Aviation

Canada's size — 5 500 km from the Atlantic to the Pacific oceans, 4 600 km from Ellesmere Island in the north to its southern border with the United States — means that wide expanses often separate one population centre from another. It also means that much of the nation's natural resource wealth, which is located in its remote regions, must be transported immense distances for processing.

It was inevitable that Canada would be a leader in the design and manufacture of aviation products to move people and goods quickly over great distances. From the design of the variable pitch propeller (recognized as one of the more important inventions in the history of aeronautics) to world-class corporate jets, Canada has a history of technological innovation stretching back to the historic flight of the *Silver Dart* in 1909.

The de Havilland Dash-8 aircraft, which can accommodate 36 to 40 passengers, has a large cabin that can be adjusted to meet work or conference requirements.

STOL planes and business jets

De Havilland "*bush planes*" opened up the Canadian North, carrying cargo and supplies to remote communities.

Bush planes can take off and land on short, crude runways, on ice and snow, and on lakes and rivers in normally inaccessible areas, and they perform in every type of weather. Names like *Beaver* and *Buffalo* have become synonymous with search and rescue, emergency and supply aircraft throughout the world. The success of these aircraft created a global demand for Canadian short take-off and landing (STOL) technology.

Today, a new generation of STOL aircraft like the de Havilland *Dash-7* and *Dash-8* has been adapted to urban requirements. They are ideal both for busy airports in dense urban areas, providing efficient downtown to downtown service, or for short runways in rough terrain. The Dash-7 and 8 can take off and land in very short distances (usually less than 610 m for the Dash-7 and less than 915 m for the Dash-8). The Dash-8 seats 36 to 40 passengers while the Dash-7 accommodates 50. The newest version of the Dash-8, the Series 300, can seat 50 to 56 persons. (Initial customer deliveries for this new series are planned for late 1988.) Efficient wing design and low speed manœuvrability, plus economical fuel consumption make these planes very desirable for airlines around the world; and their specially constructed turboprop engines, also developed and manufactured in Canada, make them the quietest planes flying today.