

These centres provide forecasts and weather information for all R.A.F. Ferry Command operations west of 30 degrees W. longitude and extend to all routes over the Atlantic.

Weather Service for the Trans-Canada Airlines.—In 1937, the Meteorological Service was called upon to provide the weather service for the Trans-Canada Airways. This required the establishment of forecast centres at the main terminals and provision of meteorological equipment at all the radio range stations from which observations could be obtained throughout the whole twenty-four hours, seven days a week. This necessitated the recruiting of a large forecasting and sub-technical staff, as well as the organization of rapid communication by teletype connecting all the radio range stations and terminals along the airlines. The teletype service permits the transmission of hourly weather reports throughout the twenty-four hours and additional reports when weather conditions are changing rapidly. Thus, the forecasters at the various centres are kept in constant touch with all weather changes taking place along the route. It is the duty of the forecaster to issue regular forecasts for the airlines and to keep their personnel informed of important changes taking place in the weather or in the forecasts.

The service was first established between Vancouver and Winnipeg in 1938 and extended to Montreal by 1939 just before war broke out and was put through to the Maritime Provinces shortly afterwards. There are now seven forecasting centres from Vancouver to Moncton providing the airlines with weather information and forecasts.

Meteorological Service for the Armed Forces.—While weather has always played a very important part in war operations, in the War of 1914-18 North America was not affected and, throughout that period, the Meteorological Service of Canada carried on its usual activities. During the present war, however, with the great development of aviation and communications, weather has become a most vital factor in aerial warfare. Since it was important that, so far as possible, weather information should be denied to the enemy but at the same time made available for the United Nations, one of the first acts was to suppress all broadcasts in clear of weather information in Canada. This, however, was not completely effective until the United States entered the War, when broadcasts in clear of weather information were suppressed over the whole continent.

Soon after the outbreak of war, the R.C.A.F. and Naval authorities of the Eastern Air Command requested a forecast centre at Halifax to advise the personnel concerning operations being carried on from there. This was immediately organized and shortly afterwards a similar organization was set up on the West Coast at Victoria, later transferred to Vancouver.

Forecasting service is now provided to all the operational units of the R.C.A.F. and Naval authorities in Newfoundland and on the Atlantic and Pacific Coasts. One very important duty of the forecaster is to discuss with the operational personnel meteorological situations and expected developments, and to brief the pilots before they set out on their patrols or navigation exercises. In this case, the weather situation likely to be encountered is very fully explained by means of blackboard sketches and the men are provided with forecasts and maps showing the weather conditions prevailing on the route.

Weather Service for the British Commonwealth Air Training Plan.—With the inauguration of the Plan in 1940, the Meteorological Service was asked to provide Instructors and Assistant Forecasters at the schools, in order to give the students the basic principles of practical meteorology that would be of most use