

It was there on Deception Island they set up "shop" to meet skeds with monitoring stations around the globe and so as to have an ending to this experiment, I wrote to Mr. Johnson who participated in this feat requesting any information he could give me. Here is an excerpt from his letter I received..... A transistorized kilowatt "transmitter", operating on 4, 6, and 8 khz, was used, powered by a gasoline generator and the output applied across the island nearly opposite the sea opening through 10 parallel #12 copper wires, spaced about 5 yards apart and fed in the center. For about a week, tests were carried out as time permitted, preliminary to operating the equipment on a programmed schedule. Using small boats and larger craft as they arrived, it was found that signals could be received some distance out at sea. Unfortunately, something unforeseen happened, just what we shall never know and all the transistors got fried and there were not enough good replacements at the Island to get going again. By then, we all were involved in the high altitude atomic tests in the Pacific and, except in conversation, the project has been largely ignored ever since. It could well happen that the tests will be resumed sometime in the future, but I don't know when.....

Mr. Johnson writes that in the March 1961 edition of QST, information was printed as to equipment for the reception of WHISTLERS.

There's still an enormous amount we don't know about these strange VLF signals, but what we do know can be summed up about as follows They are generated by unknown sources. So far, no man-made discharge beneath the ionosphere has been successful in producing a WHISTLER. Above the ionosphere, success has been quite high. Thunderstorms, and lightning discharges may have some connection with the causative discharge. The energy in the discharge is propagated in all directions, but that which goes along the magnetic field has an advantage -- losses are lower and the energy will return to the earth. When the energy reaches the other hemisphere and starts to penetrate the ionosphere, some may be reflected, some may be transmitted, but most is lost. That which comes thru the ionosphere can be detected on the ground as a WHISTLER. With luck some of that which is reflected will cruise back along the field and go through the same process at the originating area and might be detected on the ground there. Observations with the orbiting satellite observatories show that there is tremendously more activity above the ionosphere than below. Since the magnetic field extends out to several earth radii, the presence of WHISTLERS show that there is much more ionization in space than previously (previous to IGY, that is) thought.

The work of Dr. R. Helliwell, of Stanford, indicates that the path for WHISTLER activity is open most of the time. The fact that signals show a marked diurnal and seasonal variation would lead to the belief that it is the source which undergoes changes. Observations from the Injun and Alouette satellites confirm this.

Well, that just about wraps it up on the search for the cause of those elusive WHISTLERS! Many thanks to Mr. W. C. Johnson W1FGO, of the Thayer School of Engineering, Hanover New Hampshire, for his letters assisting me in compiling the necessary and up-to-date information for this article.

73, Ed Taylor VE3FRM.

FROM VE-NEWS -- SASKATCHEWAN

Bill Parker VE5CU, President of the Saskatoon Amateur Radio Club, requests all Canadian amateurs to forward any documents, photographs, information on amateur radio in Canada. They are undertaking as a Centennial project to publish in book form, a history of amateur radio in Canada. All photographs and documents will be photocopied and returned promptly. Target date has been set at October 1966. Wilf Brown VE3AJ0 is in charge of any information possible from S.A.R.C. and will pass it along to the Saskatoon club. NOW IS THE TIME!

ALBERTA

The Centennial project of the Amateur League of Alberta will be to promote the formation of a National Organization of Canadian Amateurs.

KITCHENER-WATERLOO club suggests that various radio clubs in Ontario who have top rate speakers to address their meetings, put the talk on tape. These tapes could then be sent to other interested clubs.