# Manitoba Aerospace Directory



## MANITOBA, CANADA

#### A World Centre for Cold Weather Testing

In the HEART OF CANADA lies the beautiful province of Manitoba. Stretching from the northern United States border to the shores of Hudson Bay at the Arctic's edge, Manitoba is ideal for cold weather and winter testing. The aerospace and automotive industries as well as equipment manufacturers and suppliers can be assured their equipment will be tested in cold weather, snow and ice.

We are known as "Friendly Manitoba" so call us and we'll help you and your company get started in the cold.





General Electric Research & Development Test Centre located at the James Richardson International Airport in Winnipeg, Manitoba. The facility is operated by StandardAero.





The Global Aerospace Centre for loing and Environmental Research (GLACIER) facility and the not-forprofit Environmental Test, Research and Education Center (EnviroTREC) in Thompson Manitoba. A state-of-theart cold weather testing and research facility.

#### CONTACT:

Robert Manson
Entrepreneurship, Training and Trade
Government of Manitoba
T: 204-945-2475
E: robert.manson@gov.mb.ca
W: www.investinmanitoba.ca



"Come chill with us!"

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# MANITOBA AEROSPACE

#### MESSAGE FROM THE MANITOBA AEROSPACE ASSOCIATION EXECUTIVE DIRECTOR

The Manitoba Aerospace Association is pleased to partner with the Federal and Provincial Governments to provide this quick reference guide to the Manitoba aerospace industry.

Canada is a global leader in aerospace and Manitoba is home to Canada's third largest aerospace industry. Our highly competitive aerospace sector produces world-class products for customers on six continents.

From modest roots in small bush plane repair in the 1930's, the Manitoba aerospace industry has grown to include sophisticated design, manufacturing, servicing, testing, certification and research and development capabilities.

We are home to Canada's largest aerospace composite manufacturing centre, as well as one of the world's largest gas turbine engine repair and overhaul companies. The internationally acclaimed Composites Innovation Centre and two of the world's most advanced aircraft engine testing and certification centres developed by Rolls Royce, Pratt & Whitney and GE Aviation are also located here.

Along with a number of global aerospace leaders, Manitoba has a network of SMEs that compete and supply into the world markets. This growing cluster is strengthened through the Competitive Edge Supplier Development initiative, an internationally recognized learner – to- world class supplier and supply chain development program.

A supportive business environment, award winning university, college and high-school collaborations and a Network-of-Excellence led by the Manitoba Aerospace Association support a culture of innovation and the development of a world-class workforce.

In this guide we are also commemorating

Magellan Aerospace's 50th Anniversary celebration of the Black Brant Rocket, with two articles that expand on the theme of 'Manitoba Companies in Space'.

"Magellan Aerospace in Space - A Canadian Success Story", provides an overview of the extent of Magellan Winnipeg's activities that is unknown to most outside this unique sphere of experts. "The Black Brant Rocket - 50 Years of Operational Excellence" portrays the historical origins and evolution of this enduring product family.

More and more, global customers and suppliers are looking to Manitoba aerospace companies for value-based solutions. Within this guide, or in its online version at www.manitoba-aerospace. mb.ca, you will find the innovative solution providers that will help you compete in the global aerospace market.

Ken Webb

Executive Director



### MESSAGE DU DIRECTEUR EXÉCUTIF MANITOBA AEROSPACE ASSOCIATION

La Manitoba Aerospace Association est heureuse de s'associer aux gouvernements fédéral et provincial afin de fournir ce guide de référence à l'intention de l'industrie aérospatiale du Manitoba.

Le Canada est le chef de file en aéronautique, et le Manitoba abrite la troisième plus grande industrie aérospatiale du pays. Notre secteur aérospatial fortement concurrentiel génère des produits de calibre international pour les clients des six continents.

Depuis ses débuts modestes dans la réparation de petits avions de brousse dans les années 1930, l'industrie aérospatiale manitobaine a évolué et englobe maintenant la conception sophistiquée, la fabrication, l'entretien, la mise à l'essai, la certification, de même que la recherche et le développement.

Nous possédons le plus grand centre de fabrication de matériaux composites au Canada, ainsi que l'une des plus grandes entreprises mondiales de révision et d'entretien de turbines à gaz. Le Composites Innovation Center d'envergure internationale et deux des centres de mise à l'essai et de certification de moteurs d'avion les plus avancés au monde, mis sur pied par Rolls Royce, Pratt & Whitney et GE Aviation, se situent également ici.

En plus d'un certain nombre de chefs de file mondiaux en aérospatiale, le Manitoba compte un réseau de petites et moyennes entreprises qui font concurrence sur internationaux et marchés approvisionnent. Ce réseau grandissant est renforcé par l'initiative Competitive Supplier Development, programme reconnu internationalement de développement des chaînes d'approvisionnement et des marchés de fournisseurs novices et mondiaux.

Un environnement d'affaires favorable, une université primée, des collaborations avec les universités, collèges et écoles secondaires et un réseau d'excellence dirigé par la Manitoba Aerospace Association soutiennent une culture d'innovation et la formation d'une main-d'œuvre de première classe.

Dans ce quide, nous célébrons le 50e anniversaire de la fusée Black Brant Magellan Aerospace avec deux articles qui portent sur les entreprises manitobaines qui œuvent dans le secteur de l'aérospatiale. L'article « Magellan Aerospace in Space – A Canadian Success Story » offre un aperçu de l'ampleur des activités de Magellan Winnipeg qui est généralement inconnue à l'extérieur de cette sphère unique d'experts. Par ailleurs, l'article « The Black Brant Rocket - 50 Years of Operational Excellence » dresse le portrait des origines historiques et de l'évolution de cette famille de produits durable.

De plus en plus de clients et de fournisseurs du monde entier se tournent vers les entreprises aérospatiales manitobaines pour trouver des solutions qui reposent sur des valeurs. Dans ce guide ou dans sa version en ligne à www.manitobaaerospace.mb.ca, vous trouverez des fournisseurs de solutions novatrices qui vous aideront à faire concurrence sur le marché international de l'aérospatiale.

Ken Webb

Directeur exécutif

#### MAGELLAN AEROSPACE IN SPACE – A CANADIAN SUCCESS STORY

Magellan Aerospace is a Canadian company headquartered in Mississauga, Ontario, Canada, and has operating divisions located in Canada, the United States, the United Kingdom, India, and Poland. Magellan employs approximately 3,200 people throughout all of its divisions.

The company manufactures complex aeroengine components and advanced aerostructures fabrications, as well as proprietary products; including small satellite buses, propulsion products, and the Wire Strike Protection System™ (WSPS™) for civil and military helicopters.

Magellan's space business operates primarily from its largest division in Winnipeg, MB, which also includes satellite offices in Rockwood, Manitoba and in the Canadian Space Agency David Florida Laboratory in Ottawa, Ontario. The Winnipeg division employs approximately 700 people at the three facilities.

#### **ORIGINS**

Magellan's space heritage dates back to the early 1960's and the development of the Black Brant family of sub-orbital rocket vehicles. For the past 40 years, Magellan has worked closely with the Canadian scientific community to deliver more than 130 space missions. These missions encompassed sounding rocket flights, space shuttle and International Space Station (ISS) experiments and small satellites. Magellan's space activities are concentrated in three areas: sub-orbital rockets, space payloads and small satellites.

#### **BLACK BRANT SOUNDING ROCKET FAMILY**

Magellan has built over 1000 Black Brant rockets and the product remains in production today. The Black Brant has been launched from over 20 ranges worldwide with an overall reliability of 98%. Magellan is responsible for the design of the overall system including manufacture of the BB5 and Nihka solid propellant rocket motors, interstage hardware manufacture, payload accommodation, guidance and control package integration, recovery system hardware and, in some cases, mission analysis and launch operations.

#### **PAYLOADS**

Magellan has also been involved with the development of the many of the science payloads that have been used on Black Brant missions. One rocket payload that was built by Magellan was for the GEODESIC mission that was launched successfully in 2000. This CSA-NASA collaboration contained instruments contributed by Canadian and US scientists to study plasma in the ionosphere. This experience led directly Magellan developing numerous science payloads for a number of space shuttle and ISS missions.

#### **SATELLITES**

The core space business at Magellan today is the development of small satellite buses. Magellan, a long time advocate of a Canadian small satellite program, has led or participated in numerous small satellite bus and mission studies for the Canadian Space Agency (CSA) and the Department of National Defence (DND) dating back to the early 1 9 9 0 's.

Magellan is now established as Canada's sole supplier of small satellite buses.

#### **SCISAT-1**

SCISAT-1 was the first Canadian small satellite mission since the 1970s. Magellan was the spacecraft prime contractor for the SCISAT-1mission. Magellan developed the spacecraft bus and was responsible for instrument integration and spacecraft assembly, integration and test (AIT). Magellan procured the Ground Control and Data Handling Systems now used in the Mission Operations Centre at CSA and also developed the real time spacecraft operations and training simulator. Magellan worked closely with Orbital Science Corporation to integrate the spacecraft onto the Pegasus XL launcher and with CSA satellite operations to perform the launch and early operations, on-orbit commissioning the spacecraft. The 150 kg SCISAT-1 spacecraft was successfully launched to the desired 650 km orbit on a Pegasus-XL vehicle on August 12, 2003. The bus was designed to meet a two year mission life requirement. As of January 2013, the SCISAT-1 spacecraft continues to perform well within specification and is delivering high quality science data relating to ozone measurement.

#### **CASSIOPE**

The CASSIOPE mission was the first to use the MAC-200 bus. Magellan developed the bus and performed the payload integration under contract to MacDonald, Dettwiler and Associates (MDA). In parallel, Magellan was contracted by the CSA to develop the spacecraft simulator and ground infrastructure that will be used to support multiple missions. CASSIOPE is scheduled to be launched in 2013. http://www.asc-csa.gc.ca/eng/satellites/cassiope.asp

#### **RADARSAT**

Magellan's most recent satellite project is the RADARSAT Constellation Mission (RCM) satellite bus. RCM is a constellation of three identical satellites that will provide high-resolution radar images of the earth. The RCM design re-uses many of the existing MAC-200 bus subsystems. Magellan has completed the design phase of RCM. The three RCM spacecraft are scheduled for launch in the 2018 timeframe.

Magellan Aerospace's Winnipeg division was a pioneer in Canada's space industry. The Black Brant was one of Canada's first space contributions to the world, and a proud part of Magellan's past that has developed into our burgeoning space business today. Starting with the first Black Brant 50 years ago, Magellan has years of experience providing customers with solutions for space missions that include sounding rockets and payloads, space shuttle payloads, International Space Station payloads, and spacecraft buses and integration services.

#### **WHAT IS A SATELLITE BUS?**

The bus is the "chassis" and support infrastructure of a spacecraft. It usually provides locations for the payload (typically space experiments or instruments) and guidance, control and mission-specific systems.

http://en.wikipedia.org/wiki/Satellite\_bus

In 2004, Magellan was awarded a CSA contract to design the MAC-200 multimission smallsat bus. The MAC-200 was designed to provide a standardized platform capable of supporting requirements from a wide range of anticipated Canadian satellite missions. Magellan has since participated in numerous studies for a wide range of science and operational missions.

# THE BLACK BRANT ROCKET - 50 YEARS OF OPERATIONAL EXCELLENCE

Black Brant is the name of a goose indigenous to Western Canada. This was the name that was given 50 years ago to a new, Canadian-built sounding rocket that would become a legacy product for Magellan's Winnipeg division, formerly Bristol Aerospace.

On June 15, 1962, a Black Brant 3 (BB3) rocket launched from Wallops Island, Virginia soared into the upper atmosphere. This was the first flight of a Bristol Aerospace-built rocket and is considered the first milestone of what was to become a very successful rockets and space business at the company.

#### WHAT IS A SOUNDING ROCKET?

Sounding rockets, sometimes called research rockets, take their name from the nautical term "to sound", which means to take measurements. Unlike orbital rockets, sounding rockets use their energy to achieve mission requirements and then return to earth. Up to six minutes of weightlessness can be achieved from sounding rocket trajectories.

The origins of the Magellan space business date back to the 1950s when the Canadian Armament Research and Development Establishment (CARDE) in Valcartier, Quebec (now called the Defence Research and Development Canada or DRDC) was developing a solid propellant called CARDEPLEX. Bristol Aero Industries (the company name then) manufactured the motor cases to test the CARDEPLEX. The flight of the CARDE rocket, later designated as BB1, took place from Churchill, Manitoba in 1959 and proved the flight performance of the motor and the propellant. CARDE subsequently transformed the BB1 into BB2 using the same motor; but with better fins giving improved performance. The first flight of BB2 rocket took place in 1960. Motor cases for both the BB1 and BB2 were built by Bristol.

In 1960, the Government of Canada awarded a contract to Bristol to develop three sounding rockets - BB3, BB4 and BB5 - with CARDE initially having the overall engineering control. In 1961, responsibility for the supply of solid propellant powered rockets Canadian the Space **Program** and the supporting technology was transferred to Bristol, CARDE the National Research Council (NRC) provided invaluable assistance for these development activities. CARDE filled all the rocket motors with propellant until Bristol's Rockwood propellant plant came into operation in 1963.

