



WEATHERFAX - At the inauguration of the world's first automatic weather map transmission service, Hon. Lionel Chevrier placed the weather map on the transmitting drum while (to the right) G.C.W. Browne and Andrew Thomson, DOT officials, look on. Others in the photo from l. to r. M. Metcalf (CN), C.R. Slemon (RCAF), D.F. Bowie (COTC) and A. Lyle (CP).

WEATHER MAPS BY WIRE

At 2.00 p.m. on August 28 last, the Central Analysis Weather Office at the airport, Dorval, Que., played hosts to visiting officials from the RCAF, CPR, CNR, and DOT, who came to see a new weather telecommunication service put into operation - transmitting weather maps by wire. Hon. Lionel Chevrier placed a weather map on a transmitting drum, Air Marshall C.R. Slemon, Chief of Staff, RCAF, turned a switch, in a few minutes identical copies of this map were available in the main meteorological forecast centres and many RCAF training centres in Canada. This was the opening of the world's first fully automatic weather map facsimile transmission service, which the Department of Transport has called WEATHERFAX.

Weatherfax was developed to provide a faster and more economical means of getting weather information to Air Force stations, to meet the demands of their rapidly expanding operations and training commitments. The national transmission maps, which are prepared in the Central Analysis Weather Office, under direction of J.M. Leaver, consists of a series of charts that plot the weather in the form of pressure patterns and fronts for altitudes all the way from sea level to 50,000 feet. They also indicate such information as temperature, wind velocity and direction, precipitation and dew points. This master chart is transmitted four times daily.

The high altitude plot is valuable to jet flying. With a master chart transmitted over the network, showing weather picture from the Aleutians to Iceland, the Air Force demand for trained meteorologist required for such a complete analysis of the upper air will be greatly reduced. Now, with the basic maps available at the stations, the forecaster can spend a greater portion of his time in the detailed weather conditions over the area, and in combined operations the Unit Commander knows he has a weather map identical to that of his colleagues.

The maps reproduced exactly as drawn come to the recorders fully printed and do not require any laboratory processing there. The receiving stations are only required to keep power supplied to the recorders and rolls of electrolytic paper on



Staff of Central Analysis Weather Office who compile Weatherfax maps, sent out four times daily.

the machines. Facsimile is the only form of communication that can never make a mistake.

The ceremony at Dorval was the culmination of many months work by the Telecommunications Division under Controller G.C.W. Browne and his staff of engineers which carried out the negotiations with the line companies for the rental of lines and equipment on behalf of the Meteorological Service. H.E. Walsh is senior aviation Radio Aids Engineer and D.S. Robertson is land line engineer. The Telecommunications Division of DOT are also arranging for the transmission to and reception of these maps at points in the far north depending entirely on radio for communication. Radio Engineer F.L. Bentley is in charge of this technical operation. The weather map which is sent along the land line, will, electronically, go straight on to the powerful transmitter in Montreal, for transmission to Goose Bay, Labrador and again electronically without human aid or action of any sort, will be transposed and put on another transmitter at Goose, where it will be relayed on the circuit already established at an Arctic station. This Arctic station will receive the charts the same time as Vancouver, Winnipeg or Moncton. Each map transmitted travels over 4,000 miles by cable and 1500 by radio. The radio facsimile circuit to the Arctic is technically another first for DOT telecommunications engineers and WEATHERFAX is establishing another improved meteorological service for Canada.



The Minister of Transport signs the first weather map facsimile as J.M. Leaver watches.