University of Toronto David Dunlap Observatory Richmond Hill, Ontario June 15, 1948 Mr. Grote Reber P.O. Box 4868

Cleveland Park Station Washington, D.C.

Dear Grote:

Many thanks for the impressive array of data, which arrived last week. We are already embarked on the not inconsiderable task of reducing it to galactic coordinates. The greatly increased number of points now available to us should greatly increase the accuracy of a solution for the radio pole.

One small point comes up, which will become important in the final discussion of your data. It is not immediately obvious to me to what equinox your right ascensions and declinations refer. I should imagine that it would be the equinox of the date of your observations; in case of any doubt, a short description of your method of reduction would be quite sufficient.

I was also wondering about what accuracy we could rely on as to your antenna axis being actually in the plane of the meridian. It turns out that fairly high accuracy is very useful, in the problem of determining the plane of the galaxy, since the results are the mean of a large number of independent observations. Actually, 001 degree error in laying down the meridian will make a significant difference in the position of the galactic pole, possibly. If you suspect errors of that size or greater, we could easily include a term in our solution allowing for a permanent deviation of the meridian of your equipment from the true meridian. I suppose this would be a necessary precaution for the other data, such as Jankky's and Sanders.

By the way, do you have at hand the title, or number, and date and origin of the latter's report? I thought I'd like to get a copy but the British Scientific Office couldn't find it for me without those items.

Will let you know as soon as we have any interesting results.

Very sincerely,

P.S. Had quite a chal with Denisse down at I thaca the otherday,

Ralph E. Williamson

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