

Mr. Grote Reber
G.B.O., Hobart
Tasmania, Australia

Christmas Eve, 1954

Dear Reber,

Thank you very much for your extremely interesting letter. It is just the sort that I like to get but hesitate to request because I know you are busy with more important things. I am most interested to learn what you are able to make of your data from Kale Kale.

Also, your idea of choosing a wavelength and a hole in the ionosphere and letting the hole do the scanning as it moves strikes me as highly original and I hope it works. What I don't understand is the reasoning back of your statement that the hole will be about 1.0 by 0.8 degrees. I assume you mean that that will be the beam width of your aerial at the frequency you choose. This confusion of course is a function and a sign of my ignorance, but I certainly appreciate that you need no huge arrays.

I am taking the liberty of sending you a first draft of my third chapter. As you know, the book is intended for laymen. Also, more technical matters are to be discussed in later chapters. The first chapter is a general introduction, the second goes in detail into Jansky's career, emphasizing his difficulties and the fact that, contrary to what his associates at the Bell Labs told me, he wanted very much to continue his work in radio astronomy and was not permitted to do so. In fact, I have a letter from which he wrote to his father--or rather an excerpt from the letter--which indicates that at one time he had tried to get a job elsewhere where he would be able to pursue his research.

That's the second chapter. The third is enclosed. Frankly, remembering my audience, I consider it a rather good first draft--and I expect you to be frank too whatever you think. There is nothing more useless to a science writer than politeness and tact. Correct any inaccuracies. There are many things I wanted to ask you about your life and work which I had no time to ask you. So if in correcting a misstatement you have a chance to add some facts, that would be fine.

What worries me most is your time and the imposition of sending you the chapter in the first place. But do what you can when you can. If you can get it back to me by March 1st, I'd be delighted. Incidentally, please don't write comments on the chapter itself. Corrections, okay. But I never can read crammed-in marginal remarks. As the chapter will indicate, one of the things that gets me maddest about the history of radio astronomy is the indifference from two sides--the practical men and the professors. I still don't see how the science got anywhere against such negativism. It must be the force of fact.

Just received a fine paper from John Hagen on the absorption of 21-cm radiation by interstellar hydrogen. I still want to hear that some one has picked up deuterium, but Lovell and Ewen and I assume the Australians have so far tried in vain.

Best wishes, happy seasonal greeting and felicitations, and please write any time about anything. I look forward to our next meeting whenever it comes.

Yours,

John

Dr. Grote Reber a Scandinavian