432 AND ABOVE EME NEWS
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CONDITIONS: No conditions were needed this month to copy the 432 signals from KP4AO at Arecibo. They ended with 254 QSOs – see their report and those of many others in this newsletter (NL). There are also many reports on the 13 cm leg of the EUWW (DUBUS/REF) EME Contest. Activity is definitely building on this band with the highest QSO count reported by F2TU of 45. There are also reports on the EWW Contest's 70 and 5 cm legs, which occurred the following weekend. The major casualty of all the 432 and microwave activity appears to be 1296 with very few reports. This will change this month with the 23 cm EUWW Contest leg scheduled for 22/23 May. There is also DL1YMK's mystery dxpedition (70, 23 and 13 cm) starting on 13 May on 1296. See the Table of activity times following Michael's report. The 70 cm CW Activity Time Period (ATP) returns and is on 16 May from 0700 to 0900 and 1700 to 1900. If this is not enough, the ARI Digital EME Contest is also on the 22/23 May weekend, which is the designated EME activity weekend (AW).

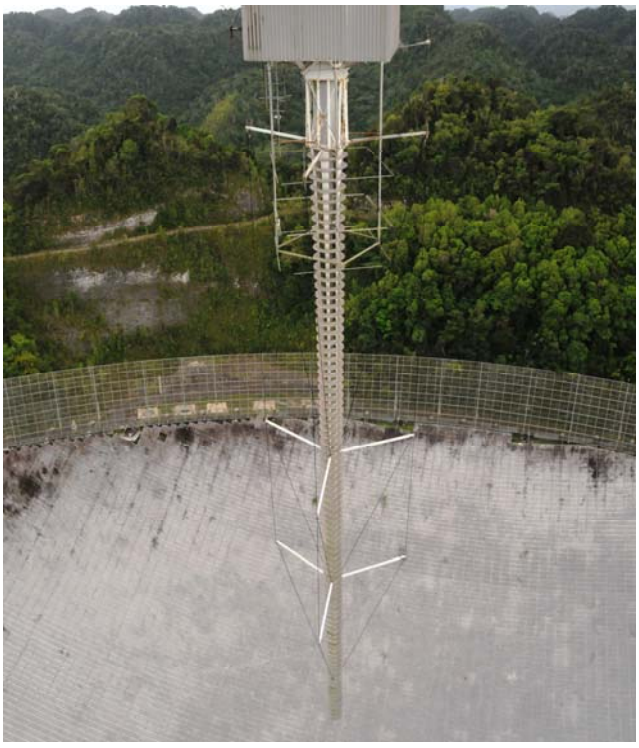
KP4AO operating position (L-R: WA3FET, K1JT, WP3R, WP4G & NP4A)

DK3WG: Jurgen dk3wg@online.de reports on his 432 April 70 cm EME activity. He QSO'd KP4AO on SSB (55/59) and on JT65B worked K5QE, WD4JHD, W5UWB (125W and 23 el yagi), RX9YM, EA8/G4RGK, YO3DDZ, EA2ASB, DF3RL and DF6SM.

DL1YMK: Michael DL1YMK@aol.com, besides preparing for his May "XXX" dxpedition – see following Table, was QRV on 13 and 70 cm in April –– I was QRV on 2320 in the 13 cm part of the EU EWW Contest for a few hours. Activity from US was close to none – very disappointing! On 70 cm KP4AO was 20 dB weaker than in March. Their signal was marginal on a 4 x 19 el (horz pol) array on Friday. [Michael & Monika should be now on their way to their mystery location. Their operating frequencies will be 432.045, 1296.045 and 2320.100 with RX on 2304.100 for US and 2301.975 for VK. Additional 70 cm activity is now planned for the 19th as follows: 1800 DL4MEA, 1830 G4YTL, 1900 W5LUA, 1930 WA6PY, 2000 G3LTF, 2030 N4GJV and 2100 K5GW].

DATE	MN RISE	NA EAST	NA WEST	MN SET	BAND	NOTES
13 MAY	0230	1020	1300	1730	23 cm	Random
14 MAY	0300	1130	1400	1900	13 cm	Random
15 MAY	0340	1240	1500	2000	23 cm	
16 MAY	0440	1300	1540	2100	70 cm	Random
17 MAY	0600	1440	1640	2140	13 cm	
18 MAY	0700	1540	1740	2200./	23 cm	Skeds/JT
19 MAY	0840	1700	1900	2240		
20 MAY	1000	1800	2000	2240		
21 MAY	1120	1900	2100	2300	13 cm	
22 MAY	1240	2000	2300	2320	23 cm	DUBUS
23 MAY	1420	2100	2315	2330	23 cm	DUBUS

DL4MEA: Günter guenter.koellner@nsn.com was QRV on 13 cm in the DUBUS Contest -- I QSO'd on Saturday VK3NX, OK2DL, RK3WWF, SV1BTR, F2TU, LA9NEA, SP6OPN, DL3EBJ, LZ1DX, OH2DG, OK1DFC, HB9SV, G3LTF, IW2FZR, OK1KIR, VE6TA, DF3RU, SP6GWN, PA3DZL, DL1YMK, SV3AAF, OZ4MM, OK1CA and ES5PC, and on Sunday F6WJF, SP6OPN, SD3F, PA0BAT, IK2RTI, SM2CEW, W5LUA and WW2R. None of the signals were really weak. Some of the strong signals, HB9SV, SV1BTR, OK1CA and F2TU were worked on SSB. My QSOs were totally random CW, no logger, just a few e-mails with G3LTF exchanging power supply schematics. During my NA window on Sunday I called without success for nearly an hour W5LUA and for another K2UYH, so I am not aware who else would have been QRV. I thought calling those who are 100% able to work crossband gives the most chance of a QSO. Heard on 2304 only were WD5AGO, WA8RJF, LA8LF, K8EB and W7JM. I agree with others that the activity from Europe on 2304, kept all away from listening on 2320. It is somewhat frustrating to see. One more note: It is also fine to identify some stations not just by listening, but by other means. SV1BTR's spectrum has two sidebands, LZ2DX with very fast keying, DF3RU and RK3WWF with about the same signal (medium strength). The rig here is a 4.5 m f/d 0.32 dish, round septum feed with chaparral choke, 2 x Andrews UMTS prototype PAs combined with homemade hybrids, G4DDK preamp (0.3 dB NF, 13 dB CS/Sun), DB6NT Gen. 2 transverter and FT847 with Winrad connected to the 455 kHz IF of the radio. CW filtering is done by FT847. I was also on 70 cm. Could we somehow get those active for Arecibo on 70 cm again, please?



Arecibo's 96' line feed suspended 400' above surface of dish

DL9KR: Jan bruinier@t-online.de writes – I was listening a bit to KP4AO on Friday and Saturday. Signals were way over the noise and easy loudspeaker copy, as to be expected. The split QSX certainly paid off (in contrast to the test operating in March). Interestingly, a number of QRP callers were good copy in the 50-60 window, including some misguided doodling on 058. Both N4IP and AA4RC were good SSB copy. Both calls are unknown to me. Has anyone an idea? During the 432 leg of the DUBUS contest the low dec closed my eastern window completely due to house and tree blockage. And my western window closed below 25 degs of elevation. (The XYL objects to using the chain saw). I

share SV3AAF's view on date selection. Therefore, I enjoyed this contest more in the way of an AW - and there was plenty of it. In a total of 4 operating hours the following were worked: on 24 April SM2CEW, OE5JFL, SV1BTR, SP6JLW, I1NDP, UA3PTW, SV3AAF, SM3JQU, SM4IVE, SM6FHZ, SP7DCS, G4DHF #896 (last worked as TF/G4DHF), OZ6OL, ES5PC, N4GJV, OK1DFC, G4ALH, DL4MEA, SM7GVF, PI9CAM, DL1YMK, OK2POI, DL9JY, W8TXT (unusually loud), DL7APV, EA8/G4RGK (tnx patience, Dave!), GM4ISM and W5LUA (pleasant surprise after so many years!), and on 25 April G4YTL, CT1DMK (back again!), LU7DZ, UA4AQL, SD3F and K2DH #897 (last worked decades back as KD5RO FN13). Apologies to several other callers that were "eaten" by libration and weird polarization.

EA8/G4RGK: Dave g4rgk@btinternet.com was QRV on 70 cm in a mini dxpedition from IL38pp -- I again was using my usual portable setup, except that I had more power than before, around 350 W and a polarization control fashioned from bits of wood. From the start I had problems with sequencing and also an oscillating preamp. I eventually managed to fix all the problems and was able to get on and work a few stations. I ended up using a cavity preamp I built 15-20 years ago. So the receive was down a bit, but I could still hear much more than I could work. I QSO'd HB9Q, DK3WG, JA6AHB, PA3CSG, DL9KR, UA3PTW and OK1DFC. I was not able to be on for long in the DUBUS 432 CW contest due to social conflicts and bad weather (a sandstorm). While I was on I managed hear about 10 stations, and worked DL9KR and DL7APV, CWNR were SM4IVE, OE5JFL and K2UYH. I will probably be back down there again at the end of the year.

