432 AND ABOVE EME NEWS
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CONDITIONS: Another EME contest is over. Conditions seemed reasonably good except on 70 cm where Faraday was not the most cooperative and activity seemed down. Most operators reported having a great time during the contest, but some were unhappy with the split between JT and CW and others with having only one weekend for operation on all the microwave bands. I will not argue that the increasing use of JT modes is not affecting the contest, but it is interesting to note that many of the highest scores (on 432 and above) were achieved by stations that only operated CW. There were also concerns that activity and scores were down this year, but one of the biggest factors affecting scores is operating time, which was reduced by the lower declinations this year. I am concerned by the low level of activity on 70 cm. I wonder if part of this drop is associated with the increase in activity on 1296. In any case, increasing the turnout on 432 is something we all need to work on. (The next 70 cm CW ATP is on 25 Dec from 2230 to 0030 and 26 Dec from 0630 to 0830). Besides the contest there was very successful dxpedition activity – see the CE2/DK2ZF report below. There is plenty to keep interest high in the coming month. DL3OCH is planning activity on 23 cm from Taiwan and the Philippines, and DL8YHR and DL8LAQ will be QRV from 7X (Algeria) on 70 cm – see their reports below.

HIGH SCORES: SM4IVE worked a total of 117 QSOs for the 23 cm top spot – all on CW! OK1DFC on 432 had 55x32 for the 70 cm top spot, and was second on 1296 with 102x45. OZ4MM 70 cm QSOs were 49 for second place on 432.

7X/DL8YHR: Frank DL8YHRFRANK(x)AOL.COM reports that he and DL8LAQ will be QRV on 70 cm EME from Algeria (JM16) between 26 and 29 Nov. They will have a single yagi and 120 W. Because of the small station they will probably concentrate on JT65B operation. In the past they have operated both CW and JT on 432.050. I have no further information. EME operating time will be split between 144 and 432.

AL7RT: Dan dpahunt(x)alaska.net reports another great EME contest – The stations worked on 1296 were OK2DL, SP6JLW, OK1CA, SM6FHZ, SM4IVE, K1JT, G4CCH, N2UO, DL0SHF, G3LTF, PY2BS, W7JM, K4QI, K5GW, K2DH, N4PZ, VK3UM, OZ6OL, OK1DFC, VE6TA, VA7MM, W6YX, NA4N, W6PY, DL4MEA and K1RQG. All QSOs were on CW. Four new stations were added to my initial stations worked list.

CE0Y/DK2ZF AND CE2/DK2ZF: Rolf (DK2ZF) niefind.rolf(x)t-online.de and Martin (DK7ZB) despite problem pulled off a truly magnificent double dxpedition. Last month we reported on their 70 cm success from Easter Island (DG52du). This month we have their 70 cm results from Chile in FF47gi (Maitencillo). They QSOs on 25 Oct UA3PTW (21DB/O), OK1DFC (24DB/O), K2UYH (23DB/O), WA4NJP (25DB/O) and heard by no contact with OK1KIR (22DB) all on JT65B, on 26 Oct DL7APV (19DB/O), PA3CSG (20DB/O), DK3GW (23DB/O), ES6RQ (23DB/O), G4RGK (23DB/O), DL2NUD (21DB/O) all on JT65B and OZ4MM (539/O) and UA3PTW (539/O) on CW, on 29 Oct HB9Q (19DB/O) on JT65B and DL9KR (429/O) on CW, and finally on 2 Nov OK1KIR (27DB/O), DF3RU (16DB/O) and DL5FN (22DB/O) all on JT65B.

DL3OCH DXPEDITION ACTIVITY: Bodo dl3och(x)gmx.de is planning to be QRV from BW on 23 cm – I am planning my next 23 cm EME activity from here in Taiwan. Unfortunately my time schedule is pretty full, but I have identified two possible dates: Friday, 26 Nov, 1400-1530 and Sunday, 19 Dec, 0800-1000. Conditions on 26 Nov looks pretty nice. I don't know yet the callsign. It might be BV2A and grid PL05. I am not exactly sure yet, but will let you know when. Other good news is that I got my license for the Philippines. Since I have all my equipment here, I will become QRV from DU. It is very possible that I go to Philippines between Christmas and New Years. The following proposed call will be DU9/DL3OCH from PJ18QL. I will TX first using JT65C on 1296.090, and will RX on my own echo freq. For NA: Saturday, 25 Dec 1330-1430 and for EU: Saturday, 25 Dec 2300-0100. After 27 Dec I should have more time for Moon activity, but there is no window to NA anymore.

DL6SH: Slaw, DL6SH(x)online.de is relative new to 23 cm EME (JN48sw), but did quite well in the contest -- I am pleased to announce a score of 78 QSOs on 23 cm. I operated alone during the first weekend, but was joined by OK3RM and DH2SAV for the second weekend. We made most of our QSOs on CW and only 13 were on JT. 46 of the stations worked were initials. The smallest station worked was SM0ERR with a single 55 element Tonna yagi. I am using a 4.8 m mesh dish with 270 W at the feed. I wish to thank all the moonbouncers that we worked, and am looking forward to working more new stations. Please don't worry, if sometimes I need a little extra time to receive your call on CW. I am seriously working to increase my CW ability, and am interested in working weak CW stations.

CE2/DK2ZF yagis in Chile

ES5PC: Viljo sends the following result and comments on the ARRL EME Contest -- I was QRV in all 3 weekends and completed QSOs on all 7 bands where I'm currently QRV. This is one band more than last year (3.4 GHz). I worked both CW and digital modes as I did last year. I wonder if there were many other stations active on 7 or more bands in this year's contest? I worked no station on all 7 or even 6 bands. Only K1JT and W5LUA were worked five bands, and a few more on 4 bands. During the last contest weekend I was not able to be QRV during most of the second Moon pass – primarily the NA window due to other commitments. In the first 50-1296 weekend I only worked on 144 and 1296 as my 432 yagi array had a problem with VSWR and I did not have time to take it down. Instead I decided to build a 432 dual-polarization patch feed for use with my 4.5 m dish. I got the feed ready just before the second 50-1296 weekend and worked 20 stations on 432. The feed seemed to work fine and was comparable if not better than my 4 x 9 wl array. My overall results were down from last year (204 vs 221 QSOs and 122 vs 132 multipliers). The number of digital QSOs was slightly higher this year (80 vs 71). My 144 activity was limited to Moon elevations below 35 degrs. Compared to last year, I found the activity on 144 CW much lower. Regarding the microwave part, I agree with many others about too many band changes and problems with coordinating the activity between several bands to maximize the number of QSOs. I think it was clearly too large a number of band changes for a single weekend, and more than I have ever done before! My QSO breakdown was on 144 53x30 (4 CW and 49 JT), on 432 20x15 (11 CW and 9 JT), on 1296 68x34 (48 CW and 20 JT), on 2300 40x23 (38 CW and 2 JT), on 3400 7x6 all CW, on 5760 9x8 all CW and on 10,368 7x6 all CW. My setup on 144 was 1 kW and 4 x 5 wl M2 H-pol yagis, on 432 4.5 m dish H/V-pol and 1 kW, on 1296 4.5 m dish

and 300 W, on 2304 4.5 m dish and 500 W, on 3400 4.5 m dish and 80 W, on 5760 4.5 m dish and 15 W, and 10,368 4.5 m dish and 20 W.

F2TU: Philippe f2tu.philippe(x)orange.fr was active in the ARRL EME Contest on 4 bands but does not plan to submit his log. He does report the following scores were achieved, on 23 cm 345 points, on 13 cm 109 points, on 6 cm 41 points and on 3 cm 57 points. Philippe is planning to document CW score on all bands. He will post these on his web page and I have agreed to also post them in the NL.

F5SE/p: Franck kozton(x)free.fr NL report follows -- This time, I managed to be QRV under acceptable conditions. I was still running a single 500 W DB6NT SSPA delivering about 400 W, but with reduced TX feed-line loss down to 1.5 dB instead of 5 dB in Feb and March. The improvement in my echo strength was quite significant. Despite QRM from the local air-base radar, the contest ended up with a score of 60x29, but some stations never came back to my calls, including RW3PX, IK2RTI, EA2LU, OE9ERC, W4OP, DJ3FI and LX1DB. 9A5AA came back to my call, but then, faded away. "Big gun" stations were heard back off the Moon with tremendous signals. It was very hard to believe these were actually Moon reflected signals! Local WX was very poor during the contest with wind and rain on Saturday, and very heavy rain on Sunday. I noticed that at moonset, when the elevation was lower than 8°, tree attenuation becomes quite significant. Echoes were no longer heard, and only faint signals from the "big guns" could be copied. Towards west, the trees are a curtain extending over a few km deep. Towards east, the trees are just a few meters away from the dish, but they are only two or three trees thick, and do not seem to absorb as much as the "western" trees, although the Moon must still rise to > 15° in order to move above their effect.

