Spinifex and contrails

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After a substantial (four year) absence from VHF/UHF DXpeditions, a dose of Long Service Leave during October/November gave me time to cart myself, and my gear, back out and about.

The trip I had in mind had two aims: (1) to visit Peter VK5ZPG at his QTH in Quorn SA and assist him in any way with getting his 12 metre (40 foot) tower upright; and (2) activate a couple of inactive Maidenhead squares along the way.

Peter lives just outside Quorn, at the southern end of the Flinders Ranges. The Flinders Ranges are a favourite destination of mine, and this trip would be either my 12th or 13th visit – I am beginning to lose track!

On a previous trip back in June 2001, I had activated PF99 from near Moolooloo Station (close to Blinman in the Central Flinders Ranges), and another trip in April 2004 took me to Waukaringa to activate PF97. This last trip was specifically to test Aircraft Enhancement Propagation (AEP) possibilities back into VK3 in general and the Melbourne area in particular, and was documented in an article in AR in November 2002.

Peter and I live under an International Flight Route (IFR) used by aircraft bound from Melbourne for Singapore and Indonesia. (The IFR is known as Q168.) We have been interested in making an AEP contact, using this IFR, on 144 MHz for a year or two now, but due to both our stations being in a state of upgrade this has not as yet been completed. The path distance is just on 800 km, which is certainly feasible using AEP.

The Station:

My portable station for this trip consisted of the following:

For 144 MHz and 432 MHz, an Icom IC-706IIG coupled with a 160 watt 144 MHz PA and a 100 watt 432 MHz PA.

On 1296 MHz I use a VK5EME transverter (with a Yaesu FT-290R as the IF rig) backed onto a VK3PY-designed 60 watt PA (see AR October 2008).

I packed a 10-element DL6WU Yagi for 144 MHz, a 28-element for 432 MHz and a 900 mm 'Grid-Pack' dish for 1296 MHz. I also used 'Big Wheels' for 144 MHz and 432 MHz whilst mobile.

The Trip:

I left a bit after midday on Monday 13th October, and paused overnight just outside Underbool (50 km west of Ouyen). I had a couple of contacts with VK3XPD on 2 m as I was mobile, the last being near Charlton. Set-up was a bit late, due to an inability to find a really suitable site – it is very flat out there! – and wanting to have something for dinner.

From the locator QF04wv I had twenty-one contacts on 144 MHz (with



Photo 2: Singapore Airlines Boeing 747-400, headed from Melbourne to Singapore, over Mt Arden.

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some repeats) spread amongst VK3KH, VK3XPD, VK3HZ, VK3II, VK3JTM, VK5AKK, VK5GF, VK5BC, VK3NX, VK3QM, VK5PJ, VK5ZK, VK3WN, VK5LA, VK3AXH and VK3VG; seven contacts on 432 MHz (with VK5AKK, VK5ZK, VK5GF, VK3AXH, VK3HZ, VK3XPD and VK3VG), and three contacts on 1296 MHz (with VK3VG and VK3HZ), between 0950 Z and 2213 Z.

23 cm was frustrating, with conditions only peaking enough in the last 30 minutes before I broke camp to provide the three successful contacts.

From Underbool I travelled west to Pinnaroo, then north through Loxton, Waikerie, Morgan, Burra, Spalding and Gulnare before picking up the North Road, which took me through Melrose and Wilmington to Quorn where I arrived just after 6 pm CDT.

En route I had mobile contacts with VK5BC and VK5LA (and possibly others – log-keeping at this point was via the old grey matter...) on 2 m, and a reassuring contact on 70 cm with Brian VK5BC whilst mobile near Cadell.

Reassuring because I was concerned that I may have DESTROYED my 70 cm PA at Underbool through having inserted it into the coax feed system BACK-TO-FRONT... The contacts I made were with the amp off (therefore in bypass) with 20 watt from the IC-706MkIIG. How, after 10 years of playing at portable ops, I managed to do such a stupendously stupid thing; well, I dunno. The lateness of the hour and pressure to be on air, probably contributed to a

mistake I hope never visits me again.

Peter VK5ZPG kindly put me up for a couple of nights. As promised, I gave Peter a hand with some of the preparatory work required for erecting his new tower. This occupied most of Wednesday.

At some point, Peter asked if I was interested in trying Mount Arden as an operating site. I was game, and he made a number of phone calls to various people in order to obtain permission. Having gained this, we set off for the summit on Thursday afternoon.

