RU (14DB/18DB), OK2DL (10DB/20DB), RA3AUB (7DB/10DB), UA3PTW (12DB/17DB), ES6RQ (12DB/12DB), PI9CAM (3DB/7DB), IK3COJ (15DB/19DB), G4DZU (19DB/18DB), RA4A (26DB/26DB), G4CCH (11DB/16DB), G4RGK (20DB/23DB), HB9Q (9DB/11DB), K1JT (10C) and PY2BS (9DB/18DB), and on 21 Nov OK1DFC (8DB/8DB) and (55/53) on SSB and YO3DDZ (23DB/20DB). My QSO total for this my first year on EME is 174. I'm working to add EME for 70 cm and 3 cm. For more details see his web page at <https://sites.google.com/site/lu8enu/>.

LZ1DX: Ned [lz1dx\(x\)lz1dx.org](mailto:lz1dx(x)lz1dx.org) was QRV for the 70 cm CW ATP on 11 Dec using 16 x 15 el yagis and a 1 kw PA. He was on for both periods and QSO'd at 0301 G4RGK (559/449), 0315 K5GW (579/579), 0328 K2UYH (559/559), 0408 W7MEM (559/519), 0424 VE6TA (559/559), 0451 K7XQ (449/449), 1950 ES5PC (559/559), 2008 DF3RU (569/579) and (53/53) on SSB and 2029 UA3PTW (55/55) on SSB for a total of 8x8.

N4GJV: Ron's [qstdemb\(x\)yahoo.com](mailto:qstdemb(x)yahoo.com) 70 cm activity report – Unfortunately during both EME contest weekends I was feeling "under the WX" and I was not

up to spending a great deal of time operating. I logged QSOs with SM4IVE, K5GW, SV1BTR, OZ4MM, K0RZ, VK3UM and OH2PO in Oct. Added in Nov were OK1DFC, UA3PTW, DL7APV, G3LTF, DL9KR, G4RGK and SM2CEW. Got-a-ways include F6HLC, NR5M, K1JT, K4EME, VE6TA, ES5PC, WD5AGO, SM6FHZ, LZ1DX, WA6PY and DF3RU. Conditions were often good, but Faraday rotation seemed to be permanently fixed at ~ 90 degs. I experienced severe and unrelenting problems with one-way propagation, which virtually eliminated the possibility of contacting many of the other fixed polarity (yagi) stations heard, and even often made it quite difficult, to contact stations that have polarity diversity. The latter were often apparently receiving plenty of replies to their CQs from stations whose signals were arriving 90 degs from the polarity at which my signal was arriving. Thus, they had no reason to listen on the "other" polarity. Seldom has it been more apparent that my very small 4 Yagi array simply does not have sufficient reserve gain, to overcome the polarity misalignment issues! During the Dec CW ATP period, I enjoyed QSOs with K5GW, G4RGK, K2UYH and VE6TA. Got-a-ways include W7MEM and LZ1DX. Conditions seemed to be only fair. However, after experiencing several months of continuous ~ 90 deg Faraday rotation, resulting in the hearing of little or nil of my own echoes, I was able to finally hear them with relatively good strength again.

N4PZ: Steve <n4pz(x)live.com> was active in Nov and Dec, and writes – There was excellent condx on 1296 on 11 Nov. Everyone was very loud. I QSO'd VE6TA (589), W4OP (579) and K5AZU (589). On 12 Nov I added DJ6FR (569), SM2CEW and others. During the contest, I worked 61x34 for 207,400 points single op on 1296 CW only. On the 10/11 Dec weekend I added N2UO, VE3KRP, CT1DMK, RD3DA, DF3RU and K7XQ after a half hour struggle.

N8CQ: Gary <gaberccr(x)nc.rr.com> reports -- The 30' dish is up. I just need the feed horns and control lines installed and will be QRV. The cabin is just about ready for final inspections so hoping to be ready very soon.



OE5JFL's partially offset dish or how to turn a 2.8 m dish into a 3 m dish

OE5JFL: Hannes [oe5jfl\(x\)aoon.at](mailto:oe5jfl(x)aoon.at) sends his ARRL contest report -- Last summer I extended the 2.8 m dish I have at my home QTH at the upper part and tilted the feed 25 deg upwards, so I have now an effective diameter of 3 m and something between a conventional prime focus dish and an offset dish. The results were promising, so I decided to give it a try in the contest. I was QRV on 23 cm, random CW only, without any logger. It was nice to receive with a SDR, after some time I learned how a CQ looks on the screen, and it helped me as well to find the weaker stations in the crowd. On one occasion I saw more than 20 stations at the same time and made a screenshot, you can see that on my webpage http://www.qsl.net/oe5jfl/eme_stn_2.htm. In both parts I worked 69 stations and identified 34 more call signs. So all together I heard 103. I think this is not bad for a 3 m dish. I could have worked more, but some stations showed

