

# The Johnston Geodetic Survey Station

By B. P. LAMBERT, Director of National Mapping, Department of National Development

On a lonely granite outcrop near the place where the road from Alice Springs to Port Augusta crosses the South Australian border there stands a Geodetic Survey Station bearing the inscription shown in figure 1.

It was erected towards the end of 1965 by officers of the Division of National Mapping, Department of National Development, and of the Lands and Survey Branch, Northern Territory Administration at Alice Springs, in accordance with Resolution No. 287 of the National Mapping Council of Australia and which reads:

“The Council resolved that a special geodetic station be established and suitably monumented in the centre of Australia as the origin of the National Geodetic Survey and that this station be named

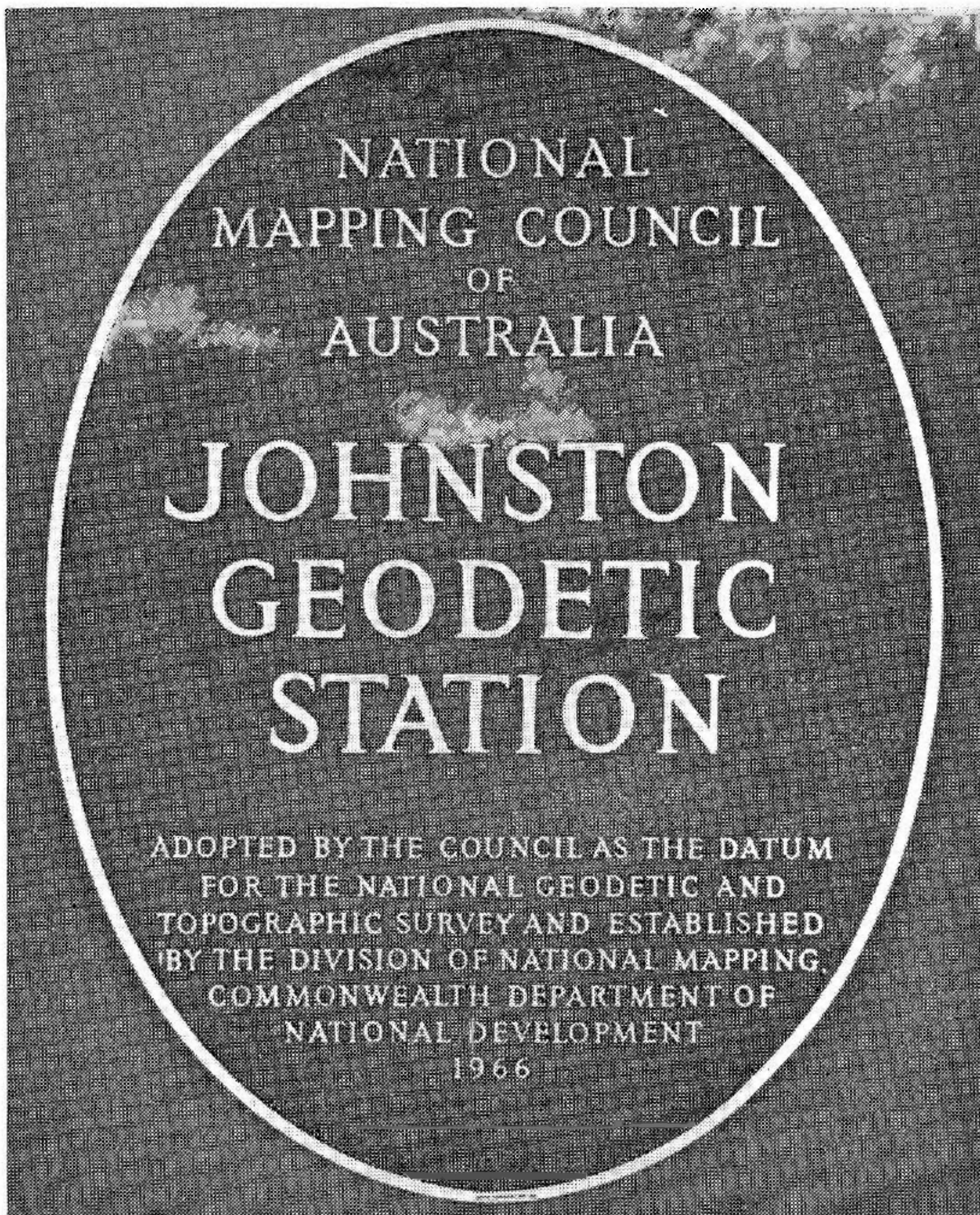


Figure 1



Johnston in memory of Frederick Marshall Johnston former Commonwealth Surveyor General and the first Director of National Mapping.”

In adopting this resolution, the Council felt that this was the most appropriate way of setting up a permanent monument to the fine work of Mr Johnston in establishing the Council itself and also the National Mapping Organization within the Commonwealth Public Service.

The station is a cairn (figure 2) of granite and concrete, faced with red sandstone to give a pleasing appearance. It has been tied to the geodetic survey, and (provisionally) to the 3rd order levelling network.

