

The 144 MHz EME NewsLetter

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VK5APN Once Again Visiting Rare Grid Squares PF84 and PF85

On the weekend of the 11th and 12th of February (local time) Wayne decided to operate portable once again. Many eme hams had requested that he revisits his first portable grid again as they had missed the opportunity (PF85 was in October 2013). As this is relatively close to the home QTH in PF95, and Wayne had just bought a new car, he decided this needed testing. What a better way but to add PF84 grid as well. Both are reachable via the mainland.



The view to moon-set direction in PF84TU promised a fair ground gain.

On arrival in PF84, Wayne had to find a suitable location. Searching Google street view, mobile phone coverage maps and other aides did not assist very much before these travels. The moment of truth came on arrival when he either found a good spot for ground gain, but terrible for mobile phone coverage or the other way around. Eventually Wayne decided to setup in a small area off the side of a deserted road (for both grids). But both places had very poor internet coverage. Wayne thanks Joop PA0JMV for relaying to the logger information about the activity status (freq, period, issues etc). Even this took 5-10 min to send small messages to him. It would have been frustrating to use the logger and try to operate at the same time, being out there by oneself.

Wayne found waking at 1am local for the European moon window, hearing only some animal noises off in the distance. Like sheep, owl's, kangaroo's etc. Then at dawn for all the other birds and animals making sounds. So peaceful being out with nature.

The new car being slightly bigger, therefore he decided to sleep on the back seat. However sleeping in the foetal position was not the most comfortable (but a lot more comfortable than the previous car). However the pileups that occurred made up for this small inconvenience.



Wayne's new "DXpedition car" in PF84, right next to the road (Pictures VK5APN)

The operating equipment was the same as before, about the best that is achievable from a 12v system. Despite this, many stations made it into the log. In PF84 there were 44 EME QSO's in the one moon pass and 29 from PF85 (all being on moon set, no activity on moon rise – sad that). Plus some local VK's during the early hour Meteor Scatter sessions. There were some who called when

in PF85 that had worked VK5APN during his first activity from that grid. Consequently Wayne gave priority to those who had not worked that grid before.

As usual at most EME-DXpeditions Wayne always called stations about 3 to 4 times. If he didn't get a reply (OOO) from them, he then moved on to the next station, hoping to come back to them if they reappear and if there are not many others calling. Only if no-one else is calling, then he continued with them until RO and 73 or a new station appeared. Despite this, there was one station that he called many many times, but no QSO happened. They were -12 at his end! Wayne is very sorry about this, he gave it his best shot. From many DXpeditions before he got to know those stations that come back to him quickly.

There were also some new stations in the log that he had not worked before while out portable. It was a nice surprise for him (and them). And it is always nice to see and work JA friends. One BIG surprise was working a station that informed later on that he was only using his tropo 12 ele yagi. That are the benefits of the flat area and the ground gain.

When looking at the grid map of Australia Wayne sees so many grids begging to be activated on EME. Many areas in VK are so sparsely populated, hence their lack of hams in them (even for HF). Future grids are expected and are in the planning stage. But now it is time to catch up on the backlog of QSL cards, before Wayne's employer sends him to some other rare grid area, sometimes at very short notice. If his employer only knew how much good he does to the EME community by sending Wayne out to those places...Further details and log are available on the VK5APN webpage at <http://vk5apn.com/PortableEME.html>

Special calls TM1BF & TM8DO to celebrate the 50th anniversary of the first F-USA EME QSO

The 15 days of activation (seven in January and eight in February 2017) are now over. Special QSL cards will be sent to all the stations worked during this activation. Here is a brief summary by de Marius and Gérard:



Left: TM1BF/F6BEG's shack with FT847 and TE Systems 1452G, 300 W out on 144 MHz.

TM1BF (F6BEG)

The final score is 75 QSO's with 71 initials. Gérard had hoped for a little more but the EME conditions have been really complicated during the last 3 days with much noise (5 dB more than usually) and almost permanent Faraday effect which is a great concern for those with only H-Pol or V-Pol antennas.



Left: TM1BF/F6BEG antennas: 2x12 element yagis from M2, located 28 rue Bony, Lyon, France. The take-off seems good on this photo but if you look at the Google Earth view with that address, you will see what a typical downtown location is with over 1 million people living around.

TM8DO (F8DO)

On 144 MHz, Marius has made 231 QSO's with 214 initials in 42 DXCC countries. The conditions in February have also been particularly hard: strong wind, high noise and quasi-permanent Faraday. On 423 MHz, he made 21 contacts with 19 initials in 10 DXCC countries, this not bad with only 2x21 element yagis from Tonna and 120 watts.



What this activation has revealed

When F8DO made the first EME QSO between France and the USA in January 1967, it was hard to imagine that hundreds of QSO's would be possible on the same band in a few days 50 years after.

