

## 432 AND ABOVE EME NEWS OCTOBER-2 2008 VOL 36 #12

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**CONDITION:** What a difference a month makes! With the first leg (the microwave, MW, part on 13 cm and up) of the ARRL and the ARI CW EME Contests both in Sept, reports and activity are way up! A surprise dxpedition by OK1DFC to OM on 13 and 9 cm also increased MW activity levels. I am afraid the MW contest stole the show, but there still was considerable activity if not great conditions on 70 and 23 cm. In Oct the focus will return to 70 and 23 cm for the second leg of the ARRL EME Contest.

**DXPEDITION NEWS:** DL8YHR will join an HF dxpedition by the Lufthansa Radio Club to put A43DLH, Oman on 2 m and 70 cm EME. Operation will be from 6 to 11 Nov. He will have a single 38 el long M<sup>2</sup> yagi plus 1 kW on 70 cm EME. 70 cm operation will be on 432.050. CW is preferred, but JT65B is possible as well. A43DHL will use 1 minute sequencing and always TX first. Frank will call CQ after each QSO. Direct sked requests to Frank at [DL8YHRFRANK@aol.com](mailto:DL8YHRFRANK@aol.com). He will have Internet access.



OM/OK1DFC dish and 23 & 9 cm dxpedition operating site

**REF/DUBUS EME CW CONTEST RESULTS:** Congratulations to the 432 up winners [and lower bands too]. They were OZ4MM on 70 cm, OK1DFC on 23 cm, ES5PC on 13 cm, W5LUA on 9 cm, and OK1KIR on 6 cm, 3 cm and 1.5 cm. SV1BTR was the multiband winner. QRP winners were DL1YMK on 70 cm and IW2FZR on 23 cm. A special award for the best 23 cm EME dxpedition of the contest was given to DL1YMK/CX! Thanks to DL8HCZ who compiled the results. The full (432 up) contest listing can be found at the end of this NL.

**9H1TX:** David [davcut@maltanet.net](mailto:davcut@maltanet.net) was QRV on 432 during the ARI contest weekend – I was active for 2 hours but not able to work anyone. I called UA3PTW several times, and received a QRZ once. I also had a schedule with LZ1DX on JT, but detected nothing from him. Other stations heard but not called were I1NDP, KL6M, PA3CSG and G4RGK. I hope next time to have more than 120 W.

**DF1OI:** Johannes [jworonzow@freenet.de](mailto:jworonzow@freenet.de) reports on his Sept 24 GHz activity -- I worked 24048.1 on 20 Sept DK7LJ and LX1DB. Both stations were (O) and easily copied. The WX was clear sky, 4° C and 80% rel. humidity. The spreading was around 100 Hz. On 21 Sept I added W5LUA (O/O). Although the WX on Sunday was not good (cloudy sky and rel. humidity 100% at 10° C), the spreading dropped to 50 Hz! I heard AI in QSO with LX1DB. My sun noise was 11 dB (norm. 11.7 – 12.1 dB) and moon noise 1 dB (norm. 1.2 - 1.5 dB).

**DL1YMK:** Michael [DL1YMK@aol.com](mailto:DL1YMK@aol.com) reports on his activity during the MW EME Contest -- I spent quite some time the past few weeks to design a flexible feed support system for my home station that allows me to exchange feeds within a few minutes. The old feed support was exclusively made to fit a 23 cm

VE4MA horn. The new support consists of a rather simple clamp structure – see picture. The sliding clamps are made of welded hard aluminum in order to maintain enough rigidity with heavier feeds. The incentive to make these modifications was primarily to allow me to operate on 13 cm and 9 cm as well as 23 cm. Except for the 9 cm horn (a round septum feed) everything is ready to go. I operated on 20 Sept on 13 cm with low power (approx. 100 W at the feed) from a HB 2 x MRF21120 PA that could not be fully driven by my transverter. I worked G3LTF, RW1AW, OK1CA, ES5PC, G4CCH, DL4MEA, K1JT, WA6PY, OZ4MM and OH2DG on the first shot. With the next moon pass on the 21<sup>st</sup>, I switched to an Ericsson HPA module with about 200 W at the feed and improved my echoes somewhat. (G4CCH sent me a sound clip that clearly shows the improved signal). I was able to add F2TU, OM/OK1DFC (my TNX to Zdenek for a superb dxpedition), HB9Q, SD3F, DF3RU and WD5AGO. My moon window is confined at high declination, so in total I only spent some 5 hours on the moon, resulting in 16 initials with many *gotaways*. On 27 Sept I was on 13 cm again and worked VK4AFL and VK3NX very easily on sked, as well as WW2R, whom I missed on the previous weekend. I also had a nice SSB rag chew with RW1AW, who has a really impressing signal off the rock! On 28 Oct, I completed with VE6TA on my moonset as #20. I will switch back to 23 cm for the ARRL EME Contest with a newly aligned VE4MA-feed. (The delay line screws now all penetrate to the same depth into the WG after aligning it in my garden without reflections). But I didn't do that bad with a mistuned horn during the past 10 years - hi.



DL1YMK's new 13 cm feed horn

**DL4MEA:** Guenter [guenter.koellner@nnsn.com](mailto:guenter.koellner@nnsn.com) was QRV in the ARRL MW contest on 13 and 9 cm -- I got in bed really early and got up at 0400 local. I immediately found good signals from F2TU, but no echoes. I went out and found no error. After 3 hours, I found that the jumper cable across the elevation axis broke in the middle and opened at high elevation. I then worked just 9 stations on 13 cm: G3LTF, RW1AW on SSB, SD3F, K1JT (x), G3LQR, G4CCH, SP6GWN, DL1YMK and DF9QX. CWNR were ES5PC (too low el), OZ4MM (x), OK1CA, WA6PY (x), OH2DG (X) and DK7LJ. Heard only was WA6RJR. At 0900 I switched to 9 cm, and worked OK1CA, W5LUA and G3LTF. On the second pass, which was better than my first, I added on 13 cm ES5PC, VK4AFL, F2TU, HB9Q, VK3NX, OH2DG, W5LUA, SM2CEW, OZ4MM, HB9SV, OK1CA, DF3RU, VE6TA, WD6AGO, WA6PY, K7XQ and NA4N. Missed were IW2FZR, WW2R (called many, many times), DL7YC (too weak), WA6RJR and DK7LJ (went away too quick), RW3BP and RW3R (?). On 9 cm I added VK3NX, who nicely waited for me when the moon rose over my neighbor's house as he became louder and louder.

**DL7APV:** Bernd [dl7apv@gmx.de](mailto:dl7apv@gmx.de) is back in operation on 70 cm after his tornado disaster -- I have my new 432 antenna consisting of 16 x 13 wl yagis up and running. I'm getting 17.5 dB of sun noise. This is about 2 dB less than I expected. The SWR is bad as well, so there is room for improvement. Pointing problems due to the new AZ rotor (RAS) add to my list of things to do. Last, I have to add some kind of storm security. I'm sure with 80+ km/h, I will get in trouble again. I'm not sure if I can fix all these problems before the ARRL EME Contest in Oct, but I am going to try. Hopefully weather will be cooperative.

**DL7UDA:** Dietmar [dl7uda@versanet.de](mailto:dl7uda@versanet.de) was QRV on Sunday on 70 cm for the ARI EME Contest -- Conditions and activity seems very poor. I worked only I1NDP, KL6M, UA3PTW (best signal), G4RGK and hard to copy SM3BYA. I also heard PA3CSG and very weak LZ1DX. I missed a sked with N4GJV because my EME QTH is about 80 km from home without Internet.

**DL7YC:** Manfred [ploetz@snaflu.de](mailto:ploetz@snaflu.de) is back on EME for the first time in a long time -- I tried to use my low power multiband tropo station for EME. It is a 1.9 m mesh dish with linear pol ring feeds, but all the preamps and SSPAs are at the feedpoint. I can do automatic tracking, so moon pointing is no problem. I listened most of the time. Here are my results: On 13 cm with 130 W (2320 only) I worked G3LTF (O/O) and G4CCH (O/O) - both very easy and quick, and heard DL4MEA, OK1CA and many other unidentified stations. The problem with random activity (short durations) and high speed CW is that copy is not so good for (M) grade sigals - hi. On 9 cm with 60 W, I made no QSOs but heard several unidentified stations (M-O). The CW was too fast to decode on random. On 6 cm with 40 W, I worked F2TU (M/M) and heard OK1KIR and W5LUA plus 2 unidentified stations. It is amazing what can be done with such simple equipment. Knowing this, I will start to build up RA3AQ modified CP horn for my 0.45 dish for all 3 bands. If the +3 dB does not help enough, I can expand my dish to 3 m dia for another + 3 dB. Last but not least, my power can be improved by an additionally 3 dB.

