432 AND ABOVE EME NEWS
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THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT http://www.nitehawk.com/rasmit/em70cm.html.

CONDITIONS: Dxpedition activity added some spice to 1296 activity during what might have been a slow July activity weekend (AW). 9A/DL3OCH provided Croatia for the first time on 23 cm EME – see Bodo's report below. OH1LRY was also QRV from Säkylä Island, Finland in a last minute mini dxpedition by Janne, OH1LRY and Petri, OH3MCK. Conditions on 432 during the AW were not particularly good with near 90 degree Faraday rotation producing weak echoes, but there were enough new stations around to keep things interesting. OA4A was to be back on 70 cm during the weekend of 13/14 Aug, but as of this writing I have no reports of anyone hearing or working them. The Aug AW will be busy with 23 cm dxpedition activity from Andorra by C31TLT and Ireland by EI/DL1YMK – see skeds at the end of this NL.Later in the year there are possibilities of some new African 70 cm dxpedition activity – see ZS6OB's report.

GUEST EDITORIAL BY K5JL: My comments are directed to the statement that appeared in the August Newsletter. "I must admit that talking to someone on a logger at the same time that you work them ruins some of the magic of EME for me". It goes on to say that this in the past was considered a NO NO. The rules have NOT been changed! The justification for this practice is that "attitudes as technology are changing". The majority of the world's serious EME operators have not changed their attitude. Technology has been changing from the first day our hobby was conceived. But it does not mean that we have to sell our sole to the devil. Any QSO made while using any electronic assistance such as telephone, logger, or Internet should be considered null and void. It seems that leaving it to the integrity of the individuals is a thing of the past. Just count the times that you have seen on Moonnet or a Logger that "the system (logger) was down and as a result I was not able to make any QSOs. Scheduling is fine, but additional assistance during the contact is still a NO NO. This seemed to get its start about the time new technology began to appear. Those responsible for telling the newcomer what the rules were did not relay the proper procedures and applicable rules. Whether this was an oversight or the desire to further one's own totals – this was a serious mistake. Don't misinterpret my comments – I am not opposed to the digital modes of communication. I have made digital QSOs and will continue to make them in the future. My highest respect goes to those who have developed this technology. But, as Steve W7CI commented "we need a level playing field". Educate those who wish to partake in the magic of an EME QSO and tell them what is expected before they play the game. It certainly is not a level playing field when some stations go on dxpeditions and state that will work nothing, but the digital mode and others can't operate because there is no Logger. It is now more apparent than ever that those "Serious EMEers" at Prague could foresee some of the problems with the up-coming digital modes. They were right then and still are – that the digital mode needs to be put in a separate class. The operation and abuses that have come to pass since Prague have certainly become evident. Now the time has come to create a separate class for the Digital mode contacts and Level the Playing Field. [I want to thank Jay for trying making clear that the rules have not changed. I hope my comments were not misunderstood. I did not mean to imply that using Loggers to complete a QSO was an acceptable procedure. Most Loggers users will tell you that they do not look at the Logger while a QSO is in progress. My personal decision was to set up my system so that I can't access the Internet from my shack. To e-mail, I must go to my office in another room of my house. I do recognize that the use of Loggers in the way that Jay described is happening. It seems to be accepted by a new generation of operators that do not see things the same way as many of the old time EMEers do. Where we differ is on the cause. Jay blames the use of Loggers on the digital modes, but Loggers were used by HF DX hunters long before the JT modes existed. It is true that Loggers are used more by digital mode operators, but there are plenty of examples of CW misuse as well. The ARRL has now officially added a new assisted class to the ARRL EME Contest. Doesn't this recognize the practice of using the Internet to assist in EME contacts? This is what I meant about the world changing. I did not say we have to like it. HB9Q has modified his top list to show both CW/SSB and mixed initial listings. Here in the NL, I am using an * to indicate totals (initials, DXCC, WAS) that include digital mode contacts].

9A/DL3OCH: Bodo dl3och@gdxf.de had some unexpected problems during his 1296 dxpedition to Croatia – I operated on 28/29 July in JN74 and JN75. The circumstances were very difficult, especially in JN74. I had a temperature of about 100 F and was in the middle of nowhere... No breeze, no clouds, no shade. I was sweating like crazy and the equipment was very hot. It was hard to see anything on the screen due to the sun and the transverter didn't get enough cool air. I set up an additional fan to cool the PA, but it died anyway. I had only 60 W available when I QSO'd Erich. (Does anybody have any BJ250's for me?) The QSOs during the night were better. I ended up using JT44 only. I don't know why, but JT65C did not work at all this time. When I tried to QSO OE9ERC and DJ9YW in JN74, I didn't even see the synch tone or anything else. It was like there was nobody TXing. We then changed to JT44 and Erich's signal was up to –20 dB and synch of 4. We had a very good QSO. There must be something wrong with my version of JT65 or something I don't understand. HB9Q was not there and I missed the sked with F2TU. DJ9YW's signal was marginal, but we worked. I decided to us JT44 exclusively for the remainder of the dxpedition. The situation was a little better in JN75, but still hot. I QSO'd OE9ERC, DJ9YW and K2UYH there. I had a very bad headache and no sleep for 2 days, but have now recovered and am making plans for my next dxpeditions!

