ADDRESS REPLY TO
DIRECTOR, NAVAL RESEARCH LABORATORY
WASHINGTON 25, D. C.
AND REFER TO:

NAVAL RESEARCH LABORATORY washington 25, D. C.



3490-201/51 ts

21 November 1951

Mr. Grote Reber 212 W. Seminary St. Wheaton, Illinois

Dear Sir:

The International Astronomical Union is planning to hold a symposium on Radio Astronomy at Sydney, Australia in August 1952. The symposium will thus take place about one month before the general assembly of the IAU in Rome.

The organizing committee chosen by the executive committee is composed of: Pawsey (Australia) Laffineur (France) Lovell (England) Hagen (USA) and van de Hulst (Netherlands). While the program for the symposium is not yet firm, it will be concerned with the observational results of radio astronomy and their interpretation. There are two broad fields:

- 1. The atmosphere of the sun
- 2. Galactic structure

We would like to have papers with description, comparison and compilation of observational results. These should form a large part of the program. There are many urgent questions to be discussed, e.g., galactic surveys, the position and diameters of the bright point sources, the brightness of the quiet sun as a function of frequency and phase of solar activity, limb brightening of the sun as a function of frequency and methods of determining it, papers on visual observation of solar activity and its connection with radio observations, etc.

We would like also papers on the interpretation of results and astrophysical theory. Many questions are open here: theory of the corona and chromosphere, speculation on the nature of point sources and their connection with cosmic rays, galactic structure, a critical survey of the various models of the sun's atmosphere derived from radio and optical evidence, etc.

There is also planned a symposium on Radio Astronomy at the URSI meeting to be held at Canberra, Australia, August 11 to 20. It is our thought that the URSI symposium could deal with such matters as: the technical problems of instrumentation, calibration and antennas, papers on the geophysical implication of such things as meteor echoes, moon echoes, aurora echoes and ionospheric twinkling, papers on the theory of

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plasma oscillations, papers on the results obtained both in solar and galactic work with their more direct implication, i.e., correlation of radio brightness of the sun with sunspot activity. This part of the program will necessarily overlap part of the IAU program and might well be joint.

I would appreciate your comments on the suggested program and would also like to know as soon as possible whether you or any of your co-workers have a paper you would like to present and whether you plan at this time to attend.

Sincerely yours,

John P. Hagen

a letter from you would be most wilcome.
We are finally working riginals thru the 50' deil; to
date they have been local fripping of gain and pattern
but with a sum any day.

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