HARVARD COLLEGE OBSERVATORY

CAMBRIDGE 38, MASSACHUSETTS

July 5, 1956

Dr. Merle A. Tuwe Department of Terrestrial Magnetian Carnegie Institution 5341 Broad Branch Road, N.W. Washington 15, D. C.

Dear Merles

I have not yet had an opportunity to respond to the request received from Helen Hogg with regard to future federal support for radio astronomy in the United States under the auspices of the National Science Foundation. Since you are directly in touch with the various universities now active in the field of radio astronomy, and since you are thoroughly aware of the budgetary needs for the proposed National Radio Observatory, there is no need for me to express myself on these two subjects.

At the time of the July 10 to 12 meeting in Washington, Donald Menzel will want to discuss with Raymond Seager and yourself the future budgetary requirements for the radio astronomy project at the Agassiz Station. You will remember that we are provided with a minimum budget for operation from now until the end of January 1957, but that the agreement was that this fall a proposal would be submitted by Harvard to cover the two year period starting February 1, 1957. In view of this the estimates that I give now should not be considered in any way as definitive. David Heeschen, Kochu Memon and I on the basis of our past experience with the operation at Agassis Station have prepared the attached Sample Budget for a year's operation of the radio astronomy project at Agassiz Station. We have assumed that, as in the past, a friend of Agassis Station will provide the salary for the Agassiz Radio Astronomer and that the direction of the project will be in the hands of my successor with a regular professorial appointment at Harvard. We have also assumed that Harvard Observatory will, as in the past, carry the basic expenses for maintenance and some of the operational expenses. The most uncertain item in the annual budget is that for Electronic Development. All told, I would have very much preferred to leave the presentation of this first tentative Annual Budget to Donald Menzal and Doc Ewen, but since apparently the National Science Foundation wants some first rough estimates before July 9 I shall send you this material now. To summarize the way it looks to me, Harvard Observatory will need to find amoually a minimum of \$40,000 of outside support for the operation of the two radio telescopes at Agassiz Station and will in addition need a minimum of \$20,000 annually for further instrumental development. Again, do keep in mind that these are entirely my figures and that Donald Menzel and Doc Ewen may well went to present a totally different picture.

MAY SOUTH Page 2 I think that in the planning for the budget for the next few years, to is going to be very essential that the National Science Foundation keep in mind the need of furthering radio astronomy at some universities where research in the field is not yet in progress, or just starting. Along with Ohio State, Harvard, Michigan, Cornell and possibly Cal Tech and Stanford, I think that the following universities should be kept in mind: Yale, Pennsylvania, Rensselaer, Illinois and possibly one other mid western university, one or two south eastern universities and possibly the University of California. I am sending copies of this letter to Donald Mensal, Doc Ewen, Gerhard Miczaika, and to David Heeschen and Kochu Menon who helped me draft the tentative budget. I shall ask my secretary Jose-Hales to sign the letter in my absence. Very sincerely yours, Bart J. Bok BJB: jh Budget enclosed cc: Dr. Mensel Dr. Ewen Dr. Miczaika Dr. Heeschen Dr. Menon