
VHF/UHF – An Expanding World

David Smith VK3HZ

Weak Signal

David Smith - VK3HZ

Only a very short report from me this month as there's not been a great deal of newsworthy activity.

The only propagation of note was reported by Jim VK3II. On the morning of April 10th at about 2300Z, he heard the Esperance VK6REP 2 m beacon, peaking to S3. No contacts were made.

VK3QM Portable Ops

David VK3QM has again been out traveling around the state with his portable microwave setup. On ANZAC Day, he headed east to Mt Pinnibar (1750m) in QF43, just on the Victorian side of the border near Mt Kosciucko. He had equipment covering all bands from 1296 to 10 GHz. Unfortunately, he had to contend with multiple challenges including fallen trees, blocked roads, howling winds and low temperature.

The team of Chas VK3PY, Ken VK3AKK, Charlie VK3NX and Lou VK3ALB set up at their usual field site in the Barabool Hills near Geelong. Lou reports that due to time constraints and site access, there was no activity on 1296 although Ken VK3AKK remedied that by working David the following morning. All managed to work David on 2.4 GHz although QSB was slow and deep. 3.4 GHz also had some QSB but not as pronounced. The big disappointment was 5.7GHz where the WiFi noise wiped out any chance of a contact. The path ran over the inner Eastern suburbs and there was no getting around the noise. Flat band conditions didn't help the situation. No contacts were made on 10GHz.

AX on EME

Australian Radio Amateurs have the opportunity to operate using the AX prefix on ANZAC Day Thursday April 25th as an Amateur radio salute to the servicemen and women in the many conflicts.

Ian AX3AXH used the opportunity to work the rare DXpedition station 9G5EME in Ghana on 2 m - a special AX call for their special log!

Phil AX4CDI was also handing out AX contacts off the moon.

VK3RLP Beacons

Phil VK3YB reports:

The Frankston 1296.532 MHz and 2403.532 MHz beacons are back on air. Very keen to get reports - including from "locals" - to ppavey@bigpond.com.

Thanks to everyone involved in repairing and reinstalling the beacons.

Please send any Weak Signal reports to David VK3HZ

Digital DX Modes

Rex Moncur – VK7MO

Meteor Scatter reports April 2013 by Kevin VK4UH

In general the early part of April can herald poor or average conditions for 2m MS. This proved to be the case again this year. The change-over of clock times with Daylight Savings in the Eastern and Southern call areas also delays the start of the Saturday and Sunday morning activity sessions (07:00 -08:00 local) by an hour. In VK4, which has no daylight saving, it was already after dawn by 20:00 UTC and past the optimum time for MS activity.

For those not familiar with MS operating in VK there are two main activity periods in place running from 07:00 to 08:00 on Saturday and Sunday mornings on 144.230 MHz using FSK441 mode. By agreed protocol, in general, stations in the southern call areas VK7 VK3 VK5 always transmit in the first period (0-30 secs each minute) and beam northwards on both days. Northern stations in VK4 always transmit in the second period (30-60 seconds each minute) and beam south on both days. Stations in the middle states VK2 and VK1 generally run 2nd period on Saturdays and beam south and first period on Sunday beaming north.

Saturday 5 April – Conditions reported as average, many very short pings detected often too short to decode.

VK4UH QG62 reported contact with VK3AMZ, VK3II and VK3HY

VK3AMZ QF22 reported contact with VK2DVZ VK2AMS VK4UH VK4RF VK2XN VK4AMG

Sunday 6 April – Conditions reported as “rollercoaster ride” from previous day with low ping count

VK4UH QF62 worked/decoded VK3AMZ VK1WJ VK5PJ VK3HY

VK3AMZ QF22 worked/decoded VK4CDI VK2DVZ VK4UH VK2AMS VK2EMA VK2XN

Saturday 12 April- average conditions reported by all stations

VK4UH QF62 worked/decoded VK3AMZ VK5PJ VK3II

VK4AMG QG62 worked/decoded VK3AMZ VK5PJ VK3II

VK3AMZ QF22 worked/decoded VK2DVZ VK2AMS VK4UH VK4AMG

Sunday 13 April Conditions reported as average but rapidly deteriorating after 20:00 UTC

VK4UH QG62 Worked/decoded VK1WJ VK5PJ

VK1WJ QF44 worked/decoded VK4UH VK4JMC VK2XN

Saturday 19th April – Conditions reported as “worst remembered” meteor count very low with short weak pings only.

