## 432 AND ABOVE EME NEWS AUGUST 2010 VOL 38 #8

EDITOR: AL KATZ, K2UYH; DEPT. ELECTRICAL/COMPUTER ENGINEERING, 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: TOM KIRK, KA2VAD (609-584/8424), E-MAIL kirkt@lintech.com

NETNEWS EDITOR & INITIAL LISTS: G4RGK, DAVID DIBLEY, E-MAIL g4rgk@btinternet.com.uk (based on K1RQG's Netnotes & Reflector News)

EME NETS: 14.345, 10 AM ET SATURDAY AND SUNDAY (AFTER VARO NET ENDS ON SUNDAY)

NET CONTROL AND SKEDS COORDINATOR: 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@snafu.de

NL EMAIL DISTRIBUTION and EMAIL LIST CORD: WARREN, W2WD wbutler@ieee.org [TXT OR PDF OR "ON WEB" NOTICE]

THE NL WEB VERSION IS PRODUCED BY REIN, W6SZ AND AVAILABLE AT http://www.nitehawk.com/rasmit/em70cm.html

CONDITIONS: Late June/early July was not the best of times for EME activity or conditions, but considering the poor alignment of the Moon, Sun and declination, it was no too bad. The high point of the period was the 6 cm Activity Weekend (AW) on 10/11 July for which reports are just coming in. It is clear that there was an excellent turnout. OK1KIR made 18 QSOs the first day. In July the AW is on the 17th/18<sup>th</sup> with the Moon well into southern declination and the 70 cm CW activity time period (ATP) is not until two weekends later on 31 July from 2200 to 0000 and on 1 Aug from 0700 to 0900. There are possibilities for 70 cm dxpedition activity by OH0/DK2ZF from Aland Island (KP00) on 432 between 9 and 21 Aug with 2 x 19 el X-pol yagis and 500 W. Also 9Q1EK is still in the Congo and could come on 432 at anytime with 4 yagis. Dxpedition activity for Sept is planned by OK1DFC for ZA and later by DL3OCH for KH0. The event not to miss is the International EME Conference, EME2010 in Dallas on the 11<sup>th</sup> through the 14<sup>th</sup> Aug – see details at the end of this newsletter (NL).

**4Z5LV:** Alex alex70@barak-online.net has been around VHF and EME for a while, but is now apparently getting interested in 1296 EME. He presently has only a 1.8 m dish and relatively low power (14 W) that will be increased soon. We will hopefully see regular 23 cm EME activity again from Israel (KM72oc).

**DJ3FI:** Hubert <a href="https://https



DJ3FI getting ready to put his 3 m dish in place.

**DL3OCH:** Bodo dl3och@gmx.de is on the road again -- I am in BV (Taiwan) but do not yet have any equipment here for 70 and 23 cm. However, I am planning to be QRV on these bands. I have to go home soon and will take equipment with me when I return. The 70 cm set up will probably be similar to the one used at 5N0EME. For 23 cm I will only take my transverter and yagi. Activity on those bands is possible in Sept and/or Oct. I am not sure yet about the call. It might be BV2A that I have already used on 2 m. In the beginning of Aug I will take two weeks of vacation and activate on shortwave KH2/KT3Q and KH0/KT3Q. I will look for a nice EME location. In Nov or maybe Dec, I plan to be on 23 cm from KH2 and on 23 cm and 2 m from KH0. I will give you more information when just as soon as my plans solidify.



PI9CAM was recently visited by the DL1YMK dxpedition team and also PY2BS. Shown above (top) is Michael and Monika with PA3FXB at the big dish – see report later in this NL.

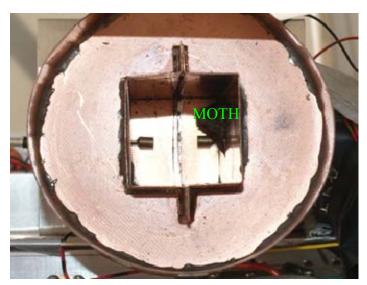
<u>F2TU:</u> Philippe <u>f2tu.philippe@orange.fr</u> sends news on the 6 cm AW – An excellent first day! A storm come at 1630, but after all the activity. QSO'd were SV3AAF, OK1CA, OH2DG for an initial 37#, PA0BAT, G3LTF, JA6CZD, ES5PC, JA8ERE, DL4MEA 38#, G4NNS, OK1KIR, LX1DB, ON5TA, VE4MA, CT1DMK, WA6PY 39#, DF9QX #40 and WD5AGO.

