The 144 MHz EME NewsLetter

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Why is it a Good Idea to use the „Lance Procedure“ during EME DXpeditions?
Anybody who had ever been on an EME DXpedition very well knows the situation being described here: From the pile-up you choose a station and start sending OOOs to that call sign. Only, the station does not reply with ROs but continues calling with both call signs. So another sequence of Os is being transmitted, and again a decode with call signs only is received. So a third sequence of OOOs is sent and once more only call signs are being received: Obviously the caller did not at all copy but had joined the pile-up nevertheless. Or the caller had had copy all the time but only when the DXpedition started to send OOOs polarisation changed and copy was gone. As a consequence precious six minutes of activity time are lost. Six minutes which could mean another station made a contact who did have copy during that time.

So the question is: How can this situation be avoided? Here the so-called “Lance Procedure” comes into play. This procedure had long ago been suggested by Lance, W7GJ, who is a very experienced DXpeditioner, on 2 m and nowadays mainly on 6 m.

The „Lance Procedure“
W7GJ suggested a slightly modified procedure for EME DXpeditions, the so-called Lance or W7GJ procedure. Here the calling station does not call with call signs only but with call signs and OOOs, for example „D44TU DL2OM OOO“. The important precondition is: The station does at least clearly see the sync on the fft screen. Not even a full decode is necessary.

Lance explains the procedure as follows: „If you are seeing a signal from me in the **immediately preceeding sequence** (even if it is only a trace from me on the SpecJT waterfall, without any decode), I ask that you call me with call signs and OOO reports (JT65 standard message #2). When I answer you, you should then be able to decode me if you saw my signal trace on SpecJT before. If I can tell which station(s) are copying me at that moment, I should be able to complete the contact with them very quickly and move on to the next station. If you are **no longer copying** me at that time, it is **essential to remember to change the message back to call signs only** (JT65 standard message #1)!”

Of course this is not standard EME protocol, since a station must not send reports before they have copied both call signs. However, in this case, it simply says that a station is receiving something from the DXpedition. And the DXpedition will still always reply with both call signs and OOO to such a caller, indicating which station is being called, and that complete call signs have been copied (per the standard EME QSO procedure).

In discussions some people come up with the question: If the DXpedition copies both call signs plus report, they reply with ROs and nobody knows who the ROs are sent to. This understanding is wrong – as it is explained above. The standard EME procedure is kept with simply one additional information: By adding the OOOs the caller conveys the information "I'm not calling into the blue, I really copy you." **However, if during the QSO process copy is being lost for any reason (fading, QRM, noise...) the caller must revert to sending call signs only to tell exactly this to the DXpedition.** Only then, if everybody acts exactly according to this the advantages of the Lance Procedure can be realised!

A fictive example QSO situation with D44TU and three callers easily shows the benefits of that procedure:

1000Z RX: (1) D44TU DL2OM OOO (2) D44TU IK1UWL (3) D44TU PA0JMV OOO
1001Z TX: DL2OM D44TU OOO
1002Z RX: (1) RO (2) D44TU IK1UWL (3) D44TU PA0JMV OOO
1003Z TX : RRR
1004Z RX: (1) 73 (2) D44TU IK1UWL OOO (3) D44TU PA0JMV

Here it becomes obvious that Gio IK1UWL has now got copy while Joop PA0JMV lost the trace. Consequently now IK1UWL is being called as he's the only one calling with OOOs showing he's copying.

1005Z TX: IK1UWL D44TU OOO
Etc etc.

If Joop would have been called instead the next minutes might be wasted because he had lost copy (switching from OOO to call signs only).

During the recent D44TU DXpedition Frank DH7FB and Bernd DF2ZC had particularly asked for the use of the Lance Procedure and made very good experience with stations using it. Particularly DK5WL and I1ANP deserve praise as they went back to calling with call signs only when they lost copy of D44TU. Therefore D44TU could choose a different caller and work him instead. When copy was back 10 or 20 mins later DK5WL and I1ANP resumed calling with OOOs – and were worked. So DH7FB and DF2ZC will use that procedure also next time. Wayne VK5APN also has good experience with that way during his DXpeditions..

Of course, all callers must adhere to the rules described above: D44TU sometimes experienced that they sent OOOs to a station calling them with OOOs but still the station did not copy, even after three sequences. The Lance Procedure only makes sense if you go back to calling with call signs only as long as you have no copy anymore! And of course those stations calling with OOOs though they don't see the sync on fft then risk being regarded as callers who always call with or without copy. Consequently this will reduce their priority in the pile-up.

Hopefully more DXpeditions will use it in future as it helps to make more QSOs in a particular and restricted time frame.

Upcoming DXpeditions

EME from Bouvet Island – Request for Financial Support

An experienced DXpedition team of 20 operators are in the advanced planning stages of a DXpedition to Bouvet Island (3Y0Z). The DXpedition is scheduled to begin mid to late January 2018.

