



Fred Haddock

THE **Lord Elgin**  
HOTEL  
OTTAWA CANADA

25 January 1956

Dear Fred:

Since our conversation of two weeks ago I have been thinking about your new job at the University of Michigan. Solar radio spectroscopy is a very important field of endeavour. However the wide band variety as practiced by the Aussies at Dapto may be impossible at U. of M. due to interference of many carriers.

While at NBS, I made high speed recordings of solar transients. These studies were written up in a brief note to Nature last January 15th, page 132. The spectral width of a transient was determined to be only a few percent with a life of several seconds. For a long time I have been of the opinion that the secret of the method of production of these transients was locked up in an understanding of their fine structure.

I would suggest that high speed, narrow band spectroscopy would elucidate the real story. Perhaps equipment could be built with a band width of 5 or 10 kc having a sweeping rate of 100 cps over a band of 5% ; This would allow an examination to be made of the detailed life history of these transients. Such a narrow sweep band could probably be fitted into an empty television channel or other narrow place in an otherwise crowded spectrum - The next few

years will be quite auspicious for making these kind of observations.

During most of February 2 will be travelling in England, Holland and France. However after March 1st my address will again be

Grote Reber  
General Delivery, G. P. O.  
Hobart, Tasmania, Australia

Wishing you great success in your new position, I am

Sincerely yours,

Grote Reber