up only from time to time working some of big guns and did not CQ. I worked in Oct IK1MTZ, LA9NEA, I1NDP, G3LTF, SP6JLW, OK2DL, I5MPK, DF3RU, G4CCH, RA3AUB, SV1BTR, F2TU, F5SE/p, LA8LF, EA5UM, SD3F, SM4DHN, S59DCD, F5KUG, HB9BBD, OH2DG, N2UO, PA3FXB, SM6FHZ, DL1YMK, N4PZ, K5GW, WA6PY, W5LUA, OZ6OL, W4AF, VK3UM, SP7DCS, DL4DTU, IZ1BPN, JA4BLC, UA3PTW, LZ1DX, DF1SR, F5JWF, LX1DB, RD3DA, DL0SHF, OZ4MM, DH2SAV, PY2BS, IS0/OK5EME, K1JT, SM2CEW and LZ2US, and in Nov DL3EBJ, EA5AA, DL6SH, JA1WQF, ES5PC, DJ8FR, K2DH, CT1DMK, VE6TA, VA7MM, JA6AHB, OK1DFC, SM4IVE, HB9Q, ON7UN, P19CAM, G4RGK, SP7JSG and W4OP. Stations heard only were DJ3FI, OK1CS, OK2ULQ, PA3DZL, HB9SV, HB9BCD, IK2MMB, IZ2DJP, IW2FZR, IK3COJ, NA4N, VE3KRP, IK5QLO, PA7JB, JA8ERE, JR4AEP, IK3GHY, SM7FWZ, SV3AAF, JA6CZD, SM3JQU, SP6GWN, PA0BAT, WB2BYP, W9IIX, JA4LJB, ES6RQ, K5AZU, SP3XBO, JF3HUC, OK1KIR, IK6EIW, F5HRY and VE4SA.

OH2DG: Eino [eino.metsamaki\(x\)sulo.fi](mailto:eino.metsamaki(x)sulo.fi) sends his thanks to all for nice QSOs during in contest and reports his first 3 cm EME QSO – In the Microwave weekend, I made on 13 cm 17 QSOs and added initials with JA8IAD and ON5TA, on 6 cm 8 QSOs and initials with S59DCD and K5GW. Due to low declination NA QSOs was quite limited. I had no time to activate the 9 cm band at all. During 70/23 cm weekends I made on 432 19 QSOs and added initials with DG2KJG and K4EME, and on 23 cm 57 QSOs with initials HB9BCD, I1NDO, IK1MTZ, a new DXCC 58 with Corsica IS0/OK5EME, SP7JSG and UA4AAV. On the tech side, I heard my first 3 cm signal via Moon from F2TU. We did an RX test near perigee. Philippe's signal was quite readable. My RX set up has the capability to hear Moon noise a little over 1 dB. First sked with Philippe did not succeed. My signal was too spread due to problems with my high RF power amplifier. RF energy leaked inside the transverter and caused interference in the mixers and PLL. The medicine was new feed-through capacitors and aluminum tape. After the fix, the transverter looked like a Christmas package! Transverter is a converted Qualcomm unit based on W1RIL's approach. We finally QSO'd easily on 25 Oct, and I'm ready for 3 cm skeds.

OK1DFC: Zdenek [ok1dfc\(x\)seznam.cz](mailto:ok1dfc(x)seznam.cz) was busy with the IS0/OK5EME during the Oct contest week, but was active after his return – I worked between 10 and 18 Nov on 432 DJ8MS for initial {#217} on JT, DL7APV, K5DOG {#216} on JT, I1NDP, UT5UAS, LX1DB, UT6UG, DF3RL, OK2POI, W7IUV and 8P9HP {#215} JT, DXCC 78* and first OK – 8P9, and on 1296 R4YM for initial {#131} on JT, IK3COJ {#130} JT, I1NDP {#129} JT, I1NDP on SSB for initial #311, 8P9HP {#128} JT, DXCC 75* and first 8P9-OK, JA1WQF, G5WQ, OK1CS, VK3AXH, IW2FZR, G4RGK, S59DCD, G3LTF, G5WQ, G5WQ, LZ1DX, PE1HNG and PA3FXB. In the EME contest I QSO'd on 19 Nov on 432 WA6PY, WB7QBS for CW initial #145, G4RGK, WD5AGO, F6DRO #144, SM6FHZ, SM2CEW, LX1DB, DG1KJG, DL9KR, DL7UDA #143, F6HLC #142, SP7DCS, N4GJV, K5GW, G4FUF, OZ4MM, JA6XED #141, SV1BTR, UA3PTW, G3LTF, SM3JQU, OH2DG, OH2PO, LZ1DX, SD3F, VK3UM, JA9BOH, DF3RU and SM4IVE for a total of 30 QSOs in this one Moon window. (Interesting with the 3.2m dish in IS0, I had 31 QSOs in first window.) The next day on 1296, I worked WB2BYP, NA4N, LU1C, VA7MM, W4OP, VE6TA, VE4SA, IZ2DJP, ON5TA #315, K5GW, SM6FHZ, WA6PY, LX1DB, F5HRY, P19CAM, W5LUA, K2DH, SM4DHN, EA3UM, LZ2US, IZ1BPN, N2UO, F5SE/P, G3LTF, DK0ZAB, IK6EIW #314, UA4LCF {#135} JT, RA4A, OK2DL, SV1CAL {#133} JT, EA1FAQ {#132} JT, IK5QLO, SD3F, heard 8P9HP (15dB) JT – they did not hear me on CW, OK1YK, RD3DA, G3LQR, LA9NEA, IK3GHY, PY2BS, HB9Q, RA3AUB, ES5PC, G4RGK, S59DCD, DJ8FR, OK2ULQ, PA3FXB, SP7JSG #313, SP3XBO, UA4AAV #312, UA3PTW, CT1DMK, SV1BTR, OZ4MM, I5MPK, ES5PC, DF3RU, JF3HUC, SM3JQU, OK1CS, JA1WQF, I1NDP, DL4DTU, IK3COJ, OZ6OL, RA3AUB, G4CCH, 9A5AA, SP6JLW, DL6SH, JA6AHB, OH2DG, VK2JDS, JA4BLC, DL3EBJ, IK1MTZ, F5KUG, OE5JFL, SP7DCS, F2TU and VK3UM. I was QRV on 21 Nov and 2 Dec on 1296 and added F5SE/P, IZ4MAO #317, G3LTF, YO3DDZ {#136} JT, LU8ENU SSB {#316} and LU8ENU (9DB) JT. I am rebuilding 1296 TH 327 PA and will be QRV only with my QRP setup on 1296. I have bought from GM3SEK boards and am building new power supplies for G1 and G2. After the IS0 expedition, I visited a location in Albania that looks good for our next dxpedition.

