

432 AND ABOVE EME NEWS AUGUST-2 2012 VOL 40 #8

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CONDITIONS: This was to be an abbreviated pre Cambridge EME Conference edition of the newsletter (NL), but unfortunately we have some very sad news to report. K1FO has joined the ranks of the SKs. Many of us knew this was coming. Steve had brain cancer and has been in a very bad way for several months. He passed away on 28 July at age 60. Steve's contributions to EME could fill many pages. He is probably best known for the K1FO yagi, but is also well known for his power amplifier designs and his amplifier company Lunar-Link Systems. He had one of the top 432 EME signals and was near the top of the initials list before his illness.



K1FO:- 70 cm EME will not be the same without Steve.

RIP dear friend.

There is not a lot of EME news since the last NL. The 9 cm activity weekend (AW) was a great success. It generated a good deal microwave EME activity for what otherwise would have been a hot temperature-wise, but quiet RF-wise summer afternoon. I missed the 70 cm CW activity time period (ATP) because of my 9 cm activity, and am sorry to say I received no reports ATP activity. I am sure this issue will be discussed at Cambridge. There are no further ATPs scheduled until Dec because of EME contest activity. I am embarrassed to report that I totally missed activity by VP9I on 432 and 1296. They apparently had an excellent signal on both bands with 2 x 16 el Xpol yagis on 432 and a small circular setup [?] on 1296. DL9KR worked them on CW.

EME2012 CAMBRIDGE NEWS: 1) Preamp measurements - please bring your preamps to be measured. This is an excellent opportunity to do some comparisons. Go to <http://www.eme2012.com/eme/measurements.html> for details and tell us what you may bring along. 2) The page for groups who wish to host an EME conference in 2014 to put up their proposals is <http://www.eme2012.com/eme2014/eme2014.html>. So far there are two proposals, one from France and another from Italy (Venice). There is still time for more to be put forward. **CU in Cambridge!**

F2TU: Philippe f2tu.philippe@orange.fr reports on his recent microwave EME - In the 5760 Contest REF-DUBUS contest, I made 25 QSOs. All were on random, and added initials with S57NML and G3LQR. On 10 and 11 July for the 50th anniversary of the first satellite TV transmission between France and the USA, I made several 6 cm demonstration QSOs with TM8PB (52/52) on SSB at the Pleumeur Bodou dish site for initial #56. I also worked ES5PC (569/569), VE4MA (559/559), W5LUA (559/559), WD5AGO (539/559), G4DDK (O/O), K2UYH (559/559) #58, K5GW (569/569). My SSB echoes were (54)! I was also on 10 GHz on 26 June and on random QSO'd PA0BAT

(539/539) for initial #73, OK1QIR (559/559) and SM7FWZ (539/539), and on both 14 and 15 July I4BER (5559/559). Hope to see all at Cambridge.

G3LTF: Peter g3ltf@btinternet.com reports on the 9 cm AW and other recent EME -- On 11 July, I was able to get on 6 cm and work TM8PB for initial #34. He was not very strong, but it later I learned that he was cross-polarized. [I do not believe this is correct.] I heard several other stations, but was too QRL to make notes. I was active for the 9 cm AW. There was a good turnout. On 14 July I worked LZ1DX, K5GW, ES5PC, K2UYH, DL1YMK, OK1KIR, VE6TA and WW2R. On 15 July, I added OH2DG and G4CCH for initial #40. Howard was also X polarized at this time, so we worked on the residuals! I also QSO'd W5LUA, DL1YMK with a better signal than the previous day, OZ60L and WA6PY. On 21 July, I was on 23 cm and worked I5MPK and N4PZ, and the next day on 13 cm worked OH2DG and G4BA. I then went back to 1296 to work G4DZU, W3HMS on CW for initial #359 and SM2CEW. I am looking forward to seeing everyone at EME2012.