ES5PC: Viljo viljo@comnet.se reports on his 13 cm operation during the DUBUS Contest –- I worked a total of 40 stations including 5 initials: OK2DL, W7JM, LA8LF, SM3JQU and WA8RJF. The conditions were better on Sunday compared to Saturday. I also spent a few hours on Saturday listening and recording the KP4AO operation. [Viljo due to travel had only very limited operating time for the 70 and 6 cm legs of the EWW Contest. His setup on 432 is 4 x 9 wl M2, H-pol yagis, PA max 1 kW and RX NF about 0.5 dB, and on 5760 is a 4.5 m dish, circular pol, SSPA 15 W, RX NF about 0.6 dB].

F2TU: Phillippe f2tu.philippe@orange.fr was QRV for the 13 cm part of the DUBUS Contest –- I found good activity and ended with a total of 43 QSOs and 3 initials with OK2DL, SM3JQU and LA8LF on CW and SSB to bring me to initial #103. I also copied VK2DAG (M) - very weak.

G3LTF's new 6 cm feed/SSPA

G3LTF: Peter g3ltf@btinternet.com reports on his April activity -- I worked KP4AO in March and only listened briefly this month. I was very pleased to see all the activity generated. I was on 432 on 16 April before KP4AO appeared and worked K1RQG, G4CCH for initial #429, OK2POI #430 and F5SE/P #431. I was on 13 cm for the DUBUS Contest (TX 2320 with * indicating crossband QSOs) and worked on 17 April RK3WWF, SV1BTR, LA9NEA, SP6OPN, OK1KIR, PA3DZL for initial #83, LZ1DX, OK2DL #84, F2TU, SV3AAF, DL3EBJ #85, OK1DFC, OK1CA, ES5PC, DF3RU, DL4MEA, OH2DG, HB9SV, PA0BAT, DL1YMK and W5LUA*, and on 18 April VK3NX*, OZ4MM, SP6GWN, SD3F, LA8LF* #86, IW2FZR, VE6TA, SM2CEW, WW2R*, K2UYH* and WD5AGO*. I also exchanged reports with Tommy on SSB. Heard were K8EB*, W7JM* and IK2RTI*. The next weekend was 70 cm and 6 cm's turn and I finally got my new system all up and working. The main change from last Aug was more power, about 25 W compared to about 7 W - see picture. The whole system fits in place with 4 plugs and 3 wing nuts. Echoes are now easily heard. As my Moon window was restricted due to the low declination, I started on 432 and worked OE5JFL, JA6AHB, SV1BTR, OK1DFC, SP6JLW, DL4MEA, SM6FHZ, PI9CAM, SP7DCS, SM4IVE, SD3F, DL1YMK, UA3PTW and LZ1DX. At 2100 I changed the feed over to 6 cm and worked F2TU, OK1KIR, IK2RTI for initial #8, SV3AAF #9 and OK1CA #10, and then changed back to 432 to work DL7APV, OZ6OL, N4GJV, W8TXT, VE6TA, W5LUA, and I1NDP. On the final pass on 25 April, I CWNR G4YTL and heard no other new ones. The situation was the same on 6 cm. The low declinations this year are a real problem as they greatly restricting my window due to tree blockage.

G3WDG/G4KGC: Charlie and Petra Charles.Suckling@tqs.com are active on 10 GHz EME and write – With both children now at the University, we have a little more time on our hands, so we have begun repairing/updating our equipment. We got back on 10 GHz EME at the end of Jan and G3WDG worked ON5TA on 31 Jan. We then built up a down converter for 10.45 GHz and on 19 Feb G3WDG worked JA6CZD for the 1st G-JA 3 cm QSO and a new continent, followed by JA4BLC. G4KGC also worked JA6CZD and had a partial with JA4BLC. Some yard work followed to reduce the height of a hedge, which had grown somewhat in the 8 years since the dish was last used (for AO-40). This surgery opened up our moonset window, and on 21 March we both worked WA6PY. G3WDG also worked ON5TA. We were active during the DUBUS 3 cm Contest. G3WDG worked on 27 March ES5PC, VK3NX, OK1KIR, F2TU, F5JWF, G4NNS, OK1CA, ON5TA, IQ4F and LX1DB, and on 28 March WA7CJO, JA6CZD and F6CQK. Activity levels seemed higher than when we were last active 10 years ago. [Charlie has also been doing some very interesting work with predicting libration fading; see his Technical piece at end of this NL].

G4DHF: Dave david@g4dhf.freeserve.co.uk made the effort to be QRV for the 70 cm DUBUS Contest -- I erecting 8 x 21ele Tonnas, which I refurbished for several months. The array had been dismantled, chemically cleaned and treated with corrosion resistant zinc primer on the booms and metal-to-metal joints. Tests proved that they were resonant on 428 MHz, so they were falling off on the high side of the gain curve by the time they reached 432. They are not my antennas of choice as they are quite dated and have a higher noise temperature than more recent designs. I'm currently building 16 x YU7EF yagis, which will be rear mounted for pol rotation. The Tonnas have seen good service through the '90's and so I did not want to scrap them. As they were available they allowed me to be QRV again and I enjoyed the fun. I suffered badly from cross-polarization, suspecting signals on Saturday and Sunday were returning mostly vertical. On Saturday I was still building the sequencer and pre-amp, which I had modified from 2 m use. I still managed QSOs with OK1DFC, SM4IVE, SM2CEW, DL9KR, I1NDP, DL7APV, PI9CAM, UA3PTW and SV1BTR. I CWNR SP6JLW for sometime. Now that I'm QRV again, I'd be pleased to make skeds in the coming weeks. Looking forward to working friends old and new. It's good to be back.

G4DHF's 8 x21 el refurbished Tonna Array for 70 cm

IK5QLO: Andrea andrea@isaacasimov.it sends his 23 cm *QRP EME report* for April -- March and April were interesting months. I worked to reduce my TX drift and I can now say that I am quite satisfied with my results. I added DB6NT's QH40A to the DDS reference xtal of my FT-847, and an external 50° OCXO to my 13G2 TRV. The OCXO is a kit by W6PQL, cheap and effective. Another highlight was the reception of my first SSTV signals off the Moon from PI9CAM, in Robot 72 and Scottie1 modes. [see picture on next page]. I could receive readable text, while the images were almost unreadable. This was with my 2.4 m dish. QSO'd on JT65C were ES5PC, YO8BCF for an initial (#), PA3FXB, VE7BBG, RD3DA, PA0BAT (#), DF3RU, UT5JCW (#), PA0PLY (#), PI9CAM and ES6RQ, and on CW LA9NEA. Heard was PY2BS. I plan to be active in the Italian Digital EME Contest at the end of May.

Slow scan TV received by IK5QLO on a 2.4 m dish

IT9CJC: Marcello marcellocris@gmail.com is QRV as a QRP station on 70 cm EME with a single 13 el DK7ZB yagi on his balcony, a barefoot IC706MKIIG giving through 6 m of ¼" coax 30 W at the feed, and no LNA but a lot of patience! Marcello has EME experience from 2 m where he has a QRO setup, but notes "The challenge and the pleasure of a QRP QSO has no comparison with any easy QRO QSO". He has 3 more yagi ready to complete array of four and a kW solid state amplifier.

JA4BLC: Yoshior ja4blc@web-sanin.co.jp was active during 6 cm parts of the EU WW EME Contest -- I worked on 24 April on 5760 ZM2TV (589/449) for initial #14, VK3NX (O/O), F2TU (O/549). The next day, I added JA6CZD (559/549), OK1KIR (559/549) and OK1CA (549/559). I am now temporally QRT on 6 and 3 cm EME because I removed the aluminum foil (4.2 m dia) from my 6 m dish. The dishes regular mesh surface is unusable on these bands. I will concentrate 23 cm for the next several months. The noise measurements before and after the foil removal are on 3 cm, Sun noise 12.1 vs. 6.6 dB and ground noise 4.95 vs. 1.3 dB; and on 6 cm, Sun noise 11.9 vs. 7.7 dB and ground noise 4.1 vs. 2.0 dB. My estimation from these data are on 3 cm, the antenna gain is 43.7 vs. 41.2 dBi, but overall noise temp. is 112 vs. 272 deg K (antenna noise 42.5 vs. 204 deg K with RX noise of 69/68 deg K); and on 6 cm, antenna gain is 43.0 vs. 40.3 dBi, overall noise temp. is 155 vs. 256 deg K (antenna noise 47 vs. 149 deg K with RX noise of 108/107 deg K) as the preamps and horns are the same. Ground noise was obtained by pointing the dish toward a neighbor's house at 5 deg el. Noise increase from the 10 mm mesh is remarkable. The attached picture is in the middle of removal, which was half done at lunch time on 2 May.