VK4UH QF62 decodes only VK3II VK3AMZ and VK5PJ but no 2way completions

VK3AMZ QF22 worked /decoded VK4JMC VK2AMS VK2DVZ K2XN vk4LHD

VK3II QF21 reported decodes only VK1WJ VK4UH VK4JMC

Sunday 20th April –Conditions remained poor

VK4UH QG62 worked/decoded VK3AMZ VK1WJ VK5PJ

VK3AMZ QF22 worked/decoded VK4JMC VK2AMS VK2DVZ VK2XN VK4LHD

VK4UH

Saturday 26 April – conditions improved over previous week. Stations reported receiving many loud but short pings often too brief to decode

VK4UH QG62 worked/decoded VK3AMZ VK3HY

VK3AMZ QF22 worked/decoded VK2DVZ VK4MIL VK4NWH VK4JMC VK4UH VK2AMS VK4LHD

Sunday 27 April- “unusual” but improved conditions reported. A mixture of short pings and frequent large meteor returns providing burns lasting tens of seconds. Probably representing the beginning of the Aquarid meteor shower expected over the following weekend at the beginning of May. This being one of the best expected MS operating showers each year.

VK4UH QG62 decoded/worked VK1WJ VK3AMZ VK3HY VK3AXH

VK3AMZ QF22 worked/decoded VK4UH VK2DVZ VK4LHD VK2AMS VK4MIL

24 GHZ EME World Record Extended to 16,583 km with JT4F

On 23 April Rex, VK7MO worked OK1KIR to extend Alan VK3XPD's World Record for 24 GHz EME to 16,383 km (see AR for April and May 2013 for details of Alan's records).

Rex upgraded his portable station to a 1.2 metre Mitec dish (1.14 meters effective size) and was running about 8 watts to the feed.



VK7MO 24 GHz 1.2m Dish

OK1KIR was running 20 watts to a 4.5 metre dish. The JT4F mode was used with WSJT's improved decoder in Version 9.5 r3033. Best signals were -14 dB as received by VK7MO and -17 dB as received by OK1KIR. A more detailed report on this QSO is available at:

www.vk3hz.net/microwave/24GHz_World_Record_EME_QSO.pdf

Rex also completed a QSO with W5LUA on 25 April. W5LUA uses a 2.4 metre dish compared to the 4.5 metre dish used by OK1KIR but he does run 100 watts with a high power TWT. The problem is for W5LUA to receive Rex's 8 watts on his smaller 2.4 metre dish, and while signals were right on the margin a QSO was completed and then repeated again on 30 April. A more detailed report on the first QSO with W5LUA is at:

www.vk3hz.net/microwave/24GHz_QSO_W5LUA.pdf

Please send any Digital DX Modes reports to Rex VK7MO

The Magic Band – 6 m DX

John McRae - VK5PO

Hi fellow 6 metre enthusiasts.

Sadly, we have lost one of the FIRST VK 6 metre “tragics”. Eric C. Jamieson, VK5LP passed away at Meningie. His funeral was attended by many amateur radio friends.

Steve, VK3OT, has sent these paragraphs for inclusion in this months AR magazine:

ERIC JAMIESON VK5LP SK

I had known Eric for more than forty years, that is over four sunspot cycles when he passed away this year.

During that period there were times when I saw or heard little from him when he moved from being the voice in the hills to the voice by the lake.

When he became seriously ill with the back injury that was to eventually paralyse him, I made a special trip to see him in the Royal Adelaide Hospital such was the rapport between us. He told me that he really appreciated the effort, as he did the infrequent visits at the Meningie Hospital in recent years, when I flew over the dirt airstrip at Lake Albert and always buzzed his house,

When I applied for a position with ANARE in 1992 his reference was one of two that I sent in and which I am sure was the result of my successful candidacy. Eric only forgave me for pulling out of the position, when Mark Spooner (VK0AQ) and I made that initial two way 6 Metre qso between the Antarctic Continent and Australia in 1993.

Eventually Eric was moved to the Meningie Hospital, where he busied himself with books and publications. He had two rooms at Meningie and it was a hive of production.

Collectively we researched and produced 50 Years on 50 Meg's which circulates on the Internet to this day. Every few months I would cram a manila envelope with QST magazines because I knew he liked following the World above 50 MHZ which used to be published by his very good friend, Bill Tynan W3XO. Bill came to visit in the 1990's and made a point at coming to Hamilton then onto Meningie to visit with Eric, and missed seeing Eric, because he was receiving treatment for his ailment in the RAH. Both men never got over this meeting denied of them by the circumstances.

