# Bombardier's global ambition and constant innovation have propelled it to No. 1 in our CEO survey by BRUCE LIVESEY



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With all the pomp and circumstance of a D.W. Griffith movie spectacle, the ultimate business jet was unveiled in a cavernous hangar in Toronto last summer. While Prime Minister Jean Chrétien and other political heavies looked on – and accompanied by a 45-piece orchestra and 1,000-strong choir belting out a rousing chorus – an enormous tarpaulin displaying the image of a Canadian flag was lifted from the silvery skin of the Global Express. Thirty metres long and 2.5 storeys high, this jet can fly 6,700 nautical miles non-stop – say from New York to Tokyo – slicing across the heavens at Mach .9 (935 kmh). For those CEOs, heads

of state and sheiks who plunk down \$34 million (U.S.) to buy one of these Lamborghinis-in-the-sky, they can luxuriate in gold-plated splendour at 51,000 feet. The Global Express, with its double-crank wings and sculpted fuselage, is a sleek bird for fat cats. • It's also the progeny of Bombardier Inc., the Montreal-based multinational selected by chief executives in our annual survey as Canada's Most Respected Corporation – for the second year in a row. Again, the executives are paying homage to the helmsmanship of Laurent Beaudoin, 58, Bombardier's \$19-million-a-year CEO, who continues to display unerring skill at the wheel. Bombardier

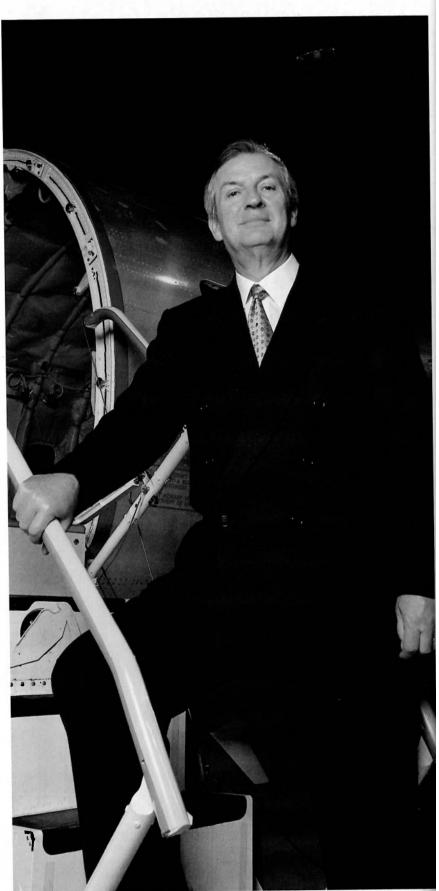
Most lespected corporations

chalked up another impressive year, selling \$7.1-billion worth of planes, trains and signature \$\$ki-Doos and \$\$Sea-Doos.\$\$

Other highlights of the year included Bombardier's purchase of the Ontario government's 49% stake in Toronto-based airplane manufacturer de Havilland Inc., as well as sales of nearly 70 copies of its 70-seater Canadair Regional Jet, the second-generation outgrowth of its popular Challenger business jet. Bombardier will probably see its market share for regional aircraft grow from 41% of the world market to 50% as sales of the 70-seat Regional Jet take off. Meanwhile, its share of the snowmobile market rose from 26% to 28%, and in the personal watercraft market, from 42% to 50%. And contracts worth hundreds of millions of dollars flow in from all over the world, including one to build a high-speed train for the corridor along the U.S. eastern seaboard.

The third-largest civil aircraft manufacturer in the world has such international stature that Boeing Co. of Seattle sent a team of headhunters to Montreal and Toronto last fall, offering Bombardier engineers double their salaries if they jumped ship. Bombardier concedes that it lost some people but says that the company managed to hold on to its core group of engineering talent. Overall, Bombardier's reach remains breathtaking: It employs 41,000 people worldwide in nine countries and can boast of customers in 60 nations. "By aerospace standards, managing several different lines is difficult enough - but doing it across a number of geographical jurisdictions is extremely difficult," asserts Wolfgang Demisch, an analyst with New York-based BT Securities Corp. "But Bombardier has done it with unexpected success."