OK1KIR: Tonda and Vlada [vladimir.masek\(x\)volny.cz](mailto:vladimir.masek(x)volny.cz) send the following summary of recent EME activity by their club – We worked on 432 on 22 Oct using JT65B IS0/OK5EME (24DB/21DB for digital initial {#63} and 1st IS0-OK QSO on 70 cm, OH2PO (12DB/O) JT {#64}, RW3WR (19DB/O) JT {#65}, PY2BS (15DB/O) JT and OZ4MM (549/549), and on 23 Oct F6DRO (20DB/15DB) JT {#66}, DJ8MS {24DB/19DB} JT {#67}, OK2POI (22DB/O) JT and DL7APV (6DB/9DB) JT, on 16 Nov 8P9HP (22DB/24DB) JT {#68} as new DXCC. We worked on 1296 on 23 Oct IS0/OK5EME (549/569) #322 and new DXCC, F2TU (579/579) and IK1MTZ (579/589) #323, on 17 Nov I1NDP

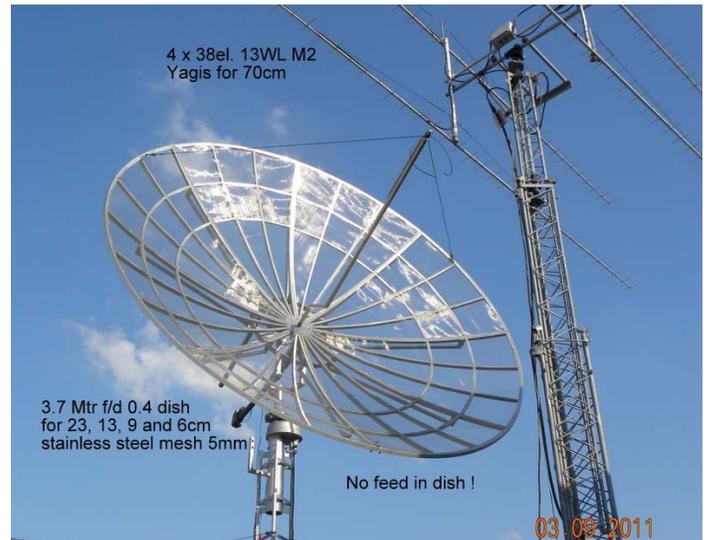
(579/589) #324, on 19 Nov G4CCH (589/589) and DF3RU (569/559), on 20 Nov VK2JDS (549/559), ON5TA (549/559) #325, on 23 Nov IS0/OK5EME (17DB/10DB) JT initial {#93}, RA4A (22DB/14DB) - new call of UA4API, and NR5M (12DB/O) JT {#94}, on 17 Nov 8P9HP (19DB/18DB) JT {#95} and new DXCC and I1NDP (6DB/6DB) JT {#96}, on 19 Nov VK2AMS (24DB/15DB) JT {#97}, OK2DL (6DB/5DB), VK3AXH (11DB/7DB) JT {#98}, PA3FXB (17DB/12DB), RA3AUB (9DB/4DB) JT {#99}, VK4DCI (19DB/O), G4CCH (6DB/2DB), RD3DA (14DB/7DB), DL6SH (9DB/O) JT {#100}, LZ1DX (10DB/9DB), ES5PC (11DB/O), UA3PTW (15DB/O), IK5QLO (12DB/O), YO3DDZ (23DB/O) JT {#101}, PE1HNG (19DB/13DB) and IK3COJ (10DB/7DB), on 20 Nov OK1CS (19DB/12DB), SM0ERR (19DB/O), ZS5Y (25DB/20DB), 8P9HP (23DB/25DB) and OK2ULQ (15DB/O) JT {#102}. We had no decodes in skeds with EA1FAQ (26DB/17DB) and UA4LCF (27DB/17DB). We worked on 13 cm on 24 Oct IS0/OK5EME (549/559) for initial #114, new DXCC and first IS0-OK QSO on 13 cm, F1PYR (539/549) #115 and on JT65C IS0/OK5EME (16DB/8DB) JT initial {#8} and PA7JB (20DB/11DB) JT {#9}. We worked on 10 GHz on 9 Nov in sked OH2DG (549/449) for initial #62 and new DXCC. On 24 GHz we ran several tests with IK2RTI (2.7 m off-set dish with 1.35 dB NF DB6NT LNA). On 23 Oct Gianfranco received his own echoes with 34 W from a modified RW1127 TWT. He has 14 dB of Sun noise (el 30 degs) and Moon noise over 2 dB (el 45 degs el, 10 deg C and RH 75%). Unfortunately we have had no success in all tests. We can copy receive our own echoes all the time with good levels despite apogee, low elevation and high humidity - over 90%.

ON5TA: Eric [fb812248\(x\)skynet.be](mailto:fb812248(x)skynet.be) is now QRV on 23 cm -- I was active for the first time ever on 23 cm EME for about 3 hours on Sunday 20 Nov. My power was only 40 W at the feed of my 3.6 m mesh dish. I made 13 CW QSOs, 12 were on random and 1 on sked. Despite the low power, I was surprised that the other stations had my call correct after only 1 or 2 calls maximum! Stations worked were HB9Q, F2TU, ON7UN, OK2DL, SM4DHN, I1NDP, G4CCH, PI9CAM, OK1KIR, OK1DFC, OZ4MM, N2UO and F5SE/P. I also heard EA3UM, W5LUA IZ1BPN and some others, but did not call them as I was still busy debugging my new 23 cm station and Murphy would not leave me in peace! I was especially pleased to QSO F2TU and OK1KIR on one more band, after working them on 3, 6 and 13 cm. I will soon fit a choke on the septum feed and increase my power by 6 dB.