OK1DFC: Zdenek ok1dfc@seznam.cz writes about his July QSOs -- I was EME QRV on 21 July after long time of quiet; sorry but QRL first. I was able to work two bands by exchanging feeds during a Thunder storm. I contacted VP9I on both 432 and 1296 for respectively DXCC 87 and 80. Their signal was great on both bands. During a CW QSO with DL9KR on 70 cm, they were easy (449) copy. On 1296, their signal was speaker copy. I will be traveling until EME conference in Cambridge, and looking forward to meet a lot of you there.

TM8PB: Guy (F2CT) F2CT@wanadoo.fr was concerned that the correct circular polarization standard was used during their 6 cm EME tests. They used RHCP for RX and LHCP for TX. This seems incorrect, but as was pointed out by JA4BLC, their antenna is Cassegrain fed with a subreflector, which reflects radio wave one more time than a prime-focus dish. Each time a circular polarized wave is reflected, its sense is reversed. Thus it appears they were connected correctly. (Yoshiro uses a Cassegrain dish and connects his preamp to the usual TX port of an W2IMU horn.) Guy reports that on 6 cm their Sun noise was 24.8 dB, Moon noise 4.9 dB and their own echoes were at a min 22 dB and max 29.5 dB, but that many stations said that their sigs were not as strong as expected with a 13 m reflector. However, it is likely that this was due to very sharp beam of the dish (~0.4 degs) or only ~1/3 of Moon surface was lighted. [We saw the same effect when operating on 10 GHz with the 150' at VE3ONT. Echoes were phenomenal! We could detect a second echo from the Earth bounce back to the Moon and back to the Earth again, but signals were good, not phenomenal.]

VE6TA: Grant ve6ta@clearwave.ca reports on his activity during the 3.4 GHz AW -- There appeared to be a good turnout of stations for the annual 9 cm AW. Weather was good here and my equipment worked without any major failures. I sure need to contemplate moving the amplifier to the dish feed, but am a bit nervous about doing that as one cannot run down to the local ham store for a replacement. Stations worked were K2UYH, OK1KIR, K5GW (big signal award again), DL1YMK (how much goo Michael?), ES5PC (not his normal strength until Sunday), G3LTF, OZ60L, WA6PY, W5LUA, and G4CCH for initial #29. I also heard WW2R very well, but he was not copying me. Sun noise is 13.3 dB at 147 SF using a .55 IMU launcher, which illuminates about 4.5 m of my 5.5 m dish. I am running about 40 W at the feed. Thanks to everyone for all the nice QSOs.

W3HMS: John W3HMS@aol.com was on 70 cm EME for the NA Field Day -- Thanks to the loan of a 24 element Cushcraft 424B antenna and SSB Electronics LNA by W3FEY, I was able to assemble a portable moonbounce station and make 3 contacts all with the superb station of DL7APV (17DB/23DB) on JT65B. The first and second QSOs were at 1827 and 1840 on 21 June when the station was on in my backyard. The third QSO was at the SMRA Club FD site near Carlisle, PA at 1621 on 23 June. My power was about 75 W from a D100 to 18' of 9913. K3SWZ helped. As it was

Field Day, a very real reason was to "show, tell, and sell" EME to perhaps 15 guys who got a hands-on dose of how EME works.



