



Government
of Canada

Gouvernement
du Canada

December 2000

Think Canada

Think Bottom Line

Think Aerospace Industry

Think Investment



104-00978/



Aerospace - an Established Platform

Why Canada?

The Aerospace Edge

Summary

Canadian Aerospace and Defence... Performance Proven

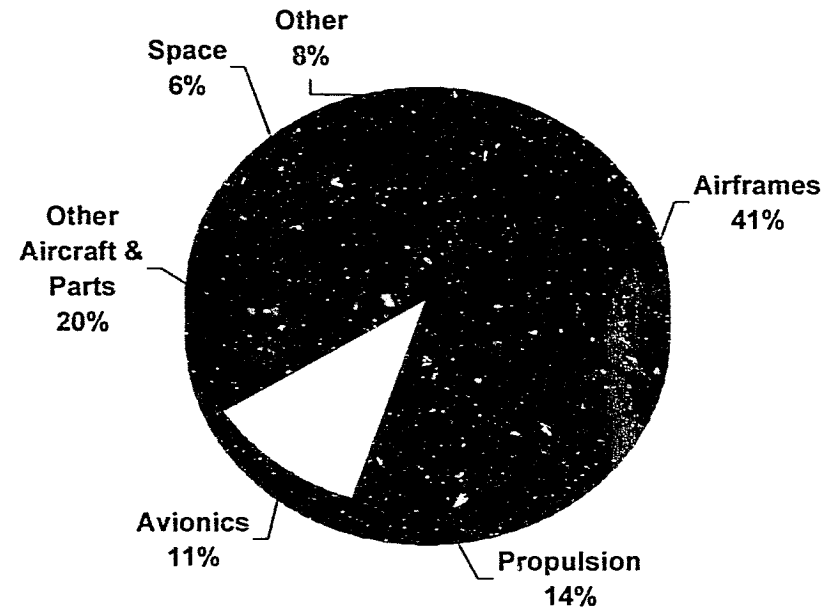
- **Approximately 700 firms with 92,000 employees**
- **Gross Sales of \$19.6 Billion in 1999**
- **Invested approximately \$800 Million in R&D (1999)**
- **Globally competitive with exports of 71% of output**
- **Extensively integrated in the global aerospace and defence industries**

Source: Industry Canada. Canada's Aerospace Industry, 1999/2000 Statistical Survey Preliminary Results.

...A Presence in Major Market Segments

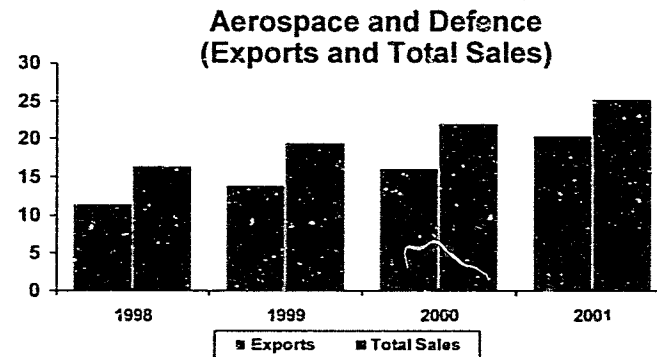
- Significant capabilities in all product segments...
- ...with particular strengths in commercial aircraft and dual-use electronics
- ...and a strong aerospace and defense service industry

Canada's Aerospace and Defence-Related Products

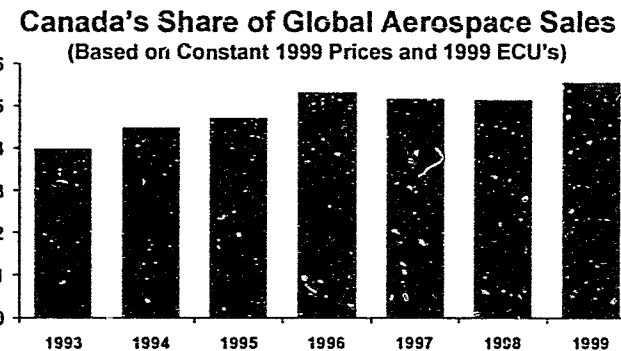


A Continuously Strong Record of Performance...

- In 1999, aerospace sales by the G-7 totaled \$196 billion \$ U.S.
- Continued strong growth in past three years
- From 1976 to 1998, Canada's share of world production more than tripled
- Canada was sixth in sales in 1999

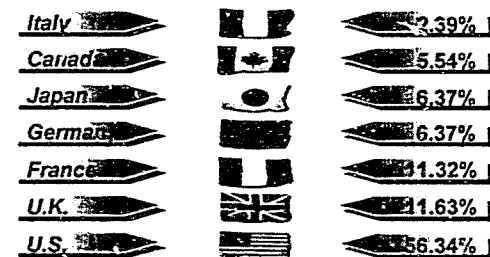


Source: Industry Canada. Canada's Aerospace Industry, 1999/2000 Statistical Survey Preliminary Results



Source: The European Association of Aerospace Industries (AECMA)

**Aerospace Output, 1998
7 Largest Western Aerospace Nations
(Based on Constant 1998 Prices and 1998 ECU's)**



Source: The European Association of Aerospace Industries (AECMA)

...Leading in Several Aerospace Products

Company	Product Lines	% World Market Share
Bell Helicopter Canada	Civil helicopters	50
Bombardier	20-90 seat turboprop and turbojet regional aircraft	40
CAE	Commercial simulator	75
	Visual simulation sector	70
Various companies	Landing gear	30
	New large aircraft landing gear	60
Pratt & Whitney Canada	Small gas turbine engines	35
AlliedSignal	Transport aircraft environmental control systems	60

...and Leading Edge Space Companies

- **Strategic International Partnerships**
 - USA (NASA) partner for over 3 decades - from Alouette to RADARSAT
 - special relationship with the European Space Agency for over 2 decades
 - only non-European country with quasi-associate status
 - extensive bilateral cooperation with other European and Asian countries
- **World - leading capabilities**
 - space robotics and moveable spacecraft antennas (EMS and MD Robotics)
 - many space microwave subsystems (COM DEV)
 - turn-key earth observation data receiving, processing, archiving and distribution (MDA)
 - Satellite communications systems consulting (Telesat)
 - Synthetic Aperture Radar (MDA)
- **Larger export proportion than other spacefaring nations**

Aerospace - an Established Platform



Why Canada?

The Aerospace Edge

Summary

Canada: a Dynamic, Competitive Economy — Open for Global Business

Canada's economic fundamentals and relative cost advantages provide a first-rate business environment.

Canada provides:

- ➔ Excellent economic fundamentals
- ➔ Easy access to markets
- ➔ A cost-competitive business environment
- ➔ An excellent place to live

Report Card



Federal government budget in surplus.



Low Inflation and low interest rates.



