

7th July 1958
General Delivery
Wailuku, Maui, Hawaii

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

Dear Hap:

Thanks for your letter of the 18th June. According to your clipping, radio telescopes are getting bigger and bigger every day in every way in the newspapers. I hope that someday they will become a reality.

Things progress slowly but steadily out here. There is more in this old Haleakala data than meets the eye. As you remember, the records were badly confused by fluctuations of ionospheric origin. I took a lot of observations in the vain hope of, by chance, hitting on a couple of times when the fluctuations would be absent. The whole performance was very frustrating.

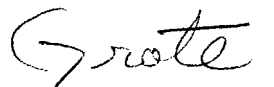
By definition, these fluctuations should be random in both phase and amplitude. If this be true, then by averaging several of the better records, most of the random components should disappear. When this is done, lo and behold, they do. The net results are fairly creditable patterns of the kind I was looking for. Most of this spade work has been completed and now I'm analysing these patterns. Also I'm in contact with Minkowski of Mount Wilson and I think the whole affair will amount to something worthwhile yet. A bit of the initial results will be presented for me at the International Astronomical Union in Paris toward the end of this month.

The present study should have been made long ago. However, at that time, I was too busy getting organized for Australia to do anything but take data. I feel that I should stay on here a couple of more months to extract the last ounce of results and see the matter finished. Please tell Emberson that I'm still busy here but not to give up hope.

Enclosed is a proposal by Mullard for six special band pass filters. I have canvassed several American concerns but only Mullard is interested in making the filters the way I want them. I have used their products before and know them to be of good quality. Please place the order and have the filters routed thru NYC to Green Bank. About 15% duty will have to be paid at NYC. Mullard may want their money before starting work.

As things stand now, it will probably be September before I show up in NYC.

See you then,


Grote Reber