G3LTF: Peter g3ltf(x)btinternet.com EME Contest score is down 28% from last year due to low CW activity on 432 -- Its been a busy month on EME, and we had a good tropo opening as well. Warming up for the final leg of the contest, I worked on 23 Oct on 1296 SM4IVE, G4CCH, IW2FZR, LZ1DX and S59DCD, and next day on 432 KL7HFQ and W7MEM for initial #438, I1NDP, OK1DFC and OK1KIR, and on 25 Oct PA3DZL and ES5PC, and on 1296 a really good CW chat with I5MPK. In the contest, I started on 30 Oct on 432 as it was lagging a bit from the first leg and worked JA6AHB, ES5PC, OK2POI, JJ1NNJ, SM6FHZ, K5GW and N8CQ #439; at 0800 I changed feeds to 1296 and worked PA7JB for initial #330, F5SE/P, LZ1DX, VE6TA, F5VHX, IK3COJ, W6YX, PA3DZL, WA6PY, EA2LU and WA8RJF. Another feed change back to 432 netted WA6PY. Please note for those who say contest QSOs by small stations can only be made with the assistance of loggers, Paul runs a single dual pol yagi, and we worked on random, as usual. On 30 Oct, I started on 1296 at 0300, as I had no VK window due to trees, and worked PI9CAM, DL4DTU, DL4MEA, 9A5AA, RW3PX, SM2CEW, PY2BS, K1RQG, W4OP, OZ6OL and PA0PLY #331. I then added two more on 432, G3LQR and WD5AGO #440. On 1296 CWNR were OE9ERC and N9JIM. UA3DHC called me several times (in QRM), and I only really got his call when he was calling SV1BTR, and after a few more tries we would have made it. I also heard SP3XBO with a nice signal, but no CQs. On 432 *gotaways* were DL7UDA and OH2DG. Final numbers are on 432 35x21 and on 1296 86x39. 1296 is about the same as last year, but 432 is 20% down. I note from OK1DFCs log that there are now many stations who used to work both CW and JT, but who now work JT exclusively. I suppose regrettably that 432 is going to follow 144 and become pretty much exclusively a JT band. I find if I go on the 432 HB9Q logger during the week that I can easily hear the JT signals, but the stations are only interested in digital QSOs. Conditions on 432 were good on the first day, but definitely down on the second. On 1296, I now use the SDR to tune the band clicking on each signal and listening on the headphones, then when I hear something new (or see a pile-up), I switch to the TS850 and bring that onto frequency. Finally on 3 Nov I worked on 1296 N9JIM #332. I made several attempts to work the CE/DK2ZF expedition on 432, but they were never strong and always busy with JT QSOs. On the technical front, I rebuilt my 1296 feed probe to get a better connector arrangement, and ended with a 30 dB return loss (RL), a 20 dB RL bandwidth of 75 MHz and an isolation of 25 dB. Moon noise in the contest was close to 0.5 dB.

IK5QLO: Andrea ik5qlo(x)gmail.com sends his ARRL contest small dish final report for 1296 -- Despite very uncooperative WX with heavy rain all the time and few hours for operation, I added 6 more stations to my score at the end of Oct. I finished with 37 QSOs, 25 on CW and 12 on JT. Not bad, I think for my tiny 2.4 m dish. I could have done more, but could not help missing some, and at least I have a goal for the next year: work more than 40 stations. Worked on CW were N4PZ, K1RQG for an initial (#), and on JT PA3FXB, UA3PTW, PA7JB (#*) and PI9CAM. Conditions with the heavy rain were surely not good and signals had a fading quality about them. I want to thank PA7JB for his persistent calling, which allowed 2.4 m to 2.4 m dish QSO.

K1DS: Rick rick1ds(x)hotmail.com prior to the contest weekend, on 23 Oct, ran some EME tests on 432 -- I spent the entire day setting up for 432 EME using a pair of 9 WL yagis, vert pol on an AZ-EL mount with 180 W and preamp with only a 10' length of superflex feedline to splitter. I saw the Moon at about 7 degs of el, and I tried a JT sked with OK1DFC. I heard Zdenek, but he heard nothing from me. I discovered that somehow my WSJT was not working correctly. Despite going over all the connections, it would not turn on the TX. Another major issue, which I did not encounter on 2 m or 23 cm is that the RFI noise generated by my computer on 432 is loud! We finally tried on CW and had a good QSO with several exchanges. This made my day and justified my effort setting up my portable station.

K1DS' portable 70 cm EME antenna system

K1JT: Joe k1jt(x)arrl.net sends info on 70 and 23 cm contest activity was from K2UYH's QTH. Operation was primarily by K2TXB and K2BMI. [I was only able to operate at the beginning of the first Moon pass because of a conflicting social/family activity. QSO'd on 30 Oct on 432 on JT65B were EA3XU (O/O), OK1TEH (21DB/22DB), OK1DFC (3DB/7DB), OK1KIR (O/16DB), OK2POI (O/20DB), ES5PC (O/14DB) and WA3QPX (O/11DB), on CW I1NDP (559/559), SV1BTR (449/559), SM2CEW (569/569) and DG1KJG (559/559), on JT65B EA8/G4RGK (O/24DB), on CW DF3RU (559/559) and KL6M (559/549) 35-26, then on 1296 CW W6YX (589/599), back to 432 JT65B K5QE (O/17DB) and on 1296 CW W7JM (569/549), and on 31 Oct on 1296 CW F5SE/P (559/559), LA9NEA (559/559) DUP, SP7DCS (569/559), IK3COJ (559/559), DL4MEA (569/569), LZ2US (579/559) DUP, PI9CAM (589/579), 9A5AA (559/549), K1RQG (579/569), LX1DB (569/569), WA8RJF (529/539), DL1HYZ (569/559), S59DCD (559/559) DUP, I5MPK (579/549), VE3KRP (569/549), OK1DFC (599/569) and PA3DZL (559/549), and on JT65C PA0PLY (O/17 DB), G5WQ (O/23DB), EA3XU (O/24DB), K7XQ (O/12DB) DUP and LU1C (O/19DB), then on 432 JT65B KL7UW (O/29DB) and VA3GMT (O/22DB), back to 1296 JT65C VK4CDI (7DB/19DB) and 1705 JA1WQF (O/13DB) for at total on 70 cm of 38x28 and on 23 cm of 83x40.

K3JNZ: Bill K3JNZ(x)aol.com writes about his troubles trying to get QRV for the final EME contest weekend -- K6DV, KA0Y and I worked on getting my EME station QRV. Gene brought his TDR Friday. It showed only a small impedance bump about where the TX line meets the connector. However, we didn't have time to check the connector itself and later had the same SWR problem we've had before - high SWR to dish in TX. With Gene's power meter we were able to determine that properly loaded we had 400 W output. It also showed we were only getting 40 W from the driver amp instead of the expected 80 W and was why we had 400 W rather than 600 W from the PA. Gene also rechecked the noise figure for the two 1296 pre amps and determined that both were close in NF and gain. The 432 preamp we had used during the Arecibo activity was removed from the preamp box and a direct connection was made from the output of the #2 1296 preamp to the transmission line running back to the shack. (I have yet to figure out what the other relays in the box do. I also have to figure the sequencing and indicator lights which show power to the pre amps, standby, and transmitter light indicators). Ken removed the 1296 preamp from the FT-736R's input and we attached the rig from the dish input to the RX input. There was an increase in noise level to S6 about 1/2 way up the S meter scale, which seemed much higher as compared to prior noise level indications, which were usually around 1/4 scale or 3 S units. I brought the dish around to make a Sun noise and was very disappointed to find Sun noise only increased to S7, a 3 DB increase. Sun noise should be 23 DB or +7 S units above the noise floor. When we hooked up the dish pm TX, we had the same 600 W forward, but 200 W reverse. This was about all we had time to do. At least with everything attached again, we can troubleshoot from the shack forward or the

dish back. Gene left his test equipment as well as a 10 W 1296 transverter. I hope we can do some more EME work before the cold weather sets in.

KJ6HZ: John john.d.oppen(x)boeing.com made his first 70 cm EME QSO during the contest -- On the second pass of the ARRL contest weekend, I worked DL7APV for my first 432 EME QSO. I hastily hooked everything together, but Murphy kept me busy during the pass. I had to replace a faulty T/R relay and use a 60 W brick amp instead of my dual 4CX250R amp. My computer also reset the time for Daylight Savings incorrectly, throwing off my tracking. By the time I got everything hooked up, several big stations had lost the Moon, but I was able to catch DL7APV calling CQ on JT65B. I received him as high as – 10 dB, but he only heard me at -28 dB. I will work on getting more power in the next few weeks and look forward to working many more stations. I am running 4 x 19 yagis, 60 W SSPA, soon to be 300 W and a 0.35 dB NF LNA [where located?].

N4GJV: Ron qstdemb(x)yahoo.com reports on his Oct contest activity -- I was QRV during the ARRL EME contest, and logged CW QSOs with the following stations on 70 cm: OZ4MM, SM2CEW, G3LTF, OK1DFC, OH2PO, PA3DZL, DL7APV, K4EME, SD3F, K5SO, UA3PTW, DF3RU, N8CQ, VE6TA, VK3UM, K1JT, W8TXT and W7CI during the first weekend. During the second weekend, I experienced some Murphy problems, but after correcting the problem I added DG1KJG, KL6M, JJ1NNJ, SV1BTR, PI9CAM, WD5AGO, I1NDP, SP6JLW and SM6FHZ. Many thanks to all, for the fine contacts! Others heard (most called) include OZ6OL, JA0JTU, JA6AHB, WA6PY, ES5PC, K5GW, DJ7GK, SV3AAF, and JA9BOH. I was also active on 2 m EME during the contest.

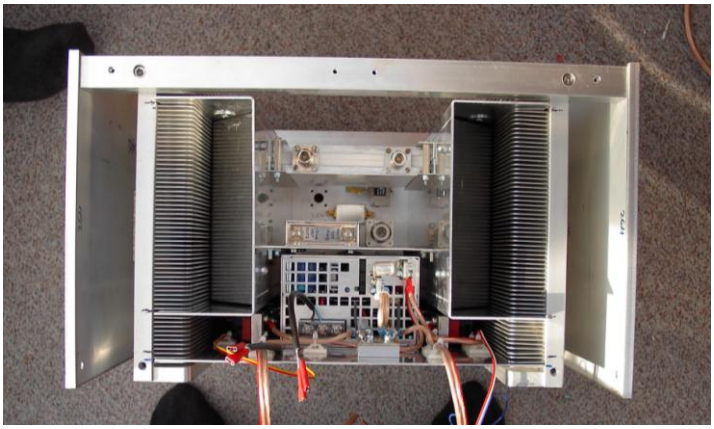
N9JIM: Jim n9jim-6(x)pacbell.net is back on 1296 EME again and writes -- It took me until the last pass of the contest. I just finished installing everything on Saturday afternoon. On 1296, I am running a 3.3 m dish, 200 W and a 0.28 dB NF preamp. I woke up for moonrise at 1:30 am local and had lots of fun running up and down the tower to adjust the camera. Luckily the sky was clear. I couldn't hear my echoes, but heard lot of signals at just a few degrees up after moonrise. I used DL0SHF as a beacon and rocked the dish up/down/left/right to find the peak, then calibrated the camera. I worked SM4IVE, DL0SHF, G4CCH, N2UO, OZ4MM, SP6JLW, W6YX and K5GW all on CW. I heard IZ1BPM, PY2BS, AL7RT (?) and JA6AHB (?).

