## COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION

## DIVISION OF RADIOPHYSICS

TELEPHONE: MW 2484

UNIVERSITY GROUNDS,
CITY ROAD,
CHIPPENDALE, N.S.W.

JLP:MDH A.1/3/1(a)

1st May, 1950.

Dr. G. Reber, P.O. Box 4868, Cleveland Park Station, Washington, D.C., U.S.A.

Dear Reber,

Thank you for your letter of April 22nd, enclosing reprints of your "Sky & Telescope" article and your P.I.R.E. letter. The former is a beautifully lucid account of your picture of the situation.

With regard to your comments on atmospheric fluctuations I agree that some must be due to the troposphere and others to the ionosphere. My guess is that the former are appreciable only at very low angles of incidence; the latter are obviously going to become more and more important as the wavelength is increased.

With regard to sea reflections I shall look forward to receiving the book you are sending me. I am quite interested in the subject independently of the use of the sea as a mirror. Instead of answering your question concerning 25 cm. troubles myself, I am passing over your letter to Piddington and Minnett, who have been making the tests to which I referred, and asking them to reply to you personally.

Piddington has also recently completed a theoretical paper concerned with the general problem of origin of cosmic noise in gas and other sources. His conclusion is that the results require dual sources such as you postulate.

I am sorry to hear N.B.S. had turned down your big mirror. I presume you know of the existence of a big - 300 ft. diameter - fixed mirror at Manchester University. (Dr. A.C.B. Lovell.) I don't know if anything significant has been found with it - it was just erected in 1948 when I was there.

Yours very sincerely,

(J. L. Pawsey.)