F5SE: Franck kozton@free.fr sends news on his dish progress, which had been slowed by his recent heart attack -- Things are going slowly, but never stopped. I replaced the solid rubber wheels that roll on the rail track with cast iron wheels. Things have drastically improved. The whole system can now be rotated by a single man using a single arm! I am presently working on improving the elevation drive by adding an extra activator. This work is presently under way. More about this later when (and if) it works. My preamp and horn difficulties (see my last report) are not solved, but at least understood. I replaced the W2IMU feed by an EIA dual dipole feed. The preamp is now stable, but another problem arose. On the spectrum analyzer, I have noticed a lot of powerful signals, between 800 and 1200 MHz, which I never noticed with the horn. Some of these signals are so strong they probably overload the preamp. Anyway, with the EIA feed, I have about 19 dB of sun noise, against 16.5 dB on average with the horn. Still 3 dB are missing in order to "fit" the theory. I found two reasons for this. 1) The preamp is somewhat overloaded by unwanted signals outside of the band, not filtered by the EIA antenna (the horn does filter out all frequencies below its cut-off frequency, as you do know). 2) The radiation pattern of the EIA antenna is too broad for a 0.6 F/D dish, resulting in a lot of side lobes picking up ground noise and stray tree noise all around the dish. The high power

SSPA is still on the work bench, and I still have to build a septum feed, which I hope should give much better results than the old W2IMU feed. Well, as you can see, no time to get bored! I hope to be back on the Moon with full power by late Sept.

G3LTF: Peter's g3ltf@btinternet.com June EME report -- Not very much to report this month. I worked on 1296 on 5 June OZ6OL and OK1KIR and on 6 June G4CCH and SV3AAF. I was on 6 cm and worked on 12 June PA0BAT for initial #12 and SV3AAF and on 6 June G4NNS, W5LUA and SV3AAF, and on 19 June PA0BAT. I am hoping we shall have a good turnout for the 6 cm AW on 11/12 July. On the construction side I am working on a 2.4 m dish and mount for 3 cm. [Correction] I'm afraid photo that appeared in the last NL is mislabeled. It is not my 6 cm feed, but in fact a photo taken through the dish mesh of the moon in a gap in the trees during the DUBUS 23 cm Contest during my JA and VK window. The feed is of course my 1296 feed. I do not like these low declination weekends for contests. [I agree - hi!!]

G4NNS: Brian brian-coleman@tiscali.co.uk had a very successful 6 cm AW completing 16 QSOs and adding 4 initials. He included the follow report as he says for your amusement -- It's always difficult to pick up the Moon using the noise power indicator as the Moon rises through the tree tops. But I was really struggling at the start of the 5.7 GHz AW. When I eventually found my echoes, they were very weak. I managed a JT4G QSO with OK1KIR, but when I tried CW with DF9QX I realized something was badly wrong with my RX. My first suspicion was that the Sun, which was only separated from the Moon by a few degrees, might be in a side lobe. I decided to check the Sun noise. It was down from 12 dB to 8 dB. I am no stranger to defects in my receiver and indeed hold a coveted "Cloth Ear" award to prove it. This award was won nearly 40 years ago when with I was G8AZU/P and operating on 70 cm. This award occupies a place of pride on my shack wall. Not being one to give up easily, I lowered my 3.7 m dish to check the transverter and feed in hope of a simple fix. Like a reasonably competent engineer I decided to start by inspecting the CP feed, (hoping as I peered in that the TX was not on). Sure enough I spotted the problem right away, a large moth had taken up residence at the RX port of the feed - see photo. Lucky for him he hadn't chosen the TX port! After taking some photos, I persuaded the moth to fly away. On re checking the Sun noise, it was back to 12 dB. Moon noise was back to ~0.6 dB and my echoes and other signals were back to normal. VK3UM's EME Calc program suggests that the 4 dB reduction in Sun noise translates into a 3.7 dB system NF, which I am able to confirm is not really good enough for EME on 5.7 GHz. I wonder if this entitles me to apply for the "Moth Ear" award to go with my "Cloth Ear" award? Please note that no moths were harmed during this incident.