9A/DL3OCH dxpedition station

DJ9YW: Heinrich DJ9YW@t-online.de had his own problems from the unusually hot temperatures in Eur during the 9A dxpedition. His air temperature was 35°C and caused his PA to fail. His output power dropped from 540 W to less than 300 W! Despite the low power Heinrich was still able to QSO 9A/DL3OCH on JT44 from both locations.

DK3WG: Jurgen dk3wg@online.de sends the following tip for locating the e-mail addresses of Russian stations – try www.qrz.ru. He also supplied me with the following info for UT2EG: Vladimir Botvinov, P.O. Box 101, Krivoy Rog, UKRAINE 50071, and e-mail: ut2eg@ukr.net .

DL3YEE: Klaus dl3yee@gmx.de had been planning to return to EME on 23 cm, has had to put his plans on hold due to problems with the German PTT -- One Month ago I had a telephone call from the German PTT about some TVI and BCI in the TV behind my House. They made some tests and was told my problem is overload of the signal from my dish feed getting into the TV. Now for the first time, I have a restriction on my power to only 50 W on 70 and 23 cm! In future I hope to find a solution, but for the present I am QRT on EME.

DL8YHR: Frank DL8YHRFRANK@aol.com writes – I am near ready for 432 EME. I have a 4 x 9 wl yagi array and 1 kW. I just need to bring Antennas up on the tower. I expect this to be accomplished very soon.

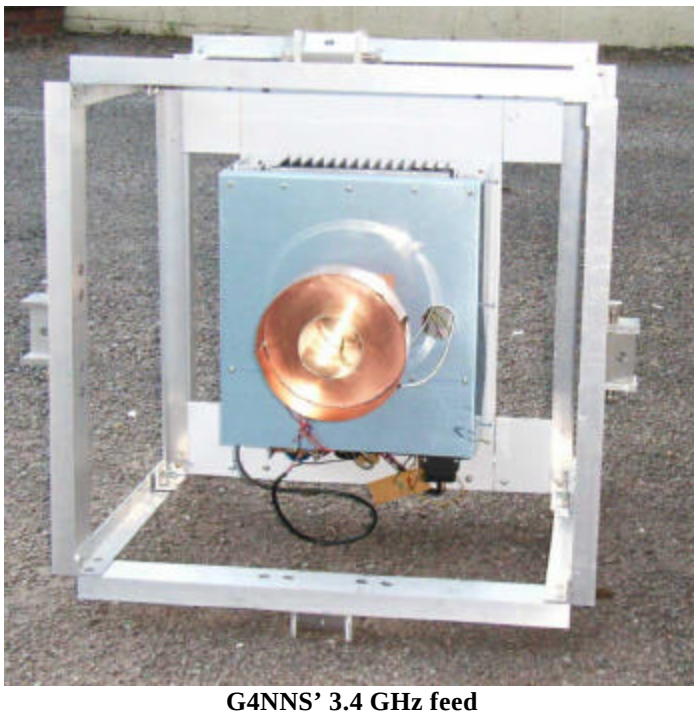
DL9KR: Jan bruinier@t-online.de reports that he was active during the end of July AW and worked SV1AWE and added 2 new ones, S54T and WB7QBS to bring him to initial #826.

EI/DL1YMK: Michael DL1YMK@aol.com plans to be QRV on 1296 from 21 Aug to 2 Sept Ireland (IO41tu) using a 4.1 m stressed dish with circ. polarization, 0.35 dB NF LNA and sufficient power – If everything goes smoothly with the setup of the station, operation will start on Sunday, 21 Aug at 2200 and end Monday, 22 Aug at 0800 (moonset). K1RQG is coordinating skeds. I'll also be available for contacts throughout the following week, and will and again on the AW, starting operation on Saturday, 27 July 0000 to 1415 and Sunday 0000 to 1530. The week after I'm also available until 2 Sept when the station will come down. If you would like a sked, please send Joe an e-mail with your proposal. I hope to have Internet access at the site (but if so, only slow analog). Also keep in mind that this operation is quite demanding and somewhat risky, as we will be at a location at the very southern tip of Ireland known to suffer from high winds. So all skeds will be notified 'weather permitting', as we may have to dismantle the dish at short notice because of stormy weather is moving in.