**ES5PC:** Viljo [viljo@comnet.se](mailto:viljo@comnet.se) appreciated all for the activity on the MW bands -- It was a busy weekend for me with all the equipment changes at the focus of the dish. This time everything worked without significant problems. I'm pleased with my new 13 cm PA using two Ericsson 250 W SSPAs combined together and mounted very close to the dish feed. Also the new 3 cm setup with a 20 W TWTAs seems to work better than the old 6.5 W SSPA. Although it started very slow on 3 cm during the first moon pass, it was much better during the second pass. On 3 cm I worked 10 stations: HB9BHU for an initial (#), RW1AW, SP7JSG (#), IQ4DF, F5JWF (#), G4NNS, F2TU, W5LUA (#), OK1KIR and WA6PY. I CWNR many times K1JT. Most of the stations were worked random. Only F2TU and W5LUA were sked QSOs. I worked IQ4DF before our sked time. The conditions on 10 GHz were quite variable and spectrum spreading was changing very rapidly. I had cloudy weather with light rain sometimes. On 6 cm I worked 6 stations: OK1KIR, F2TU, LX1DB, IK2RTI, RW1AW and W5LUA. On 13 cm I contacted 27 stations: OH2DG, HB9SV, G4CCH, G3LTF, IK2RTI, RW1AW, SP6GWN, SD3F, OK1CA, F2TU, K1JT, WD5AGO, NA4N, SM2CEW for an initial (#), DF9QX (#), VK4AFL, DL4MEA, HB9Q, DF3RU, LX1DB, OM/OK1DFC (#), VK3NX, F5JWF, DL1YMK, W5LUA, WW2R, VE6TA and VK3NX who was worked on both CW and SSB. I heard a station with "8" in the call and later I realized it was WA8RJR. The moon was already quite low and I had some ground noise contribution. My special thanks to the OM/OK1DFC team for another fine EME expedition! I'm sorry about all stations I missed because sharing my operating time between three bands. I will switch back to 23 cm for the ARRL EME Contest weekends and will be operating my station remotely from Sweden.

**F2TU:** Philippe [f2tu.philippe@orange.fr](mailto:f2tu.philippe@orange.fr) writes about his microwave EME contest activity -- It was a good contest but complicated to be on the 3 bands. I spent a lot of time spent on 6 cm with nothing to show for my effort. I had hoped contact NA stations 0930-1130 Saturday and 1030-1230 Sunday on 2304, but there was no one around. I was also disappointed that VK3NX went QRT Sunday for 6 and 3 cm because of high winds. Yet, my overall results were 53 QSOs. On 13 cm, I worked 33 stations: OK1CA, OH2DG, SD3F, ES5PC, HB9SV, SP6GWN, IK2RTI, K1JT, NA4N, RW1AW, WA6PY, WD5AGO, G4CCH, SM2CEW for an initial #74, VK4AFL, DL4MEA, VK3NX, HB9Q, OM/OK1DFC #75, G3LTF, RW3BP, DF3RU, JA6CZD, JA8ERE, F5JWF, OZ4MM, DL1YMK (#), DF9QX, G3LQR, VE6TA, W5LUA, WW2R and WA8RJR #76; on 6 cm, 8 stations: IK2RTI, ES5PC, OK1KIR, LX1DB, DL7YC for initial #29, OK1CA #30, RW1AW and W5LUA; and on 3 cm, 12 stations: IQ4DF, IK2RTI, WA6PY, F5JWF, HB9BHU, G4NNS, RW1AW, ES5PC, K1JT for initial #49, OK1KIR, F5VKQ and SP7JSG. I also had a 3 cm partial with GW4DGU - he had a problem and went QRT. I also copied on 3 cm W5LUA, but too late. I should have been able to work 17 on 10 GHz, if I had not had spent so much time on 5.6 GHz.

**F5JWF:** Phil [f5jwf@wanadoo.fr](mailto:f5jwf@wanadoo.fr) writes on his results during the MW EME weekend -- On 3 cm I QSO'd IQ4DF, OK1CA, G4NNS, HB9BHU, WA6PY, F2TU, IK2RTI, RW1AW, W5LUA, K1JT, ES5PC, OK1KIR and WA7CJO. Heard were I4BER and F5VKQ. On 13 cm (2320 only), I worked F2TU, G3LTF, G4CCH, OH2DG, OK1CA, ES5PC and SD3F. I tried to concentrate my time on 3 cm as I am still not equipped to operate in crossband on 13 cm. My station is a 3.7 m dish with on 10 GHz 40 W and a 0.9 dB NF LNA and on 2.3 GHz 200 W and a 0.5 dB NF LNA.

**G3LTF:** Peter [g3ltf@btinternet.com](mailto:g3ltf@btinternet.com) was leading the way in the microwave EME contest -- There was a pleasing level of activity on 13 cm and up in the first leg of the ARRL's EME contest. But on 13 cm there were a few regulars missing, nevertheless I think there were at least 40 stations active. On 9 cm, I think we had the highest ever activity level for this contest! I worked on 13 cm on 20 Sept the following (x= crossband QSO) JA8ERE for initial #63 x, DL1YMK #64, SD3F, OH2DG, ES5PC, G4CCH, HB9SV, RW1AW, DL4MEA, G3LQR, DK7LJ SSB, RW1AW SSB, WD5AGO x, K1JT x, OZ4MM, NA4N x, W9IIX x #65, SP6GWN, DF9QX, OK1CA, VK4AFL x, VK3NX x, RW3BP, F2TU, OM/OK1DFC #66 despite QSB and QRM - well done Zdenek, F5JWF and DF3RU, and on 21 Sept WW2R x, IW2FZR, HB9Q, K7XQ x, WA6PY x and DL7YC #67 (Manfred has 1.9 m dish and 130 W and linear pol) and W5LUA for a total of 34x22. I heard PA0BAT, WA8RJR and SM4DHN. I worked on 9 cm on 20 Sept LX1BD, DL4MEA, VE6TA, W5LUA and RW1AW, and on 21 Sept OK1CA for a total of 6x6. I also heard OK1KIR. I was also on 23 cm and worked on 27 Sept LA9NEA and SV3AAF on SSB and HB9GR for initial #284, and 28 Sept UT5CJW. I saw a posting on the Moonnet reflector that OZ6OL was hearing his 3400 echoes, so I changed the feed and was able to work him (539/529) for initial #17. We thus have another country now active on 9 cm! The microwave activity is increasing month by month.

**G4CCH:** Howard had a great time during the MW contest -- On the 1<sup>st</sup> moon pass I made 17 QSOs and added 9 Initials over the whole operating period which started at my moonrise before the start of the contest. I thought activity was good for my first real experience of 13 cm during a contest. At times there were some exceptionally loud signals. QSO'd were OM/OK1DFC for an initial (#) and DXCC - moon was very low and I had about 40% tree blockage, RW1AW on CW and SSB, OK1CA (#), ES5PC, OH2DG (#) and DXCC, HB9SV (#) and DXCC, G3LTF, G3LQR (#), WD5AGO x-band, K1JT x-band (#), DL4MEA (#), DL1YMK (#), SP6GWN, WA6PY x-band (#), F2TU, NA4N x-band and SM2CEW. Also heard were RW3BP, IK2RTI, DK7LJ on SSB, OZ4MM and W9IIX.

**G4NNS:** Brian [brian-coleman@tiscali.co.uk](mailto:brian-coleman@tiscali.co.uk) was QRV on 3 cm during the ARRL EME Contest. He used a 3.7 m dish with 18 W into his feed. His system is locked to GPS. Brian QSO'd 14 stations on 10 GHz and had a partial with K1JT (O/O), but no final Rs.

**G4RGK:** Dave [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com) just got his feed for 13 cm finished in time for the start of the MW contest and was able to lash it on to his dish. With nothing optimized, he copied RW1RW, G3LTF, G4CCH, ES5PC, OK1CA, HB9SV, DL1YMK and SP6GWN in a couple of hours at the start of the contest. He was also active on 70 cm and worked LZ1DX and on 23 cm OK1DFC. Dave heard OK1DFC on SSB with SV3AAF and called him, but had to go to CW. Dave should be QRV during the ARRL EME Contest in Oct, but does not expect to be on in Nov.

**I4BER:** Goliardo [tomasset@ira.inaf.it](mailto:tomasset@ira.inaf.it) had many problems both mechanical and electrical during the ARRL MW contest -- My problems reduced my operating time and I was only able to make 2 QSOs on 10 GHz. Contacted were OK1CA and IQ4DF. I measured about 2 dB of moon noise around a 75° K system noise with my 3 m dish.

**IK6EIW:** Stefano [asmag@libero.it](mailto:asmag@libero.it) should be active again on 1296 during the ARRL EME Contest -- Good news, my new 3.7 meter KTI dish is on the tower and the rotators are running OK. I hope to be active during the second leg of the ARRL contest on 23 cm. I am already QRV on 70 cm and should be QRV on this band as well during the contest.

**J1JNNJ:** Kouichi [j1jnnj@extra.ocn.ne.jp](mailto:j1jnnj@extra.ocn.ne.jp) was QRV on 70 cm during the ARI EME Contest -- I QSO'd on 20 Sept N4GJV (449/449) - pol was 30°/30°, JA6AHB (559/559) - H/H, SP6JLW (449/559) - V/V, SM3AKW (449/559) - V/V, KL6M (559/559) - V/V, JA9BOH (O/O) - V/V, SM3BYA (439/539) - V/V, UA3PTW (559/559) - V/V and I1NDP (559/549) - V/V. Heard were DL7UDA and LZ1DX -- sent QRZ. I was also QRV on 21 Sept but made no QSOs. Conditions were good, but with long and deep QSB.

