

Expenditures on the Northwest Staging Route have amounted to \$37,320,226 U.S. funds, of which \$31,311,196 in U.S. funds were for permanent assets; \$14,535,071 in Canadian funds were also spent by Canada up to Mar. 31, 1944. In addition Canada, during 1944, spent a further \$5,161,000 at the request of the United States. Expenditures are analysed in the table at p. 712.

The Mackenzie River Route.—Canadian bush pilots have long followed the general course of the Mackenzie River northward as far as Aklavik with seaplanes and skiplanes, but once the United States Government had decided to proceed with the Canol oil project far greater payloads were available for the carriage of Canol freight to augment shipments over the Mackenzie River water route, which has very definite limitations. Twin-engined transport aircraft were decided on as the most suitable carriers, and landing facilities became necessary. These were provided by the development of landing strips at McMurray, Embarras, Fort Smith, Fort Resolution, Hay River, Fort Providence, Mills Lake, Fort Simpson, Wrigley, Norman Wells, Camp Canol, Peace River, Metis and Upper Hay River Post. A cut-off route running between Peace River, Alta., and Mills Lake in the Northwest Territories, used mainly during the winter months, is included in the system and military transport flying is also conducted from Fort Nelson to connect with the Mackenzie System at Fort Simpson.

Service flights are now operated along the route to as far north as Norman Wells by the R.C.A.F., and civil operations extend to Aklavik. Department of Transport personnel are stationed at each location to maintain the airports, service aircraft, obtain weather reports and operate the radio ranges. Royal Canadian Corps of Signals personnel are also stationed at various points along the route to gather and transmit weather information and supplement radio communications.

Survey parties of the R.C.A.F. and the Department of Transport have conducted surveys in the field with the purpose of setting out sites against the possibility of future extension of the route to the north and northwest through Good Hope, Arctic Red River, McPherson, Bell-Porcupine and Blue Fish-Porcupine. Material and supplies are flown to these parties by float-equipped aircraft from Norman Wells.

A closely integrated network of weather observation posts and forecast stations has been established throughout the Canadian Northwest by both Canadian and United States agencies. Telephone and telegraph lines, built by the United States Government, with a capacity of 6-voice and 13 teletype communications, supplemented by several circuits added by the R.C.A.F. for Airway Traffic Control and ground line communications, are now in operation between Edmonton and Fairbanks, a total distance of 1,993 wire miles. A telephone line has been strung along the 110 miles of pipeline involved in the supplementary Canol project, and a line is being strung along the main Canol pipeline from Norman Wells to Whitehorse.

Development of the Northeast Airways

The Northeast Staging Route.—The need for a northeast staging route was originally suggested to Canada by the United Kingdom in August, 1941, with the suggestion that the matter be discussed with the United States. Long-range bombers of which the United Kingdom was greatly in need were already being ferried across the Atlantic through the Newfoundland airport at Gander, which was established to assist civil aviation by the Government of Great Britain in September,