Fast-track Europeans move in on Americans
Victim of economic malnutrition

## Industry Welt Pert

April 30, 1979

Penton/IPC • \$1.50



## Selling paper airplanes for \$4 million-plus each

## Manager on the spot

Jim Taylor was asked to sell planes that didn't exist. Although his specialty is marketing, he helped transform a concept into a design—then sold more than 100 planes before that design became an airborne reality. One result: the sound of competitors choking on their words.

By John H. Carson

Canadair Ltd. describes its Challenger as "the first wide-body business jet." But Jim Taylor also likes to call it "the first business airplane that's what I call a marketing-oriented airplane."

That's only natural, because James B. Taylor's specialty happens to be marketing. Further, he has had such labels as "marketing genius" bestowed upon him by aviation experts for his success in the Pan-American World Airways/ Dassault Falcon and Cessna Aircraft Citation programs.

Three years ago, he took on his third major business-jet challenge when he became vice president of Canadair, the Montreal-based aircraft manufacturer, and president and first employee of Canadair Inc., its Westport, Conn.-based worldwide marketing subsidiary.

Although the Challenger is still several months away from Federal Aviation Administration (FAA) certification, 111 of the planes (currently selling for \$7 million) have been sold, with options on 18 more, pushing delivery dates for those ordered now into 1982. Along the way, Canadair and Mr. Taylor have broken some new ground in the marketing of business aircraft, but they also have taken some big jolts.

For instance, the late Bill Lear, who sold the original concept for the Challenger to Canadair, quit the project when extensive revisions were made, and then started bad-mouthing the plane to potential customers.

Competitors reacted to the brash newcomer from the North by unleashing a barrage of advertising filled with undisguised skepticism about the likelihood of the Challenger ever flying.

And Federal Express Corp., which accounted for nearly half the early sales which had been a prerequisite for launching production, pulled out of its commitment for all except one of the 25 planes it had ordered.

Canadair managed to clear all these obstacles, and its executives are confident of clearing the final hurdle: getting the nod from FAA that the Challenger meets or exceeds all the performance guarantees made to buyers. (Impartial observers of the aviation industry see little chance the plane will fail its certification tests.)

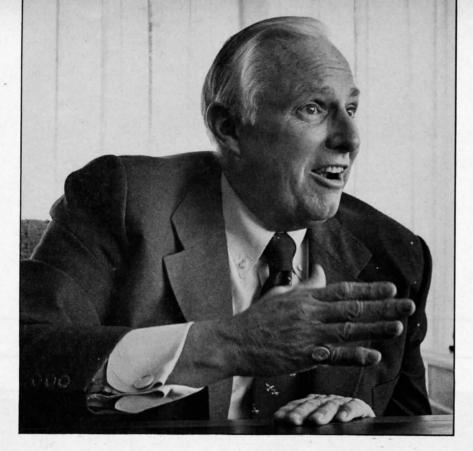
But, even though Jim Taylor was selling what is turning out to be a high-performance product, these observers are pointing out that he sold more than 100 Challengers before the first one even flew—and did it for a company which had never before manufactured business aircraft. Thus, they are once again using words such as "genius" to describe him.

**Aviation heritage.** Jim Taylor got his start not by selling airplanes (or anything else) but by flying them.

A second-generation flier—his father, also James, was a navy pilot in both world wars and was killed in 1942 while test-piloting a fighter—Mr. Taylor was a navy pilot, too, from 1942 through 1946. "My only claim to fame," he says, "was that I was the first cadet in the navy in World War II without any college.

"When I got out of the navy," he





continues, "I flew for a nonscheduled airline, like everybody was doing. You could buy DC-3s for something like \$20,000. We'd fly lobsters in from Nova Scotia and then wash out the airplane, put in the bucket seats, and fly people around."

When the airline folded after six months because the industry was too crowded, he took his first sales job, selling airplanes. That job was brief because one of his first sales was to Arthur Godfrey, then just beginning his rise in television, and he spent the next two years as Mr. Godfrey's personal pilot.

Then, newly married and looking for a more stable career, Mr. Taylor took a 13-year hiatus from the aircraft business, becoming sales manager of Upressit Metal Cap Corp., which made one product, closures for containers. Two years later, he became president, and he soon added four new products.

When its major competitor, American Flange & Mfg. Co., bought out Upressit, its sales had tripled during slightly less than ten years under Mr. Taylor's leadership. He stayed with the new ownership for about a year and a half, then left because "I was vice president of a division, but wasn't allowed to see any numbers."

