

Another aid which we are watching closely, is being developed in the U.S.A. and Great Britain. This is a fully-automatic landing system, which will carry out the actual landing of an aircraft without active participation by the pilot until the aircraft reaches the ground.

Aircraft designers are now talking about supersonic commercial aircraft which will fly at 1,800 miles an hour, at a height of fourteen miles -- and which, needless to say, will bring a whole new set of operating problems. We must, as best we can, foresee all these problems and plan how to meet them. Closed circuit television based on radar screens, electric computers, secondary radar for individual identification, and automatic signalling, are the tools we are now trying out as speed and traffic volume increase.

Within the past ten years, the growth of air traffic in Canada has exceeded the most optimistic expectations. In that short period, domestic passenger traffic has sky-rocketed from one million to five million passengers a year.

The requirements arising from this explosive growth in terms of airports, airways, and terminals, are tremendous. At the present time, we are pushing ahead rapidly with a long-range programme, which covers the ten-year period expiring in 1968. The total estimated expenditure amounts to no less than \$1 billion, based on about a 50-50 division between capital and operational costs.

Air terminal buildings form possibly the most noticeable part of the current construction programme. Each of these buildings is a highly complex structure, specially designed to suit not only the air traveller but many technical operations as well --- communications, customs and immigration, air-traffic control, baggage handling, and so on. When you superimpose on these the accommodation for a dozen and one types of concession, the terminal building is just about the equivalent of a small community.

For example, the new Montreal terminal building, which we will have in operation by the end of the year, has an area equivalent to five city blocks. 2,500 persons will work there daily. The heating load is more than $2\frac{1}{2}$ times that of the Queen Elizabeth Hotel --- to be exact, 18,000 gallons of fuel oil on a peak day. The new Toronto terminal will cover an area thirteen times as large as the present building.

New terminal buildings are already in operation at Saskatoon, the Lakehead, Windsor, Quebec City, Seven Islands, Moncton, Torbay, Stephenville and Gander. This year we will complete new terminal buildings at Ottawa, Halifax, Regina and Montreal. Good progress is being made on the new projects at Edmonton, Winnipeg, and Toronto. When this part of our programme is completed, we will have a series of terminals better than those provided by any country of comparable size.