432 AND ABOVE EME NEWS
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EDITOR: AL KATZ, K2UYH; ENGINEERING DEPARTMENT, THE COLLEGE OF NEW JERSEY, PO BOX 7718 EWING, NJ 08628
TEL (W 609-584-8424) OR (H 609-443-3184), FAX (609-631-0177), E-MAIL a.katz@ieee.org
PROD/MAIL: BRIAN MULLANEY, KB2TIS (609-883-6390), E-MAIL mullaney@mccc.edu
NETNEWS EDITOR: G4RGK, DAVID DIBLEY, E-MAIL g4rgk@hdeng.freeserve.co.uk
REFLECTOR/MOONNET EDITOR NU7Z, RICK BEATTY E-MAIL nu7z@aol.com
EME NETS: 14.345, 10 AM ET SATURDAY AND SUNDAY (AFTER VARO NET ENDS ON SUNDAY)
NET CONTROL AND SKEDS CORDINATOR: JOE, K1RQG, TEL (207-469-3492), E-MAIL k1rqg@aol.com
EME DIRECTORY: http://www.dl4eby.de/, DL4EBY/DK0TU, KLAUS TIEDEMANN, TEL (49-30-7955467), E-MAIL: <tklaus@berlin.snafu.de>
E-MAIL LIST CORD: WARREN, W2WD wbutler@comcast.net /NL DISTRIBUTION: SCOTT, KD4LT <cscott@surfsouth.com> [TXT OR PDF]
EME STANDINGS: DAN GAUTSCHI, HB9CRQ/HB9Q E-MAIL hb9crq@hb9q.ch OR SEE HIS WEBPAGE AT www.hb9q.ch.
THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT <http://www.nitehawk.com/rasmit/em70cm.html>

CONDITIONS: This month's emphasis has to be on the Prague EME Conference. The OK-group did a terrific job organizing the conference, which came off without any real hitches despite concerns over flooding. We arrived in Europe to news of the disastrous floods. Fortunately the conference site was located on high ground far from the flooding. By the conference start, the water had receded to the point where it was possible to walk along the river's banks. Nevertheless many of the tourist sights near the river were closed as well as the main train station. This latter closing caused travel complications for a few attendees, but the resourceful Czech organizers had work around solutions. As a result more than 100 EMEers (plus 80 spouses) attended with all continents represented except S. America.

Prague site of 2002 EME Conference

A major topic of the conference was the new digital modes starting to be used on 70 cm and above EME. Both Joe, K1JT and Lief, SM5BZE gave presentations. Lief has developing computer processing techniques that allow the copy of normal CW at signal levels lower than with the ear. His approach can be considered the creation of a "super audio filters". He also advocates simultaneous reception of vertical and horizontal polarization separately and recombining them to produce the optimum polarization. This approach is applicable to 144 and 432 where linear polarization is used and Faraday rotation is a problem. It is not clear if there would be any advantage on 1296 where circular polarization is almost universally used. K1JT announced a new version of his JT44 software to be available shortly with an echo test mode. VE4MA's talk on how EME was achieved on 24 GHz and current efforts on 48 GHz received a standing ovation.

Among the recommendations of the conference was the use of circular polarization on the EME microwave bands (including 3 cm). There was also considerable discussion on how to get operation on the different 13 cm sub-bands required around the world. Peter, G3LTF discussed the benefits of using a common LO in order to maintain a fixed offset in each segment. It was agreed to use CQX when listening for stations in a different sub-band. Some of the most intense discussion centered on JT44. Many stations felt that JT44 QSOs should not count for DXCC, WAS, initial counts, etc. Ian, G3SEK pointed out that the rules for awards as DXCC and WAS are set by the organization and do not differentiate by mode. I noted that the key issue is what constitutes a QSO. JT44 contacts do not appear to violate the definition of a QSO, and can occur in less time than a typical weak signal CW contact, so time delay is not factor. It was agreed that the recommended JT44 CQ calling frequency be 432.044 and 1296.044, not on .024 as proposed in last month NL. It was also decided that the 2004 EME Conference will return to New Jersey after 14 years. N2UO will head the committee and planning has started to make the 2004 conference one that no one will want to miss.

