

Aerogramme 12-16-54

Dear Hap:

Many thanks for your letters of the 6th and the 9th. Presently I am not interested in anything mixed up in any big mirror promotion. However I might be after this Tasmanian adventure is finished. I have written to my brother Schuyler C. Peber and asked him to get the model out of the attic and deliver it to the Research Corporation office in Chicago. You can show it to me you see if it. The model is rather delicate and should be handled carefully.

My boxes arrived the other day. However there now appears to be some kind of a botch up <sup>the red tape at</sup> in Canberra so the customs won't release the boxes. This will be cleared up in due time and I'll be able to get on with the job. ~~None of these things are going OK.~~

I have permission to use the laboratories and shops at the University to complete my apparatus. The initial try will be made at the IPS field station near Cambridge. This place turned out to be not too good as an airport is only a mile away and a high voltage power line goes by one side of the property, plus quite a few dwelling houses within a half mile. Consequently I have secured permission to use the far half of Seven Mile Beach. This place is about 15 miles east of Hobart in the wilderness. access

is by road to near end of beach and then out along beach. Thus I should have ample room ( $3\frac{1}{2}$  mi) to put up any kind of antenna.

I find quite an interest in radio astronomy here. One of the lecturers in Electrical Engineering has just returned from a year in Cambridge, England working with Ryle. Newstead is now setting up to do radio astronomy experiments here. He is quite a theoretician. Also Ellis who is in charge of the ionosphere station is starting on some radio astronomy studies closely related to my ideas. We will work together. If this hole experiment can be made to function, big mirrors will be obsolete. The hole in the ionosphere is about  $1^\circ \times .8^\circ$  also the position of the hole can be moved up and down by changing frequency. Thus one merely sets up an antenna to look in general direction of hole, adjusts frequency for right altitude and lets time pass. The hole sweeps over the sky with the ionosphere as screen to exclude everything else. Simple, if it works! We will know in a few months.

Merry Christmas & a Happy New Year

Grote