G3LTF: Peter g3ltf@btinternet.com reports – Despite visitors, 3 cm tropo from rare grids, local flower shows and other distractions, I did manage some EME activity. On 1296 on 30 July, I worked OH1LRY for initial #216 in KP10. They were running a 2.5 m dish and 250 W, but were good copy. I then worked IW2FZR, G4CCH, F2TU and IK2MMB. The next day also on 1296 I worked ZS6AXT, RW1AW, OZ6OL (2way SSB), SM2CEW, F1ANH, F8BPN/P (from F6KHM), W7UPF #217 and K9SLQ. I was interested to see that HB9Q worked K3MF on JT65 on the same day that I worked him on CW (see last month's report). He reported K3MF at –19 dB, my dish has 8 dB less gain and so I conclude that I am able to work stations using CW at a level equivalent to –27 dB with JT65. I report this out of interest only, not to make any point. On 8 August I learned that Brian, G4NNS was planning to test with W5LUA on 3456 MHz later that day. I quickly built a converter with a 56 MHz LO to take the 200 MHz IF generated by 3456 down to 144 MHz, and was delighted to find G4NNS first and then W5LUA within 3 KHz of the expected spot. Both were good copy (539/549). On 9 Aug I listened to a test between G4NNS and LX1DB on 3400.100. Both stations were good copy. Brian on CW was (549), and I could copy LX1DB's SSB perfectly. There was no wind and so the 6 m dish kept on the moon perfectly with the polar mount auto follow system and an occasional tweak on moon noise. I was using my HB 6 m dish with a VE4MA feedhorn and linear polarization adjusted to be vertical. I see 16 dB Sun noise at a SF of 92 and 0.65 dB of moon noise. The preamp is a modified DJ9BV design and the whole transverter is mounted at the focus with the 100 MHz TCXO (G8ACE design) in the shack. I just need to finish the SSPA and will be QRV on 3456.

G4NNS: Brian brian-coleman@tiscali.co.uk is now QRV on 3.4 GHz -- Until recently I have only used my 3.7 m cassegrain antenna for 10 GHz TX/RX and 24 GHz RX. I do not have sufficient power to TX on 24 GHz EME yet! To enable the antenna's use on lower bands, I have constructed a focus box. This box, which is a 500 mm cube contains a sliding section, which can support feeds for bands down to 23 cm and allow for finding the focus. I will eventually remote control this feature. For 9 cm and 6 cm I plan to have the transverter, pre amp and PA all housed within the focus box. For 13 cm and 23 cm only the feed and preamp will be located there. The first band to be tested has been 9 cm. My first QSO was with Al, W5LUA on 8 Aug on a frequency of 3456.100 MHz. The next day I retuned the transverter to the European segment and worked Willi, LX1DB on 3400.100 MHz. Unless anyone knows any better, I believe these contacts to be the first 9 cm EME from G. The equipment consists of DB6NT preamp and transverter and a Toshiba UM2683A amplifier modified as suggested by Dave WW2R and producing 40 W at the feed. Both QSOs were made using a VE4MA feed. Sun noise of about 13 dB and moon noise of about 0.4 dB were observed. John, G8ACE and Ronny, SM7FWZ helped with the installation and we were all delighted to hear echoes quite literally the first time the key was pressed, having already set the correct offset for Doppler. After working Willi, I only had one more day before the moon dropped below my horizon for the time being so I decided to quickly test the septum feed I had already constructed. It was clear that without the choke ring the dish was being grossly over illuminated as sun noise was only 10 dB. As the f/d of the dish is 0.43, this was thought to be mainly due to increased ground noise rather than lack of gain. A choke was quickly constructed before moon set and resulted in better Sun noise of about 11.5 dB and moon noise unchanged at around 0.4 dB. Subjectively echoes sounded much the same as with linear polarization. I look forward to contacting any other stations on this band and am available for skeds.

G4NNS 3.7 m dish used on 3.4 GHz



G4NNS' 3.4 GHz feed

I1PIK: Peter Peter i1pik@libero.it is a possible sked on 70 cm EME particularly on JT65. He has 100 W into 4x31 el HB yagis. His sun noise is around 14 dB

with a DB6NT preamp. He has had only one EME QSO with HB9Q and a partial with K2UYH.

I1PIK's EME array

K5SO: Joe k5so@direcway.com on 23 cm added PA3DZL for initial #37 at the end of July. He is still collecting sun noise data – see Joe's web site at k5so@direcway.com. He and W2UHI are developing a means to enable you to tracking your system performance based on sun noise measurements at varying solar flux. Joe reports that he lost 1 dB of Sun noise when he removed the Scaler ring from his Septum feed.

LA9DL: Just la9dl@online.no (JO59ke) is QRV on 70 cm EME with 4 long yagis and 200 W, and is available for skeds -– I QSO'd K2UYH on 30 July despite PA problems. While testing before my sked, suddenly the power (G1 and G2) dropped and a transformer overheated and failed. With some parts from another power supply, I managed to repair the unit, but the G1 voltage was low. With no drive the current was the same as full power! Despite this problem I was able to complete the contact.

LY2BAW: Tadas LY2BAW@takas.lt has QRV on 432 1 kW and a 31 el KLM yagi, but is limited to operation on the horizon. He is willing to take EME skeds on both CW and JT. Tadas QSO'd on 31 July K2UYH (O/O) on JT65C and copied signals on CW. He is also working on 1296 EME and already has much of the system in place.

N2UO: Marc (lu6dw@yahoo.com) sends his July 1296 EME report -- On 30 July I worked on 23 cm ZS6AXT, HB9Q, G4CCH, F2TU, HB9SV, OZ6OL and OH2DG. I also had a sked with IW2FZR, but there was confusion and we had to re-schedule for the next day. On 31 July, I worked G3LTF, IW2FZR for initial #62 and K9SLQ. I am busy building a completely portable system for 10 GHz terrestrial. It includes a 20 W TWT and waveguide relay, so it can be used in the future for 10 GHz EME with a larger dish that I already have in the basement.