BY7BJA: Feng by4bja@citiz.net in China has been again in contact with WA4NJP. Ray sent him information on JT44 and received the following reply -- I changed my jobs last year. I went to a middle school to do some management work, and was away from my station. I am returning to teaching next month and will be back near my station. I will try to do something on EME, but I need to work on my system first. Thank for your information, I will ask for more details after I finish checking out my system.

DL8OBU: Jürgen Juergen.Kaufer@t-online.de writes -- I just modified the roof of my house (two tiles had to go!) to avoid its touching the dish. Now I can operate with elevation from 20-60 deg over the full range of azimuth. I have now worked the following stations on 1296: N2IQ, KA0Y, VE6TA, SM6CKU, LX1DB, HB9Q, JA6CZD, HB9BBD, WA6PY, SM3AKW, OH2DG, K2UYH, IK2MMB, W5LUA, VE1ALQ, W2UHI, G3LTF, F1ANH, GW3XYW, JA6AHB, K5JL, DF4PV, OZ6OL, DJ9YW and G4CCH with my 3.1 m dish and 100 W to the feed. Skeds are very welcome. I'm still QRV on 70 cm EME and interested in sked there too! I have 4 x 33 el yagis and a YL1500 PA. I plan to shut down on 432 EME next spring, so if anyone still needs me, please get your skeds in now! I am waiting for QSLs from W2UHI, VE1ALQ, W5LUA, IK2MMB, OH2DG and N2IQ.

OK1DFC, Zdenek and OK1DIG, Dan welcoming attendees

ES5PC: Viljo in Estonia (KO38hj) is QRV on 2320 MHz EME and made several QSOs in Aug. He is using linear polarization with a 2.6 m prime focus dish, f/d = 0.35 on a polar mount. The feed is a patch antenna. TX power is 350-400 W to only 3 meters of ½ cable. RX NF is about 1 dB. His moon window azimuth range is currently limited to between 160 and 260 degrees. At the time of Viljo's correspondence, he had copied SM3AKW (339) and has since QSO'd several stations.

ES8X: Andy, ES2NA es2na@erau.ee reports on a VHF/UHF dxpedition to Kihnu Island (KO18xc) organized by the Viimsi Radio Club (ES2WX). This portable operation involved operators ES2NA, ES2QH, ES2RJ, ES1DW, ES2EZ, ES1LAA and ES1TGO. They were QRV from 30 July until 6 Aug. Their activity included EME on 70 cm using 4 x 12 el yagis with elevation rotator, 300 W PA and FT 847 with a preamp. I know they worked SM2CEW

and at least one other station using JT44 - [see my report]. They also tried 1296 EME with a single 44 el yagi (no elevation) to a low loss cable to an 160 W PA and TS790 with a preamp, but I do not believe they made any EME QSOs on this band.

ES8X's 4 x 12 el yagi array (low part of picture)

ES8X operating team

F1EHN: Jean-Jacques jjm_f1ehn@wanadoo.fr expresses disappointment that the 3 cm band scores were somehow missing from QST in the ARRL 2001 EME Contest Results. The F6KSX EME Group with which he is associated took first place on 10 GHz. The correction was published as a Feedback item in the June 2002 issue of QST on page 90. I am sure QST's staff will not make this mistake again! The F6KXS entry was a Single Band 10 GHz multi-operator with a Score of 18x11 for 19,800 points. The operators included F1EHN, F1SXC, F4UPG, F6DLA and F6ECX.

F5VHX: Graham has a new call (formally F/G8MBI and F/GOVBA). He was on 23 cm on 10 Aug and worked SM2CEW and others. VK3UM was visiting with Graham prior to going to Prague.

GW3XYW: Stu gw3xyw@thersgb.net July and Aug EME activity report – I was QRV on 13/14 July on 10 GHz only. Saturday was spent on Moon noise tests (1.4 dB). On Sunday I worked OK1UWA (M/M). This was my second 10 GHz EME contact. The first was with PA3CSG back in Aug 99. In Aug I was activity on Sunday the 4th on 23 cm. The following stations were worked OH2DG (559/559), G4CCH (559/559), OZ6OL (569/559), K5JL (549/539) and SM2CEW (559/559). For possible 10 GHz QSOs with GW please note that I am now QRV again with 12 W and a HB 2.7 m (9') dish. I plan to be available on 3 cm for the next few months. Please sked via the newsletter (K1RQG) or direct e-mail (see above).