Removing aluminum foil surface from JA4BLC's dish

K0YW: Bruce k0yw@frontier.net is QRV on 23 cm EME again with he usual big signal. He is available on the Moon just about anytime for a test/sked. In April he worked W1JM on CW and VE3KRP on CW and SSB.

K1DS: Rick rick1ds@hotmail.com was among the many that turned out for the Arecibo 70 cm activity -- I was able to work KP4OA on CW Sunday. But I was caught off guard as I kept sending CW not expecting to get a response, and then I heard them come back to me. I used a 30 el single 9 wl yagi on an az-el mount with 20' of LMR400, a GaAs FET preamp in front of a FT736R in my rover van. N TX I Used a D1010 amp for 100 W output. It was interesting to watch PI9CAM's web SDR and see my very faint trace on their waterfall from the Dwingelo dish. It was a very neat. I now have four yagis, and need a 4-way 432 splitter and some coax jumpers. I am also seeking a higher power SSPA (> 250 W), so that I can better play EME on 70 cm. I also copied KP4AO on JT65 during the last 45 mins. They were always strong (-4DB to -8DB).

K2DH: Dave k2dh@frontiernet.net decided to try to work Arecibo. -- After hearing all the reports of a huge signal last month, I figured it would be a "piece of cake". After all, I had a Cushcraft 424B and 400 W. I set up the 424B on a ladder so I could elevate it, ran a short piece of 1/2" Helix into the shack and waited Saturday till they came on (I had to work Friday). I couldn't hear them. So, I dug out an old 222 preamp, rebuilt it for 432, tweaked it for NF and hooked it up. I heard them a bit better, not much but at least I could tell they were there and at times the signal was Q5. I didn't work them on Saturday. With suggestions from K1RQG, I decided to scrap the single yagi, and built a feed for my 5 m dish, which still had the 23 cm feed in place. It consists of 2 el (reflector and director) from another old Cushcraft 70 cm yagi. I put it so the reflector was at the front of the 23 cm feed, which put the director some 6" in front of the focal point of the dish, taped it in place, hooked my preamp, and proceeded to see about 7-8 dB of Sun noise. K1RQG wanted to see if he could hear me. (This is early Sunday morning, before KP4AO had moon), so I said "OK" and started to TX. Well, he didn't hear me because the power supply that feeds the T/R relay at the feed had been turned off. I was putting 400 W into nothing, and took out the preamp. I turned on the supply and K1RQG could hear me off the moon just fine. But the preamp was now dead and I had no more devices. I went begging and finally found a friend with an ARR 432VDA (A Dual-Gate MOSFET preamp) he would lend me. I raced to his house 30 miles away, raced back, put it on the NF machine and found it had a Noise Figure of 1.5 dB and only about 16dB Gain. Well, it was better than the other one. I stuck it up at the feed and ran back to the shack. KP4AO was loud on SSB! I called them a few times and soon had them in the log. I then proceeded to listen to them for another hour or so, recording the signals using my SDR-IQ. Then, K1RQG and I ran on CW and he was an an easy QSO (539/569). Next, I tuned around and heard SM4IVE struggling with WB7QBS, so I dumped in my call a few times and he came right back and we had a QSO (549/529). I also heard W8TXT weakly, and called him, but he didn't hear me. This lousy feed is stuck horizontal, so I can't do anything when the pol changes. On later analysis, I think the problem with the long single yagi was that my "elevation system" (a pipe attached to the boom-mast clamp and bolted to the top of the ladder) was in the same plane as the elements and right between two of them in about the middle of the antenna. I think if the antenna was vertically polarized, it would have worked. Anyway, I want to say that the 70 cm bug has bitten me. I was on for the DUBUS contest. I plan to build a real feed and a real LNA, so except for the low TX power, I should be able to work alot of stations. It's been almost 20 years since I did some Moonrise/Moonset EME on 70 cm.

K2TXB: Russ k2txb@dxcc.com was another relatively small station that tried to work KP4AO — I set up 2 small yagis and on Sunday called them many times with 400 W, but they never found me. I was operating at about 432.059 and moved up and down a half KHz now and then, but maybe there was a lot of QRM there. I was disappointed when they suddenly switched to JT65. I had not rigged the outdoor station for JT65 because I figured it would be easy to work them on CW. Also the report was that they would only operate JT65 for about a half hour - not long enough to work many stations. I kept calling on CW, hoping they would switch back before quitting time, so no joy. Saturday I had 100 W but they spent a long time on SSB and I knew they would never copy my SSB since they were only 4x3 here on my 2 x 11 el WA5VJB yagis (plus preamp). On CW they were 559 most all the time and the JT tones were loud and moving the S meter. It was fun trying. Saturday was my birthday and we had a party here with family including my 3 granddaughters, including one who also had a birthday. The kids were interested and it was fun to tell them that the signal they were hearing was from the moon. But I lost about 45 minutes of on the air time due to the party. I had a good time trying to work them, but in hindsight wish now I had opted for a better antenna.

K6JEY: Doug doughnhelen@moonlink.net was all set to participate in the 432 leg of the DUBUS Contest and was doing pretty well at the beginning of the contest right up until his preamp and the TR relay burned up. I still haven't completed a post-mortem. I worked K2UYH, SM4IVE and I1NDP before being forced to QRT. The latter was through the trees. We will be on for the ARI and DUBUS contests at the end of May. I not sure which band(s), 2 m vs. 23 cm, we will operate as yet. The wekend is the last really low noise/loss weekend until the fall. It looks like a great opportunity to work the VK/JA window. I just got a Lunar Link PA and have been enjoying it very much. I am going to the EME conference in Aug.

K8EB: Erv mrdxcc@sbcglobal.net was active on 13 cm for the April DUBUS Contest – I worked on 18 April VE6TA, OZ4MM, OK1KIR, DL1YMK, SV3AAF, ES5PC, W5LUA, OK1DFC, F2TU and SP6GWN, and on 19 April IZ2DJP and PA3DZL. All QSO were on CW except PA3DZL which was on both JT and CW. I heard a lot more and maybe missed some in the log. I was hearing K2UYH fine but then they were gone.

KL6UW: Ed kl7uw@acsalaska.net is QRV on 432 -- The Arecibo event sure got some stuff done! Except for calibrating the dish encoders, I am QRV on 432 in QRP EME mode. I am running my 4.9 m dish (24.5 dBi – horizontal dual quad feed) with 100 W D3010 SSPA into 3 m LDF4-50A hardline and MGF-1402/FT-847. I hope to get the encoders calibrated in a couple days. The Arecibo signals were received on SSB running one S-unit over the noise and 90% copy. Wind gusts to 35 mph added some QSB by moving the dish off the Moon. I now have installed both 100 W 432 and 45 W 1296 SSPA at the back of dish and have a 0.5 dB NF preamp at the dual quad feed. I transmitted to KP4AO for over and hour but was not able to work them thru the QRM. Their JT-65B signal was -6 and reading S5 on the FT-847; tones were very audible. I would like to try working JT65B with some stations on 432. 1296 is coming along and I expect to be doing sun-noise measurements this week as soon as the az-el digital encoders are calibrated. Then I can try some transmitting JT65C. My W6PQL 300 W SSPA is about half-done, so I may try out 150 W using one of the PA's. I expect that it will be a month until we are QRV with the full 300 W. I will be at the International EME Conference in Dallas and will show the story of "My Big Dish".

KL6UW's new 4.9 m dish with 70 cm quad feed in front of 23 cm horn

KP4AO: Joe (K1JT) k1jt@arrl.net reports for the Areicbo club -- The "wall" of stations calling was simply incredible. A rough estimate suggests that we may have worked something like 20% of the callers potentially workable on SSB, 10% of those workable on CW, and only a few percent of those workable on JT65. I guess we'll have to do it again. Operation over the 16-18 April extended weekend was from the transmitter room with the signals sent to/from the feed through 1500' of WR2100 waveguide (1.25 dB loss, including all joints and couplers). On Friday, 16 April we had problems with our 3CX800 PA and most of the operation was done using a TS-2000 barefoot at 35 W. Nevertheless 89 QSOs were completed on SSB and CW. On Saturday we started on SSB with about 350 W from the repaired 3CX800 PA, but it developed PA problems again after about half an hour. Happily by that time we had finished cobbling together a power supply for the superb F1JRD supplied SSPA. While connecting things, we ran the TS-2000 again barefoot for 15 minutes, and then switched over to the SSPA. It produced a very stable 500 W out, cool as a cucumber. (The heat sink never even got warm.) We added 106 QSOs. On Sunday we followed the same pattern of SSB and then CW operation and finally JT65B near the end of our window. We ended with 242 QSOs in 36 DXCC entities, in a total of 8 operating hours. We made recordings of the whole 432 EME sub-band for most of the time KP4AO was on the air. With these recordings we and many others have since "tuned the band" carefully, many times, picking out hundreds of additional callsigns. Members of the Arecibo Observatory Amateur Radio Club who constructed and operated the KP4AO station for this event were WP3R, NP4A, WP4G, WA3FET and K1JT. An additional guest operator was AA6EG.