OZ4MM: Stig's [vestergaard\(x\)os.dk](mailto:vestergaard(x)os.dk) info on his recent EME activities -- I ran both contest weekend as single op and on CW only, and ended with 56x28 on 432 and 85x40 on 1296. I addition I had 9 contacts on 144 for total of 1,155,000 points. During the weekends, I had feeds in the dish for all 3 bands at the same time. (Looking back with only 9 QSO's on 144, I should probably have dropped 144, as the 144 feed gives extra blockage on 432 and 1296.) I found more QSOs on 432 than the previous year and a little less on 1296, which is probably because of the low declination and consequent less Moon time. The weekend was quite tuff here, as on Sunday the Moon was just riding on the edge of my neighbors trees. It seems that the noise on 432 is getting worse and worse. At the same time signals on 1296 are increasing (probably because it is now easier to get high power.) New 70 cm contest initials were IS0/OK5EME, PE1RDP, I2FHW, DL5MAE, DJ8MS and DK5MB. Outside contest I worked 8P9HP and 7P8EME, both on JT65B. On 1296 initials in the contest were IS0/OK5EME, I1NDP, VE3CNP, UA4AAV and SP3XBO. Outside the contest found 8P9HP and 7P8HP on JT65C. Both stations would be easy on CW, but it seemed that they were only on JT, at least when I was around.

PA3DZL: Jac [PA3DZL\(x\)planet.nl](mailto:PA3DZL(x)planet.nl) sends to following news -- I took down my 2.5 m dish in the beginning of Sept and have put up a new 3.7 m dish, f/d 0.4. I am using this dish for 23 up to 6 cm. I am still working on my 9 and 6 cm EME rigs. I had a very good time during the ARRL EME contest on 23 and 13 cm with this new dish. It was a big improvement! Using it I added initials on 13 cm on 24 Oct with IS0/OK5EME for #41, square 63, DXCC 27 and the first PA-IS0 QSO, on 30 Oct ON5TA #42, on 5 Nov JA4BLC #43, square 64 and DXCC 28 and F1PYR #44 and square 65. During the 70 (using my 8 yagi array) and 23 cm parts of the contest, I worked on 432 on 22 Oct IS0/OK5EME for mixed initial #191*, square 295 and DXCC 60, PY2BS #192* and square 296, DL7APV, SV1BTR, SM4IVE, OZ4MM, OH2PO, OK2POI and W7IUV #193* and square 297, on 19 Nov SM4IVE and, on 20 Nov DL7APV, RA3LE, DJ8MS #195*, DL5FN, LZ1DX, UA3PTW, K1JT, ES5PC, F6APE #196*, K3MF, PE1RDP #197* and EA5CJ #198 and square 298, and on 23 on 22 Oct N4PZ, OK1CS 142*, I1NDP, LA8LF, OK2DL, N2UO, G4CCH, SP6JLW, HB9SV, SM6FHZ, DL1YMK #143*, SM4DHN, F2TU, IK1MTZ #144*, WA6PY, JA8ERE #145 and square 184, JA4BLC and IS0/OK5EME #146, square 185, DXCC 47 and first PA-IS0 QSO, and on 19 Oct PA3FXB, PY2BS, OK1CS, UA3PTW, PE1HNG, RA3AUB, DF3RU, IK5QLO, K5GW, OK2ULQ #147*, F2TU, HB9Q, K2DH and VA7MM #148* and square 186, K5AZU #149* and square 187. Outside of the contest I worked on 432 on 4 Nov PY1KK, on 8 Nov LX1DB #194*, and 12 Dec DL8DAU #199, F6APE, DF3RU, RA4A #200 and

G4RGK, and on 1296 on 16 Oct I1NDP for initial #141* - Nando's first contact with his new dish, on 27 Nov I1NDP again, IK3GHY #150*, LU8ENU and SVICAL #151, on 1 Dec I1NDP and I5MPK, on 4 Dec with very nice conditions and SSB echoes RD3DA, PA3FXB, IK3COJ, JA1WQF, G4CCH, YO2BCT #152 and square 188 YO2LEL (same as YO2BCT), 4Z5LV, PE1LWT and IK3GHY, on 5 Dec OK1CS and PA3FXB, 10 Dec JH1KRC #153, PA7JB, PA3FXB, G5WQ, G4CCH, YO3DDZ #154 and square 189 and OK1CS, on 11 Dec SM7FWZ #155 and square 190, PA3FXB, JA6AHH, PE1HNG, PE1LWT and G5WQ, and on 12 Dec OK1DFC on CW and SSB, DF3RU on SSB and PA3FXB. I am sure that there are possibilities to further improve my system performance. I have to check for the best feed position and on the TX-side I plan to change my 7/8" feedline to 1-1/4" coax. This change will give me 0.2 to 0.3 dB of more power.



PA3DZL's 3.7 m dish

PY2BS: Bruce [bruce\(x\)zirok.net](mailto:bruce(x)zirok.net) reports on his PY1KK summer plans -- I will be QRV during my summer vacation (from now until the end of Jan) from my coastal QTH. I plan to be active on 70 cm and 6 cm. Please send an e-mail if interested in a try on any of these bands.