K0YW: Bruce was active during the post SW in Aug on 1296. He worked ZS6AXT, W2UHI, G4CCH, W7BBM (3-way on SSB), OZ6OL, G3LTF and IK3COJ. He also QSO'd N7AM on SSB and gave a demo of EME for visitors doing some work for Jack. The system seems to be working well. Bruce also says that he is trying to catch upon QSL cards.

K1FO: Steve steve@lunarlink.com has been very busy the last few months and has not had a lot of time for EME. He was QRV on 10 and 11 Aug calling CQ for the better part of 3 hours between the 2 days with nothing heard but his own echoes. Back in the DUBUS/REF Contest Steve had 57 QSOs on 432 with 1 initial (JA8IAD #603) – [The top contest score!] Within the next month or two Steve expects to reach another milestone as he is close to making his 6,000th 70 cm EME QSO!

K1RQG: Joe K1rqg@aol.com is making progress on his dish repairs – The dish is almost complete. I just need to put new screening on and then concentrate on the new mount. I hope I can get it back up this year. I have way too much work and it has been extremely hot. Willie (W1ZX) is here and we are working as much as we can. Please bring up schedule requests at the Prague Conference. [It was done.] Specific sked requests need to include the requested callsigns (not simply "new ones"), the requesting station's window in date and UTC time, and band. Also I need these requests the weekend following the last skeds weekend (SW). This gives me time to properly plan the skeds and check out the request. If stations do use "Moon-Net" for sked requests, and also want me to sked them, please copy me on the request. I do not do anything with moon net postings unless specifically asked to do so. [At the conference the skeds situation was discussed. Everyone seemed to favor the SW concept, but agreed that the majority of skeds are now made directly via e-mail/Internet. It was recommended that 1) direct skeds be made for the SW, if at all convenient, 2) K1RQG be copied on all such skeds so that they can be added to the skeds list, and 3) an updated skeds list be publicized. Presently the skeds list is update to DL4EBY's WEB page and sent out with Joe's Netnotes. My idea was to include this "updated" skeds list on Rein's (W6/PA0ZN) EME WEB page with the latest NL. A link directly to it could be included with the NL and also K1RQG's Netnotes, which would also include the latest sked list.]

The BIG Prague Conference award winner JA4BLC!

K5JL: Jay added an initial on 23 cm on Saturday of the Aug SW with ON4QMT (?) and is looking for information on this station. [ON4QQ is a new station on 1296 that G4CCH has reported QSOing.] Jay also reports that OH2DG was on with great signal, but overall Aug activity seemed very low.

KA0Y: Ken was on 1296 during the Aug SW and reports contacting OZ6OL, SM2CEW, K4QI, W2UHI, OE9ERC and N2IQ. He plans to be active on 23 cm the next few weekends.

KU4F: Thorton is temporarily QRT. He suffered some wind damage to his azimuth drive and a lightening hit. He will be off air until he has a chance to make repairs. He hopes to be back on by mid Sept.

N2UO: Marc lu6dw@yahoo.com found the last two activity weekends very interesting on 23 cm – I worked on 3 Aug OH2DG, G4CCH and W2UHI, on 4 Aug SM2CEW, OZ6OL, OH2DG and W5LUA, and on 10 Aug ZS6AXT, G3LTF, VE6TA, W2UHI and G4CCH, on 11 Aug OH2DG and OZ6OL. This last weekend, I worked on 31 Aug K5JL, PA3CSG, G4CCH, OZ6OL, DF4PV