The Rockwood propellant plant was built by a company named Bristol Aerojet; a joint venture between Bristol Aero Industries and Aerojet General Corporation of California. This venture produced the BB5 motor which utilized an Aerojet propellant named AEROPLEX. Aerojet withdrew from the joint venture in 1965 which led to renaming the company Bristol Aerospace.

The upper atmospheric research scientists at NRC and at the Canadian Universities were the major customers in the early days of the Black Brant program. Later, NASA and the US Department of Defense (DoD) became customers, and production of Black Brant rocket motors and hardware for NASA continues to this day.

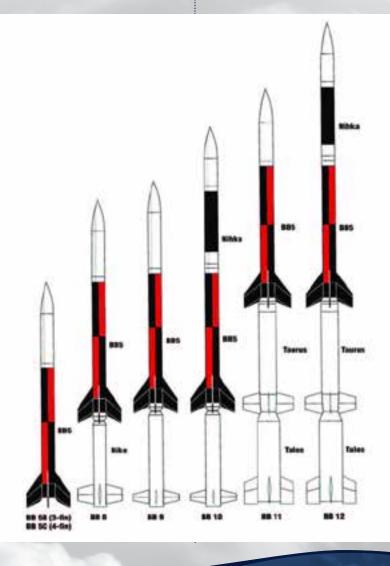
A family of Black Brant rockets with various modifications have been

THE BLACK BRANT ROCKET 7

designed and developed during the past 50 years. The BB12, which included the NIHKA motor as the fourth stage took place in 1988 and was the last complete Black Brant rocket developed to meet specific requirements for NASA. Product improvements to the Black Brant rocket are an ongoing activity.

Black Brant rockets have carried payloads of 70 to 850 kgs to an altitude

of 150 to 1,500 kms (high above the 370 km orbit of the International Space Station). In addition to diagnostic and scientific payloads, Magellan has developed many rocket accessories for specific mission requirements. These include: The Despin System, Deployable Nose Fairings, Interstage Separation Systems, Payload Recovery Systems, Water Recovery Systems, and Thrust



Termination System and Payload Tether systems. Knowledge and experience gained from the Black Brant program have been extended to many other Magellan products including the CRV7 Rocket System, CL89 and CL289 surveillance drones, the Excalibur target system rocket motors, satellites and space shuttle payloads.

Approximately 1,160 Black Brant rockets have been flown to-date; primarily from launch sites in Churchill, Manitoba; Wallops Island, Virginia; White Sands, New Mexico and Poker Flats, Alaska. However, Black Brant rockets have also been flown from various other established ranges and temporary sites in remote locations such as Vandenberg, California; Kauai, Hawaii; Cape Parry and Resolute Bay, NWT; Australia, Brazil, France, Greenland, Kenya, Norway, Peru, Sweden Spain. In fact, the Black Brant rocket has been fired from every continent except Antarctica, with a success rate of more than 98 per cent. Many of these launches were conducted or supported by Bristol personnel and equipment.

Magellan was the first non-US recipient of the NASA Goddard's Contractor of Excellence Award and the continued use of the Black Brant rockets by NASA is a testimony to the reliability and cost effectiveness of this 50 year legacy product.

To celebrate the 50th anniversary of the first launch of a Bristol-built Black Brant rocket, a celebration was held at the Magellan Aerospace plant in Winnipeg on July 5, 2012.

At the event, Magellan Aerospace's Vice President and General Manager, Don Boitson, made a special presentation to commemorate the anniversary by donating a full scale Black Brant V rocket to the Manitoba Museum. The rocket will be an exhibit in their new Science Gallery.

"We are delighted to entrust this Black Brant V rocket to the Manitoba Museum. We know that the Museum is the perfect place to display the Black Brant rocket for the enjoyment of Manitobans today and for future generations. The Black Brant is an important piece of Manitoba's heritage and showcases one of Manitoba's significant contributions to the field of rocketry and to space science," he said.

The Black Brant rocket is science at its best in Manitoba, and a significant part of our province's science and engineering history.



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Global Aerospace Centre for Icing and Environmental Research - Thompson, Manitoba

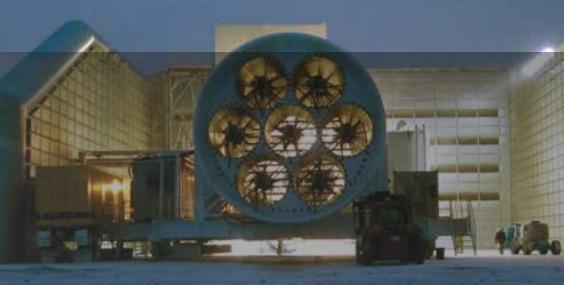
Glacier is a joint venture between Rolls-Royce Canada and Pratt & Whitney Canada.

Project partners include MDS Aero Support, the National Research Council, EnviroTREC,
Western Economic Diversification, and the Province of Manitoba.

For all Glacier Facility and testing enquiries please contact sales@mdsaerotest.com or visit www.aerotest.com

# GE Aviation Engine Testing, Research & Development Centre

Operated by StandardAero













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	COMPANIES	Acetek Composites, Inc.	Acklands Grainger	Acsion Industries	Advanced Composite Structures	Aero Recip (Canada) Ltd.	Aeroplus (STM) STM Services Inc.	Aerotech Herman Nelson International Inc.	Allied Wings	Argus Industries Ltd.	Big Deal Custom Cases	Blayd Corporation	Boeing Canada Operations Ltd.	Cadorath Aerospace	Cadorath Coating	Cadorath Distribution	Canada Wings Aviation Training Centre	Canadian Propeller	Carlson Engineered Composites Inc.	Castle Metals	Composites Innovation Centre	Cormer Aerospace	Custom Steel Manufacturing Ltd.	Deloitte	Dynamic Machine Corp.	Economic Development Winnipeg	EMTEQ Canada (formerly ACS NAI)	Enduron Custom Inc.	Environmental Testing Research & Educational Centre (EnviroTREC)	FastAir Executive Aviation Services	Flightcraft Maintenance Services	GE Capital	Global Advantage Manufacturers	
Aerostructures																																		
Coatings & Heat Treating																					П													
Components & System Integration																																		
Composite Fabrication	RING																																	
Precision Machining	UFACTURING																																	
Rubber Seals & Gaskets	MANG																																	
Software and Electronics																																		
Spacecraft & Payloads																																		
Tooling, Equipment, Materials																																		
Airframe																																		
Engine & Accessories	MR&0																																	
Propellers & Accessories																																		
Business Development																																		
Engineering, Design, Testing & Certification																																		
Financial and Business Services																																		
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R&D	SERV																																	
Trade Promotion																																		
Training & HR Support																																	H	
Airports and Aviation Services																																		

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Grey Owl Aviation Consultants Inc.	Harris Consulting	HindTech	iders incorporated	Industrial Technology Centre	Investors Group Financial Services Inc.	Keewatin Air Limited	Legacy Bowes Group	Magellan Aerospace Winnipeg	Manitoba Entrepreneurship, Training and Trade (METT)	· Industry Consulting	· Industry Workforce Development	Manitoba Aerospace Association Inc. (MAA)	Manitoba Aerospace Human Resources Council (MAHRC)	Maple Leaf Aviation Limited	MDS Aero	MicroPilot	Perimeter Aviation	Red River College	Southport	StandardAero	Standard Machine Works	Standard Manufacturers Services Ltd.	TDS Law	Tarry & Associates Ltd.	Thompson Unlimited	Trade Commissioner Service — Foreign Affairs & International Trade Canada	University of Manitoba	West-Can Inspection Limited	West Canitest R & D Inc. (WestCaRD)	Western Economic Diversification Canada (WD)	Winnipeg Airports Authority, Inc.	COMPANIES	
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CENTRE (ENVIROTREC)	
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FASTAIR EXECUTIVE AVIATION SERVICES	MANITOBA DEPARTMENT OF ENTREPRENEURSHIP, TRAINING AND TRADE (ETT) -
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K	(WD)
KEEWATIN AIR LIMITED	



Facilities: 20,000 sq. ft.

Employees: 15

Established: 2001

#### **Quality Standards/Certifications:**

CAR573 certified (AMO#2001 – 77) – Structures and Components Approved Manufacture and Certification Organization (AWM 561) 2004 RDC# C-RA03-059 (E-Beam cured repair for Airbus structure) ISO / AS compliant 9001 (certification pending) Principal Products and Services:

#### **ACETEK COMPOSITES, INC.**

43 Muir Rd.

Winnipeg, Manitoba, Canada R2X 2X7

Tel:204-885-8030 Fax:204-957-5396

E-mail: info@acetek.ca Website: www.acetek.ca/

#### **CONTACTS/TITLE:**

Ray Cook, Operations Manager

- Radom repairs and testing services
- Repairing/refurbishing
- rotor blade, flight control surfaces
- cargo & cabin panels ceiling, sidewall, floor numerous composite parts, including cargo pods galleys and washrooms Clean-room for part lay-up; large curing ovens 3-axis CNC core milling CAD-CAE-CAM technologies Mobile inspection and repair services to meet on-aircraft repair needs EB curing and repair technology Full painting services Aircraft Type:
  - Airbus A319, 320, 321, 330, 340
  - Boeing 737, 757, 767
  - Regional Jets, General Aviation Aircraft Special Equipment:
- Hot-bonders (for complex composite repair geometries), Cure ovens and presses; autoclave
- 10 MeV, 4 kW Electron Beam Accelerator curing cell Multiworkstations equipped with vacuum and compressed air systems Industrial clean room for lay-up; environmentally controlled (temperature and humidity) CNC milling machine with program writing capabilities Measurement equipment and tooling devices calibrated to international standards

#### **Major Clients:**

North American Airlines, Third party MROs, Airline Leasing companies, General Aviation



INDUSTRIAL • SAFETY • FASTENERS

#### **Principal Product & Services:**

Canada's largest distributor of industrial, safety and fastener products, (Hand Tools, Power Tools, Metalworking, Fasteners, Electrical, Facility Maintenance, Material Handling, Safety Equipment). More than 120,000 unique items in stock, 179 branches and 7 distribution centres from coast to coast to coast.

**Quality Standards/Certifications:** 

Acklands-Grainger is working with suppliers every day to offer you new and reformulated products that can

help you reduce your environmental footprint. Attributes include: extended life product, recycled content, reduced energy consumption, reduced resource use, reduced water consumption, reusable & refillable and ISO compliant.

Established: 1905

#### **ACKLANDS GRAINGER**

19 Scurfield Blvd.

Winnipeg, Manitoba Canada R3Y 1G4

Tel: 204-954-8910 Fax: 204-947-1584 Email: kuchinskig@agi.ca

Website: www.acklandsgrainger.com

#### **CONTACT/TITLE:**

Quentin Kuchinski,

National Account Manager

16 ACKLANDS GRAINGER



Experts in the Science of Safety

#### **Principal Product & Services:**

- Acsion serves the ever-increasing electron beam (E-beam) processing needs in North America. E-beam curing produces high-performance composite aerospace parts. It makes it possible to build composite structures without the need for slow, high-temperature, high-pressure curing cycles with associated expensive fabrication tools.
- E-beam cure opportunities in the aerospace market consist of both manufacturing and repair of composite and metal bonded structures. Acetek Composites, Acsion's manufacturing company, provides composite repair services and new composite products to our aerospace customers, using many of the latest technologies, including E-beam curing. Our key markets include:
  - New & replacement composite parts and assemblies
  - Composite part repairs
  - Protective coatings for composite parts
  - Low-cost prototype tooling
  - Metal-to-metal bonded parts and assemblies
  - Metal-to-composite bonded parts and assemblies

 Acsion's research team, in collaboration with Acetek's engineering staff, work with your design and incorporate E-beam curing into your manufacturing line, so that your company can realize the technical and cost benefits of E-beam curing.

Employees: 30

Established: 1998

#### **ACSION INDUSTRIES**

P.O. Box 429

Bldg. 402, Ara Mooradian Way Pinawa, Manitoba, Canada R0E 1L0

Tel: 204-753-2255
Fax: 204-753-8466
Email: acsion@acsion.com
Website: www.acsion.com/

#### **CONTACT/TITLE:**

Chris Saunders, President

ACSION INDUSTRIES 17



Facilities: 20,000 sq. ft.