**K1JT:** Joe [k1jt@arrl.net](mailto:k1jt@arrl.net) is operating the ARRL EME Contest in conjunction with K2UYH. He, I and K2TXB operated the MW part of the contest from my

QTH. We started operation on 13 cm using my 28' dish and an 80 W SSPA mounted at the feed. We QSO'd on 20 Sept at 0331 F2TU (569/569), 0336 HB9SV (559/559), 0351 IK2RTI (559/559), 0421 ES5PC (579/57), 0425 RW1AW (589/579), 0439 NA4N (449/559), 0500 SP6GWN (O/O), 0539 OZ4MM (579/569), 0546 G3LTF (579/579) X-band, 0551 G4CCH (559/579) X-band, 0556 DL4MEA (559/559) x-band, 0614 WD5AGO (559/559), 0636 WA8RJF (559/559), 0645 SD3F (559/569), 0655 DL1YMK (559/559) x-band, 0700 OH2DG (569/559), 0750 W9IIX (549/549), 0803 OK1CA (579/579) x-band, 0810 WA6PY (559/569) and 1023 SM2CEW (569/559). We tried to listen for signals during the JA/VK window, but heard nil probably due to my increasing tree blockage. The next day (21 Sept) we decided to give my C-band 28' dish a try on 10 GHz. I felt it was worth a try based on the results others had achieved with dishes designed for lower bands. I did some sun noise measurements and was able to see 7 dB, but the sun was already in the trees by the time I made the measurements. We used an 80 W TWTA and about a 1 dB NF LNA with an IMU type linear feed. Everything was mounted at the feed. We then waited for the moon to clear my trees. But well before the moon was clear, we were amazed to copy echoes! The beam pattern seemed about right and as more of the dish became clear, echoes increased in strength. The noise from the trees was probably not a major impediment, as the course mesh of my dish caused us to receive significant ground noise from behind the dish. We could not copy significant moon noise, but had a visual moon and could easily track with a TV camera. We QSO'd at 0516 IQ4DF (559/539), 0532 F5JFW (539/549), 0606 RW1AW (559/579), 0650 W5LUA (559/559), 0714 HB9BHU (549/559), 0722 F2TU (339/O), 0734 WA6PY (439/559) and 0744 OK1CA (549/559). We also copied G4NNS (O/O), but lost him before we could complete a QSO. At 0800 we switched back to 13 cm and QSO at 0915 VE6TA (559/559), 0955 WW2R (549/O), 1036 W5LUA (569/569) and 1126 LX1DB (579/569). I wanted to try again with JA/VK, but had a problem with my chain drive and missed the chance to listen when the moon was still high. Getting back on 3 cm again was a big thrill. We will be back in the near future. There are many things that we can do to easily improve the system – for example add screening behind the dish to improve the noise temperature. In Oct, we will operate 2 m from K1JT's QTH, and 70 and 23 cm (under Joe's call) from my QTH.



**Installing 10 GHz system for K1JT operation**

**K4EME:** Cowles candrus@rica.net will be on for the first leg of the ARRL EME Contest -- I am planning to work mainly CW with the help of Richard, KR4V. He is always a great help in pulling out the weak stations on 432. I do have everything set for JT-65 and hope to make a few contacts via this mode, but I don't have much experience. Everything seems to be up and running well. I heard my echoes off the moon last night. I still have 8 FO-33 up in the horizontal plane with legal limit input on CW and will be running a little less when on JT65. My cavity preamp seems to be working well with several S units of sun noise verses cold sky. I am playing with the idea of putting two FO-22 antennas up on the Vertical side just to see if I can hear anything when I get locked out on horizontal pol.

**K7XQ:** Jeff k7xq@secure.elite.net had problems during the MW contest – I made my first attempt at 3 cm EME on 20 Sept, but heard nil during moonrise. I looked for activity for several hours and then gave up the night. The next morning I measured no sun noise. The transverter was dead with 2 blown devices in the RX chain but was still giving a noise floor, (which fooled me into thinking it was working). This also killed my abilities to work the local 10 GHz activity event that only occurs twice a year. I was not on 2304 EME on 20 Sept.

I was QRV on 21 Sep. I started at my moonrise and was active only 4 hours. QSO'd were G3LTF (x-band), DL4MEA for an initial (#), OH2DG (#) - strongest signal heard, HB9SV and OZ4MM. I was also on during moonset on 21 Sept looking for VK/ZL/JA activity but found none. I listened on both 2301 and 2424. Later on 13 cm, I CWNR RW1AW, G4CCH and HB9Q, and heard OK1CA, WD5AGO and a RD3?. I am looking forward to working my first QSO on 10 GHz EME within the next month and will try again on this band soon.

**KL7UW:** Ed kl7uw@acsalaska.net reports his was incorrectly listed in the last NL as a KL6 – [My apology]. I the past month he has continued to make progress on his 23 cm system. His dish is now more than 1/4 assembled, but notes it is harder to get much outdoor time due to the change in WX. Ed has also shifter his PA plans and is planning to buy one of the 300 W SSPAs from W6PQL. This solves my Heliac connector problem. The amp will be housed on the backside of the dish with only a 10' run of 1/2-inch hardline to the feed.

**LA8LF:** Anders anders@LA8LF.com planned to be QRV on 13 cm for the MW contest but report frustration -- After having worked for 6 months building the 3 band transverter, purchasing 2 new LNAs (0.28 and 0.31 dB NF), installing new cables to the antenna, upgrading my W2DRZ tracking system with new US Digital encoders and tuning up a VE4MA circular pol feed, Murphy visited. I was set to test sun noise on Friday morning before the contest, but could not get better than 6.1 dB of sun noise. I removed the isolation relay and mounted the LNA directly at the RX port of the feed, but no improvement. I moved the transverter to the feed and tested all 3 LNAs. No improvement! I replaced the VE4MA feed with my old W2IMU feed used successfully back in 1997 and got 5.7 dB! I measured the NF of the transverter and LNAs with my DUBUS Panfi and found all was OK! It was then 0030 Saturday. I had been working on this problem since 0800 Friday. I gave up and went home. The next day I listened on 2304 and heard OZ4MM (M). A year ago Stig was (579) plus on 13 cm. The only explanation I can figure is that I have the same problem as OK1KIR, namely wideband data BPL noise. The only positive thing last week was that the police returned my driver license that I lost in April due to a health problem. I was therefore not dependent on my wife to drive me too and from the EME site.

**LX1DB:** Willie's wbauer@pt.lu MW contest results follow – I QSO'd on 13 cm on 20 Sept at 2140 OK1CA (599/599) and 2151 ES5PC (589/579), 2219 VK4AFL (579/579), 2258 OM/OK1DFC (559/559), 2300 RW1AW (599/599), 2312 G4CCH (55/57) on SSB, 2314 DF3RU (56/56) on SSB and 2318 G3LTF (57/57), and on 21 Sept at 1020 W5LUA (579/579) and 1128 K1JT (569/559). I worked on 9 cm on 20 Sept at 0841 OM/OK1DCF (439/539), 0858 VE6TA (439/579), 0907 W5LUA (569/569), 0922 OK1CA (579/589), 0830 G3LTF (569/569) and 1005 RW1AW (599/599), on 6 cm on 20 Sept at 0601 F2TU (579/589) and 0607 ES5PC (559/559), and 21 Sept at 0935 W5LUA (579/579) and 0941 RW1AW (579/589), on 3 cm on 21 Sept at 1006 W5LUA (579/569), 1012 IQ4DF (599/599), 1030 RW1AW (599/599), 1034 HB9SV (569/569), 1037 WA7CJO (599/589), 1058 G3NNS (559/559) and 1111 OK1KIR (569/569), and on 24 GHz on 20 Sept at 0728 DF11O (439/O) and 0756 DK7LJ (O/O), and 21 Sept 0636 W5LUA (559/559). During the contest I worked W5LUA on 5 bands, RW1AW on 4 bands. My operating time was limited because of a family celebration, but I reach able to reach my goal of 5 band operation with at least one station and 3 QSOs on 24 GHz!

**LZ1DX:** Ned <lz1dx@lz1dx.org> is now QRV on both 70 and 23 cm EME. He is using 4 x 35el yagis and a 120 W SSPA with 0.36 dB LNA on 1296. He made his first 1296 QSO with OK1DFC in Oct.