SD3F: Carl (SM3AKW) [sm3akw\(x\)spray.se](mailto:sm3akw(x)spray.se) reports on this year's ARRL EME Contest -- In spite of the low declination (I have much tree blockage) and a bias problem with my 70 cm cavity PA that made me loose several dBs, I still enjoyed taking part and working the CW champs and the upcoming champs in the future. I QSO'd on 24 Sept on 2.3 GHz SP6OPN, F2TU, ES5PC, SV1BTR, CT1DMK, G3LTF, OH2DG, SM4DHN, G4CCH, K5GW and SM3BYA, and on 25 Sept OZ4MM, LZ1DX, SM4IVE and PY2BS, on 22 Oct on 432 VK3UM, OZ4MM, JA9BOH, OH2DG, DL7APV, SM4IVE, DL9KR, OH2PO, UA3PTW, SP6JLW, LZ1DX, F2TU, DK1KJG, JA6AHH, DL1YMK and SM3JQU, and on 1296 LA8LF, IK1MTZ, G4CCH, OE5JFL, UA3PTW, OK2DL, F2TU, HB9BCD, F5SE/P, RA3AUB, S59DCD, HB9BBD, SM4DHN, I1NDP, SV1BTR, DF3RU, HB9SV, OK2ULQ and SM6FHZ, and back on 432 SV1BTR and G3LTF, on 23 Oct on 1296 VK3UM, I5MPK, SM3JQU, SP7DCS, JA4BLC, LZ1DX, DL4DTU, RD3DA, DL3EBJ, LA9NEA, OZ6OL, IZ1BPN, EA3UM, PA3FXB, F5JWF, DF1SR, DJ3FI, DL1YMK, IS0/OK5EME, F5KUG, PY2BS, N2UO and K5GW, and on 19 Nov on 432 OK1DFC, OH2DG (DUP) and G3LTF (DUP), and on 1296 CT1DMK, DL6SH, ES5PC, IK3COJ, 9A5AA and ON7UN, on 432 SM2CEW and K5GW, on 1296 N4PZ and K1JT, on 432 SP7DCS and G4RGK, and finally on 1296 G4RGK, SP6JLW, SP7JSG, DJ8FR, OK1DFC, HB9Q, OH2DG, G3LTF, SM4IVE, DK0ZAB and PI9CAM. I also made one QSO on 144.

SM4IVE: Lars [sm4ive\(x\)telia.com](mailto:sm4ive(x)telia.com) writes about his activity in the EME contest -- It was a fun ARRL contest this year. I participated on 3 bands: 13 cm in Sept and 432 and 1296 in Oct and Nov. Despite the low activity and the low dec, I did fairly well on 432. I decided to stay on 432 as much as possible to raise the CW activity there. I ended up working 19 initials, not bad at all. I QSO'd 80 stations on 432 and 37 multipliers. On 1296, I made 52 QSOs and 24 multipliers. I did not spend much time on 23 cm. In sept on 13 cm I scored 22x19. QSO'd on 70 cm were on 22 Oct OZ4MM (579/579), VK3UM (579/589), OH2DG (559/569), JA9BOH (549/569), OK2POI (529/559), F6DRO (549/569), SP7DCS (549/579), JA0TJU (559/569) initial (#), LZ1DX (549/579), OH2PO (569/579), DL7APV (569/579), VK4EME (529/559), DG1KJG (549/569), SD3F (549/579), SP6JLW (559/569), G4EZP (529/539)

(#), SV1BTR (579/599), F2TU (429/559), DL9KR (599/599), UA3PTW (579/589), SM3JQU (559/589), DL1YMK (559/579), SM2CEW (559/579), IK2RTI (539/569), F6HLC (529/549), K4EME (549/559), WA9KRT (539/559), N4GJV (549/569), W8TXT (539/569), DK3WG (559/579), G4FUF (529/569), PA3DZL (549/579), I2FHW (539/559) (#), G3LQR (549/579), I5CTE (549/569), UR5LX (O/O), UT3LL (539/539) (#), K3MF (529/559), K5GW (569/589), G3LTF (569/579), WA6PY (539/559), ISØ/OK5EME (529/O) (#), VE6TA (559/579), W7MEM (549/559), 1107 WB7QBS (529/O), K1JT (569/579), ES5PC (549/569), KØRZ (559/579), DL7UDA (O/579) and DL5MAE (O/O), on 23 Oct IPIK (529/539) (#), RK6MC (529/339) (#), EA8/G4RGK (519/559) (#), DJ7GK (549/579) (#), SM7GVF (529/549), DJ3JJ (O/O), RA3LE (429/559), PE1RDP (O/O) (#), DJ8MS(O/O) (#), OK1TEH (O/O) (#), PAØPLY (529/559) (#), on 19 Nov OK1DFC (599/599), DF3RU (579/579), DK5MB (429/449) (#), JA6XED (579/589) (#), UT2EG (539/559) (#), DK8VS (529/559), SM6FHZ (549/569), WD5AGO (539/579), F6APU (O/O) (#), LX1DB (599/599), OE3JCP (539/579) (#), DFØBV (529/529) (#), G4ALH (539/579) and G4RGK (559/589), and on 20 11 S59UAR (529/559) (#), RA4A (539/579), UA3TCF (O/O), N1KI (O/O) (#) and PI9CAM (559/559). Contacted on 1296 were 23 Oct SV1BTR (589/599), OK2DL (599/599), SP6JLW (579/589), JA6CZD (579/569), VK3UM (579/579), JR4AEP (579/579) for an initial (#), HB9BBD (599/599), RD3DA (569/599), SM3JQU (569/599), F5KUG (568/569), ISØ/OK5EME (549/579) (#) and SM4DHN (579/579), and on 20 Nov G4CCH (579/599), OK1DFC (599/599), F2TU (599/589), IK1MTZ (579/589), DF3RU (579/599), CT1DMK (559/579), IK3COJ (559/579), JA6AHB (579/599), RA3AUB (579/589), ES5PC (559/589), I5MPK (559/579), OE5JFL (559/589), UA3PTW (559/599), PA3FXB (549/579), SP7DCS (569/599), 9A5AA (559/599), DL3EBJ (559/579), UA4AAV (549/569) (#), I1NDP (589/599), SP7JSG (549/599), PY2BS (589/589), PA7JB (549/589), S59DCD (559/599), OK2ULQ (559/599) (#), ON7UN (599/599), IK3GHY (539/579), OZ6OL (569/579), F5SE/P (599/579), DL6SH (569/569), G3LQR (539/579), G4RGK (539/579), RA4A (O/O) (#), DJ3FI (539/559), DJ8FR (539/599) (#), IK6EIW (539/559), G3LTF (569/589), IK5QLO (539/559), K2DH (559/579), OK1YK (539/579) and EA3UM (567/579). Worked on 2300 were on 24 Sept ES5PC (559/559), K5GW (589/579), SV1BTR (579/569), SP6OPN (579/569), SM4DHN (579/549), K1JT (559/559), VE6TA (559/559), WD5AGO (559/559), CT1DMK (559/559), WA6PY (559/559), F2TU (589/559), G4CCH (559/559), OZ4MM (579/579), LZ1DX (559/569), RK3WWF (559/569), PA7JB (529/529), ON5TA (539/549), SD3F (539/549), G3LTF (569/569), SM3BYA (569/569), PY2BS (549/569), and W7JM (569/559). I did not have good luck with the 8P9 dxpedition on 432. I was up on their moonrise on 14 Nov and saw them on JT but could not get any decodes. I listen when DL9KR called and sent (449), but they where to weak with me to copy. So I went to bed again. I have been using an TS2000X for a long time, but SM4DHN and myself have bought Flex1500s. SM4DHN used his during Nov part of the contest and was very satisfied. I will have more info to come on this matter.



