# Contrails

#### A PUBLICATION OF THE MANITOBA AEROSPACE ASSOCIATION MARKETING COMMITTEE

### **NANITOBA AEROSPACE**

NEWS EVENTS INFORMATION



MESSAGE FROM THE EXECUTIVE DIRECTOR -KEN WEBB



Summer arrived at last, but now is going fast. As befits an industry that designs, builds, tests, certifies, and maintains airplanes and spacecraft, - time seems to fly too.

The Canadian Aerospace (Emerson) Review was released last fall and already we are seeing changes being introduced through the federal Budget 2013. Check out the update report in this issue.

The MAA, EnviroTREC and WestCARD co-hosted a two-day workshop to review Emerson's recommendations, with one outcome being the establishment of an industry led Technology Roadmap (TRM) project. The TRM will help identify the critical technologies we need to develop or acquire to assure our competitiveness over the short, medium and long term.

Manitoba hosted 270 delegates at a very successful Western Aerospace Expo (May 6-8), and then we coordinated the Western Canada stand at the (somewhat) larger Paris Air Show (PAS). At the latter, Magellan Aerospace signed a Memorandum of Agreement with BAE Systems for more than 1,000 sets of horizontal tails for the F-35 Lightning II, with a potential value of \$1.2B over 20 years.

Cormer Aerospace also signed agreements in Paris,

including plans to establish its first Mexican manufacturing facility in the Aerospace Park in Querétaro City. Also part of "Team Manitoba" at the PAS were Boeing Canada Operations Ltd, the Composites Innovation Centre, Manitoba Entrepreneurship Training and Trade, MicroPilot, HINDTECH, Red River College (Applied Research and Commercialization Office), and YES! Winnipeg.

Thanks to both Western Economic Diversification and the Manitoba Government for supporting our participation at the Western Canada stand in the Canadian Pavilion.

In between workshops, expos and airshows, we updated the Manitoba Aerospace Directory, designed a new website, and hosted visits from EADS and Airbus. Industry Canada, and Innoventures Canada.

The new directory is updated and reformatted to include individual pages for each company, corporate logos, colour graphics, a capabilities matrix and feature articles on Manitoba's space capabilities. It was very popular at the PAS and members can expect to receive a copy in the mail by the end of the month. Copies have also been sent to select Canadian embassies and Trade Commissioners.

A downloadable pdf version will soon be posted to the website and if you would like extra copies please let me know. Many thanks to Donna Roberecki at Manitoba Entrepreneurship, Training and Trade and Lisa McBride at Boeing for helping to totally re-design the Directory.

The new website is currently under construction, with a launch date planned for Aerospace Week in September. As well as being technically and graphically

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#### Message from the Executive Director - Ken Webb (con't from page 1)



Magellan Aerospace signs MOA with BAE Systems at the PAS. Back Row (L-R) Phil Davidson, Head of International Industrial Participation (IIP) Programmes F-35 Lightning II, BAE Systems; Steve O'Bryan, Vice President, F-35, LMCO; James S. Butyniec, President and CEO, Magellan Aerospace; Scott McCrady, Corporate JSF Program Director, Magellan Aerospace Front Row (Seated, L-R) Daniel Zanatta, Vice President, Business Development and Contracts, Magellan Aerospace; Mr. Paul Burns, Global Procurement and Supply Chain Director, BAE Systems.

updated, the new website will feature separate linked sites for MAHRC and MAA, along with new content such as member profiles, a capabilities guide, news and events, and the new Manitoba Aerospace Directory.

As a lead department for implementing recommendations from the Emerson review, Industry Canada has been visiting aerospace regions across the country, seeking input and consulting with industry, governments and provincial associations.

Deputy Minister John Knubly, Director General Aerospace, Defence and Marine Brian Gear and Senior Investment Specialist Peter Filipkowski have all made visits to Manitoba in the past few months, including a roundtable meeting with aerospace SME companies. When two thirds of the industry is located in Quebec and Ontario, it is important for Industry Canada to know and understand the capabilities in other regions.

