

One of Those Days

Saturday 13 December 1986

by John Belshaw - VK2IUI (ex VK2FG / VK2BZB / VK2VPG)

It had been a warmish, muggy sort of day, but the forecast for the Sunday was for cooler temperatures. The television programme was bereft of interest for me - not that that is unusual! I'd seen the weather map on the news and wondered what might be happening on the radio. Amateur radio - the two-metre band in particular.

The weather map had given me the idea that conditions just might be right for a long distance contact on sideband to VK5 so I determined to head to the shack and see what I could hear. Some years prior to this I had been bitten by the two-metre sideband bug, thanks in the main to Gordon (VK2ZAB) and Ross (VK2ZRZ), and joined schedules each weekend to work Brisbane and Melbourne via 'aircraft enhancement', which involves using commercial aircraft as reflectors of VHF signals to enable contacts which otherwise would not be possible.

Accordingly I had constructed an aerial array, which consisted of two 12-element yagis with booms around 2 wavelengths long, horizontally polarised and stacked vertically 1½-wave lengths apart. The construct was mounted on a 6 or 7 metre long guyed pole on the ridge cap of my roof, which itself was around 8 metres above the ground. I also had the advantage of living on the very top of a ridge with around 300 degrees of unobstructed take off North, and about 30 degrees each side thereof had only trees as obstacles apart from a tallish concrete water tower about 200 metres away.

The rig I used then, and for that matter still do, was a Kenwood TS711A, which is a dual mode (FM/SSB) rig, in conjunction with a small solid state home brewed (kit) RF amplifier that was capable of 100-Watts output. Additionally I had a home brewed RF controlled receive preamplifier (only in the shack) with around 20dB of gain and a low noise capability of a theoretical 1.5 dB.

So, back to the story. I headed down to my shack, turned on the master switch and moved the array so it was pointing just a tad south of west. Having set the VFO to 144.100 (the sideband calling frequency on 2-metres) I began transmitting CQs. This went on for a wee while, the gaps taken up by listening and reading a book.

Suddenly a reply: "VK2FG from VK6AOM, how copy?" I started, and managed to glance at the signal meter before the other station de-keyed. The meter indicated something like S9 + 20dB. "Ah!" I thought, "A Sandgroper mobile through the mountains". Returning to him I asked him where he was, expecting him to indicate Woodford, Hazelbrook or similar (I lived in Glenbrook in those days) - instead he advised me he was in Esperance in Western Australia.

It transpired that he, just as had I, thought I was a mobile in his area simply omitting the 'portable VK x' part of the call. Reception was totally clear; there was no fading, no interference - nothing at all to indicate that he wasn't just around the corner. We chatted for a couple of minutes before it occurred to one of us (I think it was David - that was his name - as I was still behaving like a stunned mullet) to see if any other stations were listening.

Ross (VK2ZRU) dived in; Ross lived in French's Forest and ran a far superior system to mine. He told me later what it was like at his location. Ross lived alone and was eating his evening meal with his two-metre rig chuckling away in the background. He heard the contact begin and, like myself, thought that it was a mobile VK6 involved. When it suddenly clicked with him that it was a direct VK2 - VK6 contact he tells me that he left egg, bacon and sausages, along with knife, fork and plate, in a trail from his dining table to his rig.

After Ross and David had exchanged details they decided to try 432MHz, just in case. Unfortunately I only had an experimental 70cm yagi mounted only a couple of metres above ground on a garden stake and no preamplifier in circuit. I too went to the 70cm calling frequency - having turned on the other rig - but heard nothing. Shortly Ross returned to 2-metres with David, also having been unsuccessful, and we conversed for some time. Regrettably I cannot remember just how long the contact lasted, but it was certainly for 20 minutes or more. Eventually the signal from VK6AOM faded away; it was not a sudden cut-off, just a gradually weakening signal.

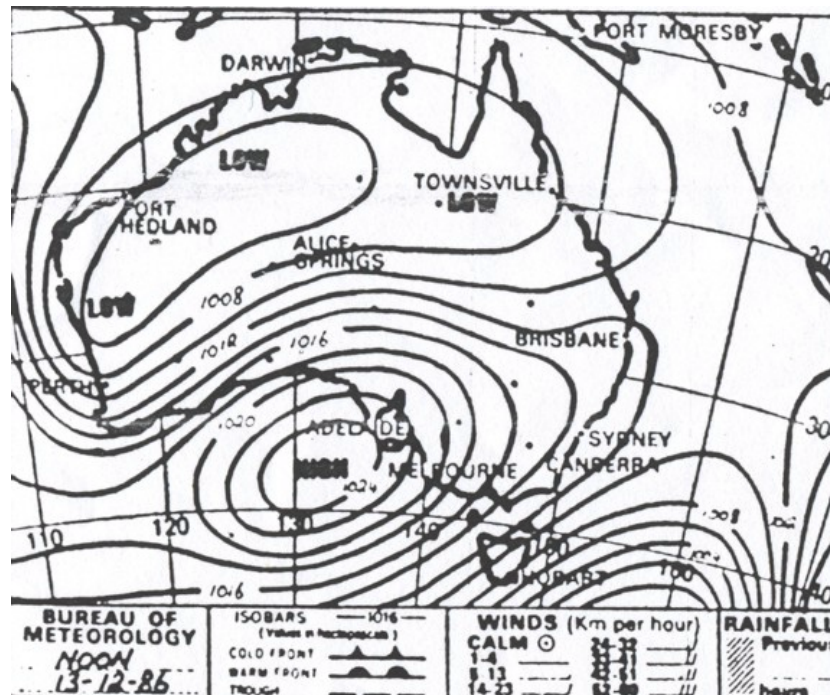


Figure 1. Australian weather map for 12-noon on 13 December 1986

For those of you who may be interested I have included a copy of the weather map (see Figure 1) from the Bureau of Meteorology (courtesy of Guy, VK2KU who somehow managed to conjure it up), and also a copy of the QSL card from David in confirmation of the contact (see Figure 2). Additionally I have appended the text of short notes which David and I exchanged after the event.