SV1BTR, Jimmy now has 6.1 m dishes on both 70 and 23 cm!

SV1BTR: Jimmy [jimmyv\(x\)hol.gr](http://jimmyv(x)hol.gr) was QRV on 2 m, 70 cm, 23 cm, 13 cm and 6 cm in the contest, of course all on CW. I have been participating in the ARRL EME Contest since 1994. This year Murphy visited in all legs and bands, but my CW EME operator's contest spirit won him over, despite 25+ QSOs lost. Highlight of this year's contest for me was good the highly improved 70 cm activity vs. last year, as has been reported by fellow stations. On the downside was the low US presence. It is a pity as NA was once a leading EME continent.

In 96% of my QSOs RSTs were exchanged. My total was 227 CW QSOs. 52 were 432, 79 on 1296, 37 on 2300 and 14 on 5760. After the contest, on 5 Dec I put up my new 6.1 m dish for 23 cm. (the old 4.9 m dish used on 23 cm used in the recent ARRL contest was taken down.) This new dish is my 23rd antenna for CW moonbounce. I started in 1993 and expect that I must have the world record for an EME station having put up and experimented with the most antenna systems – Hi! Antennas are my biggest passion.

VA7MM: Mark (VE7CMK) and Toby (VE7CNF) [va7mm\(x\)rac.ca](http://va7mm(x)rac.ca) on their groups efforts in the contest -- We was active on 1296 during both the Oct and Nov weekends. This was our 9th year of participation. Overall we found the conditions to be good, but our window to Europe was only about 2 hours with the low declination. This year we logged 50 QSOs (32 on CW and 18 on digital) and 28 multipliers. Nine initials were worked during the contest: I1NDP, I5MPK, IK5QLO, ISØ/OK5EME, WA3GFZ, PA3DZL, W4OP, CT1DMK and WB2BYP. These bring our initial total to #117 on CW and #145* mixed. It is interesting to look at the change in our ARRL EME Contest results over this period, which is as follows: 2003 (CW 11, JT 0, total 11x9 = 9,900), 2004 (CW 26, JT 1, total 27x21 = 56,700), 2005 (CW 34, JT 0, total 34x24 = 81,600), 2006 (CW 26, JT 11, total 37x24 = 88,800), 2007 (CW 40, JT 7, total 47x26 = 122,200), 2008 (CW 49, JT 1, total 50x32 = 160,000), 2009 (CW 44, JT 10, total 54x30 = 162,000), 2010 (CW 35, JT 19, total 54x32 = 172,800) and 2011 (CW 32, JT 18, total 50x28 = 140,000). These results illustrate the performance of our station in the western North American region comprising a 3 m dish, about 200 W RF power at the dish feed and receive preamp with 15 dB gain and 0.33 dB NF. We will continue in 2012 to operate 1296 EME operating events and are otherwise available for scheduled contacts.

VE2XX: Stu [stuart.truba\(x\)inukshuk.ca](http://stuart.truba(x)inukshuk.ca) is almost QRV again on 70 cm EME -- I'm making good progress on the array. I changed to an 80' run of 1 1/4" hardline and reworked the TX/RX relays. I now have 4 relays and near 80 dB of isolation. I use the same feed line on TX and RX. With this arrangement in the event that a preamp goes, I can still operate with a preamp in the shack. I am working on my 8938 PAQ. I was getting a smooth 1500 W out, but decided to rebuild the face to add more metering. When I am QRV, besides CW I might try JT, if I can figure out how it works on my Flex! I shall be interested in skeds.

