

One AACS recipient of the weekly forecast of ionospheric disturbances, JILA, Algiers, has been deactivated, and the weekly telegrams are now being sent to nine remaining AACS activities.

Frequency Utilization Research (Section 4). - Mr. J. W. Herbstreit's paper entitled "Cosmic Radio Noise," originally presented at the joint meeting of the IRE and Physics Society in Cleveland, Ohio, February 27, 1947, was given at the joint meeting of the International Scientific Radio Union and the American Section of the Institute of Radio Engineers at Washington, D. C., May 6, and also at the Radio and Electronics Colloquium at the National Bureau of Standards, May 16. The paper dealt primarily with a description of the measurement technique being used at CRPL to determine the frequency law of cosmic radio noise.

Messrs. K. A. Norton and J. W. Herbstreit participated in the Conference on Radio Propagation held at CRPL, May 8, 9 and 10, in the capacity of discussion leaders for the session on "Cosmic and Solar Radio Noise." Mr. Norton's topic was "Frequency Distribution of Cosmic Radio Noise Intensity," and the discussion on "Measurement Techniques" was lead by Mr. Herbstreit.

At the request of the Signal Corps, a study is being made of a microwave radio link between Washington and Fortress Monroe, Va. Messrs. Herbstreit and Kirby made a trip to Fortress Monroe in connection with this project to investigate the equipment and propagation paths being used.

Messrs. E. F. Vandivere of the FCC and J. H. DeWitt of the Clear Channel Broadcasting Group, visited the section and discussed the problem of daytime sky-wave propagation on standard broadcast frequencies.

Experimental Ionospheric Research (Section 5). - Problems encountered in the experimental study of the characteristics of radio waves were discussed with Messrs G. B. Fanning of the Aircraft Research Laboratory, Wright Field, Ohio, and R. A. Helliwell and L. A. Manning, of Stanford University, California.

Messrs. W. F. Squibb and H. P. Gates of the Naval Electronics Laboratory, San Diego, California, visited the Sterling Radio Propagation Laboratory to inspect the high-power pulse transmitter to be used in the tests with White Sands, New Mexico. Messrs. Squibb and Gates had previously visited the section with Messrs. R. J. Cary and R. J. Steelman, also of NEL, to discuss several experimental problems.

Discussions were held with Dr. M. D. O'Day, of the Cambridge Field Station of Watson Laboratories and Dr. Royal M. Frye of Boston

University on instrumentation in the forthcoming tests between Sterling, Virginia, and White Sands Proving Ground, New Mexico, in which high-power pulse emissions from the Sterling Radio Propagation Laboratory will be received on the ground and in the rocket there and the results compared on the ground by means of a telemetering system. Dr. O'Day and Dr. Frye also visited the Sterling Laboratory to examine the high-power pulse transmitter.

Members of Section 5 took part in the discussions of the Conference on Radio Propagation held at the Bureau May 8, 9, and 10, 1947. Mr. R. Bateman was discussion leader on radio noise and Mr. R. Silberstein, on world distribution of ionosphere characteristics.

Field Operations (Section 7). - A preliminary calibration was made of the loop antenna used in the standard radio field-intensity unit for the purpose of determining and calibrating the effective length of the vertical-incidence antennas at the Sterling Laboratory. During calibration of the loop, it was discovered to have a resonant condition at approximately 8 Mc/s. Efforts are now being made to change the design of the loop to produce a more linear calibration curve. The work was under the direction of Mr. V. C. Pineo, Section 5, but will be continued hereafter by personnel of Section 7.

The CRPL Model C-1 automatic ionosphere recorder was removed early this month from the U. S. Canisteo, anchored at Craney Island, near Norfolk, Virginia. For the past several months it had been used to obtain ionosphere data on the Byrd Antarctic Expedition (Operation Highjump), (see general article, page 1) under the direction of Lt. Edwards, USN. Lt. Edwards reported that ionospheric data were obtained almost continuously during the expedition. The reassembling and adjusting of the Model C-1 for use at the Sterling Laboratory has commenced and it is hoped to have it on continuous operation soon, replacing the manual equipment now in use.

A low-frequency (1510 kc) crystal was obtained and sent to the Regional Administrator of the CAA, Anchorage, Alaska, for use in a transmitter at their Big Delta station, to obtain some test recordings for absorption studies in that region.

A conference was held at the request of Lt. Comdr. P. H. Sullivan, Bureau of Aeronautics, Navy Department, on the subject of low-frequency propagation in Northern regions.

A SID starting 1447 GCT and ending 2230 GCT, April 19, was observed at the Sterling Radio Propagation Laboratory. The time of occurrence agrees quite closely with that reported at Trinidad, B.W.I., on the same date.