NA4N: Greg na4n(x)hughes.net writes that he worked a total of 49 stations in the two contest weekends on 1296 – I had a great time. Conditions were better here on the second weekend. I want to thank the following stations for contacts: During the first weekend DL0SHE, SM4IVE, SV1BTR, RA3AQ, DF3RU, ES5PC, LZ2US, OK1CA, SV3AAF, SP6JLW, UT5JCW, LA8LF, G3LTF, OK2DL, HB9MOON, K5GW, N4PZ, IZ1BPN, OZ4MM, N2UO, OH2DG, G4CCH, K1JT, WA6PY, K4QI, JA8ERE, K2DH, HB9BBD, PA0BAT, LA9NEA, ON4BCB, SD3F, VE6TA, DL6SH and IK2MMB, and in the second weekend SP7DCS, S59DCD, W6YX, AL7RT, K1RQG, JH3HUC, DL4MEA, PY2BS, OK1DFC, PI9CAM, OZ6OL, IW2FZR, IK3COJ and W7JM. The strongest station on the band by far was DL0SHF.

OK1DFC: Zdenek ok1dfc(x)seznam.cz sends a detailed report of his highly successful EME efforts during Oct -- I was quite active and worked all together on 432 and 1296 248 QSOs! The main part was during the ARRL contest, where I have entered my log in the category of multiband, multimode, single operator. I am still working on my 70 cm system. The addition of an improved loop feed on 432 to my 10 m dish has proved very fruitful. I am now able to work many *really* QRP stations. I have a Sun noise of 18.6 dB and a CS/G noise of 5 dB. During the winter I want to play more with my LNAs and prepare my station for next year. I QSO'd in the first Oct weekend, starting on 432 using JT65B, JH7PAV (27DB/O), SM7GVF (15DB/O) for digital initial {#145} and LZ1OA (17DB/O) {#146}, and on CW VK3UM (579/569), on CW VK3UM (579/579), SV1BTR (579/579), KL6M (579/579), SP6JLW (579/579), UA3PTW (599/589), G3LTF (569/569), OZ6OL (559/559), SV3AAF (559/559), I1NDP (599/599), DL1YMK (579/579), OH2PO (599/579), DG1KJG (559/569) #116, PA3DZL (569/569) for initial #117, JA9BOH (559/549), G4RGK (559/559), OZ4MM (599/579), DF3RU (569/559), JA0TJU (559/559) #118, SD3F (569/579), SM3JQU (559/579), YO2IS (559/579), OK2POI (559/559), N4GJV (559/559) and SM2CEW (579/579), and on JT65B GW3XYW (10DB/O) {#147} and EA3XU (11DB/O), then on CW G4DHF (O/559), I5CTE (559/559), W8TXT (559/559), VE6TA (559/ 579), WD5AGO (559/559) #119, K5SO (579/579) #120 and K4EME (579/579) #121, back on JT65B ES6RQ (13DB/O) {#148}, K6JEY (12DB/O) {#149}, K3MF (7DB/O), DL7APV (6DB/O), DK3WG (8DB/O), and DL2NUD (10DB/O), after moonset I changed feeds to 1296 for the second pass and added on CW SM4IVE (599/599), DL0SHF (599/599), OK1CA (599/579), JF3HUC (599/589), UR5LX (O/O), OK2DL (579/579), UT2EG (569/569), JA4BLC (579/579), YO8BCF (569/589), RA3AQ (569/589), OZ4MM (599/579), VK3UM (599/579), OH2DG (579/569), JA8IAD (569/589), LZ2US (579/579), SP6JLW (579/579), DF3RU (579/559), F5KUG (559/569), DL6SH (579/599), UA3PTW (559/589), JA8ERE (579/579), G3LTF (579/ 569), S59DCD (559/579), JA6AHB (579/599), SV1BTR (579/589), IK5QLO (559/559) and LA9NEA (579/579), on JT65C HB9Q (3DB/O), PA0PLY (11DB/O), UN6PD (17DB/O) and ES5PC (7DB/O), back on CW SV3AAF (559/579), DL1YMK (579/579), JA6CZD (579/569), SD3F (579/589), SP7DCS (559/579), G4RGK (559/569), PA3FXB (559/569), SP3XBO (559/559), K2DH (559/579) and IZ1BPN (559/579), on JT65C GM4PMK (15DB/O) for digital initial {#104} and GW3XYW (9DB/O), back on CW HB9SV (599/599), N2UO (579/589), PA0BAT (559/579), DJ3FI (559/569) for initial #279, DL1HYZ (559/599), SM6FHZ (559/579), I5MPK (559/579), HB9BBD (599/599), N0OY (599/ 589), F5JWF (559/579), N4PZ (579/599), VE6TA (579/589), W5LUA (579/589), W9IIX (559/ 559), SM3JQU (559/579), WA6PY (579/579), VA7MM (559/579) and VE3KRP (559/569), on JT65C G4CCH (7DB/O), LU1C (22DB/O) and PA2DW (12DB/O) and on CW IK2MMB (559/569), W7JM (599/579), K4QI (579/579), OE9ERC (599/599) and AL7RT (559/559), then I exchange feeds for 432 and looked for initials and QRP stations. Between business trips I worked from 4 to 29 Oct on 70 cm on JT65C F6APE (12DB/O), KD9NH (14DB/O) {#150}, PY4AJ (22DB/O) {#151}, F6FHP (17DB/O) {#152}, WA4NJP (6DB/O), DK6AS (20DB/O) {#153}, W4AS {28DB/O {#154} using 50 W and a single yagi, PA3DZL (9DB/O), HA0HO (25DB/O) {#155}, CE0Y/DK2ZF (16DB/O) {#156} and DXCC 65 and on CW (559/539) #122, DL8DAU (22DB/O), 9A9T (21DB/O) {#157}, ZS6WAB (11DB/O), LZ1OA (11DB/O), UT5UAS (19DB/O), PA5KM (28DB/O) {#158}, GI6ATZ (29DB/O) {#159} DXCC 66 – single yagi QRP, TK5JJ (25DB/O), F6APE (19DB/O), PY1KK (8DB/O) and on CW (559/559) #123, G4RGK (9DB/O), YL2HA (28DB/O), DL8YHR (22DB/O) {#160} – single 23 el yagi and 80 W, UA4API (21DB/O), UA4AQL (21DB/O), RU4HU (25DB/O), DF3RL (18DB/O), AA9MY (21DB/O) {#161}, EA7AJ (17DB/O), EB3DYS (20DB/O), WA3QPX (10DB/O), K5DOG (24DB/O), JA6AHB (8DB/O), JE1TNL (15DB/O) {#162} - 4 x 23 el yagis and 30 W, IK1ODO (28DB/O) {#163} 2 x 23 el yagis and 70 W, YL2OK (21DB/O), RW3WR (21DB/O), EB3DYS (21DB/O), YO6OBK (16DB/O), TK5JJ (28DB/O), RA3LE (20DB/O), DL3YEE (26DB/O) {#164} – no elevation single yagi QRP, TI2AEB (20DB/O) {#165} DXCC 67 and first TI-OK 432 QSO, DL8YHR (21DB/O) - test of system for EME dxpedition to North Africa, UT5UAS (26DB/O) and EB3DYS (21DB/O), on CW ES6RQ (569/579) #124, SM4IVE (599/589), on JT65B again YU7AA (25DB/O), SM7GVF (O/O), DL7APV (3DB/O), S51WX (29DB/O) {#166} – QRP, S57SU (28DB/O) {#167} QRP and G4RGK (9DB/O), on CW K1DS (O/O) #125 - peeking (539), W7EME (539/539) #126, W7MEM (579/579) #127 and KL7HFQ (539/559) #128, on JT65B again LU1CGB (21DB/O) {#168}, K7XQ (13DB/O), EB5EEO (10DB/O), PA0ZH (17DB/O) {#169}, EB3DYS (17DB/O), OK2POI (17DB/O), UT5UAS (22DB/O), on CW G3LTF (579/579), back on JT65B CE/DK2ZF (20DB/O) {#170} DXCC 68 and first CE-OK 432 QSO, K4EME (10DB/O) {#171}, WB2RVX (15DB/O), OZ6OL (10DB/O), EB3DYS (21DB/O), G4YTL (11DB/O), DF1HF (29DB/O) {#172}, EA1FAQ (28DB/O) {#173} - single 21 el yagi and 30 W, K5QE (11DB/O) {#174}. In the second Oct leg of the ARRL EME Contest, WX allowed operation for the whole leg. On Saturday I was QRV on 432 and on Sunday I follow up on 1296. I used MAP65 on 432 and 1296. It helped very much when looking for new stations. 1296 activity was great, but the situation was not as good on 432. I do not understand why so few stations were active. I remember in the 90´s, it was easy to work 100 stations with a much smaller set up than I have today. It is a pity that so few QRP stations call CQ. I QSO'd on 30 Oct starting on 432 on CW SV1BTR (559/579) and JA6AHB (579/589), on JT65B OK1KIR (13DB/O), EA1FAQ (21DB/O) and EA3XU (13DB/O), back on CW JJ1NNJ (539/559), JA0TJU (559/559), JH4JLV (559/559) #128, ES5PC (559/569), EA8/G4RGK (10DB/O), PA3CSG (5DB/O) {#175}, K1JT {3DB/O) {#176} [same as K2UYH for initials], YL2OK (18DB/O) and VA3GMT (14DB/O), on CW again SM6FHZ (579/559), W7CI (559/579) and N8CQ (559/559) #129, back on JT65B LZ1OA (11DB/O) and CW (O/O) #130, N4GJV (579/559) and WA6PY (579/559) #131. After moonset, I exchange feeds a last time and prepared for 23 cm. On 31 Oct I worked using JT65C SM0ERR (18DB/O) {#105}, OK1KIR (2DB/O), VK4CDI (14DB/O), DL6SH (3DB/O) {#106} and JA1WQF (6DB/O), on CW LZ1DX (559/579), IK3COJ (559/569), I5MPK (559/599), OZ6OL (559/569), F5SE/P (579/579) #280, PA3DZL (559/579), JA4LJB (559/579), JA6CZD (579/579), RW3PX (539/579), PI9CAM (599/599), G4CCH (579/599), 9A5AA (539/559), DL4DTU (559/599) and DL4MEA (579/579), and on JT65C PA7JB (7DB/O), back on CW DL1HYZ (559/589), PY2BS (579/589), W4OP (579/569), K1RQG (599/599), UA3DHC (O/O) #281 and F5VHX (559/559), on JT65C PE1HNG (15DB/O), back on CW IZ2DJP (559/579) #282, W6YX (579/579), K5GW (599/599), NA4N (559/589), on JT65C OH3MCK (20DB/O) {#107}, G4DZU (9DB/O), RN3DCF (17DB/O) {#108}, LU1C (27DB/O) and W3HMS (10DB/O), on CW K1JT (599/569) and LX1DB (599/579). My final score on 432 was 55x32 for 176,000 points, on 1296 102x45 for 459,000 points, and on 2320 33x24 for 79,200 points. I will be QRV in Nov for EME AW tests of 432

and will be looking for DL8YHR from Africa. Skeds for 432 are very welcome via my e-mail address.