Geography and NAFTA provides easy access to the world's most prosperous market.



Large stock of skilled workers; low start-up costs; competitive tax system (particularly for R&D); strong technological environment; positive business climate.

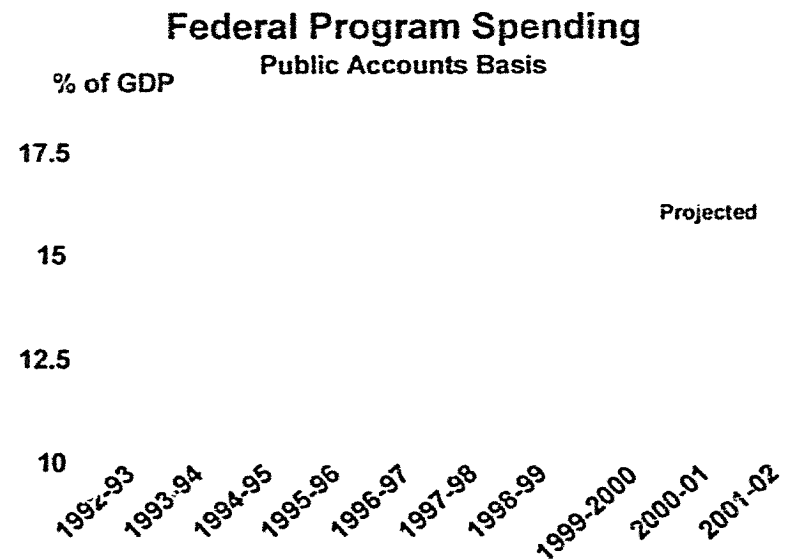
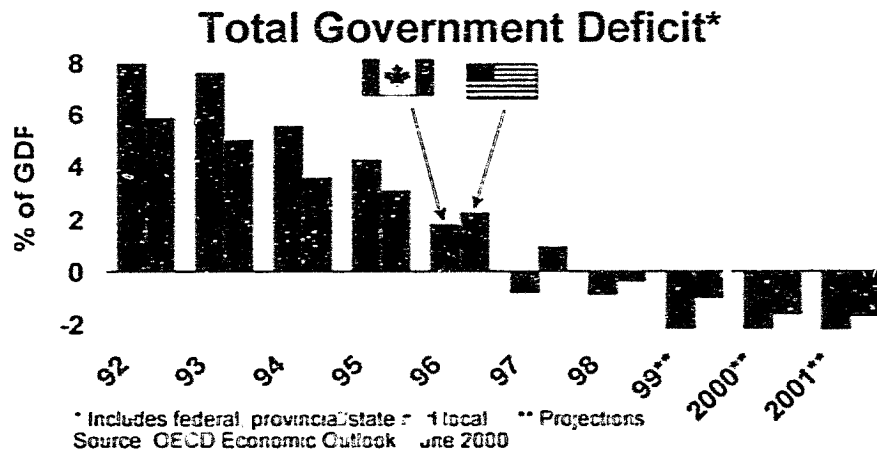
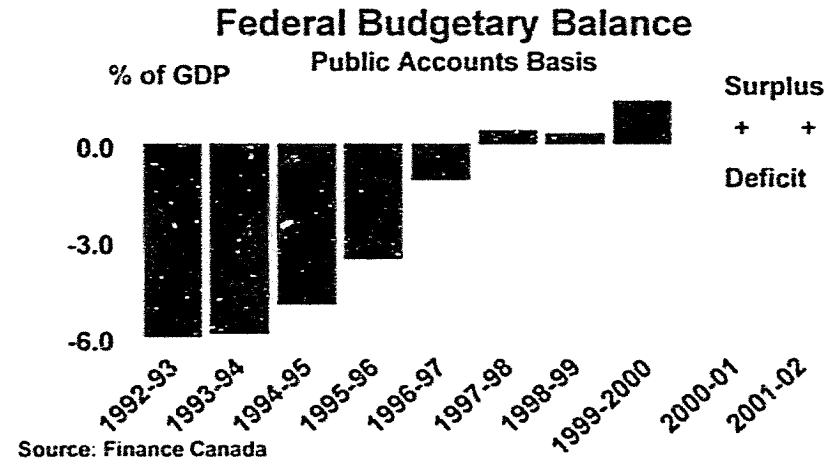


Superb overall quality of life.

A Balanced Fiscal Situation

- Canada's fiscal situation has turned around dramatically:
 - In 1992, Canada's deficit (as a percentage of GDP) was 8.0%, the second highest in the G-7 and significantly above the U.S. rate.
 - However, by 1997, Canada posted a surplus – the first G-7 country in the 1990s. In 1999, Canada had the highest financial surplus relative to GDP of the G-7 countries.
 - Federal government spending (as a % of GDP) is at a 50-year low, the key source of the Canadian fiscal turnaround.


The Institute for Management Development ranked Canada as the best fiscally managed country in the G-7 in 2000



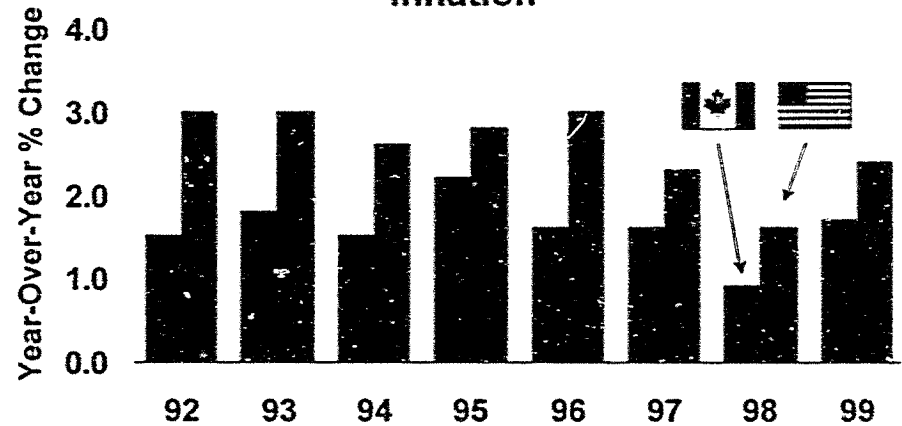
Low Inflation and Low Interest Rates

- The federal government and the Bank of Canada have an inflation target that locks the inflation rate in the 1% to 3% range.
 - Over the past five years, Canadian inflation averaged 1.6% — 30% lower than the U.S. rate.
- Canada's excellent fiscal situation and low inflation are reflected in low domestic interest rates.
 - Canadian rates are below comparable U.S. rates across all maturities.

"Long-term interest rates are expected to remain slightly below comparable US rates, given less intensive capacity pressures than in the United States and Canada's improving fiscal position."

