

REF

INTERNAL AFFAIRS  
AFFAIRES INTERNES  
OTTAWA  
JAN 14 1981  
LIBRARY / BIBLIOTHÈQUE

Volume 9, No. 2

January 14, 1981



Ottawa, Canada

## New developments in STOL - destination high speed flight, 1

Aircraft agreement with U.S., 3

Wheat to China, 3

Banking law proclaimed, 3

Telidon a world standard, 3

British Defence Minister makes Canadian visit, 3

Canada-Guyana insurance pact, 4

CIDA assists Kenyan farmers, 4

Whitehorse hosts world cup race, 4

Canadians honoured, 4

TV commercials win prizes, 4

Alert, world's most northern station, 5

Vets health benefits increase, 6

Duty-free shops planned, 6

Canadians win golf title, 6

Meat import legislation, 6

Here you can fly like a bird, 6

Cancer study for women, 6

News of the arts - exhibition, radio, award, 7

Educational awards program, 8

News briefs, 8

## New developments in STOL - destination high speed flight

Canada, a leader in short-take-off-and-landing (STOL) aircraft technology, is participating with the United States in a program of research on a new jet STOL aircraft using the aerodynamic concept called "augmentor wing".

This idea, which is one means of providing STOL performance for jet aircraft, was pioneered by de Havilland Aircraft of Canada, which already has a worldwide reputation for its *Beaver*, *Otter*, *Caribou*, *Buffalo* and *Twin Otter* aircraft, all capable of operating from small airfields with runways well under a kilometre in length. (Runways at major jet airports are typically about three kilometres long, sometimes more.)

Over 700 *Twin Otters* have been produced and are operating in more than 75 countries. Now, the larger, four-engined *DASH-7* STOL transport aircraft is in production.

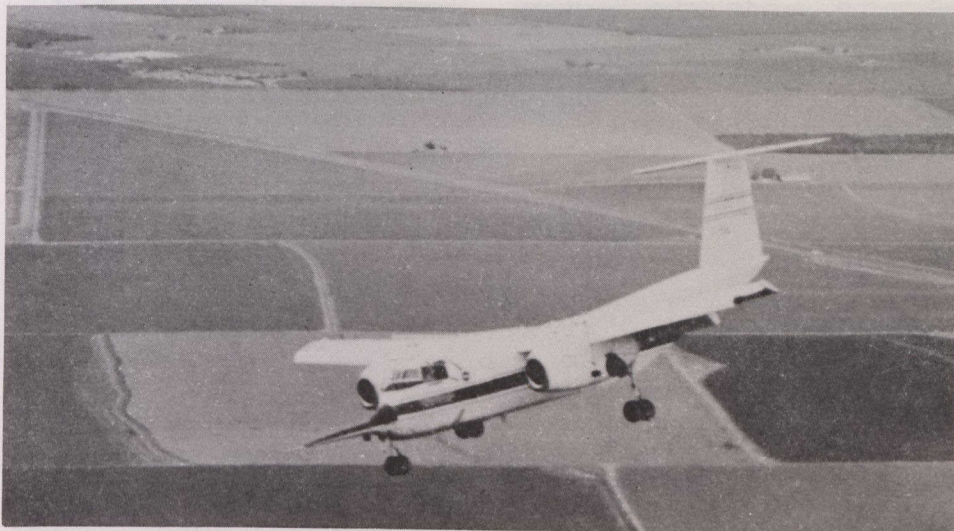
Among the companies ordering the *DASH-7* are six of the ten largest commuter airlines in the U.S.; one of these is flying regularly to and from Washington National Airport, guided around other air

traffic through specially designated air corridors onto segments of otherwise inactive runways. This illustrates a major attraction of the STOL aircraft - its ability to operate without making additional demands on airport facilities, most of which are already overburdened.

### Towards faster STOL planes

STOL aircraft performance has always entailed a sacrifice - cruising speed. The slow flying capability required - about 70 knots - to operate from small airfields has been achieved by using large wings, developing high lift with the aid of conventional flaps. But efficient high speed flight requires much smaller wings.

On very short flights low cruising speeds may be acceptable. On longer flights, however, higher cruising speeds are of great importance to both commercial and military aviation. Fast STOL transports are particularly attractive to military planners who are becoming increasingly concerned with the vulnerability and geographic scarcity of large, conventional air



NASA

The experimental augmentor-wing, jet STOL - a modified Buffalo aircraft - turns to its landing approach with its special flaps and swivelling exhaust nozzles positioned down. Most of the flight experiments in California have been carried out using the facilities operated by the National Aeronautics and Space Administration at Crow's Landing, a U.S. Navy airfield in the San Joaquin valley east of San Francisco Bay.

Jan. 14 / 81

### Two-hundred-and-eighty-one years ago...

Marguerite Bourgeoys, one of Canada's pioneers, died in Montreal on January 12. Arriving in Montreal in 1653, she first devoted herself to the care of the sick. In 1658 she opened a girls' school and later founded a religious order. She was beatified on November 12, 1950.