N4BH: Pat pat@n4bh.com is now QRV on 70 cm and interested in skeds -- I am on 432 with 2 x 7 wl yagis and 180 W, using a 0.3 NF preamp and about 110' of 5/8 Heliax to the tower. Not a great setup, but I easily worked HB9Q, PI9CAM and heard the KP4 guys very well, so I imagine that I can work some the big stations without a problem and would like to try.

N4GJV: Ron qstdemb@yahoo.com was QRV for the 432 part of the DUBUS/REF EME Contest -- On 16 April I contacted KP4AO, who had a tremendous signal, even without their power amp! I was QRV again during the DUBUS/REF test. Conditions seemed to be extremely poor during all of my first Moon pass. Signals were weak, and libration QSB was severe. To my amazement, I found that conditions were very good, during the early hours of my second pass, but they declined considerably, afterwards. During my brief third pass, I again found that conditions were good. Many thanks to the DUBUS/REF people for sponsoring this event, and to SM4IVE, OK1DFC, VE6TA, W8TXT, KL6M, I1NDP, UA3PTW, SP6JLW, DL9KR, OZ6OL, SD3F, DL4MEA, SM2CEW, DL7APV, PI9CAM, DL1YMK, G3LTF, and SV1BTR, for the very FB QSOs. I CWNR K2UYH, JA9BOH, LZ1DX, and K6JEY, and heard DF3RU, G4DHF, SP7DCS, and LU7DZ.

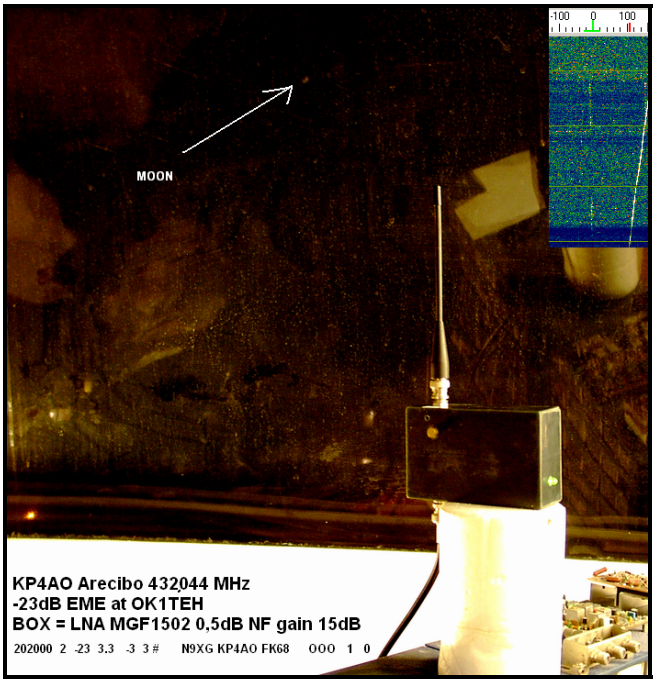
OK1CA: Franta strihavka@upcmail.cz had a big signal is the 13 cm and 6 cm legs of the DUBUS Contest -- I was QRV on 17/18 April on 2.3 GHz and worked 39 stations. Initials were OK2DL for #87, RK3WWF #87, OH1LRY #88 and LA8LF #89. I was also QRV on 24/25 April on 5.7 GHz, and worked F2TU, G4NNS, PA0EHG, SV3AAF for initial #16, G3LTF #17, OK1KIR, IK2RTI, K5GW, VE4MA #18, JA4BLC, JA6CZD and VK3NX. I missed W5LUA and ES5PC and I hear SP6GWN. The activity on the both bands was very good.

OK1DFC: Zednek **ok1dfc@seznam.cz** was very active and successful in April –- On 432 I worked KP4AO on SSB. Audio waves of my QSO can be heard at http://www.ok1dfc.com/Peditions/kp4/dfc.mp3, of DL9KR's CW QSO at http://www.ok1dfc.com/Peditions/kp4/aokr.mp3, and my Winrad screens at http://www.ok1dfc.com/Peditions/kp4/kp4.htm. I was QRV during the 70 cm contest weekend and mostly focused testing my new 432 MHz feed. Activity was great and I have worked many stations and initials. Callsign are as follows: CW QSOs were OZ6OL, DL4MEA, LZ1DX, G4CCH for initial #106, OZ6OL, K2UYH, SP7DCS, W8TXT, N4GJV, VE6TA, SM4IVE, UA3PTW, DK3WG, SD3F, SM6FHZ #107, JA9BOH, DL4MEA, I1NDP, SP6JLW, PI9CAM #108, DL1YMK, SV3AAF, JA6AHB, G3LTF, SV1BTR, OE5JFL, OK2BDQ 109, SM3JQU, G4DHF #110, LZ1DX, OK2POI, OK1YK #111, DL9JY #112, DF3RU, DL9KR, DL7APV, SM2CEW, G4ALH, DL5FN, G4YTL and CT1DMK #113, and JT QSOs were DL5FN (12DB), EA3XU (18 DB), F6APE (24 DB), DL8GP (25 DB) {#106}, RW3WR (25 DB) {#107}, OK2UZL (23 DB) {#108}, EA7AJ (21 DB), EB3DYS (21 DB), G4CCH (18 DB) {#109}, YL2OK (19 DB), DF3RL (18 DB) {#110}, DL1AAH (18dB) {#111}, RA3LE (17 DB) {#112}, UA4LCF (22 DB) {#113}, ES3RF (16 DB) {#114}, EA3BB (25 DB) {#115}, GM4ISM (18 DB) {#116}, F6HTJ (29 DB) {#117}, CT1FFU (29 DB) {#118} and DXCC 59*, VK4EME (12 DB V & 19DB H), 7J1ADS (20 DB) {#119}, YO3DDZ (10 DB) {#120}, RX9YM (13DB) {#121}, K7XC {#122}, NT0V {#123}, EA8/G4RGK (16 DB) {#124} and DXCC 60, AJ4MW {#125}, SP3XBO (23 DB) {#126}, EA2ASB (21 DB) {#127}, YL2HA (26 DB), YL3HA (22DB) {#128}, PI9CAM (6 DB) {#129}, W4RBO (22 DB), W6YX (30 DB) {#130}, DL8DAU (21 DB) {#131}, BD4SY (14DB) {#132} and DXCC* 61, VK4CDI (11DB), OY4TN (28 DB) {#133} and DXCC* 62, OH8MGK (26DB) {#134}, SM2A (19DB) {#135}, RU4HU (20DB), OH4LA (17DB), S51ZO (15DB), IT9CJC (27DB) {#136}, WB2RVX (10DB) {#137} and OH6UW (23DB) {#138}. I was hearing speaker copy from many of the stations that were worked on JT, which means there is a good chance that I can work them on CW in near future. Anyway I can say that the feed is working really great and I am very satisfied. (More info on my new feed can to be found at http://www.ok1dfc.com/EME/technic/432feed/432feed.htm. The smallest station worked was IT9CJC with a single 13 el yagi and 30 W. If anybody with 50 W and a 19 el yagi is interested in a sked, let me know as I am looking for WAS on 432 and all skeds are very welcome including moonrise/set for stations without elevation. Same goes for WAS on 1296. I am especially looking forward to the 23 cm leg of the DUBUS EME Contest in May, as I do not see how I can participate in the ARRL EME Contest, which coincides with EU IARU UHF-SHF contest, due to QRM/problems with tropo calling stations. I was also active during the 13 cm DUBUS Contest on 17-18 April. Activity was great and I worked many new initials. This was the first time I tested a new transverter for 13 cm with the ability to operating on all the available bands. It worked very well and will be great help during my planned dxpedition to Albania in Sept. (Info on this transverter is on http://www.ok1dfc.com/EME/technic/LO13cm/lo.htm. I still need to finish my 400 W SSPA before we leave for the dxpedition. During contest I worked OK1CA, F2TU, ES5PC, OK1KIR, SV1BTR for initial #39, LA9NEA #40 and DXCC 28, OK2DL #41, SP6OPN #42, SP6GWN, DL3EBJ #43, LZ1DX, DL1YMK, G3LTF, DF3RU, RK3WWF #44, HB9SV, SV3AAF, DL4MEA, OH2DG, PA0BAT, VE6TA, W5LUA, WD5AGO #45, WA6PY, W7JM #46, OZ4MM, WW2R #47, WA8RJF #48, VK3NX, PA3DZL #49, SD3F, OK1KIR on JT65 (9DB) for digital initial {#4}, F5JWF, IK2RTI #50, IW2FZR, LA8LF #51, K8EB #52, SM2CEW and K2UYH for a total of 39 QSOs. CWNR were K8UO [?], 9A5AA and IZ2DJP.