Moth in G4NNS' 6 cm septum feed

**GM4PMK:** Roger marsport@marsport.org.uk is now QRV on 23 cm EME from IO66, Isle of Mull (EU-008) on JT65C but plans to also be active on CW very soon. He has an excellent signal with from a 3.2 m dish with 100 W and has QSO a number of stations. His web page can be reached at www.marsport.org.uk.

**K5QE:** Marshall <k5qe@sabinenet.com> has been more an EME operator on 2 m than 70 cm, but decided to give 432 EME a try during the ARRL's June VHF Contest. He set up from a rare Texas grid (EM31) and did it in a big way with 16 x 28 el M2 yagis (all horizontal), 1.1 kW of TX power and a tower mounted

preamp. Unfortunately Marshall did not feel his effort was worth the return. He made only 4 EME QSOs with K2UYH, DL7APV, DK3WG, and I1NDP – all on JT65B, although he made a point of looking for CW. W7AMI saw them calling CQ, but did not get their attention. Part of their problem was the close proximity of the Sun and the Moon which limited Moon time to a Sunday. Marshall also had a very large number of very nasty birdies all over his waterfall screen. He has not given up on 70 cm and says — I will work on the improvements and be back in Sept. If you want/need me to show up and work you in one of the EU contests, you just need to send me an email and I will make every effort to show up and give you a point or two.



K5QE's 432 16 x 28 el M2 yagis

**OK1KIR:** Tonda and Vlada vladimir.masek@volny.cz report on their club's June/July activity – We worked in June on 432 on 8 June at 0414 LA/DL2NUD (25DB/O) JT65B for digital initial {#36}, on 1296 on 5 June at 0813 SV1DNU (23DB/20DB) for digital initial {#61}, 0847 ZS5Y (27DB/18DB) {#62}, and on 8 June at 0648 LA/DL2NUD (20DB/O) {#63} and JQ field and 0759 PY2BS (559/559) CW for initial #298, and on 5760 on 19 June at 1733 PA0BAT (559/559) CW for initial #38, 1738 G4NNS CW (559/559) and at 1749 G4NNS using JT4G (25DB/O) for digital initial {#3}. During the first day of the 6 cm AW, there was great activity. We worked on 10 July at 0256 OK1CA (559/569), 0335 OH2DG (559/559), 0350 PA0BAT (559/559), 0403 JA8ERE (559/559), 0413 SV3AAF (559/559), 0446 ON5TA (O/O) for initial #39 and the first ON/OK 6 cm QSO, 0535 G3LTF (559/559), 0625 JA6CZD (559/549), 0721 DL4MEA (559/539) #40, 0734 ES5PC (549/559), 0813 G4NNS (559/559), 0824 F2TU (559/559), 0922 LX1DB (579/569), 1005 DF9QX (O/O), 1335 WA6PY (O/O) #41 and DM field, 1359 CT1DMK (559/559), 1438 VE4MA (549/549) and 1525 WD5AGO (549/549). In total 18 QSOs were made even though some obvious stations were not active due to other commitments. We were also heard by SP6GWN, who CWNR due to his low TX power (10 W). Many TNX to G3LTF for organizing the 6 cm AW.

OKITEH: Matej oklteh@seznam.cz has completed another milestone with his single yagi -- Just one new note for next newsletter, in May I worked my 50th mixed initial on 70 cm with LX1DB on CW. Signals were FB both ways. I'm waiting for PY1KK's to install his new 70 cm I kW SSPA to complete 70 cm WAC with single yagi, then I'll be able to upgrade my system.

