The 'Very Highs' with a VK Accent

Visualise a nation so extensive that its eastern suburbs might be out on the borders of the Caspian Sea and its western suburbs around Dublin. Its southern suburbs would be washed by the Mediterranean and its northernmost tip would reach almost to the Arctic Circle.

This month we include a special report from our 'Metre Wave' correspondent Jack Hum, G5UM, after his recent trip to the Antipodes.

That *could* be a description of the United States. In fact it is a description of Australia. Note that it includes two keywords: "nation" and "suburbs". They are keywords for two good reasons: that Australia is a nation in its own right, and that most of its inhabitants dwell in suburbs around its great cities.

Perhaps the foregoing will disabuse any British misconception (it still lingers) that Australia is a place "somewhere down at the bottom of the map" and that its people are broad-brimmed bushwhackers. Nothing is further from the truth.

What all this means in a radio communicating context is that distances in Australia (or VK-land if you prefer) are so vast that communication across its length and its breadth must be by means of what would be regarded in the UK as a DX band – most popularly 14MHz, closely followed by 7MHz and with 3.5MHz some way behind because of its shorter haul characteristics.

Where VHF Scores

It is in the great conurbations that the metre wavelengths come into their own. Remember that over 3 million people live in Greater Sydney, almost as many in Greater Melbourne, and approaching a million each in Brisbane, Adelaide and, way out west, Perth. These people are spread out for tens of miles from the cities' centres simply because there is so much more room to move in VK-land by contrast with close-packed Britain. In other words, here is ready-made terrain for a high level of amateur transmitting operation on 'metre waves' that embrace not only the familiar 2m and 70cm bands used in Britain but, in addition, the 52MHz band, or "Six" as it is known in Australasia and the Americas, where it is an official allocation (unlike the situation in Europe).

G5UM (left) with Gordon Bracewell, VK3XX, ex-G3EGK.

A visitor contemplating the Australian life-style, as G5UM was privileged to do during a 3½ month stay earlier this year, marvels at the sophisticated and highly developed society which has been built in only a couple of hundred years. Taming such a huge land could only have been achieved by a resourceful people – and this resourcefulness is still much in evidence today, notably on the amateur radio front. Without the pioneer work done by Australia's and New Zealand's hams in the Twenties, international DX would have been a very circumscribed affair.

In the metre-wave spectrum this spirit of enterprise – of pioneering new developments – is much in evidence. Since its inception, through-satellite communication has drawn many adherents, many of them on 145MHz up and 28MHz down, but, in the case of restricted licence operators who are the equivalent of Britain's VHF-only Class-B licenses, 144MHz up and 432MHz down.

Repeaters Sublimated . . . And Ground-Borne

Satellite communication is a sublimated form of through-repeater operation, in an exalted plane in more senses than one. At the more mundane level of ground-borne repeaters, developments in Australia have been truly remarkable. Repeater coverage of all the great urban areas is complete. Further out, coverage in between the conurbations is considerable. For example, throughout the 650-mile drive from Melbourne to Sydney an operator is rarely out of range of one or other 2m repeater station, except for a small area near Canberra where topography exercises its toll.

Unlike procedures in the UK, no tone-burst access is required to bring up repeaters in Australia. Voice-access is the norm, but not exclusively: there are many RTTY and video repeaters as well.

The original licence for the Melbourne broadband amateur television repeater, VK3RTV, was granted as long ago as September of 1978. Now a full colour-vision service is provided at 444.25MHz in and 579.25MHz out, sound 5.5MHz high in each case, with functional control exercised through a 6800 microprocessor. Video and audio ident are given every 10 minutes and at the start and finish of each transmission. Much friendly rivalry is evident on the TV repeater front, for