OK1KIR: Jan (OK1VAO) <ok1vao@post.cz> send's news that his club's was active in April on 70 cm and in EU contest on 13 and 6 cm –- We worked on 432 on 16 April at 1704 KP4AO (54/59) on SSB, 1738 G4YTL (549/539) on CW, 1853 GM4ISM (21DB/21DB) on JT for digital initial {#32} and new DXCC and 1945 K5QE (13DB/O) {#33} on JT, on 2300 in the EU EME contest on 17 April at 0610 VK3NX (549/539), 0636 OK1CA (559/579), 0643

SV1BTR (559/549), 0657 OK2DL (549/549) for initial #99, 0750 ES5PC (569/569), 0758 OK1DFC 549/569, 0810 SP6OPN (569/559), 0834 SV3AAF (549/559), 0902 G3LTF (569/569), 0915 RK3WWF (549/559), 1002 F2TU (569/569), 1056 LX1DB (569/569), 1115 HB9SV (579/579), 1120 DL1YMK (569/569), 1136 SP6GWN (549/539), 1245 LA9NEA (549/549), 1259 LZ1DX (549/559), 1331 PA0BAT (549/559), 1414 OH2DG (569/569), 1434 DL3EBJ (549/559), 1444 DL4MEA (559/559), 1551 IW2FZR (559/559), 1548 W5LUA (569/569), 1618 W7JM (569/559), 1630 WD5AGO (549/549), 1740 VE6TA (559/559), 1810 WW2R (559/559), 1818 OZ4MM (559/559) and 1922 PA3DZL (O/O), on 18 April at 0807 DF3RU (559/559), 1003 SD3F (559/559), 1148 OK1DFC (12DB/9DB) on JT65C for digital initial {#3}, 1309 F5JWF (O/559), 1448 LA8LF (559/559), 1546 IK2RTI (569/559), 1818 9A5AA (549/549) #100 and DXCC 37, 1935 K8EB (559/569), 2004 WA8RJF (O/O) #101 and 2030 K2UYH (569/559). We heard N8UO (549), on 5760 in EU EME Contest on 24 April at 0001 F2TU (559/569), 0047 VE4MA (O/O), 1946 PA0EHG (O/O), 1955 IK2RTI (559/569), 2003 G4NNS (549/559), 2015 ES5PC (549/559), 2111 G3LTF (549/559), 2136 SV3AAF (549/559) and 2254 OK1CA (549/579), and on 25 April at 0007 K5GW (569/559), 0113 W5LUA (569/569), 1553 JA6CZD (559/559), 1559 JA4BLC (549/569) and 1620 VK3NX (559/559). We also heard ZM2TV (54) and SP6GWN (M). We are sorry but because of strong interference from the EU tropo contest, we will not be active in the Oct (50 through 1296) part of the ARRL EME Contest.

OK1TEH: Matej ok1teh@seznam.cz sends information on recent 70 cm operation -- I was pleased to work KP4AO on 19 March on CW right after SM2CEW. Their signal was huge, so I QSP'd to my dad, OK1VPZ and he worked them on SSB for his first EME contact. He heard them in the 80's as OK1KRA with a single 21 el F9FT, but was unable to complete a QSO until now! Later on Friday, I heard KP4AO's send long CQ without an answer, so I called him using our OK2KKW club call and worked him on SSB too. I had a 2nd QSO with KP4AO on 22 March on SSB. I was glad to meet Angel, WP4G on the mike as we had QSO'd on 2 m EME before. This was also my 2nd SSB QSO on 70 cm with single yagi. (The first was with HB9Q). During the April Arecibo weekend I tested RX possibilities and was able to decode their JT signal with a "rubber ducky" antenna. I later worked on JT65B IK6EIW for mixed initial #47* - we had tried unsuccessfully before, S53RM (25DB) #48* and K5QE (23DB/23DB) #49*. Marshall has repaired his antenna and his signal is similar to I1NDP. During the DUBUS 70 cm CW Contest weekend I CWNR'd SM4IVE, SV1BTR, OE5JFL (big signal) and DL9KR. On JT65 I decoded DL7UDA, however his signal was too unstable to copy my QRP signal. I also CWNR WA3QPX FB (24DB) signal. I'm looking for my 50th mixed initial with a single yagi as well as somebody from South America to complete WAC (heard LU7DZ but no success yet), so if you are interested in CW or JT65 skeds, please don't be shy to ask me. (The smallest station worked on 70 cm remains UA4AQL with his 2 x LY and 800 W).



OK1TEH decoded KP4AO's JT EME signals with a rubber ducky antenna

OK2DL: Marek ok2dl@seznam.cz is a new station QRV on 23 and 13 cm EME. He is using a home made 6 m dish. On 1296 he has available 200 W and on 13 cm 100 W (both referenced to the feed). Marek's Sun noise on 23 cm is 16 dB and on 13 cm is 12 dB. During the recent 13 cm contest, Marek worked SP6OPN (559/559), OK1CA (569/569), RK3WWF (559/559), SV1BTR (559/529), OK1KIR (559/549), F2TU (569/569), OZ4MM (559/549), DL4MEA (559/559), LA9NEA (559/559), OK1DFC (539/559), G3LTF (559/559), DL1YMK (559/549), ES5PC (549/549), LZ1DX (539/559), SV3AAF (539/549), IW2FZR (559/559), OH2DG (569/569), HB9SV (579/579), DF3RU (539/549), WA6PY (O/O), VE6TA (549/549) and W5LUA (O/O). Marek is expecting to add 432 in the near future. More details can be found at www.ok2dl.blogspot.com. [TNX to OK1DFC for forwarding this report].

OK2DL's new 6 m dish

PA3DZL: Jac's PA3DZL@planet.nl 13 and 70 cm contest report – Using my 2.5 m dish with VE4MA feed, 0.4 dB NF G4DDK preamp and 175 W SSPA at the feed, I logged the following QSOs: On 17 April F2TU (559/539), G3LTF (O/O) for mixed initial #16*, OK1CA (O/O), SV1BTR (O/O), ES5PC (O/O), DL4MEA (O/O) #17*, W5LUA (559/449) x-band, SP6OPN (559/549), OK1KIR (O/O) and OZ4MM (O/O), on 18 April OK1DFC (O/O) #18* and PA0BAT (17DB/24DB) on JT65C #19*, and on 19 April VK3NX (O/M) #20* x-band for best DX of 16,552 km, K8EB (16DB/O)on JT65C #21* x-band and K8EB (O/O) CW, and on 20 April LX1DB (569/569) #22*, LX1DB (44/44) and DF3RU (539/449) #23. I also became after a long time QRV again on 70 cm to work KP4OA. I put up for this event a 1 x 38 el M2 13 wl yagi, old 0.4 dB NF MGF1302 preamp and PA with about 750 W at antenna. I last worked KP4I on 17 and 18 Oct 1987, so it was not new for me but I enjoyed very much hearing such strong signals off the Moon again. In addition to KP4AO (599/559) on CW on 16 April and (59/55) on SSB on 17 April, I worked on JT65B on 17 April HB9Q (O/13DB) and I1NDP (O/O), and on 18 April PI9CAM (15DB/O).