PA3DZL: Jac PA3DZL@planet.nl updates us on his activity 23 and 13 cm EME activity – I QSO'd on 23 cm on 18 May at 1825 R2/DL2YMK (O/O) on CW for mixed initial #102\*, DXCC 42 and sector 159, 1843 PA3FXB (15DB/19DB) on JT65C and 1900 UA3PTW (16DB/O) on JT65c #103\*, on 20 May at 1919 PA0BAT (14DB/17DB) JT65c, 1931 IK5QLO (24DB/O) JT65c and 2003 W3HMS (O/O) JT65c, on 22 May at 1733 G3LTF (559/559) CW, 1803 SV1BTR (559/549) CW, 1903 SM4IVE (539/539) CW #104\* and sector 160, 1947 PI9CAM (559/559) CW, 1957 OK1DFC (559/559) CW, 2006 SD3F (549/549) CW, 2016 DL0SHF (579/539) CW, 2022 G4CCH (549/559) CW, 2032 DF3RU (539/539) CW, 2128 DL4MEA (549/549) CW #105\*, 2150 IZ1BPN (559/519) CW #106 and sector 161 and 2202 OK1CA (549/559) CW, and 23 May at 1656 LZ2US (559/549) CW, 1710 F2TU (559/539) CW, 1916 OZ4MM (559/549) CW, 1942 SP6JLW (559/559) CW #107, 2033 IK5QLO (25DB/O) JT65c, 2053 G4CCH (11dB/13 dB) JT65c, 2139 PA2DW (O/O) JT65c #108\* and 2207 OK3RM (18DB/O) JT65c #109\* and sector 162, on 24 May at 1800 ZS5Y (28DB/O) JT65c #110\* initial and sector 163, Best -28, and on 07 June at 1055 N4PZ (O/O) CW for #111 and sector 164. I worked on 13 cm on 17 May at 0800 VK7MO (22DB/O) JT65c for mixed initial #25\*, and on 17 May at 1550 R2/DL1YMK (O/O) CW #26\*, DXCC 21 and sector 53.



PA0PLY has re-aligned his dish and found his 23 cm feed position was off by 10 cm. The changes improved signals remarkable. He also increased his power to 200 W. He had his son paint the dish to add some pizzazz to his garden. Jan hopes to be on 3 cm EME for the ARRL contest in Sept.

PI9CAM: Jan (PA3FXB) jvmmap@bart.nl reports on the highlights of the last few months -- We have been able to activate the big dish one day every month. In April we even managed two days. We were QRV on 26/27 March and QSO'd on 70 cm 8Q7QQ for the first PA-8Q, and on 23 cm we finally completed with LY2BAW for the first PA-LY. Tadas cannot elevate his dish so we only have a chance on his moonset. Both these QSOs were on JT. On 18 April we had a long test with VK7MO on 23 cm. We tested a new digital mode called "ROS" on EME that has seen some use on 144 EME. We saw one good decode from Rex in ROS. We ran out of time and did not complete a QSO in ROS, but it should have been possible. Rex has written a fine article for DUBUS magazine about his findings with ROS. It seems ROS has no real advantages over JT65. We continued on JT65c, while Rex was using his software to eliminate the frequency change due to Doppler shift. This worked very well and we could easily copy him down to 0.5 W. After the Moon window with Rex closed, we worked VK2JDS and VK4CDI with 1 W on JT65. On the same day we managed to do what we believe is the first EME SSTV QSO on 70 cm with HB9Q! Pictures looked more or less the same as on 23 cm a few months earlier. On 25 April we were mainly on 70 cm because of the DUBUS contest. It was nice to be in a CW pile-up on EME. During this contest we were also active on the HB9Q-logger to try to find new/small/beginning stations for 70 and 23 cm. This is the reason we only sent in a checklog for the DUBUS contest. For quite a few stations, we have been their first "ever" EME contact. Most of the time these contacts are arranged via the logger. Helping people to get started on EME is highly motivating for us, as well as for the other station, this is why we made this choice. On 22 May we were mainly on 23 cm in the DUBUS contest. But the highlight of our weekend was on 70 cm! Our "own" guys (PE1L, PA3CEE and PE9DX) were on Mauritius as 3B8EME. They were mainly active on 2 m and had very good results, but they were also on 70 cm with one yagi and 50 W. We were happy to have a QSO with them in JT for the first PA-3B8. Another milestone in May was completing EME OSO number 1000 after only two years of becoming active with PI9CAM. We were very happy and opened a bottle of champagne to celebrate. On 12 June we had a "sunny" day at PI9CAM. The sun was very close to the Moon, but our dish has a very narrow beam of approximately 0.5 degs on 23 cm and approximately 2 degs on 70 cm. We wanted to see if it was possible to do EME under these conditions. On 23 cm we could see no difference from normal operation. Echoes were as strong as always and received signals were also strong. On 70 cm the situation was different with more noise and weaker echoes, but we had QSO's on both bands! We contacted K5QE and K5DOG on 70 cm, and DF3RL and PY2BS on 23 cm. All QSO were again on JT. We also had a very good SSTV QSO with PY2BS on 23 cm with very good quality pictures. On 10 July we had excellent day, which started with a JT QSO on 23 cm with 4Z5LV. It was Alex's first EME QSO and the first 23 cm PA - 4X QSO. In addition to operating, we had visits from DL1YMK (Michael and Monika) and PY2BS and his family. We hope to activate PI9CAM many more times. We are working on getting our own 13 cm equipment. The last time we were active on 13, 9 and 6 cm, it was all with equipment from other people. We also hope to raise the money for the complete restoration of the dish. We can use the dish for EME as it is now, but corrosion goes on and on that needs professional attention to correct.

