



THESE DIAGRAMS ILLUSTRATE THE DHC-7 OPERATING FROM A 2,000 FOOT DOWNTOWN STOLPORT AT A REPRESENTATIVE GROSS WEIGHT OF 36,000 LB. MAXIMUM TAKEOFF WEIGHTS FOR OPERATION FROM A 2,000 FOOT STOLPORT AT SEA-LEVEL, ZERO WIND; RANGE FROM 37,400 LB AT 59°F TO 36,000 LB AT 90°F.

The project calls for construction of three types of STOL ports within cities — high density capacity ranging from one to four million passengers per year and low density capacity ranging from one-half to two million passengers per 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.

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 per year is estimated at \$7,500,000.

Estimating revenues at \$1 per passenger per 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.

Backers of the Regionair proposal draw on the Science Council Report No. 11 to cite the benefits Canada would derive from a fully functioning STOL system. These include sales of \$500,000,000 to \$1,000,000,000 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 government-industry partnership STOL operation concept has been greeted favorably by the Science Council. In its recently-released report on STOL, the Council notes that Canada has the skills to tackle the STOL system but that they are spread through a

number of companies so "it will be necessary to find some means of amalgamating the design capabilities of one company with the production capabilities of another."

The Science Council urges the Government to undertake to establish a STOL system as quickly as possible as a "major program". The Science Council criteria for such a program is a large multidisciplinary, mission-oriented program having as a goal the solution of important economic and social problems in which all sectors of the scientific community must participate on an equal footing.

The program would call for a total net investment of \$150,000,000. Designing and developing STOL aircraft and putting them into production could cost between \$75,000,000 and \$80,000,000. STOL port cost is estimated at \$5,000,000 each, with supporting services for five STOL ports set at about \$50,000,000. An unspecified amount would also be needed for feasibility studies and long-term develop-