23rd September 1963

Dr. George C. Southworth

Chatham, New Jersey

U. S. A.

Dear Dr. Southworth:

A copy of "Forty Years of Radio Research" has found its way to me here. I am greatly flattered by your comments about my early work. Thanks for the kind inclusion in your good book.

About four years ago we had some correspondence about reconstructing the Jansky rotary antenna. Recently I've received word that the project is well underway. It seems likely this reconstruction will be mounted on the right side of the front entrance, at Green Bank sometime next year. Thank you for giving this matter a push.

The purpose of this letter is to enquire about another subject. Your "Early History of Radio Astronomy", Scientific Monthly, February 1956 makes an interesting statement at bottom of second column on page 5 of reprint as follows:, "Much of the summer of 1931 was evidently spent on a receiver for ultrashort-wave static that he had apparently been asked to build". You probably are one of the few people who have access to and knowledge about his notebooks. I wonder if you would care to examine these again to ascertain just what kind of equipment he was building and its approximate frequency range. Perhaps some details about antenna, kind of circuit, number of stages, types of tubes, etc. are still recorded. I am curious about the state of the UHF art when I was doing amateur radio at 20 and 10 meters.

My observations here are progressing well. Now I have a circular array consisting of 192 dipoles over an area of about one square kilometer. These produce a steerable beam $8^{\circ} \times 8^{\circ}$ at a frequency of 2082 kilocycles. The vast amount of ionized hydrogen in space causes the center parts of the Milkyway to be relatively dark compared to its borders. Jupiter and some radio stars are also visible. Frequently, on adjoining frequencies, I can hear WCC, WNU, WNY, KPH, etc., so America seems quite close! With kind regards, I am

Sincerely yours,

Grote Reber

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