

THE UNIVERSITY OF TEXAS AT AUSTIN COLLEGE OF ARTS AND SCIENCES AUSTIN, TEXAS 78712

May 17, 1971

Department of Astronomy Telephone: (512) 471-1031

> Mr. Charles A. Schauer Executive Vice President Research Corporation 405 Lexington Avenue New York, NY 10017

Dear Hap:

In answer to yours of April 28, concerning Grote Reber:

First, the sun obeyeth no man. Predicting exactly what the next sunspot cycle will do is in the category of astrology, not astronomy! Nevertheless it is practically certain there will at least be some sort of sunspot minimum; even an ordinary minimum will permit Reber to work from Tasmania in the ballpark of 1 megacycle. And he might be lucky to have an extraordinarily low minimum—though I can only reiterate that to the best of my knowledge people who have done honest statistics on sunspot cycles find that nobody's predictions of second-order effects (exact height and time of maximum, exact time and depth of minimum) really seem to work out.

Secondly, for observing even an ordinary sunspot minimum I think it should be worthwhile supporting Reber in Tasmania, since his is really the only ground-based work in this field so far of any consequence, and he should be able to do additional constructive things.

Before you make a final commitment on this I suggest that you get in touch with Dr. Joseph Alexander at the Goddard Space Flight Center, Greenbelt, Maryland, because his group is involved with very low frequency radio observations from space, above the ionosphere of the earth, which is what causes all the trouble. I would want at least to know the opinion of these people as to the likelihood of getting more directional data and more accurate intensity measurements at one megacycle from space versus the ground.

Finally, even if the space people think they have it all sewed up, it would probably nevertheless be very worthwhile to support Reber, partly to keep them honest, partly because Reber is so intrinsically worthy of support as a man in view of all that he has accomplished so far, and partly because of the probable continued effervescence and stimulus of his ideas even if on this run he has some competition.

Sincerely,

Harlan

Harlan J. Smith

HJS:gc