Of course, progress has been made at several levels: optimised antennas, low noise transistors and the major enhancement has been provided by the use of personal computers. Thanks to Joe Taylor, K1JT and some others, the digital modes have appeared in the radioamateur's shack, providing at least 10 dB of better RX sensitivity. This simply means that you can now do with a single yagi the same as with 10 similar yagis 15 years ago. Nowadays, anyone has access to this kind of « Grale » which represents EME for the radioamateur.

TM8DO/F8DO's 2 m antennas: 4x11 element Flexa modified (5.5 m long)

EME is one of the rare experiences that allow us to escape from our planet, to have an opening to space and to provide evidence of it when our signals come back 2.5 seconds after. Of course, this is still the beginning of this adventure, we are far from having discovered all the mechanisms of EME and we must keep investigating with the help of all those who are ready to join the EME community.

Upcoming DXpeditions

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

S79Z QRV from Mahe Island (LI75GS)

From April 6th to 18th OK1RI, OK1NY, OK1FFU, OK1JKT, OK1VVT and OM5AW will operate on 160 – 10 m and also 2 m EME. Equipment is 400 W out and a 17 ele yagi (hpol). On April 9th Wayne VK5APN was the first station to work them after their CQ on .141 with S79Z tx 1st.

D4(...) QRV from HK85FA

During the Easter holidays Frank DH7FB and Bernd DF2ZC will do their final equipment testing and then pack all gear for travelling to Cap Verde on April 29th. As their airline TAP Portugal cancelled their flight home they are now “forced” to stay one more day before leaving the place on May 4th. So that is good news for those chasing that DXCC and square. Start of operation stays the same: May 30th.

Equipment is FT857, LNA, Tajfun SSPA and two 8/8 ele xpol yagis (DK7ZB). Working frequency is 144,114 MHz with D4 always tx 1st. At moon rise there might be a minimum elevation of some 10° needed, the same at moon-set.

Please remember they will use the “Lance Procedure” to speed up the process: If you copy them, please call with OOOs to show that you have copy and are not calling into the blue as some do. They will return with OOO then and the usual QSO process is being followed, just like you had called them with call signs only. Details on this procedure suggested by Lance W7GJ are on <http://www.bigskyspaces.com/w7gi/DXpedition%20Procedure.pdf> It is very efficient on DXpeditions on 6 m and sure is also on 2 m.

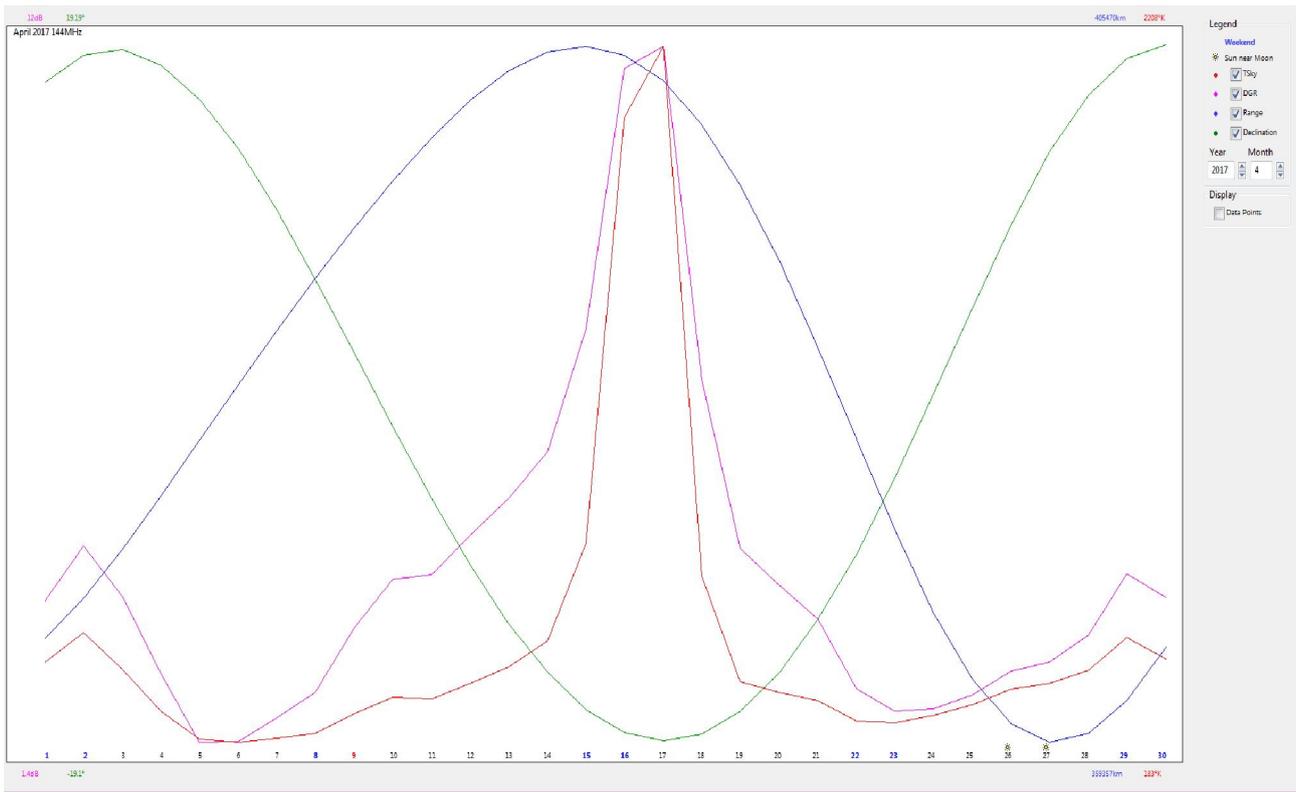
Further details after Easter at df2zc.darc.de