Yet, as its balance sheet consistently reveals, and our survey confirms, Bombardier's success is no mere fluke. "The company's managers are clearly the smartest, most disciplined businesspeople we've ever worked with," says Aaron Hollander, managing director of First Equity Development Inc., an aerospace investment bank based in Stamford, Conn., which has helped Bombardier with some of its corporate acquisitions. Indeed, it's apparent that a well-thought-out methodology is in effect at the corporation's Montreal head office, one that is fervently entrepreneurial and risktaking, and avails itself of the benefits of olohalization.



Bombardier CEO Laurent Beaudoin is a man on the move, fashioning international alliances and impressive foreign sales. Bottom line: revenues of \$7.1 billion in 1996



Of the ingredients that make up Bombardier's consistently stellar performance, tapping the best and brightest business minds is key.

This is illustrated by what happened as a result of an inauspicious lunch meeting in Montreal that occurred in April, 1985. One of the diners was Laurent Beaudoin. By then, this son-in-law of snowmobile inventor and company founder Joseph-Armand Bombardier had been run-

has played a role in bringing new ideas and demonstrating where there are new trends. In this regard, he has had an influence on the orientation I've taken over the years."

Allaire's influence has been especially profound in the company's aerospace division, which now accounts for 50% of all revenues. After the purchase of Canadair, Bombardier picked up other aerospace companies in quick succession—Short Brothers PLC in Northern Ireland, Learjet Inc. in Kansas and de Havilland Inc. in Toronto. All were bought

flourish, but ensures that senior management always know what is happening and can strategize for the future. "We put in place pillars of good governance, and it starts with how do you structure these companies, what is the level of their autonomy, what are the boundaries of their responsibility?" he explains. Beaudoin has monthly meetings

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## Bombardier brain trust that the company would flourish if it carved out a niche in the fastest-growing regional and business plane market

ning the firm for two decades, having taken over at the tender age of 28 (his family retains 62% of voting control of the company). And, to that point, Beaudoin had made some astute decisions, like when he moved to manufacturing subway and railway cars after the 1973 oil crisis sank snowmobile sales.

eaudoin's dining companion was Yvan Allaire, an academic with a PhD in management science from MIT, and a businessman who was running Secor Inc., a Montreal management consulting firm. Beaudoin had asked Allaire to this get-together for a very specific reason: He wanted Bombardier to diversify again, but required some expert advice on how to do this successfully. "Diversification has helped us maintain our growth," explains Beaudoin. "Due to the fact that we are in three sectors of business, the fluctuations in each one are not the same. This helps us maintain growth in the overall business."

During their lunch, Beaudoin asked the consultant to meet with 45 of Bombardier's top executives to talk about how to strategize for possible diversification. Allaire agreed and, by the end of that year, Bombardier had made its first foray into the aerospace industry by moving to acquire Canadair Ltd. for \$121 million from the federal government. More importantly, Yvan Allaire was ensconced as one of Beaudoin's closest advisers.

Today, Allaire, 55, can take credit for being one of the key architects of Bombardier's relentless expansion. He had worked so closely with Beaudoin over the years that he finally joined the company as executive vice-president in charge of strategy and corporate affairs in 1996. "I like to have people beside me who think of [market] trends and can bring new ideas to the challenge," says Beaudoin. "Yvan

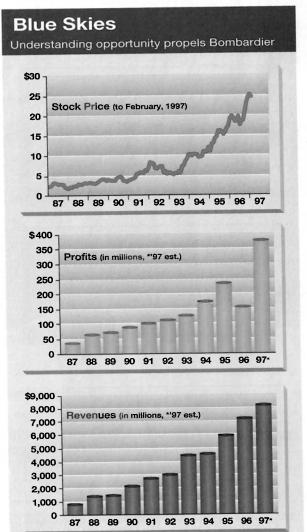
for peanuts from motivated sellers, but all were money-losers. Bombardier turned every one into a profit centre.

How? For starters, Allaire oversaw the installation of a governing structure within Bombardier that allows entrepreneurialism to

with the executive committees of each of Bombardier's five operating groups, and is in contact with the presidents of each group on a daily basis. "It's very intense, it's very unbureaucratic, it's very focused on the issues and on new projects and programs," says Allaire.

