

# Contrails

MANITOBA AEROSPACE

JUNE 2014

A PUBLICATION OF THE  
MANITOBA AEROSPACE ASSOCIATION  
MARKETING COMMITTEE

NEWS • EVENTS • INFORMATION



## MESSAGE FROM THE EXECUTIVE DIRECTOR - KEN WEBB



Hockey is over, football is starting, we've passed the longest day of the year, the Farnborough Air Show is just around the corner and the last water pipe has thawed- it must be June! Before we all head off for wherever summer takes us, let me provide an update on your association's activities.

The Emerson and Jenkins reviews continued to drive the national aerospace agenda forward in Canada, and both MAHRC and MAA were actively engaged in the development of new initiatives.

Announced in April, the Consortium of Aerospace Research and Innovation in Canada (CARIC) will be the new collaborative research and development network that was recommended by Emerson. With \$4 million in annual funding from Industry Canada, the goal of the initiative is to bring together industry, academia and research institutions to advance strategic aerospace technologies through collaborative research and development.

Kim Olson (StandardAero) and Sean McKay (CIC) are working with AIAC and industry representatives from across the country to launch this new network.

Still under development, the national supplier development program will enable Canadian SMEs to develop the systems, business processes and performance demanded in the supply chain by the OEMs.

Wendell Wiebe (MAHRC) is working with AIAC and a national steering committee to develop a Canadian model that builds on the experience gained through the MACH 5 program in Quebec and the Competitive Edge program in Manitoba. Expect to hear more about the program later this year.

A third Emerson recommendation, to support the creation of "hubs" in support of aerospace training and research, is being actively supported by the NRC. While the report identified Montreal and Toronto as "among the obvious places to create or nurture such hubs", we believe Manitoba is another logical choice and are working with NRC to identify collaborative aerospace R&T opportunities for NRC here in Manitoba.

As part of our response to the Emerson report, the Manitoba aerospace community undertook a technology road map (TRM) project to identify the key technologies required to keep us competitive and engaged in the global markets of the future.

The TRM report, identifying 25 key technologies in six strategic areas, was presented at a special MAA workshop in February and has since been the basis for discussions with industry, NRC, government and our academic institutions about the research and training needs to support aerospace in Manitoba. The MAA board is considering a recommendation to establish an Aerospace Research and Technology committee to help implement the results of the TRM and to keep the

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## MESSAGE FROM THE EXECUTIVE DIRECTOR - KEN WEBB (CON'T FROM PAGE 1)

R&T agenda moving forward.

One of the goals of this committee would be to align and connect our TRM with the national agenda and the new CARIC network. At the first CARIC forum in April, Manitoba led teams submitted three collaborative research proposals, the only region outside of Quebec and Ontario to do so. We hope that one of more of the proposals - out of autoclave composites; non-destructive inspection; and robotics and automation in manufacturing - will be selected for support by the new national network later this year.

As well as the TRM workshop, MAA hosted a number of well attended forums and events over the first half of the year.

In March AIAC, NRC and Industry Canada provided an update on the Emerson review with a special focus on technology. RAFALE International came to town in April to provide a briefing on the RAFALE as a candidate for Canada's new fighter aircraft and the potential business opportunities that could arise from a RAFALE acquisition. In May the RCAF provided an introduction to their new Emerging Skies Initiative, a consultation process to bring together the RCAF, Canadian industry and academic institutions to jointly explore innovative solutions for Canada's future air-power needs over the next 10-30 years.

We also celebrated Aerospace Week 2014 in May. The week kicked off with Minister Oswald (Manitoba Jobs and the Economy) proclaiming May 26-30 as Aerospace Week in Manitoba with 1000 grade six students at the annual Aerospace and Aviation in Manitoba (AAiM) Day at Stevenson Campus.

This year AAiM Day had some extra special visitors, as Their Royal Highnesses, the Prince of Wales and the Duchess of Cornwall spent an hour touring the facilities and talking to the children. Other special guests included Prime Minister Harper and his wife, senior Manitoba MP Shelly Glover and her husband, General Walter Natynczyk from the Canadian Space Agency and

several Manitoba MPs and senators. As well as thrilling the children, the royal visit provided national publicity to the aerospace industry in Manitoba.