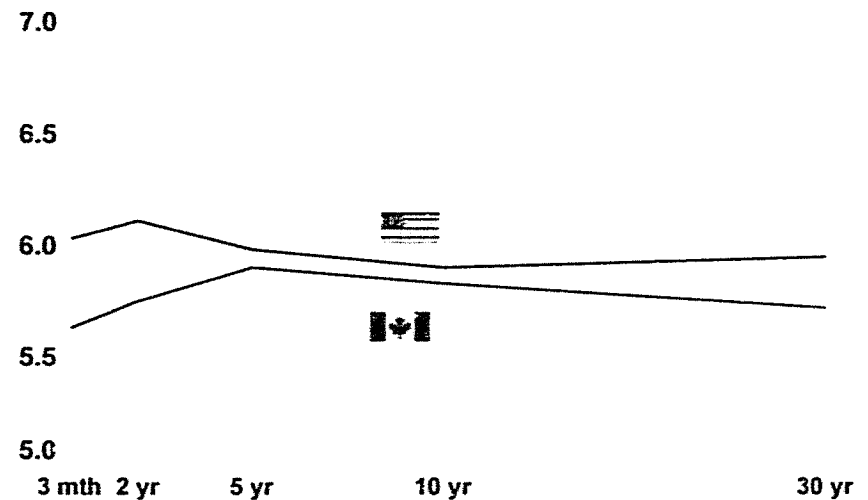
OECD Economic Outlook
June 2000 

Inflation



Sources: Statistics Canada and the Federal Reserve Bank of St. Louis

Canada – U.S. Yield Curve* September 20, 2000

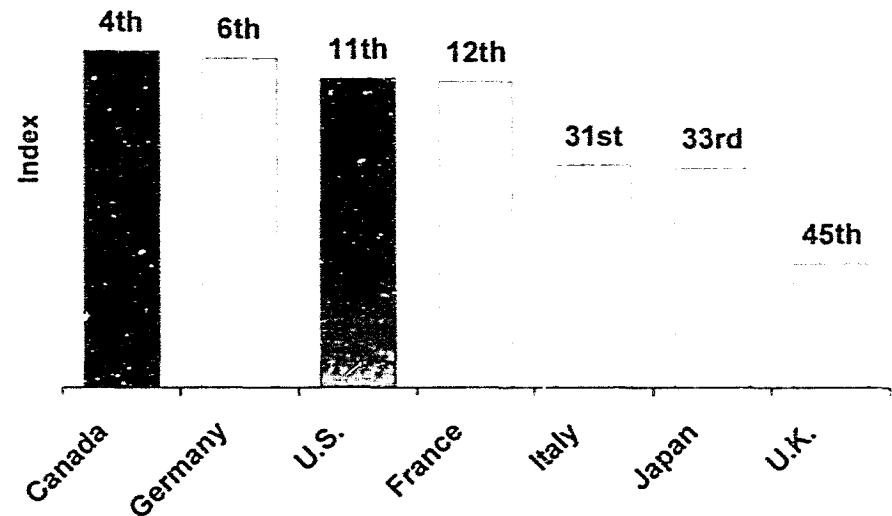


*Yields less than 1 year in duration are based on banker's acceptances in Canada and commercial paper in the U.S.
Source: Royal Bank of Canada

An Efficient Exchange Rate

- Canada's flexible exchange rate provides a buffer against temporary world economic shocks (such as the "Asian flu" of August 1998).
 - Top executives from around the world rank Canada's exchange rate policy the best in the G-7 for supporting the competitiveness of businesses.

Exchange Rate Regime — World Rank*



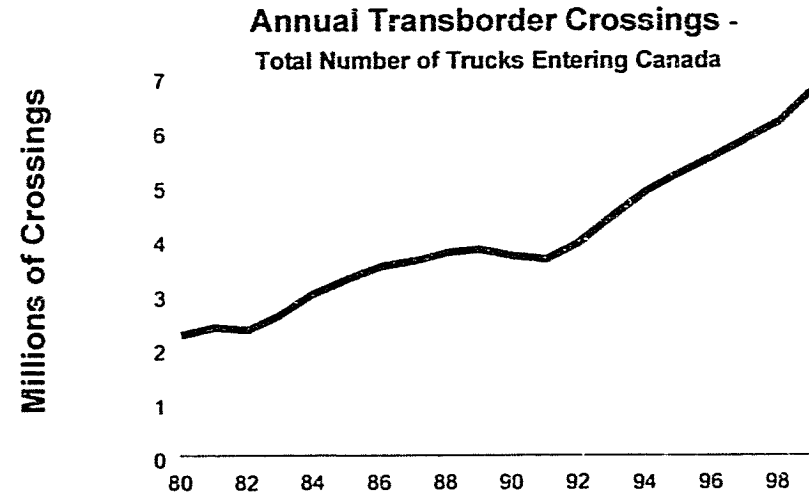
* Exchange rate policy as evaluated by the Executive Opinion Survey
Source: The World Competitiveness Yearbook, 2000

Streamlined Border Flows ...

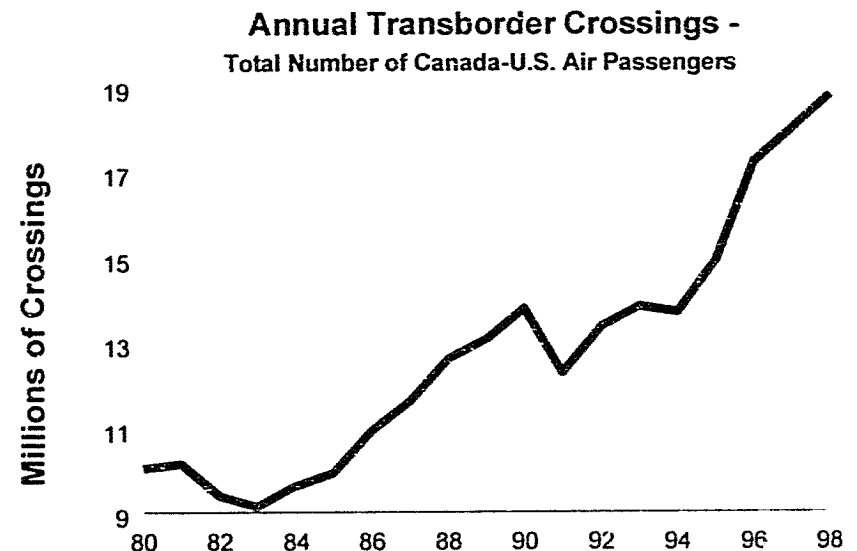
- Since the enactment of the North American Free Trade Agreement (NAFTA) in 1994, Canada provides long-term assured access to the North American market — nearly 400 million people with a combined GDP of over \$9.4 trillion (\$U.S.).
- In addition to eliminating tariffs, NAFTA provides procedures for:
 - border facilitation;
 - movement of personnel;
 - investment and intellectual property protection; and
 - product certification.
- Automated permit ports, transponder identification systems and joint processing centres are being tested and deployed.