<u>VE2XX</u>: Stuart <u>stuart.truba@inukshuk.ca</u> is getting close to being QRV again on 70 cm EME. He has an array of 8 x FO22 yagis mounted and is working on the calibration. He also needs a good high power PA and to mount his preamp at the feed point.

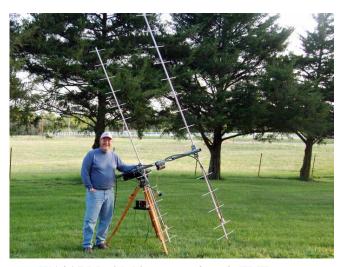


VE2XX's 8 x FO22 yagis array

VK4CDI: Phil vk4cdi@gmail.com writes about activities this last month or so – On 23 cm I was pleased to give ZS5Y Oceania for WAC on 1296. I also QSO'd NR5M, JA1WQF and VK100WIA (special event station operated by VK2JDS) on JT65C and N4PZ on CW. On 70 cm I added W7AMI and VK4EME both on JT65B. I am looking forward to see all of you at EME2010 in Dallas.

W3HMS: John W3HMS@aol.com now has a new SSPA on 1296 EME -- I am delighted with my new DB6NT 500 w SSPA. I placed it in service on 15 June running at only about 300 W, but the improved reports I am receiving are impressive. It made possible JT65c contacts with PA7JB (23DB) and ZS5Y (25DB). These QSO would not have been possible with the reduced power of my old 120 W amp. With the new amp and the same 3 m dish I worked PA3FXB (15DB), PY2BS (12DB) and G4CCH (12DB). Bruce and Howard are always strong with Spec JT lines like a new white line on a roadway!

WA0ARM: Bill Bill.Glynn@westarenergy.com will be setting up for 432 EME with W0DRL's array -- I have all of Al antennas and tower harvested and home safely stored. I need to let the toy fund build back up some before "planting" the 50' Rohn 25 tower w/hazer. Over the next couple of months I will also be "planting" a 10' section of Rohn 25 to serve as the pedestal for the 8 - NBS 15 el 432 array. Since this is a fairly compact array, I plan to construct the mount to allow for polarization adjustment. Al pieced the frame together using parts from an old 20 m beam. Structurally it is not capable of rotation, so I will redesign and rebuild it also. I have concluded that I will get more bang for the buck with array rotation over expanding the array, but this will take a while. In the meantime I am playing with a Cushcraft 424b mounted on an old large video tripod. I am using a Yaesu FT-857D and a Rigblaster Plug and Play interface. I do not yet have a preamp, but I do have a 100 watt brick. It only requires 15 W to drive, so the Yeasu will work fine. I am using about 30' of LMR400 for lead in. My initial listening test using JT65b was marginally fruitful. I found a signal at 432.023 but was unable to decode it. I could recognize the timing peaks. I purposely do not have Internet access at home as I live and breath it at work. I have acquired a decoding program to sync via the radio to remove that variable. I also am devising a way to adjust polarization with an old Radio Shack rotator. I will be attending the EME conference in Dallas and hope to get some pointers there



WA0ARM with his present 2 yagis EME array

<u>WA3QXP:</u> Paul <u>wa3qpx@atlanticbb.net</u> has completed expanding his 432 array to 8 M2 9 wl yagis and now only needs a TR *good* relay for his high power PA. Paul plans to attend the EME2010 in Dallas and will be looking for all of you there

**ZS5Y:** Derek derek@fotogravett.com is QRV on both 70 and 23 cm EME, but has been spending considerable time on 1296 with his new setup. At his last writing Derek was up to initial #29 on 23 cm. 2 on CW and the rest on JT. He is looking for someone else on 1296 from Africa to complete WAC.

