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Business Today

Challenger set to confound prophets

There's a hustle and bustle at the Canadair plant these days — a buzz of activity that takes its cue from a major company decision to venture into the big league field of business jets.

And the sounds of surprise coming from the aviation world echo the sales success of the new Canadair plane — the Challenger, a wide-bodied business jet that has caught the fancy of the big multi-nationals.

Using a triple whammy sales pitch — comfort, long range, and a reasonable low price — Canadair has 102 firm orders worth more than \$500 million for the aircraft which has yet to get off the drawing board.

The National Film Board is so impressed by the venture that it is planning to make a film about the Challenger.



By Patrick Finn

Not all reactions are favorable, however. There have been moans of disbelief at the airplane's performance guarantees, and groans of worry and sour grapes from U.S. business jet competitors.

And in Ottawa, home of those nabobs of negativism, there has been hand wringing by opposition members who say they are worried that the federal government might lose money if the big venture flops.

After all, Canadair has never before ventured into such a highly competitive "consumer" market, and even Canada itself has never really shaken the world — not recently anyway — with its major civilian aviation successes.

Jobs created

Whether or not one approves of the venture, one has to admit that it has created jobs in Montreal, although some of them have gone to skilled workers brought in from abroad.

The parking lots around Canadair are filling up with employees' cars for the first time in years, and employment has jumped from 1,600 last October to its present 3,000, with the total expected to peak at 4,500 in a year or so.

Admittedly, that is a far cry from the 10,000 employees Canadair had during the peak of its defence production efforts 10 to 15 years ago. But that was another era. Innovation in the civilian field is the name of the game today.

In fact, it is the imaginative aspect of Canadair's Challenger project that has caught the interest of major aviation publications in the U.S. and abroad.

The story is one of staid old Canadair coming up with a wide-bodied business jet that makes use of the latest state-of-the-art developments, all based on a concept by that flamboyant U.S. inventor, William Lear.

One key executive behind the big Canadair sales effort is James B. Taylor, vice-president in charge of marketing, an American, who has successfully promoted a French and then a U.S. business jet during the past 10 years.

Mr. Taylor joined Canadair on April 1, 1976, the day after the company signed a deal with Mr. Lear. By the time the company approached the federal government with a request for finance guarantees in November, 1976, Mr. Taylor and his staff had 53 firm orders in hand

Mr. Taylor, who sold French-made jets to America at a time when anti-French feeling was high, attributes much of the success of the Challenger program to the company's willingness to "keep an open ear" to prospective customers' wishes. But timing also had a lot to do with it, and so did Mr. Lear and Canadair president Fred Kearns.

When the federal government bought Canadair from General Dynamics in January, 1976, Mr. Kearns had already been dickering with Mr. Lear about a new "concept" for a business jet.

Mr. Lear's concept put together some of the latest developments in wings, engines and modern design — things that had already been tried in the big airline military jets, but not in the business jet field.

"Bill Lear is one of the greatest concept guys in the world," says Mr. Taylor. The actual design though remains Canadair's.

The subject of Mr. Lear's relations with the company always seem a little touchy in discussions with Canadair officials. Mr. Lear is known to have been less than enthusiastic about the company's refusal to adopt every aspect of his concept.

"He is still (working on the Challenger in the U.S.) on a consultative basis," said Mr. Taylor of Mr. Lear. "He is happy (but) . . . Bill himself admits that he is easy to get along with only if you do everything his way."

Although the Challenger is still only on paper, Canadair has completed most of the assembly jigs in readiness for the manufacture of the prototype.

The first prototype is scheduled to fly next February or March, and will undergo a series of flight tests in California during the spring and summer. This is the usual procedure when building a new aircraft — manufacture some prototypes and start government certification tests on them as quickly as possible so that necessary changes can be made on the first production model which is scheduled for delivery in August, 1979. Company officials estimate that Canadair will have to sell a total of 131 to break even on the venture.

In addition to the 102 firm orders, 10 more are under negotiation and there are 25 on option, a far cry from the poor sales record of that other federal government-backed venture, the de Havilland of Canada Dash Seven short takeoff and landing aircraft.

To date, only three firm orders have been received for the Dash Seven, and production models are already coming off the lines at Downview, Ont. Federal officials insist, however, that sales will be made eventually.

Canadair's advertisements in aviation publications state that the Challenger at \$6.5 million is up to \$2 million cheaper than its competitors.

1981 delivery date

The claim takes into account the need for other manufacturers to boost current prices to compensate for inflation between now and 1981, the Challenger's delivery date.

Asked about the doubts of the U.S. ayiation press that the Challenger can live up to its guarantees, Mr. Taylor said that "they wouldn't be saying that if they weren't worried about our product."

While Mr. Taylor admits that Canadair is "betting the whole company" on the project, he quickly adds that in his view, there is little real risk.



Canadair salesman James B. Taylor

"There is no magic to this," he insists. "It is not like trying to compete with Lockheed or Douglas (with an airliner)...this is less sophisticated..."

Some Canadair critics say that the buyers are committing themselves to a paper airplane, but Mr. Taylor points out that aviation manufacturers have for years been selling aircraft to major airlines that are only in the design stage. For example, the Boeing 747 was sold before the first plane was built.

Canadair's success with the Challenger can be attributed to having "the right product at the right time," he said

The Challenger, a twin-engine jet that was originally called the LearStar 600, is the first new business jet in 15 years, according to Mr. Taylor.