On to bizjets. Next, a brief stint selling used airplanes produced a connection with Pan-Am that launched Jim Taylor's business-jet career. He became the first employee of the marketing effort for the Falcon in July 1963 and the first member of the Citation marketing team in March 1969.

Both programs illustrate Mr. Taylor's contention that, unlike the marketing-oriented Challenger, other airplanes are engineering-oriented, manufactured by companies founded by engineers. "They built an airplane and said, 'Here it is, the greatest airplane in the world. Buy it.' They did very little market research," he says.

Pan-Am's goal in entering the business-jet field was increasing utilization of the worldwide network of 88 airports it operated then and which were being used at only 5% of capacity.

After an extensive study of available aircraft, Pan-Am settled on a Dassault plane, which became the Falcon fanjet and which Mr. Taylor believes might otherwise never have gone into production. "The French are great at building prototypes," he explains, "but that's where it ends unless somebody comes along and buys it."

Pan-Am brought in Mr. Taylor as vice president in charge of its Business Jets Div. With Charles de Gaulle making frequent anti-American statements, selling a French airplane in the U. S. wasn't easy, but Pan-Am had sold more than \$250 million worth of Falcons by the

time its marketing chief departed for Cessna.

By that time, the Citation prototype was already being built. "They had done very little research. They just had their gut feel of what the market wanted," Mr. Taylor says, adding that "they were pretty close."

Despite being "pretty close," Citation's early sales came slowly, especially when compared with those of the Challenger. "When we delivered the first Citation to the customer, do you know how many orders we had?" Mr. Taylor asks. "One. And that was from Pratt & Whitney of Canada, which had its engines in the airplane."

Cessna suffered from an image problem, the Citation from a positioning problem. "The attitude of the market-place was: Cessna builds Mickey Mouse airplanes," Mr. Taylor says. Once the Citation was built and flying, that claim was refuted. And Cessna also was able to establish the Citation's position as competitive with the turboprops, not with the bigger faster jets such as the Learjet. (Last fall, Cessna delivered its 500th Citation.)

A national cause. During Jim Taylor's last years at Cessna, changes were occurring in the aircraft industry that would lead to his third major business-jet marketing challenge.

Like most other companies in the industry, General Dynamics Corp., St. Louis, was faced with overcapacity problems. (Started in the 1920s as a division of Canadian Vickers Ltd., Canadair went through a series of changes that eventually made it part of the organization that became General Dynamics in 1952.)

Canadair had once been a major manufacturer of military and commercial aircraft, employing about 11,000 people in 1960. But by 1975, the only finished plane it produced was the CL-215 forest fire fighter. Most of its business was in subcontracting for other companies' aircraft. Employment had dwindled to about 1,500 (it's now at 4,500).

Hoping to at least preserve its small aerospace industry, the Canadian government bought Canadair from General Dynamics, effective Jan. 1, 1976. Keeping Canadair alive necessitated finding new business, and Fred J. Kearns, the company president, made several studies which indicated that the business-jet field offered the best possibility. "Canadair was hungry," Mr.

Taylor comments. "They felt they saw a gap in the market and wanted to gamble on it."

Meanwhile, Bill Lear had been trying to sell a concept he had been developing since 1974. He figured that combining supercritical wing technology (designing aerfoils to delay the formation of shock waves, thus reducing drag and increasing lift) and high-bypass-ratio engines would result in a longer-range, more economical business iet.

Several U. S. manufacturers looked at his ideas, but decided against going ahead with them. One reason: all the companies were tied up in production with other aircraft. Also, the aircraft industry has a strong "not invented here" mentality, Mr. Taylor contends.

Canadair certainly had no problems with being tied up in production and was more receptive, even though it quickly found it couldn't go along 100% with Mr. Lear's ideas. "His airplane was a beautiful thing to look at, and there were typical Bill Lear claims," Mr. Taylor explains, listing some of the range and speed projections his old friend had made. "Canadair ran it through its computers and found out pretty quickly that the airplane couldn't carry enough fuel to go as far as he said it would or go anywhere as fast. But the concept was good.'

Canadair agreed to proceed with the concept, but stipulated it would not go into production unless it got enough deposits on firm orders to keep the project afloat until the first delivery. The Canadian government agreed to guarantee up to \$75 million in loans, but that was "nowhere near enough to go ahead with the program," Mr. Taylor says. (The project will have cost \$180 million by the time the Challenger is certified.) So it was determined that at least 50 Challengers would have to be sold, with 5% of the \$4.375 million per plane price as a deposit, before work on even a prototype could begin.

