

3rd April 1964

Greetings Jennie:

Your note of March 5th arrived with Mr. Schauer's letter of the 4th. Thanks for keeping me informed of all those reprints. The medal also arrived on the 4th in good shape. While I am duly appreciative of this honor, somehow I cannot get up great enthusiasm for medals, citations, etc., They always seem to me demonstrations of elegant hindsight. Much more important and difficult matters relate to "where do we go from here?".

Please renew the membership in Southern Appalachian Botanical Club for 1964 and send to me any copies of *Castanea* which may be on hand or will arrive.

Please secure and send to me copies of patents 1,745,175 and 1,877,140 and 1,900,018 all granted to Julius E. Lilienfeld. These describe transistor devices at least 20 years before BTL invented them. See *Physics Today*, February 1964, pages 24-6.

By my letter of 31st January I requested more Barograms. We still have a lot on hand, but I hope more are being secured and sent.

*arrived on 17/4/64*

Observing conditions during March have been poor compared to February. This is caused by a temporary resurgence of solar activity. The ionosphere of the earth seems to be a much more sensitive gauge of solar activity than most of the visible features of the sun itself especially during solar activity minimum. I suspect the present solar activity minimum is not as low as the one in 1954 which was probably higher than the very low minimum of 1932. It may be that I am trying to carry out these studies during an inauspicious epoch.

Most of the past month has been devoted to equipment test and development. I expect to follow along this avenue while collecting data during the winter.

The only correspondence I've had with Smithsonian has been two exchanges during November and December to Bernard S. Finn. These related solely to a proposed model of my Wheaton mirror. As usual, my collection of old radio gear is mostly trivia. However I have a score or so pieces which are important examples of development of the art. Who does Smithsonian have on the staff to help them weed out the wheat from the chaff?

The above doesn't interest me nearly as much as what's going to happen to my dish at Green Bank and the score of cases of apparatus and records relating thereto at Bound Brook? When NBS had my dish they thoroughly smashed it up and lost most of the focal point apparatus. I don't want that kind of a thing to happen again. Jansky's equipment and records all perished by similar incompetence at BTL.

I have a complete list with me of everything at Bound Brook.

If Carmichael is interested I will draw up a variety of things out of the couple of hundred pieces which I believe to be most important and write to Mr. Schauer separately on this matter. However I believe this to be secondary to the radio astronomy gear.

We are having beautiful mild calm autumn weather. It is a real pleasure to spend two days a week at Bothwell. This is the equivalent of Indian Summer in north America. My crop of beans are beginning to mature and a variety of those brightly colored pods are showing up. Apparently some kind of a mutation occurred two years ago. It has not happened before or since. However the products thereof can reproduce themselves and make for startling effects. This is different than heterozygous meaning mixed ancestry. If it were the latter, then every year the main line of seed should produce a wide variety of offspring. Such does not occur as the main line of seed continues to breed true.

Best regards,

Grote Reber