Peter ,VK5PJ and I last visited Eric in the Meningie Hospital late last year and we saw that he was busily into everything and was not slowing down with age.

As soon as I heard of Eric's passing I notified Bill and Mattie Tynan in Kerrville, Texas and VK5PJ of the sad news.

The voice by the lake is silenced but the memory will live on in his books, publications and his 2M award. When I fly over Lake Albert in future and look down from altitude, I will reflect on this man that I knew and respected, and will never forget.

VK3OT

Vale Eric Jamieson OAM, JP, VK5LP AR SK.

At its AGM on 20 April, the RSGB awarded the Wortley-Talbot Trophy jointly to VK3OE (Andrew) and VK6APH (Phil) "to recognise outstanding experimental work in amateur radio" for the work on chirp modulation.

This award is indeed a great recognition by the RSGB for the chirp "radar" backscatter and forward scatter experiments. Andrew and Phil are very honoured.

That is fantastic recognition of the Research and Development in this field. Well done to both of you, and we are proud that two VK fellows have made a mark internationally, as reflected by the RSGB in giving these prestigious awards to Andrew and Phil.

April activity was not full on, it is fair to say that. If you live south of the tropics, DX has been scant.

27th of April saw 6 metres open between various parts of VK3 and JA. At around 06:00 z, several stations were heard and worked.

Northern parts of VK8 are enjoying daily propagation to JA, BY and some parts of the Pacific. KH7Y logs many of the northern beacons and has been worked by stations as far south as Brisbane.

Several Middle East beacons were logged in Darwin also from time to time during April.

South West VK6 had a few openings to most JA call areas during April.

The KH9/WA2YUN/B beacon is heard almost daily in VK4, despite this, it is proving very hard for any stations to actually work Colin from Wake Island!

From a VK5 perspective, the various BY TV video offsets are audible almost daily, but signals are way down. The Russian "warbler" continues to be heard from time to time also.

ZL3 analogue TV transmitters are now shut down, so 45 Mhz usage as an indicator is no more! In a few months, the "big" ones on the north island will also be defunct.

David, VK3AUU reports:

Not much to report on the DX front. I worked several JA's, with just 5 Watts!. The rest were with my Mirage 1016 Amp putting out just 100 watts.

Antenna 10 element YU7EF at 14 metres.

On the 2nd of April, I snared JR2HCB, JM1IGJ, JL1IHE and JP1LRT. My Flex 1500 SDR with the standard 5 Watts was used.

The 5th of April saw another JA opening!, running 100 Watts, I managed to get these stations: JR2HCB, JF3VEC, JF3FFJ, JA1QOP and I heard JI2NQR as well as the JR6YBR beacon weakly at 319. On the 15th April, a very brief sporadic E opening into VK4 at 04:15z allowed me to work VK4XE, and at the same time BY TV video was audible on 49.75 Mhz.

The 27th of April around 05:45z, I worked Hiyo, JH2HCB again, and also heard JH1USR.

A brief summary of activity from Perth. Andy, VK6OX writes:

On 3rd April the band opened to JA from about 0630UTC to 0800UTC. Twenty two

JA stations were worked during the period with many signals at around the S 9 level. All contacts were via CW but call areas 5, 6 and 9 were not worked.

On 13th April, five JA stations from call areas 0, 3, 5 and 9 were worked between 06:58 UTC and 07:44 UTC, with signals up to S9. JA3OKC was worked with JT65a,

others using CW.

On 20th April I worked IW5DHN (Matteo) via EME on my moon-set. Signals were good in both directions however Matteo's very good EME setup with 4 x 8ele LFA yagis, with full elevation was doing most of the work!!

The 24th of April saw me complete an EME qso with N3XX

This brings the number of completed EME contacts on 6 metres, to 6 so far.

Cheers

Andy VK6OX

Peter, VK6KXW and I have been trying for months now to complete a meteor scatter QSO using FSK441. Finally on the morning of ANZAC day we did it. At 400w my end, Peter did not get many decodes, so I tried my legal limit of 1,000 watts. That helped nicely. The distance between us is approximately 2,042 km, and as such is almost at the maximum distance for meteor scatter. The horizon is at 1 degree at that distance.

Morning meteor scatter operating is still ongoing, with the regulars making contacts via SSB and JT65a.

The Mt. Lofty Beacon, VK5VF is off air, and whilst on the subject of beacons, VK5GF reports that he is rebuilding the VK8RAS beacon, and when completed, Jeff, along with Peter (VK5PJ) will make the long drive up to Alice Springs to put it all back on air.

Please submit reports, logs or other info you may consider useful to John VK5PO