to have handled the 1927 flood and also the project superflood which has been "par" for the Mississippi flood control work of recent years.

If the present flood brings water levels to heights anticipated from the advance Ohio River disaster forecasts, the Army Engineers may have to set a new high water level for their theoretical superflood. In any event they will have new flood data to study in their

miniature of the Father of Waters.

Out of the current disaster will probably come widespread work on soil erosion, reforestation and other stages of flood control, but wherever a new dike or levee or a constructional change in the river is contemplated, the Waterways laboratory will provide the first hurdle, proving whether it is really useful or not.

Science News Letter, February 13, 1937

PADIO

Scientific Journal of the Air Will Broadcast Cosmic Data

Information About Sunspots, Radiation, Magnetism, To Be Sent Out Daily From Station W1XAL, Boston

NEW scientific journal, one that is issued by radio rather than with paper and ink, was inaugurated at Boston on Feb. 1, when World Wide Broadcasting Foundation's short-wave station W1XAL began a regular schedule of broadcasts of cosmic data and scientific news. W1XAL in this activity cooperates with the Union Radio Scientifique International, familiarly known in scientific circles by its initials URSI, and Science Service. Each afternoon W1XAL will announce in plain English technical data on observations of sunspots, solar radiation, magnetism, ionized layer heights and other phenomena that have been observed in far corners of the world during the same day.

The primary purpose of these broadcasts is to make such information available internationally and to interest scientifically inclined laymen in the making of observations.

For nearly seven years Science Service in cooperation with the American Section of the Union Radio Scientifique International has collected and distributed daily information about these fundamental inconstants of nature. The Army Radio Net has brought some of this information to Washington and the Navy has lent its valuable cooperation in the broadcasting of the daily cosmic data messages in international Morse code from NAA, Arlington, at 5:30 p.m. Eastern Standard Time on 9250 kilocycles and 4390 kilocycles.

Through arrangements effected by Walter S. Lemmon, radio engineer who is founder and president of the World Wide Broadcasting Foundation, the facilities of educational short-wave station W1XAL are made available for the extension of the ursigram service in cooperation with Science Service. This station, licensed for international broadcasting on four frequencies, now operates on 20,000 watts and is heard with good volume in almost all parts of the world. These broadcasts of cosmic data and scientific news should, therefore, be available to listeners anywhere who

are suitably equipped with standard all wave receivers. Mr. Lemmon stated this new radio service "will aid world-wide cooperation in scientific observation and make more effective the correlation of cosmic causes and cosmic effects."

The broadcasts from W1XAL will be heard daily from 4:55 to 5:00 p.m. Eastern Standard Time on 11.79 megacycles (25.4 meters) and weekly summaries on Monday evenings from 8:30 to 8:45 p.m. EST on 6.40 megacycles (49.6 meters). The daily broadcasts will cover current data; the Monday evening broadcasts will be a weekly compilation.

The program inaugurating this new service included brief talks by Dr. A. E. Kennelly of Harvard University, the co-discoverer of the Kennelly-Heaviside layer, Dr. Harlow Shapley, director of the Harvard College Observatory and trustee of the World Wide Broadcasting Foundation, W1XAL; Dr. Loring B. Andrews, chairman of W1XAL program committee, and Watson Davis, director of Science Service.

Science News Letter, February 13, 1937

An elephant's heart beats about half as fast as a man's.

The meadowlark turns its back on any one approaching it, thus concealing its bright yellow breast.



BROADCAST A JOURNAL

Inaugurating the broadcast of a scientific journal of the air are (left to right) Prof. Harlow Shapley, director, Harvard College Observatory; Dr. A. E. Kennelly, Harvard, co-discoverer of the Kennelly-Heaviside radio reflecting layer of the atmosphere; and Dr. Loring B. Andrews, astronomer-chairman of the WIXAL program committee.