**Employees: 15** 

#### **Quality Standards/Certifications:**

- AMO#39 89
- EASA.145.7127 this needs to be deleted
- Working Towards a Design Approval Organization

#### **Principal Products and Services:**

 Specializing in repair and overhaul of composite components such as: helicopter rotor blades, fairings/ cowlings, passenger/cargo floor

# ADVANCED COMPOSITE STRUCTURES

43 Muir Road

Winnipeg, Manitoba, Canada R2X 2X7

Tel: 204-982-6565 Fax: 204-982-6555

Email: acs@acs-composites.com/ Website: www.acs-composites.com/

#### **CONTACT/TITLE:**

James Anning, President

**Bruce Anning**, Director of Maintenance

Slobodan Oravec, General Manager

Glen Frye, Production

Brenda Schmidt, Customer Service

- panels, radomes, propeller spinners and flight controls
- Manufacturing composite repair equipment and tooling
- Composite component manufacturing
- In-house composite repair design capabilities
- Expanded repair capabilities for composite components
- Hot bonding repair capabilities up to 350F

#### **Aircraft Type:**

 Eurocopter, Bell, MD Helicopters, Schweizer, Sikorsky, Fokker, Cessna, Pilatus, Airbus, Boeing, Hamilton-Standard, De Havilland

#### **Special Equipment:**

- Cleanroom, positive pressure
- Various curing/bonding ovens up to 9'H x 14'W x 30'L
- · Temperature control units
- Positive and negative pressure tooling

#### **Major Clients:**

- StandardAero, Canadian Forces, Canadian Helicopters, Air Canada, Dept. of Homeland Security, U.S. State Agencies
- Large and small fleet operators

Established: 1988



Facilities: 30,000 sq. ft.

Employees: 30

#### **Quality Standards/Certifications:**

 Transport Canada approved overhaul facility (Approval #45-89)

#### **Principal Products and Services:**

 Repair and overhaul of Pratt & Whitney R985 and R1340 radial engines, and all models of Continental and Lycoming engines, cylinders and related accessories.

#### **AERO RECIP (CANADA) LTD.**

540 Marjorie Street

Winnipeg, Manitoba, Canada R3H 0S9

Tel: 204-788-4765
Fax: 204-786-2775
Toll Free: 1-800-561-5544
Email: info@aerorecip.com

Website: www.gregorashaviation.com

#### **CONTACT/TITLE:**

Tracey Gregorash, General Manager

#### **Special Equipment:**

- Specialized tooling for the overhaul of Pratt & Whitney, Lycoming and Continental engines.
- Accessory shop equipped to overhaul and test carburetors, fuel injectors, magnetos, harnesses, fuel pumps and turbo systems.
- NDT equipment (Magnetic Particle & Fluorescent Penetrant).
- Dyno Test Cell.
- Oil cooler overhaul and test facilitites.

Established: 1988

# AEROPLUS (STM) STM SERVICES INC.

#### **Principal Products and Services:**

- Provision of executive management services to aerospace and aviation organizations
- Provision of aviation safety consulting/training.
- Facilitation and management of aerospace research & development projects

#### **Major Clients:**

- West Canitest R & D Inc. (WestCaRD)
- Manitoba Aerospace Human Resources Council (MAHRC)
- Aerospace and aviation companies

- Aviation-related investigative associations and companies
- · Government agencies

Established: 2011

# AEROPLUS (STM) STM SERVICES INC.

Tel: 204-471-9979
Fax: 204-489-7024
Email: vicgerden@mts.net

#### **CONTACTS/TITLE:**

Vic Gerden, President



Facilities: 24,000 sq. ft.

#### **Quality Standards/Certifications:**

ISO 9001

#### **Principal Products and Services:**

 Specializes in sales, parts and service of aircraft ground support equipment such as: Aircraft maintenance, Indirect Fired "completely portable" heating systems for "extreme weather" conditions and Flameless Portable Heating systems for high risk fire situations.

#### **Major Clients:**

- NATO
- Major airline companies
- · Governments of Canada and U.S.A.
- FedEX

Established: 1973



#### AEROTECH HERMAN NELSON INTERNATIONAL INC.

100 Eagle Drive

Winnipeg, Manitoba, Canada R2R 1V5

Tel: 204-633-1999 Fax: 204-694-1612

Email: sales@hermannelson.com Website: www.hermannelson.com

#### **CONTACT/TITLE:**

Fran Koch, President



Allied Wings is the commercial entity which in partnership with the Royal Canadian Air Force operates the Canada Wings Aviation Training Centre under the Contracted Flying Training and Support contract.

The Centre is located in Southport,
Manitoba, a one hour drive west of
Winnipeg, Manitoba's capital city. The
team includes specialist companies that
provide all the key training elements
– fixed and rotary wing aircraft,
maintenance, courseware, simulators

#### **ALLIED WINGS**

Canada Wings Base
55 Musketeer Road East
Southport, MB Canada
R0H 1N1
Telephone: (204) 428–2500

Fax: (204) 428-2501

#### **CONTACT/TITLE:**

**Bill Ryan**, Site Manager ryan.wl@alliedwings.ca

Allied Wings Corporate Office 5655 Airport Way Kelowna, BC Canada V1V 1S1

Telephone: (250) 491–5500 Fax: (250) 765–1489 http://www.alliedwings.ca and flight training devices, flying instructors and total site management – a turnkey state-of-the-art training system. The fleet of 39 aircraft in Southport include:

- Grob 120A single engine aircraft
- King Air C–90A twin engine aircraft
- Bell 206 single engine helicopter
- Bell 412 twin engine helicopter

There has been international

participation in the program and the Air Force and Allied Wings is open to further participation on an availability basis. The C-90 King Air and B412 full flight simulators are also available for commercial use. In addition to flight training, Canada Wings also operates the entire airfield including air traffic control, navigation services and runway maintenance. On–site support services include housing and meals, classroom space and recreation.

The Allied Wings Team was assembled and led by Kelowna Flightcraft and includes the following industry leaders in integrated flying training solutions and advanced simulation technologies.

- Kelowna Flightcraft Ltd.
- · Canadian Helicopters Ltd.
- · Atlantis Systems Intl.
- · Canadian Base Operators



22 ALLIED WINGS



#### **Facilities:**

- 28,000 sq. ft. plant/Head Office
- 20,000 sq. ft Metals manufacturing plant
- 5,000 sq. ft. Pickering Branch plant

#### **Employees: 65**

#### **Quality Standards/Certifications:**

- · ISO9001:2000
- AS 9100 "C"
- AS9102 First Part Qualification
- Bombardier Aerospace Approvals (QAS/004 - Classification A – Subcontractor & Classification C – Manufacturer)

#### **Principal Products and Services:**

- Elastomeric sealing solutions .
   Custom 3D fluoro silicone/ silicone/
   rubber injection molded seals; 2D
   steel rule die cut gaskets; CNC knife
   cut gaskets / seals.
- Materials Fluoro Silicone, silicone, Viton, black rubber (all common rubber compounds), industrial cork/rubber, cork /silicone, sponge rubber/foam & Engineered Adhesive Solutions.
- Aerospace parts bulkhead seals, vent seals, fuel tank seals and various bulb seal subassemblies
- CNC Metal Machining
- Fixtures Transport, Welding Fixtures, etc.
- Core competencies include s Gasket Fabrication, Rubber/Plastic Molding, Machining Metal & Robotic Welding of Steel

#### **Special Equipment:**

- Rubber & Plastic Injection Molding
- Rubber Compression Machine (46x48 platen size - 700 Ton)
- Conversion/die cutting presses
- LaserQC Automated 2D laser scanning/part inspection system.
   CNC Mills, CNC Lathe, Robotic Welding
- On-site Aerospace Quality Lab
   Postcure/postbake convection oven
- Automated, laser sighted sitting machine

**Major Clients:** Bombardier Aerospace, Viking, GDLS and several OEM suppliers to the aerospace & defense industries

Established: 1962

#### **ARGUS INDUSTRIES LTD.**

#### **Head Office**

20 Murray Park Road Winnipeg, Manitoba, Canada R3J 3T9 Tel: 204-837-4660 Fax: 204-896-4250

Metals Division

250 Saulteaux Crescent Winnipeg, Manitoba, Canada, R3J3T2 Tel: 204- 837-4660 Fax: 204- 697-0578 Email: info@argusindustries.ca Website: www.argusindustries.ca/

#### **CONTACTS/TITLE:**

Michael Easton, President & CEO; Mike@argusindustries.com

**Ross A. Roy**, VP Business Development; ross@argusindustries.ca

ARGUS INDUSTRIES LTD. 23



Facilities: 10,000 sq. ft.

**Employees:** 6

#### **Quality Certifications:**

- ATA spec. 300 Category 1
- Roto Moulded and Injection Moulded Cases

#### **Principal Product & Services:**

 Foam lined cases, other protective wrapped cases. Cartons used for transport of electronic instruments and components (i.e. computers etc.). Cases are also used by the health products and aerospace industries. Products: A.T.A. flight cases; Plywood container systems, Base hardware, Tooling Custom Inserts, Container Repair.

· Rotation Moulded

#### **Major Clients:**

- Bristol Aerospace
- Boeing Canada Operations
- · Standard Aero
- GE Nuclear
- SRS Mantech
- · Northrop Gromman
- NASA
- Nexolve
- · Ball Aerospace
- · Perimeter Air

Established: 1976

#### **BIG DEAL CUSTOM CASES**

100 Durand Road

Winnipeg, Manitoba, Canada R2J 3T2

Tel: 204-663-4870 Fax: 204-668-7404 Toll Free: 1-800-337-3325

Email: gdealey@bigdealcases.com Website: www.bigdealcases.com/ www.

bigdealcases.ca/

www.facebook.com/bigdealcustomcases/

#### **CONTACT/TITLE:**

Gary Dealey, President

24 BIG DEAL CUSTOM CASES

#### **BLAYD CORPORATION**

Facilities: 10,000 sq. ft.

Employees: 3

#### **Quality Standards/Certifications:**

 Transport Canada Manufacturing Approval

#### **Principal Products and Services:**

- Hydropress forming of aluminum and steel -600 ton capacity
- Part production and assembly
- Tool and fixture production
- Solution heat treating
- · Precipitation heat treating
- · Machining facilities

#### **BLAYD CORPORATION**

Box 939
184 Main Street North
Carman, Manitoba, Canada ROG 0J0
Tel: 204-745-2878
Email: blayds@mts.net

#### **CONTACTS/TITLE:**

Earl Calverley, Manager

#### **Major Clients:**

- EMTEQ Canada (formerly ACS-NAI Ltd)
- Keewatin Air

Established: 1989

BLAYD CORPORATION 25



**Facilities:** 616,500 sq. ft.

Employees: 1,600

#### **Quality Standards/Certifications:**

- DOT (Airworthiness)
- D1-9000

#### **Principal Products and Services:**

- High strength-to-weight ratio solid laminate and sandwich panels and assemblies in support of Boeing Commercial Airplane production.
- Engine Strut Forward and Aft Fairings
- Wing to Body Fairings

# BOEING CANADA OPERATIONS LTD.

99 Murray Park Road Winnipeg, Manitoba, Canada R3J 3M6

Tel: 204-888-2300 Fax: 204-837-2807 Website: www.boeing.ca

#### **CONTACT/TITLE:**

Kevin Bartelson

**President & General Manager** 

#### **Special Equipment:**

- CNC Trim (5, 4, 3 axis)
- Clothcutting
- Autoclaves
- CNC Core Carver (6 axis)
- Non-destructive Inspection

#### **Major Clients:**

• Boeing Commercial Airplanes

Established: 1971



Facilities: 4,000 sq. ft.

**Employees:** 9

#### **Quality Standards/Certifications:**

• DOT, approval #79-94

#### **Principal Products and Services:**

- Parts distributor for Allison A250 engines and engine components
- Parts distributor for Bell & Sikorsky Helicopters airframe components

Established: 1992

# CADORATH AEROSPACE DISTRIBUTION INC.

2070 Logan Avenue

Winnipeg, Manitoba, Canada R2R 0H9

Tel: 204-985-1317 Fax: 204-985-1327

Email: rhartfiel@cadorath.com Website:

www.cadorath.com/

#### **CONTACTS/TITLE:**

**Gerry Cadorath**, President

**David Haines**, Sr. VP

Roy Hartfiel, General Manager



Facilities: 40,000 sq. ft.

**Employees:** 55

#### **Quality Standards/Certifications:**

- DOT #86-91
- ISO 9001-2000
- EASA Part 145
- Rolls-Royce Authorized Repair Facility
- Turbomeca Approval

#### **Principal Products and Services:**

 Repair of turbine engine components including RR Model 250; T56; Pratt & Whitney PW100,

# CADORATH AEROSPACE INC.

2070 Logan Avenue Winnipeg, Manitoba, Canada R2R 0H9

Tel: 204-633-2707 Fax: 204-632-7663 Email: info@cadorath.com

#### **CONTACTS/TITLE:**

**Gerry Cadorath**, President

Ray Last, General Manager -Cadorath Engineer Coatings Division

Dave Haines, Sr. VP

Meloney Mitchell,

**Director of Quality Assurance** 

PT6; Lycoming T53; Sikorsky S61, S76; Bell 204, 205, 206, Turbomeca Repair Development; Hydraulic Components & Dynamic Components

#### **Special Equipment:**

- Lab analysis facility
- Electrostatic liquid penetrate inspection line, MPI
- · Full machine shop
- Engineered plating deposits
- CMM
- Plasma Spray
- · Shot Peen

#### **Major Clients:**

 Engine overhaul shops, brokers and helicopter and fixed wing operators worldwide.