OA4O: Dan, HB9Q dan@hb9q.ch sends the following update on activity from Peru -– OA4O will be QRV on 70 cm EME during the weekend of 13/14 Aug. They are running 100 W into an 8 m dish, and so far they have worked 10 initials. The frequency for the skeds is 432.030. All operation will be CW and they will be using 2.5 minutes sequence. OA4O will always TX second period. They will also be QRV random calling CQ, if they have no sked. They will listen for random calls on 432.033 only. Please do not TX (except for skeds) on 432.030! They have a "private" logger, which you may use to say hallo or to chat in case of a problem: http://www.artieda.net/hb9dri/oa4o.eme. [Skeds were listed for 7 stations, but I have received no reports of anyone hearing them].

OH1LRY: Janne and Petri (OH3MCK) petri.kotilainen@nokia.com made a small ad hoc EME dxpedition to Säkylä, Finland during the July AW. The main purpose was to test Janne's 3 m dish, which he acquired a few weeks ago. Janne had been working with the dish mount for the whole week when Petri arrived with his 23 cm equipment. On Friday morning, 29 July, they woke up about 0600 and started experimenting with dish pointing. In the beginning they did not have any means of finding the moon position and the WX was quite cloudy. They could detect their echoes using JT a couple of times and Janne constructed a visual aiming device using a couple of metal tubes. Then they worked G4CCH on sked using CW after correcting the pol sense - of course it was the wrong way at first. What added to their difficulties was that the mount was neither a proper polar mount nor Az/El mount. Furthermore it had a limited angular range, which meant that they would not operate with the moon much past Zenith. They thought their echoes were weaker than they should be and started looking at sun noise, which was only 6.5 dB. They tried to improve this level without much success, but did discover that they could move the whole system to a better location to extend their moon window. They also had problems with e-mail, which prevented them from confirming their skeds. On Saturday the weather was cloudy at first and we noticed that we were lacking elevation. This was fixed by installing some bricks under the dish mount to increase the tilt. However, finding the moon was still difficult due to the clouds. Later the sky cleared and the moon was visible for long periods of time. They worked OE9ERC, G3LTF and HB9Q, all on random CW. They also heard other stations calling, but they were just too weak to copy. They tried CQ on JT65C for some periods, but got no replies. One problem with JT65C was that they did not know where to listen as the Doppler shift could be as high as -2 kHz. The performance of Janne's dish did not seem quite optimal, but the system was operational. They lost only one preamp (in the middle of their QSO with G3LTF) and quite a few hours of sleep - hi. Petri, OH3CMK has moved back to Finland from Denmark and will now be regularly QRV from my home station on 1296 MHz. I am also going to install 432 MHz quite soon.

OK1KIR: Jan ok1vao@quick.cz sends news of the OK1KIR team – We were active only on 3 cm in July. We made contacts on 31 July with F2TU (O/O) for initial #26, G4NNS (O/O) #27, DL2LAC (O/O) and WA6PY (O/O) #28. We have ran a sked with GW3XYW on Saturday 30 July, but had problems switching between our 10,368 and 10,450 MHz band oscillators. Unfortunately Stu has some problem with his TX, when we were on the right band on Sunday.

PY2SRB: Silvio pru1078246@terra.com.br (GG48BC) is operational on 70 cm EME using JT65. He has only 100 W and a 21 el yagi with elevation. I have thus far QSO'd only HB9Q, but am willing to try skeds with larger stations.

PY2SRB's EME array – yagis for 2 m and 70 cm

SM2CEW: Peter sm2cew@telia.com was active on EME during the July AW. He had a partial with OK1TEH on 70 cm EME, and worked on 23 cm F8BPN/P (Mau) from F6KHM's QTH. Peter also copied N7AM calling K9SLQ, but 2 kHz high.

SM3BYA: Gudmund, SM2BYA sm2bya@telia.com plans to be QRV on 432 MHz from SM3BYA (JP81NX) during the 20/21 Aug weekend. This is a low moon declination weekend, but degradation is predicted to be low, so conditions might be okay. The rig at SM3BYA is 800 W to an 8 x 21 el yagi array with 0.4 dB NF receiver. I am looking for skeds for new initials including K3MF, S52RM and LU7DZ, but have received no response yet to my e-mails. Maybe that email never went out as the email system has been unstable all week and is currently down due to a faulty firewall. Anyone interested please e-mail me.

SV1AWE: Bob t_koulouris@yahoo.com was on holiday during the first few weeks of Aug, but before he left QSO'd on 70 cm on Saturday 30 July DL9KR and nil from SV1BTR, and on Sunday 31 Aug HB9Q. Both these contacts were on CW. Due to a conflict he missed his sked with K2UYH on Sunday.