SM3JQU: Per perolof.sjlander@telia.com writes on his recent 432 operation -- I guess, many others spent a lot of time close to the radio during the Arecibo weekend. I did not make any contact with Arecibo during the test in March due to problems in my TX-line, so I started Friday evening and hoped to get a reply. I found that signals from them were a bit weaker than expected. When Faraday did its best to block, signals were not much better than the normal signals from DL9KR, hi. After listening for little more than an hour and half and a few spontaneous calls a reply on CW was heard, but I was not sure if a QSO was complete. Saturday morning I started with a frozen lawn. This condition made necessary a trip there with my lawn tractor, which allowed the antennas to lower with no deep tracks. My goal was to replace the13 cm preamp at the feed point. But during the change, I was surprised by a fall of about 3 cm of snow in 15 mins. So instead of the mud, I wanted to avoid, I ended up in snow. Sun noise seemed fair after the switch, but I did not measure any exact figure. I spend most of my time during the rest of the day trying to get my first QSO on 13 cm. I identified some calls, but did not receive any answer to my calling. Some of the strongest where SP6OPN, SV1BTR, G3LTF, DL4MEA and OZ4MM. In the KP4AO Saturday window, I was tempted to make another call due to my earlier uncertain result. This time I got answer on SSB, but again was not sure of the report. This time Arecibo was loud and clear and just listening to the activity was great entertainment. Later back on 2320, I managed to catch ES5PC for my first QSO on 13 cm! TNX Viljo for your great ears. On Sunday, I worked F2TU for #2 - TNX Phillippe. TNX also to SM3AKW for the coaching during the weekend and keeping my spirit up, even if we did not manage to copy each other. Activity on 2320 was lower in the evening during the US window and I had no cross band, but I still listened hoping I find a new station. The window for KP4AO on Sunday was monitored from time to time. I also recorded some examples of the enormous level of the signal. I think the signal on Sunday was strongest I ever cpied off the Moon. Personally I feel almost spoiled with all the *happenings* during the weekend.

SP6GWN: Henryk sp6gwn@wp.pl completed the first 6 cm EME from SP during the DUBUS Contest on the weekend 25 April with F2TU. Henryk's station consists of 2.7 m, 0.37 f/d dish with RA3AQ feed scaled from 23 cm version, 12 W SSPA (11 W at feed) and 1.3 dB NF LNA. A day earlier he had a partial QSO with OK1KIR. Both stations were hearing each other, but a QSO could not be completed. Henryk also heard ZM2TV on SSB and other stations on CW, but was not able to identify them. He is having difficulty with tracking and hope to be QRV again in July with a better rotor. (He also made the first SP EME QSOs on the 23 cm and 13 cm bands). [TNX to SP7DCS for forwarding this report].

SP6GWN's 2.7 m dish and 6 cm system

SV1BTR: Jimmy jimmyv@hol.gr had a great time in the 70 cm and 13 cm legs of the CW/SSB European WW EME Contest -- I do not fully agree with complaints about the low declination contest weekends. Low dec weekends are certainly not my choice for any band, but I respect the choice of organizers and tried to enjoy as much activity my window allowed. I was not QRV in 1st pass as I having no visible Moon at 10 degrees elevation when the contest started. As such, I ask myself is this only a European EME Contest and not a "WW" one, where NA participates? Why do we, Europeans, QRV in ARRL Contest? Well, shouldn't we take advantage of the wonderful opportunity and try to maximize moonbounce traffic in all contests so as to have "fun" and attract newcomers? So, PSE spend at least sometime on the bands. We all have commitments, and multi-banders have their own special challenges, but I think a more balanced participation from NA would be nice to show this is truly a Great WW CW/SSB EME contest! Organizers PSE help multiband stations by scheduling high declination weekends with a minimum of weekends where more than 1 band is involved. I returned to SV from Brazil a day prior to the 13 cm contest and just in time to go to my EME QTH, install the repaired azimuth rotor for the dish and align the antenna. I was QRV only half the time on Sunday. US activity was scarce, only about 1/4 of the active stations were on. I QSO'd the following 35 fine stations: SP6OPN, OK2DL, OK1KIR, OK1CA, G3LTF, VK3NX, RK3WWF, ES5PC, OK1DFC, F2TU, DL4MEA (I called on CW, he responded on SSB), LZ1DX, SP6GWN, SV3AAF, SD3F, DL3EBJ, LA9NEA, IK2RTI, DL1YMK, DF3RU, PA3DZL, PA0BAT, HB9SV, OH2DG, IW2FZR, W7JM, VE6TA, WD5AGO, OZ4MM, WW2R, JA8ERE, F5JWF, N8OU, LA8LF and W5LUA. During the 432 contest I was very pleased to have worked on CW random the following 30 fine stations: UA3PTW, SP6JLW, JA9BOH, DL4MEA, SM6FHZ, SV3AAF, DL5FN, JA6AHB, DL1YMK, DK3WG, I1NDP, OZ6OL, G3LTF, PI9CAM, DL7APV, SM4IVE, OK1DFC, SP7DCS, OE5JFL, LZ1DX, SD3F, DL9KR, W8TXT, DG1KJG, JA0TJU, G4DHF, ES5PC, CT1DMK, K2DH and N4GJV. Getaways (briefly on) but with good signals were OZ4MM, W5LUA, G4YTL and LU7DZ. I hope to be on for the 23 cm leg as I will be returning from PY land the day before.

SV3AAF: Petros sv3aaf@yahoo.com writes about his April EME activity on 70, 13 and 6 cm -- I was on EME for DUBUS/REF Contest legs for around 3 hours per moon-pass. Thankfully hijacking behavior was not that bad this time. I find that the more new stations active, the less hijacking occurs. Low declination during the 70/6 cm weekend limited Moon window time and hurt activity - most dishes are at a low height and blocked near the horizon. All types of Faraday disturbance and deep QSB were experienced on 70 cm, while on the microwaves conditions were stable and weak signals were rare. The following stations were worked on random CW on 70 cm: UA3PTW, SV1BTR, OE5JFL, PI9CAM, OK1DFC, SM4IVE, DL9KR, DL7APV, I1NDP and SM2CEW. I worked on 13 cm OK1KIR, SV1BTR, SP6OPN, F2TU, G3LTF, OK1CA, RK3WWF, OK1DFC, OK2DL, ES5PC, HB9SV, LA9NEA, LZ1DX, W7JM, IW2FZR, VE6TA, OH2DG, DL1YMK, DL4MEA, VK3NX, OZ4MM, SD3F, IK2RTI, K8EB and LA8LF, and on 6 cm IK2RTI, F2TU, OK1CA, OK1KIR, G3LTF and ES5PC.

UA3PTW: Dmitrij ua3ptw@inbox.ru was very active on 432 and 1296 during April. He QSO'd on 432 CW G4DHF and K2DH, and on JT65B RK9AT, GM4ISM, OK2UZL, K5QE, G4CCH, W7IUV, LU1C, SM7GVF, YO3DDZ, DL8GP, DL1AAH, AJ4MW and BD4SY. On 1296 he worked on CW UT5JCW and on JT65C VK7MO and OK2DL.

VE4MA: Barry ve4ma@shaw.ca was QRV for the 6 cm DUBUS Contest –- I worked on the first pass (Friday local) F2TU and OK1KIR, and on Saturday OK1CA and W5LUA. I initially had a frequency error, but soon corrected it.

VE6TA: Grant ve6ta@clearwave.ca was QRV on 13 cm for the DUBUS EME Contest in March -- I worked 16 stations and one new station OK2DL (549) for initial #64. I did get on for my western window, but had no luck there. I did work WD5AGO and copied him well on SSB. Grant also worked KP4AO on 70 cm in March on SSB.

VK3NX: Charlie ibnkarim@bigpond.net.au had a good time on 13 cm during the EWW Contest weekend – I found condx on the 1st pass were OK, but a lot of rapid QSB. Condx on the 2nd pass were much better. I worked OK1KIR, ES5PC, F2TU, SV1BTR for an initial (#), DL4MEA, LA9NEA (#), OK1CA, OK1DFC, SP6OPN (#), SP6GWN (#), G3LTF, OZ4MM, SV3AAF and OH2DG (#). Not a lot of stations by comparison to others, but for the limited window down here in VK, I was pretty happy. I worked all heard but 1 station on 2320 or on the VK band (2301). Only F2TU was worked on 2304. I have come to the conclusion that it does help to spread stations, if I listen all 3 sub bands. Sorry I didn't have the JA sub band in line. QRM seemed less and thanks to all the stations on 2320 for giving my *transposed QRG* a *wide-berth*. It made a huge difference. I think in the future I will operate in a similar fashion and listen on all sub-bands. One thing stands out – the very little activity from NA! As I publicized, I listened in my NA window on the 2nd pass and called CQ for 1 ¾ hrs with no replies. WW2R was there but no one else! From the reports of others there was some activity, but it looks like the Arecibo adventure took precedence. Is there another "moonnet type reflector" in use over in NA that I should be "publicizing" on? Actually can someone tell me of all relevant reflectors PSE? All in all, a lot of fun was had and tonight (after the contest) I added PA3DZL to my list of worked stations on 13 cm.

W5LUA: Al w5lua@sbcglobal.net reports on his 70 and 6 cm activity in April – I was on 432 after a long absence on 16 April and worked KP4AO for their first contact. I used a one wavelength loop to feed my dish. The following week, I was in California and did not get home till very late Friday night. On Saturday on 70 cm, I worked DL9KR, I1NDP and G3LTF. It was a special treat to work Jan and Peter again on 432. I then switched to 6 cm and worked OK1KIR, F2TU, VE4MA, ZM2TV and VK3NX.