"Pratt & Whitney has a worldwide distribution network. Customs operations have been streamlined to the point that the Canada-US border plays no role in our distribution system."

Brian McGill, Director of Transportation
Pratt & Whitney Canada Inc.

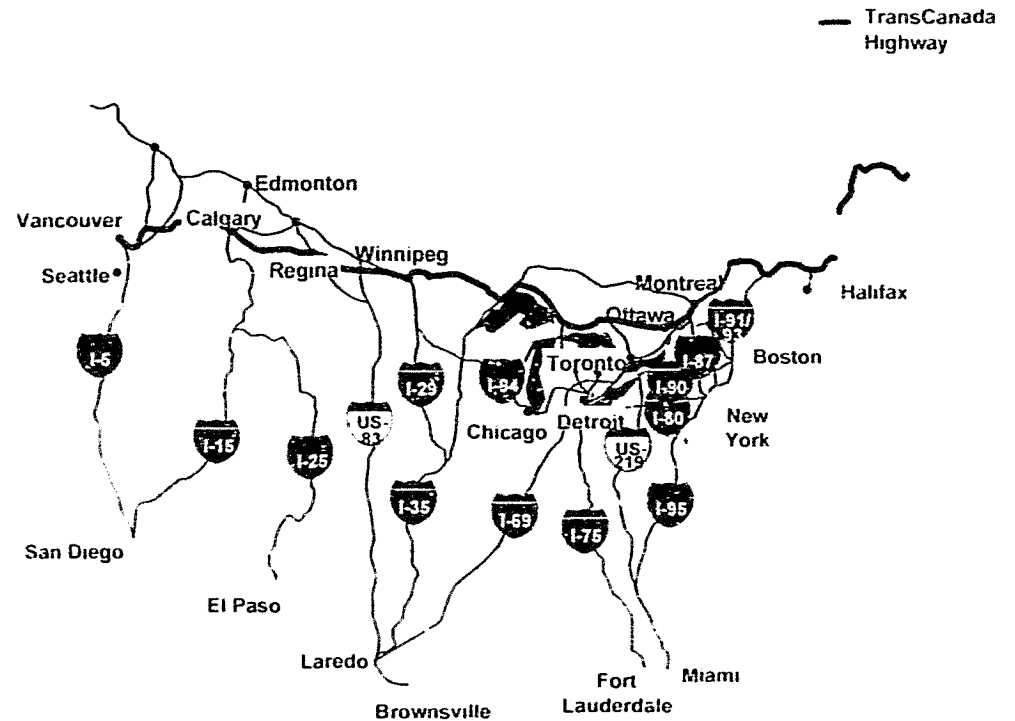


Source: Statistics Canada



Source: Transport Canada

- The North American market is serviced through a well integrated transportation system, which is among the best in the world.
- This infrastructure supports the world's largest trade partnership, moving well over \$1 billion/day in traded goods.



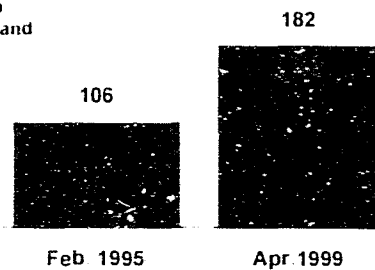
Distances to Markets are Short

- Almost half of the U.S. population lives within a 10 hour drive of Toronto, and over 60 percent within a two hour flight.
- Business travel between Canada and the U.S. has increased considerably since the inception of the "Open Skies*" Agreement (February, 1995)
- Direct air service between major cities in Canada and the U.S. has nearly doubled in 4 years.

*Under "Open Skies" Canadian Air Carriers gained unlimited rights to establish routes from any point in Canada to any point in the United States. Similarly, U.S. carriers also gained unlimited access to the Canadian market (with a phase in period for up to three years)

Increase in Transborder Routes Since Open Skies

Scheduled Flights Between Canada and the U.S.



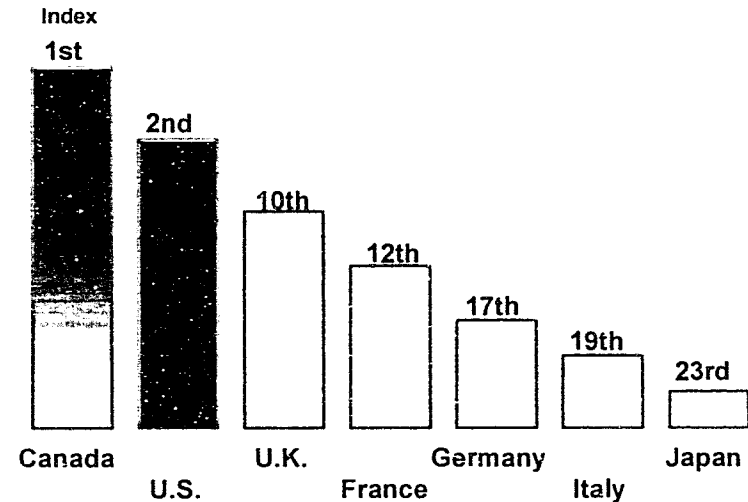
Source: Transport Canada



Superior Quality Workforce

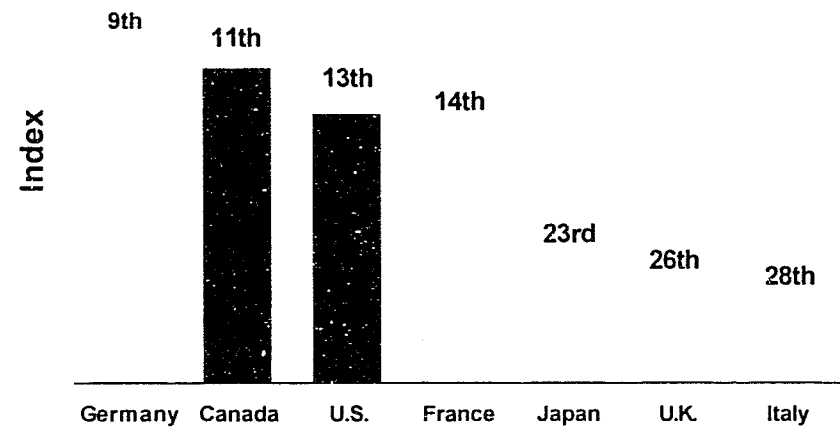
- The overall skill level of Canada's workforce ranks high among competing countries.
- Plus, anecdotal evidence abounds that a shortage of capable workers is a more serious problem in the U.S. than in Canada, and that it is on the rise.
 - According to "Bridging the Gap: Information Technology Skills for a New Millennium" (Information Technology Association of America, April 10, 2000), the US faces a shortage of 800,000 IT workers in 2000.