SV1BTR: Jimmy jimmyv@hol.gr reports that conditions were were very disappointing on 70 cm during the AW with very weak echoes all the time. In the summer I have noticed that 90% of the time conditions produces vertical pol here. I heard and worked DL9KR (579/559) after his QSO with SV1AWE on CW. I heard K2UYH (559) during his sked with SV1AWE for 15 mins then he disappeared. Al was sending (Os and 559). I also heard SV1AWE for 2 periods.

Nil was copied from G4YTL and OK1DFC in skeds, but K3MF was worked with a very weak signal probably due to Faraday rotation.

UT2EG: Vlad ut2eg@ukr.net has been active on 70 cm EME for nearly a year with an excellent signal, but we have had little information on him. He is using a 16 x 17 el DJ9BV yagi array and 1 kW transmitter from KN67pw. His mailing address is VLADIMIR BOTVINOV, MIRA STR., 41-18 KRIVOY ROG, 50069 UKRAINE.

VE4MA: Barry ve4ma@shaw.ca went to the CSVHF Conference and sends the following report – Many of the EME crowd were there including K5JL, K5SO, KL6M, K0YW, W5LUA, W7CS, W7QX, WB0TEM, WD5AGO, W5RCI, K0RZ, WA5VJB and others. Gary AD6FP was not present, but was awarded the John Chambers award for technical excellence. I am (finally) on vacation for the next week and hope to make some real progress in getting the ham shack back in EME shape. W5LUA and I are continuing to work towards 80 GHz EME, but have a huge amount of work to do. The usefulness of our 47 GHz dishes on 80 GHz is certainly a big question mark. We need to look at dish performance with sun noise, etc, and probably need to get preamps built before we see anything significant.

VE6TA's new 18' dish under construction

VK2ALU: Lyle has a new call (VK6ALU) and QTH – I recently moved to "VK6 land" and was able to obtain a callsign that included the "ALU" part – over 58+ years of amateur radio! My wife and I made the move (> 3,000 km) to be nearer our children. At 81 years my health is not quite what it was when I was younger. We sold our house in Wollongong and are now located in a retirement village (294/41 Portrush Parade, Meadow Springs, W.A. 6210 Australia). Unfortunately restrictions preclude the installation of a dish or even a beam antenna. I had to sell (or give away) much of my radio equipment. I still have my portable 10 GHz gear, but it is too small for EME. The 10 GHz EME station went to a VK3 in Victoria. He already has a 4 m dish and hopes to be up on 3 cm soon. My 3.7 m dish will be used for Space Radio Research (primarily sun noise measurement) in a new facility near Camberra run by a University in Sydney. I am afraid my over 30 years of EME activities have been forced to come to an end, but I retain great interest in learning what other amateurs are achieving on EME in the EME Newsletter. I still have some letters which I received prior to the first "432 and Above EME News" and also about all the issues. There are still many challenges to meet – and for me EME communications on 432, 1296 and 10 GHz was one of them!

W2WD: Warren wbutler@comcast.net our EME email list coordinator has been experimenting with JT on 432 using his single long yagi – I got N9AB using JT65B after starting with JT65C. He was rock solid copy with both modes. Each year I think about making a trip back to Nebraska for another EME dxpedition. At 85 years of age, the 1200 mile auto trip is a large hurdle. I might still do it, but I wouldn't bet on it.

W5LUA: Al al_ward@agilent.com reports working G4NNS on 3456 [9 cm]. He is working on the new 23 cm xvtr. He reports seeing 7.2 dB CS/G noise with an W2IMU feed and only 5 dB with Septum feed [on 23 cm ?] K5GW saw 7 dB with VE4MA feed. Al would think that JT calling freq should be far above the CW area, but .080-.090 is agreeable. He would like it much like the 6 m band.

ZS6AXT: Ivo zs6axt@telkomsa.net had been suffering from a terrible flu, but is now over it and reports -- On Saturday 30 July I started quite early on 23 cm, but no stations were heard for long time. Then finally JA6AHB came back to my CQ; later ON7UN replied with a very healthy signal. Much later IW2FZR called me and we made it, finally for my initial #199 despite apogee losses! Then OH2DG, F2TU and N2UO were worked before the end of my window. Also copied were HB9SV and IK2MMB. Pity for the low activity as signals were very good. On Sunday the 31st, I worked RW1AW and after that my EL actuator refused to lift my dish up. Thus I put a note on MOON-NET, but after the moon passed north of me, the EL was again right for a while and I worked G3LTF. In the afternoon I took EL drive down for an inspection. Well, just the UP limit switch was stuck in the off position. But the motor was still quite noisy. This is a brand new actuator. Gears were OK, but I could not manage to dismantle the motor cover – another mechanical trouble! So I'm shopping for another one, but will have to use this one in the meantime. My new EL sensor with ADXL311 is working. I hope to install it soon to have a more accurate EL indication. I hope to be more active and will be looking for contacts during the Aug AW.