#### **Parent Company:**

• Cadorath Plating Co. Ltd.

Established: 1990



Facilities: 70,000 sq. ft.

#### **Principal Products and Services:**

• Electro depositing coatings

#### **Major Clients:**

- Rolls Royce AMC
- Bristol Aerospace Limited
- Owner/operators
- Agriculture/ industrial/ food industries

Established: 1954

#### **CADORATH COATING**

2150 Logan Ave. / 1438 Church Ave Winnipeg, Manitoba, Canada R2R 0J2

Tel: 204-633-9420 Fax: 204-632-0323 Email: info@cadorath.com

#### **CONTACTS/TITLE:**

**Gerry Cadorath**, President

Dave Haines, Sr. VP

CADORATH COATING 29



#### **Facilities:**

- Modern Flight Training Facility
- Two new hangars.
- Student accommodations and dining facility

Employees: 180

#### **Principal Products and Services:**

 Flying training and support, primarily for the Canadian Forces, for primary, rotary wing and multiengine fixed wing training.

#### **Special Equipment:**

- CT-120A Grob
- · Bell 206 Jet Ranger
- Bell 412CF
- · C90B King Air
- Class D full motion Bell 412 simulator
- Class D full motion King Air simulator
- Full suite of Procedure and Desk-top Simulators

#### **Major Client:**

 Canadian Government Department of National Defence

Established: 2005

# CANADA WINGS AVIATION TRAINING CENTRE

P.O. Box 240

Southport, Manitoba, Canada R0H 1N0

Tel: 204-428-2500 Fax: 204-428-2501

Email: ryan.wl@alliedwings.ca Website: www.alliedwings.ca

#### **CONTACT/TITLE:**

Bill Ryan, Site Manager

**Terese Schroeder**, Administration

Piero Scaramuzzi, Manager,

**Business Operations** 



Facilities: 10,200 sq. ft.

Employees: 12

#### **Quality Standards/Certifications:**

- Transport Canada AMO 175-91
- · EASA Approval 145.7254
- CGSB Level II, LPI & MPI
- Factory Authorized Propeller Service Station for Hartzell & McCauley & MT propellers

#### **Principal Products and Services:**

 Repair, Sales and Overhaul of Propellers, Governors & Components

- Composite and Metal Propellers, Turbine and Reciprocating Governors
- NDT testing of Components, Brakes & Wheels
- On Wing Maintenance & De-ice boot installations

#### **Major Clients:**

- Commercial operators
- Transport Canada & Provincial Governments
- International Customers
- Aerial Applicators
- Flight Schools
- Private Operators

Established: 1991

#### **CANADIAN PROPELLER**

462 Brooklyn Street

Winnipeg, Manitoba, Canada R3J 1M7

Tel: 204-832-8679 Fax: 204-888-4696

Toll Free: 1-800-773-6853 24/7 & AOG Email: info@canadianpropeller.com Website: www.canadianpropeller.com

#### **CONTACT/TITLE:**

Maurice Wills, President



CANADIAN PROPELLER 31



Facilities: 122, 000 sq. ft.

Employees: 200

#### **Quality Standards/Certifications:**

ISO 9001:2008

(In the process implementing AS9100)

#### **Principal Products and Services:**

- Composites
- Carbon fiber
- · Robotic water jet cutting
- Patterns and tolling development
- Automated paint line class A finishes
- · Down draft booth

# CARLSON ENGINEERED COMPOSITES INC

692 Mission Street
Winnipeg, Manitoba, Canada R2J 0A4
Tel: 204-233-0671
Email: ncarlson@carlsongrpco.com Web-

site: www.carlsongrpco.com web

#### **CONTACT/TITLE:**

Neil Carlson, President

**Dieter Loewen**,

**Executive VP - Operations** 

Arnie Milne

**VP Sales and Customer Relations** 

#### **Special Equipment:**

- Seven axes ABB robotic water jet cutter using a KMT dual intensifier running on a 30 ft. track
- 5 stage pre treatment wash, dry off oven, prime, flash off area, finish and 60 ft. bake oven running on a 586 ft. conveyor line

#### **Established:**

Carlson Engineered Composites was established in 1978. The Carlson group of companies was established in 1939.





Facilities: 50,000 sq. ft

Employees: 20

#### **Quality Certifications:**

ISO 9001:2000

#### **Principal Product & Services:**

 Metal distribution; aluminum, stainless, nickel, titanium, alloy and carbon steel.

#### **CASTLE METALS**

520 Mercy Street P.O. Box 213

Selkirk, Manitoba, Canada R1A 2B2

Tel: 204-482-6887 Fax: 204-785-1480 Website: www.amcastle.com

#### **CONTACTS/TITLE:**

**George Pic**, General Manager Email: gpic@amcastle.com

CASTLE METALS 33



Employees: 30

#### **Principal Products and Services:**

- Not for profit corporation supporting the development and commercialization of composite materials and technologies
- · Project planning and coordination
- Project management
- · Technical consultation
- Composite part design, modeling and analysis
- 3,000 sq. ft. laboratory to support process development and component testing (expansion underway)
- Business planning and market development including feasibility studies
- Coordination of training programs and seminars

#### **Special Equipment:**

- CAD and FEA software with composites structural capability – Siemens NX 8
- Resin infusion molding and out of autoclave processing equipment
- 5 axis machining station
- Material physical and mechanical test capability

#### **Major Clients:**

- Boeing Canada Operations -Winnipeg Division
- Boeing Research & Technology
- Magellan Aerospace

- Acetek Composites
- · Cormer Aerospace
- Advanced Composites Structures
- Avcorp Industries
- Comtek Advanced Structures

Established: 2003





# COMPOSITES INNOVATION CENTRE

158 Commerce Drive Winnipeg, Manitoba Canada R3P 0Z6

Tel: 204-262-3400 Fax: 204-262-3409

Email: cic@compositesinnovation.ca Website: www.compositesinnovation.ca/

#### **CONTACT/TITLE:**

Sean McKay, Executive Director

Mike Hudek, Manager -Business Development & Operations



Facilities: 130,000 sq. ft.

Employees:150

#### **Quality Standards/Certifications:**

- ISO 9001:2000, and AS9100 Rev C. (with exclusions for design)
- Nadcap approvals AS7114 for NDT, and AS7108 for Chemical Processing
- · Can Z 299.2
- MIL-1-45208

#### **Principal Products and Services:**

- High Speed Machining of Medium and Monolithic Aluminum Aerostructures.
- Steel and Titanium, Plate and Forgings for Aerospace and Defence Industries
- Special processing (LPI/anodize/ paint) in support of Aerospace and Defense operations

#### **CORMER AEROSPACE**

33 Bentall Street

Winnipeg, Manitoba, Canada R2X 2Z7

Tel: 204-987-6400 Fax: 204-988-3808

Email:

Website: www.cormeraerospace.com/

#### **CONTACTS/TITLE:**

Leo Sousa, President

Shannon Edison, Senior Manager PMO

Assembly of Aerospace and Defense components and structures

#### **Special Equipment:**

- Integrated 4 Axis Makino cell combining eight 240 tool A88 Horizontal Machining Centers coupled with a powerful Cell Controlled 50 Pallet Pool providing Lights Out Capability.
- one Makino Mag 3, Horizontal High Performance Profiler, 100HP, 33000 RPM, 10 pallets
- one SNK Horizontal High Performance Profiler, 75 HP, 20,000 RPM, 2 Pallets
- three 10' Cincinnati Vertical Machining Centers, 15,000 RPM
- two Mazak Variaxis, 20000 RPM 2 Pallet
- one Cincinnati 40' Gantry, Three Spindle, 100 HP, 10,000 RPM
- one Mazak Integrex i400 9 Axis Turn Mill
- Numerous Horizontal and Vertical CNC machining Centers
- CATIA V5 / Unigraphics NX CAD/CAM
- CNC CMM inspection
- Boric acid anodizing facility for aluminum parts up to 14 feet long
- NDT / LPI facility
- · Paint facility

#### **Major Clients:**

- GeneralDynamicsLand Systems
- · Boeing
- Airbus
- Canadian and United States Militaries

**Established:** 1988 and is a Registered Controlled Goods Facility and ITARS Compliant

CORMER AEROSPACE 35



Facilities: 58,000 sq. ft.

**Employees: 48** 

#### **Quality Certifications:**

ISO 9001 - 2000

#### **Principal Product & Services:**

 Custom Steel Manufacturing Ltd. is a CAD / CAM custom manufacturer, fabricator and assembler of precision aluminum, stainless steel, other high strength metals and steel products. Its capability includes laser and bending, stamping, MIG and TIG welding as well as in-house design, development, engineering, programming, and the manufacture of jigs, fixtures and other tooling all to MIL and other industrial specifications.

#### **Major Clients:**

 Includes OEMs in the aerospace, defense, transportation, electronic and other industrial sectors.

### CUSTOM STEEL MANUFACTURING LTD.

15 - B Bury Street

Winnipeg, Manitoba, Canada R3E 2X7

Tel: 204-783-2272 Fax: 204-772-2561

Email: ray@customsteelmfg.com Website: www.customsteelmfg.com

#### **CONTACTS/TITLE:**

lan Southcott, President & CEO

### Deloitte.

**Employees:** 192 in Winnipeg office

#### **Principle products and services:**

- Operational Strategy, Human
   Capital and Technology Consulting
- Enterprise Risk Services
- R&D and Government Incentives
- Financial advisory
- · Domestic and International Taxation
- Corporate Legal Services
- Corporate governance
- Assurance & Advisory

Deloitte, one of the world's leading professional services firms, is the brand under which tens of thousands of dedicated professionals in independent firms throughout the world collaborate to provide audit, tax, financial advisory and consulting services.

Deloitte's Winnipeg office is one of the largest public accounting and management consulting firms in Manitoba. We have approximately 190 staff members representing a full service office providing a complete array of professional services including audit, tax, enterprise risk management, financial advisory and consulting. We serve our clients with quality and integrity while providing an ever-evolving range of innovative ideas and practical strategies to help companies achieve the results they need.

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#### **DELOITTE**

360 Main, Suite 2300

Winnipeg, Manitoba, Canada R3C 3Z3

Tel: 204-944-3589 Fax: 204-947-9390 Email: kgale@deloitte.ca Web: www.deloitte.ca

#### **CONTACTS/TITLE:**

**Kevin Gale**, Senior Manager, Cross Border Services – Transfer Pricing

DELOITTE 37



Facilities: 51,444 sq. ft.

Employees: 87

#### **Quality Standards/Certifications:**

· ISO 9001-2000

#### **Principal Products and Services:**

- · Precision Metal Fabrication
- CNC Machining
- Special Project Engineering Design and Manufacture
- Progressive, Compound and Fine Blanking Dies
- Jigs and Fixtures
- EDM, WEDM
- · Design and Engineering

#### **Special Equipment:**

- EDM Machines (Wire & Ram)
- Milling Machines
- CNC Lathes
- CNC Mills
- 5-Axis CNC Mills
- CAD-CAM
- · Lathes, Grinders
- · Centerless Grinder

#### **Major Clients:**

- Bristol Aerospace Ltd.
- Boeing Canada Operations
- StandardAero Ltd
- Spar Aerospace Ltd.
- · National Research Council
- · MacDon Industries Ltd. Evraz Inc
- Buhler Versatile & Manufacturing
- Carte International

- L.V.Control
- Manitoba Hydro
- · ACS-NAI Ltd. DBA Emteq Canada

Established: 1970

#### DYNAMIC MACHINE CORP.

1407 Dugald Road

Winnipeg, Manitoba, Canada R2J 0H3

Tel: 204-982-4900 Fax: 204-982-4933 Email: samv@dmcorp.ca

#### **CONTACT/TITLE:**

Richard van den Broek, President

Sam Vacchiano.

Vice President of Machine Shop Services

38 DYNAMIC MACHINE CORP.



Facilities: 40,000 sq. ft. Employees: 70

EMTEQ Canada offers turnkey solutions to Aircraft OEMs, Modification Centers and Integrators through our core competencies in aircraft design, engineering, certification and custom manufacturing.

EMTEQ Canada is a Transport Canada (TC) Design Approval Organization (DAO) able to approve aircraft design data in avionics, interior systems, structures, and flammability, providing comprehensive manufacturing and maintenance solutions around the globe.

We are a TC approved manufacturer, distributor and maintenance provider of aeronautical products and we design, and manufacture products and provide subcontract manufacturing to airframe manufacturers and maintenance organizations worldwide.

