

The DHC-2 Turbo Beaver.

Urban airports are becoming more and more congested and new ones being built are farther and farther from large centres of population, thus decreasing the advantages of air travel on short inter urban trips over more conventional transportation forms. Aviation planners, however, look to the STOL (short-take-off-and-landing) concept aircraft to remedy this problem by providing short-hop service from the centres of the cities to nearby airports, and for other use such as tourist taxis. STOL aircraft are designed to take-off and land at slow speeds, requiring less than 2,000 feet of runway. Stol-ports could thus be built along waterfronts or even large city parking lots.

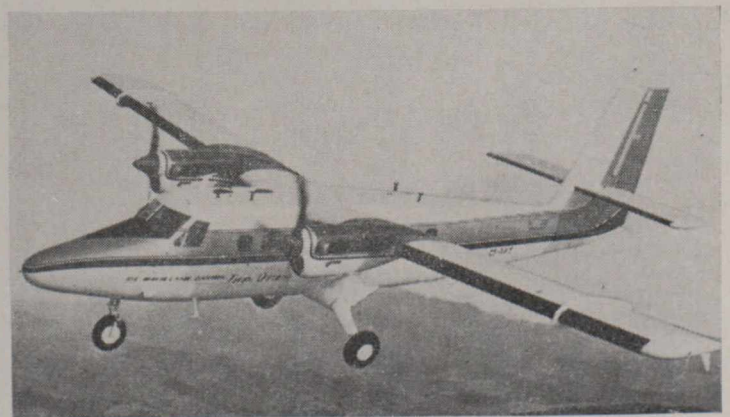
The Science Council of Canada in studying the use of STOL concept feel that it could save on airport construction costs, and also help in solving the air traffic congestion found in the skies around most large cities. The idea is that STOL aircraft would use lower altitudes and use navigational aids so precise as to ensure all weather operations.

To test public acceptance of the idea the Department of Transport will launch an experimental service next spring in two Canadian cities. The service will probably involve four stol-ports—one within each city and one at each city's present airport. Donald Jamieson, Minister of Transport, has also invited the three leading Canadian

aircraft manufacturers—de Havilland Aircraft of Canada, Douglas Aircraft Co. of Canada and Canadair Ltd.—to propose a joint program to build a Canadian STOL liner.

De Havilland is a world pioneer in designing STOL aircraft and enjoys a technological advantage that in Mr. Jamieson's views puts Canada "two to three years ahead" of other countries. The de Havilland Company have been building utility transport aircraft for a number of years and its famed Beaver, Buffalo, Caribou and Twin Otter are flying in nearly every country in the world. The company's DHC-7 "Quiet STOL Airliner" is its latest project. It is designed to carry 48 passengers and operate from STOL airports with a total length of only 2,000 feet. The design of the DHC-7 allows it to land at a slow 74 m.p.h. Specially designed four turbine engines will give the DHC-7 the lowest noise level of any transport aircraft. Another Canadian designed STOL aircraft is Canadair's CL-84. It differs from the DHC-7 in that it is a tilt wing design which literally pulls the airplane into the sky.

The Augmentor Wing program is another promising Canadian design concept. It is currently being developed by de Havilland in conjunction with an American firm and is an advanced STOL technique which will bring to large modern jets many of the advantages of STOL propellor-driven aircraft. Tests already completed by de Havilland on a 12.8 metre wing span, wind tunnel model, show that a Boeing 737, carrying more than 100 passengers and baggage, could operate from 610-metre runways instead of the 1830 metres required by today's version of this aircraft.



The DHC-6 Twin Otter.