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ROYAL ASTRONOMICAL SOCIETY
BURLINGTON HOUSE
LONDON, W1V 0NL

Our ref:
RAS/Medals

1983 May 20

Dr Grote Reber,
General Delivery,
Bothwell,
Tasmania,
Australia 7411.

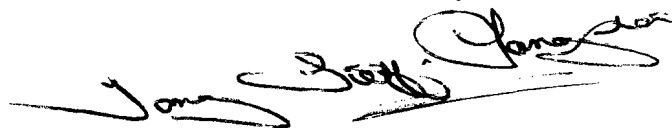
Dear Dr Reber,

I enclose herewith the 1983 Jackson-Gwilt Medal of the Royal Astronomical Society and a bank draft for Aust \$179.50 representing the £100 gift which completes the award.

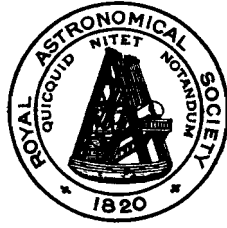
Professor Martin Rees was unable to be present at the Ordinary Meeting of the Society on Friday May 13 but he asked Professor R.D. Davies of Jodrell Bank, the Senior Secretary of the Society, to accept the medal and gift on your behalf which he did and he read out your message to the meeting. Dr Michael Rycroft, Vice-President, was in the Chair on this occasion and I enclose a copy of the address which he delivered; this will be published in due course in the Quarterly Journal of the Royal Astronomical Society.

In conclusion my I add my congratulations to you on the award.

With very best wishes,
Yours sincerely,



J.A. STEFF-LANGSTON (M.A.)
Executive Secretary



BURLINGTON HOUSE, LONDON W1V 0NL

Herewith a Bank Draft for AU\$. \$179.50
payable to

Dr GROTE REBER

and representing the Jackson-Gwilt Gift of £100
which accompanies the award of the
Jackson-Gwilt Medal.

1983 May 13

MEETING OF THE ROYAL ASTRONOMICAL SOCIETY

Friday 1983 May 15 at 16^h00^m

in the Scientific Societies' Lecture Theatre, Savile Row.

M J Rycroft, Vice President

in the Chair

Secretaries: R.D. Davies

C. Jordan

The Chairman. The President of the Society, Professor Raymond Hide, regrets that he is unable to chair this meeting and has asked me to take his place. He is at the moment in Auckland New Zealand, giving the keynote address to their Institute of Physics. I welcome all the visitors to our meeting today, and in particular those from overseas who have come to attend next week's workshop on project MERIT.

I now have the pleasant duty of awarding two of the Society's medals.

The second award is to Grote Reber.

After Karl Jansky's discovery of radio emission from the Milky Way, just over 50 years ago, there followed several barren years in which no further advances were made. Radio astronomy would have lapsed into oblivion for a decade but for the inspired initiative of one man - Grote Reber, a graduate radio engineer and amateur radio enthusiast. He wrestled with the best ways of extending Jansky's work. It seemed to him that the most important requirement was to measure the detailed distribution across the sky.

Reber realized that if he could construct a parabolic reflector he could map the radio sky at a range of frequencies by changing the receptor at the focus. Consequently he designed and built a 31-foot diameter paraboloid, at his own expense (\$1300), in his own back garden in Wheaton, Illinois, during the summer of 1937. The telescope consisted of a sheet metal surface on a wooden structure; it was used as a meridian transit instrument. He would observe from midnight to 6 a.m. and after breakfast drive to Chicago where he designed receivers for a radio company. After attempting measurements at wavelengths of 9 and 33 centimetres, he was eventually

successful during 1939 in detecting radio emission from the Milky Way at 1.87 metres. In an historic paper in 1940 he described the distribution of radio emission along the galactic plane. He attributed this "cosmic static" to thermal emission from free electrons, inspired by the work of Eddington on the optical radiation from interstellar gas.

Grote Reber made one of the few important amateur contributions to science in recent years. His scientific approach and persistence in overcoming technical difficulties rank him as a pioneer in radio astronomy.

On behalf of the RAS, I award the 1983 Jackson-Gwilt Medal and Gift to Grote Reber. Because Dr Reber now lives in Australia, these will be accepted on his behalf by Professor Rod Davies. I ask Professor Davies to come forward to receive the Medal and Gift, and to say a few words.