

Aerospace Industry in Prince Edward Island

November 2009

INDUSTRY HIGHLIGHTS

- Aerospace is one of the key sectors in the Provincial Government's innovation and economic development strategy.
- Aerospace operations in PEI can be classified into two sub-sectors: 1) Maintenance, repair and overhaul; and 2) manufacture aerospace components.
- The PEI government provides aerospace companies with a tax rebate incentive program to encourage economic development in the province. The program took effect in 1993 and applies to corporate, sales and property taxes.
- Holland College offers the "Aircraft Gas Turbine Engine Repair and Overhaul Technology" program at its Aerospace Technology Centre, in Slemon Park Summerside.
- Slemon Park is a 1,500 acre business park located just outside of Summerside. It has an airport with two runways and numerous hangars ranging in size from 25,000 to 300,000 square feet.
- Vector Aerospace Engine Services (formerly known as Atlantic Turbines Inc.) employs about 400 people (or nearly half of all aerospace employment) at its hangar in Slemon Park. The company began operations in 1992 with only 4 employees.
- MDS-PRAD Technologies Corp. develops and produces an erosion resistant coating for gas turbines which increases operational time by up to 12 times and has saved the US Navy \$8M annually per aircraft.

Did you know...???

...that the aerospace sector in PEI has grown by an average annual rate of 10%, in terms of sales and employment?

...there are 9 member companies comprising aerospace industry in PEI?

...there are more than 800 people employed in aerospace?

...aerospace makes up about 25% of international exports?

...less than 20 years ago, an aerospace industry did not exist in PEI?

...Vector Atlantic (formerly Atlantic Turbines Inc.) was one of the first tenants of Slemon Park (1992)?

...Marand Engineering is the smallest of the aerospace companies in PEI?

...in 2008, sales from aerospace operations surpassed the \$300M mark for the first time ever (valued \$310M)?

...the average industry salary for workers in aerospace is approximately \$41,000 per year?