K2UYH: I a.katz@ieee.org was active during the ARRL VHF contest and despite a very close Sun and Moon QSO'd on 12 June on 1296 at 1752 W2DRZ (16DB/O) on JT65C. With much more separation on 13 June I gave contest QSOs to on 432 at 1442 K5QE (17DB/O) on JT65B for mixed initial #798\* EM31 and partial on CW – heard FB but did not reply and 1506 W7AMI (9DB/16DB) JT65B DM13, and on 1296 at 1553 PA7JB (17DB/14DB) JT65C for mixed initial #371\*. I also QSO'd on 16 June on 23 cm at 1730 ZS5Y (17DB/16DB) on JT65C and after on CW (O/O) for Derek's first 1296 NA QSO #309 and #372\*, on 17 June on 432 at 0130 K5DOG (22DB/24DB) on JT65B, on 3 July on 432 tried at 0620 A71AW (nil) JT65B - Hamad had problems and 0714 K7XO (12DB/22DB) JT65B 0722, and on 10 July on 1296 1255 GM4PMK (11DB/11DB) JT65C #373\*, 1316 partial PA0PLY (12DB/11DB) JT65C – no Rs, 1341 PA3DZL (11DB/11DB) JT65C, 1349 OH3MCK (21DB/15DB) JT65C – Good to have Petri back on and 1359 OK2DL (11DB/O) JT65C. I hope to see you all in Dallas.

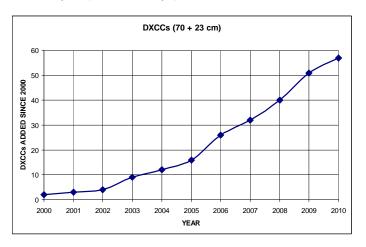
**NETNEWS: A71AW** has made several QSOs on 70 cm EME in the past and will take skeds. Hamad <u>a71aw@mail.com</u> has a single K1FO home made yagi and a 100 W brick amp with a mast-head preamp from grid LL55rh. **YO4FNG** is QRV on 432 with 1 kW and 4 x 21 el yagis.

FOR SALE: UR4LL still has for sale many QRO tubes and parts. See Alex's web site for complete info at www.nd2x.net/ur4ll.html. VE2XX is looking for a GS35 PA for 70 cm. W3HMS has for sale a 23 cm 6 x 7289 water- cooled ring PA with an output capability of 650 W with 65 W of drive. It comes with anode cooling jackets and non-leak tested water cooling system with 80 GPM 117 VAC pump. The PA includes a simple HB fail- safe water switch that requires water flow to close the ac circuitry, a dual plastic water tank, proper cooling hose and an inline thermometer for remote reading of the temp in F. The power supply is brand new and made by Lunar Links, Model PS-71L with full documentation. It was designed expressly for operation of 2, 4, or 6 7289s. The AC input is 117/234 with 3 taps for + HV at 1000, 1250, 1500 VDC at 1 amp and one additional tap. The HV can be remote monitored with a HB accessory device. The accessory power supply for 26 VDC HV turn-on is furnished as are a 117 VAC amp power supply switching unit, and about 15 spare tubes, both 2C39s and 7289s. Much but not all documentation is available. The PA was tested at 200 W output - limited by drive available. In addition, a rack- mounted and metered cavity for a 2 x 7289 amp is included. The amp has not been built, but schematics are included. John can meet a buyer within 200 miles of his QTH. If this is not feasible, lets discuss. Price complete is \$US1495. Contact John at email W3HMS@aol.com or tel 717-697-3633 / cell 717 695 1217. VK3UM software updates for EMECalculator V7.04 and EME Planner EME2009 V1.50 are available at http://sm2cew.com/download.htm, http://www.ve1alq.com/ vk3um/ or http://www.vk3bez.org/vk3um software.htm.