Knowledge Workers — World Rank*



* Tertiary education enrolment among 59 countries considered in the Global Competitiveness Report 2000
Source: Global Competitiveness Report 2000

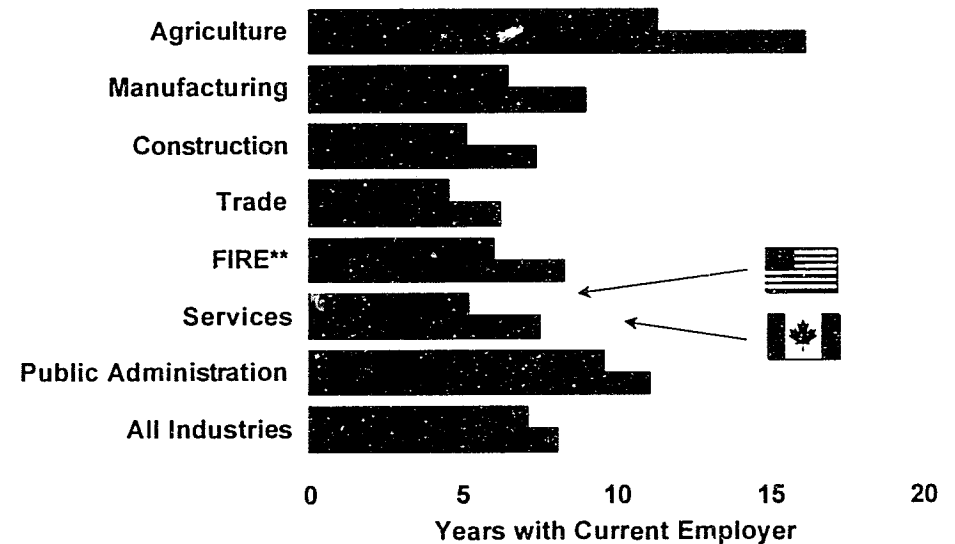
Availability of Skilled Labour*



* Standing among the 47 countries considered in the World Competitiveness Yearbook, 2000.

- Workers are less "footloose" in Canada than in the U.S.
 - Lower turnover rates are associated with reduced training, hiring and separation costs.

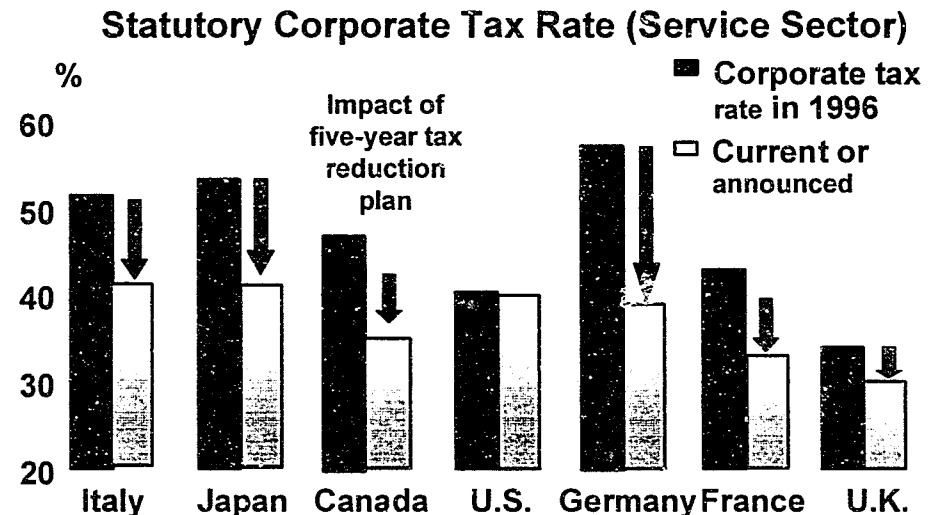
Average Job Tenure by Industry Group — 1998*



*U.S. data is based on the Current Population Survey (February 1998). Canadian data is an annual average.
**FIRE is Finance, Insurance and Real Estate in the U.S. In Canada, FIRE also includes Leasing.
Source: U.S. Bureau of Labor Statistics and Statistics Canada

Competitive Corporate Taxes

- Canadian locations compare well in terms of corporate income taxes across North America.
- The federal government's February 2000 Budget has also put in place sharp cuts in corporate taxes, to take effect over a five-year period.



Rates effective by 2004, based on changes announced to October 2000. Rates include the income tax rate equivalent of capital taxes, where this information is available.

Source: KPMG Corporate Tax Rate Survey (Jan 2000); Ernst&Young International Tax Services; OECD Tax Database; Department of Finance calculations

Top Statutory Corporate Income Tax Rates Canada vs. United States (%)

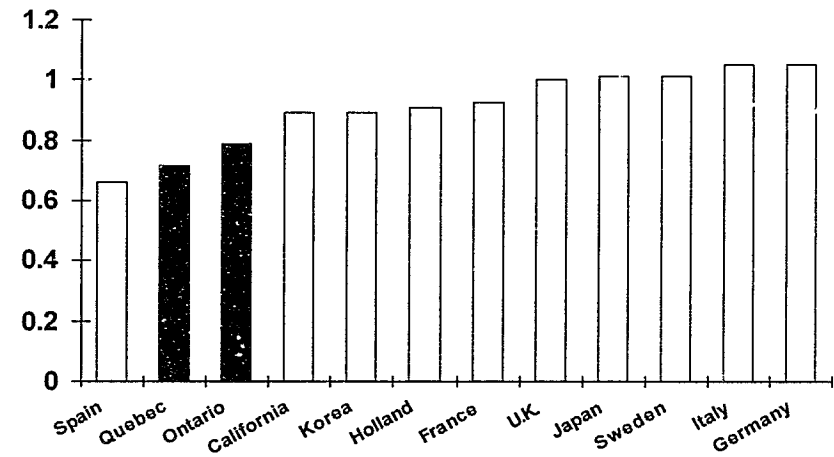
Jurisdictions	2000	2005
Canada		
• Federal (incl. Surtax)	29.12	22.12
• Fed. - manufacturing	22.12	22.12
• Ontario	14.5	8.0
• Alberta	15.5	8.0
• Combined fed-prov. average	43.0	31.8
United States		
Federal/States combined average	39.0	39.0

Source: Department of Finance

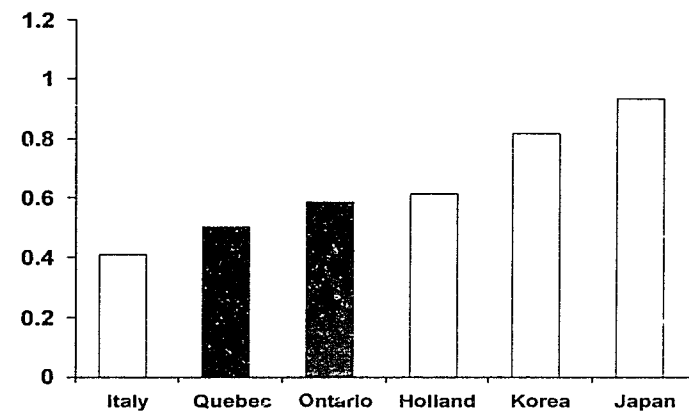
R&D Cost Advantage

- Canada's Scientific Research and Experimental Development tax credits, in combination with provincial tax credits, rank second when compared with other OECD aerospace nations
- Canadian support levels have remained relatively stable since the early 1980s.
- Of the OECD nations offering R&D tax incentives to small firms, Canada ranks second.