WA0ARM: Bill's [Bill.Glynn\(x\)westarenergy.com](http://Bill.Glynn(x)westarenergy.com) report for Nov -- Along with removing my 8 dB local noise source, I borrowed a WA2ODO preamp from WQOP for the second half of the contest. Together this improved my hearing by about 11 dB. This time however, I *hosed* my TX signal by trying some untested capture software running underneath WSJT. This was a bad move as my signal was not heard by anyone. I'll know better next time. I am very pleased with my improved hearing. Here is who I copied and their strongest signal report using my 8x15 432 array horizontally polarized: On 19 Sept at 0648 DL7APV (7DB), 0810 K4EME (26DB), 0840 DL7UDA (16DB), 0900 OH2PO (13DB), 0956 LZ1OA (22DB), 0956 UT2EG (20DB), 1007 LZ1DX (16DB), 1010 AE6EQ (14DB), 1137 G4RGK (16DB), 1304 K1JT (23DB) and 1612 W7IUV (22DB), and on 20 Nov at 0755 ES5PC (16DB), 0802 UT2EG (22DB), 0802 DJ8MS (18DB), 0807 UR5LX (27DB), 0846 DL7UDA (19DB), 0942 DK3WG (10DB), 1017 F6FHP (19DB) and 1104 LZ1DX (17DB).

WA6PY: Paul [pchominski\(x\)maxlinear.com](http://pchominski(x)maxlinear.com) sends a report on his Nov activity -- I was active in Nov ARRL EME Contest weekend and added on 432: DL9KR, OZ4MM, SM2CEW, OK1DFC, DG1KJG, DL7APV and G4RGK. Hear were DF3RU, WD5AGO, G3LTF, LZ1DX and a very strong SM4IVE as a beacon all the time. Most of the signals and my echoes came on horz pol. On 1296, I added ON7UN, DJ8FR, CT1DMK, DL6SH, K2DH, K5AZU, 9A5AA, F5SE/P, VE4SA, OK1DFC, EA3UM, SP7JSG, W4OP, DF3RU, OK2ULQ, DL3EBJ, OZ6OL, W7JM and VE3KRP. It was a nice surprise to QSO SP7JSG. We worked not long ago on 10 GHz. My window to EU was short limiting number of stations, but on the other hand near perigee helps with small system stations. We can't change Moon's orbit, it is what it is.

WB7QBS: Glenn [glennwb7qbs\(x\)hotmail.com](http://glennwb7qbs(x)hotmail.com) had some person time conflicts that limited his 432 activity during the contest -- I was QRV on Saturday 19 Sept from 0900 to 1200 and heard DL9KR, DL7APV, OK1DFC, OZ4MM and SM4IVE. They had good signals (579-599), but alas I was unable to work anyone. He had better luck in Dec and added K5GW to his initial list.

WD5AGO: Tommy <[wd5ago\(x\)hotmail.com](mailto:wd5ago(x)hotmail.com)> reports great signals on 70 cm, on early Saturday of the Nov contest weekend -- Despite good signals, we still did not work more than a dozen with 225 W at the power divider. On the other hand, signals were not as good using the large horn on 23 cm. I called a dozen stations, but managed only 1 QSO with OZ4MM. I need to try a longer horn next year!

be found at www.sm4ive.com. Lars says there is only space for max of 30 persons.

70 cm CW ATPs are planned for Jan 28/29, Sun 1000-1200 & 1800-2000; Feb 25/26, Sun 0900-1100 & 1700-1900; Mar 24/25, Sun 0730-0930 & 1530-1730; Apr 21/22, Sun 0600-0800 & 1400-1600; May 19/20, Sun 0500-0700 & 1300-1500; June 16/17, Sun 1200-1400 & 23/24 Sun 1100-1300; July 14/15, Sun 1200-1400 & 21/22 Sun 0930-1130 and Dec 22/23, Sun 1400-1600 & 2100-2300. These were planned by DL7APV, but it appears that SV1BTR will be taking over the task on setting the ATP dates and times. I have included the first part (proposed) of DL7APV's 2012 Lunar Calendar. I expect have a final listing and complete calendar in the Jan NL.

The dates for 2012 EME Contest dates: 6-7 Oct for the Microwave weekend, and 3-4 Nov and 1-2 Dec for the 50-1296 parts.

This month the NL includes F5SE's 2012 Moon Chart – see end of this NL to check on the ARRL EME Contest dates.

The picture in the last NL showing SV1BTR's dishes was in error. It shows Jimmy's 4.9 m dish that was used for 23 cm and a 6.1 m dish used for 70 and 13 cm. He used a second 4.9 m dish for 6 cm (and 3 cm in the future). However, he has already replaced the 4.9 m dish for 23 cm with a new 6.1 m dish – see his report.



SV1BTR's 4.9 m microwave dish – nothing like having lots of dishes

The NL is still in need of a NETNOTES editor to provide summary material from the 20 m net and various Internet EME Reflectors for the NETNOTES section. W6SZ has temporarily agreed to do this task [TNX]. Can anyone help?

We also have the results of the Microwave Update NF measurement Competition – see below.

2011 MUD 70 cm Up NF Results (TNX WA2ODO for Info)

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=====
432  WA2ODO .04  34.78
      WA2ODO .04  33.26
      WA2ODO .06  34.36
      WA2ODO .17  28.12
      WA2ODO .21  23.81
      W2ZV  .32  23.77
      K1OR  .62  13.59
      VA3NRN 1.16 10.65
      VA3NRN 2.10 09.30
=====
902  WA2ODO .10  21.17
      WA2ODO .12  21.39
=====
1296 WA2ODO .20  18.68
      WA2ODO .31  15.83
      WA2ODO .32  14.26
      WA2ODO .44  19.71
      W2ZV  .49  15.80
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VE2XX .95  15.17
WA3GFZ 1.23 24.83
WA2IID 1.95 23.44
=====
2304  WA2ODO .25  19.07
      WA2ODO .29  16.23
      WA2ODO .31  16.28
      WA2ODO .34  18.80
      W2ZV  .37  13.39
=====
3456  WA3QPX .68  14.98
      WA2ODO .71  10.44
=====
5760  K3TUF .95  11.96
      K3TUF 1.00  11.25
=====
10368 W3SZ  1.65  15.60
      W3HMS 2.19  24.25
      W3SZ  2.38  11.45
      WB2RVX 3.00  04.10
      K3TUF 4.17  26.30
=====

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The next contest will be the EME SSB Contest on 4/5 Feb. 432 is on Saturday and 1296 Sunday

We will have more next month. Please keep the info and reports coming. I will be looking for you off the Moon. Have a wonderful Holiday and a very Happy New Year. 73, Al – K2UYH

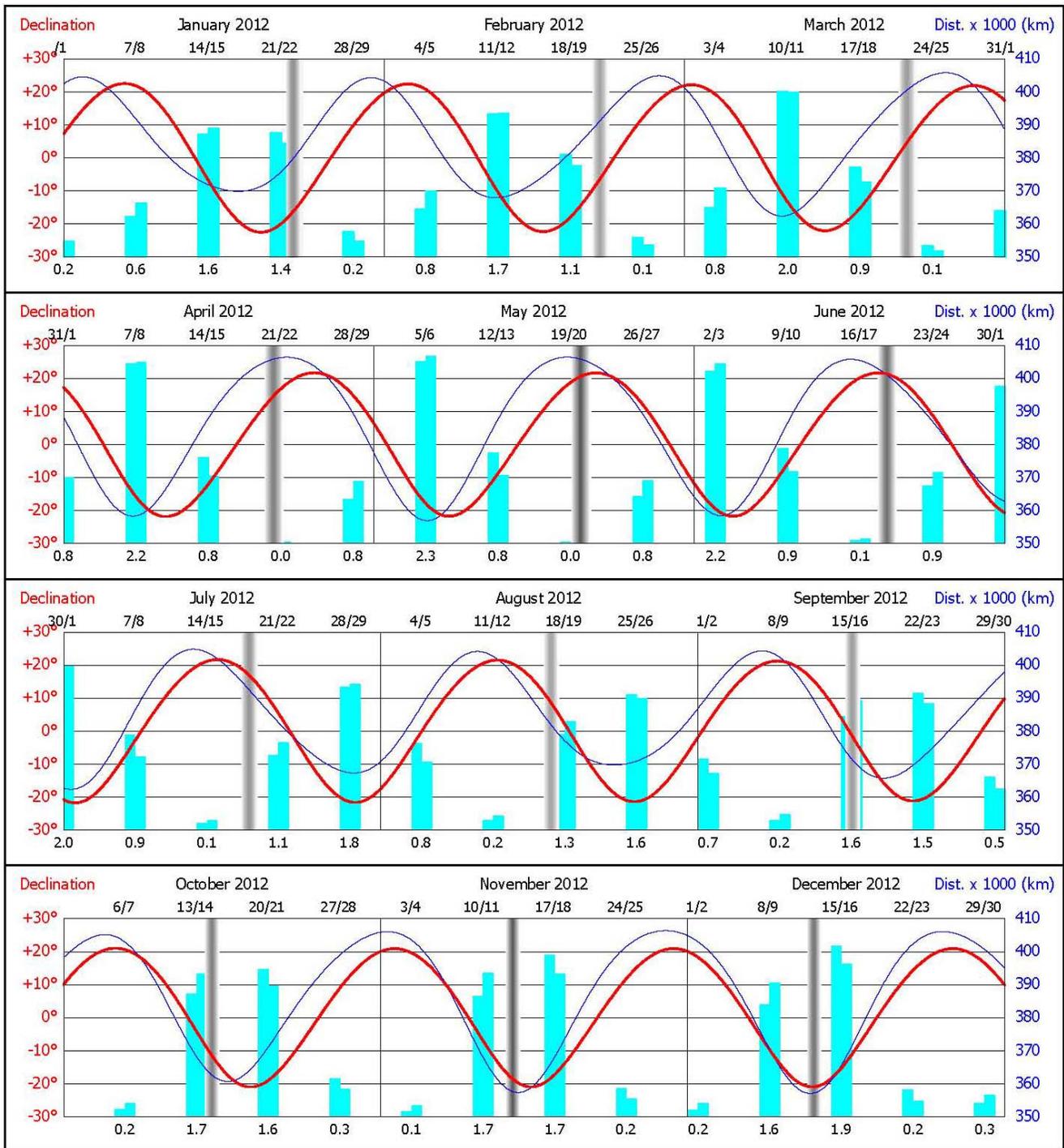
Proposal !!!!! Lunar Weekend Calendar for 2012 (by DL7APV)

2400 Sat/0000 Sun	Decl /deg	Loss (dB)	Sun offset/+	Temp 432	contest dates	Comments & 432 ATP
Jan 0/1	+6	3.20	+85	25		
Jan 7/8	+21	-1.32	+165	45		
Jan 14/15	-8	-0.42	-110	30		
Jan 21/22	-20	-0.59	11	11	ARRL VHF contest	
Jan 28/29*	+9	3.20	+64	25		Sun 10-12+18-20
Feb 4/5	+20	-1.18	+146	40	Sab EME contest sat 432 sun 1296	
Feb 11/12	-11	0.23	-127	30		
Feb 18/19	-18	-0.87	-33	45		
Feb 25/26	+11	3.20	+45	25		Sun 9-11+17-19
Mar 3/4	+18	-1.14	+126	30	Bu VHF/UHF T-contest	
Mar 10/11	-14	0.23	-145	30		
Mar 17/18	-15	-1.07	-50	35		
Mar 24/25	+14	3.20	+25	30		Sun 7:30-9:30+15:30-17:30



Another view of OE5JFL's partially offset dish

Moon Ephemeris Overview for the Year 2012, 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