Like in 2006 at 3Y0X Peter One Island DXpedition, also EME will be deployed at the Bouvet 3Y0Z DXpedition for 50 MHz and 144 MHz. This time they have improved the set-up's: SDR radios, EME tuned antennas, a minimum of 1 kW SSPA power per band with low noise preamps and additional BPFs inline to avoid HF-QRM, low loss coax cabling, automatic Az and El moon tracking system, improved WSJT modes, heavily involved experienced EME pilots (Chris PA2CHR and Lance W7GJ) and back-up of the EME community.

The 3Y0Z EME operator team consists of Craig K9CT, Just LA9DL and Michael PA5M. Therefore technical and operational knowledge to work EME from such a remote location is assured.

Everything is in place except the financing. The total budget for this DXpedition is $740,500 where 50% of the budget is paid for by the 20 operators. 5% of the total budget is related to EME. This is where the team needs the support of the EME Community. Club/Foundation and individual EME donors can be seen on the website: http://www.bouvetdx.org/eme-bouvet-island/ Every little help is making this EME event possible!

DM2BHG QRV from Northern Norway

Like in the past years Heinz DM2BHG is travelling Scandinavia also this summer holiday season. And also like in past years he's bringing his portable EME setup so that he can be QRV from a number of wanted grid squares. His schedule is: JP51 (Lillehammer) June 21st, JP53 (Levanger) June 23rd,JP89 (Andenes) June 27th or 28th and JP88 (Narvik) July 1st. This will be a 5000 km trip. Therefore, anything can happen and this schedule is just an indication. Heinz will have internet at each camping site and he will announce his activities accordingly.

Rig will be: 2 x 8 ele DK7ZB, LNA with BFP196 and a homemade SSPA running abt 500 watts (the same amp he was using from Sweden last year). The station will sit in the car and the antennas will be on top of his brand new Skoda YETI.

VC2EME QRV From FO10 Grid and WAZ Zone 2

Bob VE3WY and Marshall K5QE will be QRV from FO10LE from June 25th thru June 28th. This not only makes a new grid square available but also waz zone 2. Call sign is VC2EME.

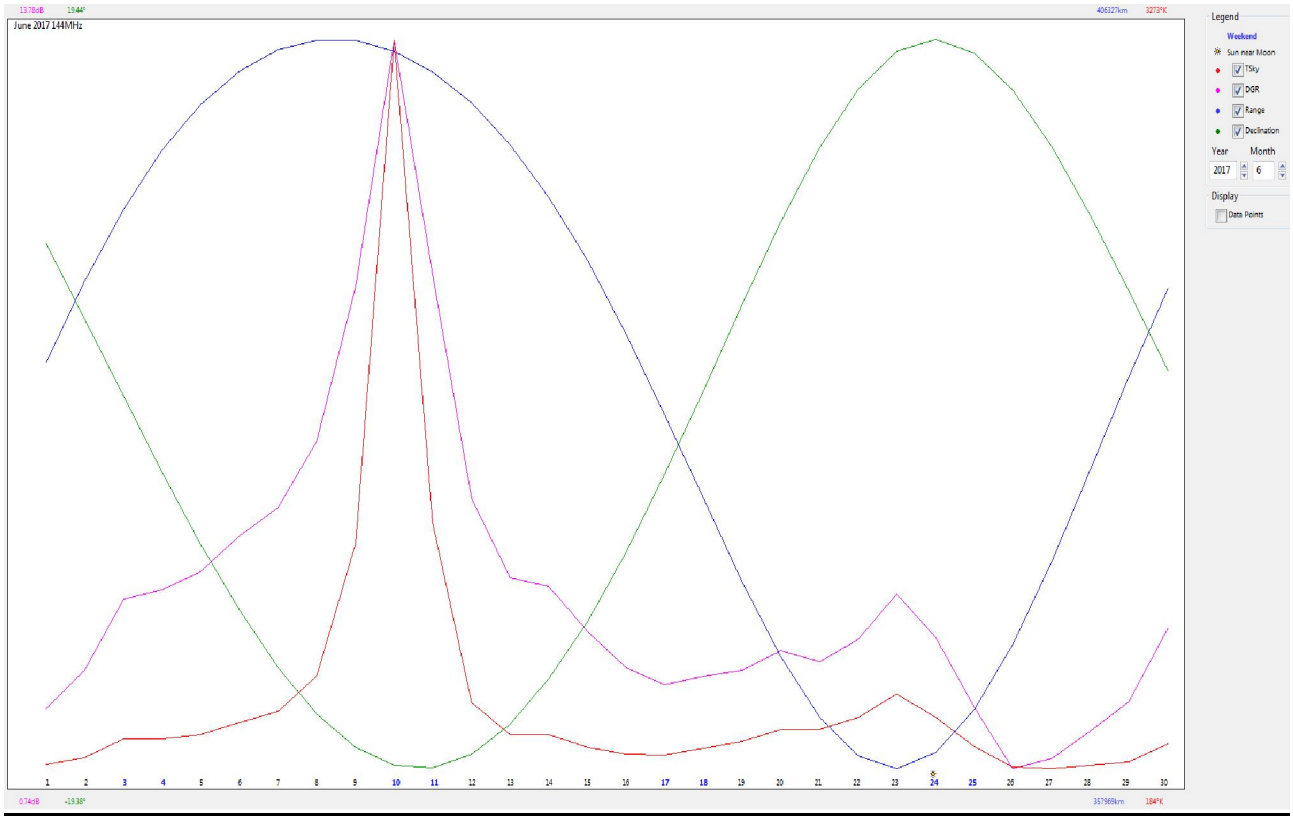
They are planning for 4 x 7el VE3WY loop yagis with QRO power. They will have full steering on this antenna with good preamps. Please have a look at the loggers for latest news, particularly the N5TM chat room chat.n5tm.com: login with your call sign and then go to VC2EME-2M.