Other Aerospace Week activities included a special 20 page Aerospace supplement in the Winnipeg Free Press, a members' networking meeting with guest speaker Lt. Col Paulhuas from the RCAF, a tour of 435 Squadron (C-130 Hercules) at 17 Wing and the launch of the new Manitoba Aerospace website at [www.mbaerospace.ca](http://www.mbaerospace.ca)

In addition to AAiM Day, other outreach and advocacy activities over the first half of the year included Western Partnership Days with MPs and senior government officials in Ottawa, individual meetings and roundtable briefings with MPs Kenney, Rempel, Glover, Bezan, Bergen, and Bateman, and business prospecting meetings with representative from Israel Aircraft Industries Ltd. (IAI), who are looking for Canadian collaborators.

Looking forward, our joint MAA/MAHRC AGM will be on October 2, the annual golf tournament is scheduled for September 11, and our All Star Awards dinner will be on November 20th. Golfers and nominations are needed for these latter events, which raise funds for our Manitoba Aerospace Student Endowments. So put your thinking caps on and let's identify those special teams or individuals who have made an outstanding contribution to aerospace in Manitoba. Nomination forms can be found on our website.

New for this year, we are working with Red River College and the University of Manitoba to have our endowment funds attract matching donations from a special provincial government fund, allowing us to double up on our post-secondary endowments. This makes your participation more valuable than ever. Since the endowment was established in 2007 we have raised over \$100,000 for student awards.

So mark your calendars and come out to participate in some fun events. In the meantime, let's all go celebrate summer. Cheers!

## MANITOBA AEROSPACE ASSOCIATION 4TH ANNUAL GOLF TOURNAMENT

Mark your calendars for Thursday, September 11th to participate in the 4th annual MAA Golf Tournament. This year's tournament will take place at Larter's Golf and Country Club, located on the picturesque banks of the Red River. Lunch will be served at noon prior to the shotgun start at 1:00 (dinner to follow). For more information and to register, click on this link- <https://www.larters.com/manitoba-aerospace-tournament>.

All proceeds go towards the MAA Student Endowment Fund. Each year, MAA, in partnership with MAHRC, awards bursaries to students from five schools who exemplify qualities that are endorsed by the aerospace community. Those qualities consist of integrity, reliability, team work, innovation and work ethic. To register, please visit

[www.larters.com/clubhouse/events/event/1463/Manitoba-Aerospace-Assoc--\(MAA\)](http://www.larters.com/clubhouse/events/event/1463/Manitoba-Aerospace-Assoc--(MAA))

We hope we will see you there!



**MANITOBA AEROSPACE**

*Golf Tournament*

*in Support of the  
Aerospace Student Awards  
Endowment Fund*

**LARTERS at St. ANDREWS**  
GOLF & COUNTRY CLUB

**Date:** Thursday, September 11, 2014  
**Place:** Larters at St. Andrews Golf Club  
**Format:** Texas Scramble  
**Time:** 1:00 pm Shotgun Start

**Entrance Fee:** \$175 / person  
**Includes:** Green Fee / Cart / Dinner / Prizes

**Contact:** Peter Ewert, Larter's Golf Director  
(204) 334-2107 Ext. 207  
[pewert@larters.com](mailto:pewert@larters.com)

*September 11, 2014*



## AAiM DAY IN MANITOBA



*Prince Charles was given a mini flight jacket for his grandson by Barb Bowen (Photo/ Hello Canada)*