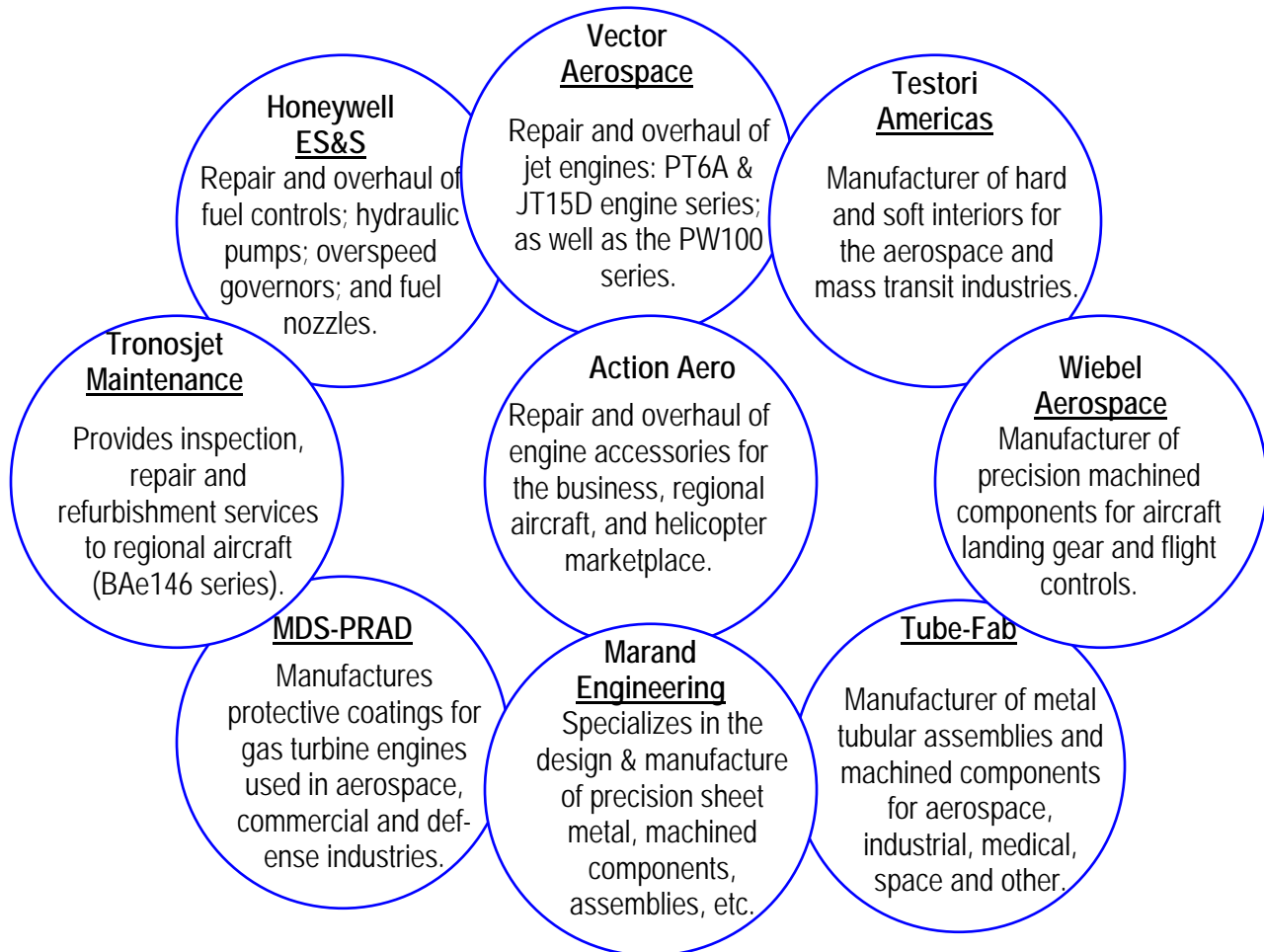
INDUSTRY CHARACTERISTICS

There are currently 9 aerospace companies operating in the Province.

Company	Emp*	General Employment Characteristics**	Business Start Up Timeline		
Action Aero	15	<i>Working conditions</i> Full-time and full-year employment opportunities		1990	
Vector Aerospace Engine Services	400		Honeywell	1991	
				1992	Vector
Honeywell Engines Systems & Services	100	<i>Education</i> High School courses: Math, Physics, & English; college diploma, post-secondary education.		1993	
Marand Engineering Limited	10		Testori	1994	
				1995	Wiebel
MDS-PRAD	50	<i>Common competencies</i> Manual dexterity; attention to detail; mathematical and problem solving; communication; hand tools; carpentry/painting; business; engineering; mechanical aptitude; work independently; follow instructions.		1996	
Testori Americas Corporation	200			1997	
Tronosjet Maintenance	20		Tube-Fab	1998	
Tube-Fab Limited	25			1999	Marand
Wiebel Aerospace	40			2000	
Total	860			2001	
				2002	
				2003	MDS-PRAD
				2004	Tronos
			2005		
			2006		
			2007		
			2008	Action Aero	
			2009		

*Notes: Emp (number of employed persons, 2009); **General employment characteristics vary according to occupation (common competencies are listed).*

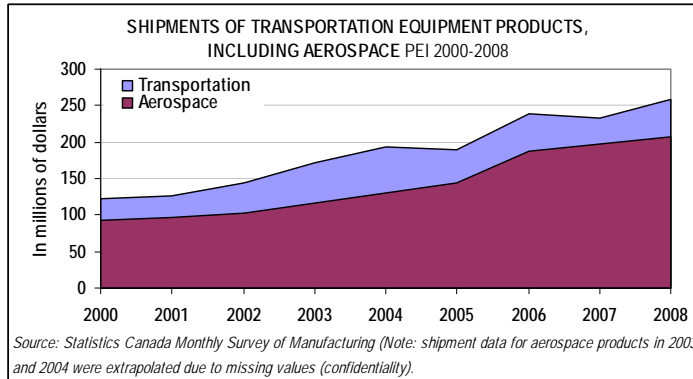
PEI Aerospace Cluster: No two companies are alike!



INDUSTRY TRENDS

Shipments of aerospace products experienced considerable growth

According to Statistics Canada, shipments of aerospace products/parts valued \$207 million in



2008, and comprised 15% of total manufactured shipments in the province that year. Since 2000, shipments of aerospace products have increased by an average annual rate of 11%. The aerospace industry has experienced consistent growth over the past two decades driven largely by new start-ups and expansions of existing companies.

Aerospace labour force predominantly male; rural dwellers

According to Census 2006, there were 690 persons employed in operations involving aerospace products/parts manufacturing in PEI. This is double the number employed at the time of the 2001 Census. Males comprised 80% (or 555) of the total labour force, which is about consistent with the previous Census. In addition, more than half of workers employed in the aerospace industry lived in rural areas. Census estimates show that of the total labour force in aerospace manufacturing, only 90 persons resided in Charlottetown and 240 in Summerside. The remainder (52%) lived in rural areas.