Early on, it was evident to the Bombardier brain trust that the company would flourish if it carved out a niche in the regional and business plane market, and stayed clear of the big passenger jet business where fleets of Boeing 747s go nose to nose with Airbus 340s. To make a profit, though, investing in new products was critical. "It's a bit too pat to say we acquired assets at a good price," Allaire remarks. "We've invested something like \$1.9 billion in aerospace since we started in that business." Indeed, in the late '80s, the company spent \$250 million to build a niche-market little passenger jet, the 50-seat Canadair Regional Jet. At the time, this was close to the total equity of Bombardier. Now the company is reaping the rewards of such gambles as orders for the aircraft pour in.

Bombardier also takes advantage of the growing popularity of corporate aircraft fleets and business globalization,





whereby corporations – no longer shackled by trade barriers, and enjoying low transportation and communications costs – can raise capital, set up manufacturing plants

and sell products in virtually any corner of the world. Globalization allows corporations to establish international assembly lines, and outsource production to a raft of suppliers in foreign countries. So, for example, the new

#### Of all Bombardier's daring endeavours,

assume the risk of their own costs, they assume the market risk and they get paid when we get paid for the final product. All of this reduces the total cash commitment and risk for Bombardier."

Of all the company's efforts, building the Global Express shows how risk-sharing and globalization can be combined successfully.

For years, the high-end business jet market was led by Gulfstream of Savannah, Ga. Its large-cabined Gulfstreams competed with Canadair's big Challenger jets to be the Rolls-Royce of the skies, a must-have for rock stars, CEOs and presidents. In 1991, however, Bombardier announced it was going to go one

David Geffen, Steven Spielberg and Roy Disney, Gulfstream has made a damaging first strike. Bombardier's management, however, is unfazed, certain they have designed a superior plane. The GV is a quickie makeover, with an existing airframe and a wing originally designed in the 1960s, while the Global Express is built entirely from scratch using aerospace know-how of the 1990s.

ombardier negotiated risk-sharing deals with an array of companies from around the globe, including Japan's Mitsubishi Heavy Industries Ltd., which is manufacturing the wing and centre

#### building the Global Express long-range business jet shows how financial risk-sharing and globalization can be combined successfully



Diversity training: Strategist Yvan Allaire taught Bombardier how to expand beyond snowmobiles and into planes and trains

Learjet 45 has a fuselage made by Short Brothers in Belfast, wings made by de Havilland in Toronto, while the plane is actually assembled in Wichita, Kan.

Bombardier then took globalization one step further. It copied an investment strategy used by Airbus and Boeing in that it signs risk-sharing agreements with suppliers who bear some of the costs for developing a plane, and then get their money back if and when the aircraft sells. "Instead of having suppliers who manufactured components and got paid," says Allaire, "now they are part of the process of developing the airplane jointly. And they

step beyond the Challenger and the Gulfstream line by building an ultralong-range business jet that would travel 6,700 nautical miles without refuelling. The Global Express, as this new jet was called, would carry eight passengers and a crew of four from New York to Tokyo in less than 14 hours.

Gulfstream responded by rushing the GV to market. The GV can travel the same distance, yet will be available for customers a year before the Global Express is fully certified. Moreover, with a customer base that includes 125 of the *Fortune* 500 companies, and orders from notables such as Edgar Bronfman Jr.,

fuselage; Germany's BMW-Rolls-Royce GmbH, which is providing the engine; the U.S.'s Honeywell Inc., which is supplying the avionics; and France's Sextant Avionique, which is providing the flight controls. The advantages of these agreements are apparent: Of the \$800-million cost to develop the Global Express, Bombardier put up only \$400 million, while the rest is shouldered by its partners. Moreover, a greater depth of engineering know-how is applied to the aircraft, whereby a total of 1,000 engineers from all partners worked on it, using an interlinked 3-D computer design system.



Finally, components of the Global Express are manufactured elsewhere and then shipped to de Havilland's factory in Toronto for final assembly. After extensive testing is

conducted this year, the Global Express will be delivered to its first customer in 1998. The

interim scoreboard shows Gulfstream only slightly ahead: It has 69 orders for the GV, while Bombardier has nearly 60 for the Global Express. Aviation experts see a potential world market of between 300 and 800 of these corporate ultrajets. Bombardier and its partners must sell at least 100 Global Expresses to break even.

But aerospace is not the only arena in which Bombardier is forging Schmidt, issued a statement claiming that Bombardier had received almost \$1.2 billion from Ottawa over the previous 15 years.