Mount Arden is about 22 km NNW of Quorn, on Argadells Station. It is 844 m ASL, and the view from the top was stunning. Unfortunately a paging system on 148.265 MHz was causing regular desensitisation to my receiver, so I ended up about a kilometre north along the ridge, hidden and protected from the RF poison by a knoll but with a clear view to Adelaide, Melbourne, Sydney and way out west.

A flat area, clear of spinifex and with room for the Land Rover and my swag, was next to the track. Brilliant!

Between 0720 Z and 2249 Z on the 16th, from PF87xu thirteen contacts on 144 MHz (VK5ZPG, VK5AKK, VK5BC, VK5GF, VK5ACY, VK5LA, VK5PJ, VK5DK, VK3ATS, VK5ZK and VK5FD), nine contacts on 432 MHz (VK5BC, VK5AKK, VK5ACY, VK5PJ, VK5DK and VK5ZPG) and three contacts (VK5BC, VK5AKK and VK5PJ) on 1296 MHz were made. Almost all were via tropo; Colin VK5DK was worked via AE on 2 m and 70 cm. A little of Ian VK3AXH was also heard on Friday morning, but not enough for a contact.

Perhaps most remarkable was hearing David VK3HZ several times – not short grabs, but several consecutive transmissions at a comfortable RS of



Photo 1: Operating site near Underbool, Victoria (QF04wv), with the antennas pointed to Adelaide.

41 – via AE. David was monitoring a virtual radar display, and could see aircraft flying between Adelaide and Sydney at 37,000 feet; as they entered the path between Mount Arden and Balwyn, up came the signal! The frustration was not being able to make myself heard!! David was running the legal limit on SSB, but I only had 160 watts into a 10-element Yagi and I could not beat the local Melbourne noise floor.

Somehow I need another 4 dB! I abandoned his calling to me. have a 14-element Yagi available for

Photo 3: Looking south from the Mt Arden ridge - antenna pointed to Adelaide. See front cover

next time – I need a bigger PA, one that will fit in as much as possible with the existing system – this includes power supply, and vehicle storage space considerations. Having said that - I firmly believe contacts on 2 m over that 900 km path are possible. The last enhancement lasted long enough for me to retrieve my video camera from the 'boot' and capture video/audio of some of Dave's transmissions – including the chatting that took place after Dave

At 1000 am CDT on Friday

17th, I packed up (reluctantly) and made my way (slowly) down the track and back to Quorn to catch up with Peter, before setting off via Hawker to Stokes Hill Lookout. about 15 km NE of Wilpena Pound. Stokes Hill is 750 m ASL, and the locator is PF98im. I was set-up by 0400 Z.

The outlook from Stokes Hill was not as favourable as Mount Arden, with ranges to the south

and southeast raising the horizon somewhat. Tropo conditions had fallen away, too. In the next sixteen hours, eleven contacts on 144 MHz (VK5ZPG, VK5LA, VK5AKK, VK5ZK, VK5GF, VK5PJ, VK5ACY, VK5BC and VK3ATS) and seven contacts (VK5ZPG, VK5PJ, VK5BC and VK3ATS) on 432 MHz were made. 1296 MHz was a dead band no signals made it through in either direction.

Steve VK2ZT recorded what might be my CW beacon on Saturday morning during the period when it was directed to Sydney/Newcastle; he has sent the audio file to me, but I have not as yet checked it to see if it is my signal.

I packed up and after a final check-in with VK5ZPG I started the drive back home. I stayed overnight in Murray Bridge, before completing the trip home on Sunday morning. On the way I had numerous mobile 2 m contacts. with VK5PJ, VK5ZK, VK3AXH, VK3WN, VK3KAY, VK3JTM, VK3II, VK3KH, VK3FIQ and VK3HZ.

The Wash-up:

Overall, a very enjoyable and successful expedition! The experience at Mount Arden, coupled with the regularity and predictability of the air traffic between Adelaide and Sydney, demands a revisit to the site with a larger (louder?) station. Perhaps in autumn next year – summer might be a bit hellish up there.

Interestingly the mobile phone network was accessible at all three locations, which meant I was able to post messages to the VK Logger via the GPRS portal: nice work, Adam! Thanks to everyone who took the time to look/listen for me. And I am keen to QSL with anyone who succeeded in a contact with me from any of these three Maidenhead squares, and cares to do so.

Special thanks go to Peter Whellum VK5ZPG for his hospitality and his suggestion of trying out Mount Arden. I would also like to thank Malcolm and Judy Juett at Argadells Station for giving me access to Mount Arden at such short notice; and the other local amateurs, responsible for the Mount Arden 2 m FM repeater, who helped in directing us to Malcolm and Judith.

All photographs by the author.



Photo 4: Moon is up! The night view from Mt Arden.

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