Industry performing relatively well in response to US recession

Overall, the aerospace industry in PEI has performed relatively well through the economic challenges south of the border. The largest operation is the engine repair and overhaul market which has benefited from increased market shares as other companies nationally and internationally become less competitive in their contract bids. Growing infrastructure investment—particularly in mass transit (i.e. buses, trains, etc.), has also benefited the industry.

INDUSTRY CHALLENGES

(The following summaries were derived from industry consultations)

Exchange rate pressures

The high value of the Canadian dollar relative to the U.S. currency has resulted in reduced profit margins for aerospace companies. Contracts are priced in American dollars so when the Canadian dollar appreciates, this results in lower Canadian dollar values when converted from US currency.

Global competition

Local aerospace companies compete against global competitors, such as companies in China and India. With respect to the international picture, rapidly changing dynamics in aerospace requires an integrated (value-added) approach to business operations in order to stay competitive. This is a challenge for the relatively smaller companies based in PEI.

Supply of skilled labour

Human resource challenges pertaining to aerospace is global in scope, not just a local issue. Growth of the aerospace industry in the province is limited by the available supply of specialized labour. In addition, technological advancements require specialized workers which is challenging for local companies. There is a slow flow of skilled labour from the college stream (in the area of engine repair and overhaul, for example) as graduates are subject to supervised training for up to 18 months before being considered "shop ready". There is a need to fill retiring positions as well.

Industry exposure and career marketability; Changing 'culture'

Aerospace is a non-traditional industry in the province and is barely two decades in the making. There is a need to educate the public about the role aerospace plays in the local economy and show that the industry is growing, sustainable and opportune. The industry requires competency-based skills, which is key to growth. There is a need to change the 'culture' of thinking as it relates to the industry. That is, the industry is aiming to change perspectives-that they are offering meaningful, long-term careers, and not just jobs.

INDUSTRY INITIATIVES

(The following summaries were derived from industry consultations)

Strengthening partnerships with Atlantic counterparts: "Future Platforms Initiative" (FPI)

The FPI is a national initiative aimed to strengthen the competitive status of Canadian aerospace companies in the global marketplace. At the more local level, the Atlantic Alliance, a regional organization chaired by aerospace representatives from each of the Atlantic provinces, has a strong presence in the FPI. Aerospace companies in Atlantic Canada will form cluster groups-working together as a unified unit (each offering specialized skills) to meet the growing competitive pressures both nationally and internationally.

Establishing new college curriculum to produce "shop-ready" workers

An aerospace company is working with Holland College to develop a 3-year engine repair and overhaul curriculum that will be taught by various professionals in the field. The aim is to redirect human and financial resources toward producing graduates that are "shop ready" upon graduation. The new curriculum would be consistently updated as new technologies surface since it would be taught by program specialists in the field. In addition, given the commitment required of the new curriculum, this program will aid in changing the culture of aerospace toward a career based perspective.

Regional Training Evaluation

The PEI Aerospace Human Resource Sector Council is looking to evaluate the HR needs among aerospace companies in Atlantic Canada and aims to produce a long-term strategic plan with Government and post-secondary institutions to meet the specific skill needs of employers.

Specialist High Skilled Major Program

An Ontario-based model, the program will provide a deeper level of aerospace training at the high school level to serve as a platform for further post-secondary study or in some cases, direct entry into the industry. This is a three year program with a community based education component to it which will offer co-op/summer employment opportunities. Graduates will receive "gold seal" recognition in association with their diploma. The program is expected to begin in September 2010.

OCCUPATIONAL HIGHLIGHTS

P.E.I. Job Futures: Occupations related to aerospace

<p><u>Aircraft Mechanics/Inspectors (NOC 7315)</u> <i>Aircraft mechanics maintain, repair and overhaul aircraft structures, mechanical and hydraulic systems; inspectors inspect aircraft and aircraft systems following manufacture, modification, maintenance, repair/overhaul.</i></p>		<p><i>Employment Outlook for this occupation to 2011 is good</i></p> <hr/> <p><i>Average annual employment income for this occupation: \$44,400</i></p>										
<table border="1"> <thead> <tr> <th rowspan="2">Employed (2006 Census)</th> <th colspan="3">Age Composition (%)</th> </tr> <tr> <th>15-24</th> <th>25-54</th> <th>55+</th> </tr> </thead> <tbody> <tr> <td>175</td> <td>23</td> <td>69</td> <td>9</td> </tr> </tbody> </table>	Employed (2006 Census)		Age Composition (%)			15-24	25-54	55+	175	23	69	9
Employed (2006 Census)		Age Composition (%)										
	15-24	25-54	55+									
175	23	69	9									