#### **EMTEQ CANADA**

25 Dunlop Avenue

Winnipeg, Manitoba, Canada R2X 2V2

Tel: 204-783-5402 Fax: 204-783-5436 Website: www.emteq.com

#### **CONTACT/TITLE:**

Udaya Silva, Site Leader

#### **Quality Standards/Certifications:**

- DAO 98-C-01 (TC approved)
- AMO 88-97 (TC Approved)
- Material burn/flame test certification (TC approved)
- AS9100 Rev. C Credited
- C.A.S.E. Approved
- Controlled Goods Approved

#### **Engineering / Certification:**

- Design, develop, testing & certification services for aircraft modification & repair
- Full engineering design & analysis capabilities
- Fracture mechanics & damage tolerance analysis (DTA)
- Development of aircraft modification kits
- · Aircraft import/export support,
- Aircraft pre-import/purchase evaluations
- Aircraft upgrade feasibility studies

#### **Manufacturing:**

- Modification kits (STC) for fixed & rotary wing
- Replacement parts (PDA) & repair kits for fixed & rotary wing
- Sub-contract manufacturing for aircraft OEMs
- Structural & electrical component exchange & maintenance services for aircraft operators

#### **Major Clients:**

 Bombardier Aerospace; Pilatus Aircraft; Cascade; Jet Aviation; Innotech Aviation; Flying Colours Corp; Piedmont Airlines

Established: 1976

EMTEQ CANADA 39



Facilities: 60,000 sq. ft.

Employees: 140

#### **Quality Standards/Certifications:**

- Welding certified to Military Standard 1595
- CWB-W47.2-M1987
- CWB-W47.1-M1987
- ISO 9001
- AWS D1.1, D1.2, D1.3, D1.7

#### **Principal Products and Services:**

A contract manufacturer specializing in:

- Precision metal cutting and fabrication
- Certified welding of steel, aluminum and stainless steel for aerospace, defense, communications, construction and agriculture equipment sectors
- Military specification cleaning and painting
- · Assembly, Packaging, Kitting

#### **Special Equipment:**

- Laser Cutting
- CNC Punch and CNC Press Brakes
- Aluminum Spot Welding
- TiG/MiG Welder
- Aluminum Cleaning and Conversion Coating line
- Zinc Phosphate Conversion Coating line
- · MIL Specification painting
- Powder Coating system
- · CAD/CAM

#### **Major Clients:**

- General Dynamics
- · Canadian National Railway
- Canadian Pacific Railway
- Motor Coach Industries

Established: 1997

#### **ENDURON / CUSTOM INC.**

150 Cree Crescent

Winnipeg, Manitoba, Canada R3J 3W1

Tel: 204-885-2580 Fax: 204-888-2912

Email: richard.k@enduron.net

Website: www.enduron.net

#### CONTACT/TITLE:

Richard Klassen, President

Julian Kulbacki, General Manager

40 ENDURON / CUSTOM INC.



#### **Principal Products and Services:**

EnviroTREC is a Non-Profit Organization (NPO) that is partnered with GLACIER, a limited partnership between Rolls-Royce and Pratt & Whitney. Other partner organizations that were crucial to the establishment of this globally unique world-class facility include the National Research Council Institute for Aerospace Research, Western Economic Diversification Canada, the Province of Manitoba, MDS AERO Support Corporation and MDS Aero Test. MDS Aero Test is a Manitoba based firm which operates, maintains, and markets the available cycles at the Thompson Facility. The EnviroTREC assets include all of the test systems and the thrust stand which are located at the GLACIER Facility in Thompson, Manitoba. This facility is the most modern engine icing certification facility in the world. It is capable of testing engines whose fan diameter is up to 140 inches while producing up to 150,000 pounds of thrust.

EnviroTREC was formed to stimulate the development of technology programs which are required to support the operation of the facilities in Thompson. EnviroTREC is also involved in the development of the highly qualified personnel and technologies which are necessary to keep the EnviroTREC/ GLACIER capabilities at the forefront of the aerospace sector.

#### **ENVIRONMENTAL TESTING RESEARCH & EDUCATION CENTRE (ENVIROTREC)**

200-78 Innovation Drive Winnipeg, Manitoba R3T 5C1

Tel: 204-480-0350 Fax: 204-480-0345

Email: alfonz.koncan@envirotrec.ca

Website: www.envirotrec.ca

#### **CONTACTS/TITLE:**

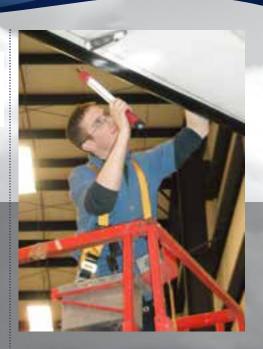
Alfonz Koncan, Director of Business **Development and Government Relations** 





Fast Air began its Winnipeg based air charter service in 1995 with one aircraft and two employees and has quickly grown to what it is today – a diverse aviation business which offers a variety of first class business aviation services.

Operating from a private business-class terminal at the Winnipeg airport Fast Air's aviation services include aircraft management, corporate aircraft maintenance programs, aviation consulting, and corporate aircraft charters. Fast Air also operates a MedEvac division which provides 24-hour patient transfers throughout Manitoba from bases in Thompson and Norway House.



### FAST AIR EXECUTIVE AVIATION SERVICES

<mark>80 Han</mark>gar Line Road Winnipeg, Manitoba, Canada R3J 3Y7

Tel: 204-982-7240
Fax: 204-783-2483
Email: dom@flyfastair.com
Website: www.flyfastair.com

#### **CONTACT/TITLE:**

**Dennis Lyons**, Person Responsible for Maintenance

### FLIGHTCRAFT MAINTENANCE SERVICES

Facilities: 10,000 sq. ft.

**Employees:** 15

#### **Quality Standards/Certifications:**

DOT #80/97

· MDM - Maintenance

#### **Principal Products and Services:**

- Repair, overhaul and refurbishment of piston and turbine aircraft.
- · Conversion and modification.
- · Major airframe repair.
- Line maintenance for Boeing / Airbus.

### FLIGHTCRAFT MAINTENANCE SERVICES

155 West Hangar Rd

Winnipeg, Manitoba, Canada R3J 3Z1

Tel: 204-783-2754 Fax: 204-783-2848

#### **CONTACT/TITLE:**

Jim Peroff, President

Steve Oliveria, QA Manager

Barb Kreitz, Office manager

#### **Special Services:**

- Structural repairs and modifications.
- Line maintenance
- Importing and Exporting
- Auditing

#### **Major Clients:**

 Commercial airlines domestic and International

Established: 1996



**GE Capital** 

GE Capital is a leading provider of financial solutions to the Canadian aerospace and defence sector. We provide commercial loans and leases specifically customized for the A&D sector building opportunity for today and our future.

GE Capital offers Access GE to its customers as part of its financing solutions. Access GE engagements draw on our global experience as an industrial company, and knowledge to help our customers address their most pressing business needs and pursue their greatest opportunities. Our workshops,

events and one-on-one collaborations with our customers highlight market, sector specific issues and share business best practices. In addition we assist our customers in building relationships with GE Aviation supply chain organization

At GE Capital, we understand your financial needs because like you, we invent, build and sell in these markets every day.

#### **GE CAPITAL**

330 Portage Ave #1700, Winnipeg, Manitoba, Canada R3C 0C4 Web site: www.gecapital.ca

#### **CONTACT/TITLE:**

Jacques Bonaventure, National Director, Aerospace and Defence, GE Capital, Canada (514) 397-5306

44 GE CAPITAL



With 20+ years in aerospace, manufacturing, engineering and sales Global Advantage Manufacturers has brought together over 30 different contract manufacturers from Canada, USA and China to service Manitoba and Western Canada.

#### Manufacturer's Representative:

 Global Advantage represents contract manufacturers ranging from fully accredited aerospace manufacturers with AS9100 through to plastic injection molding, machining, casting and many others. Some of our Principals are

### GLOBAL ADVANTAGE MANUFACTURERS

143 Knightsbridge Dr Winnipeg, Manitoba R2M 4E7 Tel Work: (204) 257-5657 Tel Mobile: (204) 471-4692

Skype: mjmizak

Email: mmizak@mymts.net

#### **CONTACT/TITLE:**

Michael Mizak,

Sales Engineer & Managing Partner

- already manufacturing for the Aerospace community in Winnipeg.
- With 30 different manufacturers in our portfolio we are able to help customers connect with suppliers from a broad range of industry & expertises, we can find a solution to meet your needs.

#### Other services represented:

- Aerospace Manufacturing, AS9100 and ITARS companies
- Sheet-Plastic Forming (like sheet metal with plastic, great for short runs and prototypes, save on tooling costs)
- · Bearing manufacturing.
- Machining, sheet metal, stamping and casting
- Wire Harnesses
- · Screw machine
- · Glass manufacturing
- And others



#### **Employees:** 2

#### **Quality Certifications:**

 FAA (Federal Aviation Approved) and meets TC, EASA 145 requirements.

#### **Principal Product & Services:**

Grey Owl Aviation provides
 Canadian Aviation Regulatory,
 Fatigue Risk Management and
 Human Factors training for aircraft maintenance departments. Safety
 Management System Workshops.

#### **Major Clients:**

- · Sikorsky Aircraft
- Raytheon Aerospace
- Bombardier
- · Sunwing Airlines
- Chevron

Established: 1994

### GREY OWL AVIATION CONSULTANTS INC.

Lot 5, Lakeview Road Onanole, Manitoba, Canada ROJ 1NO Mailing Address: Box 233, Onanole, Manitoba, Canada

Tel: 204-848-7353 Fax: 204-848-4605

ROJ 1NO

Email: richard@greyowl.com Website:

www.greyowl.com

#### **CONTACTS/TITLE:**

Richard Komarniski, President



Facilities: 5,000 sq. ft.

Employees: 13

### Principle Products and Services – (see Harris Consulting website):

- · Executive Search and Recruitment
- Executive Coaching
- · Career Management and Transition
- Organizational Strategies
- · Succession Management
- Organizational & Employee Surveys
- Leadership Development and Coaching
- Psychometric Assessments
- · Compensation Analysis

#### HARRIS CONSULTING

1400 – 444 St. Mary Avenue Winnipeg, Manitoba, Canada R3C 3T1

Tel: 204-942-8735 Fax: 204-944-8941

Email: resumes@harrisconsult.com or

info@harrisconsult.com

Website: www.harrisconsult.com

#### **CONTACTS/TITLE:**

Keith Sinclair, President & CEO

**Chuck Golfman**, VP Business

Development and President Harris Interim

Executives

- Training & Development Workshops
- Board Governance
- Interim Executive Contracting

#### **Major Clients:**

- Aerospace
- Manufacturing
- Private Industry
- · Not-for-Profit
- Municipal
- Public
- Education

Established: 1981

HARRIS CONSULTING 47



#### **Principal Products and Services:**

Based on a background of over 35 years of leading the worldwide aerospace and defence, marketing and business development with Spar Aerospace Limited, and Canadian divisions of Hawker Siddeley and Rolls-Royce, HindTech offers:

- Consulting: Aerospace and defence, marketing and business consulting; market studies and analyses; product market research and launch; proposal management and preparation; teaming and joint ventures; ability to undertake market or business related special tasks without the distraction of the daily office routine that would affect an employee.
- Contract Executive: Interim replacement for an unplanned vacancy in the marketing, sales, business development or strategic planning roles of a company; market or business mentoring of a new hire or promoted employee; provide temporary or business assistance at times of peak load.
- Manufacturer's Representative: Sales representative for products and capabilities of companies wishing to achieve sales in Canada, the US or Europe. This would provide a broad market coverage at a portion of the cost of an employee.

#### **Major Clients:**

 Over the past fifteen years, HindTech has provided service to more than 25 organizations and small to medium sized enterprises (SME's) in Canada, USA, and Europe.

Established: 1997

#### HINDTECH

26 Kingsborough Drive Winnipeg, Manitoba, Canada R3P 1H7 Tel: 204-488-9622

Fax: 204-488-9622 Cel: 204-228-5363

Email: CMHinds@aol.com Website:

www.hindtech.ca/

#### **CONTACT/TITLE:**

Malcolm Hinds, President

48 HINDTECH



Facilities: 18,000 sq. ft.

Employees: 100

Established: 1992

#### **Quality Standards:**

- Mutli-industry participation requires compliance with customer prescribed standards & practices
- Designed and produced electronic systems for Signals Intelligence, advanced UAV controls, fiber optic interrogation systems, semiconductor test equip.
- Rigorous internal QA standards & practices

#### **IDERS INCORPORATED**

27047 Oakwood Road

Oakbank, Manitoba, Canada R0E 1J2

Tel: 204-444-5200 Ext. 223
Fax: 204-444-5900
Email: info@iders.ca

#### CONTACT/TITLE:

**David Fletcher**, Vice President dfletcher@iders.ca, (Extension 223)

#### Kevin Luellman,

Director - products and technologies kluellman@iders.ca, (Extension 229)

#### **Principal Products and Services:**

- EDS (Electronic Design Services), including:
- digital & analog electronics, logic & DSP design
- power & RF (high power, GHz RF)
- firmware & software (VxWorks, Linux)
- VME, PCI, custom & compact design outputs
- comprehensive DVT tools
- EMS (Electronics Manufacturing Services)
- advanced SMT technologies-12,000 pph
- BGA placement to 0.6mm
- THT LED automated placement, 4,000pph
- no-touch machine vision inspection
- specialize in low-volume electronics assembly
- facilities for in-process burn-in and OA

#### **Special Equipment:**

- High-speed digital, analog & RF test & measurement
- Advanced optophotonics test & measurement equip.
- · Environmental test chambers
- SMT paste, SMT 2d & 3d paste inspection (automated)
- SMT & THT automated placement with machine vision
- 7-zone, closed loop IR reflow. Leadfree process ready
- Automated optical inspection postassembly
- Xray inspection (BGA) and automated rework

IDERS INCORPORATED 49



Facilities: 19,000 sq. ft.

