

written while in Washington, D.C.

February 24th, 1947  
212 W. Seminary Ave.  
Wheaton, Illinois, U.S.A.

via air mail

Dr. J. H. Coetz  
Leiden Observatory  
Leiden, Holland

Dear Dr. Coetz:

It has been some time since I have heard from you regarding astronomical radio and I am wondering how your plans are progressing.

Enclosed is a short note regarding some of my solar measurements. These will be published in expanded form after more data has been collected. While I have secured a lot of data on the galaxy at 480mc, no effort will be made to reduce it until the survey is complete. In general the center of the disturbance is in Sagittarius but the details are still unknown. However it is apparent the 480mc picture will be different than the 160mc picture; not merely the same set of constant intensity contours with different absolute intensity. The peak intensity in the region of the center of the galaxy is of the same order of magnitude at 480mc as at 160mc.

As of the present date it is practically certain that my services, my equipment and the whole program are going to be taken over by the U. S. Bureau of Standards and prosecuted on a large scale at their field station in Sterling, Virginia. Currently, funds are available but time is short. If the funds are not committed in some fashion by the 30th of June 1947 it is very likely they will be returned to the U. S. treasury. As part of the expanded program the Bureau desires to

secure a really large mirror (75 to 100 feet in diameter). The engineering on such a machine is considerable and very time consuming.

When Dr. Minnaert visited my laboratory some time ago he mentioned that you had worked up detailed drawings for a mirror 25 meters in diameter but were unfortunate in the securing of funds for the construction of same. If you would be kind enough to send me a complete set of blue prints giving detailed specifications on the construction of this device I believe much engineering time could be saved here. Probably with very small change, your designs could be carried out by an American bridge building company.

If the program goes into operation; and I have every reason to believe that it will, we will be pleased to make available to you such of our findings as are of interest to your investigations at Leiden.

Please let me know as soon as possible the availability of detailed plans and specifications on your mirror, along with a few fundamentals such as exact diameter, focal length, type of mounting (altazimuth or equatorial), etc. If any charges are connected with the reproduction of these prints and specifications; I will be pleased to defray same upon receipt of a statement of their amount.

Sincerely yours,

Grote Reber