The $200 Million Dollar Challenge

In January, 1976 the gigantic Canadair plant in Montreal was about to close down.

It had had a long and productive life: it had manufactured fighters and transports; the Argus, which served as the workhorse of the Canadian Forces' patrol and search and rescue missions for over twenty years; and the CL-215, the water bomber which had put out forest fires in Canada, France, Spain, Venezuela, Greece and Yugoslavia.

But by the early 1970s it did not have enough customers (Arguses and water bombers last almost forever). It was costing $5,000 a day just to heat the 2.7 million square foot (225,000 sq. m.) facility on the outskirts of Montreal, and 10,000 people had been laid off.

The parent company, General Dynamics Corp., of St. Louis, was glad to sell it to the Canadian government for $37 million.

The government wasn't sure what to do with it. The suggestion was made to simply tear the building down and redevelop the land, but that would have meant the loss of more than 6,000 jobs and a significant part of Canada's high technology capability.

F.R. Kearns, Canadair's president, had more ambitious plans—he wished to build a brand new executive jet and sell it to corporations around the world.

He found a man with very similar ideas in Bill Lear, the designer of the Lear Jet, which still dominated the field after fifteen years. He had since designed a jet to take its place but had been unable to interest any of the large manufacturers of corporate jets, since they were doing well with their established models.

Canadair's chief engineer, Harry Halton, who had returned to the company after a near fatal illness, was delighted with Lear's basic design. He and his associates modified it to make it more appealing to buyers, broadening the body from 88 to 106 inches. This change necessitated others: the tail was redesigned to a T-tail configuration, the engine's thrust was increased and new light-weight interior construction materials were introduced to keep the overall weight down.

The new design was clearly superior—quieter, faster, more comfortable. It would be the first executive jet aircraft specifically designed for long-range missions (including international flights) at Mach 0.8. It would be powered with two high by-pass ratio turbofan engines, Avco Lycoming ALF502's, or, as an option, General Electric C434-1A's. Key parts were the advanced transonic wing and an advanced airfoil which increased both speed and fuel efficiency. Several wing designs were tested before the final one was selected.

The Company hired Jim Taylor and his associates as their driving sales force. The Taylor group picked the name Challenger for the new plane. They also invited the pilots of business jets all over the world to a seminar to suggest specific features they'd like to see in the new plane. By its specifications it was already the plane of the future.

Production was set in motion. It would take 8,000 people to build the plane. The tail assembly would be designed and built in Vancouver, the landing gear in Ajax, Ontario, the engines in Bridgeport, Connecticut.

The company built a plywood mockup and took it on tour all over the United States. Orders came in at an increasing clip and soon there were over seventy-five. There were delays in production but the orders held up. The company

The Challenger.