W7MEM: Mark w7mem@msn.com worked KP4AO on CW and SSB, and quite a few other stations on 70 cm during the weekend -- SM4IVE was quite strong and confused me with W7EME. I am still planning on moving my 70 cm array and putting up a dish for 23 cm.

WA8RJF: Tony TEmanuele@kentdisplays.com was QRV on 13 cm for the DUBUS Contest and worked the first day 4 including two initials, and added on Sunday 4 more including 2 more initials for a total of 8 QSOs. Contacted were F2TU, OK1CA, OK1DFC for an initial (#), ES5PC (#), OZ4MM, OK1KIR (#), SP6OPN (#) and VE6TA. Satellite interference on 2320 made it difficult to work the usual suspects in G and DL-land.

WD5AGO: Tommy wd5ago@hotmail.com reports on his Areicbo, 6, 13 and 70 cm activity in April –- My students built up antennas to receive the KP4AO signal. All were 1 m or less in length. The smallest antenna was between a 3 el LP and a 4 el yagi. With the lower than expected power from Arecibo and rain static here, it was difficult at first, especially on SSB. But by 1745 with the rain stopped and them on CW, all of the antennas had succeeded. They did have some help from an 18 deg LNA. After the antenna test, the WD5AGO (club) QSO'd KP4AO on CW with 100 W at 1815 and a little later K1RQG. I also managd to find time to QRV for the 13 cm contest.

WW2R: Dave eme_ww2r@g4fre.com sends news on his DUBUS Contest activity on 70, 13 and 6 cm –- On 17/18 April I was active on 13 cm. I started

late because of a family needs and the first day worked 11 including 3 initials and 2 new countries. Only one W though! Conditions were good, especially at Zenith; for the 1st time ever I heard my SSB echoes. The following 24/25 April weekend, I had an encouraging time on 6 cm. It was my 1st experience of this band, and I heard more stations on 6 cm than on 432! Friday night (local time) on 6 cm upon pointing dish at the Moon, I immediately heard F2TU and OK1KIR, and detected my own echoes - so the TX was OK. I called F2TU and received (M) back, but didn't complete before the Moon disappeared into Phillippe's trees. I CWNR'd OK1KIR (who was louder than F2TU) for 20 minutes. I also heard VE4MA and SV3AAF. On Saturday night signals were way down from Friday. I heard F2TU weakly and got some very weak signals from VK3NX – too weak to work. I heard W5LUA, but no sign of ZM2TV, whom he was working. Tracking the moon was an issue as at low declination I have some pointing errors due to the weight distribution on the dish. Tracking on moon noise was impossible as I was suffering 1 second pulses that brought the noise floor up 6 dB on my G3WDG 144 MHz noise amp and the GR noise meter. Fortunately the K3 noise blanker made it have no effect on the receiver. Having heard 5 stations, I am now looking forward to the next 6 cm AW.
On 432 during the DUBUS Contest, I only heard K2UYH and I1NDP, but no QSOs. The previous Arecibo weekend, my XYL worked KP4AO.

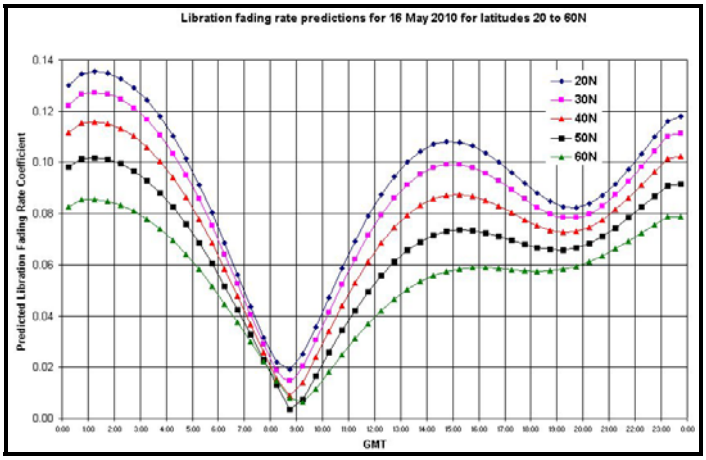
ZS5Y: Derek derek@fotogravett.com is now QRV again on 23 cm with a QRP system -- I worked PI9CAM in Apri on 1296. I only have 10 W in shack, maybe 5 w at feed of his 3.7 m dish. I do have a 2C39 PA, but I have as yet not been able to get it going. My RX is fine as I copy even 2 m dish stations on JT. I hope to be QRV with more power soon. [Derek is also QRV on 70 cm EME]

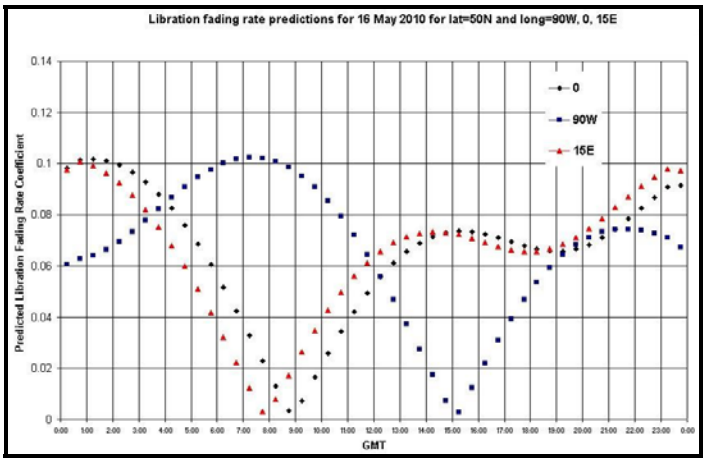
K2UYH: I a.katz@ieee.org was active on 70 and 13 cm in April, but only had very limited operating time during the contest weekends because of other long standing commitments –- I worked on 432 on 9 April at 1155 WD4JHD (13DB/21DB) JT65B for a mixed initial #792* - tried to set up a CW sked, and also had a partial with N6RMJ (26DB/-) - Pat can only operate on the horizon, on 16 April at 1738 DF3RL (19DB/20DB) JT65B 1748 #793*, on 17 April at 1738 4L1FP (25DB/21DB) JT65B for 794* and DXCC 97*, 1809 UT6UG (15DB/15DB) JT65B #795* and 1815 OK2UZL (23DB/21DB) JT65B #796*, and then switched to 13 cm at 1925 OK1CA (559/569), 1935 F2TU (599/579), 1938 OH2DG (559/569), 1942 ES5PC (559/569), 1946 OZ4MM(559/559), 1950 SP6OPN (559/569) for initial #44 and new DXCC, 1955 OK1DFC (559/559), 1958 VE6TA (559/569), 2010 W7JM (559/559), 2020 partial K8EB (559/-) – disappeared, 2025 OK1KIR (559/579), 2032 SD3F (559/569), 2041 HB9SV (569/569), 2046 WW2R (559/559), 2054 SP6GWN (559/0) #45, 2114 G3LTF (569/569) x-band for a total of 16 QSOs, on 23 April on 1296 at 1830 partial ZS6E (-/22DB) JT65C – nil heard from Derek, on 24 April on briefly for the 70 cm leg of DUBUS Contest at 0015 SM4IVE (579/559), 0026 OZ6OL (549/569), 0032 OK1DFC (569/579), 0040 QRZ ??? – quite too soon, 0057 VE6TA (559/559) and 0142 K6JEY (559/559), and on 8 May at 1100 N4HB nil JT65B, 1145 G4CCH (22DB/O) JT65B for #797* and 1210 G4CCH (O/O) CW #720. We will only be on during the 1296 contest weekend for a limited time because of conflicting business travel.

NETNEWS BY G4RGK: **LX1DB** report copy of KP4AO (569) with 18 el yagi. **WB7QBS** worked KP4AO (579) on 16 April, but did not succeed on sked with VK4CDI. **K5SO** was on 70 cm on 16 April and worked KP4AO on SSB. He recorded 100 kHz of spectrum that is posted on his website and needs just Spectraview for decode. **W4TJ** copied KP4AO (S5) or greater all the time on single yagi, but did not try to transmit. **W6AT** copied KP4AO for 1.5 hours and CWNR. **W8TXT** worked KP4AO on 16 April. **K0RZ** was on 70 cm on 16 April and worked KP4AO. **VE1ALQ** reports that 3 families of squirrels plus a few snakes have taken up residence in his 1296 feed and AZ drive house. They eaten (cut) nearly everything including my RX line, 7/8" TX hardline, AZ and EL drive cables, encoder lines – a real mess! Darrell now needs approx. 45' of Andrews 7/8" annular hardline. **WA5TKU** reports copy of KP4AO (449) Friday using a single 22 el K1FO yagi and an FT-847 with no preamp. **W4SC** using FO 25 el yagi and IC-910 with no pre-amp copied KP4AO (44) on SSB and (569) on CW. Ben CWNR. **VE2DFO** worked KP4AO with 2 x FO yagis and a barefoot TS 2000X. Don says it is nice to get on the Moon again! **K5PJR** CWNR KP4AP with a 19 db antenna and 100 W. Tony never missed anything on RX with only 3 dB NF. **VE3KRP** worked KP4AO with "bungie" feed on his 10' dish. **K5JL** reports little 23 cm activity during the April AW. **ON5OF** work KP4AO on SSB and CW. He now has his 70 cm station running well again with 800 W out. K4QF reports with a single yagi coping KP4AO about 25% on SSB and 50% of the time on CW. **CT1DMK** reports copy of SSTV between PI9CAM and HB9Q on 70 cm EME. Luiz also worked KP4AO. **WA7KYM** heard KP4AO fine, but no contact. **4L1FP** worked on JT65B K2UYH on 70 cm.