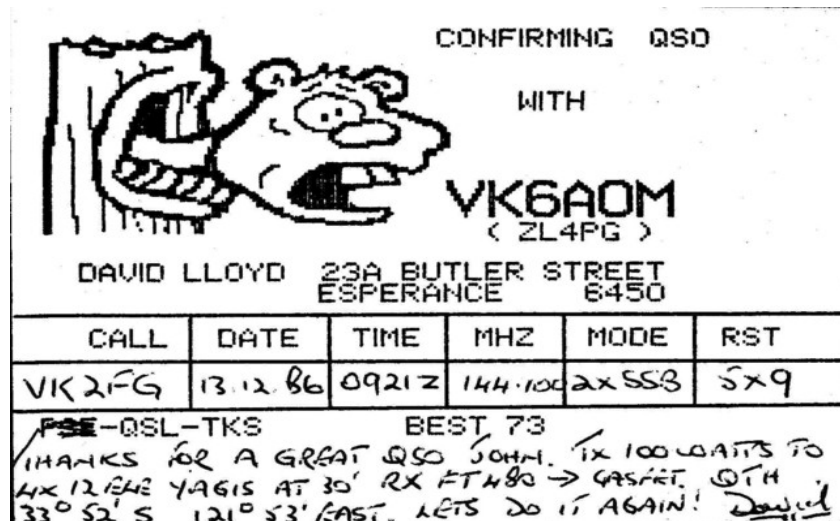


Figure 2. QSL card to VK2FG from VK6AOM

During our conversation David had the presence of mind to record a short section of the contact to which he added some post-contact comments on what sounds like rather good quality sound equipment. Guy, VK2KU, has taken a copy of the original audio tape that David sent to me and is going to post a digitized version of it on the NSW VHF DX Group's web site. There is every chance that it has already been included by the time you read this. The address for the site is <http://www.vhfdx.oz-hams.org/>

Some of you may be unfamiliar with the weather patterns that, at least from my experience, are associated with long distance VHF contacts. Notice in Figure 1 the large high-pressure system lying in the Great Australian Bight and the close 'ramping' of the isobars (they are the continuous lines which indicate areas of equal air pressure). It is not unusual to have a similar pattern, only in this case centred across the Tasman, when VK to ZL contacts are made on VHF. From my own experience it also seems to help if the temperature in Sydney is warm to hot, although this may merely indicate that those are the prevailing conditions when this type of weather pattern forms.

Some time prior to this contact I had made a couple of contacts into South Australia (VK5) when a very similar weather pattern was in evidence - although I suspect sporadic-E was involved in those events - which is why I was tempted into the shack on this occasion. It is interesting to note that on the chart the isobars follow a path which put Sydney and Esperance on almost the same pressure gradient. Given that the chart is as at noon on the day of the contact and that the contact was made some hours later, the typical easterly shift of weather patterns could possibly have brought them into even closer synchronisation.

What method of propagation was in effect? The strong steady signal and gentle fading of the signal would appear to rule out sporadic-E, so ducting is a strong possibility, but that's one heck of a duct! Is there some other factor at work that I don't fully understand or is it something more prosaic? I honestly don't know.

Postscript

Just in case you are wondering - David was definitely in Esperance. Ross rang him after the signals faded - remember, this was before mobile 'phones and call diversion facilities were commonly available.

Text of David's - VK6AOM - message to John - VK2FG

Monday January 19, 1987

Dear John,

Please let me apologise for the delay in returning a card for that terrific QSO we had in December. I can tell you, John, I couldn't believe my ears when I heard your call sign at 5 x 9 and it may have been apparent in my cautious approach to you when I called you back! Never again will I be so backward in coming forward !!!!!

If I said that it was a pleasure in working you, it would be a masterpiece of understatement. It has been the highlight of this DX season. Incidentally, I heard (only) ZL3TIB on two metres on Xmas day. His signal came up out of the noise for about 45 seconds and I immediately fired up my big linear but before it came out of the pre-heat stage, the signal was gone. If I left out all of the swear words I didn't say a thing. He was working VK7's and I worked him on 6 next day and was able to identify the stations he was calling and part of his QSO... which he confirmed. So that's one way. Next time.....

John, I look forward to the opportunity of working you again. Should I be spared till next year, you'll be the first station I'll call !!!!!

Best 73, John

(Signed)

David Lloyd - VK6AOM

Text of John's - VK2FG - message to Dave - VK6AOM

16 December 1986

Dear Dave,

Absolutely tremendous to hear you on two metres, Dave, you could have knocked me over with a feather at the time! I suspect that the shock of it all showed in my incoherent language and general demeanour at the time. A pleasure to meet you under such circumstance.....we must do it again sometime.

In all seriousness, my contacts here in Sydney have indicated that they have never heard of any previous contact between VK6 and VK2 on two metres. It will be interesting indeed to find out whether this is in fact the case. I intend to write to the W.I.A. in the next few days to try to ascertain if there is a record of such a contact in the past. Any information obtained from that source will be passed on to you poste haste.

Anyway, thanks, Dave, for being there at the right time and for making the contact possible. All the best to you and yours for the coming festive season and for the New Year and Es season.

(Signed)

John Belshaw - VK2FG

A very special" thank you" to Guy Fletcher, VK2KU, for his valuable assistance and comments in the preparation of this article.