and HB9SV, and on 1 Sept SM2CEW, K5JL, OZ4MM and OH2DG. Only 2 QSOs were scheduled. I have been lucky working random or calling CQ in spite of my small system (260 W at the feed and 3 m dish). Also I finished my new IF rig and I am very pleased with its performance. It is a 14 MHz CW/SSB monoband transceiver, all solid state. It is as small as any modern commercial radio. On 20 m it delivers 100 W. It is based on a Qualcomm DDS, so no traditional PLL synthesizer was used. The radio is controlled by an 8052, and has an alphanumeric display that shows the actual operating frequency (14 MHz or 144, 432, 1296, depending on the transverter in use). It has a very sharp crystal filter at the IF, and due to the low phase noise and diode mixer, its dynamic range is very good. I can now hear weak stations even if my neighbor K2UYH is 1 kHz from my frequency working CW. The radio also has a dual product detector with a quadrature BFO, so binaural reception is possible. I also added a feature to have not only the classic RIT, but also TX incremental tuning, so I can program the required Doppler shift quite easily. Right now I do not use any kind of commercially manufactured radios to operate.

N4PU: Jim n4pu@yahoo.com was QRV on RX on 23 cm EME and getting 16.5 dB of sun noise, but was hit by lightening and had a lot of stuff zapped. His equipment is now on the mend. The dish is down and he working on a different mount for his feedhorn. Jim wants to get rid of the shepard's crook mounting. It is an 8 rib mesh C-band TVRO type dish. Any ideas are welcome.

N7AM: Jack jackriggs@attbi.com is now QRV on 23 cm EME with 670 W off the moon – This is real living now that we can hear and xmit on 1296. We finally located the focal point on the dish, so now everything seems to be in place to make a good effort. It was indeed a pleasure to work W2UHI this AM [11 Aug]. His sigs were the loudest heard! We also QSO'd K0YW, ZS6AXT, G3LTF and G4CCH, and heard VE6TA.

OH3MCK: Petri petri.kotilainen@nokia.com has moved to Denmark -- I'm QRT for most of the time in the near future because of my move. However, I can be QRV on 70 cm occasionally, when I visit Finland. I don't know yet when I'm going to be in Finland next time. A somewhat longer term plan is to become QRV from Denmark on 1296 and maybe also on 2304. I have good visibility to south and west from my new location, but I need quite a high elevation. Also some work must be done to find a suitable dish and build up the installation. I have a theory as to why my 70 cm JT44 skeds did not succeed. My AF noise level on 70 cm is clearly lower than on 1296, so I used the MIC input of the soundcard instead of the LINE input. But there is some kind of "booster" device in the MIC channel. Maybe it does some compression too that may have ruined my audio by distorting it excessively. [In setting up F5SE on JT44, we also used the MIC input and observed some strange effects. If we turned the audio level up enough to drive the JT44 program in to the proper range, the MIC channel was in over compression. If we reduced the input to MIC channel's linear region, there was insufficient level for the WSJT program to function properly.]

ON4BCB: Walter walter.crauwels@skynet.be is new to EME on 23 cm and looking for some advice -- I have a DL9EBL "type B" (description in Dubus) cavity for a YL-1050/52, which is giving me some problems with a Thomson YL-1050. The Thomson tube is 0.2 mm out of maximum specs. The minimum cold resonance frequency is 1335 MHz, I think due to the tube's characteristics. I'm looking now for a Siemens YL-1050 or 1052 to see if this tube makes any difference. If you have any ideas, contact me via e-mail. You can see my status on my Web page at www.qsl.net/on4bcb. [Walter was at the Prague Conference and may have received some help there.]

OZ4MM: Stig vestergaard@os.dk only had a little time for EME this month – I was QRV on 13 cm during the post SW and worked ES5PC in KO38HJ for an initial and new DXCC. He has a very good copy (549) even though he is running only a 2.6 m dish with linear pol.

SK0CC: Sven sven.o.nordin@telia.com is experimenting with JT44 on 70 cm – I worked on 1 Aug K2UYH for my very first EME JT44 QSO, on 3 Aug SM2CEW, partial DL4KG, N9AB (solid even heard), nil OH3MCK (30 W 19 dB ant) and partial KJ7F, on 8 Aug partial KJ7F - almost finished but Terry had to go to work, and on 10 Aug KJ7F - sampling of several transmissions did it this time. DL4KG, G4YTL and EA3DXU are now QRV on JT44 on 70 cm. I have not seeing any JT44-interest from Japan yet. I would like to try with VK3FMD or K2TXB and anyone else willing to try JT44 on 70 cm. Based on my JT44 experience: Do NOT touch the RX knob during the RX 30 sec. Period. Do your RX adjustment in the TX period.

