RADIO NOISE ATTACK BY SUN IS STUDIED WITH RADAR MIRRORS

By SCIENCE SERVICE

STERLING, Va., Dec. — The sun is attacking the earth with hissing and popping noises. The Bureau of Standards is starting out to investigate these radio noises originating in the sun. Two giant radar mirrors are being set up for this study here at the radio propagation laboratory. These solar noises are becoming increasingly important with the use of higher and higher frequencies in communication and radar equipment.

These radio waves sent out by the sun may prove useful in many ways. A radio sextant might be built, for instance, that would use solar noise to determine the position of a ship at sea. Ships could thus navigate by the sun despite overcast skies.

Frequencies and intensities of solar radio waves are to be investigated and the actual sources of these waves determined as closely as possible with two giant radar mirrors measuring about 25 feet in diameter. These mirrors, which will be automatically directed toward the sun during the day, can capture a large amount of energy from the solar broadcasts.

Radio waves constantly pouring out from the sun, interfere with reception of broadcasts over very-high and ultra-high frequency receivers. They are heard as short "puffs" and "swishes" that last a second or more. Sometimes these "swishes overlap, resulting in an irritating grinding noise which may cause streaking on a television screen and picture jumpiness. Intense bursts of solar transmission, lasting several hours, have blanked out a radar pointed at the sun.

12/22/47 W

SCIENCE SERVICE

THE INSTITUTION FOR THE POPULARIZATION OF SCIENCE organized 1921 as a nonprofit corporation, with trustees nominated by the National Academy of Sciences, the National Research Council, the American Association for the Advancement of Science, the E. W. Scripps Estate and the Journalistic Profession. WATSON DAVIS, DIRECTOR.

1719 N Street, N. W WASHINGTON 6, D. C.

Talaphone NOrth 2255

Cable Address Sciencerve

Dec. 23, 1947

National Bureau of Standards Radio Propagation Laboratory Sterling, Va.

& Keller

Gentlemen:

A sheet from one of our reports on science that has been issued to newspapers and magazines is enclosed because of your connection with one of the items that it contains. It is sent you for your information and files.

Science Service issues regular syndicate services which carry to over 400 subscribing newspapers and other publications in this country and abroad, authentic accounts of current scientific progress in all fields.

I thank you for your cooperation with Science Service. If you will continue to keep us in touch with your own work and that of your associates, we shall value this aid to our work of science popularization.

Sincerely,

Watson Davis, Director

WD/Ro

also in 10th er 10 where