The main contender would have been a new design (a stretched version) of the Grumman II, a turboprop updated for the jet age, but the project was cancelled because of the expense involved.

Money has not been too much of a problem for government-owned Canadair. The federal government has guaranteed \$50 million, and the returns from the five per cent deposits on sales have helped the company get production preparations into high gear.

(Canadair has declined to accept loan guarantees of \$20 million from the Quebec government because the PQ wants too much to say in company affairs).

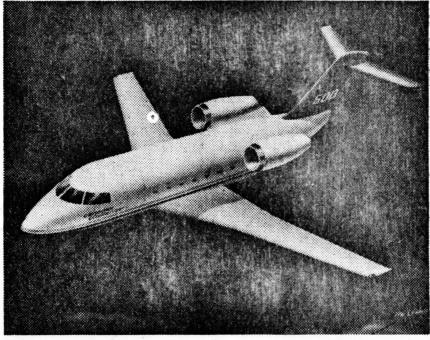
For executives a business jet such as the Challenger means they will be able to fly directly from medium-sized airports in North America to similar airports in Europe, Asia and Africa.

It will mean freedom from airline schedules, which are becoming more limited as fuel costs rise and airlines try to fly full planes only.

The order book shows that five Challengers have been sold to Canadian companies, six to European firms, two to South American interests, one to a Singapore company, and 21 to a multinational company owned by Saudi Arabian interests.

The rest of the planes sold went to U.S. interests, including 25 cargo versions of the aircraft to Federal Express, a package delivery firm based in Memphis, Tenn.

Details of the aircraft



Model of the Challenger in flight. The prototype is expected to fly next spring.

The Canadair Challenger can carry 11-14 passengers in a comfortable lounge-like arrangement — a flying office

By contrast, the Learjet, another business aircraft, carries about six persons in a similar setup, Canadair officials point out.

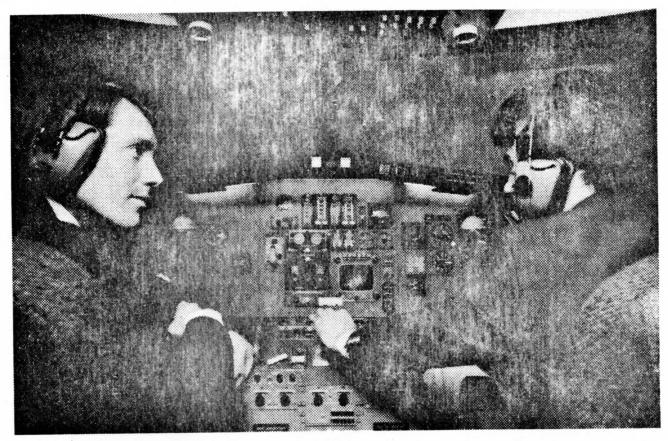
The Challenger could carry up to 33 passengers in a tight commuter-style configuration. But so far, there has been no request for such a model.

The new jet, powered by two U.S.built Avco Lycoming ALF 500D engines, will be much quieter than similar business aircraft.

The plane will also feature a "supercritical wing" — a design that makes use of a wing that is thicker than usual, but produces less drag. The extra thickness provides more room for fuel inside the wing, and with this goes the extra range.

Given good flying weather, the aircraft's range is 5,000 (statute) miles.

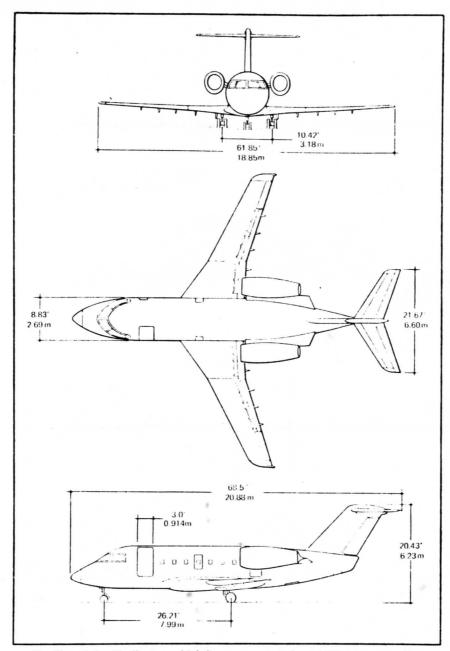
The company is considering plans for a longer version of the Challenger — a stretched model — for airlines in need of a small jet with a long range.



The flight deck of the Challenger. At \$6.2 million the aircraft is up to \$2 million cheaper than the competition.



The cabin of the Challenger. It can carry 11-14 passengers in lounge-room comfort or 33 in a tight configuration.



Profiles of the Challenger which has a range of about 5,000 (statute) miles.

From parts to water bombers

Other air work on hand

Canadair has a number of important contracts going for it at a time when many other local industries and businesses are on the decline for political or economic reasons.

Besides the Challenger, the company is working on component parts for the Lockheed Orion, the aircraft that will replace Canada's Argus maritime patrol aircraft.

It is also making parts for other military aircraft, including the Grumman EF-11 and the McDonnell Douglas F-15. Canadair also produces a line of drone reconnaissance flight vehicles for NATO countries.

The company has sophisticated and large equipment that can be matched

only by such firms as Lockheed and Boeing, and for this reason has been able to win orders for major parts for the Boeing 747SP, the long-range version of this jumbo jet.

The company is also manufacturing CL-215 water bombers, which have been selling slowly, but steadily over the past decade.