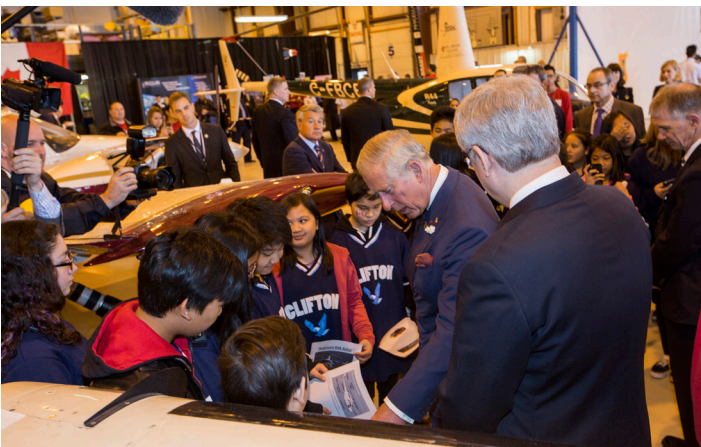
We were so excited to host His Royal Highness, Prince Charles and Her Royal Highness, the Duchess of Cornwall at our Aerospace and Aviation in Manitoba (AAiM) Day event on May 21, 2014. This was the 8th anniversary of our event. Approximately 1000 Grade 6 students visited the RRC-Stevenson campus and took part in six hands on activities related to the fields of aerospace and aviation. This is always a great opportunity for Grade 6 students because they study flight in their science curriculum. Our activities have been designed to make science fun and exciting for the students.

Their Royal Highnesses interacted with some of the Grade 6 students who were taking part in hands on activities which included: flight inspection, composite manufacturing, space exploration and flight (making and flying paper airplanes). We were thrilled to be able to showcase our industry and this event to the Royal Couple and the Prime Minister and his wife.

AAiM Day would not be possible without the support and hard work of our partner organizations and more than 175 volunteers from companies and organizations such as: Boeing Winnipeg, Magellan Aerospace, StandardAero, Manitoba Rocketry Group, Career Trek, Women in Science and Engineering, Air Cadet League of Manitoba, Air Cadets, 17 Wing Squadron, Canadian Forces School of Aerospace Studies, Tec Voc High School, and particularly to the staff and students of our gracious host, RRC – Stevenson Campus.



## AAIM DAY IN MANITOBA IN PICTURES





## MAGELLAN AEROSPACE TO BUILD ADVANCED SATELLITE INTEGRATION FACILITY



*From left to right: Lawrence Toet, MP for Elmwood-Transcona; Dr. Jonathon Beddoes, Dean of Engineering, University of Manitoba; The Honourable Michelle Rempel, Minister of State for Western Economic Diversification; Don Boitson, Vice President and General Manager, Magellan Aerospace; Dr. David Barnard, President and Vice Chancellor, University of Manitoba*

On Tuesday, 20 May 2014, Magellan Aerospace announced that it will establish an advanced satellite integration facility (ASIF) in partnership with the University of Manitoba. With the support of Western Economic Diversification Canada (WD), the facility will be shared and jointly operated by Magellan and the University of Manitoba and will create a unique and innovative hub that will bring together industry and academia in the research, development, and the construction and testing of satellite buses and components.

Magellan Aerospace, Winnipeg will be home to the ASIF and will be large enough to accommodate the simultaneous assembly, integration and testing (AIT) of three satellite buses. Magellan will invest more than \$2 million Canadian in the project that will contribute to the construction of the facility, multi-year program funding, and the establishment of an Industrial Research Chair in the area of satellite development within the Faculty of Engineering at the University of Manitoba. This facility and the new Chair will enhance the training opportunities available to engineering students at the University of Manitoba.

“This partnership between the University of Manitoba and Magellan is the kind of relationship that was identified in the Emerson Report of

2012 as the model industry, research, cooperation that is a vital component of growing Canada’s space technology development”, said Mr. Don Boitson, Vice President and General Manager, of Magellan Aerospace, Winnipeg. “All of the parties involved in this project are pleased for the support provided by the government to launch this industry-based education and training facility. The funding for ASIF demonstrates a commitment to turning investment in knowledge and technology into an advantage for developing Canada’s space industry globally.”

Construction of the 6,000 square foot facility is the first stage of ASIF development and is scheduled for completion in June 2014. The second stage will see the facility equipped and configured with 3-axis cranes, environmental control equipment, fume hoods, and other specialized equipment for the



*The Honourable Michelle Rempel and Don Boitson on tour of the Magellan Aerospace plant*

production and testing of satellite buses and sub-systems.