β -Indexes* - Large Companies, 1995-96



β -Indexes* - Small Companies, 1995-96



Source: The Conference Board of Canada, 1997

* The β -index measures a tax system's impact on the private sector decision to invest in R&D.

...And Government Program Support

- **Technology Partnerships Canada** – invests in technology development programs
- **National Research Council**
 - **Institute for Aerospace Research** – aerospace R&D and testing
 - **Industrial Research Assistance Program** – support for small and medium-sized Canadian firms
 - **The Aerospace Manufacturing Technology Centre (AMTC)** – facilitate next generation manufacturing, particularly among SMEs.
- **Export Development Corporation (EDC)** – export financing and insurance services
- **Industrial and Regional Benefits (IRB)** – industrial participation in major Crown procurements
- **Granting councils** – support university and project research through partnerships of universities with industry
- **Defence Industry Research Program** – financial and scientific support for industry-initiated research
- **Canadian Commercial Corporation** –guarantees contract performance for Canadian exporters, especially for sales to governments

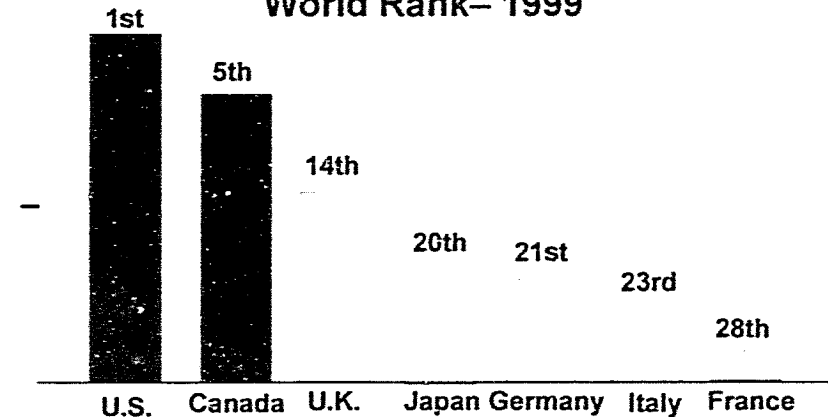
First-Class Technological Infrastructure

- Canada's technological infrastructure is second only to the U.S. among the G-7 — we rank above or very close to the U.S. in terms of:
 - internet users and internet hosts,
 - computers per capita, and
 - computer instructions per second.
- Building a universal, competitive, leading edge "Information Highway" is a government priority.
- Technology works best in the hands of highly skilled individuals. Canada is considered to have the best overall technology-people combination in the world.

"CAE has developed world leading simulation and imagery capabilities in Canada. Our successes are due in large part to the technology infrastructure and trained workforce available to us here."

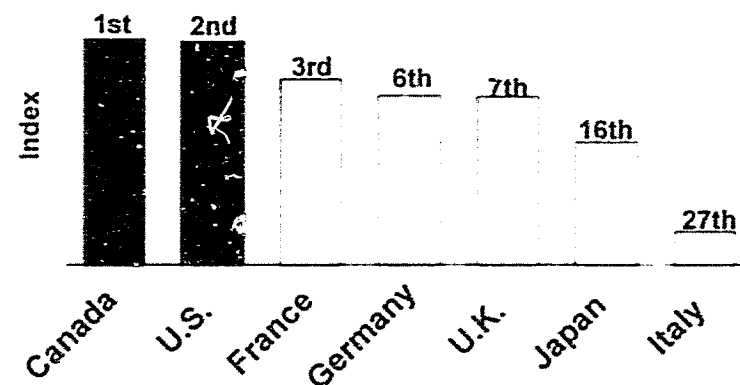
Robert E. Waite Vice President
Corporate Relations and Marketing CAE Inc.

Technological Infrastructure*
World Rank— 1999



* Standing among 40 countries. Index based on 12 characteristics including investment in telecommunications, computers in use, computer power, internet connections, number of telephone lines, cost of telephone calls and use of robotics.
Source: World Competitiveness Yearbook, 2000

Technological Potential*
World Rank, 1997

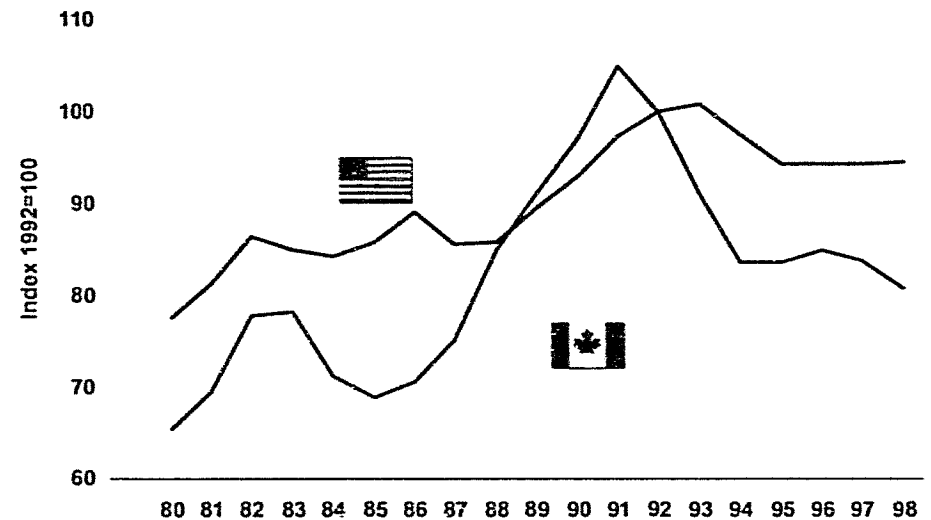


* Standing among 38 countries. Index based on several information technology and human capital characteristics including the availability of direct-dial international service, number of fax machines per capita, computing power in the country per capita, enrolment in tertiary schools, quality of scientific research institutions and power generation capacity.
Source: Global Competitiveness Report, 1997

Low Production Costs

- Growing productivity, skilled workers, and low labour costs make businesses competitive.
 - Canada's competitive position vis-à-vis the U.S. has improved substantially since 1991.