Employees: 22

#### **Quality Standards/Certifications:**

- ITC is registered to ISO 9001
- ITC's Mechanical Testing Laboratory is accredited to ISO/IEC 17025 for specific tests
- ITC's Calibration Laboratory is ISO/IEC 17025 accredited by the Calibration Laboratory Assessment Service, a joint program of accreditation by the Standards Council of Canada and certification by the National Research Council of Canada

#### **Principal Products and Services:**

- Product development and testing facility providing services to industry in the following areas:
  - 3D Laser Scanning
  - 3D Printing
  - Calibration
  - · Custom Data Acquisition
  - · Equipment Rental
  - Mechanical Testing
  - · Modeling & Simulation
  - Noise & Vibration
  - Technical Information & Advice
  - Visualization
  - Technology Introduction and Demonstration

#### **Special Equipment:**

- Fortus 400mc Additive Manufacturing/3D Printer
- EXAscan 3D laser scanner

- Dimensional reference standards and calibration equipment
- Load and fatigue testing machines to 300,000 lbf
- Environmental exposure and corrosion testing chambers
- Sound and vibration measurement and analysis tools
- Full range of data acquisition transducers and signal conditioners
- · Virtual Reality equipment
- Large Scale 3D Immersive Visualization Theatre
- High Performance Graphical Computing Cluster
- Real-time Visualization and Simulation tools

#### **Major Clients:**

Small, medium and large manufacturers

Established: 1979

### INDUSTRIAL TECHNOLOGY CENTRE

200 - 78 Innovation Drive

Winnipeg, Manitoba, Canada R3T 6C2

Tel: 204-480-3333
Fax: 204-480-0345
Toll free: 800-728-7933
Email: tech@itc.mb.ca
Website: www.itc.mb.ca

#### **CONTACTS/TITLE:**

**Trevor Cornell**, Chief Operating Officer



Investors Group Financial Services
Inc. was founded in 1926 and is a part
of IGM Financial — the sixth largest
publicly traded global asset manager
(Bloomberg, December 31, 2012),
with over \$125 billion in assets under
management through its subsidiaries.\*

My practice maintains a team that is committed to one-to-one service excellence and providing comprehensive financial advice on investments, retirement, tax, estate, education, charitable giving and cash management issues.

### INVESTORS GROUP FINANCIAL SERIVCE INC.

100-1345 Waverley Street, Winnipeg, Manitoba, Canada R3T 5Y6

Cell: (204) 981-7596 Office: (204) 489-4640 ext.249

Toll Free: 1 (888) 205-4828 Fax: (204) 489-0688

Website: www.tomaldridge.ca

#### **CONTACTS/TITLE:**

Tom Aldridge, Consultant: Heui-Jung Lee, Associate We focus on group health insurance, group RRSP and group DPSP plan design, implementation and management.

At Investors Group, we know that today, good financial advice is more important than ever.

We take a long-term approach to planning. We believe that with a detailed plan, reviewed and updated regularly, you will have the financial resources to realize your goals and stay on track.

We believe that building long-term relationships with clients is the best way to help you and your family to explore the financial options that are best for you at each stage of your life.

Whatever your short or long-term financial goals – buying a home, paying for an education, living well in retirement or planning your estate – we will work with you to develop a plan to help get you there.

\*As of February 28, 2013

Insurance products and services distributed through I.G. Insurance Services Inc. Insurance license sponsored by The Great-West Life Assurance Company.



**Employees:** 145

#### **Principal Products and Services:**

 Scheduled, Charter and Medevac Transports using Beech 1900C, King Air 200, Lear 35A, PC-12

Established: 1971

#### **KEEWATIN AIR LIMITED**

1 Allen Dyne Road

Winnipeg, Manitoba, Canada R3H 0Z9

Tel: 204-888-0100 Fax: 204-888-3300

Email: Igoodchild@keewatinair.ca Website: www.keewatinair.ca/

#### **CONTACT/TITLE:**

Wayne McLeod, President

Lloyd Goodchild,

Chief Operating Officer & Operations Manager

**Penny Triggs**, Vice President

Rick Brenton, Chief Pilot

Dan Swedberg, Director of Maintenance

Dave Gillis,

Manager Safety Management Systems

52 KEEWATIN AIR LIMITED



Legacy Bowes Group has acquired its premier reputation for HR Services excellence through the demonstrated ability to consistently deliver high quality results. We've accomplished this by partnering with our clients to understand their organizations and their needs. Our experienced consulting team is renowned for responsiveness, integrity and excellence; we garner trust by delivering what's promised... effective solutions. Being able to solve any problem, especially those challenging and complex people issues, isn't easy for any company leader. That's where Legacy Bowes Group can assist.

**LEGACY BOWES GROUP** 

Suite 720, 1 Lombard Place
Winnipeg, Manitoba, Canada R3B 0X3
Tel: 204-943-0553
Email: info@legacybowes.com Website:
www.legacybowes.com

To increase productivity and improve workplace cultures, Western Canadian and NW Ontario organizations - large and small - are turning to LBG's custom-designed HR strategy services. Providing a comprehensive range of attraction, retention and engagement solutions, our experienced consultants look forward to working with you to address your people issues by developing the ideal Talent Management program for your business.

#### **Areas of Practice:**

- Executive, Management & Professional Search
- HR Consulting & Advisory Services
- Online & Print Recruitment Strategy, Design & Programming
- Organizational & Leader Development Services
- · Labour and Employee Relations
- Career Management & Transition
   Services
- Assessment & Coaching
- Training & Development
- Succession Management
- · Incident Investigation
- Workplace Health and Safety
- · Change Management
- · Administrative Search

#### **Products/Services:**

- Compensation
- Coaching
- · Labour Relations
- · Leadership Development
- Training & Organizational Development
- · Career Management Firms
- HR Solutions
- · Executive / Management Search
- Recruitment
- Employee Survey

LEGACY BOWES GROUP 53



**Parent Company:** 

Magellan Aerospace Limited

Established: 1930

Facilities: 840,000 sq. ft.

Employees: 700

#### **Quality Standards/Certifications:**

- · ISO 14001:2004
- · ISO 9001:2008
- AS 9100 Rev. C
- Nadcap

#### **Principle Products and Services:**

- Aeroengine components manufacture and R&O
- Aerostructures component manufacture and assembly (composite and metal)
- Space science programs
   (manufacture of sounding rockets, small satellites, payloads, and space hardware)
- Wire Strike Protection System (WSPS™) for helicopters
- Solid propellant rocket motors

#### **Major Clients:**

- · General Electric
- BAES
- Rolls-Royce
- Lockheed Martin Aeronautics
- Airbus
- Boeing
- Various Air Forces in NATO, ASEAN, and Australasia
- Bombardier
- DND
- Canadian Space Agency



### MAGELLAN AEROSPACE, WINNIPEG

660 Berry Street

Winnipeg, Manitoba, Canada R3C 2S4

Tel: 204-775-8331 Fax: 204-775-2091

Website: www.magellan.aero

#### **CONTACT/TITLE:**

#### Don Boitson

Vice President and General Manager



#### **Employees:** 7

#### **Quality Standards:**

- · Transport Canada approval
- Transport Canada Supplemental type approvals
- FAA Supplemental type certificates

#### **Principal Products and Services:**

- International & domestic charter service
- Aircraft maintenance and piston helicopters
- Manufacture fiberglass products
- Transport Canada MD-M services (Aircraft Importation and Export services)

Established: 1946

### MAPLE LEAF AVIATION LIMITED

Group 520, Box 16, R.R. #5, Brandon Municipal Airport, McGill Field, Brandon, Manitoba, Canada R7A 5Y5 (#3 Hangar, 455 Agnew Drive, Brandon)

Tel: 204-728-7618 Fax: 204-725-1719 Email: mla@mlav.ca

Website: www.aircraftspeedmods.ca OR

www.mlav.ca

#### **CONTACT/TITLE:**

**David Wall**, President & General Manager,
Director of Maintenance



Founded in 1985, MDS has steadily risen to a position of global prominence in the provision of turnkey test facilities and test systems for the aviation, industrial, and marine gas turbine engine community. From complete turnkey facilities to maintenance and operational support, for MDS there continues to be one underlying constant: a steadfast commitment to the provision of superior products and services to our clients around the world.

MDS, through its subsidiary, MDS AeroTest, is operating and maintaining the largest and most advanced cold weather test and research facility for gas turbines in

#### **MDS AEROTEST**

100 Test Avenue, Box 1240 Thompson, Manitoba, Canada R8N 1N4 Tel: +1 204 778 6352

#### **CONTACT/TITLE:**

**Don Pereira**, General Manager don.pereira@mdsaerotest.com

the world. The Global Aerospace Centre for Icing and Environmental Research (GLACIER) in Thompson, Manitoba was designed and built by MDS. It is a joint venture between Rolls-Royce and Pratt & Whitney, two of the world's largest aerospace engine manufacturers.

GLACIER provides the world's aerospace industry with rugged, true-to-life and rigorous testing in adverse environmental conditions, with measurement and capacity for today's gas turbine engines and those of the future. The state-ofthe-art GLACIER facility is designed to test the complete range of existing and future aircraft gas turbines. The facility specializes in Icing Certification testing of civil aircraft engines. The centre also houses facilities for indoor preparation of engine packages, full engine measurement and control. GLACIER's data acquisition system – MDS' market leading proDAS – can measure over 2,000 separate parameters at varying frequencies from steady state to dynamic characteristics.

The facility is a ground-based open air test stand capable of testing a very wide range of gas turbine engines. As an engine-generic installation, it includes the infrastructure and test systems necessary for the introduction of both current and future aerospace engines. The subarctic weather conditions of Thompson. Manitoba, make it an ideal location for outdoor icing tests, low temperature endurance testing, cold soak, and other adverse weather testing of flight vehicles and their propulsion systems. During the off season, the facility also provides ideal conditions for other performance, endurance and operability testing.

56 MDS AEROTEST



#### **Facilities:**

- The MicroPilot Flight Test Facility is located 9 km north of Winnipeg, Manitoba, Canada
- The 10,000 square foot facility includes offices and production area
- Situated on 40 acres of land it is ideally suited for flight testing

**Employees: 24** 

#### **Quality Standards/Certifications:**

 MicroPilot has devised rigid internal standards and testing for its products

#### **Principal Products and Services:**

- MicroPilot designs and manufactures miniature autopilots for UAVs and MAVs.
- Weighing 28 grams MicroPilot offers a full line of UAV autopilots, accessories, customization and training. Capabilities include airspeed hold, altitude hold, turn coordination, GPS navigation, plus autonomous operation from launch to recovery.
- Included is the HORIZON<sup>mp</sup> ground control software for mission planning, parameter adjustment, flight monitoring and mission simulation.
- New products are MP2128<sup>HELI3x</sup> triple redundancy for helicopter, MP2028<sup>3x</sup> triple redundancy for fixed wing, MP2128<sup>LRC</sup> integrated advanced

autopilot and MP-trueHWIL Matlabbased hardware in the loop.

#### **Special Equipment:**

- Anti static flooring
- Soldering and de-soldering
- Electronic and sensor equipment
- Signal sensing equipment
- GPS satellite and re-broadcasting equipment
- · Calibration and vibration racks
- Environmental chamber
- · Wireless weather station

#### **Major Clients:**

MicroPilot has over 750 customers in 65 countries

Established: 1995

#### **MICROPILOT**

P.O. Box 720 72067 Road 8E, Sturgeon Road Stony Mountain, Manitoba, Canada ROC 3A0

Tel: 204-344-5558
Fax: 204-344-5706
Email: info@micropilot.com
Website: www.micropilot.com

#### **CONTACT/TITLE:**

Howard Loewen, President

Pierre Pepin,

Vice President Sales & Marketing

MICROPILOT 57



Perimeter Aviation is a diversified airline company operating a Class 2 scheduled air service in Manitoba, a flight training school, charter and contract flying, a fuel depot in Northern Manitoba, and a full service maintenance facility while leasing Metro aircraft to other operators in North America.

The largest independent passenger airline in Manitoba, Perimeter is also by far the largest carrier in Manitoba, in terms of number of aircraft, number of pilots, number of flights, etc.