OK1TEH: Matej ok1teh(x)seznam.cz Oct activity (prior to the contest weekend) -- I worked 5 initials on 432. They were all on JT65B and with ES6RQ (27DB/27DB) for mixed initial #53*, WA3QPX (26DB/27DB) #54* - it took 2 hours to positive decode at Paul's side, VK4EME (29DB/18DB) #55, OZ6OL (25DB/20DB) #56 – later speaker copy and F6FHP (27DB/27DB) #57 - worked after our 70 cm MS QSO. The QSO with VK4EME (100 W!) brought me my last continent for digital WAC (not mixed). Next target is to complete single yagi WAC on CW. Africa should not be problem with ZS6WAB, however PY1KK is still too small for CW contact by my station. I also heard K4EME and YO3DDZ.



OK1TEH's new SSPA

OZ4MM: Stig vestergaard(x)os.dk reports a great weekend during the second part of the 50 to 1296 ARRL EME Contest – The weather was excellent for EME and there were no visits from Murphy. Conditions seemed to be best on Saturday again. I got my 1296 G4DDKv2 LNA working and it seems very good indeed! I added my 144 dual yagi feed, so I had a 3 band feed in the dish, which gives some degradation on 432 and 1296. As expected for a second weekend, the QSO rate was down compared to first leg. All contacts were done in CW mode. On 432 I worked JA0TJU, ES5PC, JA6AHB, JH4JLV, EA8/G4RGK for initial #337, SM6FHZ, W7CI, KL7HFQ, KL6M, JA5NNS, DL7UDA, K7XQ, G3LQR, PI9CAM and IK6EIW. A big surprise was having G4RGK in EA8 call on random. On 1296 I added VK5MC, F5SE/P, PA0PLY for initial #363, LZ1DX, I5MPK, PA7JB #364, EA2LU, IK3COJ, WA8RJF, PA3DZL, W6YX, DL1HYZ, W9IIX, W7JM, PY2BS, OZ6OL, RW3PX, UA3DHC #365, K1RQG, UT1EI #366, PI9CAM, 9A5AA, LX1DB, N9JIM and K7XQ. I still have not counted the multipliers, but the QSOs are 49 on 432, 90 on 1296 and 21 on 144. In the microwave part I had 37 on 2304. Prior to the contest weekend I worked on CW CE0Y/DK2ZF and CE/DK2ZF, who have made and excellent dxpedition. I also worked PY1KK with a UFB signal from his summer QTH.

PA0PLY: Jan pa0ply(x)pa0ply.nl reports a very nice and impressive weekend during the ARRL EME Contest weekend -- I had everything prepared this time for the CW mode on 23 cm this time. I was only on during the first Moon pass to the east and QSO'd VK3UM (559/559), OZ4MM (599/549), G4CCH (599/559), F5SE/P (559/529), IZ1BPN (559/529), SM4IVE (599/549) and OK2DL (559/549), but missed working any JA. I planned to operate to the west the day, but Murphy showed up at the start. My computer used for JT/CW and I had to use an alternative, retired CPU. My CW is not very good, due to the fact of no practice for more than 5 years. Hopefully it will improve. F5SE/p slowed down to a very low speed (~5 wpm), which was appreciated. I worked on JT65C UA3PTW (19DB/11DB), OK1KIR (8DB/14DB) and UR5LX (24DB/18DB), on CW LZ2US (549/529), N4PZ (539/449), DL0SHF (559/449) and G3LTF (529/519), and on Jt65C again OE9ERC (12DB/13DB) and K1JT (23DB/17DB). I worked Joe with an elevation of 7 degs and the dish for more than 30% blocked by bushes! I missed on CW K1RQG and UR5LX and some others who were strong enough to work. My alternate computer also was not able to satisfactorily run JT as it turned out. It took much more time to calculate the received information, and consequently it already had started the TX cycle before finishing the RX decoding. On CW, I found using Spectran was helpful, but discovered this not soon enough. My station consisted of 3 m dish with septum feed and 180 WSSPA (by PE1RKI).

PA2DW: Dick pa2dw(x)veron.nl had many other (family) obligations during the second Oct contest weekend – So, I did not have much time for 1296 EME and had no chance to join the PI9CAM team as intended. On Saturday I spend the few moments available on trying to work LZ2US on CW and was very pleased we made it! Thanks to Marko's patient listening and after numerous QRZ's. This was not a 2 m to 3.7 m dish CW contact. I also worked PY2BS on JT with outstanding signals and heard on CW DL0SHF (loudest signal on Saturday), SM4IVE, HB9BBD, K1RQG (loudest signal on Sunday), PI9CAM, PA0PLY and PE1HNG.

PA3DZL: Jac PA3DZL(x)planet.nl had excellent results at the end of Oct and beginning of Nov. He QSO'd on 432 on 24 Oct using JT65B ES5PC (17DB/14DB), UA4AQL (O/O), OK1KIR (17DB/10DB), DF3RL (27DB/O) and JA6AHB (19DB/O), 25 Oct on CW G3LTF (559/559), 30 Oct on JT65B EA3XU(21DB/O) and EA8/G4RGK(O/O) for mixed initial #165* and DXCC 58, on CW DG1KJG (O/O) #166*, SP6LJW (O/O) #167, SM6FHZ (O/O) #168, back on JT65B ES5PC (26DB/O), OK2POI (28DB/O), K4EME (20DB/O) #169* and W7MEM (27DB/O) #170*, on 31 Oct ES6RQ (19DB/O), PI9CAM (6DB/16DB), K5DOG (29DB/O) #171 and WA3QPX (15DB/O) #172, and on 7 Nov EA5EEO (28DB/O) #173, I1NDP (O/O) with only 50 W on TX. On 1296 Jac QSO'd on 24 Oct using JT65C PY2BS (11DB/14DB), on CW PY2BS (559/539), back on JT65C PA3FXB (18DB/18DB), G4CCH (10DB/11DB), JA1WQF (15DB/13DB), JA6AHB (14DB/11DB) and PE1HNG (23DB/O), on 30 Oct on CW OK2DL (559/539), SM4IVE (579/559), G4CCH (559/579), IZ1BPN (559/539), F5SE/P (559/549) for mixed initial #113* and SV1BTR (559/539), on JT65C PA7JB (18DB/O) #114*, DL6SH (13DB/O), W3HMS (16DB/O), PA3FXB (15DB/O), PY2BS (12DB/14DB) and YO8BCF (14DB/O), on CW RA3AQ(559/559), DL0SHF (579/529), LZ2US (559/529), N4PZ (559/559), G3LTF (559/549) and OZ4MM (569/639), and on 31 Oct on CW OK1DFC (579/ 559), on JT65C JA1WQF (12DB/O), UN6PD (23DB/O) #116*, UR5LX (20DB/O), on CW SD3F (559/559), WA6PY (O/O) #117, SP6JLW (559/559), W6YX (O/559) #118*, K1JT (559/549) and VE6TA (O/O) #119*and on JT65C K7XQ (25DBO/O) #120*, and on 2 Nov on CW F5VHX (O/O) #121*. Jac's 1296 results were made with his new water cooled 8 x XRF286S SSPA. Even the circulator is Water cooled!

PA7JB: John is a new station and had a good weekend on 23 cm during the contest -- I made 19 QSOs on CW and 13 on JT65C. I tried to work more, but my output is to low (120 W at a RA3AQ feed). I can hear a lot, but I need more power. Sorry for the stations that came back with QRZ. My station also uses a 2.4 m offset dish and 0.3 dB NF preamp. The smallest station that I worked with JT was W7IUV, who was using a 2.1 m dish and 40 W.

RA3AQ: Dmitry ra3aq(x)vhfdx.ru was active on 3, 13 and 23 cm (CW only) this year. This was my first experience in a multiband contest. Thanks to all who worked me. I ended with scores on 3 cm of 3x3, on 13cm of 20x16, and on 23 cm of 90x36. I missed about 10 stations on 23 cm. My station consisted of on 3 cm 2.4 m offset dish with 10 W, on 13 cm 2.4m offset dish with 300 W and on 23 cm 3.4 m offset dish with 700 W. I was QRV from RW3BP's shack.

SD3F: Carl (SM3AKW) sm3akw(x)spray.se had problems on 432 during the final contest weekend – I had a nice, enjoyable weekend, but unfortunately Murphy sneaked in and killed my 432 driver before the contest start, which limited my operating exclusively to 23 cm. I made 20 contacts on 432 in the first part and 46 on 1296. The final leg brought my 1296 score up to 73 QSOs, all on CW. In the microwave section, I made a brief visit to 13 cm and worked 4 stations. Thanks to all for the QSOs.

