

The 144 MHz EME NewsLetter

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Issue 4/2009 25 Apr 2009

EME from Africa!

The recent weeks two very successful EME dxpeditions were active: E51EME from Rarotonga and 5Z4EME from Kenya. Let's start with the latter. The following is just an excerpt of a detailed report written by Eeltje PA3CEE on behalf of the entire team: "In April 2009 René PE1L, Ronald PA3EWP and Eeltje PA3CEE went on expedition to Kenya to activate this entity on 144 MHz and 432 MHz.



The two yagis pointing at the African moon.

There once had been some activity on EME before by a local resident, meaning only two big guns (W5UN and KB8RQ) could be worked at that occasion. Grid was KI79mo, which also meant a first big activation from the KI-grid.



Assembling antennas with local help (Photos 5Z4EME)

The EME aerials consisted of 2 x 10 el. X-pol (BVO 3 wl.) DJ9BV design with an approx. gain of ~ 16,5 dBd plus the possibility to switch polarity for both transmitting and for receiving.

Once arrived in Nairobi we had to travel many hours by car to the western part of the country. After safe arrival on 1 April we built up the station. The aerials were in perfect balance and

could be turned manually with help of ropes after we first had calibrated them on the moon and the Southern Cross. In the afternoon everything worked well and nicely, we had enough power from the IØJXX PA and the moon started to rise.

It worked great beginning from the start. At some times we saw more than 14 stations calling us. The following days we worked 282 stations via the moon using K1JT's digital JT65b mode: 47 DXCC and 45 firsts on 144 MHz. This is an absolute record! Never ever a DX-pedition made so many EME QSO's.

Even many "small pistols" made it into our log, single-yagi stations and stations with only 100 w or less could easily be worked. The possibility to switch polarity turned out to be a big advantage and that was our secret weapon. A CW QSO with the large 32 yagi-array of Finn LA8YB was one of the highlights and brought him also a first.

EME in the tropics has some challenges. There was often a power failure after a T-storm and QRN made it sometimes impossible to hear anything. Moreover there was just a fragile internet connection that enabled us to update our logs on a daily base on our website www.emelogger.com/kenya/. Turning the aerials in the dark nights was a big adventure because of poisonous snakes and brutal buffoons that had taken possession of the place where we had to go in order to pull the ropes in heavy rain or thunder.

We look back on a very successful dxpedition. All targets were reached and we are satisfied in our conclusion that anyone who even tried came in our log. Meanwhile we are thinking about a next trip when we will point the shiny aerials towards the moon! Moonbouncing from Africa was an unforgettable experience. A continent to fall in love with, Africa came into our blood and we know we once will turn back!"

E51EME bringing Rarotonga on the Moon

Together with Lance W7GJ who worked on 6m Bob ZL1RS activated Rarotonga again on 2m EME after having been there already in 2005. Bob writes: "Upon arrival in Rarotonga we set up Lance's 6m antenna first because he could operate effectively on 6m at new moon. The 2m station went together the following day with the antenna array mounted on the balcony of the holiday rental home at about 8m above the lagoon level.

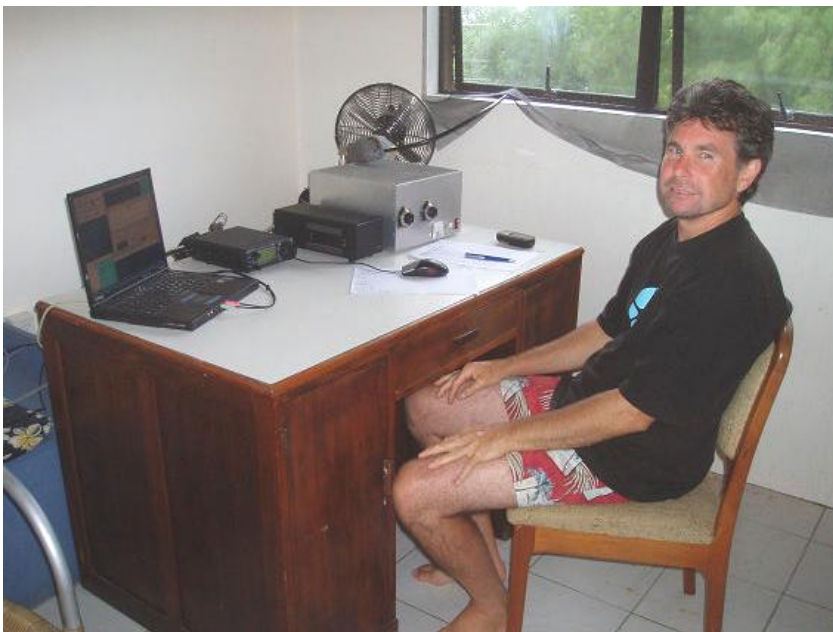


Unfortunately no signals were received during the first moonrise period on 27 March due to an intermittent RCA connector on my interface box not supplying power to the masthead relay."

