Paul Campbell Communications Canada 1241 Clyde Avenue Ottawa, Ontario CANADA K2C 1Y3

Dear Paul:

Recently a copy of your red booklet for July 1988 arrived. It provided me with an opportunity to do some new and different analysis of  $f_0F_2$ . I compared readings alt exactly same GMT for Resolute, Churchill, and Ottawa for each hour. A total of 259 separate observations were made covering all 24 hours. From 6 am to 10 pm CST the values of  $f_0F_2$  decrease as latitude increases. However, from 10 pm to 6 am the values of  $f_0F_2$  increase as latitude increases. This shows a substatial valley or trough exists near 45°N latitude. Such is in agreement with and confirms Alouette satellite observations. On my last trip I spent considerable time at CRC searching and plotting Alouette data. The above analysis explains why only nite time transits showed the trough. It is simply not there during day.

July 88 is summer pretty well up on solar activity cycle. I'd like to try similar analysis for winters near bottom of cycle. Please search thru your archives and send to me red booklets of  $f_0F_2$  or equivalent for Dec. 84, Jan 85, Dec 85, Jan 86, or whatever you can locate similar.

After I've developed this business further, I'll send to you my detailed analysis. Let us keep in touch. I am,

Red Booklets for April, May, June 1988 Ported 15/11/88, 892, Reid 6/4/89 Sincerely yours,

Grote Reber General Delivery Bothwell, Tasmania Australia 7030