SM4IVE: Lars sm4ive(x)telia.com reports on his super contest effort on 1296 with his new dish -- I worked a total of 117 QSOs. Missed were LX1DB (who ran away) and RN3DCF (heard). The contest was fun except for a relay failure at the contest start. It forced me to move the dish down to my service tower at 0215 local time. I climbed the tower with a lamp on my head and removed the bad relay. It all started with when I was calling VK5MC. My echoes were weak (S3) and Chris did not answer. I realized something was wrong and decided that I need to climb. Later I found the problem; I missed soldering the minus wire to a ground lug. I have not calculated the initials worked, but I guess it is around 60. I have printed new QSL cards and will reply to all that send a card. I would appreciate an SASE. The cost for mailing outside of EUR is 2 dollars. Movies that I made during the contest, can be found on my home page www.sm4ive.com. All QSOs were on CW except for one on SSB. Stations worked were on Oct 2 JH1EFA (O/O), VK4CDI (429/559), W7JM (54/55) on SSB, F5HRY (539/569), AL7RT (539/559), K4QI (569/579), K7XQ (539/579), WA6PY (579/589), OK1CA (579/589), N4PZ (589/599), VA7MM (539/589), DL1HYZ (O/O), VE3KRP (539/569), UA3PTW (539/589), G4RGK (539/569), N2UO (579/579), SM6FHZ (559/579), K1JT (579/589), K5GW (589/589), GM4PMK (O/O), SM0ERR (O/O), UA3MBJ (O/O), N0OY (559/579), PA2DW (429/569), UT3LL (O/O), G3LTF (569/589), F5JWF (529/599), NY2Z (O/O), SM4DHN (589/599), W9IIX (539/549), DJ3FI (539/549), UT2EG (549/569), PY2BS (569/589), NA4N (559/559), SP6JLW (579/589), LA8LF (579/589), IW2FZR (579/579), HB9Q (579/579), F5KUG (549/579), PA3FXB (539/579),

SM6CSO (559/579), SV3AAF (559/579), LA9NEA (559/589), OK2DL (559/579), DF1SR (549/579), OH2DG (569/589), SV1BTR (589/599), DL1YMK (569/589), JA1WQF (559/599), DL6SH (539/579), IK5QLO (539/559) and JA8ERE (579/589), on 3 Oct LU1C (O/O), OZ6OL (559/569), IK2MMB (579/589), W5LUA (579/589),SM2CEW (559/589), VE6TA (559/589), SM3JQU (549/589), K2DH (559/589), I5MPK (559/599), PA3CSG (569/579), IZ2DJP (539/599), SP3XDO (539/569), ON4BCB (579/559), SP7DCS (559/589), JA6CZD (579/589), SD3F (559/599),JF3HUC (579/589), OK1DFC (599/599) and UR5LX (O/O), on 30 Oct JA6XED (549/579), RW3PX (529/559),EA2LU (559/579), W7CS (569/579), WA8RJF (529/559), F5VHX (559/589), W6YX (579/589), UA3DHC (O/599), K1RQG (559/599), PA7JB (549/579), IK3COJ (569/589), 9A5AA (429/559), UT1EI (O/559), PA0PLY (549/599), LZ1DX (559/589), F5SE/P (589/579), PA3DZL (559/579) and VK5MC (569/569), and on 31 Oct WW2R (539/569), N9JIM (O/O), PI9CAM (599/589), W4OP (569/579), OE9ERC (579/599), DL4DTU (559/579) and VK2JDS (549/559).

SM6JLW: Andy's sp6jlw(x)wp.pl group (SP6JLW, SP6OPN, SQ6OPG) ARRL EME Competition report -- We operated on four bands in multioperator, CW-only category. On 70 and 23 cm we used the call SP6JLW, on 13 cm we used the call SP6OPN and on 6 cm the call SQ6OPG. The 6 cm was on an experimental basis and the equipment is still in a test phase. During the three weekends we completed a total of 156 QSOs. This result is down from last year. On 432 we contacted VK3UM, OK1DFC, KL6M, OH2PO, SD3F, I1NDP, DL1YNK, G3LTF, UA3PTW, DG1KJG, SV1BTR, SV3AAF, DF3RU, VE6TA, SM2CEW, DL7APV, OZ6OL, K1JT, JA6AHB, JA0TJU, ES5PC, PA3DZL, SM6FHZ, WA6PY, W8TXT and N4GJV for a score of 27x19. On 1296 we worked HB9MOON, ES5PC, S59DCD, LZ2US, IZ1BPN, UT5JCW, DL0SHF, OZ4MM, DL4MEA, HB9BBD, OH2DG, YO8BCF, JA6AHB, F5KUG, IK5QLO, DL1YMK, G4CCH, LA9NEA, SV1BTR, S50C, SV3AAF, K2DH, OK2DL, F5JWF, DF1SR, SM4IVE, DF3RU, RA3AQ, OK1CA, LA8LF, K1JT, SM6FHZ, VE3KRP, NA4N, N2UO, K5GW, N4PZ, I5MPK, G3LTF, UA3PTW, G4RGK, WA6PY, UT2EG, VA7MM, DJ3FI, IW2FZR, PA3FXB, PA0BAT, W5LUA, AL7RT, DL6SH, K4QI, VK3UM, JA4BLC, JA8ERE, UR5LX, JF3HUC, JA8IAD, JA6CZD, SP7DCS, OK1DFC, JH1KRC, SD3F, PA3CSG, IZ2DJP, ON4BCB, VE6TA, HB9Q, OZ6OL, IK2MMB, F5SE/P, SP3XBO, LZ1DX, PA7JB, IK3COJ, PY2BS, W7CS, SM4DHN, W6YX, F5VHX, EA2LU, VK2JDS, JA1WQF, PI9CAM, DL4DTU, SM2CEW, K1RQG, W4OP, DL1HYZ, PA3DZL, W9IIX and N9JIM for a total of 92x37. On 2300 we QSO'd OH2DG, ES5PC, SV1BTR, G3LTF, OK1DFC, OK1CA, LZ1DX, JA8IAD, HB9Q, 9A5AA, PA3DZL, G4CCH, LA8LF, OK2DL, OZ4MM, SV3AAF, DL0SHF, F2TU, K1JT, VE6TA, IW2FZR, K5GW, WD5AGO, WA6PY, DL1YMK, W9IIX, JA4BLC, PA0BAT, SM2CEW, RA3AQ, PA3FXB, HB9SV, VE4MA, IZ2DJP, SD3F and W5LU for a total of 36x24. And on 5760 we worked OK1KIR. Our equipment was on 70 cm 8 x 32 el yagis, ATF54143 LNA and GS35B PA, on 23 cm 6.5 m dish, G4DDK VLNA and 16 x BLV958 SSPA, on 13 cm 6.5 m dish, G4DDK VLNA and 8 x MRF21125 SSPA and on 6 cm 4 m dish, NEC500 2.7 dB NF LNA and 4 x NEC500 SSPA with 25 W out.

SV1BTR: Jimmy's jimmyv(x)hol.gr ARRL EME contest report –- A big thanks to all stations who were QRV on CW during the contest. Using CW random operation (with no passive or active use of loggers) I completed 199 QSOs (+14 DUPs), which is down from my 2009 total of 208 QSOs. The big loss was on 2 m, which was 46% down from last year. This was no surprise because of most 2 m EME operation was by the *deep space Google Moon* [JT] in this mixed contest. There was also extremely low activity from US. The propagation conditions on the last leg were excellent. (I replaced motor and azimuth encoder just before contest, and repaired 2 m elevation under pouring rain). The biggest percentage drop was on 70 cm, which was 60% down from last year. 25% less due to low activity in the final leg, for the same reason described above for 2 m. The rest, 35%, was because of terrible QRM problems in the ARI and ARRL 1st Oct weekend. I had 8-12 dB of white noise for 24 hours in all directions. I still have not found the source. In the final part the noise was still there, but down to a total of 3-5 dB. 23 cm was 55% up from last year. I enjoyed myself tremendously. I lost my dish elevation motor during last pass of the ARI contest, but had it repaired just before ARRL beginning of Oct leg. The higher number of QSOs this year is because in 2009 during the 2nd leg, my dish's azimuth rotor main bearing was damaged, so could not be QRV. 13 cm was 8% down from last year. This band was lots of fun. It is a fantastic band. All in all for one more year, it has been great to work new and old friends via the Moon. To me, clearly, CW EME Random is the crème de la crème of all propagations and modulation modes. I am grateful that you guys make it happen in the 17 years I am QRV on EME.

SV3AAF: Petros sv3aaf(x)yahoo.com operated the contest on 4 bands; his report follows -- Thanks to everyone for the nice QSOs during 2010 ARRL EME Contest. I operated single op, CW only. I worked 25 stations on 13 cm and 9 on 6 cm during the Microwave part - detailed are in a previous NL. During the Oct contest legs, I worked on 432: OK1DFC, OH2PO, UA3PTW, I1NDP, OZ4MM, SP6JLW, G3LTF, DL7APV, DF3RU, VK3UM, DG1KJG, SV1BTR and SM6FHZ, and on 1296: LZ2US, S59DCD, DL0SHF, JA6AHB, JA4BLC, HB9BBD, OZ4MM, IZ1BPN, HB9MOON, DL4MEA, SM4IVE, SP6JLW, DF3RU, SV1BTR, ES5PC, OK2DL, UT5JCW, G4CCH, LA8LF, F5KUG, DL6SH, DF1SR, K2DH, OK1CA, NA4N, N4PZ, N2UO, K1JT, K5GW, RA3AQ, G3LTF, LA9NEA, YO8BCF, UT2EG, PA3FXB, DL1YMK, PA0BAT, WA6PY, UA3PTW, VK3UM, JA6CZD, JA8ERE, SD3F, SP7DCS, G4RGK, JF3HUC, OK1DFC, HB9Q, OH2DG, IW2FZR, SM6FHZ, SM2CEW, W5LUA, OZ6OL, ON4BCB, IK3COJ, LZ1DX, PY2BS, IK2RTI, SM4DHN, W6YX, VE6TA, UR5LX, F5SE/P, I5MPK and K1RQG. I lso QSO'd 9 stations on 144. I found relatively good conditions with some Faraday and libration. Excluding the microwaves, I have the impression that traffic density was somewhat lower this year on the main bands. After the contest I was glad to work ON5TA on 6 cm for the first SV/ON QSO on this band. Eric has a small, but well optimized system as demonstrated by his nice echoes and precise tracking.

