

in the next three to five years and meets noise criteria for city-centre operation. The DHC-7 is currently undergoing final model tests and is programmed for production in 1973.

POSSIBLE ROUTES

Initial routes under consideration call for STOL service between two points in Vancouver and Victoria, two in Toronto from the Niagara peninsula, and two in Montreal from Ottawa, with later links to the new airport at Ste Scholastique. These are typical routes and reflect the 100-miles-or-less operating range dictated by choice of the *Twin Otter*.

The project calls for construction of three types of STOL "port" within cities - high-density capacity ranging from one to four million passengers a year and low-density capacity ranging from one-half to two million passengers a year. There also will be STOL strips at airports capable of handling either low-or high-density traffic. These strips will be integrated into major airports. The total STOL system incorporates aircraft, STOL ports, navigational aids, air-traffic control, and other supporting services.

COSTS

Based on unchanged operation over the three routes outlined, the major capital expenditures would be \$8,400,000 for 14 *Twin Otters* at \$600,000 each and \$36,600,000 for seven high-density and two low-density STOL ports. Total annual operating costs for the 14 aircraft operating 3,600 hours a year is estimated at \$7.5 million.

Estimating revenues at \$1 a passenger year, supporters of the project expect the system is not likely to break even with only 14 planes. Expansion of routes and introduction of the DHC-7 is expected to change this projection.

BENEFITS TO CANADA

Backers of the Regionair plan draw on the eleventh report of the Science Council to cite the benefits Canada would derive from a fully functioning STOL system. These include sales of \$500 million to \$1,000 million in aircraft alone; 28,000 to 56,000 man-years of employment in high technology industries from aircraft sales alone; equal travel opportunities to large and small communities; improvement in the environment in areas of pollution, congestion, noise and land-use; suitability of STOL for northern development and reduction in government expenditures through delaying expansion of existing airports.

The program would call for a total net investment of \$150 million. Designing and developing STOL aircraft and putting them into production could cost between \$75 million and \$80 million. The cost of STOL ports is estimated at \$5 million each, with supporting services for five STOL ports set at about \$50 million. An unspecified amount would also be needed for feasibility studies and long-term developments aimed at maintaining Canada's lead in STOL technology.

NRC PARTICIPATION

A significant part of any such long-term development work would involve the National Research Council of Canada, whose laboratory facilities devoted to aeronautical research, carrying a \$49-million book value, have over the past 25 years, been involved in support of the design, construction or operation of every significant aircraft and engine type built in Canada.

A recently-completed \$7-million low-speed wind-tunnel with a 30-foot-square working section, was constructed specifically to be of assistance to industry in the V/STOL fields. The first aircraft company to use this facility on a time-rental basis was de Havilland, with a scale model of its DHC-7. Canadair Limited of Montreal followed immediately after with a propeller component for an experimental four-engine propeller-driven tilt-wing experimental V/STOL aircraft. The wind-tunnel is a major component of the Low Speed Aerodynamics Section of NRC.



The de Havilland DHC-7 STOL aircraft undergoes tests in NRC'S new huge wind tunnel.

UNEMPLOYMENT INSURANCE CLAIMANTS

There were 222,000 initial and renewal claims for unemployment insurance benefit filed in March. This was 8 percent more than the 206,000 filed in February and 9 percent more than the 203,000 filed in March 1970.

At 857,000, the number of claimants at the end of March was 4 percent less than 888,000 at the end of February but 22 percent more than the 705,000 registered on March 31, 1970.

Benefit payments totalled \$114 million in March, \$101 million in February and \$84 million in March 1970. The average weekly benefit payments for these 3 months were \$35.74, \$36.47 and \$35.36 respectively.