ZS6OB: Hal (ZS6WB) zs6wb@telkomsa.net writes that Pine (ZS6OB) janpienaar@ananzi.co.za ran a demo of JT on 432 EME at his QTH on Saturday, 30 Aug – The purpose of the demonstration was to both show JT operation to EME newcomers and to test a 432 MHz 4 yagi array on EME constructed by Pine (for a Johannesburg-area ham not planning EME operation). Other attendees included ZS6JDE, ZS6KM, ZS6PJH and ZS6WB and during the session all completed EME contacts using their own calls with HB9Q and N9AB. Hannes, ZS6JDE jdenslin@mweb.co.za has just returned from his July 144 MHz EME operation as 9J2JD and this was his first exposure to 432 MHz EME operation. A Yaesu FT-736R driving a Tono 60 watt amplifier with a built-in preamp was used to make the QSOs. The antenna system consists of four 22-element K1FO design Yagis and was fed with about 30' of hardline. When the array is completed it will also have four 144 MHz Yagis added to it. Hannes will be returning to Zambia early in Sept with an stop in Malawi, and expects to operate 144 MHz WSJT EME & MS from both countries. His duties will probably also take him into other Southern Africa countries in the next few months, and is considering adding a 432 EME capability. [Unfortunately there was little advanced publicity, so few stations knew of the demo. More 432 JT EME tests are now planned for late Sept to see what kind of results they can get with a small array. They are considering using 2 yagis for 144 & 432 stacked side by side to see how many stations can be worked. I will keep you informed as I receive further information].

ZS6OB EME Tests – L to R: ZS6JDE, ZS6KM & ZS6OB

K2UYH: I had good luck generating skeds for the end of July AW. I contacted by e-mail new stations on HB9Q's 70 cm initial list whose e-mail addresses I could locate - TNX Dan. Dan has almost 6 dB more antenna, more TX power, and probably does not have my noise/birdie problems, but it give me something to shoot for, and I had some successes. The weekend started on Friday 29 July Thursday night when I QSO'd on 1296 at 9A/DL3OCH for a new DXCC* 47 and initial* 240. Bodo had problems with JT65C and switched over to JT44 at his 2nd location. Signals were weak, but produced a solid QSO. The extra 2 dB of path loss this month did not help. Activity on 30 July started on 70 cm at 0800 with a partial I1PIK (O/-) on JT65C – Peter was using a single yagi and 100 W, 0830 nil UT2EG on CW – I was late, 0900 partial SV1AWE (559/-) on CW – Bob could not hear me and 0930 LA9DL (O/O) on CW for initial* #697. I switched to 1296 at about 0950 to try to catch OH1LRY before they lost the

moon. OH1LHR was good copy (559), but I found no output from my driver – a pot in the heater circuit went bad. I patched in a smaller amplifier. This gave me about 150 W, but I was not able to get more than a QRZ from them. I should have tried JT65C. I switched back to 432 at 1200 nil PY2SRB on JT65B who was using one yagi and 50 W, 1300 nil LY2BAW on JT65B using 1 yagi and 1 kW on the horizon – WX problems at Tadas' end and 1400 nil EA6VQ on JT65B using one yagi and 100 W. The next day, 31 July I worked at 0830 UT2EG on CW # 698* and 1400 LY2BAW (O/O) on JT65C for DXCC* 86 and #699* – we tried switching to CW, but there was confusion over the sequencing (2.5 min vs. 1 min) and 1430 nil OH1JCS on JT65C. JCS was using 50 W and 1 yagi. I believe we had the sequencing reversed. We tried again on 2 Aug for a partial (O/-). I also partials on 6 Aug at 1730 LY2BAW signal heard on CW both ways and 1830 EA6VQ (O/-) on JT65C. This was the first time in years that I have worked new countries on both 70 and 23 cm during one weekend.

NETNEWS BY G4RGK: **K7LNP** in ID has his 432 EME array up and is very pleased, but feels his yagi booms need more support and is working on extra bracing. **W9IIX** is experimenting with using a GAP HearIt DSP audio processor to improve EME copy. **WB7QBS** is QRV on 70 cm EME and worked DL9KR during the July AW. He is still having problems with antenna tracking. **HB9Q** plans to be QRV for skeds only on 19 Aug at 2100 to 0430 on 20 Aug, on 20 Aug at 1940 to 0600 on 21 Aug, 27 Aug at 2200 to 1330 on 28 Aug. Contact Dan for sked at dan@hb9q.ch. **WA9FWD** is working on the 70 cm feed for his dish and will be looking for K7LNP on 70 cm his 50th state! John is close to having 5760 running for the ARRL EME Contest. **K9SLQ** worked on 1296 during the July AW N2UO, ON4UN, IW2FZR and SM2CEW. F8BPN/P was on with a Big signal. Who is he? [Same as F6KHM]. **WA4PGI** in VA has 40 W on 3 GHz and a 10' dish. **VE6TA** has just about completed a new 18' dish. **K0RZ** reports trying with K3MF on 70 cm, but was not successful. **WD5AGO** is working on 13 cm preamp. **VE6AFO** has moved and is now interested on EME again. **VE6NA's** interests have drifted away from EME. **DL7APV** is hoping to have a new 70 cm EME antenna up by the ARRL contest. Bernd will have the array vertically polarized. **KL6M** has been working on his 23 cm system and plans to be ready for the dxpeditions at the end of Aug. Mike is also working on 222 EME.