Staffing and developing the Research Chair by the spring of 2015 will facilitate the commencement of the program in mid to late 2015. The cost-sharing participants in the establishment of this Manitoba-based satellite integration facility, including the foundation of the Aerospace Research Chair, are Magellan and the University of Manitoba, in partnership with WD.

## THE BIRCH BARK CANOE

Manitoba Aerospace, the Engineering Access Program and the Faculty of Engineering at the University of Manitoba commissioned a documentary called *The Birch Bark Canoe: Navigating a New World*. This 20 minute video is included in a teachers' guide resource package. The package has been designed to be used in Manitoba classrooms to honour the contributions of First Nations and Métis peoples and educate future generations about the art and science of the birch bark canoe.

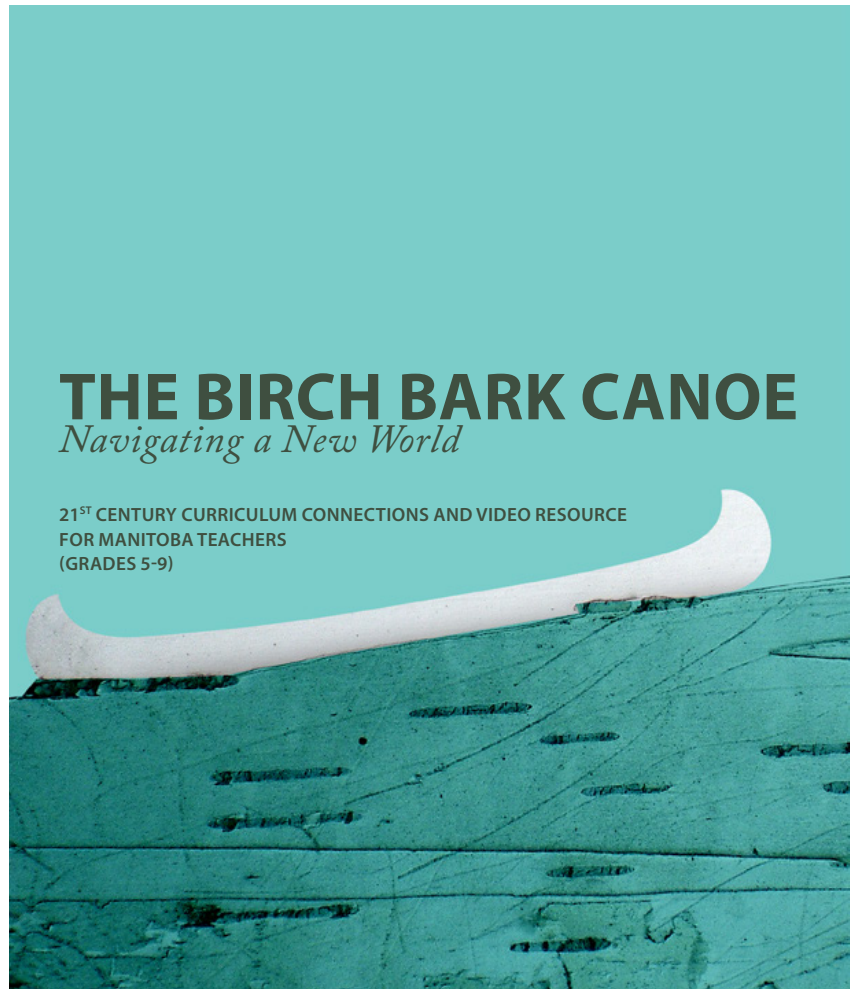
The birch bark canoe is not only a wondrous technological achievement; it is also a work of art. It exists in that world where art, engineering, science and technology intersect. It is also a gift that Indigenous people of Canada shared with the European newcomers that arrived on their shores so many years ago.

This video has several purposes: the most important of which is to demonstrate to youth that engineering and science were fields that were used every day by the Indigenous people of this land and that those concepts were not foreign to their culture. In this way, it is hoped that Indigenous youth will be inspired to seek out science, technology, engineering and mathematic careers in greater numbers than they presently do.