VE6TA: Grant was on 23 cm during the post SW and added OH2DG, DL8OBU and N2UO. He is working on a new dish, but doesn't know if he will get it up before the fall. His new autotrack system is working very well now.

WA1JOF: Don's XYL passed away a few weeks ago. [Our condolences to Don on his loss.] Things are obvious on hold for a while. He is planning to move QTH and is reported to have bought a new place in Farmington.

W2UHI: Frank fblumn@pathwaynet.com was QRV on 1296 in Aug and worked during the SW on Saturday 0Z6OL, SM2CEW and N2UO. Conditions seemed good, but activity was light. On Sunday he was on late because of a large thunderstorm. After it passed Frank QSO'd KA0Y, K4QI, OE9ERC and N2IQ with excellent signals. During the post SW he QSO'd N7AM for initial #160 with a nice signal, ZS6AXT, SM2CEW, F1ANH, W7BBM, G3LTF, F6ETI, VE6TA and N2UO - all on random, and heard DL8OBU. Frank and W4OP continue to gather data on sun noise vs. solar flux. An updated graph of their results can be found on Frank's web page at http://www.w2uhi.com.

W5LUA: Al was active on 1296 during the Aug SW and worked N2UO, G4CCH and K2UYH. On the post SW he was on 13 cm and added ES5PC (O/O) for initial #50 and later F2TU on SSB.

ZS6AXT: Ivo's zs6axt@global.co.za Aug report -- I was not QRV on SW, because of bad weather. I tried the next weekend on 23 cm. What a surprise, quite reasonable activity and 4 initials! However, when I started to operate a fault in my TX coax appeared again! I checked the Superflex and connectors next to the dish, and all was OK. Then I moved the connector on the 7/8" coax next to the PA and that was it! This was after ten trips to the top of my 6 m tower and balancing there with my Bird wattmeter, hi. I worked on Saturday 10 Aug SM2CEW, F6ETI, F1ANH, G3LTF, N2UO for initial #181, W2UHI, DL8OBU #182, W7BBM and N7AM #183, and on Sunday 11 Aug OZ6OL, G4CCH, F6KHM, OH2DG, IK3COJ, F5VHX #184 with heavy QSB and K0YW. WA6PY was copied quite well, but this was at the end of my window. Signals were quite good with heavy QSB on occasions. The real surprise was activity in the non-SW, but it was perigee!

K2UYH: I made my 1st 70 cm JT44 QSO on 1 Aug at 0900 with ES8X for initial #654 and DXCC 78. This QSO was the result of a call from K2TXB who was skedding them on 144 MHz and told me they were interested in trying JT44 sked on 432. 432 was the only band on which they had elevation rotation. It is ashamed that news of this dxpedition was not better publicized in the 70 cm and up EME community. I am sure they could have made many more QSOs. I also tried with them on 1296 where they could only operate on the horizon, but nil was copied either way. I was active during the SW on 1296 and worked on 4 Aug 1020 G4CCH (56/55) on SSB, 1112 W5LUA (55/54) on SSB, 1135 VE6TA (559/559), 1153 SM2CEW (559/569), 1216 OH2DG (569/569), 1232 OZ6OL (559/569) and 1240 OE9ERC (56/57) on SSB. Heard were N2UO and PA3CSG. I also QSO'd on JT44 on 70 cm on 1 Aug at 1005 SK0CC (O/O), and tried with OH3MCK and VK3FMD with nil copied at my end, although both copied me. As the moon was near apogee, we decided to give the post SW when the moon was near perigee a try. The results were frustrating. I had a near miss with OH3MCK who is running 30 W and a single yagi on 432 – see picture in last month's NL. I copied him full calls and was sending O's, but he was never able to get full calls from me. Then almost the same result but reversed with VK3FMD. He was sending Os to me (which I copied), but I never was able to fully decode his call. I have very heavy tree blockage in his direction, but could still hear my echoes. In between my JT44 activity on 70 cm I did catch on 10 Aug at 1611 SP6JLW (559/549) #655 on random and 1709 RA1LE (559/539). I also heard some random JT44 on 432.024, but had a clock problem at the time and never decoded the station. [The JT44 random CQ calling frequency has been moved to 432.044].