FOR SALE: EMEer **UR4LL** has over the years proved to be a reliable source for high power tubes and other hard to find power components (HV RF capacitors, relays, etc). Available components and prices can be found at www.nd2x.net/ur4ll.html. Contact Alex directly at ur4ll@bk.ru. **K0RZ** is looking for more K1FO 22 el yagis, preferably Rutland arrays.

JT65B CALLING FREQUENCY: Andy, N9AB andrew_bachler@msn.com and I have been discussing the need for a JT CQ calling frequency on 70 cm. After considerable discussion, we would like to propose that 432.065 be used for this frequency with 432.080 as a possible alternative. We recommend that 1) the station calling CQ always use the first period and 2) that JT65B be used exclusively for JT CQs on this calling frequency. We have kept the frequency below 432.100 because of tropo activity in NA. 432.100 is the NA tropo calling frequency. During contests there can be considerable tropo activity from 432.090 up. TX should be as close to 432.065 as possible. On RX, the Doppler shift can be a problem as you don't know where a station calling CQ is located. In the worst case on 70 cm about a ± 1 kHz error is possible; however knowing where the moon is located you can always select an RX offset that will limit the total Doppler frequency uncertainty to < ± 500 Hz. This value is within JT's frequency window (+/- 600 Hz) even allowing for a ± 100 Hz frequency error. Using Spectran along with JT will allow a weak signal with even ± 0.5 kHz of frequency error to be found. In the case of birdies the alternative (.080) frequency could be used, but until a calling frequency is well established, we recommend that just one frequency be used (.065). Please let Andy and I know your thoughts regarding this proposal. If we do not hear too many negatives, we will start using "pushing" 432.065.

ARI "NEW MODES" EME CONTEST: Mario, I1ANP mario.alberti8@tin.it, the ARI EME Coordinator announces that the ARI is sponsoring a new EME contest for digital modes in 2006 with the following rules: [only the rules that relate to operation on 432 and above have been fully reproduced here]: Period: from 0000 1 April to 2400 2 April. Bands: 50 Mhz and up, only via Moon reflection. Modes: those modes in which message decoding is charged to a computer, whilst validation and QSO management are effected by the human operator. If during the contest no information has been received, specifically regarding frequency and calls, the QSO is considered "random", otherwise "assisted". Categories for bands 144 and 432 MHz: Stations are subdivided by power and type of antenna employed. For yagis the total length, in wavelengths is considered (distance reflector–last director multiplied by the number of yagis in the array), for parabolic reflectors the dish diameter is considered. (At 432 1 wl = 0.694 m = 27.340"). Band 432 MHz (A, B, C, D, E): Yagi <= 18 wl with pwr < 250 W = A, with pwr > 250 W = B; Yagi >18 wl & <= 36 wl with < 250 W = B, with pwr > 250 = C; Dish <3.05 m (10') with < 250 W = B, with pwr > 250 = C; Yagi >36 wl & <= 72 wl with < 250 W = C, with pwr > 250 = D; Dish <3.05 m (10') & <4.57 m (15') with < 250 W = C, with pwr > 250 = D; Yagi >72 wl with < 250 W = D, with pwr > 250 = E; and Dish <4.57 m (15') with < 250 W = D, with pwr > 250 = E. Bands 1.3 GHz and up: One category per band, independently from power and antenna. Down classing: If the first of each category scores less than the first of the lower category, the whole category is moved into the lower category. Points: For bilateral "random" QSOs: 10 points, 31 points with Italian stations, 10 points between Italian stations. For bilateral "assisted" QSOs: 3 points, 11 points with Italian stations, 3 points between Italian stations. Italian stations, and eventual foreigners operating in Italy, will be classified separately from the rest of the world. SWLs: The station heard can be inserted as correspondent twice maximum. Points: 10 for each station heard in QSO, 31 if Italian. Prizes: The first in each category will receive a prize. A certificate will be sent to all the participants who sent in a log. If somebody wins more than one category, he gets only one prize and certificates for the other categories won, while the prize for these categories goes to the second placed and will be so inscribed. Log: They can be sent also by e-mail to mario.alberti8@tin.it (and will be confirmed upon reception), or by mail to Mario Alberti – Via Privata Maralunga 12 – 19126 La Spezia – Italy. Logs should be sent within 30 days from the contest. The log must contain a general section with Call, Name, Address (including e-mail if have), QTH Locator, Band, Category, PA Power, Antenna dimensions and type. The QSO log must contain Date, Hour, Mode, Call, R (random) or A (assisted), Points, and Total Points. Comments and other info are welcome.

FINAL: I sadly report that we have lost another EMEer who will be greatly missed. Peter, G4ERG is silent key. He is reported to have died from lung cancer. I have little other information, but remember working him many times on 70 cm EME.

The Weinheim VHF Convention will be celebrating its 50th Anniversary on the 10/11 Sept! The Karl Kübel School in Bensheim is the venue for the lectures and exhibition on Saturday 10 Sept and the more informal events will take place at the DL0WH clubhouse in Weinheim on Sunday 11 Sept. More information can be found on their home page at www.ukw-tagung.de.