Bombardier, however, is quick to point out that every aircraft industry the world over is government subsidized, either directly or via defence spending. The loans it receives simply ensure that the playing field is level. "If you



Even Bombardier's humble snowmobile has global reach, as this Russian Ski-Doo ad featuring Vladislav Tretiak shows

bought McDonnell Douglas Corp. of St. Louis, Mo., last December for \$13.3 billion (U.S.). Some academics believe that globalization leads to greater instability within industries. "[Globalization] is a double-edged sword—there are higher risks but also higher rewards," notes Daniel Trefler, an international trade economist at the University of Toronto. "On average, Bombardier and its workers are better off because of globalization. But it also puts Bombardier more at risk." Nevertheless, because the aircraft manufacturer is such a niche player, it's in no immediate danger of being swallowed whole.

In fact, few clouds mar Bombardier's future. The company is projected to notch \$12.4 billion (Canadian) in revenues by the millennium, is currently anchored by an order backlog of \$10 billion, and will be releasing a new plane every year until at least 2000 – namely the Learjet 45, the Global

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partnerships: It's also true in its railway division. Bombardier is a member of a consortium that landed a \$611-million (U.S.) contract last year to build the fastest high-speed passenger train in North America. Called the American Flyer, and awarded by Amtrak, the train will hit top speeds of 240 kilometres an hour and run between Boston and Washington. Bombardier is on track to win a \$4.8-billion contract to build a bullet train in Florida, called the Overland Express. Using Europeanengineered train à grande vitesse (TGV) technology-which allows trains to travel at up to 320 kmh-the Express will link Miami, Orlando and Tampa and carry 6.3 million passengers annually by 2010.

espite its obvious management smarts, critics charge that one reason Bombardier's books are so healthy is that it regularly dines out on the public tab. Last year, the federal government lent the company \$144 million (Canadian) to help defray the costs of developing a stretched, 70-seat version of the Canadair Regional Jet and the de Havilland Dash 8-400 short-range turboprop. Not surprisingly, the loans were not well received in some quarters. One Reform MP from British Columbia, Werner

look at the amount of money lent to those programs," says Beaudoin, "it's very insignificant in terms of job creation and the size of the aerospace industry in Canada." In fact, Peter Boag, director of operations at the Ottawabased Aerospace Industries Association of Canada, argues that the federal government learned its lesson after cancelling the Avro Arrow fighter jet in 1959. By pouring public money into the sector, the government fostered the sixth-largest aerospace industry in the world today, generating \$12.5 billion in annual sales and employing 59,200 Canadians. Now, the industry is reaping the windfalls of a three-year boom that's left companies such as Bombardier swimming in orders. Without government funds, Boag insists, "we would have lost the industry."

Still, Bombardier's global strategy is not without its downside. After all, in a world bereft of trade barriers, corporations are subject to the unrelenting winds of global competition. One consequence is the consolidation within many industries—especially evident in the aerospace sector—with smaller companies being gobbled up by multinationals or forging superalliances such as Airbus. Or even multinationals consuming other big companies, as demonstrated when Boeing Co.

Express, the Dash 8-400 and the 70-seat Regional Jet. It's also developing a presence in the Asia/Pacific Rim region, which will account for 40% of worldwide aircraft sales over the next decade. And, with an eye to a more ecologically friendly future, the company is diversifying again. Last year, it introduced the Neighbourhood Electric Vehicle – a cross between a golf cart and small car-designed to meet the needs of American retirees living in gated communities. Priced at \$8,000 (U.S.) apiece, sales could reach up to 20,000 units within three years. Given the necessity to eliminate pollution, says Beaudoin, "there is a need for a different type of commuter vehicle. We feel that the NEV is the one that will fill that need over time."

Bombardier is also bolstered by evidence that its products are popular in the farthest regions of the earth. In recent months, its Ski-Doos and Sea-Doos have become the status symbol among Russia's New Rich and nomenklatura. Earlier this year, stodgy Russian Prime Minister Viktor Chernomyrdin was spotted at a Black Sea resort bouncing across the waves, gleefully riding a Bombardier Sea-Doo. With this sort of market penetration, it's no wonder Bombardier is so highly regarded among Canada's corporate elite.