

15th August 1956
G.P.O., Hobart
Tasmania, Australia

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

Dear Hap:

It pleases me to report that some results are now in hand. I started making observations about 5pm on the 12th and the apparatus continues to run automatically since then. On the basis of the very limited evidence presently available it seems to be a success. However things have taken so long that I'm now about $2\frac{1}{2}$ months behind schedule; thus I will be here for several more months until this whole setup can be given a fair trial. If these results are what I think (or hope) it seems that this Y hole is the small round one about a degree across which I mentioned a year or more ago.

The weather had continued bad. Last night I folded up about midnight in a blizzard and finally got back to town about lam. Kempton is inland about 30 miles north of Hobart at an elevation of 800 feet. I park my Holden car on the edge of the road about a mile from my installation. The farmer has loaned to me one of his tractors upon which I have installed an electric starting system and lights plus a big box to carry my stuff. The tractor is kept under a big Norfolk pine tree. I then drive the tractor down into the bottom of the valley and park it outside of my shed. A cord runs from shed and plugs into a receptacle on the tractor which has an oversize battery. This provides light at night. A good kersene heater provides warmth. A kerosene stove may be used to cook hot soup or heat soldering irons etc. Altogether, the setup is about as good as I can organize without expending a huge amount of time and money.

The antennas are two east-west wires each 2200 feet long and 300 feet high above the center of the valley. They form the center parts of spans respectively 3660 feet long at south and 3920 feet long at north. These parallel wires are about 1000 feet apart in a north-south direction. For comparison the main span of the Hudson river bridge is 3500 feet. While this valley is rather inaccessible, the choice seems to be a good one as it is very quiet electrically. Wires are buried in the bottom of the valley. These connect the down leads and tuner boxes under the center of the 2200ft. sections with the building which is in the middle of the whole affair. All this construction in a sea of mud is what took so long. This year is one of the very wettest on record. By 30th June quite a bit more than the normal annual rainfall had already come down and the wet season was just beginning. The creek at the

bottom is swollen most of the time and it was necessary to lay down tiles and put in a dozen loads of rock to form a kind of bridge. Last night the water was running over the top of rocks a foot deep but the tractor got thru OK. At one place we ploughed a trench about 400 feet long up a slight slope. The water seeped out of soil all along trench so that at bottom there was a stream 3" deep and 6" wide. Atop one hill 360 feet high we put down another trench six feet long and 2ft deep to bury an anchor log. In a half hour there was nearly an inch of water in this trench. The hills must be saturated to the very summit,

No kangaroos are around and the rabbits are about extinct but quite a number of small animals such as bandicoots and devils inhabit the place. They are respectively similar to mongoose and skunk in appearance and size but don't have a scent and both have a pouch like a kangaroo. They are harmless. The birds are magpie (big black and white crow), plover and two varieties of parrotts. These are green birds with red and yellow markings. They feed on clusters of red berries which are abundant. However they don't peck at the berries like ordinary birds. The parrott stands on a branch with one foot. He then breaks off a bunch of berries with his bill and transfers these to his other foot. Holding the cluster of berries in his claw like a bunch of grapes he bites off one berry at a time and spits out the seed before going on to the next berry. The whole procedure is rather a human performance. Most parrotts stand on left foot and hold berries in right claw. Thus they are right handers.

Recently I learn that Bok is taking over the job of Commonwealth Astronomer. He seems to be a good choice as he is being well received. There is to be a welcoming gathering and symposium on radio astronomy in Sydney during the first week in September which I expect to attend.

The Edmund Scientific Company, Barrington, N.J. offers small electrostatic generators under stock number 70,070-X for 10.95 dollars each postpaid in U.S.A. If there are any left, please order a pair and keep them until I return as I think I can use them in a future idea. I'll write again soon.

Grote Reber