Even after rectifying this Bob's rx was still down. This time the preamp itself was the culprit. So it was taken out and the spare preamp was installed in the shack, giving away some rx performance of course.

Antennas at their first location.

Bob continues: "Both Lance and I noticed some difficult conditions on both 2m and 6m at moonrise. Signals varied wildly and the expected ground gain was masked at northern declination by thick vegetation down the beach front. On 2m I could usually



see strong signals from 0-2 degrees, but between 3 and 10 degrees signals were very erratic. Lance was seeing a similar effect on 6m.

Unfortunately the common moon window to Europe where many 2m EME stations are located was at our moonrise which occurred during the local day time hours. As a result, this window was severely disrupted by the difficult conditions, so I lost many QSOs. When the moon was above 10 or 12 degrees of elevation the signals tended

Looks like Bob caught a sunburn during buildup.

to stabilise and my own echoes also became quite consistent. I worked many stations very quickly and easily when the moon was well elevated."

Finally Bob moved the array off the balcony location down to ground level for the last two days of operation. This was done in an attempt to broaden the ground gain lobe and get the advantage this can bring as was seen at A35RS earlier this year. The new site also gave a better shot to moonset that was otherwise blocked by the house when the array was on the balcony. Yet, the effort was met with moderate success: still some severe fading, but the ground gain lobe at moonrise seemed to be wider and more effective with the array at a lower height.



From 27 March to 6 April 2009 Bob completed with 145 different callsigns from Rarotonga, including many country firsts. A lot of the experience gained will be kept in mind by Bob for future dxpeditions. So we all may hope for more rare DXCC from Oceania yet to come.

A more detailed report can be found on www.qsl.net/zl1rs as well as more photos.

**The 2nd antenna location had free take-off across the lagoon.
(Photos: ZL1RS)**

[Upcoming DXpeditions](#)

(For latest news on current and future dxpeditions check <http://www.mmmonvhf.de>)

ISO/DH7FB & ISO/DF2ZC

Frank DH7FB and Bernd DF2ZC will be QRV from Sardinia from 1 May to 5 May, the locator will be JN40TJ. Equipment consists of Kenwood TS 2000, Linear Amp with 2 x GU74b by LZ2US, MGF1302 preamp and 2 x 9 elements M2 as used in Guernsey last October. Of course the LZ2US amp will be used only at moderate output levels as the reliability of the local mains supply is uncertain.

Working frequencies: TX always 144,124 MHz (while JA has moon we will rx on .082, after moonset in JA we will rx on .124). So please do check the moon visibility in Japan before you decide where to call us. In pileups we always rx +/- 1...2 kHz depending on the intensity of the pileup.

ISO is always 1st! To gain time ISO will not transmit 73s after receipt of 73 and go straight to the next callsign but we expect all partners to send at least one sequence 73s after receipt of RRRs from ISO.

We will arrive in Sardinia on May 1st at 0430Z and we hope to have access to the holiday house (which is 1 1/2 hour drive from ferry port Olbia) as soon as possible. If everything works out o.k. we should be operational some time during the afternoon on 1 May (moonrise is at 1020Z that day). We don't know when we will have moonset because the mountains to the West will eventually block us. However, the moon window should be good even for the west coast of America.

We might run an online log on www.mmmonvhf.de/showblog.php?ca=IS0-DH7FB if GPRS coverage permits. Please see www.df2zc.de/hamradioresults/dxp/index.html for very latest news, also with a link to the holiday house location. And of course, we will reply CW calls if there should be any.

Yet another African DXCC on EME: Tanzania!

Hermann DL2NUD has safe and sound returned from his recent dxpedition trip to Australia/Oceania. Probably he did not even unpack his equipment: Together with Joe DL9MS he is now preparing for a dxpedition to Tanzania (5H). Both will try to activate the grids KI93RU and KI94RA during a two weeks trip in May. Planned equipment is a 24el XP antenna and a BEKO PA with EME Power. Working frequency is 144.144 MHz (if QRM .120 MHz) and 5H is always 1st. And when does this take place: from 16 May to 2 June.

Montenegro on EME!