Microwave UpDate (MUD) 2005 will be held this year in the Los Angeles area on 27 – 31 Oct and invites interested authors to present a paper(s). MUD is a premiere microwave amateur radio conference with many people around the world collecting the conference proceedings. This is a great opportunity to get your ideas and papers published! You don't have to give a talk to get your paper included in the proceedings. Electronic submissions in Word, WordPerfect or text formats will be accepted by e-mail or CD. The cutoff date for inclusion in the proceedings is 5 Sept. If you are interested please e-mail n6ca@ham-radio.com or write: N6CA, PO Box 35, Lomita, CA 90717-0035. More information MUD 2005 can be found at http://www.microwaveupdate.org.

This month we have the remainder of HB9Q's Top List for the 13, 6 and 3 cm bands. Dan asks that you go to the EME INITIAL LIST page at www.hb9q.ch http://www.hb9q.ch/ to up-date your standings and see the complete list.

Good luck with the dxpeditions, I shall be looking for you off the moon. 73, Al – K2UYH

DXPEDITION SKEDS FOR THE AUG AW

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21 Aug
Time   1296.045
2300z  EI/DL1-OE9ERC
2330z  EI/DL1-DJ9YW
22 Aug
Time   1296.045
0330z  EI/DL1-G3LTF
0400z  EI/DL1-F2TU
0430z  EI/DL1-OZ4MM
0500z  EI/DL1-HB9Q
0530z  EI/DL1-K2UYH
23 Aug
Time   1296.045        1296.050
0300z  EI/DL1-N2UO
0400z  EI/DL1-OZ4MM
0500z  EI/DL1-DJ9YW
0700z  EI/DL1-W5LUA
2130z                  C31TLT-CQCW
Continued…
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24 Aug
Time   1296.050
0400z  C31TLT-OE9ERC  JT65C
0500z  C31TLT-OE9ERC
0530z  C31TLT-IK2MMB
0600z  C31TLT-SM3AKW
0630z  C31TLT-F2TU
0800z  C31TLT-CQJT65
2230z  C31TLT-OH3MCK  JT65C
2300z  C31TLT-CQCW
25 Aug
Time   1296.045       1296.050
0000z                 C31TLT-CQJT65
0200z  EI/DL1-OK1KIR
0300z                 C31TLT-OK1KIR
0330z                 C31TLT-SM2CEW
0400z                 C31TLT-OZ4MM
0430z                 C31TLT-HB9Q
0500z                 C31TLT-DJ9YW   JT65C
0530z                 C31TLT-K5GW
0600z                 C31TLT-K5JL
0630z                 C31TLT-K2UYH   JT65C
0700z  EI/DL1-K2UYH
0800z                 C31TLT-K2UYH
0830z                 C31TLT-W5LUA   JT65C
0900z                 C31TLT-K5SO
0930z                 C31TLT-WA6PY
1000z                 C31TLT-W5LUA
26 Aug
Time   1296.045       1296.050
0330z                 C31TLT-EI/DL1
0400z                 C31TLT-SM3AKW
0430z                 C31TLT-OH2DG
0500z                 C31TLT-9H1ES
0530z                 C31TLT-VE1ALQ
0600z                 C31TLT-K5GW
0630z                 C31TLT-PY5ZBU
0700z                 C31TLT-K0YW
0830z                 C31TLT-WA6PY
1000z                 C31TLT-KL6M
1030z  EI/DL1-KL6M
1100z  EI/DL1-K5SO    C31TLT-N2IQ
1130z  EI/DL1-K5JL
27 Aug
Time   1296.045       1296.050
0600z                 C31TLT-ES6RQ
0630z                 C31TLT-ZS6AXT
0800z                 C31TLT-PA3CSG  JT65C
0830z                 C31TLT-OH3MCK  JT65C
0930z  EI/DL1-PA3CSG
1000z  EI/DL1-VE1ALQ
1030z  EI/DL1-WB5AFY
1100z  EI/DL1-WA6PY
1130z  EI/DL1-N2IQ
1200z                 C31TLT-N2IQ
28 Aug
Time   1296.045
1200z  EI/DL1-W5LUA
1230z  EI/DL1-K5GW
30 Aug
Time   1296.045
1500z  EI/DL1-HB9JAW
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HB9Q's TOP LIST

13 cm

Pos.	Callsign	Initials
1	OE9ERC	66
2	W5LUA	53
3	OZ4MM	50
4	OK1KIR	41
5	SM3AKW	37
6	ZS6AXT	35
6	F2TU	35
7	JA4BLC	32
8	OK1CA	25
8	K2UYH	25
9	SK0UX	24
9	WA6PY	24
10	GW3XYW	23

6 cm

Pos.	Callsign	Initials
1	OE9ERC	25
2	W5LUA	21
3	OK1KIR	17
3	F2TU	17
4	CT1DMK	16
5	ZS6AXT	13

3 cm

Pos.	Callsign	Initials
1	W5LUA	50
2	F6KSX	40
3	AA5C	34
4	F2TU	29
5	I5PPE	26
6	OK1UWA	25
7	CT1DMK	22
8	G4NNS	19
8	OK1KIR	19
9	PA0EHG	17
10	I4TTZ	16