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.

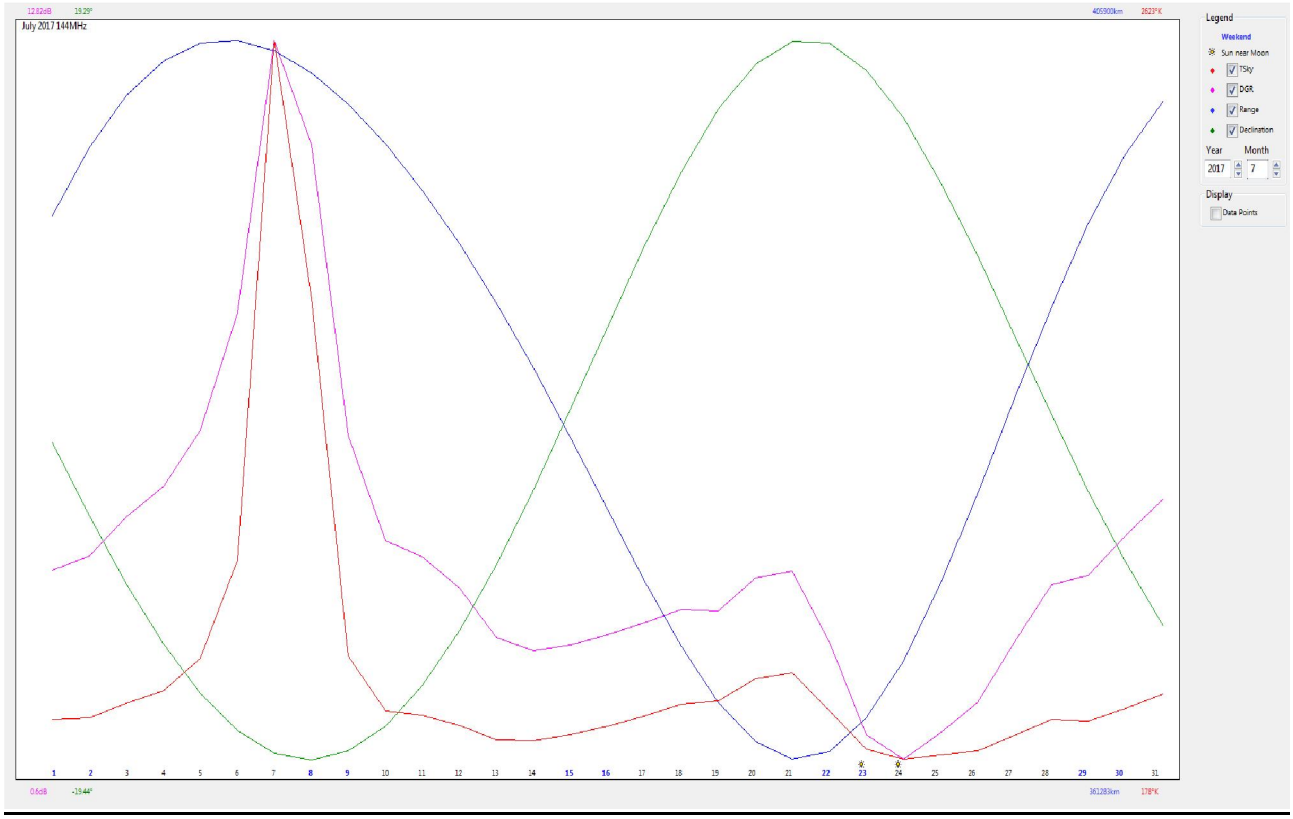
Time Table

10 July 2017	July issue of the 144 MHz EME NewsLetter ready for download at http://www.df2zc.de

Moon Conditions



Moon Graph June 2017



Moon Graph July 2017

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