nomic and educational improvement under the National Recovery Act. Strong support is expected to be given the proposal by government experts, many of whom have been outspoken for the world-uniform standards. While not sponsoring any specific proposal, President Franklin D. Roosevelt has declared, "I have always favored adoption of the metric system by this nation."

The purpose of the Decimal-Metric Code is "to establish a single standard for the expression of all values, measures, weights, angles, temperatures, etc., which is best adapted for American national and international service." The author of the code, Captain Manly B. Gibson, of Fort Banks, Massachusetts, states that while it is offered primarily in the interest of American school children, its benefits will be shared by practically every man, woman and child in the United States. The code will reduce the time and labor now required for training in elementary mathematics and practical measurements in public schools by approximately fifty per cent. To young Americans and to future generations the code will, it is said, save billions of hours of child-labor now wasted on an unsatisfactory and inefficient educational program.

With the adoption of this code, all civilized nations of economic importance, except Great Britain, will use decimal-metric units. It will give increased efficiency in every phase of American endeavor, with an economy of more than two billion dollars annually. Using this universal single standard for the expression of values, weights and measures, American advertising will find a new and more favorable domestic and foreign market for American products.

Not only is a metric code being urged for adoption under the NRA, but metric advocates throughout the United States are launching a movement to secure liberal legislation in the new session of the Congress providing for general adoption of metric weights and measures. Metric petitions are being sent to the chairman of the Committee on Coinage, Weights and Measures, U. S. House of Representatives, Washington, D. C.

## ACTIVITIES OF THE U.S. WEATHER BUREAU

CURTAILMENT in most of its activities characterized the program of the Weather Bureau, U. S. Department of Agriculture, for the fiscal year ending June 30, according to the annual report made public on November 22. In spite of substantial retrenchments, however, normal functions were continued and a new plan for increasing the number of ship's reports during the tropical hurricane season was put into effect.

The bureau also took an active part in the Interna-

tional Polar Year, which began August 1, 1932, and ended August 31, 1933. Special observations were made at a station established for the purpose at Point Barrow, Alaska. The results of these observations, together with observations by all the other meteorological services of the world, will serve as the basis for detailed weather maps on a world-wide scale, from which, it is hoped, valuable aids to forecasting may be developed.

To effect the necessary economies, more than 20 first-order stations were closed, the service at others was cut, and nearly 500 employees were dismissed. In addition, 30 storm-warning, 11 second-order, 5 tobacco, 46 cattle-region, 97 crop-weather, 84 river and rainfall and 7 snowfall stations were closed. The number of places to which daily forecasts are telegraphed was reduced by more than 125, and the distribution of coded telegraph reports was cut drastically. In other cases the issuing of weather maps was either suspended or replaced by card bulletins.

Service to the public, to agriculture and to the industries, carried on as usual, cover the following lines of activity:

About 200 first-order stations, spread over continental United States and the possessions, except the Philippines, provide twice-a-day telegraphic reports and other observations, reports and automatic records, which form the basis of all the bureau's public service. General weather forecasts are issued twice each day for all states, parts of states and larger cities. The stages of the principal rivers are gaged and reports, on which the floodwarning service is based, are prepared.

From June to November hurricane warnings are issued for the benefit of all shipping plying the adjacent oceans, the Gulf of Mexico, the Caribbean Sea and the Great Lakes. More than 1,200 secondary stations, not including any airway stations, furnish simple reports of rainfall, river, weather and crop conditions.

A network of cooperative observers, using government equipment, but serving without compensation, send in daily reports on the temperature, rainfall and state of the weather. Incidental to the daily and weekly reports from 200 first-order and 300 secondary stations, the bureau issues a weekly bulletin of weather and crop conditions. A frost and cold-wave service for the benefit of citrus growers is maintained in Florida, Mississippi, Texas, California, Oregon and Washington. Warnings of temperature and cold waves are issued for shippers of perishable products and livestock and for use in the care and protection of livestock on the range in winter and at shearing time in the spring.

Solar radiation at the earth's surface, the ultimate source of all terrestrial weather and life, is investigated and measured. In accordance with the air commerce act of 1926, the bureau furnishes "such weather reports, forecasts, warnings and advices as may be required to promote the safety and efficiency of air navigation in the United States and above the high seas."