A 100% Manitoba owned company, Perimeter has an impressive list of clients in which we have owned and operated aircraft for. These include, but are not limited to:

- · a Lear Jet for Great West Life
- · a Hawker Jet for CanWest Global
- a Citation for Reimer Express
- a Kingair for James Richardson &
- a Conquest, Citation, Metro, Beech Baron, and an F-27 for United Parcel Service
- · a Metro for Air Canada
- and Beech Barons and Metros for Purolator Courier and Brinks Canada

#### PERIMETER AVIATION

626 Ferry Road, Winnipeg International Airport Winnipeg, MB R3H 0T7

Tel: (204) 786-7031 Fax: (204) 783-5598

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#### STEVENSON CAMPUS

**Facilities:** 55,000 sq. ft., Winnipeg / 25,000 sq. ft., Southport

Employees: 22 in Winnipeg /

11 in Southport

#### **Quality Standards/Certifications:**

· Transport Canada approved Aircraft

#### RED RIVER COLLEGE -STEVENSON CAMPUS -AVIATION AND AEROSPACE

#### **Winnipeg Campus**

2280 Saskatchewan Ave, Winnipeg, Manitoba, Canada R3J 3Y9 Tel: 204-945-6001 Email: stevensonaviation@rrc.mb.ca

#### **Southport Campus**

75 Muskateer Road West Box 237, Hangar 4 Southport, MB R0H 1N0 Tel: 204-428-6300

Email: stevensonaviation@rrc.mb.ca
Website: www.rrc.mb.ca/stevensonaviation/

#### **CONTACTS/TITLE:**

**Don Macdonald**, *Dean*, *Transportation Aviation and Manufacturing*- 204 632-3990

**Bill Fraser**, Chair, Aviation and Aerospace - 204 945-6085

**Tracy Dyer**, Business Development Manager - 204 632-2456 Maintenance Engineer (AME) programs

- Canadian Council for Aviation and Aerospace (CCAA) approved AME and Gas Turbine Repair and Overhaul (GTRO) programs
- CGSB: Non Destructive Testing and Training Centre

### Principal Products and Services Include Delivery of:

- Aircraft Maintenance Journeyperson Apprenticeship Training Program (AMJ)
- Aircraft Maintenance Engineer Diploma Program (AME M)
- Gas Turbine Engine Repair and Overhaul
- Aerospace Manufacturing Technician Program (Composites Training)
- · Non-Destructive Testing
- AME Refresher/Recurrent Training
- Human Factors Training
- Canadian Aviation Regulations Training(CARs)
- · Customized training for industry

#### **Special Equipment:**

- Wide variety of aircraft, engines, and training aids at both facilities
- Composites manufacturing 'model factory'
- · Airside access both locations
- Non-destructive testing lab

#### **Major Clients:**

- · Standard Aero
- · Boeing Canada Operations Ltd.
- Large and small Manitoba and Approved Maintenance Organizations



Facilities: 607 hectares

#### **Principal Products and Services:**

- Southport is a Property
   Management and Development
   Company supporting aviation,
   training and commercial initiatives
   by understanding the needs of
   tenants, Southport is able to provide
   new or existing facilities tailored to
   their business.
- Southport is a very active aerospace operation with Transport Canada approval airport certification.
- The prime tenant, Allied Wings operates Canada's first private, air traffic control tower, as well as general airfield operations. The airport is serviced by an operational VFR tower with IFR services including a NDB, VOR, DME and ILS. There are four asphalt runways at Southport, the longest being 7,000 feet.
- Southport has invested over \$35
  million in the site within the last 5
  years, including airfield upgrades,
  new facilities and infrastructure
  upgrades.
- Southport has developed value added services; recreation centre, short and long-term accommodations, available to the public to promote a balanced lifestyle.
- With an existing 16,000 sq ft building with direct airside

- access, there are a wide variety of business opportunities including aircraft manufacturing, aircraft maintenance engineering, aviation technology and airport equipment overhaul and refinishing.
- Over 81 hectares on airside and groundside building sites are available for commercial and airside development. Existing facilities may be leased and customized to accommodate specific requirements.

Established: 1990



#### **SOUTHPORT**

25 Centennaire Drive Southport, Manitoba, Canada ROH 1N1

Tel: 204-428-6030
Fax: 204-428-6036
Email: info@southport.ca
Website: www.southport.ca/

#### **CONTACT/TITLE:**

Andy Fletcher, Chairman of the Board
Peggy A. May, Chief Executive Officer

60 SOUTHPORT



#### **Facilities:**

- Canada: Winnipeg, MB; Montreal, PQ; Vancouver, BC; Calgary, AB
- USA: Tempe, AZ; Los Angeles, CA; Houston, TX; San Antonio, TX; Augusta, GA; Springfield, IL; Maryville, TN; Lafayette, LA; Concord, NC; Black Diamond, WA; Dallas, TX; Cincinnati, OH
- International: Tilburg, Netherlands;
   Singapore, Singapore; Sydney,
   Australia

**Employees:** 3,900 worldwide (1390 in Manitoba)

#### STANDARD AERO

33 Allen Dyne Road

Winnipeg, Manitoba, Canada R3H 1A1

Tel: 204-318-7817 Fax: 204-272-0190

Email: kim.hooke@standardaero.com Web Site: www.standardaero.com

#### **CONTACT/TITLE:**

Kim Olson, Senior Vice President

#### **Quality Standards/Certifications:**

 FAA, EASA, ISO 9001:2000/AS 9110:2003, Transport Canada DAO, Transport Canada AMO, ISO 14001:2004

#### **Principal Products and Services:**

- Pratt & Whitney Canada PT6A, PW100, PW600 engines
- Rolls-Royce 250, T56/501D, AE2100, AE3007 engines
- General Electric LM1600, CF34, CFM56 engines
- · Honeywell 36 and RE220 Series APUs
- Hamilton Sundstrand S4H60 propellers and APS2300 APU
- Honeywell TFE731, TPE331, CF738, HTF7000
- Business Aviation Paint, Interiors, Airframe modifications, Avionics, Airframe Completions.

#### **Special Equipment:**

Vacuum Furnaces, Engine
Testing Facilities, Plating
Facilities, Aluminide Coating and
Fluoride Ion Cleaning, Robotic
Plasma Spray Booths and
Laser Systems, 3D Plastic
Printing, Vane Flow Capabilities,
Water Jet Stripping Equipment,
Waste Water Treatment Facility,
high speed tip grinding, Low heat
input joining capabilities and
Advanced NDT

#### **Major Clients:**

 Our major clients include some of the world's foremost airlines, military & governments, business aviation, helicopter, and marine & industrial operators.

Founded: 1911

STANDARD AERO 61



Facilities: 13,000 sq. ft.

**Employees:** 19

#### **Quality Standards:**

- Project planning and Project Quality Document Maintenance
- ISO Quality System Maintenance
- Auto DAD Drawing services
- · ISO 9001:2008

#### **Principal Products/Services:**

 Custom manufacturing and repair of equipment, tools and parts;
 Precision machining, engine and compressor parts; Grinding (cylindrical and surface) of rubber, alum, steel and cast iron; Precision lapping and polishing of pump components and seals including carbides and ceramics; Complete machine shop services; Complete welding shop services; Engine and compressor component repairs; Small batch manufacturing (under 100 piece lots); On site fabrication and repairs; On site mechanical repairs/assistance including some diagnostic services Distributor; LS Starrett Precision Tools/Gages, Electrical Discharge Machining (Die Sinker Type).

Established: 1911

### STANDARD MACHINE WORKS

660 St. Matthews Avenue

Winnipeg, Manitoba, Canada R3G 0G8

Tel: 204-783-7001 Fax: 204-783-9988 Email: smw@smw.mb.ca

Website: www.standardmachineworks.com/

#### **CONTACTS/TITLE:**

John Brown, Production Manager

Chris Saunders, Sales & Marketing Manager



Facilities: 75,000 sq. ft.

Employees: 115

#### **Quality Standards/Certifications:**

- ISO 9001:2000
- · Controlled Goods

#### **Principal Products and Services:**

- Machining 5 Axis (Robotic Loading), High Speed Horizontals, Vertical Turning Lathes
- Heat Treating Aluminum, Atmospheric, and Induction Hardening
- Rapid Prototyping Layer Deposit &

# STANDARD MANUFACTURERS SERVICES LTD.

691 Golspie Street

Winnipeg, Manitoba, Canada R2K 2V3

Tel: 204-956-6300 Fax: 204-661-4613

Email: info@standardmanufacturers.com Website: www.standardmanufacturers.

com

#### **CONTACTS/TITLE:**

Rolf Gretschmann, President

Sterolithography Modeling

- Permanent Mold Foundry
- · Robotic Welding
- · Assembly & Testing of Components
- Global Sourcing

#### **Major Clients:**

- Aerospace
- Military
- Transportation

Established: 1982



Facilities: 65,200 sq. ft.

**Employees:** 189 (includes lawyers, students and staff)

TDS and Lex Mundi

Thompson Dorfman Sweatman LLP (TDS) is a founding member of Lex Mundi, the world's leading association of independent law firms, and is the exclusive member firm for Lex Mundi in Manitoba, Canada.

Lex Mundi is the Mark of Excellence for legal services globally. Through Lex Mundi, TDS provides its clients with access to more than 20,000 lawyers in 560 offices. Lex Mundi member firms are present in more than 100 countries, states and provinces. These premier independent law firms provide legal representation and local market knowledge practically anywhere in the world.

#### **Principal Products/Services:**

Over 20 areas of practice including: Business Law (Corporate & Commercial), Labour & Employment, Taxation, Intellectual Property, Advocacy & Dispute Resolution, Property & Development, Trusts & Estate Planning and Business Immigration among others.

#### **Major Clients:**

Manitoba Hydro, HudBay Minerals Inc., St. Joseph Windfarm Inc., University of Manitoba, Boyd Group Income Fund, HyLife Ltd., Winpak Ltd., Toronto-Dominion Bank, MTS Allstream Inc., The Winnipeg Regional Health Authority, the Winnipeg Police Association, University of Winnipeg, Canadian Mortgage Loan Services, Manitoba Public Insurance, Timbercreek Asset Management Inc., Ladco Company Limited, Manitoba Health Research Council, The Winnipeg Foundation, Assembly of Manitoba Chiefs, Government of Manitoba, Maple Leaf Foods Inc., Manitoba Mining Association.

Established: 1887

#### **TDS LAW**

201 Portage Avenue, Suite 2200 Winnipeg R3B 3L3 Tel: 204.957.1930 Fax: 204.934.0570 Email: tds@tdslaw.com

Website: www.tdslaw.com

#### **CONTACTS/TITLE:**

Mark E. Howe, Director of Marketing & Professional Development

64 TDS LAW

#### TARRY & ASSOCIATES LTD.

Management Consultants

#### **Principal Products and Services:**

 General management consulting with specialization in strategic and business planning, feasibility studies, market research, HR development and government program liaison.

#### **Major Clients:**

 Large and small Canadian aerospace firms, government departments and industry associations concerned with development of aerospace industry.

Established: 1978

#### **TARRY & ASSOCIATES LTD.**

27 Jewett Bay

Winnipeg, Manitoba, Canada R3R 2M9

Tel: 204-895-8710 Cell: 204-802-0031 Email: rtarry@shaw.ca

#### **CONTACTS/TITLE:**

**Bob Tarry**, President

TARRY & ASSOCIATES LTD. 65



As the first university established in western Canada, the University of Manitoba has been at the centre of research in Manitoba for more than a century. From the development of canola and advances in wireless communication, to the prevention of Rh disease of the newborn and breakthrough discoveries concerning the transmission of HIV/AIDS, our researchers have made contributions that have had a global impact.

University of Manitoba scientists, engineers, artists and scholars are finding innovative solutions to many of the challenges facing Canada and the world in the 21st century. With the support of our partners in research, including governments, business and industry, and community organizations, they are discovering new ways to improve our health, increase our understanding of ourselves and our world, advance our technology, strengthen our communities and protect our environment.

Manitoba is home to great companies with great ideas. With additional research on product development and operations processes, those great ideas can be transformed into further business successes. The University of Manitoba's new Transformational Partnerships approach actively supports industry in making those innovation leaps through collaborative research and development partnerships.

The Technology Transfer office is ready to facilitate your connections with the University of Manitoba.

#### UNIVERSITY OF MANITOBA

Technology Transfer Office
University of Manitoba
631 Drake Centre
181 Freedman Crescent
Winnipeg, Manitoba, Canada R3T 5V4
Tel: (204) 474-6200
Fax: (204) 261-3475
Email: tto@umanitoba.ca
Website:
http://umanitoba.ca/research/tto/

#### **CONTACTS/TITLE:**

**Darren Fast**, Ph.D.

Director of Technology Transfer



Employees: 12

Facilities: 1,500 sq. ft. plant

#### **Quality Standards/Certifications:**

- Testing lab for QA inspection
- Canadian General Standards Board
- 48-GP-4M, Radiography, 48-GP-7M, Ultrasonics, 48-GP-8M, Magnetic Particle, 48-GP-9M, Liquid Penetrant, 48-GP-13M, Eddy Current
- CSA W17S, MIL STD 410E, SNT-TC1A
- AQAP 4; ASME; CSA; ISO; AMO 79-91
- CWB 178.2 Level 2 Certification

#### **Principal Products and Services:**

 West-Can's principal products and services include: nondestructive test of materials and components, materials evaluation, aircraft component and structural inspection; Rocket motor radiographic examination; R&D on new materials and components, AMO 79-91, Cessna Certification C-163 various cast product inspection; Capable of performing all services in the lab or field.

