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Dear Mr. Rebel:  

I want to thank you for your very kind letter of November 20, sending me a reprint of your latest work. I stated more specifically some of the things you had told me earlier.  

I get a great deal of satisfaction from your line of attack. I note that after extending Stahl and Fanshawe's measurements to much higher frequencies and after others have gotten close on your heels, you have circled around and got the other way to extend the frequencies by no less than four octaves! It now looks as though cosmic radiation might be present at almost any frequency provided it is sufficiently low for its observation.  

There are many questions I would like to ask about noise condition in the far north, but most of them are too involved to be handled by correspondence. To those of us who live in the New York area it seems almost incredible that anyone should be able to detect at 520 kec extra-terrestrial radiation as low as 10⁻⁵ watt per square meter per cycle of bandwidth. Here we have far too much industrial noise and too much static.  

The reprint you requested went forward by parcel post several days ago. I hope that you are not in a hurry. I could hardly bring myself to send it to you.
the necessary money to send them by air mail.

In using my antenna-array paper, bear in
mind that my calculations ignore all earth-proxim
effects. Perhaps there are not important for the fulcrum,
conditions under which you were working.

What seems to be the limitation preventing you
from making similar observations at 250 kc to
125 kc or even lower? Do these anything I can do
that will help? I am no longer in B.T.U. but I might help you in another
way, and I think that I understand your proposed
mechanism to explain the penetration of 50 ke through
the ionosphere but I assume that it calls for the
mechanical motion of charged particles in the
presence of the earth's magnetic field. Without the
energy of motion comes from the incident wave and
after penetration the energy of motion is converted back
to wave energy. If this involves a kind of resonance,
and it possible for such waves to be set up merely by
cosmic particles being shot into the ionosphere from
without? Is it possible that all cosmic noise is of this kind?
Wouldn't such waves vary with sidereal time and therefore
have the appearance of being come from outside our
solar system? You probably know many reasons why
this could not be.

I hope to be in Kansas soon and may stop on
the way down at Gainesville to see what is going on at the
University of Kansas. They once offered me a job. I
believe they have a project based on the location of storm centers
by radar methods. The fellows they should also have one
relating to radio astronomy. I must close for this time.

Best regards and best of luck in the job ahead. You have
already made priceless contributions and with your long
experience you should be able to make many more.

Sincerely, George A.