A secondary purpose of this video is to give due justice to the Indigenous people of this land and belatedly thank them for the incredible contributions they have made to the Canadian way of life. The Canada we know was built on the canoe and it would be a vastly different country if this technology had not been shared. In some small way, it is hoped that this video can help repatriate their role as guides and teachers.

Lastly, this project was undertaken to demonstrate a holistic approach to education and an inquiry based learning experience using the canoe as a guide. The video can be used as a catalyst for trans-disciplinary study and for drawing interdisciplinary connections between Indigenous education, science, mathematics, social studies, English language arts, drama, and art. The potential for learning is only limited by the teacher's imagination.

The package will be given free of charge to Manitoba teachers, particularly in Grades 5 to 9, who wish to make use of the resource in their classrooms. If you know of any teachers who may be interested, please ask them to email Barb Bowen at [bbowen@manitoba-aerospace.mb.ca](mailto:bbowen@manitoba-aerospace.mb.ca) for a copy or check out the website: [www.birchbarkcanoe.ca](http://www.birchbarkcanoe.ca).



*The image on the front cover of The Birch Bark Canoe, a new teachers' guide to be used in Manitoba classrooms*



## COMPETITIVE EDGE COLLABORATES IN THE UK

The expression goes: “what goes around, comes around.” In the case of CESD Services, a wholly owned subsidiary of the Manitoba Aerospace Human Resources Council (MAHRC), that expression became a fact.

Over the past three years, CESD Services collaborated with DNAagile Ltd., UK. Through the partnership, CESD Services was able to learn how DNAagile assists UK aerospace and defence companies develop in order to increase their capabilities, continuously improve, and keep pace in the globally competitive aerospace and defence industry. The intention was to transfer that knowledge to Manitoba. “We were able to watch and learn how leading companies in the UK develop and deploy robust methods of strategic planning and deployment, problem solving, and continuous improvement as those systems were put in place at several Manitoba small to medium sized enterprises,” says Wendell Wiebe, Executive Director of MAHRC. “These systems and improvements have made a significant impact on the companies that have participated in the Competitive Edge Program, and we’ve seen some stellar results.”



*Ken Webb, (left), Executive Director of the Manitoba Aerospace Association presents a Competitive Edge Supplier Development Program Award to Kim Gretschrann, Vice-President of Standard Manufacturers Services, for achievement of the Performer Level in Make versus Buy, Collaboration, and Sales and Operations Planning; as well as the Contender Level in Skills Planning and Development.*

At the end of last year, the circle came fully around. “Our resources based in Manitoba were asked to transfer the knowledge we had gained back to the UK. We did so, with great success,” reports Wiebe.

Over several visits in 2013 and early 2014, John Kliever, an Organization Development Specialist with CESD Services, spent a total period of nearly four months assisting Gardner Aerospace. Gardner Aerospace is a major Tier 1 manufacturer for the aerospace and defence industry in the UK. As one of the top 100 global aerospace and defence organizations, Gardner employs more than 1,500 people in 12 factory locations in four countries. “Gardner was already a great organization, their challenge was: How could they become better?” says Kliever. He goes on to say the Gardner Management Team identified that their day to day operational problems prevented them from progressing in their overall strategy. They realized they had to gain control and accountability for their performance to continue to operate at a world class level.

Kliever says the approach was to develop a self-sustaining, world class business plan deployment capability for Gardner. It was his job to implement the capability at Gardner. The challenge was to ensure the knowledge transfer was extremely effective so that it could be a self-sufficient and sustainable system for the future. “Although I would only be a phone call away for questions, obviously because of the geographic distance between the two countries, total understanding of how these systems worked, and how they impact the organization was needed.” Kliever explains there were several aspects to the installation, including coaching of the key change agent, hands on practical demonstration of the systems, and deploying the actual system into four UK plants. This included providing specific training in the use of various management tools such visual indicators, problem solving including containment and countermeasure actions, accountability via management audits, and continuous improvement—all facets of the overall system.



## COMPETITIVE EDGE COLLABORATES IN THE UK (CON'T FROM PAGE 8)

Gardner was very pleased with the Manitoba support: "The support helped us focus the management team on key measures of performance and the need to rapidly solve day to day problems," says Karl Lee, Managing Director of Gardner Aerospace's plant in Hull, UK.

