

May 2nd, 1954
General Delivery
Wailuku, Maui
Terr. of Hawaii

Mr. Charles H. Schauer
Research Corporation
405 Lexington Avenue
New York 17, New York

Dear Hap:

As you have probably guessed, my negotiations with the Australians broke down. Mills showed up as expected but Bowen found reasons to bypass this place. Sometimes it is possible to find out more from the men than from the bosses who hesitate to say what they really think. Mills statement of the situation was that Bowens outfit (Division of Radiophysics) expected to confine their activities to Sydney and did not wish to disparte their resources in Tasmania. If I wanted to find something to do in Sydney, they would take care of all expenses, etc. If I insisted on the Tasmania business I would have to provide all the funds and equipment and make the arrangements and carry out the work. The most they could offer was laboratory facilities in Sydney.

Further inquiry developed that I stepped into a bad political situation. The Division of Radiophysics is one of several organizations which are competing for U.S.I.R.O. funds. Two of the other institutions to which U.S.I.R.O. dispenses money for scientific work are the Commonwealth Observatory and the University of Tasmania. In view of all the above, it seemed more profitable to deal directly with the people in Tasmania. Therefore I opened up another contact in Hobart. Peculiarly enough they have been doing ionospheric experiments which are closely related to what I propose. Enclosed is a letter from Ellis on the subject. According to his analysis the elevation of the hole in the ionosphere can be adjusted merely by changing the frequency. If this be true, it is a very useful property as large areas of the sky may be scanned without moving anything mechanical. You will also note that in Hobart there appear to be others than the hewers of wood and the drawers of water. At times I am convinced that the large majority of the people here are incapable of even these elementary tasks. It is really marvellous how, when sufficiently primed by

federal funds, a backward area can take on the traipsings of progress and still remain backward! In any case, I expect to follow up the Hobart negotiations and go down there next autumn for about eight months.

Mills and I spent a day going over my data. Oddly enough, he seemed to think my results to be quite fair. Perhaps this was just salve. In any case his opinion was that the work should be continued at higher frequencies where the ionospheric effects were less. This was the same conclusion I had already reached. Last February I shut down on 30mc and for six weeks changed over to 50mc. Presently I have a months observations in hand. The ionospheric difficulties are still present but much less so. At times the vagaries are absent altogether for limited periods at night and beautifully regular interference patterns are secured. The daytime results are still worthless however. It is my intention to continue observations at 50mc for the next few months. When I am able to secure the necessary material, I expect to change over to 100mc. This will probably be in July or August. Thus some further improvement in results should be forthcoming before I take off for Australia.

I believe this brings you up to date on how matters stand out here. Please return the letter from Ellis when you have finished with it.

Best regards,

Grote Reber