W3HMS portable on 432 EME using US Field Day

WW2R: Dave ww2r2@g4fre.com reports on his recent 9 and 6 cm activity -- While setting up for the 9 cm AW on 12 July, I worked G3WDG for initial #24 and my 1st QSO off the Moon with Charlie. I thereby fulfilled a promise from 25 years ago while visiting the 432 EME station at G3OUR that "someday I will work you off the moon". My wife N2NQI then worked Petra, G4KGC for a YL/YL 9 cm QSO. During the 9 cm AW, I QSO'd on 14 July K5GW, K2UYH, DL1YMK, OK1KIR, ES5PC and G3LTF, and on 15 July WA6PY, W5LUA and G4CCH for initial #25 despite water getting through a tarpaulin and into PA as a result of an overnight storm. Condx seemed much better than previous day. I also heard VE6TA, but not quite loud enough for a QSO. During the period of TM8PB activation, I heard on 5760 6 stations: LX1DB (23 dBn), K5GW (15 dBn), W5LUA (12 dBn), VE4MA (10 dBn) and TM8PB (3 dBn) - surprisingly weak. I was heard weakly by W5LUA, but not enough signal for a QSO. I tweaked the TWTA to managed 30 W out, checked the feed alignment in the dish using the Sun, and then arranged another sked with W5LUA for 20 July. His signals were the loudest I had heard from him and a QSO was completed for my 1st EME QSO on 6 cm, initial #1, after 4 years of trying. By coincidence it was also WW2R EME QSO number 600. Encouraged by the success, a sked was setup for the following day with K5GW, which was completed for QSO #2. This now makes EME QSOs for WW2R on seven bands.

K2UYH: I a.katz@iecc.org had a good time on 9 cm during the AW, but was very disappointed to miss VP9I the following weekend. I QSO'd on 3400 on 14 July at 0958 W5LUA (559/569), 1004 G3LTF (559/559), 1012 K5GW (579/569) - BIG signal, 1918 DL1YMK (559/539), 1034 DL7YC (559/O), 1053 OK1KIR (559/559), 1057 VE6TA (549/559) - stronger later, 1109 WW2R (549/O), 1117 ES5PC (549/559), 1129 WW2R (549/559) - repeat with better signals and 1147 OZ6OL (559/559), and 15 July at 1245 LZ1DX (M/O) for initial #28 - very marginal copy, 1320 OH2DG (559/559) and 1432 G4CCH (559/559) #29. I was QRV again on 21 July for a 6 cm sked with PA7JB, but before I could change my feed to 6 cm, I discovered that VP9I was on 432 and 1296 EME. I had no idea that this group would be QRV on any band besides 2 m. I have VP9 on 432, but only have a partial QSO on 1296 from back in 2006 when I was on the island. I thus dropped my plans for 6 cm, and tried to move my dish on the Moon for 1296 operation. I found that my AZ drive motor has died after more than 20 years of operation. However, I was actual able to track the Moon manually on 1296 by turning a pulley by hand. I have not done this in years, but it can be done, if you are disparate, and I was. At one point I thought I might have a heart attack from running in and out. Amazingly VP9I was on 23 cm and good copy on JT (17dB). (I know JT.) After I got the rhythm, I was just waiting my turn to call. I figured that I had plenty of window this time, when they just quite. You can't win sometimes. It took me a couple of day to find a replacement motor and am now QRV again.

NETNEWS: **YV6MP** is setting up for EME. Presently Pedro has 2 x 23 el yagis and only 40 W, but is working to improve his station. He can be reached at yv6pm@hotmail.com. **KH7Y** is planning to be QRV on 70 cm before the end of 2012 from Hawaii with 4 x LY and QRO. Fred's email is contesthawaii@gmail.com.



YV6MP's dual yagis on 432 EME

FINAL: Take a look at the cover of Aug QST; the picture is N2UO's 20' dish. Besides making the front cover, the picture also won first prize in the ARRL Annual Photo Contest. Congratulations to Marc.

MUD2012, this year's Microwave Update Conference will be in the San Francisco Bay Area on 18 to 21 Oct. K6ML is looking presentations and papers for the MUD Proceedings. PSE sent topics to Mike at mud2012papers@gmail.com. The deadline is 18 Aug 18 for papers and 15 Sept 15 for presentations.

We have decided to stop distributing the NL in text form. In the future, W2WD will email only in PDF. The NL in PDF and DOC will be continued to be posted on W6SZ's web page. Rein how has links to virtually all the NL back issues (TNX K2SMN). The first printed NLs were in 1974.

I am leaving this weekend for Cambridge with a pre conference stop in Ireland. I will arrive on the 15th, and hope you will be able to attend. I shall be looking for all of you. 73, AI - K2UYH



G3LTF looking east