**N4GJV:** Ron's qstdemb@yahoo.com 70 cm EME activity report -- I was looking forward to increased activity during the ARI contest. Activity seemed to be scant, however, possibly because of the conflict with the ARRL Microwave EME Contest. In addition, I experienced a great deal of one way propagation. On 20 Sept, I had difficulty copying signals, due to deep, rapid libration fading. Contacts were completed with FR5DN, 11NDP, W8TXT, UA3PTW, W7CI, KL6M, G4RGK and JJ1NNJ. K6JEY was called without success, while K3MF and JA9BOH replied to my calls with only QRZ? I also heard JH4JLV. An unidentified station called me at 0733. The caller was sending too slowly for me, which was aggravated by the bad QSB. I believe the call contained an "L7". I am keenly interested in learning who was calling me. The poor receive side conditions that prevailed during my Eur window were replaced by much improved conditions during my JA window. The libration rate was much slower, more like that encountered on 144 EME allowing much easier copy. On 21 Oct these favorable receive conditions continued, but I wasn't being heard! I had a QSO with W8TXT soon after my moonrise, but made no other QSOs. Heard well and called were LZ1DX, DJ7GK, SV3AAF and JA9BOH. Meanwhile, my own echoes were audible throughout this period. Also heard were PA3CSG and many of the stations that were heard or contacted on Saturday. I am now looking forward to the ARRL EME Contest in Oct.

**NA4N:** Greg [na4n@hughes.net](mailto:na4n@hughes.net) was active on 13 cm during the ARRL MW EME Contest -- I worked on 13 cm on 20 Sept F2TU, K1JT, RW1AW, OH2DG, OZ4MM, G3LTF (x-band), OK1CA, G4CCH (x-band) and ES5PC, and on 21 Sept HB9Q, DL4MEA (x-band), WD5AGO and W5LUA. RW1AW had the strongest signal without a doubt -- great job Alex! In earl Oct I worked K2DS on 23 cm. I plan to operate on 1296 for the remaining parts of the ARRL EME Contest.

**OH2DG:** Eino [oh2dg@sral.fi](mailto:oh2dg@sral.fi) reports the ARRL EME Microwave Contest was both interesting and enjoyable -- Conditions were excellent with warm and sunny WX. I operated on the 13 cm band only and made 29 QSOs with 8 initials. Initials QSOs were G4CCH, SP6GWN, W9IIX, DF9QX, DF3RU, F5JWF, K7XQ and WW2R. The great surprise was a new DXCC, OM/OK1DFC - TNX Zdenek. Unfortunately local microwave ovens make so much strong QRM that I could not copy any JA stations. My total was 20x29.

**OK1CA:** Franta <[srihavka@upcmail.cz](mailto:srihavka@upcmail.cz)> sends his results from the Microwave part of the ARRL EME Contest -- I was active on four bands. I worked 28 QSOs on 2.3 GHz. Initials were OM/OK1DFC, G4CCH, DF9QX, WA8RJF and SM2CEW to bring my total to #62. Activity was very good with about 40 stations active. I worked on 3.4 GHz 10 stations. Initial were RW1AW and DF9QX to bring me to #14. Unfortunately I missed WW2R and did not hear OM/OK1DFC. I was on 5.7 GHz for about 30 min and worked only OK1KIR and F2TU. On 10 GHz I QSO'd 11 stations with initials from K1JT and I4BER for #35. I had trouble with tracking the moon on 6 and 3 cm and missed operating on Sunday evening.

**OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) was able to be QRV on 23 cm after his dxpedition [see following OM report] and worked on 10 Oct OK3RM (539/539) for initial #221, RW6AG (13DB/O) on JT65 for digital initial {#47}, SV3AAF (53/56) on SSB, G4RGK (539/559), SV1OE (539/559), I5MPK (539/579), RW6AG (539/549) #222, PY2SB (O/O) on JT65 {#48}, PY5BS (52/55) on SSB #223 and RW6AG (55/53) on SSB, and on 11 Oct UT5JCW (559/589), RD3DA (O/O) on JT65, UT3LL (O/O) on JT65, LZ1DX (24DB/O) on JT65 {#57}, DXCC 49 on JT and first OK-LZ QSO, G4RGK (O/O) on JT65 and M0DTS (O/O), and on 12 Oct SM0FOB (O/O) on JT65 {#50} and SM0FOB (O/O) on CW #224, UT5JCW (559/589) and G4CCH (589/599). Unfortunately I will be on during first leg of ARRL EME contest for only the first couple hours on Saturday. At 1100 local time, I have to fly to NY on business. I am expecting to be QRV in second leg.



**OK1KIR's MW (9 cm) feeds**

**OK1KIR:** The group <[ok1vao@o2active.cz](mailto:ok1vao@o2active.cz)> report there ARRL contest microwave EME activity as follows -- On 13 cm we have no chance for EME operation anymore. Persistent, terrible local QRM from wideband data BPL eliminates any EME activity on these bands. On 9 cm we had problems with RX (in the transverter) when the contest started. The trouble was solved the next day when OK1VAO drove back home for another transverter to be used as a separate RX. After fixing the QRG issues with separate TX and RX, our own echoes were finally found and at last on Saturday at 1010 (very close to our moonset) we worked OM/OK1DFC (M/M) for initial #15 (strong QSB). On 6 cm on 20 Sept, we worked at 0418 IK2RTI (559/569), 0518 ES5PC (O/O), 0540 F2TU (569/569), 0705 RW1AW (569/569) and at 0739 W5LUA (569/559), and on 21 Sept at 0527 OK1CA (549/579). We had no success with DL7YC -- only (T/M) on 20 Sept and (nil/M) on 21 Sept. On 3 cm on 21 Sept we QSO'd at

0715 WA6PY (559/579), 0723 HB9BHU (569/569), 07:34 F5VKQ (559/569), 0746 IQ4DF (579/579), 0754 G4NNS (549/559), 0757 W5LUA (559/569), 0802 ES5PC (549/579), 0814 SP7JSG (539/569), 0820 F5JWF (559/579), 0828 DF9QX (559/539) for initial #42, 0857 F6CQK (549/519) for #43, 0918 WA7CJO (579/579) and 1110 LX1DB (569/569). There was still no activity on 24 GHz due to a TX failure. We learned that even if our equipment worked perfectly, two moon passes is not enough time for 5 band microwave EME operation!

**OK3RM:** Zdenek [z.hofbauer@centrum.cz](mailto:z.hofbauer@centrum.cz) is now QRV on 23 cm, as well as 70 cm. OK1DFC gave him his first 23 cm EME QSO (539/539) from his new EME QTH. Zdenek has some improvements to be made and is preparing to be fully QRV during ARRL EME contest. His system is giving 14 dB of Sun noise and all looks very promising.

**OM/OK1DFC:** Zdenek [ok1dfc@seznam.cz](mailto:ok1dfc@seznam.cz) report of his microwave dxpedition -- I arrived at on Thursday around midnight at OM8A's contest QTH with OM3RM. Tibor was a great help in finding the right place in the night. On Friday morning (19 Sept) I started build the station. The WX forecast was for rain and wind starting during the afternoon. I really did not expect this bad WX, which was present during whole contest. Around a Friday noon I had finish the antenna and we still had sunny skys. This WX allowed us to visually find the sun and calibrate the dish pointing. I then installed TRX and PC. We planned to start operation immediately after moonrise. The WX kept getting worse and worse. Strong wind moved the dish like a tree leaf. OM8A, OM3RM, OM3NA and OM5KM were on hand to assist with operation. We all waited for the moon. Exactly in position of moonrise (60° east) there were a couple really high trees, which delayed operation until the moon was higher than 10°. The first EME signal heard was OK1CA. After some position corrections, Franta was speaker copy and we worked (559/559) easily. I then called G4CCH. His signal was also very good (549). For the first time I got a bad feeling that something wrong. The position of the dish was more than 3° off the moon's azimuth position as shown by our indicators. Thanks to Franta's strong signal, I was able to find him and work. I changed the feed and equipment for 9 cm where we planned to start operation during the contest. At the start of the contest (20 Sept) it was raining heavily. This bad WX allowed us to work only two stations on 3400, LX1DB (539) - very strong and OK1KIR (339). CWNR were G3LTF, W5LUA and OK1CA. With very strong winds, I managed to switch over to 13 cm, but was not able to find moon. The whole time for VK, I was looking for any signal via the moon. I set my elevation angle and moved +/- the dish from east to west looking for echoes. After a half hour, I found my own echoes. The position of the dish was -10° east and +2° in elevation. With a beamwidth of 2°, this is a big error! So after correction of the SPID rotator scale, we started to work all available stations. We had a nice pile up on 13 cm with very strong signals. QSO'd were F2TU, HB9Q - boomed (579), ES5PC, G3LTF, RW1AW, LX1DB, G3LTF again, OH2DG, OK1CA again, SD3F, OZ4MM, DF3RU and G4CCH again. The next day we added DF9QX, DL1YMK and in US window W5LUA, RW3BP and WD5AGO. A mistake was that during calling on US segment, I did not try to receive in EU segment. As a result I missed SM2CEW. Because the very poor WX, I decided to dismantle the whole setup on Sunday afternoon. We QRT'd at 1400 on Sunday. I was back home by around midnight and very tired. Please QSL with an SASE to my home address. For the next SHF dxpedition it will be necessary to construct new tripod, that is more stable and possible to use in bad WX conditions. I also plan to buy a digital inclinometer so that I can check elevation angle (a big problem this time). I also will build a mechanical 360° scale to give a chance during the night to check the position of dish in azimuth without the sun and be prepared when the moon is not visible. I will also try to be on minimally one day early to allow a whole day check of the dish position with sun noise and fix all problems. The guys from OM8A are contaminated with EME virus. I will go back to OM again next year, maybe for DUBUS contest or another MW activity weekend, and will be ready to work everybody missed this time. I am expecting that the OM8A guys will build soon a dish for EME and that it will be possible to work them during contests very soon.