TI2AEB: Armando aebonill(x)ice.co.cr has made significant improvements (two M^2 9 wl yagis with 70 W at the antennas) to his 70 cm EME station, which he continues to work on. If not already, he will be adding an antenna mounted LNA very soon. His most recent QSOs were with DL7APV and I1NDP. He is interested in skeds.

TI2AEB's shack

VE2ZAZ: Bert ve2zaz(x)yahoo.ca besides being QRV on 432 has now set up for 1296 EME and was listening during the contest -- I managed to complete a 3.2 m dish and RX setup before the ARRL contest. I was not capable of TX, but listened to the band in the CW portion for a total 3.5 hours. I copied on 30 Oct between 0930 and 1130 OK2DL, DL0SHF, SM4IVE, W6YX, SV1BTR, NA4N, G3LTF, W7JM and OZ4MM, and on 31 Oct between 1030 and 1200 DL4MEA, OK1DFC, VE6TA, LX1DB, G4CCH, LZ2US, WA6PY, IZ1BPN, K1JT, OZ6OL and N2UO, plus many other uncertain calls. This was done with the bottom half of the dish covered with thick heavy snow! Another highlight was a pileup of 5 stations within 200 Hz, something I would have never expected to see on EME! The Sun noise measured over the weekend was 11.3 dB, which is pretty much in line with the VK3UM calculator. Considering that little effort was put in to feedpoint optimization, I am very pleased with the performance of my system! In a few weeks, I will be able to transmit and will let everyone know. Initially, it will be with only 25 W at the feed, so I will need help from the bigger guns to complete my first QSOs. [Where was your 432 signal during the contest?]

VE6TA: Grant's ve6ta(x)clearwave.ca Oct EME report – First I want to say that I had a great time at the EME Conference in Dallas, and really enjoyed meeting so many EMEers that I have worked over the years. I put my 2.3 GHz IMU feed in the dish for the ARRL microwave contest. This was my first real activity with the IMU feed vs. an older round septum scalar feed and I was quite impressed. Perhaps the HB 18' dish is not quite to tolerance and the IMU provided better illumination, but I found the performance to be very good and worked 22 QSOs on the first leg. I then switched to my new 3.4 GHz IMU feed for the second leg. Activity was down due to the contest activity on other bands, and I only managed to work OZ6OL, W5LUA, OK1CA and ES5PC to bring me to initial #22. In late Sept I put my 222 feed back in the dish as WA4NJP and WA2FGK had promised to get QRV on this band. I had worked Ray before but Herb would be a new initial and State for me. I managed to work WA2FGK for initial #4 on 222 CW EME on 27 Sept with good O copy both ways. Herb was actually moving my S meter at times. I am interested in other takers? In Oct I decided as usual to run 432 on the first pass and 1296 on the following 3 passes. This strategy may not be the most effective for QSO count, but it keeps me from changing the feed as often in the cold weather. On 432 I managed to snag 18

CW QSOs the first night and one new initial, JA0TJU for #141. I found good conditions, but light activity. For the following 3 passes, I was on 1296 CW. I worked 65 stations and had initials with PA0BAT #215, PY2BS #216, F5SE/p #218 and DL6SH #219. I worked YO8BCF in between the weekends for #217, hence the gap in the numbering. I am slowly acquiring parts to try sun noise on 5760, and will need to find a suitable power amplifier once I determine if my HB dish will perform at this frequency. My target is to be QRV sometime next spring on this band. My station is still a 5.5 m dish with on 222 800 W, 432 1 kW, 1296 600 W, 2.3 350 W and 3.4 90 W.

W3HMS: John W3HMS(x)aol.com was off 23 cm EME for about 25 days due to an apparent xverter problem that turned out to be really a sequencer issue – My system problems are now solved, and I was delighted to work the following stations in Oct using JT65C, some during the contest, and some not: PY2BS (4 times best was (7DB/14DB) on JT65C with each end in rain, LZ1DX (13DB/21DB), DF3RU (13DB/10DB), PA3DZL (16DB/16DB), PE1HNG (21DB/20DB), DL6SH (13DB/O), OK1KIR (11DB/9DB), OE9ERC (8DB/5DB) and OK1DFC (9DB/O). I was very surprised with best signals ever from PY2BS during rain. I also was delighted to receive my best ever report (5DB) from OE9ERC. I told him that his "*100 m"* dish was doing well, HI, as I have but 3 m dish with 400 W + at the feed. Although all these QSOs were made on JT, I am interested and available for CW QSOs.

WA6PY: Paul pchominski(x)maxlinear.com reports on his ARRL EME contest activity on lower bands – I was QRV on 2-3 and 30-31 Oct. On 432 I QSO'd DG1KJG, DL7APV, G3LTF, I1NDP, K1JT, KL6M, OH2PO, OK1DFC, OZ4MM, SP6JLW and UA3PTW. I heard N4GJV calling CQ and I called him, but unfortunately one of the birdies slowly drifted on the top of N4GJV and I lost him. Conditions on my side were very rapid polarization changes. Even during my QSO with very strong OK1DFC, I was forced to switch polarization every 20 seconds, otherwise signals completely vanished. Sometimes my echoes were stronger on vertical polarization and few minutes later stronger on horizontal, but always returned with the same polarization. [Very strange – this seems to say there was a preferred linear pol]. On 1296 I QSO'd AL7RT, DF3RU, DL0SHF, DL1YMK, DL6SH, EA2LU, F5JWF, F5SE/P, F5VHX, G3LTF, G3LTF, G4CCH, G4RGK, HB9BBD, HB9MOON, I5MPK, IK3COJ, IZ1BPN, K1JT, K1RQG, K2DH, K4QI, K7XQ, LA8LF, LA9NEA, LX1DB, LZ2US, LZ2US, N2UO, N4PZ, NA4N, OH2DG, OK1CA, OK1DFC, OK2DL, OZ4MM, OZ6OL, PA0BAT, PA3DZL, PA3FXB, PI9CAM, PY2BS, RA3AQ, S59DCD, SD3F, SM4IVE, SM6FHZ, SP6JLW, SP7DCS, SV1BTR, SV3AAF, UR5LX, UT2EG, VA7MM, VE3KRP, VE6TA, W6YX, W7JM and W9IIX. The low declination shortened my window time this year, limiting number of stations I could work.

WW2R: Dave g4fre(x)g4fre.com writes about his Oct activity – I missed the first 50-1296 contest session as I was in Wales for HF RTTY contest. I had CQWW contest commitments for the 2nd session, so was only able to QRV on 1296 for a short time and worked SM4IVE for initial #118 (and my first CW initial for 12 months!), W6YX and K5GW. CWNR were PY2BS and DL4MEA. I used my W6PQL SSPA at 400 W output for the 1st time. It is much quieter than the TH338 PA.

YO8BCF: Emil yo8bcf(x)hotmail.com was QRV on 23 cm in the last leg of the EME contest -- I added 22 QSOs (13 on CW and 9 on JT65C) and 4 multipliers. CW QSOs were SD3F, S59DCD, N4PZ, OZ6OL, SP7DCS, PI9CAM, LZ1DX, F5SE/p, SM2CEW, IW2FZR, I5MPK, W4OP and W6YX. JT65C QSOs were UA3PTW, PA3DZL, DL6SH, UR5LX, PE1HNG, JA6AHB, OK1KIR, JA1WQF and LU1C. My contest total was 72x33 (45 on CW and 27 on JT65C). I also worked 5 new DXCCs. My rig was a 4.9 m dish with OK1DFC septum feed with OM6AA choke, 200 W (at feed) PE1RKI SSPA and G4DDK LNA.

K2UYH: I a.katz(x)ieee.org in addition to the contest activity, I made some interesting QSOs. I worked on 23 Oct on 432 at 0330 WA3QPX (O/O) on CW for CW/SSB initial #720, on 25 Oct on 432 at 0228 CE/DK2ZF (24DB/O) on JT65B for DXCC 101 and mixed initial #808*, on 26 Oct on 432 at 0440 partial W7MEM (15DB/-) JT65B – lost, 0443 OK1KIR (9DB/10DB) JT65B and 0502 UT6UG (13DB/15DB) JT65C, on 13 Nov on 432 at 0105 VK3EME (21DB/19DB) JT65B, and on 1296 at 0149 VK4CDI (27DB/14DB) JT65C – well into the trees, and on 14 Nov on 432 at 1855 G4YTL (19DB/O) JT65B – with Moon buried in the trees at 7 degs!, on 1296 at 1930 DL6SH (559/559) CW – still in trees for initial #310 and mixed initial #377*, 1940 QRZ (did not try long enough) and 1942 K1RQG (569/559) CW, and on 432 at 2027 DG1KJG (559/549) CW and 2053 VA3GMT (19DB/O) on JT65B #378*, then back on 1296 at 2241 W3HMS (11DB/10DB) JT65C, 2257 W7IUV (19DB/14DB) JT65C and 2317 W7MEM (13DB/22DB) JT65C #379*.

NETNEWS BY G4RGK: VK3UM had WX problems on 30 Oct during his setting Moon and had to shut down in a hurry despite many calling stations on 1296. The winds went from 0 to > 100 kph in a couple of minutes. It took both of his 12 ton el rams at max to stow the dish! There was no damage apart from Doug's nerves!

SOME THOUGHTS FROM K6JEY: During the last two EME Conferences there have been quite a few remarks about how old our group seems to be and questions as to how to attract younger or more members. I want to respond to this concern. I have spent most of my career developing programs for youth and adults that covered a variety of activities from ham radio clubs to youth conventions. I now teach teachers to be teachers at a local University, and particularly how to teach science and math. Much of that instruction is on how a teacher can develop outside resources to support their curriculum. I have also developed the OVRO project with a team from San Bernardino Microwave Society (SBMS). Some things that stand out that I have learned are: 1) People will rarely offer to help or get involved, but if asked will be glad to participate. 2) Strike while the iron is hot; If a group or individual shows interest, do all at the time you can to make things happen. 3) Gather a group around your activity and see it as a way to socialize and to pass on skills so that they can carry the idea on. The K6JEY "sidewalk EME" group is an example. I suppose, I could set up an EME station in the house that was a one man operation. However, it is much more enjoyable to do it the way we do. In having to set it up each time we use it, I have to have other operators and helpers. They are usually different people each time, with the exception of W6SZ, who is of great assistance. I email everyone a schedule of operation and work days and invite them to come over. My wife Helen, KI6LQV, opens "Chez Helen's Cafe" and has food for us. Everyone participates as they feel inclined and I sort of manage things and also operate. Here is a website of some of last year's activities: http://www.nitehawk.com/k6jey/. 4) Obvious sources of participants is local ham clubs (do a program on EME and ask for participants) and your local school (Jr. Hi and Sr. Hi.). If you are lucky you may find an interested teacher. There are also the randomly interested people you know. In my case the daughter of the mail man, a local guy who likes radio, my brother in law, and a few others. We usually also have a telescope set up and do a little viewing as well. Helen likes to lead that. There is a bit more to it, but those are the essentials, to me. Some other questions to be asked about generating EME growth are as follows: 1) How do people find out about EME that become EMEers? 2) What is the most common natural progression in ham radio that ends up with activity in EME? 3) Is there a profile of that person? 4) How do we get them information and connect them up to a local EME operator. 5) What activities do most new EMEers choose as their initial entry into EME? How do we encourage them to "move up". 6) How did we get here? We should take a survey to gather data on these questions. We can put up a website with pictures and stories, so that interested parties can see how we did it, and what we are doing. There may be enough information on individuals' websites and face book videos, so that only a "Meta" website may be needed to act as sort of a portal. That website URL could be passed on to organizations who might want to publish it. These are just a few of the questions and a little of what is involved. If the EME group would like, I can develop a presentation for the conference in Cambridge and present both the findings on the questions and practical techniques for involving more people in EME that have only been hinted at here. In the meantime feel free to email me. I had a very good time in Dallas and look forward to seeing many of you in Cambridge.

FINAL: I have some sad new to report. Last month we lost Tom, KA2VAD. Tom has been assisting me with mailing of this NL for longer than I can remember. He was critical back in the old days when we posted more than 300 NLs a month. He was also involved in some of the early EME contest activity and dxpeditions by K2UYH. I showed pictures of Tom at the 4U1UN dxpedition at his memorial service. Tom was killed in an automobile accident last month. He is greatly missed by all his many friends.

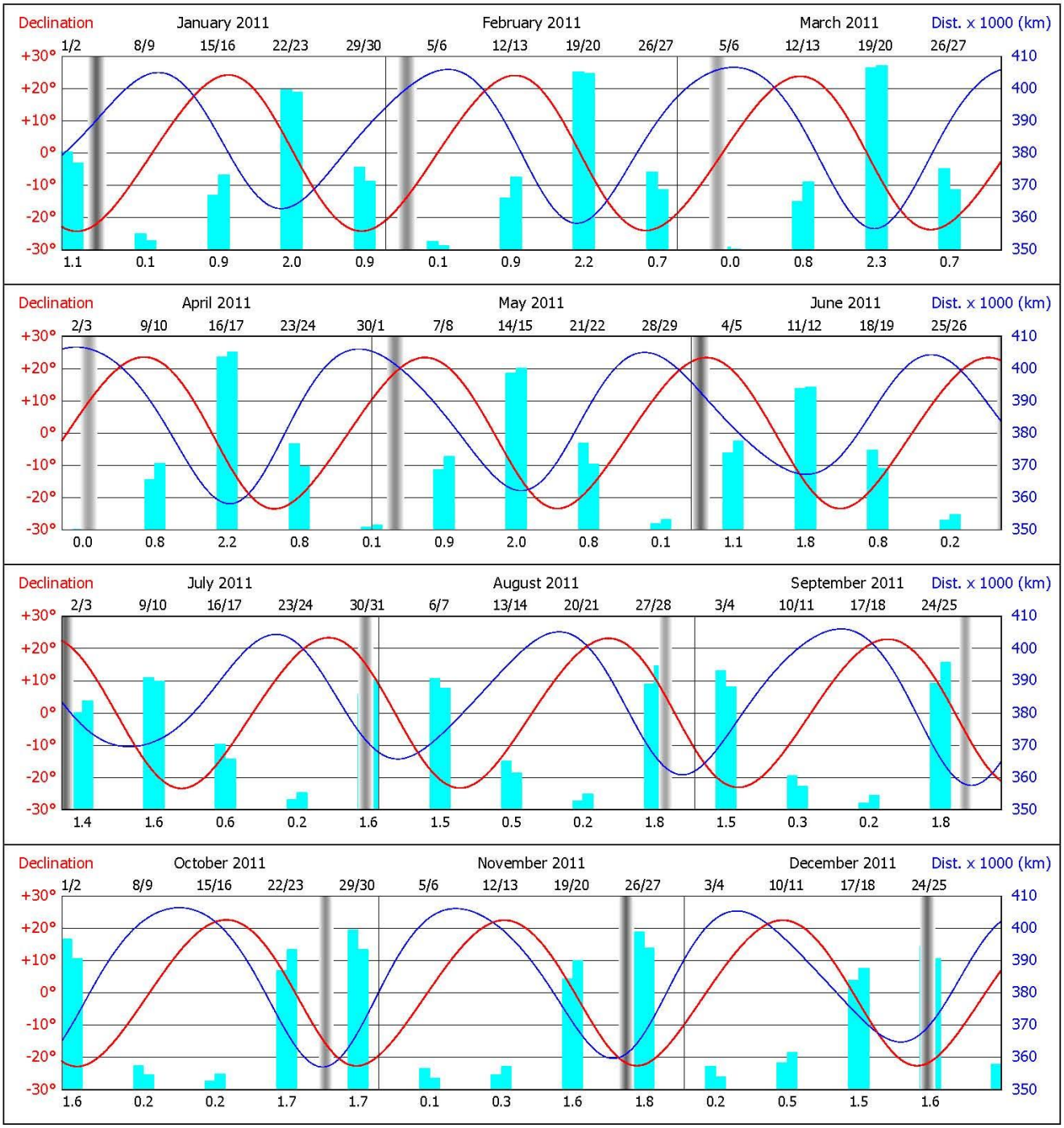
There was an error in G4RGK's initials list in the last NL. The top 3 cm station was not even shown. It is of course WA7CJO - our apologies to Jim.

We have this month, F5SE's 2011 Moon Chart. This chart shows at a glance why one Moon weekend is better than another. It also shows some of the problems choosing a good contest date.

F2TU has volunteer to compile the CW EME contest scores so that a clearer picture can be obtained of the relative standing of different CW stations – see Philippe's report. I will publish the listings in this NL,

We also have copies of the 2010 WW EU EME Contest Results provided by DL7APV, and more CE0Y and CE/DK2ZF dxpedition pictures. There is a lot more that I could write. I wanted to discuss the impact of the digital modes and how we might increase CW EME and EME in general, but I am running (have run out) of time for this 29. CU off the Moon and via this NL next month. Keep the reports and tech info coming. 73, Al – K2UYH

Moon Ephemeris Overview for the Year 2011, 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

REF / DUBUS EUROPEAN EME Contest 2010 - CW Results *by DL8HCZ*

MULTIBAND

Place	Call	Points	PWR	Bands
1	SV1BTR	3.193.000	QRO	2/70/23/13
2	F2TU	2.834.000	QRO	70/23/13/6/3
3	OK1CA	2.755.900	QRO	23/13/9/6/3
4	ES5PC	2.206.600	QRO	2/70/23/13/6/3
5	OK1DFC	2.205.000	QRO	70/23/13
6	G3LTF	2.099.600	QRO	70/23/13/9/6
7	DL4MEA	2.000.100	QRO	70/23/13/9
8	OZ4MM	1.727.000	QRO	2/70/23/13
9	OK1KIR	1.402.200	QRO	13/9/6/3
10	SM4IVE	1.171.600	QRO	70/23
11	UA3PTW	1.112.400	QRO	2/70/23
12	SV3AAF	1.078.800	QRO	2/70/23/13/6
13	OH2DG	777.200	QRO	23/13/9
14	SD3F	747.400	QRO	70/23/13
15	VE6TA	697.600	QRO	70/23/13/9
16	OK2DL	690.000	QRP	23/13
17	DF3RU	672.000	QRO	70/23/13
18	OZ6OL	660.300	QRO	70/23/9
19	SP7DCS	656.000	QRO	2/70/23
20	SP6JLW	516.800	QRO	70/23
21	VK3NX	499.200	QRO	23/13/9/6/3
22	DL1YMK	431.200	QRP	70/13/9
23	OE5JFL	324.500	QRO	70/23
24	SM2CEW	291.400	QRO	2/70/13
25	IW2FZR	266.600	QRP	70/23
26	JA6AHB	265.000	QRO	70/23
27	PA0BAT	185.600	QRO	13/9
28	WW2R	156.600	QRO	2/13/9
29	CT1DMK	148.200	QRO	70/23
30	SM6FHZ	136.900	QRO	70/23
31	F5JWF	120.000	QRP	23/13/3
32	N4GJV	115.600	QRP	2/70
33	WD5AGO	110.000	-	13/9
34	W5LUA	99.000	QRP	70/13
35	LZ1DX	98.600	QRP	70/23
36	JA6CZD	97.200	QRP	23/6/3
37	WA6PY	86.400	QRP	70/23/13/3
38	JA4BLC	81.600	QRO	23/6/3
39	9A5AA	67.200	QRP	23/13/3
40	SM3JQU	64.800	QRP	70/23/13
41	G3LQR	62.000	QRP	23/9

