major airports. Owing to the nature of the climate and the difficult physical character of the terrain in the Rocky Mountain region and in northern Ontario, where there are absolutely no alternative emergency landing places, the spacing is somewhat closer. All important communities in Canada not on the line of the Trans-Canada Airway are being connected with it by branches and arrangements for exchange of international traffic with the airway system of the United States at cities near the border are being perfected.

Construction and Operations.—Natural conditions divide the Trans-Canada Airway into four distinct regions—the Mountain Region, from the Pacific Coast to the foothills in Alberta; the Prairie Region, stretching from the foothills to the Ontario boundary; the Laurentian Area, extending through western Ontario as far as the Ottawa Valley; and the Atlantic Section, which takes in the settled areas in the Basin of the Great Lakes, the Eastern Townships of Quebec, and the Maritimes.

The Prairie Region obviously presented the simplest construction and operating problems. There, precipitation is light, visibility normally good, contour changes are gradual, and aerodrome sites requiring little development were obtainable everywhere. Airway surveys commenced on the prairie section in the summer of 1928, and aerodrome construction and lighting installation followed. By the end of 1929, a chain of lighted aerodromes from Winnipeg to Edmonton via Regina and Calgary had been prepared and a contract for the carriage of mails had been let to Canadian Airways by the Post Office Department. Actual flying operations started on Mar. 1, 1930, with the operation of a nightly service each way. Five radio-beam stations, constructed in 1931, increased the efficiency of the airway materially. This service continued in regular operation with satisfactory results until Mar. 31, 1932, when, for reasons of economy in all services, it was temporarily suspended. Although the operation of the trans-prairie service was stopped, the airway surveys then in hand in the mountains and in northern Ontario, Quebec, and the Maritime Provinces were continued with a view to the eventual completion of the system from coast to coast.

The necessity for finding useful employment for many single homeless men in all parts of the country led to the establishment of aerodrome construction camps in the Rocky Mountain section, and in northern Ontario, Quebec, and the Maritime Provinces. These resulted in much valuable work being performed, and the system was continued to June 30, 1936, when all labour camps were shut down and the construction work was continued either by contract or by day labour.

An Act creating a national operating company—Trans-Canada Air Lines—for the operation of the trans-Canada system was passed by Parliament in 1937, and in July and August of that year a joint survey was made by the staff of the operating company and the Department of Transport to decide on the air navigation facilities required to complete the airway. The increase in landing speed and the introduction of night and all-weather flying necessitated larger airports with longer clear approaches and improved surfaces. Facilities that had been adequate five years before no longer sufficed. The construction and installation of the necessary radio-range stations, the enlargement of the airports, and installation of the airway lighting system was put in hand in September, 1937, and has been prosecuted with energy since that date. Work was further advanced in the Western section; activities were concentrated there to bring it into operation as soon as possible. In the meantime, the Trans-Canada Air Lines were organizing and training their flying and ground crews, obtaining the necessary aircraft, and building hangars and workshops essential to the operation of the airway.