ES8X: 432 EME array is on tower to left of the lighthouse

NETNEWS BY G4RGK: **N2IQ** is QRV on 23 cm with his new 28' dish. His big dish (48') is also nearly ready to go again. Mark is trying to decide whether to put it on 23 cm as well. **K9BCT** is now seeing 17.5 dB of sun noise after making some tweaks to his station and is trying to measure his side lobe pattern using the sun as a source. [K1FO reminds us that one must make a S+N/N correction when measuring lobe amplitude with noise.] **N2HLT** has moved to a different location in same town, and is not a new station. **SM2CEW** worked ES8X on 70 cm. **PA3CSG** was on 23 cm during the Aug SW, but had equipment problems. Geert added N2UO and DL8OBU at the end of the month. **OK2BDQ's** grid is JN99hr. **WD5AGO** has a new address (3017 N 2nd St, Broken Arrow, OK 74012) and telephone (918-355-5839). **W7SZ** worked 9 stations on 23 cm during the Aug SW including WA6PY with an 8' dish. **UT5DL** new e-mail address is ut5dl@qsl.net. **WA3DJG** has a 15' dish and is interested in 1296 EME. **DL1YMK** working on his 23 cm YD-1336 PA and is now getting 500 W. DK3BU found the problem. **OH2DG** has a new e-mail address eino.metsamaki@linnunrata.net. **K6IBY** is getting good results with 50 W on 70 cm, but still wants to make some improvements and is not yet ready for skeds. **WA4NJP** sends information on E20NGF thailandeme@hotmail.com in Thailand. Pongsakorn is setting up for EME using JT44, but his interest and equipment appears to be for 144 MHz. **W5ZN** had a bad lightening hit, which took out the majority of his equipment. He is still working toward getting back on EME. **KB8RQ** also was hit by lightening and lost a lot of gear. **KJ7F** is QRV on CW and JT44 on 70 cm and interested in skeds. **7M2PDT** has a new e-mail address 7m2pdt@chiba.email.ne.jp. **PI4LIM** plans to have power on 6 cm very soon. **RA3LE** has a new 8 x 7 m yagi array for 70 cm and plans to be active on random in Sept on 432.008. **WB0GGM** has been busy this summer, but did pick up F2TU to bring him to initial #108 on 70 cm. John plans to be more active starting in Sept. **K5WXN** has been tweaking up his 70 cm system, which does not seem to be performing all that well.

K1DS and N6TX (Dr. SETI) in Prague at EME Conference

FORSALE: **W7CNK** has for sale a Lunar-Link System LA-70, 1500 W rack mount 70 cm PA with PS-70 power supply and spare 3CX800A7 in excellent condition for $US1950, a complete 4 x K1FO 33 el 70cm EME array with stacking frame, 1/2" LDF phase lines, elevation drive and power divider for $US400, and a 5 m aluminum dish (24 peddles) with mount, disassembled and ready for pick up for $US400. He also has available an FT-847, TS-711A and TS-811A. Contact Lucky for details at w7cnk@worldnet.att.net or tel (405) 691-2265. **VE3AX** is looking for bolts to use for assembling his 28' Kennedy dish. **KD4LT** cscott@surfsouth.com has for sale a network analyzer, HP 8754A, 2 channels (4-1300 MHz) with the 8750A storage normalizer and the 8502A (Opt-h26) Transmission/reflection test set included for $US700.00; and a Tektronix TDR, model 1503 with the chart recorder option, hood, calibrated short/load and 7 rolls of chart paper in unopened boxes for $US350. **UX3LV**, Vlad ux3lv@kharkov.ukrtel.net has the following tubes available: GU91B (4CX-1600A) $150, GU74B (4CX800A) $60, GS23B (4CX1600U) $90, GS36B (4CX400A) $75, GS35B $90, GS34-1 $35, GI7B $15, GS9B $15, G811 (811A) $10, sockets for G811 (811A) $5, GM70 (300B) $10, sockets for GS15B $30, sockets for GU74B (4CX800A) no capacitor G2. All prices in $US or Euro + shipping (< 2 kg at 10-15 days for $15, < 20 kg at 5-7 days for $35-100 for Eur and $37-170 for USA, Japan, etc. **W6TRL** w6trl@earthlink.net is looking for info on a SOTA 432 MHz transverter. He has it for sale. **WB2GLW** has for Sale: a Litton 8 – 18 GHz Type L-2384-02 TWT, a Varian (freq unknown) VTM-6196R1 TWT, 4.2 - 5 GHz 1/2 W linear driver Amp with 1 W Sat power and 47 dB of gain (dc input is +12 V at 0.5 A), and a Logmetrics 5.9 - 6.4 GHz TWTA (complete amplifier) 2 W (turns on, but is untested and the lens on the front panel push button switches are broken). Mike will accept the best reasonable offer by e-mail at mkulyk@optonline.net.