P.E.I. Job Futures: Occupations deemed employable in aerospace

<p><u>Mechanical Engineers (NOC 2132)</u> <i>Mechanical engineers research, design and develop machinery and systems for heating, ventilating and air conditioning, power generation, transportation, processing and manufacturing.</i></p>	<p><i>Employment Outlook: Fair Number employed: 55</i></p> <p><i>Employment Outlook: Good Number employed: 660</i></p> <p><i>Employment Outlook: Good Number employed: 190</i></p> <p><i>Employment Outlook: Good Number employed: 300</i></p> <p><i>Employment Outlook: Good Number employed: 125</i></p>
<p><u>Mechanics (Auto, Trucks, Bus) (NOC 7321)</u> <i>Motor vehicle mechanics and technicians inspect, diagnose, repair and service mechanical, electrical and electronic systems and components of cars, buses and trucks.</i></p>	
<p><u>Heavy-duty Equipment Mechanics (NOC 7312)</u> <i>Heavy-duty equipment mechanics repair, troubleshoot, adjust, overhaul and maintain mobile heavy-duty equipment used in construction, forestry, mining, material handling, landscaping, land clearing, farming and similar activities.</i></p>	
<p><u>Welders/Machine Operators (NOC 7265)</u> <i>Welders operate welding equipment to weld ferrous and non-ferrous metals. This unit group also includes machine operators who operate previously set up production welding, brazing and soldering equipment.</i></p>	
<p><u>Machinists/Machining & Tooling Inspectors (NOC 7231)</u> <i>Machinists set up and operate a variety of machine tools to cut or grind metal and similar materials into parts or products with precise dimensions. Machining and tooling inspectors inspect machined parts and tooling in order to maintain quality control standards.</i></p>	

INDUSTRY PARTNERS AND COMPANIES

PEI Aerospace Human Resource Sector Council

51 University Avenue - Main Floor
PO Box 1423
Charlottetown, Prince Edward Island
C1A 7N1
Phone: (902) 892-3177
Facsimile: (902) 892-0171
Email: info@aerospacepei.com
Website: www.aerospacepei.com

AEROSPACE COMPANIES IN PEI

Vector - Atlantic

800 Aerospace Boulevard; Slemon Park, Prince Edward Island; Canada C0B 2A0
Tel: (902) 436-1333; Fax: (902) 436-0777
Website: www.vectoraerospace.com

MDS-PRAD Technologies Corporation

60 Aerospace Boulevard; PO Box 312; Slemon Park, Prince Edward Island; Canada C0B 2A0
Tel: (902) 888-3900; Fax: (902) 888-3901
Website: www.mdsprad.ca

Honeywell Engines, Systems & Services

800 Aerospace Boulevard, Hangar 8; Slemon Park, Prince Edward Island; Canada C0B 2A0
Tel: (902) 436-1760; Fax: (902) 436-0570
Website: www.honeywell.com

Wiebel Aerospace

175 Greenwood Drive; PO Box 70; Summerside, Prince Edward Island; Canada C1N 5X6
Tel: (902) 888-1615; Fax: (902) 888-2008
Website: www.wiebel.ca

Action Aero Inc.

34 Belmont Street; Charlottetown, Prince Edward Island; Canada C1A 4H2
Tel: (902) 370-3311; Fax: (902) 370-3313
Website: www.actionaero.com

Marand Engineering Ltd.

105 Watts Avenue; Charlottetown, Prince Edward Island; Canada C1E 2B7
Tel: (902) 368-8954; Fax: (902) 368-7041
Website: www.marandeng.com

Testori Americas Corporation

50 Aerospace Boulevard; PO Box 40; Slemon Park, Prince Edward Island; Canada C1N 4P6
Tel: (902) 888-3200; Fax: (902) 436-4456
Website: www.testoriamericas.com

Tronosjet Maintenance Inc.

P.O Box 7; Slemon Park, PE; C0B 2A0
Tel: 902.436.5318; Fax: 902.436.5319
Website: www.tronosjet.com

Tube-Fab Ltd.

36 Fourth Street; Charlottetown, Prince Edward Island; Canada C1E 2B3
Tel: (902) 566-3229; Fax: (902) 629-1404
Website: www.tube-fab.com

For more information on relating to this report, please contact: Jamie Dooks, Labour Market Economist, Service Canada Regional Office, 85 Fitzroy Street P.O. Box 8000, Charlottetown, PE C1A 8K1; Tel 902.566.7750, Fax 902.368.0925; jamie.dooks@servicecanada.gc.ca