COMMONWEALTH OF AUSTRALIA

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION

## DIVISION OF RADIOPHYSICS

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UNIVERSITY GROUNDS, SYDNEY, N.S.W.

8th October 1962

Dr. John W. Findlay, Deputy Director, National Radio Astronomy Observatory, Post Office Box 2, GREEN BANK, West Virginia, U.S.A.

Dear John,

I was delighted to receive your letter of September 28th giving the news that the 300-ft. telescope was completed and working reasonably well.

It is very important in a research organization to be able to put a big job through quickly and effectively. I feel that this has been done in the case of the 300-ft. dish and I should like to congratulate you on your part in it.

Now that the dish is complete, it is up to you to make a success of the observing programme. I have thought for some time that the people responsible for programmes at Green Bank should know a lot more of what is going on in Sydney with our 210-ft. aerial and I have written an occasional letter to Rabi and Jerry Tape urging this course. I actually suggested a visit by Rabi and Tape themselves, but it obviously needs supplementing by expert radio astronomers from Green Bank such as Dave Heeschen and yourself. I am not being critical of the proposed program to observe as many normal galaxies as possible, but am simply putting forward the point of view that you people should be as fully informed as is possible about the most recent developments. I think that the developments at Sydney in the last few months have dominated the big dish field in radio astronomy. The think in which I myself am most interested is the discovery of the Faraday rotation effect. This, of course, is part of a wider program involving

linear polarization and magnetic fields in interstellar space.

I have been wondering if it might be a good plan for you to allocate a man to work in this field, a bright young physicist, and then send him out here to work with our polarization people. I had in mind the possibility of Ivan Pauliny-Toth. If I remember correctly, he did some work on polarization at Cambridge and he did some work on polarization at Cambridge and expressed an interest in continuing in this field at Green Bank. He would be welcome as an assistant in the team here working on linear polarization.

I have not made any suggestions here about I assume that you would be able to supply him with fares without any difficulty. If, in addition, you could pay his salary it would relieve us of this burden and not give us any troubles about differences between American and Australian salary rates. If there should be difficulties about that, it is possible we might find some money towards his expenses account, but please tell me where you stand before I initiate any enquiries from this end. I take it you will discuss this proposal with Dave Heeschen.

May I wish you all the best of luck with your ventures at Green Bank.

P.S. The vind by the expects might be for a few week or so. The young physical needs a longigh prison say much of years of years of years of years of years.