Manufacturing Unit Labour Cost Index
\$U.S. Basis



Source: U.S. Department of Labor, Bureau of Labor Statistics, August 1999

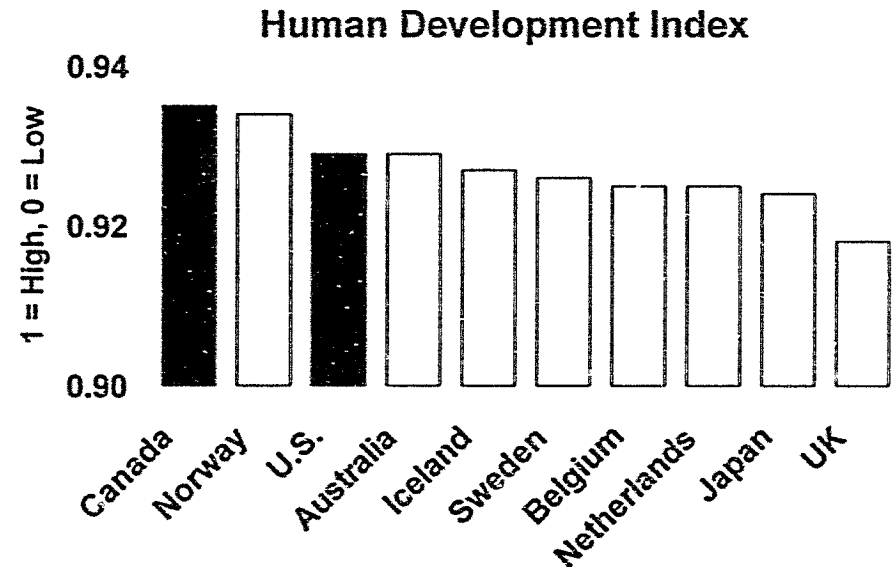
"Our records for safety and productivity place the TMMC team among the industry's best. And when it comes to quality, vehicles built at our Cambridge facility are among the highest rated vehicles in North America."

Takanori (Tak) Sakaue, President
Toyota Motor Manufacturing Canada Inc.



The Best Overall Quality of Life

- Canada ranks first on the UN Human Development Index for the seventh year in a row.
- Canadian advantages include:
 - high-quality, low cost education;
 - universal health care;
 - clean, safe, cosmopolitan cities; and
 - diverse cultural and recreational amenities.



Source: United Nations, Human Development Report, 2000

Vancouver & Toronto — *The best cities in the world from an executive or professional point of view* (Corporate Resource Group, Geneva)

Toronto is rated as the best city in the world in which to work and live (Fortune Magazine)

Canadian Cities provide:

- Multicultural and diverse population
- Industrious, well-educated workforce
- Low crime rates; strong sense of community
- Diversity in culture, entertainment and recreation
- Excellent public education and healthcare
- Low cost of living
- Effective civic administration

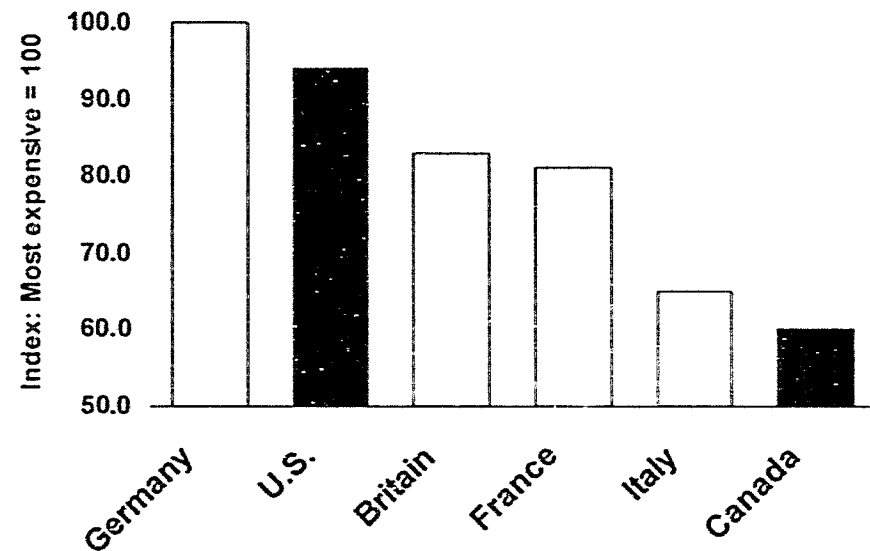
Low Overall Cost of Doing Business

- The overall cost of doing business is considerably lower in Canada than in other industrialized nations. On average, costs are about 40% lower in Canada than in Germany, the most expensive country of those examined in the Economist Intelligence Unit. Business costs are roughly 36% lower in Canada than in the United States.

As well as having the lowest cost business environment, Canada also:

- Is fully integrated into the North American free trade economy, with easy movement of people, goods and services
- Has excellent infrastructure including telecom, highways, rail, air transport, electricity, water and gas
- Has sophisticated financial services – national banks, stock exchanges, major investment houses - all tied into global networks
- Has fiscally responsible governments that have achieved low inflation and major deficit reductions while sustaining quality services

Business Costs*



* Index based on various business costs including: wages, costs for expatriate staff, air travel and subsistence, corporation taxes, perceived corruption levels, office and industrial rents, and road transport. Data for Japan is not available.
Source: The Economist (EIU), January 24, 1998

Government as a Partner for the Knowledge Economy

- **The economic policies of the government of Canada are focused on making Canada a world leader in the global knowledge-based economy of the 21st century. Commitments include:**
 - **Making Canada the most connected nation by the year 2000;**
 - **Shaping a "National System of Innovation"; and**
 - **Providing marketplace frameworks/services benchmarked against the best in the world.**

"A knowledge-based workforce, a competitive R&D tax structure, government support programs such as Technology Partnerships Canada, and well-established infrastructure in Canada: these attributes make Canada the top choice for Pratt and Whitney in considering future R&D investments in the ever-competitive world of aerospace."

**Gilles P. Ouimet, President
Pratt & Whitney Canada Inc.**



Aerospace - an Established Platform

Why Canada?



The Aerospace Edge

Summary

Aerospace is a Proven Investment Platform...