14TH INTERNATIONAL EME CONFERENCE UPDATE: No time to delay, finalize your plans now! EME Conference early registration has been extended to July 15th. Dates are 11-14 Aug at the Westin Hotel at the DFW airport in TX. The official web site with all the details (including on-line registration) is located at http://www.ntms.org/eme. The program will be excellent and includes: AD6IW - "A New Generation of High Efficiency Solid State Power Amplifiers", DL1YMK - "EME-DXpeditions to MI, OH0 and R2", G3LTF - "Practical optimization of 432 MHz and up EME systems using VK3UM's EME-Calc program", G4HUP - "A 23 cm DFS based Rx converter for SDR," HB9DRI - "DRIAC-G2, Tracking the Moon and Celestial Bodies without a PC," JH1KRC - "8J1AXA, Moon-Bounce Using the JAXA 18 m Dish on 2 m Through 23 cm – Another Big-Dish Project in Japan," K0YW - "KH7X DXpedition and Preparations for Future Trips," K1JT - "Frequency-Dependent Characteristics of the EME Path" and "KP4AO 432 MHz EME Activity at Arecibo," K2DH - "The Design and Implementation of A Hydraulic Elevation Drive System," K2UYH- "Small Antenna EME," K5GW and W5LUA -"Working with Commercial & Home brew TWT Power Supplies," K5SDR -"Expanding the SDR Technology," KL6M - "A New Technique for Construction of 23 cm Septum Feeds and Considerations for Construction of LNA/Relay Combinations," KL7UW - "My Big Dish Project," N2UO - "A lightweight 6 meter stressed parabolic dish for EME," N4PZ - "VHF/ UHF Coaxial Cavity Construction," OK1DFC - "EME DXpedition Results at E77DX on 144 MHz through 3400 MHz," - "2.3 GHz Transverter Construction," W1GHZ - "Parabolic Dish Focus, Tilt and Zoom," W4SC - "Measurements Using the SDR-IQ Receiver," WD5AGO - "13 & 9 cm Cooled LNA's and Circular Polarization Feedhorns" and "70 cm EME Systems: The Last Yagi Standing," WA5WCP - "On-Site EME Demonstration on 1296 and 2304 MHz." If you need assistance please contact W5LUA at w5lua@sbcglobal.net.

**FINAL:** I am afraid we have lost another member of the gang. KM5A passed away in Feb. Steve was not very active in recent years, but did listen to the 20 m net to keep up with what was happening. He was regularly QRV on 70 cm EME for several years starting in 2003 with 4 x 21 el yagis of his own design from DM83 in SD. Steve enjoyed the challenge of EME and will be missed by all

- ♦ G4RGK's next update of his CW EME Initials Standings will be the end of July and in the next NL. Send your updates to Dave at
- ♦ W0DRL's e-mail address at his new location is <a href="mailto:antyler46@gmail.com">antyler46@gmail.com</a>.
- ♦ In my search for missing DXCC QSL cards I discovered WB6NMT, ex-HP3XUG, and now HP3TA and KG6UH. Louis is alive and well in Panama. He still has his 4 FO yagis and 70 cm gear although his 8874 is sick. You can reach Louis at hp3xug@gmail.com or by post to CAPT Louis N. Anciaux, USN(RET), Apdto 0426-00417, David, Chiriqui, Republic de Panama.
- ◆ PA0PLY has updated his database of active EME stations. The files are in PDF format on his website at <a href="www.pa0ply.nl">www.pa0ply.nl</a>. Jan's lists appear to be the most complete and up to date of any available for 70 cm and above EME.
- ♦ I regularly hear complaints that EME activity is falling off and had bad activity is becoming. I have been continuously active on EME since 1971 and have never seen a time where there was so much happening! To illustrate what is happening, I graphed the sum of the DXCCs I added each year since 2000 (70 and 23 cm). The upward trend is very clear an increasing number, especially the last few years (2010 is not over yet)!



We could use some more technical material to get us through the summer. PSE keep the reports and tech stuff coming. I plan to be active off the Moon, but am most looking forward to see as many of you as possible in Dallas. I hope you can make the EME conference. 73, Al – K2UYH