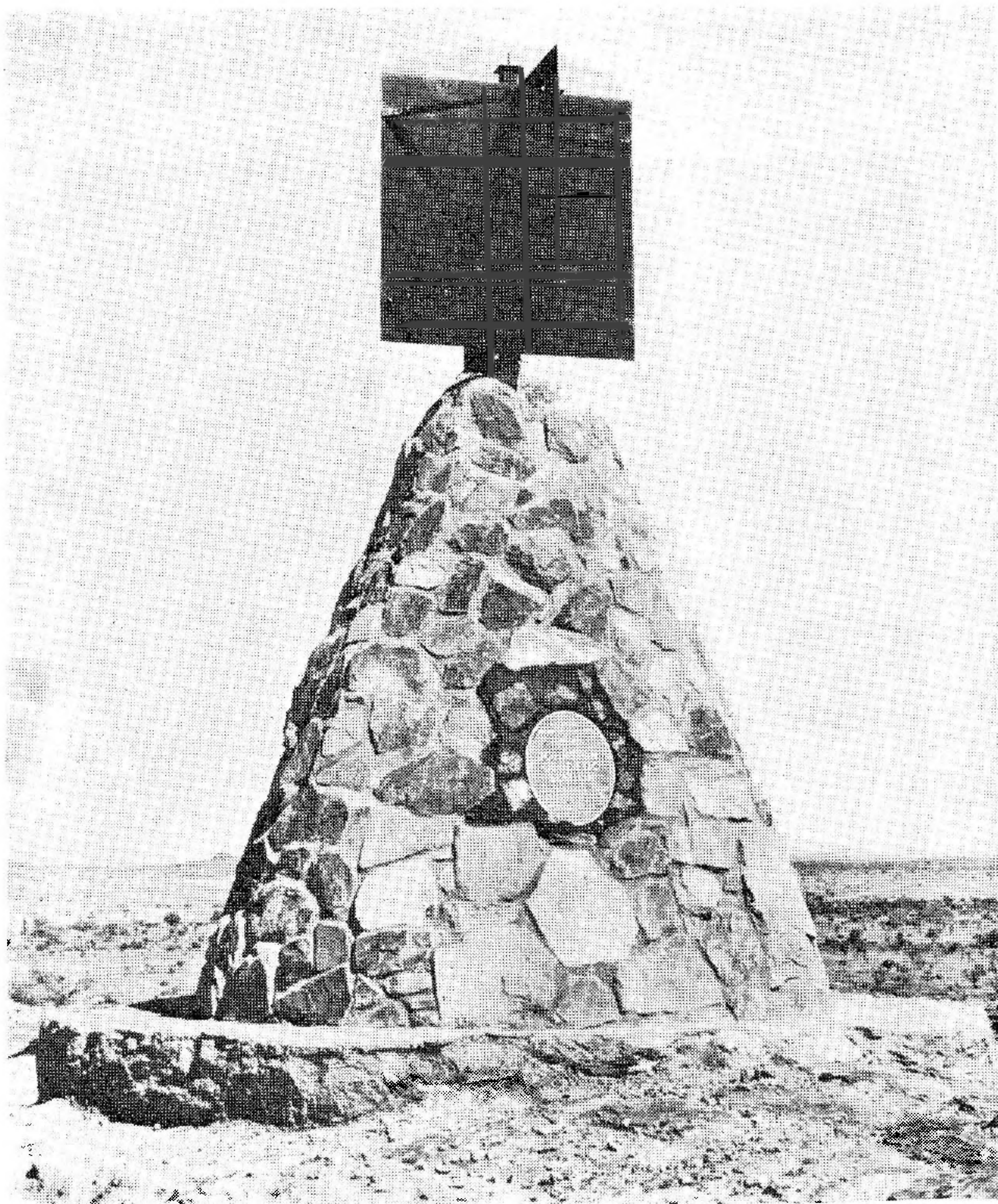


Figure 2



In 1966, all the geodetic surveys in Australia and New Guinea were recomputed and adjusted on the new Australian Geodetic Datum. This provided a homogeneous system of co-ordinates (other than heights) for geodetic survey stations all over Australia, free from discontinuities caused by changes of origin. Co-ordinates on the Australian Geodetic Datum now provide a firm foundation on which lower order surveys and all mapping can be based.

The origin was determined from the mean value of astronomical deflections at 275 selected stations spread over Australia. The Council resolved in April, 1965, that this would be expressed in terms of adopted values for the Johnston Station, and the following notice was published in the Commonwealth Gazette of 6th October, 1966.

“ DEPARTMENT OF NATIONAL DEVELOPMENT  
NATIONAL MAPPING COUNCIL

At the twenty-fourth meeting of the National Mapping Council, held in Melbourne, the Council, on the 21st April, 1966, adopted the following datum for Australian Geodetic Surveys:

Designation—The Australian Geodetic Datum.

Reference Spheroid—The Australian National Spheroid with a major (equatorial) radius of 6,378,160 metres and a flattening of  $1/298.25$ .

Origin—The Johnston Geodetic Station situated in the Northern Territory at East Longitude  $133^{\circ} 12' 30.0771''$  and South Latitude  $25^{\circ} 56' 54.5515''$  and with a ground level elevation of 571.2 metres above the spheroid.

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Director of National Mapping,  
Chairman of National Mapping Council.”