TECHNICAL: The accuracy of Doppler frequency calculation by different moon tracking programs has not been much of a concern. At 144 Doppler shift almost need not be considered, but at 10 GHz and now 24 and 48 GHz a small error can be several kHz, and with JT44 the RX window is only +/- 600 Hz. F5SE has been working on a program for improved Doppler calculation. While visiting with F5SE and F2TU, (as we listened to Philippe's 3 cm moon echoes), we compared the Doppler shifts predicted by the F5EHN, VK3UM, WSJT and F5SE's programs. Differences of more than 3 kHz were found. In some cases the error could be even greater as we did not search for the worst case. At 1296 the error was about 300 Hz, which is much less but could be a factor on JT44 when added to errors from other factors. (Remember on JT44 you want to use the mutual Doppler, not the Doppler of your own echoes). I am now using a TS2000 directly on 1296 and am finding an error between the Doppler echo frequency predicted by my moon program (WSJT) and the echo frequencies observed. I usually keep WSJT (moon/Doppler data) on the screen of my computer along with Spectrian (which shows my echo frequency to the Hz). The difference is usually about 800 to 1000 Hz. I have also observed a similar effect on 432, but to a much smaller extent (~ 200 Hz). Have others seen a this phenomena or have an explanation?

F2TU (sitting) and F5SE listening to 10 GHz moon echoes

FINAL: Because of our travel this past month to the Prague Conference, this NL is out of phase with the moon. I am afraid the situation will not improve much this coming month as I am heading back to Europe on the 23rd for another conference and will not be back until 4 Oct. I will be in the vicinity of Milan, Italy the weekend of 28/29 Sept and am always interested in meeting other EMEers.

There are no skeds with this NL because of its timing. I am also trying to work out an arrangement to keep the skeds current on the version of the NL that appears on W6PA0ZN's Web page. Joe, K1RQG, is concerned about posting direct e-mail skeds in his Skeds List. He feels that conflicts with regard to time and frequency could make this task impossible. This is one of the problems with open skeds. Right now we have little NL skeds activity. One solution is to run NL skeds on a first come, first gets the frequency basis. If a conflict is received a notification could be mailed back that the frequency is already in us. I suggest that 035, 040, 050, 055, 060, 065 070 and 075 be recommended for skeds with 035 and 040 reserved for NL skeds?

Last month I started shading in yellow parts of the NL that might be of special importance. I wonder if you find this helpful?

N2UO and I had planned to attend the Microwave Update Conference in CT, but I just discovered that the date 25/27 Oct is in conflict with the 1st weekend of the ARRL EME Contest. This is very disappointing.

Despite comments by some to the contrary, I believe activity has not decreased, it has just spread out over time and frequency. If all the activity on 70and 23 cm were combined this would be clear. Concentrating activity on one SW again would also help, but may not always be practical. Please keep the reports and technical info coming. We will be looking for you on the moon during the coming month. 73, Al – K2UYH