Testing the market. "When Canadair approached me about the marketing program, Fred Kearns asked me, 'Do you think it's possible to get a large number of firm orders in six months on a paper airplane?" ' Jim Taylor recalls. "I said, 'I don't know. It's never been done." "But he agreed to try-if Mr. Kearns would agree to three conditions:

"First, I said, 'I've got to have my own team, because we don't have time to fuss around.' I had a bunch of fellows who had worked with me at Pan-Am and Cessna, and I got them to come in with

"Second, I said, 'We've got to pay these guys an incentive so that if they're successful they'll make a lot more money than you and me.'

"Third, I said, 'Most importantly, we've got to bring the potential customer in here and find out what he wants instead of building what we think he wants.' " (Canadair, however, had already decided that its airplane, then still known as the LearStar 600, should be positioned in competition with the topof-the-line business jets: Lockheed's JetStar II, Grumman's Gulfstream III, and Dassault-Bregeut's Falcon 50.)

Mr. Kearns agreed to all three conditions, the third of which was to become the key ingredient in making the Challenger a marketing-oriented airplane, thanks in no small way to the personalities of Mr. Taylor and Harry Halton, Canadair Ltd.'s executive vice president and engineering chief.

Inasmuch as his entry into selling airplanes evolved from flying them, rather than from a degree in marketing, and given his success in garnering sales, Mr. Taylor could be expected to fit the glad-handing and loud-talking stereotype of the "born salesman." Actually, though, he is soft-spoken-and a good listener.

And he respects the ability to listen in others, too. For instance, consider his description of Mr. Halton during April through June 1976, when Canadair brought more than 200 chief corporate pilots and some top executives in groups of 30 to 40 to Montreal for two-day market-study sessions: "He listened and asked questions, and he was willing to make changes. There wasn't any of this 'not invented here.' Canadair admitted that they didn't know anything about this market, and they had their ears open and were willing to listen and do what was necessary to get the business."

One thing they heard frequently: there never seems to be enough room in business jets to move around in or to carry the necessary cargo. This led to increasing the outside fuselage width from Mr. Lear's 88 in. to 108 in., thus creating the first wide-body business

Selling a design. These sessions in Montreal resulted in a redesign which Jim Taylor and his three salesmen (a fourth was added early this year) took back to the potential customers in July 1976.

They were selling more than a paper airplane, more even than a paper airplane that had been redesigned to incorporate a great deal of input from potential customers. They also were selling a few extras Mr. Taylor borrowed from his days with Pan-Am and Cessna.

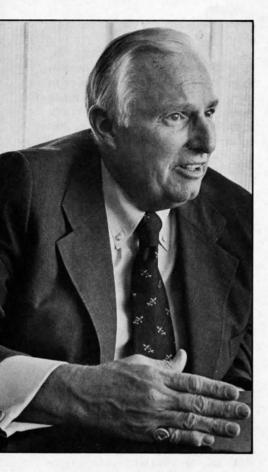
Even the two-day sessions in Montreal had been something of a twist on a segment of Pan-Am's dealings with Dassault. Committed to buying 40 Falcons with an option on 120 more, Pan-Am had had the clout to tell Dassault what it wanted on the airplanes. Why not, Mr. Taylor reasoned, give Canadair's potential customers, even though they might buy only one airplane, the same opportunity for input?

In addition to a network of authorized service stations, the Challenger's owners will have available a group of company-owned-and-operated service centers-initially two in the U.S. and one in Europe-an idea borrowed from the Cessna Citation program.

In 1966, Mr. Taylor had observed Pan-Am getting guarantees on price, performance, and delivery from Boeing Co. for an order of 747s. In order to get the necessary deposits, he made the same guarantees to Challenger buyers. the "first time this was applied to busiaviation." Performanceguaranteed figures placed the Challenger significantly ahead of the competition on speed and range and far ahead on economy of operation.

Almost everything about the Challenger impressed Charles E. Morris,

## Bill Lear "got very upset because the airplane wasn't as sleek-looking. . . ."



manager, aircraft operations, Mobil Oil Corp., New York. "It fit a good slot in what's available in business aircraft," he says. "Besides, I had a lot of confidence in Jim Taylor and a lot of confidence in Canadair." Mr. Morris had visited the Canadair facilities several times, including once during the Challenger research period.