A good chance for a further new DXCC in May: a Dutch team (Johan PA3FPQ, Jurgen PE1LWT and Chris PA2CHR) will be QRV from 4O in JN92HJ from 26 May to 4 June 2009. The 2m rig is a TS850 with TR144H transverter, 4 x 8el. X-pol. and a 3CX800 PA. They plan for JT65 as well as CW and will publish a special timetable soon. For actual info please visit <http://pi9cm.hyves.nl/blog/> the PI9CM Blog. More details to follow in the next EMENL.

[Time Table](#)

23 May 2009

0400-0700Z
1400-1700Z

Dubus EME CW Activity

24 May 2009

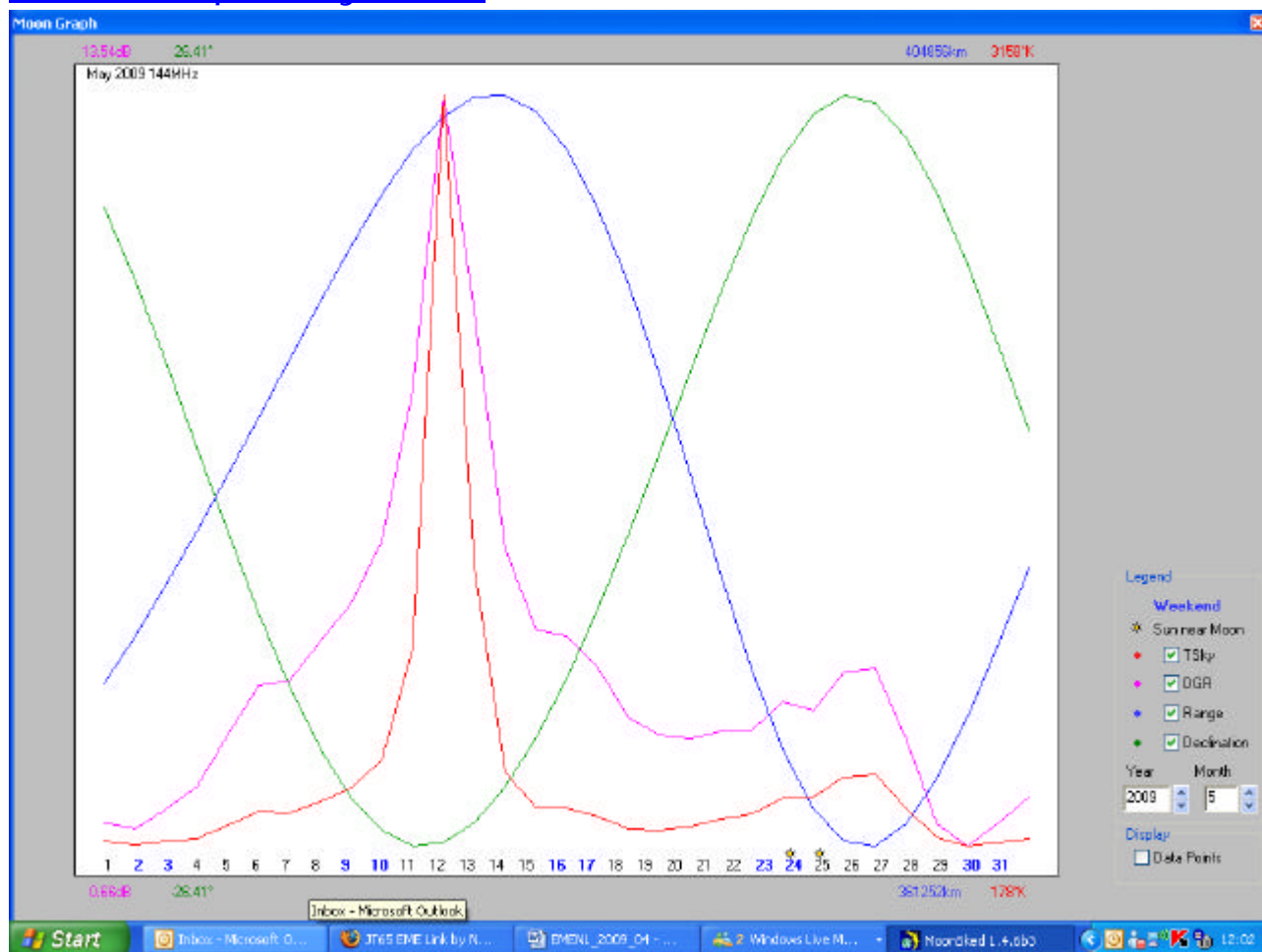
May Issue of the 144 MHz EME NewsLetter
ready for download at www.df2zc.de/newsletter

30/31 May 2009

0000-2400Z

ARI EME Contest (Digital)

Moon Graph May 2009



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

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