#### **Major Clients:**

- Boeing
- StandardAero
- Magellan Aerospace
- · Perimeter Air
- Calm Air

Established: 1969

### WEST-CAN INSPECTION LIMITED

50 Boys Road

Winnipeg, Manitoba, Canada R2C 2Z2

Tel: 204-668-7327 Fax: 204-668-7347

Email: ndt@westcaninspection.com Website: www.westcaninspection.com/

#### **CONTACTS/TITLE:**

**Bruce Wachal**, Owner

Larry Russell, Vice President



#### **Principal Products and Services:**

- · Promote, support, enable, or otherwise facilitate R&D and technology development activities in aerospace, including: engine and component testing in icing conditions, engine endurance and ingestion testing, flight in icing conditions, noise attenuation & management technologies, prognostics and health management systems, advanced instrumentation systems, integrated vehicle health management systems & technologies; and other aerospace & aeronautical science & technology domains
- Generating economic growth in Manitoba by attracting new R & D collaboration and facilitating new technologies
- Facilitating improved capabilities and maximizing the utilization

- of aerospace testing facilities in Manitoba
- Fostering the development of the specialized workforce needed for the growth of the aerospace testing domain in Manitoba

#### **Major Clients:**

- StandardAero
- General Electric Canada (GEC)
- GE Aviation
- Western Economic Diversification Canada (WD)
- · Aerospace and R & D organizations
- Government agencies
- · University of Manitoba
- Red River College

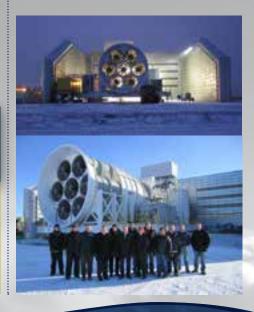
Established: 2011

### WEST CANITEST R & D INC. (WESTCARD)

Tel: 204-471-9979 Fax: 204-272-1257 Email: vicgerden@mts.net

#### **CONTACTS/TITLE:**

Vic Gerden, CEO





Employees: 170

#### **Principal Products and Services:**

 Operator of the Winnipeg James Armstrong Richardson International Airport

### WINNIPEG AIRPORTS AUTHORITY, INC

Room 249, 2000 Wellington Avenue Winnipeg, Manitoba, Canada R3H 1C2

Tel: 204-987-9400
Fax: 204-987-9401
Email: mogorman@waa.ca
Website: www.waa.ca

#### **CONTACT/TITLE:**

**Michael O'Gorman**, Vice President, Operations & Customer Experience





Economic Development Winnipeg Inc. (EDW) is the lead economic development agency for Winnipeg. EDW facilitates investment promotion and attraction, capacity building, tourism development, marketing and the management of market information.

By applying competitive intelligence and by fostering relationships with industry leaders, government officials and community stakeholders, potential opportunities and innovation drivers are evaluated to develop key industries and define future economic growth. EDW supports targeted sector development and promotes Winnipeg's diverse economy and high quality of life.

EDW leads global investment attraction, and local business retention and expansion, with its Yes! Winnipeg initiative. Yes! Winnipeg's business development team assists in the creation and retention of jobs, identifies opportunities that attract new investment, focuses on expansion and helps local entrepreneurs launch new commercial ventures.

### ECONOMIC DEVELOPMENT WINNIPEG/YES! WINNIPEG

300 - 259 Portage Avenue

Winnipeg, Manitoba, Canada R3B 2A9

Tel: 204-954-1997 Fax: 204-942-4043

Website:

www.economicdevelopmentwinnipeg.com

#### **CONTACT/TITLE:**

**Greg Dandewich**, Senior Vice President, Economic Development

Email:

greg@economicdevelopmentwinnipeg.com

**Sonya Murano**, Director, International Business Development, Yes! Winnipeg

nitiative

Email: smuraro@yeswinnipeg.com



Industry Consulting Services provides sector knowledge to business in the areas of marketing, technology, business development, and management.

Existing infrastructure advantages are used to maximize economic development opportunities and encourage commercialization and adoption of new technologies and strategic alliances to further strengthen and diversify Manitoba's industrial capabilities.

#### MANITOBA DEPARTMENT OF ENTREPRENEURSHIP, TRAINING AND TRADE (ETT) - INDUSTRY CONSULTING

1050-259 Portage Avenue Winnipeg, Manitoba, Canada R3B 3P4

Tel: 204-945-2475 Fax: 204-945-3977

#### **CONTACT/TITLE:**

Robert Manson, Senior Project Manager Direct line: 204-945-8741 Email: robert.manson@gov.mb.ca



Partnering with business, industry and labour to enhance workforce skills and knowledge, Industry Workforce Development promotes business and industry-related human resource development to create a highly skilled, knowledgeable and adaptable workforce in Manitoba. This focus recognizes that a high-performance workplace is directly linked to meeting business goals and improving bottom-line results.

#### MANITOBA DEPARTMENT OF ENTREPRENEURSHIP, TRAINING AND TRADE (ETT) - INDUSTRY WORKFORCE DEVELOPMENT

260 - 800 Portage Avenue Winnipeg, Manitoba, Canada R3G 0N4 Tel: 204-945-5643 (administrative phone number)

Fax: 204-945-0356

#### **CONTACT/TITLE:**

Wayne Copet, Executive Director Email: wayne.copet@gov.mb.ca



The Manitoba Aerospace Association (MAA) represents a "Network of Excellence" for the delivery of manufactured aerospace products and value-added services by world-class companies.

The association is a central point of access to Manitoba's aerospace industry, leading a network for collaboration, growth and development.

#### **Mission:**

The MAA supports and promotes the aerospace industry through business development activities and human resource initiatives.

### MANITOBA AEROPSPACE ASSOCIATION, INC.

10 Tweedsmuir Road Winnipeg, Manitoba, Canada R3P 2A8 Website: www.manitoba-aerospace.mb.ca

#### **CONTACT/TITLE:**

**Ken Webb**, Executive Director Tel: (204) 799-7660 Email: kenwebb.maa@mymts.net

#### **Aerospace in Manitoba:**

Manitoba provides a diverse range of superior aerospace manufactured products, as well as maintenance, repair & overhaul, training and specialized services.

The cluster has unique and growing capabilities in composites manufacturing, repair, R&D and commercialization, supported by the Composites Innovation Centre (CIC) and collaborations with industry, the University of Manitoba and Red River College.

Manitoba is also home to OEM led stateof-the-art environmental testing and research facilities, particularly for engine testing and certification.



The Manitoba Aerospace Human Resources Council (MAHRC) helps meet the training and education needs of existing and future aerospace employees. Driven by industry, MAHRC delivers innovative solutions to upgrade skills, address labour shortage challenges and foster continuous improvement and enhanced competitiveness.

MAHRC shares member companies' qualifying costs for training existing employees, creates pathways into the industry through strategic partnerships with Manitoba's secondary and post-secondary institutions, and delivers

outreach, promotion and awareness initiatives for the aerospace industry as a career destination.

MAHRC also delivers the "learner to world class" Competitive Edge Supplier Development (CESD) Program. This is a highly structured and systematic improvement system that has guided aerospace companies through strategically directed improvement activities. The improvement process is unique to each company and is informed and directed by the strategic business plan created in the initial months of joining the program.

#### MANITOBA AEROSPACE HUMAN RESOURCES COUNCIL (MAHRC)

1000 Waverly Street
Winnipeg, Manitoba, Canada R3T 0P3
www.manitoba-aerospace.mb.ca

#### **CONTACT/TITLE:**

Wendell C. Wiebe,

Executive Director and GM
Tel: (204) 272-2952
wwiebe@manitoba-aerospace.mb.ca



With an average 240 days a year of subzero temperatures, and up to six months of snow cover, Thompson, Manitoba, Canada has emerged as a premier location for real-world winter and cold weather testing.

Here are some of the reasons why:

- reliably and consistently cold temperatures offering an extra-long testing season;
- snow-cover for six months of the year;
- proximity to natural icing corridor;

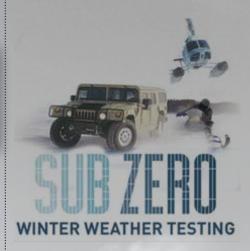
#### THOMPSON UNLIMITED -THOMPSON'S ECONOMIC DEVELOPMENT CORPORATION

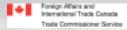
P.O. Box 1214 #15 Moak Crescent Thompson, Manitoba Canada R8N 1P1

Tel: (204) 677-1901 Toll-free: 1 866 965-3386 Fax: (204) 677-1909

Websites: www.thompsonunlimited.ca and www.thompsonsubzero.ca

- proximity to U.S. border;
- daily air, bus and rail service, providing economical and fast service for passengers and freight movements;
- a mix of urban and rural landscapes (enhances anonymity and business support);
- wide variety of modern accommodations and fine dining options; and,
- an industry-recognized track record of outstanding cooperation with hosting testing companies.





Affairos étunginos et International Trade Canada Commerce International Canada Trade Commissioner Service - Service des délégale commerciaux

Manitoban firms can benefit from investment and innovation to enhance their productivity and competitiveness, to strengthen their competitive advantage, and to enable them to grow markets in the United States and further afield.

Our trade commissioners can provide your business with trade, investment and innovation opportunities. The Trade Commissioner will develop a first-hand understanding of your business needs and help connect you to international opportunities to meet those needs.

#### TRADE COMMISSIONER **SERVICE - FOREIGN AFFAIRS & INTERNATIONAL** TRADE CANADA

Winnipeg Regional Office 4th Floor, 400 St. Mary Avenue Winnipeg, Manitoba, Canada R3C 4K5

204-983-4099 Tel: Fax: 204-984-7082

#### **CONTACTS/TITLE:**

Amanda J.W. McNaughton,

Senior Trade Commissioner Email:

amanda.mcnaughton@international.gc.ca



Western Economic Diversification Canada (WD) works to strengthen western innovation, business development, and community economic development. By continuing to promote new economic opportunities, WD is helping to create jobs, economic growth, and long-term prosperity.

## WESTERN ECONOMIC DIVERSIFICATION CANADA (WD)

250-240 Graham Avenue Winnipeg, Manitoba, Canada R3C 0J7 Postage & Delivery Address: Room 620

Tel: 204-983-4472 Fax: 204-983-1280

#### **CONTACTS/TITLE:**

#### Shannon Campbell,

Senior Business Officer Tel: 204-983-0691

Email: shannon.campbell@wd-deo.gc.ca

**Brent DePape**, Senior Policy Analyst 204-983-2124

brent.depape@wd-deo.gc.ca

# MANITOBA AEROSPACE

# MANITOBA, CANADA



"Come chill with us!"

Manitoba is home to a host of complementary world class aerospace companies that play a vital role in the global aerospace industry. Manitoba provides strategic advantages to the aerospace industry: a network of collaborating companies, a solid workforce, tailored education programs, international R&D capabilities, supportive governments, and an ideal geographic location. Together, these factors create a thriving and globally competitive business environment.

If your company is looking for a partner with access to North American markets and advanced aerospace technology, look to the Manitoba aerospace industry. If you are seeking a cost-competitive site to do business, look to Manitoba, Canada. If you need a source of aerospace component manufacturing or engine maintenance services, engine icing and other environmental testing, or composite materials manufacturing or R&D, look to Manitoba companies.

For more information on Manitoba aerospace opportunities and our positive business environment, contact:

#### Manitoba Aerospace Association

10 Tweedsmuir Road Winnipeg, Manitoba R3P 2A8

Telephone: (204) 799-7660 kenwebb.maa@mymts.net www.manitoba-aerospace.mb.ca

#### Manitoba Entrepreneurship, Training & Trade

1050-259 Portage Avenue Winnipeg, Manitoba R3B 3P4

Telephone: (204) 945-2475 robert.manson@gov.mb.ca www.gov.mb.ca/ctt/profiles/aerospace

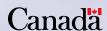
#### Western Economic Diversification Canada (WD) Manitoba

The Cargill Building Room 620 – 240 Graham Avenue Winnipeg, Manitoba R3C 0J7 Telephone: 204-983-4472 Toll Free: 1-888-338-WEST (9378)

Fax: 204-983-3852









The Manitoba Aerospace Directory is published every two years. Please send amendments to:

Mr. Robert Manson - robert.manson@gov.mb.ca

Latest electronic Directory is available on-line at www.manitoba-aerospace.mb.ca