Canadian-based companies offer investors unique opportunities

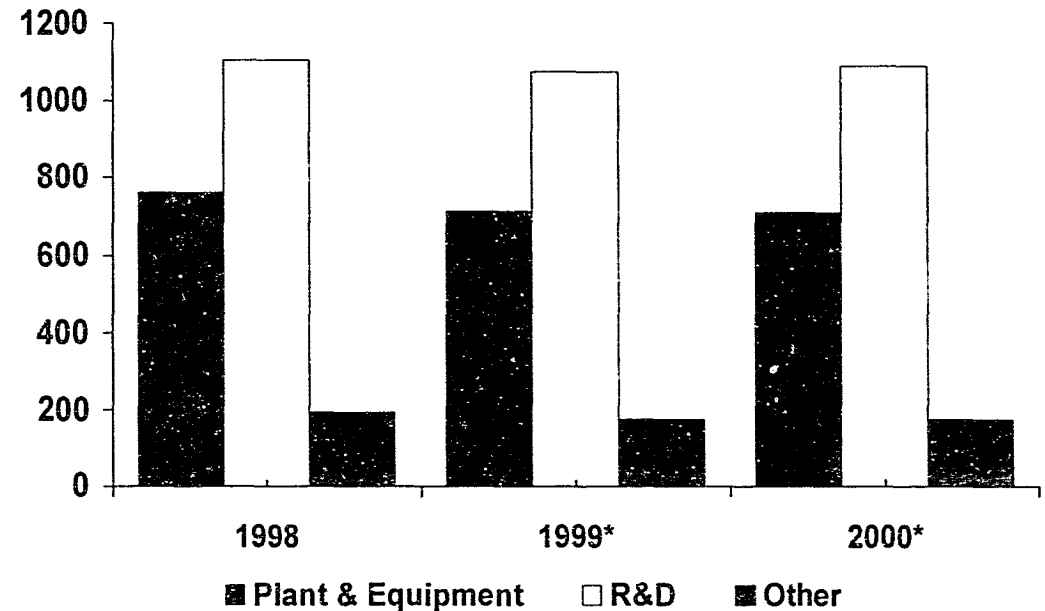
- **Team with Canadian-based multinationals, including:**
 - **Bombardier Aerospace – third largest commercial airliner manufacturer**
 - **Pratt & Whitney Canada – small gas turbine power for the world**
 - **CAE – corners the commercial flight simulator market**
 - **Bell Helicopter Canada – one of the world’s leading commercial helicopter manufacturer**

- **Access capabilities of companies that supply the OEMs, e.g.:**
 - **Avcorp – Winner of a Gold Award for entrepreneurial achievement at the Canadian Productivity Awards**
 - **Haley Industries – one of the world’s most technologically advanced foundries**
 - **NMF Canada – world leader in processing large, machined wing panels**
 - **Spar Aviation Services – one of only 11 Lockheed-approved C-130 Maintenance and Modification Centres.**
 - **Composites Atlantic – advanced composite components for commercial aircraft, space structures, rocket motor cases, etc.**

A Healthy Investment History


- Total investment in the aerospace industry reached \$2.12 billion in 1999.
- Investment in R&D peaked at \$1 billion plus (1998) — will continue in \$800 million range through 2001.

Distribution of Investment Expenditure
\$ Millions



* estimated

"Magellan Aerospace competes globally and is dedicated to creating technology, new products and jobs in its operations."

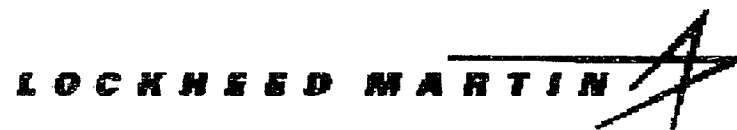
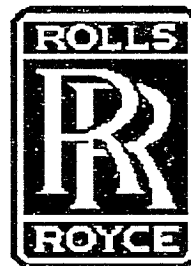
Richard R. Neill, President
Magellan Aerospace Corp. 

Source: Industry Canada. Canada's Aerospace Industry, 1999/2000 Statistical Survey Preliminary Results.

Unique Access to the U.S. Market

- **The U.S.A. consumes 50% of G-7 aerospace production with a strong domestic industry.**
- **Canada has a special relationship to access this market**
 - **For U.S. military purchases, Canada is considered part of the North American Defence Industrial Base**
 - **Special trade agreements can facilitate participation in US military projects**
 - ▶ **Defence Production Sharing Agreement**
 - ▶ **Defence Development Sharing Agreement**
- **The U.S. market accounts for the majority of Canadian aerospace and defence exports – on average \$5B annually. Boeing alone purchases in excess of \$800M from Canadian companies.**
- **60% of the Canadian aerospace and defence industry output is attributed to subsidiaries of US firms operating in Canada – a high level of cross-border integration.**

Some Investors Who Have Chosen Canada



Aerospace - an Established Platform





Why Canada?

The Aerospace Edge



Summary

Canada: The Best Investment Destination in the Industrialized World

Key Indicators				
Lowest Deficit	2	1	4	3
Lowest Inflation	2	3	1	3
Highest Growth in 99/2000	1	2	4	3
Knowledge Workers	1	2	4	3
Lowest Labour Costs	1	2	4	3
Network Infrastructure	2	1	3	4
Lowest R&D Costs	1	2	4	3
Highest Quality of Life	1	3	2	4

Sources: 1999 United Nations Human Development Report; OECD; Conference Board of Canada; Statistics Canada; Federal Reserve Bank of St. Louis; U.S. Bureau of Labor Statistics; KPMG Management Consulting; International Monetary Fund; and 1999 Global Competitiveness Report.

Canada offers:

- A balanced, healthy industry with international market access
- A competitive, highly productive workforce
- A supportive government/industry partnership
- Unique access to the NAFTA market

Canada's Aerospace Industry is:

- Diversified
- A world leader in several markets
- Out-performing the competition
- Commercial market focused / Export Oriented
- Well-positioned to compete globally

Canada Offers Much

"Aerospace is truly a global business and these wins [move of Power Management and Generating systems to Toronto, expansion of plants in Montreal and Summerside, and investment of more than \$50 million in a new headquarters, engineering and manufacturing facility] for Canada were made possible by the excellent business climate here: sound fiscal management in the public sector, attractive R&D tax incentives, and unique opportunities to partner with Governments to achieve growth.

It is clear to me that the decisions taken at the Corporate level of our global business to focus our growth here show great confidence in Canada."

David O'Brien, President,
Honeywell Canada



- Canada's economic fundamentals are excellent — government policies are geared toward competitiveness.
- Canada provides assured access to the world's richest economy, in addition to having a large and growing domestic market of its own.
- Canada provides a cost-competitive and future-oriented environment for business:
 - quality, productive workers;
 - a competitive tax system;
 - prime locations for R&D activities;
 - abundant energy at low prices; and
 - an excellent infrastructure.
- Canada is an outstanding place to live, invest and do business.



For more information:

Contact:

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Team Leader Investment
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For more information, visit Strategis, Industry Canada's award-winning Web site:

http://strategis.gc.ca/aerodef_e



For more information (continued):

R&D Tax Credit:

John Jones

Science Policy Coordinator

Scientific Research Section of Revenue Canada

Tel.: (613) 941-1130

Fax: (613) 957-3622

e-mail: john.jones2@ms.rc.gc.ca

Technology Partnerships Canada (TPC):

James Roberge

Deputy Executive Director and Director

Aerospace and Defence

Industry Canada

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