



Title 130

Standing in front of the great **Radiotelescope** in Parkes from left to right an unnamed Australian; Nigel Calder, Editor *New Scientist*; the Author; C.L. Boltz, BBC Science *Overseas Service*. Note in the background the first group of English visitors about to be invited to step on to the rim of the antenna-dish to be elevated 35 m into a horizontal position. *Courtesy CSIRO Radiophysics.*

Parkes, 300 km west of Sydney, is the centre of Australian radioastronomy with its large 69 meter diameter steerable parabolic antenna, to receive radio signals from deep space. Our group flew in a private aeroplane to the small agricultural town of Parkes which has its own airport, a common feature in the Australian outback. Before 1962, when the radio telescope started to operate there, the sparsely grass covered land was only used for sheep grazing, and when we went to see it, it was as dry as only an Australian drought can make it.

When standing below it, the telescope seemed huge, as the steerable antenna was itself mounted and centred on top of a high tower. At our arrival, the antenna was tilted so that its edge was touching the ground and we were invited to step on to it. Innocents that we were, we followed the invitation and immediately the immense dish started to resume its horizontal position and took us 35 meter up into the air.

We stood on a kind of strong chicken wire and our immediate reaction to this Australian 'welcome' was to retreat to the centre of the dish, where solid metal plates formed a firm surface. Standing on chicken wire 35 m up and seeing the ground between our feet was perhaps not the best introduction to a scientific marvel, but such was the Australian humour to greet a few 'poms'. (This is the Australian slang term for the English, supposed to come from the rosy red pomegranate cheeks of the first English settlers, as distinguished from the deep brown face colour of a true Australian.)

In the centre we found a trap door through which we entered the tower below, and we were shown round the impressive electronic offices which guided the antenna and received the signals from distant radio sources in space. The Parkes radio telescope was at the time the only one in the southern hemisphere and had in its three years of existence, achieved some remarkable results. So for example Dr J.G. Bolton told us, that they had measured the distance of the furthest object in the Universe visible from the south, a quasar 12000 million light years distant. Their pioneering Southern Hemisphere radio source survey is commemorated on the 50-dollar banknote of 1973. [Title 76]

We spent the night at the Coach House Motel and flew the next morning to Siding Springs, about another 300 km north, near Narrabri, still in New South Wales. Since our visit, Siding Springs has become as famous as Parkes in the world of astronomy, as it is now the site of the 150 inch Commonwealth Optical Telescope. The combination of an optical and a radio telescope in the same neighbourhood has proved a great success, and the results have further enhanced the reputation of Australian science. At the time we only saw the open ground and had to imagine the new giant instrument to come.