Kliwer says the synergy of working with a focused team who rallied around the future possibilities led to great results. But there is definitely sincere appreciation for Manitoba and CESD Services for the support. "John Kliwer delivered fantastic results whilst helping us to implement this management system across the business at Gardner Aerospace Derby, UK," John Rooney—Director of Operations reflects. "His ability to train, coach, and support our team leaders and managers during the implementation ensured that it was quick, robust, and continues to deliver sustainable results."

Through support of CESD Services, Gardner Aerospace now has a system to unlock their future potential. It includes routine, frequent, focused measurement of its operational performance including daily tracking of key performance indicators, the improved ownership of teams to resolve problems, improved management information and control, improved on time delivery and

quality. For CESD Services, the focus continues to be supporting Canadian organizations in their journey to world class. "CESD Services stands for: Competitive Edge Strategic Development Services," summarizes Wendell Wiebe. "We strive to give companies solutions that help them develop strategically."



*Ken Webb, (right), Executive Director of the Manitoba Aerospace Association presents a Competitive Edge Supplier Development Program Award for achievement of the Performer Level in E-business, Innovation, and Collaboration to Howard Loewen, President/Owner of MicroPilot.*



**Hold the date!**

### **2014 Manitoba Aerospace Dinner & Awards Evening**

The 13th Annual Manitoba Aerospace Awards Dinner will be held on November 20th, 2014

**Thursday, November 20th, 2014**

Victoria Inn – Centennial Ballroom - 1808 Wellington Avenue

Reception – 5:00 pm | Dinner – 6:15 pm



**Tom Aldridge**  
*Consultant*  
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## Investors Group Congratulates

Tom Aldridge, Consultant at Winnipeg South Region Office, is pleased to congratulate,

### **Heui-Jung Lee, B.Comm (Hons), CFP**

in attaining his Certified Financial Planner designation from the Financial Planners Standards Council.

Throughout Canada, the CFP designation is recognized as a mark of quality and professional integrity. To gain this designation, Heui-Jung Lee achieved a high level of focused knowledge in financial, insurance, and tax planning, designed to ensure the best possible client service is provided. Heui-Jung Lee will use this newly acquired designation to ensure each client receives unmatched financial advice available through his practice at Investors Group Financial Services Inc.



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## MANITOBA AEROSPACE EVENTS - SUMMER/FALL/WINTER 2014

### **WestDef 2014**

*Calgary, Alberta*  
 July 6 – 8, 2014

### **Farnborough International Air Show**

*Farnborough, UK*  
 July 14-20, 2014

### **Aerospace, Defence and Security EXPO**

*Abbotsford, British Columbia*  
 August 7-8, 2014

### **Manitoba Aerospace Golf Tournament**

*Larters at St. Andrews Golf & Country Club*  
 September 11, 2014

### **Aviation Industry Supplier's Conference**

*Toulouse, France*  
 September 15-17, 2014

### **LandForces 2014**

*Brisbane, Australia*  
 September 22-25, 2014

### **AIAC Hill Day 2014**

*Ottawa, Ontario*  
 September 24, 2014

### **International Astronautical Congress**

*Toronto, Ontario*  
 September 29 - October 3, 2014

### **MAA/MAHRC Joint Annual General Meeting**

*Hilton Suites Hotel, Winnipeg*  
 October 2, 2014

### **Centrallia Manitoba**

*Club Regent Event Centre, Winnipeg*  
 October 8-9, 2014

### **MRO Asia**

*Singapore*  
 November 4-6, 2014

### **Air Show China**

*Zhuhai, China*  
 November 11-16, 2014

### **2014 Canadian Aerospace Summit**

*Ottawa, Ontario*  
 November 18 – 19, 2014

### **Manitoba Aerospace Dinner and Awards Evening**

*Victoria Inn, Winnipeg*  
 November 20, 2014

### **Transport Canada Aircraft Certification Course**

*Winnipeg*  
 November 17-28, 2014

### **Aviation Forum**

*Hamburg, Germany*  
 December 9-10, 2014