Time Table

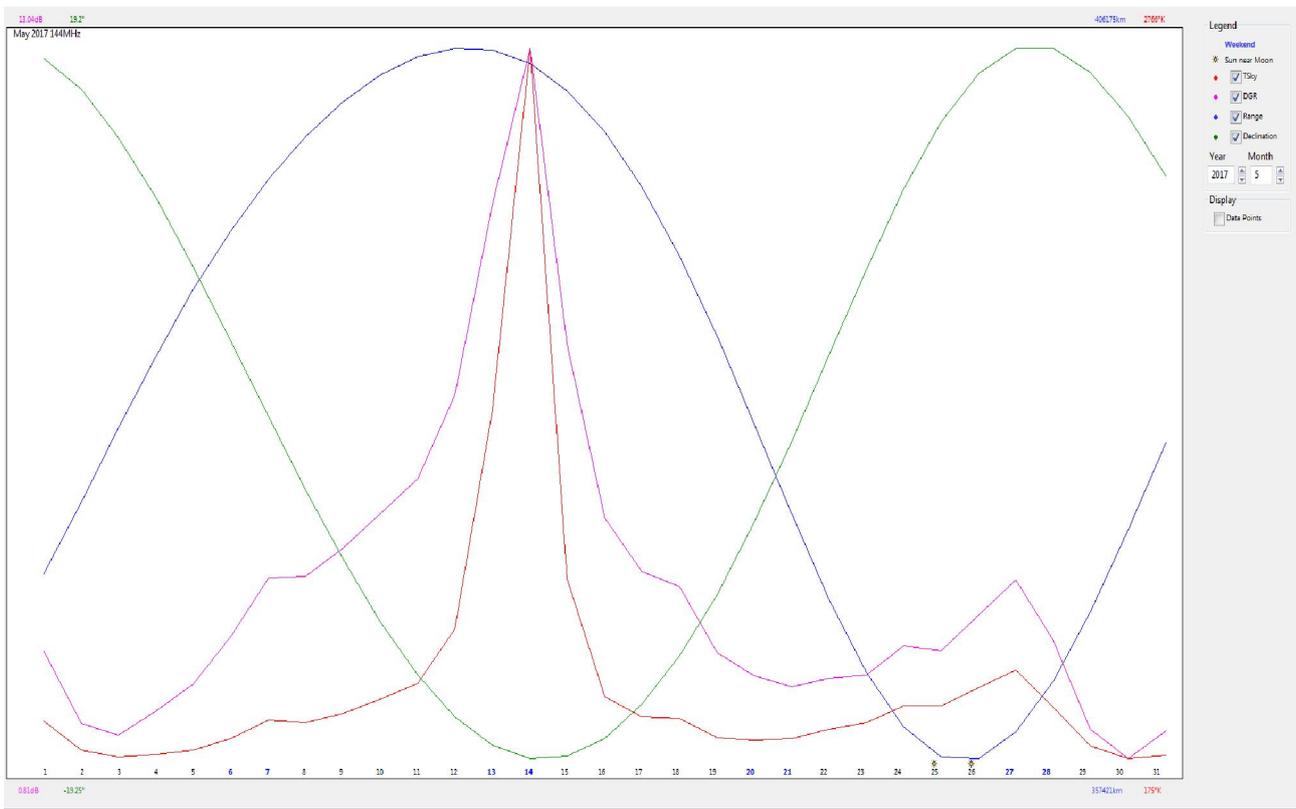
8 May 2017

May issue of the 144 MHz EME Newsletter ready for download at <http://www.df2zc.de>

Moon Conditions



Moon Graph April 2017



Moon Graph May 2017

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