FOR SALE: **DL1YMK** is looking for a reasonable priced source for 2 GaAs-Fets TIM 1011-20. **W7MEM** has FT-736R with 23 cm (and 6 m) for sale.

TECHNICAL: PREDICTING LIBRATION FADING BY G3WDG -- Libration can often be a more important factor in determining if a QSO is successful than operating when the Moon's path loss is minimum. Charlie has been working over the last few months on being able to predict timing and quality of libration minimum events. A prediction for G3WDG's Location is shown below. The first graph is [for own echoes] at IO92RG, but it can be used for most of W Europe. It illustrates the affect of latitude on the null. The "quality" of the minimum varies a little with latitude. For this event, stations a few degrees north of us would experience a deeper null, while for stations south the null would be less marked. In our experience, the null lasts for about 30 mins, with signals getting progressively broader before and after the null time. The timing of the event varies with Longitude, i.e., the minimum would occur one hour earlier for every 15 deg shift eastwards. It would be at ~0845 for a station located 15 deg to the east of us. The second graph shows the affect of longitude. While the latitude graph is labeled for N latitudes, the predictions show that the same effects occur for S latitudes also, with the same depth of null for a given latitude (N or S). [This has not been tested yet by observation.]





Based on my observations the predictions seem to work as far as I have been able to observe. We got some wonderful near -T9 echoes on 3 cm bang on the predicted time. We also listened on 13 cm after moonrise and signals from W Europe were good. Most had very narrow spreading and low fading rates. [I am looking for some software or a MATLAB expert to to analyze wave files to dig a little more deeply into this.] Nearer moonset the predicted libration was much higher and you could see on Spectran that the signals were broadening out noticeably, even on 13 cm. On the lower bands, the libration minimum will be observed most easily as a reduction in amplitude fading rate, while on higher bands (say 3.4 GHz and above) the most obvious effect is a reduction in the frequency spreading. For more information see http://www.sucklingfamily. free-online.co.uk/libration_predictions_for_16 _may.htm. If any stations are able to be active during this event, I would be very If any stations are able to be active during this event, I would be very interested to receive results - audio recordings would be most useful.

FINAL: 2010 International EME Conference in Dalas, TX – Now is the time to get your registration in. The conference on 12/14 Aug is not much more than 2 month away. The web site http://www.ntms.org/eme/ is up with all the information and ready for your registration. This is not a conference that you will want to miss. [See last page].

I hope to see you all at the Dallas Conference and off the Moon during the contests and ATPs. This will be the last month before things slow down over the summer – I hope not! In all my years of EME, I cannot remember a year with more going on than this one. Keep the info coming. 73, Al – K2UYH

PS; I will also be a Dayton this weekend and hope to see some of the EME gang there too.

Welcome to the 14th International EME Conference

It is with great pleasure that W5LUA, VE4MA, WA8RJF and the North Texas Microwave Society officially announce the 14th International EME Conference. We cordially invite you and your family to Dallas, Texas on the 12th,13th and 14th of August 2010 for the premier technical and social EME event of the year. Whether you are an experienced EMEer or new to EME, the conference will offer a wide range of technical, social and site-seeing activities for everyone.

The conference hotel is The Westin at the Dallas Fort Worth Airport which is just a short shuttle ride from DFW Airport and offers first class conference amenities at an excellent conference price of $89 USD per night plus taxes. The address for the Westin is:

The Westin, Dallas Fort Worth Airport
4545 West John Carpenter Freeway
Irving, Tx 75063

We have guest rooms blocked for Wednesday night through Saturday night. The conference rate is guaranteed only for the dates shown above. If you arrive before Wednesday night or if you stay past Sunday morning your rate may be higher on the non-conference days. Please book your room directly with the hotel as it helps the conference organizers meet our hotel commitment and help offset the price of conference meeting rooms and other amenities. We expect a large turnout and strongly recommend that you book early to avoid disappointment. The hotel block will be held until July 12, 2010. After July 12th, it will be difficult to get the same conference rate. Register online with the link below --

- ***Register for the EME Conference***
- ***Conference Hotel Details / Reservations / Map***
- ***Registered Attendees***
- ***General Schedule***
- ***Presentation Schedule***
- ***Meal Details***
- ***Program Activities including Workshops & Vendors***
- ***Tours and Ladies Program***

We are still soliciting people to speak or if you just want to submit an article for the Technical Proceedings of the 14th EME Conference, we will be happy to have you send us an email with your article. Please contact Barry at **ve4ma at shaw dot ca** if you would like to speak and/or submit an article.

Our famous state side road warrior Paul Perryman WA5WCP/5 has agreed to pull his portable EME system complete with 12 ft (3.7M) parabolic dish to the hotel. Paul has capability on 1296 MHz and 2304 MHz so if you have yet to hear any EME signals on the higher bands, this is a great opportunity to hear it live and work stations.

The Dallas-Fort Worth area offers a wide range of holiday/vacation activities. Plan on arriving at the conference hotel Wednesday afternoon or evening. We will have a hospitality suite and registration on Wednesday evening so we can get acquainted and prepare for a full day of family activities on Thursday.

We have been working with an excellent tour guide company and have pulled together some excellent tours of the Dallas Ft.Worth area. On Thursday we are offering a full day highlight tour of the Ft. Worth and Dallas area. Since there are no technical presentations planned for Thursday, we are planning for this to be a widely attended tour by both husbands and wives. While the technical sessions are going on during the day on both Friday and Saturday, we plan two full days of family activities. The Friday tour is a 9am to 3pm tour of the world famous Southfork ranch from the "Dallas" show plus a North Park Shopping Experience which is one of the largest and premier shopping centers in the country. On Friday evening it is time to put on your blue jeans and take your gal to Ft.Worth for a fun western styled evening at the Fort Worth Stockyards Championship Rodeo. We will leave the hotel at 630PM and arrive back at the hotel by 10:30PM. On Saturday morning while the EME guys are enjoying the technical sessions, the wives are invited to a guided tour of Historic downtown Grapevine.

WA5WCP and his portable EME setup

We have several electronic vendors signed up to showcase their goodies. The vendor rooms will be open all day Friday and Saturday. If you are interested in obtaining a vendor table, please contact Craig KA5BOU at ka5bou at dfwair dot net as soon as possible before the start of the conference. More information to follow.

We will also have noise figure measurement equipment on hand to showcase your newest low noise amplifier or to help you troubleshoot a troubled LNA. Tommy WD5AGO and Al W5LUA will be coordinating the testing.

The EME conference will conclude with the Saturday evening banquet. A guest speaker is planned, details will follow. The meal for the banquet must be requested in advance on your registration form. We will have a short session on Sunday morning to wrap things up and then you are free to continue your travels. We hope that you can make the Dallas Ft.Worth area the center of your 2010 vacation or just a stopping point as you tour other parts of North America. The Dallas Fort Worth area is served by DFW International Airport making international travel easy while still a convenient jumping off point to other destinations within the U.S.A. or Canada.

EME communication has evolved quite a bit over the last 30 plus years. We have met many wonderful people and learned a lot from each other. Many of us are interested in a particular band, a particular mode, and have been striving for higher frequencies, but the common interest is still communication via the moon. I hope that all of you will use this conference as a means to renew old acquaintances and to meet new faces as well. This is truly a part of amateur radio where every advancement in technology can benefit our little part of the hobby. So…come for a day or two or three… bring a "newby" but just be part of the most fascinating aspect of amateur radio…EME!

Whether this will be your 1st EME Conference or your 14th we are looking forward to seeing you in Dallas in August 2010.

73 and GUD DX (via the Moon),
Al Ward, W5LUA
Barry Malowanchuck, VE4MA
Tony Emanuele, WA8RJF

2010 International EME Conference Staff: