The 144 MHz EME NewsLetter

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Issue 11/2022 14 October 2022

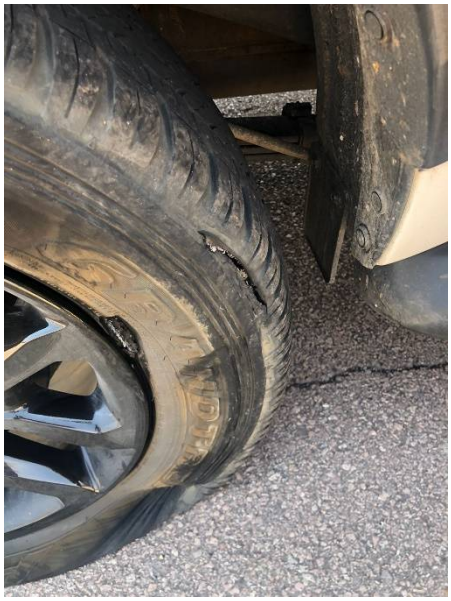
D2TX: ZS4TX Activating Angola on 2 m EME

The number of first ever DXCC activities on EME is getting smaller and smaller since many entities have been QRV already. Angola so far was one of the countries which had never been on the moon – until Bernie, ZS4TX, changed this last August.

The 2 x 18 ele M2s behind Bernie's car in JH85TI.

After intensive preparations Bernie communicated the D2TX DXpedition past July. His plans were to run 2m with an IC-9700 and 2 x 2M18XXX stacked horizontally, LNA and EME power. Sadly due to logistics problems plans to add 6m and 70cm had to be cancelled. Bernie had hoped he could be QRV by moon rise on August 12th and indeed the early UTC evening hours of August 12th the first

signals from D2TX bounced off the moon: After long drive ZS4TX had arrived only hours earlier and straight away started to set up the equipment. From then on Bernie worked a pile-up running Q65A-60 only. The complete list of stations worked during three moon passes until August 15th can be see on www.mmmonvhf.de/review.php if you just choose D2TX.



The return trip was no easy one. The shortest direct route back to Namibia had become virtually inaccessible due to very bad road conditions, forcing Bernie to take a longer safer road – and adding ~700km to the next pre-booked accommodation. Moreover when his car hit a deep pothole one tyre burst (see left) and had to be replaced. The entire trip took some 6625 km with considerable fuel cost. Including the QRV days this meant a 10 day road trip crossing the Namibia, Botswana and Angola borders. On August 25th Bernie and xyl arrived back home, safe and sound.

ZS4TX is grateful to all supporters who contributed to cover these expenses. No question, this D2TX expedition was an epic one for him and his xyl. So many things could have gone wrong and so many problems popped up. In the end it was a highly successful one though. Bernie was amazed that there were not more of a pile up as it was a brand new one DXCC for EME. Maybe the activity post Covid has gone down everywhere. In ZS there used to be 9 stations permanently on 2m EME, now only 2 are left. However it could also be that the higher technical (computer power) requirements for Q65 and the lesser experience many hams have with this mode had an influence. Plus those attending the EME conference in Prague and hence being away from the shack.

Bernie sent an email about the reasons why he chose Q65 instead of JT65B for this DXpedition: "Q65 has already been proven very useful by the Austral and Marquesas 6m EME expeditions that W7GJ did in October/November 2021. Apart from Lance's success with Q65, the reasons why I chose it are the following:

Faster QSO rate: If the caller initiates the contact with the report [TX2] then only 3 minutes are needed to complete the contact. By calling with the report it shows who is actually receiving you and there is a chance that you will be answered quicker to keep the pile-up flowing. In JT65, even by using the method Lance suggested ("Lance Procedure" or "W7GJ procedure") to transmit both callsigns plus OOO as a switch to indicate decodes or decent traces, it takes longer to complete a contact. TX2 was used successfully by several callers during this expedition – some did not understand the technique fully and kept on sending TX2 even with me answering them many times. There are probably a myriad other reasons for that as well.

I compared my D2TX [Q65] log with the 7P8Z [JT65] log and the QSO rate on Q65 was 4.5 minutes per QSO while the JT65 log showed 5.6 minutes per QSO. The ~10 hour log sections that I compared had no CQ's from me in that time frame and there were always one or more caller waiting.

Interleaving contacts: Everyone has felt the frustration of a JT65 expedition sending RO or RRR numerous times to try and complete a contact while you have perfect copy and the moon is setting on your end or you have been called for supper. Managing a pile-up has been made

very easy with Q65. When I reply to a station and he does not decode my reply I can immediately select a new caller [preferably one already on TX2] and give him a report and complete within the time frame that I would have been sending multiple OOO or RRR's to the station not seeing my previous reply. I can then continue trying to work the initial station or select a new one. A few times during the D2TX expedition the 1st caller who did not reply initially came back with the report or RRR/RR73 while I was working the new station. This could be due to late decodes, rescan decodes or a manual double click on the trace that also sometimes yields a fresh decode. I accepted it like that and no-one complained. No-one asked to be removed from the log due to a late decode/reply...

With Q65 there is no fight about who is the owner of the RO or RRR and no one asks you "what is my report for the log". Actually one station did ask me...

Logging: The logging prompt from WSJTX makes sure no one is missed. You do have to concentrate to not miss a log action when interleaving contacts but it is easy to go back in the all.txt files to check if anyone has been missed.

Automation: Everyone decides for himself what level of automation he finds acceptable and being a single operator this feature helps a lot when you have to run outside to restring guy ropes or reposition the antenna while dodging Mosquito's, Scorpions and Snakes.

Further notes: All callers had visible traces on the waterfall, even if it was just a partial trace. I did not update my CALL3 file before the expedition. No one asked me if they are in the CALL3 file. I did not receive any false decodes. Signals that overlapped decoded without problem, sometimes the signal strength showed less than I thought it should be on at least one of the overlapping stations but it still decoded.

Crowding on DF 1500Hz is counter-productive – I am amazed how many prominent EME station operators do not realise it. Several single yagi/low power stations made it in the log.

In my opinion, Q65 is superior to JT65 on 2m EME, especially during a DXpedition. There is really no reason to stick to JT65. I do accept the fact that some older PC's do not handle WSJTX well but sometimes an upgrade is inevitable if you do not want to be left behind."

Nothing much to add to Bernie's remarks. The X-Team DH7FB and DF2ZC will also try Q65 the next DXpedition scheduled for end of March 2023. Provided the laptop which is rather new can handle Q65 - which it should.

Left: The evil pothole. It is deeper than it appears.
(all photos ZS4TX)

Bernie now is already busy planning for another DXpedition to a DXCC in the Southern part of Africa for next year (no all time first this time) on 6/2/70. He's currently trying to find out about possible local or international interest to join the trip. So stay tuned...

Upcoming DXpeditions

For more information on current and upcoming DXpeditions please have a look at www.mmmonvhf.de from where most of the information here was gathered unless noted otherwise.

J28MB (LK11PX) QRV 29 Oct – 8 Nov

Emil, DL8JJ, who is the HF CW operator of the J28MB DXpedition to Djibouti in October/November reports that he will bring 2 m EME equipment: FT-857D, 1000 W PHOENIX 1000 RFP , 1 x 2M12 M2, BPF Antennas-Amplifiers and SP-2 SUPER-AMP preamplifier. During his off air time slots on HF he will run 2 m EME in JT65B. Frequency will be determined on site.

ZC4RH (KM64UX) QRV 10 Nov – 19 Nov

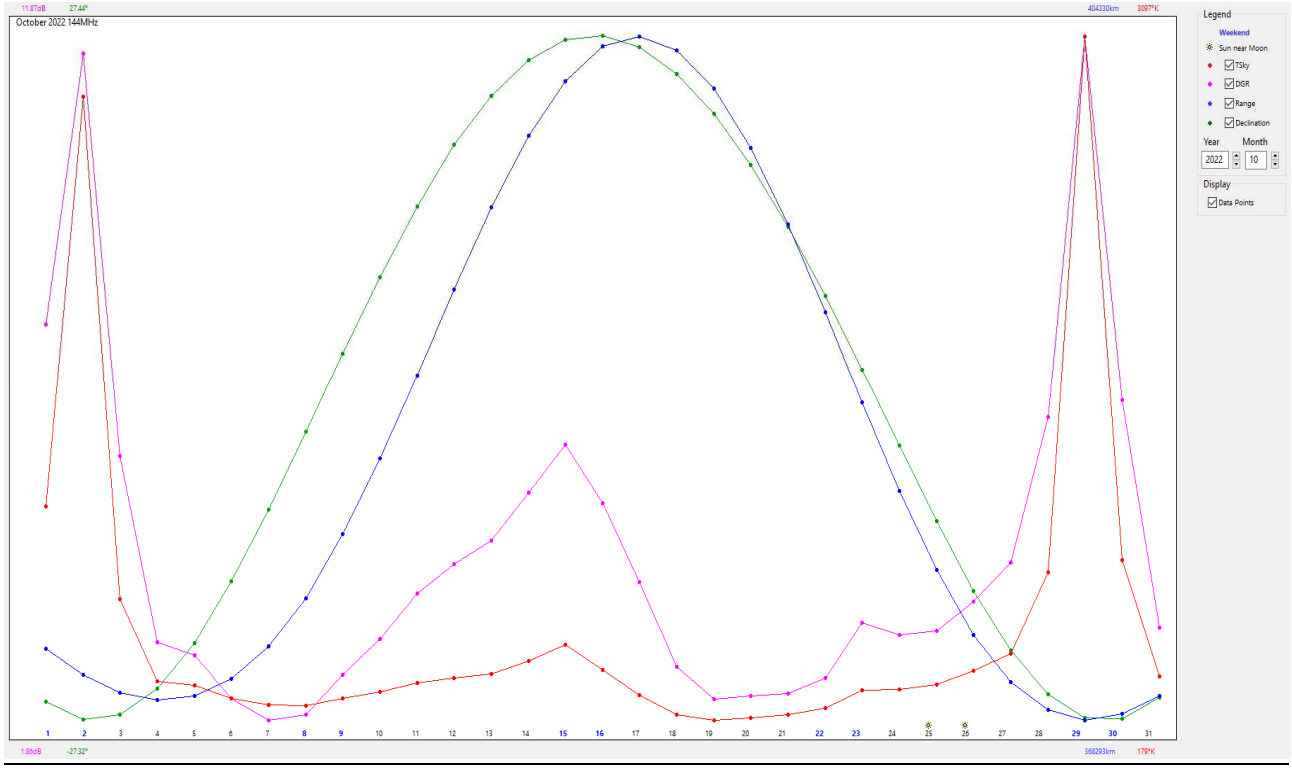
After a long time Chris PA2CHR and Jos PA3FYC are very happy to announce a new VHF/UHF activity on 144, 432 and 1296 MHz. With the great help of Dave, ZC4RH, it is possible to bring the UK Sovereign Base Area on Cyprus on the air. Chris and Jos will assist Dave with all needed equipment to operate all modes and propagations possible on three bands.

The 2m equipment will be FT857,2 x 20 ele x-pol. 16 dBd. and SSPA. Preferred mode on 144 MHz is Q65A, ZC4RH always tx 1st. Frequency will be communicated upon arrival.

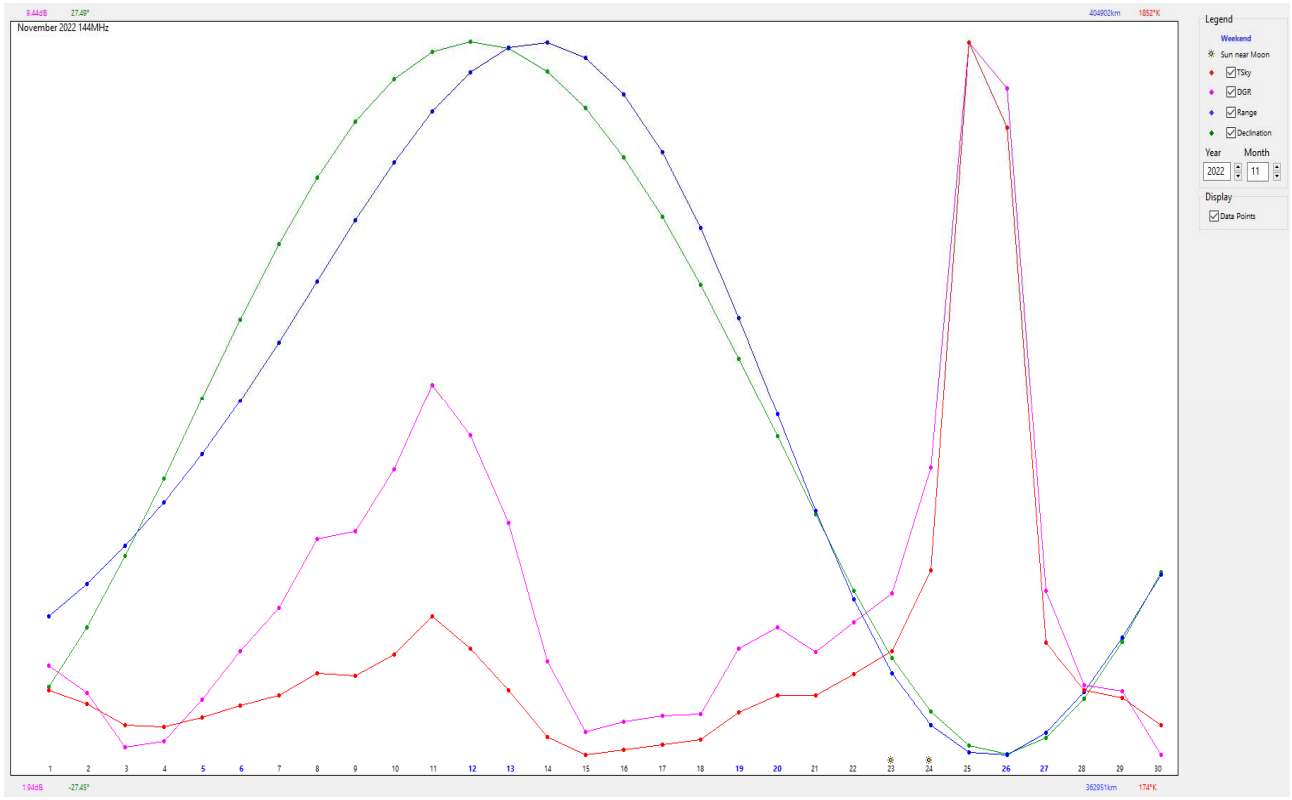
Time Table

7 Nov	The November Issue of the 144 MHz EME Newsletter ready for download.
12 Nov -13 Nov	ARRL-EME-Contest

Moon Conditions



Moon Graph October 2022



Moon Graph November 2022

(Courtesy of David GM4JJJ (sk 2019) www.gm4jjj.co.uk/MoonSked/moonsked.htm)