144 MHz

Place	Call	Points	QSO (+Sked)	Multi	Pwr	OP
1	IK3MAC	906400	103	88	QRO	MULTI
2	SV1BTR	167700	43	39	QRO	SIN
3	SP7DCS	119000	35	34	QRO	MULTI
4	UA3PTW	93000	31	30	QRO	SIN
5	OZ1HNE	75600	28	27	QRO	SIN
6	IK1FJI	70200	27	26	QRO	SIN
7	OK1MS	65000	26	25	QRO	SIN
8	OZ4MM	60000	25	24	QRO	SIN
9	IK2DDR	55000	25	22	QRO	SIN
10	RU1AA	50600	23	22	QRO	SIN
11	I3EVK	44100	21	21	QRP	SIN
12	ES5PC	39900	21	19	QRO	SIN
13	CT1HZE	36100	19	19	QRO	SIN
14	HG1W	34200	19	18	QRO	MULTI
15	SM2CEW	30600	18	17	QRO	SIN
16	LZ1DP	27200	17	16	QRO	SIN
17	N4GJV	25600	16	16	QRP	SIN
18	SV3AAF	18200	14	13	QRO	SIN
19	JH0WJF	7200	9	8	QRO	SIN
20	9A9B	3600	6	6	QRP	SIN
21	JE1TNL	2500	5	5	QRO	SIN
22	K6PF	1600	4	4	QRO	SIN
23	AD4TJ	900	3	3	QRP	SIN
24	DL7HR	400	2	2	QRP	SIN
24	SW1OAA	400	2	2	QRP	SIN
24	WW2R	400	2	2	QRP	SIN

432 MHz

Place	Call	Points	QSO	Multi	Pwr	OP
1	SM4IVE	220000	50	44	QRO	SIN
2	OK1DFC	122100	37	33	QRO	SIN
3	UA3PTW	119000	35	34	QRO	SIN
4	I1NDP	105400	34	31	QRO	SIN
5	SV1BTR	90000	30	30	QRO	SIN
6	DL7APV	84100	29	29	QRO	SIN
7	OE5JFL	70000	28	25	QRO	SIN
8	G3LTF	44100	21	21	QRO	SIN
8	JA6AHB	44100	21	21	QRO	SIN
8	SP6JLW	44100	21	21	QRO	SIN
11	SD3F	40000	20	20	QRO	SIN
12	DL4MEA	37800	21	18	QRO	SIN
13	N4GJV	32400	18	18	QRP	SIN
14	DL1YMK	25600	16	16	QRP	SIN
14	OZ6OL	25600	16	16	QRO	SIN
14	SM2CEW	25600	16	16	QRO	SIN
14	SM6FHZ	25600	16	16	QRP	SIN
18	SP7DCS	22500	15	15	QRP	MULTI
19	VE6TA	16900	13	13	QRO	SIN
20	SM3JQU	10000	10	10	QRP	SIN
20	SV3AAF	10000	10	10	QRP	SIN
22	JA9BOH	4900	7	7	QRP	SIN
23	LZ1DX	4200	7	6	QRP	SIN
24	CT1DMK	2500	5	5	QRP	SIN
24	DF3RU	2500	5	5	QRO	SIN
24	ES5PC	2500	5	5	QRO	SIN
27	WA6PY	1600	4	4	QRP	SIN
28	W5LUA	900	3	3	QRP	SIN
29	F2TU	400	2	2	QRO	SIN
29	OZ4MM	400	2	2	QRO	SIN
29	SM7GVF	400	2	2	QRP	SIN

1296 MHz

Place	Call	Points	QSO	Multi	Pwr	OP
1	DL0SHF	400200	69	58	QRO	SIN
2	SM4IVE	376200	66	57	QRO	SIN
3	OK1DFC	353400	62	57	QRO	SIN
4	F2TU	341000	62	55	QRO	SIN
5	SV1BTR	340200	63	54	QRO	SIN
6	DL4MEA	312000	60	52	QRO	SIN
7	VK3UM	301600	58	52	QRO	SIN
8	LZ2US	286000	55	52	QRO	SIN
9	OZ4MM	280000	56	50	QRO	SIN
10	OK2DL	274400	56	49	QRP	SIN
11	SP6JLW	258500	55	47	QRO	SIN
12	OK1CA	230300	49	47	QRO	SIN
13	G3LTF	230000	50	46	QRO	SIN
14	DF3RU	206800	47	44	QRO	SIN
15	R2/DL1YMK	180600	43	42	QRP	SIN
16	OZ6OL	172000	43	40	QRP	SIN
17	UA3PTW	163800	42	39	QRO	SIN
18	ON4BCB	159900	41	39	QRO	SIN
19	ES5PC	155800	41	38	QRO	SIN
20	RD3DA	136800	38	36	QRP	SIN
20	SV3AAF	136800	38	36	QRO	SIN
22	K2DH	133200	37	36	QRO	SIN
23	SD3F	119000	35	34	QRO	SIN
24	CT1DMK	112200	34	33	QRO	SGL
25	SP7DCS	99200	32	31	QRP	MULTI
26	OE5JFL	93000	31	30	QRO	SGL
27	JA6AHB	92800	32	29	QRO	SGL
28	OH2DG	84000	30	28	QRO	SGL
28	UT2EG	84000	30	28	QRP	SGL
30	IK3COJ	81200	29	28	QRO	SGL
31	W6YX	72800	28	26	QRO	MULTI
32	UT5JCW	60000	25	24	QROP	SGL
33	IW2FZR	57600	24	24	QRP	SGL
34	9A5AA	46200	22	21	QRP	SGL
35	SM6FHZ	46200	22	21	QRO	SGL
36	JA6CZD	34200	19	18	QRP	SGL
37	VK3NX	32400	18	18	QRO	SGL
38	DL6SH	30600	18	17	QRP	SGL
39	F5KUG	27200	17	16	QRP	SGL
40	JA4BLC	24000	16	15	QRO	SGL
41	VE6TH	22500	15	15	QRO	SGL
43	VA7MM	19200	16	12	QRP	MULTI
44	SM3JQU	15600	13	12	QRP	SGL
45	G3LQR	12100	11	11	QRP	SGL
45	IK5QLO	12100	11	11	QRP	SGL
46	PI4Z	9000	10	9	QRP	MUL
46	F5JWF	9000	10	9	QRP	SGL
46	WA6PY	9000	10	9	QRP	SGL
49	G4DDK	8100	9	9	QRP	SGL
50	W9IIX	4200	7	6	QRO	SGL
51	SP3XBO	1600	4	4	QRP	SGL
52	UT3LL	400	2	2	QRP	SGL
53	CT1HZE	100	1	1	QRP	SGL
53	UR6EC	100	1	1	QRP	SGL

2300 MHz

Place	Call	Points	QSO	Multi	Pwr	OP
1	F2TU	167700	43	39	SIN	
2	SP6OPN	152000	40	38	MULTI	
3	ES5PC	148000	40	37	SIN	
4	OK1CA	144300	39	37	SIN	
5	OK1DFC	136800	38	36	SIN	
6	OK1KIR	135000	37+1	36	MULTI	
7	OZ4MM	125800	37	34	SIN	
8	SV1BTR	112000	35	32	SIN	
9	G3LTF	99000	33	30	SIN	
10	DL4MEA	86800	31	28	SIN	
11	OH2DG	84000	30	28	SIN	
12	VE6TA	62400	26	24	SIN	
13	LZ1DX	62100	27	23	SIN	
14	SV3AAF	57500	25	23	SIN	
15	SD3F	46000	23	20	SIN	
16	DF3RU	44100	22	21	SIN	
17	OK2DL	44000	22	20	SIN	
18	DL1YMK	39900	21	19	SIN	
18	LA9NEA	39900	21	19	SIN	
18	W5LUA	39900	21	19	SIN	
21	IW2FZR	36100	19	19	SIN	
22	WW2R	32300	19	17	SIN	
23	SP6GWN	23800	17	14	SIN	
24	LA8LF	22400	16	14	SIN	
24	PA0BAT	22400	16	14	SIN	
26	SM2CEW	19600	14	14	SIN	
27	RK3WWF	19500	15	13	SIN	
27	WD5AGO	19500	15	13	SIN	
29	VK3NX	15400	14	11	SIN	
30	IK2RTH	13000	13	10	SIN	
31	F5JWF	9900	11	9	SIN	
32	PA3DZL	9900	11	9	SIN	
33	WA6PY	3600	6	6	SIN	
34	SM3JQU	400	2	2	SIN	
35	9A5AA	100	1	1	SIN	

3400 MHz

Place	Call	Points	QSO	Multi	Pwr	OP
1	OK1KIR	32300	19	17	MULTI	
2	OK1CA	28800	18	16	SIN	
3	DL4MEA	25500	17	15	SIN	
3	G3LTF	25500	17	15	SIN	
3	OZ6OL	25500	17	15	SIN	
6	PA0BAT	24000	16	15	SIN	
7	DL1YMK	21000	15	14	SIN	
8	HB9JAW	16800	14	12	SIN	
9	VE6TA	15600	13	12	SIN	
10	OH2DG	14300	13	11	SIN	
11	G3LQR	9000	10	9	SIN	
11	VK3NX	9000	10	9	SIN	
11	WD5AGO	9000	10	9	SIN	
14	WW2R	7200	9	8	SIN	

5700 MHz

Place	Call	Points	QSO	Multi	Pwr	OP
1	F2TU	28900	17	17	SIN	
2	OK1KIR	19600	14	14	MULTI	
3	OK1CA	14400	12	12	SIN	
4	VK3NX	9000	10	9	SIN	
5	IK2RTI	8000	10	8	SIN	
6	JA6CZD	4200	7	6	SIN	
7	ES5PC	3600	6	6	SIN	
8	JA4BLC	3000	6	5	SIN	
8	SV3AAF	3000	6	5	SIN	
10	G3LTF	2000	5	4	SIN	
11	SP6GWN	50	0+1	1	SIN	

10 GHz

Place	Call	Points	QSO	Multi	Pwr	OP
1	F2TU	28900	17	17	SIN	
2	OK1CA	22500	15	15	SIN	
2	OK1KIR	22500	15	15	MULTI	
4	ES5PC	18200	14	13	SIN	
5	ON5TA	15600	13	12	SIN	
6	WA7CJO	9000	10	9	SIN	
7	F5JWF	5600	8	7	SIN	
8	VK3NX	2500	5	5	SIN	
8	WA6PY	2500	5	5	SIN	
10	RA3AQ	2000	5	4	SIN	
10	SP7JSG	2000	5	4	SIN	
12	JA4BLC	900	3	3	SIN	
13	JA6CZD	450	0+3	3	SIN	
14	9A5AA	400	2	2	SIN	

CE2/DK2ZF operating positions

Rolf (DK2ZF) and Martin (DK7ZB) with luggage!

CE0Y/DK2ZF antenna in Easter Island