Mobil and Mr. Morris thought the Challenger was "worth a chance," so they became the first customer to make a firm commitment to buy. Mobil will get the 21st Challenger produced (delivery expected in March 1980) and the 100th (October '81). "Historically, it's not good to get the first one."

Other companies followed Mobil's lead, and by Nov. 1, 1976, the date Canadair either had to announce it was going to go ahead or give all rights back to Mr. Lear, 56 firm orders and deposits were on hand.

**Skeptics**, **skeptics**. All through this early sales period, and in fact into early 1977, Mr. Halton's engineers were continuing to revise the design. Most of the changes made the Challenger bigger, although it remained light enough to keep its economical-operation position.

But as Canadair added weight to the

airplane, Bill Lear subtracted himself from it. "Everything had to be built Bill Lear's way," Mr. Taylor comments. "He got very upset because the airplane wasn't as sleek-looking. . . ."

After the split, Mr. Lear began "running around with drawings of a sleek-looking new airplane he said he was ready to start building, saying ours was no good, that it was a Fat Albert. He was getting royalties from us, so he was biting the hand that feeds him."

However, Mr. Taylor adds, "the last six months before he died, he got on a pretty friendly basis with us, because he realized that what we were doing seemed to be working and we were getting a lot of sales."

Mr. Lear was far from being the only skeptic. "Our competition was calling it a paper airplane and acting as if it were impossible to estimate performance," Mr. Taylor says. He finds these assertions ridiculous, inasmuch as computer simulations with wind-tunnel verifications are established procedures throughout the industry. For instance, speed can be estimated within a couple of miles per hour.

Competitors' advertising also played up Canadair's rookie status in business aircraft. "Who'd heard of Canadair?" Mr. Taylor admits. And they contended that the airplane was priced too low, that Canadair was willing to take some losses to get the early sales. Mr. Taylor claims no expertise in pricing, but "our pricing people in Montreal have told me we will make a profit on every Challenger we have sold."

One reason, perhaps, the competitors' advertising attacks were more intense than usual: some of them viewed Canadair as overly aggressive in its marketing. That charge brings a chuckle from Mr. Taylor, who contends that any marketer of business aircraft who displayed any aggressiveness at all would appear unduly aggressive when compared with most of the competition.

He explains that most marketers in the industry sit in their offices and wait for orders to come in, calling their advertising agency every four months or so and saying, "Why don't we run an ad this month?"

And the ads some competitors began to run also amused the Canadair marketing chief. One two-page spread featured a picture of the Challenger's blueprints on the left and a picture of the competitor's plane on the right. The message was clear: why buy a paper airplane when you can buy a real one? But Mr. Taylor views the ad another way: "We were getting a full-page advertisement, and they were paying for it."

Although Mr. Taylor can laugh about some of those ads, there was nothing funny about the blow dealt by Federal Express, the Memphis-based smallpackage carrier, which had committed itself to buy 25 Challengers to add to its cargo fleet of Falcons. Federal then was operating under Civil Aeronautics Board restrictions on the size of its aircraft. When those restrictions were lifted in early 1978, Federal wanted to take advantage of the deregulation and upgrade its fleet with much larger cargo craft. "We let them off the hook," Mr. Taylor says. But Federal does have options on future Challengers if Canadair carries through on plans to stretch the airplane for cargo and commuter-airline purposes.

Federal's cancellation eventually paid off for Canadair, as those 24 spots (one Challenger for executives' use was kept on order) were filled within six months, at the airplane's price at the time of sale, rather than at the initial price at which Federal bought.

It flies! So Canadair had 102 firm orders when the first Challenger rolled out of its plant at Cartierville Airport in the Montreal suburb of St. Laurent in May 1978.

After the Challenger flew for the first time last November, the headline on a Canadair advertisement read: "On November 8, the sound of the Challenger taking off was drowned out by the sound of the competition eating their words."

Since then, the airplane has been undergoing FAA certification tests in California—and so far has been exceeding the guaranteed performances. "We're not going to have any problems," says Barry Smith, a Canadair Inc. vice president. "We can already tell that." The Challenger, agrees Mobil's Mr. Morris, "looks better all the time."

Certification is expected in November or December, Mr. Smith says, with the first delivery of a Challenger to a customer coming "the next day."

Assuming no change in the course of the FAA testing, some time shortly before Christmas, Jim Taylor for the first time since April 1976 will become—relatively speaking, at least—a manager off the spot.