**ON4BCB:** Walter [walter.crauwels@skynet.be](mailto:walter.crauwels@skynet.be) sends news of his progress -- In Sept I was busy completing my 1296 TH327 amplifier, which is almost finished. Meanwhile I played with OE5JFL's 23 cm remote beacon. It's a lot of fun for testing when nobody is QRV. Due to QRL, I was only QRV for a short time during the ARI CW/SSB Contest. I worked on CW ON7UN (also on SSB), IK2MMB, IW2FZR, SM5LE, SV3AAF, LA9NEA, SP6JLW, IK3COJ and HB9HAL. It was fun operating in the ARI contest with its simple contest rules and easy log. It was a pity that the date of the ARI contest was the same as the ARRL's 13 cm and up contest. The activity was low and only 3 Italian stations were QRV on 23 cm.

**ON7UN:** Eddy [ejespers@telenet.be](mailto:ejespers@telenet.be) fills in the picture of what was happening on 23 cm in Sept -- It was fun working 15 stations (plus 2 dupes) on 23 cm

during the ARI contest. I worked on CW K5PJR, SM5LE (heard on SSB), VE3KRP, IW2FZR, ON4BCB (CW and SSB), SV3AAF (CW and SSB with armchair copy), SP6JLW, IK2MMB, VA7MM, PA3FXB, LA9NEA, OE5JFL, UT5JCW, IK3COJ and K5JL. Most of the "usuals" who have high band capabilities were operating the ARRL contest on the higher bands, so activity was low. Conditions gave strong signals and with fast QSB.

**PA0BAT:** Gerard [pa0bat@amsat.org](mailto:pa0bat@amsat.org) did not operate the MW EME contest seriously, but was active on 3400. He QSO'd VK3NX, OK1CA, RW1AW, DF9QX and W5LUA. He was called by a station too weak to copy around 0700 and wonders who was calling.

**PY2BS:** Bruce [bruce@zirok.com](mailto:bruce@zirok.com) is a new station on 1296 EME from St. Paul, BZ. He has a 2.7 m dish with a rectangular septum feed and a 100 W PA. Bruce is not a CW operator but is QRV on JT65 and SSB. He has already QSO'd 7 countries in less than a month of operation, and is available for skeds.



**PY2BS's dish and feed for 1296**

**RW1AW:** Alex [rw1aw@appello.de](mailto:rw1aw@appello.de) sends his MW EME contest weekend results -- I used on 20/21 Sept my 6 m solid dish and four *switchable* modules for the 13, 6, 9 and 3 cm bands. During the weekend I transitioned from one module to another 21 times (the change ~ 15 minutes) or a total of over 4 hours lost contest time, but this effort delivered many pleasant minutes! Highlights were SSB QSOs with many MW fans including DK7LJ, DL4MEA, G3LTF, G4CCH, LX1DB, OZ4MM, RW3BP, VK3NX and VK4AFL. My personal TNX OK1DFC for the excellent 13 cm expedition to OM. Next time I hope also be on 24 GHz as well. I end with a total of 58 QSOs and 11 initials. On 10368 I made 13 QSOs and one initial with K1JT. QSO'd were HB9BHU (569/569), F2TU (569/559), F5JWF (569/579), SP7JSG (559/559), WA6PY (569/579), IQ4DF (599/599), G4NNS (569/569), F5VKQ (569/559), ES5PS (539/569), DF9QX (579/549), DK7LJ (59/57) on SSB, K1JT (579/559) (#) and LX1DB (599/599). On 5760 I had 6 QSOs with OK1KIR (569/569), IK2RTI (579/579), ES5PC (569/579), F2TU (579/579), W5LUA (579/579) and LX1DB (589/579). On 3400 I made 8 QSOs and 5 initials with PA0BAT, DF9QX, OK1CA, VE6TA, VK3NX, PA0BAT 569/569 (#), DF9QX (579/559) (#), OK1CA (589/579) (#), VE6TA (559/579) (#), W5LUA (579/579), LX1DB (589/589), G3LTF (579/579), VK3NX (579/579) and (54/57) on SSB (#). On 2302-2304-2320-2424 I added 31 QSOs and 5 initials with OH2DG (589/589), HB9SV (599/599), DL1YMK (559/579) (#), SP6GWN (549/559) (#), IK2RTI (589/589), ES5PC (599/579), SD3F (579/589), G3LTF (599/589), F2TU (589/589), K1JT (579/589), NA4N (559/579), DK7LJ (58/59) on SSB, VK4AFL (579/579) and (56/56) on SSB, VK3NX (599/589) and (58/59) on SSB, OM/OK1DFC (579/559) (#), LX1DB (599/599) and (59/59) on SSB, DF9QX (579/579) (#), DF3RU (589/579), OZ4MM (589/579), NA4N (559/579), DK7LJ (58/59 on SSB dup), G3LTF (58/58) on SSB dup, DL4MEA (57/55) on SSB, DL1YMK (579/56) CW/SSB dup, RW3BP (56/57) on SSB, OK1CA (599/599), HB9Q (599/589), RW3BP (579/589) dup, WD5AGO (559/559, W9HIX (569/559) (#), VE6TA (569/579), IW2FZR (579/579), WW2R (569/O), OE9ERC (599/599), OZ4MM (57/57) on SSB, G4CCH (599/599) and (58/58) on SSB. The weekend after the contest, I worked on 13 cm on 26 Sept at 1325 ES5PC (599/599) and (58/58) on SSB, and on 27 Sept at 0353 JA4BLC (589/589) and (56/56) SSB for initial (#) on Yoshiro's 2424.099 CQ, 0527 DL1YMK (589/589) and (57/58) on SSB, 0920 DK7LJ (59/59) on SSB and 0943 GW3XYW (569/559) - all QSOs on random.



**RW1AW at his MW dish**

**SM0FOB:** Kjell [sm0fob@gmail.com](mailto:sm0fob@gmail.com) is newcomer to EME that is working in cooperation with SM5LE. He has a 1.8 m dish and an 80 W SSPA. OK1DFC worked and copied signal (449). He is QRV on both JT and CW.

**SM2CEW:** Peter [sm2cew@telia.com](mailto:sm2cew@telia.com) reports on his MW contest activity -- I had a rather late start (1000) and found that many stations had gone QRT for the day. I did work G4CCH, ES5PC and K1JT for initial #10. Heard were WD5AGO and DF9QX. Called CQ on 2320 (also listening x-band!) with fair echoes until 1145 when I had to shut down as the moon was in the trees. G4CCH and F2TU were still good signals at that time. I got back on 13 cm early Sunday morning and worked OK1CA, HB9SV, DL4MEA, HB9Q, OZ4MM, G3LQR, VE6TA, DF3RU and WD5AGO. I heard and CWNR x-band OM/OK1DFC for a long time. Unfortunately I do not think Zdenek was listening on 2320. At 0730 the winds got so strong that I had to park the dish and go QRT. In early Oct I added DL1YMK was initial #19 on 13 cm EME. I will be active during the ARRL contest. I will be on 70 cm most the time the first weekend looking for new ones.

**SM5LE:** Sven [SM5LE@telia.com](mailto:SM5LE@telia.com) active on 23 cm during ARI contest and Sept AW with higher power -- With my new power level (up from 250 to 500 W), my CW echoes went from copy 50% of the time to 75%. I worked 9 stations on 1296. This was a little less than normal. QSO'd on CW were SP6JLW, IW2FZR, IK2MMB, ON7UN (also on SSB), K5PJR, SV3AAF, ON4BCB, K5JL and LA9NEA. Heard were IK3COJ and UT5JCW and probably VA7MM- not in my head's call file. Being familiar with calls is very significant when operating with a small dish (really weak sigs). I will be practicing CW copy in preparation for the ARRL contest, with "Morsecat" and a noise-file taken from the TS-2000 and filtered.

**SP9GWN:** Henryk [sp6gwn@wp.pl](mailto:sp6gwn@wp.pl) writes on his 13 cm activity during Sept -- With my 27 m dish, 200 W and a 0.7 dB NF LNA, I QSO'd on 19 Sept DF1SR for an initial (#), on 20 Sept RW1AW (#), OK1CA, ES5PC, HB9SV, OH2DG (#), F2TU, K1JT (#), OZ4MM, DL4MEA (#), G3LTF, G4CCH, SM4DHN (#), K7XQ (#) and HB9Q, and on 21 Sept DF3RU (#), SD3F (#) and JA6CZD (#).

**SV3AAF:** Petros' [sv3aaf@yahoo.com](mailto:sv3aaf@yahoo.com) ARI contest activity was "kaput" by heavy rain and high winds -- I was only on for a limited time. I did work on 432 I1NDP, G4RGK and UA3PTW, and on 1296 IW2FZR, ON7UN (on CW and SSB), SP6JLW, IK2MMB, SM5LE, VA7MM, ON4BCB, VE3KRP, LA9NEA, K5JL, IK3COJ and OE5JFL. In early Oct I added on 23 cm SP6JLW, G4RGK, I5MPK, SV1OE, LA9NEA and K1RQG. Look for me in the ARRL contest. I will be on 23 cm on high moon to moonset, and 70 cm on moonrise.

**VE6TA:** Grant [ve6ta@clearwave.ca](mailto:ve6ta@clearwave.ca) reports on his 9 and 13 cm MW contest operation -- Well it was kind of lonely hanging out on 9 cm. I did QSO the following stations with big signals: W5LUA, RW1AW, OK1CA, LX1DB, and G3LTF. I also heard DL4MEA briefly and called VK3NX many times. I found no sign of OM/OK1DFC. I was also QRV on 13 cm and worked DL1YMK for initial #52. I now has 2 Spectrian PAs running for 2304, but have not yet combined them. I will be back on 1296 EME for the ARRL EME Contest in Oct.

**VK3NX:** Charlie [ibnkarim@bigpond.net.au](mailto:ibnkarim@bigpond.net.au) writes on his first night of the MW contest -- it was a long night; 3 cups of coffee and an energy drink, but I managed to get through with the reward of some great signals. On 9 cm I

worked, W5LUA, RW1AW for an initial (#), OK1CA and DL4MEA. I missed out on VE6TA, who at times had a loud signal but very rapid and deep QSB. I heard WW2R briefly, but no QSO as we ran out of time. I think there was also another station W?? Please let me know if you heard me for future reference. I learned that the brain doesn't compute/decode callsigns as well at 3 am as it does 3 pm! On 13 cm I only had a very short time (1 ¼ hrs) and the fatigue was setting in, but I worked some big signals: F2TU, DL4MEA, G3LTF, RW1AW on CW and SSB, G4CCH for an initial (#), ES5PC on CW and SSB and HB9Q (#). RW1AW's SSB was (59+) on the S meter! HB9Q was worked at 1 deg elevation through 6 dB of ground noise with a very loud signal. I found it interesting that all stations were heard responding to my CQ on 2320 except for ES5PC (direct copy in the 2301 sub band). For any stations that heard and called me in the 2304 sub band, I did listen but nothing was heard. I really didn't allow myself enough time on 13 cm, but 8 contacts in 75 min seems like 13 cm popularity is growing all the time. Unfortunately I missed out on many that I read were there.

**W5LUA:** Al [w5lua@sbcglobal.net](mailto:w5lua@sbcglobal.net) reports on his ARRL MW EME Contest activity -- Considering that the moon rose about the time I would normally go to bed, I had a great time operating the MW portion of the ARRL EME contest. Fortunately I spent some time troubleshooting the system during the week, so the weekend was event free. On 2304 I used a 5 m dish about 200 W at the feed. Since I started out on 3400, I was only operational on 13 cm on the second day. I worked HB9Q, OM/OK1DFC, DL4MEA, OZ4MM, F2TU, LX1DB, G3LTF, SD3F, K1JT, ES5PC, WD5AGO, NA4N, WA8RJF, G4CCH, WA6PY, and VK4AFL. On 3400 I used a 5 m dish and about 100 W at the feed. I only operated the first day on 3400 and was able to work PA0BAT, VE6TA, RW1AW, OK1CA, LX1DB, DL4MEA, G3LTF and VK3NX. On 5760 I used a 5 m dish and 70 W at the feed. Due to the over run from 802.11a interferers in the neighborhood, it has become a challenge on this band for me to track the moon. With the help of my SDR-1000, I determined that the band was a little cleaner down around 5755 MHz, so I devised a secondary down converter that supplies 5755 MHz to my GR-1236 IF meter. This makes it a little easier to track the moon in a quieter part of the band. As a result on 5760 MHz I was able to work IK2RTI, OK1KIR, RW1AW, F2TU, LX1DB, ES5PC, and VK3NX. On 10368 I also used my 5 m dish and 50 W at the feed. 3 cm was the challenge of the week as I had not been QRV on 3 cm for about a year due to a waveguide relay that decided to quit after being in use for 15 years! I replaced the relay with a new WR-90 waveguide relay connected to my horizontally polarized linear feed and proceeded to look for echoes with 100 W in the shack earlier in the week. The results were zero echoes. So I decided to take my WR-90 directional coupler and move it to the feed. Well I was only getting less than a watt at the feed. After taking the waveguide apart in sections, I found water had leaked in. I decided to use the air hose to see what else was in the waveguide and much to my surprise I found a couple handfuls of grass had been forced out. Well it turns out that when my system is not operational, any bug or critter that enters the feedhorn has a free ride back to the TWT where there is a pressure window! With the new system, the normal non energized mode is now in the receive path so about as far as some critter can go now is the LNA. But I also put in a cellophane cover over the feedhorn. Despite all the hassles during the week, I was able to work IQ4DF, G4NNS, HB9BHU, F5JWF, K1JT for state #15, OK1CA, ES5PC, OK1KIR, WA6PY, and LX1DB. On 24048 I used a 2.4 m offset fed dish with 100 W at the feed. This was really the only band that did not require any work before the contest. It worked flawlessly. As a result, I was able to work DF1OI and LX1DB. It was a good weekend as I was able to work LX1DB on all 5 bands from 2304 through 24048 -- TNX Willi! The contest wore me out but it was a lot of fun. I was wondering how the folks would feel about expanding the microwave part of the ARRL EME contest back in to August making it a August and September event? I am going to suggest this to KX9X and the ARRL's VUAC committee. If you have some thoughts on this I would suggest including your comments in your soap box when you submit your score or write KX9X direct at [kx9x@arrl.org](mailto:kx9x@arrl.org) and he can forward on your comments to the VUAC for recommendation to the ARRL's Membership Services Committee who ultimately approves changes to contests.

**WA6PY:** Paul [pchomins@san.rr.com](mailto:pchomins@san.rr.com) reports on his Sept MW activity -- On 3 cm I QSO'd OK1CA, F5JWF, G4NNS, F2TU, HB9BHU, IQ4DF and RW1AW. I also was on 13 cm and worked SD3F, OZ4MM, WD5AGO, DL1YMK, K1JT, G4CCH, HB9SV and F2TU.

**WA8RJF:** Tony [temanuele@kentdisplays.com](mailto:temanuele@kentdisplays.com) was QRV on 13 cm for the ARRL's MW contest -- I'm pleased to report that I worked OZ4MM for initial #2, K1JT #3, OK1CA #4, F2TU #5 and W5LUA on 13 cm Sept EME contest weekend. CWNR were ES5PC, HB9Q, HB9SV, WA6PY and RW1AW (amazingly loud). Heard were OH2DG and NA4N. My attempt at a 2320 RX was unsuccessful, but it was likely something silly as I assembled it just 2 hours before moonrise on Saturday. Of course Murphy rules during any attempt at a last minute improvement. Unfortunately I will not participate the first weekend

of the regular part of the ARRL EME Contest as I will be attending Microwave Update in Minneapolis. I should be QRV on 1296 the second weekend, but will be in Munich for Electronica that week and arriving home late on Friday. I will be with at the Actron booth in the Display Hall, if any EMERs would like to stop by and say hello.

**WD5AGO:** Tommy [wd5ago@hotmail.com](mailto:wd5ago@hotmail.com) had a great time in the MW EME contest -- Thanks to all who turned out on the uwave bands. I wish there was more activity from NA, but the all night moon pass did not help the casual operator. I copied/called 8 total in NA and QSO'd 5. Total worked on 13 cm was 22 stations, up a little from last year, and heard 28. The second day activity (and signals) were better than the first moon pass. Moving the dish last month 1.5 m higher to clear the house for a 15 min window with VK4AFL paid off. Thanks also to OM/OK1DFC for the new DXCC. I'm at about the limit with what can be done with a 2.7 m dish and 180 W. I am planning to switch to 9 or 6 cm for the next AW. I will not be active during the Oct EME contest weekend because of the MUD meeting.

**WW2R:** Dave's [ww2r\\_eme@g4fre.com](mailto:ww2r_eme@g4fre.com) reports for the ARRL 2 GHz+ EME Contest and post contest efforts -- On the first day after spending many hours sorting out a receiver problem, which turned out to be a blown AFT36077 (after of course I had replaced everything else), I did get to hear 6 stations on 9 cm. LX1DB was the loudest, but QSY'd before I could call him. Others copied were OK1CA, W5LUA, RW1AW, DL4MEA and VK3NX. On the second day, I concentrated on 13 cm. Conditions varied greatly during the moon pass, but 2324 Sirius NA satellite QRM was the biggest problem. I worked G3LTF (X-band before the QRM), OZ4MM, RW1AW, SD3F, OH2DG for DXCC 20 - loudest signal of the weekend, F2TU, K1JT, ES5PC, G4CCH (X-band after the QRM). CWNR were WA6PY and HB9SV. Heard were W5LUA, OK1CA and WD5AGO. Escapees were DL1YMK and DL4MEA (not loud enough to overcome the satellite QRM that upped the 2320 noise floor 28 dB peak, but had no effect on 2304. On 27 Sept, I was back on 13 cm and worked DL1YMK for initial #31. Michael was tailed by G4CCH with slightly weaker signals (both X-band). The lower declination resulted in no satellite QRM on 2320. I also finally worked VK3NX #32, after many attempts on various bands. Success was on 2301. The window was very short but we made the most of it with a QSO.

**YO2IS:** Szigy send some thoughts from a user of a small 2IP dish on 23 cm EME -- Being one of the happy users of a minimal setup for 23 cm EME that is still not yet completely optimized, I am still far from satisfied. I gained from my experience on 70 cm EME, but it seems that I am already losing the interest of the 23 cm EME community. It seems the same hams migrate slowly to higher frequencies. EMEers are getting older and are not as happy to dig out from the noise QRP signals... And also answer received QSLs. (QSLs are a trophy to QRPers everywhere!) I wonder if anyone is going to beat DL9KR's DXCC on 70 cm CW and make the grade of an analog DXCC on 23 cm? (Once again congratulations to Jan!) Everyone wants bigger and better, but rarely have I read about the skills needed by top EME op's, who know how to copy the signals of the 'little pistols. Bravos to SM5LE!

**K2UYH:** I [katz@ieee.org](mailto:katz@ieee.org) did not do much EME beyond the MW contest operation with K1JT. I did run 2 skeds with KG6DX on JT65B on 17 and 18 Sept with nil results probably due to my trees to the west. I plan to try again after the leaves are off the trees in Nov. I also ran a 70 cm sked with W0DRL. We exchanged (O/M) reports but never completed a QSO. Aside from K1JT operation during the contest, I am available and interested in skeds on 70 and 23 cm both CW and JT and can run a linear feed on 23 cm.

**NETNEWS BY G4RGK: WE9Y** is putting up a 10' dish for 23 cm EME operation from Michigan and has a GI-7b PA. **SM7SJR** is considering putting up a 6 m dish for 1296 EME. Bjorn already has TH328 PA. **UA0CQ** is QRV on 432 EME with 4 x 18 el yagis and 50 W on JT65B from PM78ML. Anatol's e-mail is [UA0CQ@mail.kht.ru](mailto:UA0CQ@mail.kht.ru). **F5VHX** was SWLNG on 13 cm during the contest and copied on 20 Sept between 0800 and 1000 OZ4MM, G3LTF, G3LQR, DL4MEA, G4CCH, K1JT, SP6GWN, SD3F, WA6PY, DL1YMK, OH2DG, OK1CA, DF9QX, SM4DHN, W9IIX and HB9SV for a total of 17. **OZ60L** is testing a new set up on 3.4 GHz EME and has already worked G3LTF. Hans has a 5 m dish and 40 W. **HB9GR** (operated by HB9HAL) has a big signal on 1296 CW and SSB. Look for Christoph in the contest. **W2UHI** getting ready to get back on moon again. **K0RZ** plans to be on in the contest on 432 EME. **WB2BYP** will be on the moon on 23 cm. John is also working on a 70 cm EME PA and his 28' dish. **VE3KRP** picked up SV3AAF for initial #37 during ARI contest and in Oct K2DH #38. He recently picked up a 12' dish that he hopes to put on next year. Ed will be at MUD during the Oct EME contest weekend. **VE4MA** tried to be on 13 cm for the MW EME contest, but had problems with his Spectrian PA. Barry will not be QRV in Oct because of the MUD conference. **SV1BTR** will not be QRV during the ARRL contest. Jimmy feels the rules are ridiculous and to the detriment of radio. Mixing JT65 with CW is unfair and

unacceptable. Allowing the assisted Internet class is shameful and ARRL never checking logs vs. Internet logger extracts. **WA4NJP** will try to be on 70 cm during contest. **K2DS** is QRV again on 1296 and will be active in the EME contest in Oct. Dave worked in early Oct NA4N and VE3KRP for initials and also K1RQG and VE6TA. **K1ROG** worked on 1296 W3HMS, SV3AAF, K2DH, VE6TA, K7XQ and WA8RJF in early Oct. Later Joe heard K7XQ S6. **W3HMS** is new on 1296 and using 3 m dish and 110 W. **W9IIX** worked K5JL on 23 cm in Sept. **CT1DMK** is at a new QTH in IN50ro. His dish is mounted, but the cables and connections are not done. It may be 2 to 3 months before Luis is QRV again. **W8TXT** will be active on 432 in the ARRL contest. **WA9FWD** will be at MUD during the Oct EME contest weekend, but is looking forward to being on 23 cm EME for the Nov weekend. **N8CQ** will be on 70 cm EME for the ARRL EME Contest. He is still looking for some land to erect his 30' dish. **PA3CSG** will be QRV on 23 cm for the contest if he can fix his readouts.

**FOR SALE: OE9ERC** has a lot of EME equipment for sale. This may be the last chance to get a high power amplifier from Erich. He is not giving up EME, but does have a new interest (marathon running) and does not expect to have much time for building equipment. In the coming weeks he will have a lot of equipment for sale. Please see <<http://www.oe9erc.com>>. **K2DH** has for sale an OE9PMJ 1296 cavity amplifier for 23 cm EME. It is water-cooled and uses TH-308, TH-328 or TH-338 type tubes to produce 400-500 W output with less than 40 W drive. The PA's RF deck is complete and includes 3 guaranteed good TH-328's, tested by and purchased from HB9BBD, 1 tube has 10 dB gain, 1 tube has 12 dB gain, 1 tube has 13 dB gain, and all will produce rated power, but need conversion from air to water cooling (easily done). Water Jackets, pump, hoses, documentation are included. The PA power supply is not complete, but all components are included (20A/240V Variac, Peter Dahl 1.1A (CCS) transformer, 8 kV diodes (4ea), 23uF/5200V filter cap, 20A AC contactor, bleeder stack, all necessary voltage and current meters, chassis, all other miscellaneous parts to build this supply. The price for this amp and power supply is \$US2000, plus shipping or pick it up. He also an N6CA type 1296 cavity PA for 23 cm. It is water-cooled, uses a single 2C39/7289 type tube to produce 150-180 W output with about 10-15W drive. This PA's RF deck is complete, and includes a quantity of good tubes with water jackets. The tube that's in it works fine, most of the other tubes are NOS. Water jackets, pump, hoses are included. This PA's power supply is complete and produces 1700 V at up to about 500 mA (tube needs about 250mA, so this supply loaf along). The price for this amp and power supply is \$US500, plus shipping or pick it up. (This is Dave's driver for the TH-328 amp, but since the '328 is not yet online, it's his PA for EME and he will not sell it until/unless the TH-328 amp sells. He will sell both together for \$US2300). Please contact Dave at [k2dh@frontiernet.net](mailto:k2dh@frontiernet.net) or by phone at 585-395-0571. **K4EME** is looking for MGF-1302 and MGF-1402 GaAs FETs or something with a little better NF (MGF-1412, ATF-10136 or FHX35LG) in small quantities. Can anyone help Cowles at [candrus@rica.net](mailto:candrus@rica.net).

**TECHNICAL – DC to DC PSU:** See F2TU's web site for an easy approach to providing DC power for your SSPAs. Phillippe has info on a DC-DC power converter providing 48 V – 12 V at 20 A that is ultra compact and waterproof. See <http://F2TU.perso.orange.fr>.

**TECHNICAL - TWTAs FOR 24 GHz:** G4NNS is using an RW1127 and a RWN322P power supply to generate 25 W on 24 GHz. DF10I is also using an RW1127 to generate 40 W, and 14ZAU is using a RW1136 to generate 17 W. Both of these tubes have been appropriately modified from their original 14 GHz operation frequency to 24 GHz by replacing the output transition with a WR-42 transition and appropriate tuning. These tubes were modified by DK3UC, who is deemed "Professor of TWTs" by DL7YC. Based on his excellent results, the title seems very appropriate! [TNX W5LUA for this info].

**FINAL:** I hope this NL gets to everyone before the contest. I had hoped to get it out earlier, but it just was not possible.

The team of W5FF and K5FF provided the first NM EME QSOs on 432 and 220 to many of us. After Fred became a silent key in 2005, the Fred Fish memorial Award (FFMA) was established. It was just announced that Lee (K5FF) will become the first FFMA recipient on 25 Oct at the Texoma Hamarama. I can't think of anything more fitting - congratulations to Lee.

K1RQG has the 20 m EME NET on 14.345 fully active TNX to the help of W9IIX, K5JL and others, but Joe will be away for the second part of Oct. He will be back running the net again in Nov. TNX Joe.

G4RGK is updating for the "Initials" list, please send you tallies to Dave at [g4rgk@btinternet.com](mailto:g4rgk@btinternet.com).

I actually have more technical info this moth, but the NL is already pretty full. Please keep the technical info and reports coming. I shall be looking for you off the both as K1JT in the contest and under my own call at other times. Good luck in the contest and 73, AI – K2UYH



**SV1BTR's very impressive new 70 cm cross-yagi array. It is too bad Jimmy will not be QRV during the contest.**

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REF/DUBUS Eur EME Contest Results by DL8HCZ  
(shown in order of Place, Call, Points, PWR and Bands).

- 432 MHz
- 1 OZ4MM 206800 47 44 QRO SIN
- 2 KL6M 202400 46 44 QRO SIN
- 3 UA3PTW 172000 43 40 QRO SIN
- 4 VK3UM 163800 42 39 QRO SIN
- 5 OK1DFC 159900 41 39 QRO SIN
- 6 11NDP 156000 40 39 QRO SIN
- 6 SV1BTR 156000 40 39 QRO SIN
- 8 DF3RU 152100 39 39 QRO SIN
- 9 G3LTF 140600 38 37 QRO SIN
- 10 DL7APV 133200 37 36 QRO SIN
- 11 SM2CEW 93000 31 30 QRO SIN
- 12 VE6TA 78400 28 28 QRO SIN
- 13 SP6JLW 75600 28 27 QRO MULTI
- 14 OZ6OL 70200 27 26 QRO SIN
- 15 DL1YMK 62500 25 25 QRP SIN
- 15 G4RGK 62500 25 25 QRO SIN
- 15 HB9Q 62500 25 25 QRO SIN
- 18 SD3F 62400 26 24 QRO SIN
- 19 RW3PX 52900 23 23 QRO SIN
- 20 JA6AHB 48400 22 22 QRO SIN
- 21 SM3BYA 44100 21 21 QRO SIN
- 22 W8TXT 36100 19 19 QRP SIN
- 23 DL5FN 16900 13 13 QRP SIN
- 23 SV3AAF 16900 13 13 QRP SIN
- 25 SM3JQU 10000 10 10 QRP SIN

26 YO2IS 8100 9 9 QRP SIN  
27 WA6PY 6400 8 8 QRP SIN  
28 SP7DCS 900 3 3 QRP MULTI

1296 MHz

1 OK1DFC 500500 77 65 QRO SIN  
2 F2TU 395300 67 59 QRO SIN  
3 SV1BTR 374000 68 55 QRO SIN  
4 OZ4MM 368500 67 55 QRO SIN  
5 G3LTF 359670 63+1 57 QRO SIN  
6 VK3UM 313200 58 54 QRO SIN  
7 OK1KIR 307400 58 53 QRO MULTI  
8 HB9Q 291200 56 52 QRO SIN  
9 HB9BBD 263200 56 47 QRO SIN  
10 SD3F 228800 52 44 QRO SIN  
11 VE6TA 206400 48 43 QRO SIN  
12 IQ4DF 190380 50+1 38 QRO MULTI  
13 ES5PC 188600 46 41 QRO SIN  
14 DF3RU 167700 43 39 QRO SIN  
15 IW2FZR 159600 42 38 QRP SIN  
16 SP6JLW 140000 40 35 QRO MULTI  
17 SV3AAF 128700 39 33 QRO SIN  
18 OZ6OL 115200 36 32 QRP SIN  
19 DL1YMK/CX 108500 35 31 QRP SIN  
20 WA6PY 105400 34 31 QRO SIN  
21 UT5JCW 95700 33 29 QRP SIN  
22 IK3COJ 92400 33 28 QRP SIN  
23 EV5M 83700 31 27 QRP MULTI  
24 ES6RQ 72800 28 26 QRO SIN  
25 DL4MEA 67500 27 25 QRP SIN  
26 JA6AHB 67200 28 24 QRO SIN  
27 HB0/DF1SR 60030 26+1 23 QRP MULTI  
28 RD3DA 50400 24 21 QRP SIN  
29 NA4N 44000 22 20 QRO SIN  
30 JA8IAD 39100 23 17 QRO SIN  
31 VA7MM 37800 21 18 QRO MULTI  
32 SM5LE 34000 20 17 QRP SIN  
33 DL4DTU 30400 19 16 QRP SIN  
33 PI9CAM 30400 19 16 PRO MULTI  
35 K7XQ 25500 17 15 QRP SIN  
36 K5SO 24000 16 15 QRO SIN  
36 W9IIX 24000 16 15 QRO SIN  
38 F5JWF 23800 17 14 QRP SIN  
39 EA2LU 16500 15 11 QRP SIN  
40 LA2Z 14300 13 11 QRP MULTI  
41 PA0BAT 13200 12 11 QRO SIN  
42 SP7DCS 10800 12 9 QRP MULTI  
43 SM2CEW 6400 8 8 QRO SIN  
44 PA3CSG 5680 7+1 8 QRO SIN  
45 G3LQR 5400 9 8 QRP SIN  
46 SM3JQU 4200 7 6 QRP SIN  
47 RW3PX 3500 7 5 QRP SIN  
48 YO2IS 630 2+1 3 QRP SIN

2300 MHz

1 ES5PC 81000 30 27 SIN  
2 F2TU 72500 29 25 SIN  
3 G3LTF 52800 24 22 SIN  
4 HB9Q 40000 20 20 SIN  
5 OZ4MM 39900 21 19 SIN  
5 OK1KIR 39900 21 19 MULTI  
7 SD3F 36100 19 19 SIN  
8 W5LUA 36000 20 18 SIN  
9 VE6TA 24000 16 15 SIN  
9 WA6PY 24000 16 15 SIN  
11 DL4MEA 23800 17 14 SIN  
12 WW2R 16800 14 12 SIN  
13 F5JWF 13200 12 11 SIN  
14 NA4N 11000 11 10 SIN  
14 VK3NX 11000 11 10 SIN  
16 IW2FZR 10800 12 9 SIN  
17 JA4BLC 8100 9 9 SIN  
18 PA0BAT 6400 8 8 SIN  
19 G3LQR 4900 7 7 SIN  
20 JA8IAD 2500 5 5 SIN  
21 SP6GWN 2000 5 4 SIN  
22 JA6CZD 1600 4 4 SIN  
22 JA8ERE 1600 4 4 SIN

24 DF3RU 400 2 2 SIN  
25 KL6M 100 1 1 SIN

3400 MHz

1 W5LUA 3000 6 5 SIN  
2 G3LTF 2750 5+1 5 SIN  
3 DL4MEA 2500 5 5 SIN  
3 OK1KIR 2500 5 5 MULTI  
5 VK3NX 1600 4 4 SIN  
6 VE6TA 400 2 2 SIN  
6 WW2R 400 2 2 SIN

5700 MHz

1 OK1KIR 1600 4 4 MUL  
2 VK3NX 1200 4 3 SIN  
3 JA6CZD 600 3 2 SIN  
4 ES5PC 500 2+1 2 SIN

10 GHz

1 OK1KIR 13200 12 11 MULTI  
2 F5JWF 9000 10 9 SIN  
3 IQ4DF 4200 7 6 SIN  
4 G4NNS 3000 6 5 SIN  
5 ES5PC 1800 4+1 4 SIN  
6 VK3NX 1200 4 3 SIN  
7 LX1DB 900 3 3 SIN  
8 SP7JSG 600 3 2 SIN

24 GHz

1 OK1KIR 50 0+1 1 MULTI

MULTIBAND

1 SV1BTR 2.452.800 QRO 2/70/23  
2 OZ4MM 2.362.500 QRO 2/70/23/13  
3 G3LTF 1.937.210 QRO 70/23/13/9  
4 OK1KIR 1.329.000 QRP 23/13/9/6/3  
5 OK1DFC 1.227.200 QRO 70/23  
6 HB9Q 1.173.700 QRO 70/23/13  
7 SD3F 1.050.200 QRO 2/70/23/13  
8 F2TU 1.050.000 QRO 23/13  
9 ES5PC 948.000 QRO 23/13/6/3  
10 VK3UM 930.000 QRO 70/23  
11 DF3RU 688.000 QRO 70/23/13  
12 VE6TA 504.000 QRO 23/13/9  
13 SP6JLW 421.600 QRO 70/23  
14 WA6PY 399.600 QRO 70/23/13  
15 SM2CEW 372.000 QRO 2/20/23  
16 OZ6OL 365.400 QRO 70/23  
17 DL4MEA 312.400 QRP 23/13/9  
18 IW2FZR 310.200 QRP 23/13  
19 IQ4DF 282.040 QRO 23/3  
20 SV3AAF 269.500 QRO 2/70/23  
21 JA6AHB 230.000 QRO 70/23  
21 SP7DCS 230.000 QRO 2/70/23  
23 KL6M 220.500 QRO 70/13  
24 F5JWF 207.400 QRP 23/13/3  
25 NA4N 132.000 QRO 23/13  
26 W5LUA 119.600 - 13/9  
27 VK3NX 92.000 QRO 13/9/6/3  
28 RW3PX 84.000 QRP 70/23  
29 JA8IAD 72.600 QRO 23/13  
30 PA0BAT 53.200 QRP 23/13  
31 WW2R 44.800 - 13/9  
32. G3LQR 34.500 QRP 23/13  
33 SM3JQU 27.200 QRP 70/23  
34 YO2IS 13.320 QRP 70/23  
35 JA6CZD 8.400 - 13/6