GEODESY—GEOPHYSICS

Poles Have New Superior Maps Not Available to Germans

Zone Mapped Covers Part of Poland Not Involved In First Fighting; Extends From Latvia to Hungary

NEW and better maps, which are probably not available to the German General Staff, are now in the possession of Polish military forces, it appears from the scientific report prepared by Polish scientists for the meeting of the International Union of Geodesy and Geophysics in Washington, D. C.

Poland sent only one delegate to the important science meeting because war has made it necessary for many delegates, high in government circles, to stay close to the conflict. The Polish delegate is Prof. Henryk Arctowski of Lwów University, a meteorologist.

The Polish report, made public at the meeting, tells of three years of research to improve the exact knowledge of Polish terrain, especially in the eastern provinces.

Of major military importance are the new superior topographic maps prepared for the Military Geographic Institute of Poland under direction of Chief Colonel Eng. T. Zieleniewski.

The new maps, partially incomplete, have only just become available and cover the whole zone of Poland which may soon come into the "front lines" if the Germans push Polish forces back, or if Russia somehow enters the conflict from the east.

The zone runs from the Lithuanian and Latvian frontier as far as the borders of Hungary and Roumania. All field work is complete and computation is nearly finished. Even though the maps may not yet be printed the data on them are available to the Polish General Staff.

Superior topographic maps showing detailed knowledge of terrain are of vital importance for military operations. A few feet of error in a map can nullify effective artillery fire and make good shelter out of what, on the map, appears to be an exposed position. The movement of troops and supplies too hinges vitally on an accurate knowledge of terrain.

Some of the world's greatest mapping projects, of which Great Britain's complete map of the whole of India is the prize example, have resulted from military necessity.

Poland planned to make an accurate topographic map of the western section of its country. But since the region is now in the war zone it has, of course, been abandoned.

Science News Letter, September 16, 1939

Robot Weather Stations

BETTER weather forecasting by a whole ring of robot weather outposts in the barren wilderness of Alaska and northwestern Canada is in prospect because of a tiny automatic weather observer and radio transmitter demonstrated at the meeting.

Developed at Harvard University's Blue Hill Observatory under the direction of Dr. K. O. Lange, the instrument, during the meeting, transmitted weather conditions from Mt. Weather in the Blue Ridge Mountains about 50 miles from Washington direct to the exhibition hall of the meeting.

Hourly air pressure, temperature, humidity, wind direction and velocity, and sunshine data were measured and sent by the tiny two-watt transmitter to the receiver and recorder 50 miles away.

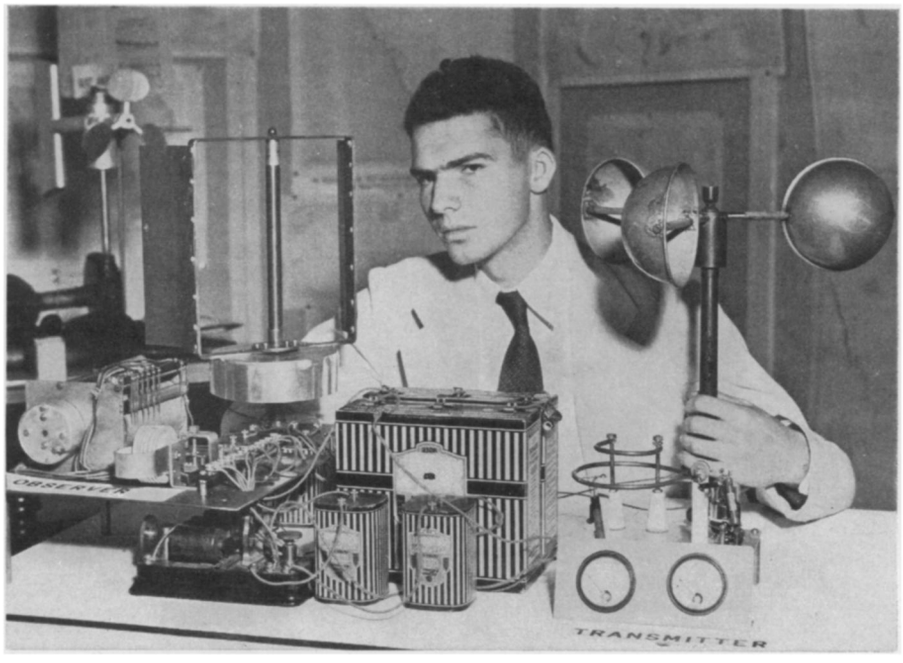
The next stage will be automatic observation and transmission of weather from Mt. Washington, N. H., to Blue Hill Observatory, approximately 145 miles away.

Ultimate goal of the research is the spotting of the robot weather observer and transmitter in isolated but vital locations in the Far North where much of the nation's weather originates. There is no reason why the robot weathermen could not be placed on desolate islands in the Pacific and other oceans so that the world pattern of weather could be learned hourly.

Thomas Dickey, senior mechanical engineering student of Princeton University built the observer and recorder for Dr. Lange and Charles Pear, research assistant at Blue Hill, did the necessary radio work.

Science News Letter, September 16, 1939

The world's rayon production has shot up from zero to two billion pounds a year almost within a single generation.



ROBOT WEATHER STATION

Thomas A. Dickey, of Princeton, is demonstrating his robot instruments for automatic weather observation, to the International Union of Geodesy and Geophysics.