Likewise, we want non-resident aerospace and defence companies to know more about us too. At the Expo in May we had a number of companies like Thales and GE participate in B2B sessions. In July, we hosted a familiarization and technology insights visit with the Research and Technology Manager from EADS Canada and the Manager of Research and Technology Partnerships from Airbus Corporate and International Cooperations.

While visits, B2B sessions and tech-tours are all

good at identifying our capabilities both as individual organizations and as a region, the most consistent comment I hear from our visitors is their marvel at our willingness and ability to collaborate. Every visitor is amazed at the ability for industry, academia, government and research organizations to come together and to get things done.

Whether it is workforce development initiatives, Technology Roadmaps, collaborative projects, RRC's industrial campuses, U of M's Engineer in Residence program, or industry led and publicly assisted collaborations like the CIC, WestCARD and EnviroTREC, our guests are very impressed by the one degree of separation in Manitoba and our ability to work together. I just tell them it is our prairie spirit and pedigree. No one could survive the elements out here without help from their neighbour.

Speaking of the elements it will soon be winter if I don't wrap this up.

Aerospace Week runs from September 9 to 13, and will include an Aerospace Supplement in the Free Press (Sept. 9), a members' meeting (Sept. 10) and our annual Golf Tournament (Sept. 12) at Larters. The tournament raises funds for our student bursary program so come out and help build your future workforce!

Also coming up, the joint MAA/MAHRC Annual General Meeting is Thursday, October 3 at the Hilton Suites Hotel, the Canadian Aerospace Summit is October 16 and 17 in Ottawa, and the All Stars Awards gala dinner is November 21 at the Victoria Inn.

Mark your calendars and come out to collaborate on some fun events.

Cheers!



Ken Webb and the Honourable Minister Rona Ambrose at the PAS.

#### BOEING WINNIPEG EXPANSION

Boeing Winnipeg is spreading its wings with the addition of 14,000 square meters (150,000 square feet) to its main Murray Park facility.

The additional space will house state-of-the-art equipment for building the newly designed composite acoustic inner barrels for the 737 MAX engine air inlet. The one-piece inner barrel is one of the latest quiet engine technologies that will be employed on the 737 MAX to help reduce the operational noise of the airplane by up to 40 percent.

"This expansion, which is about the size of 12 Olympic swimming pools, will ensure our Winnipeg site has the space and technology needed to build these complex composite parts," said Ross R. Bogue, vice president and general manager







Stantec

of Boeing Fabrication. "Placing this work in Winnipeg takes advantage of the Winnipeg team's design and manufacturing skills as well as meets Boeing's obligations for industrial benefits in Canada."

Bogue was in Winnipeg for the event along with Boeing Winnipeg General Manager Kevin Bartelson, provincial and local officials, union leaders and many of the employees.

Construction is well underway. Exterior walls on the expanded building will be completed by October 2013. It will be ready for occupancy by the fourth quarter of 2014.

#### WESTERN AEROSPACE EXPO

The Manitoba Aerospace Association was proud to host a very successful Western Aerospace Expo, May 6-8, 2013, at the Hotel Fort Garry. With the theme "Green – Growing – Global", the event brought together participants from Canada, the USA and the UK; providing three days of high energy and intense discussions around one of Canada's leading industries.

The business conference and expo included Business to Business meetings with OEMS such as GE, Boeing, Thales and MDS Aero, a tradeshow, technical and business development workshops (Composites, Precision Machining and Manufacturing, Laser Welding and Robotics) and a tour of the GE Aviation Engine Testing Research and Development Centre.



### WESTERN AEROSPACE EXPO (CON'T FROM PAGE 3)

As well as updates from the national and western aerospace associations, the conference program included a number of national and international keynote speakers on emerging strategic issues such as:

- The Big Picture Future Outlook in Aerospace-Martin Vezina, Deloitte
- Environmental Trends Sylvan Cofsky, GARDN and Stephen Emmert, Boeing
- Aero Propulsion Systems for the 21st Century-Dr. Dale Carlson, GE Aviation
- Doing Business in China Brad Bourne, FTG Corp. and the Canadian Trade Commissioners
- Developing Global Supply Chains- Jim Walters, Aero DNA Group, Liverpool
- Innovations in Aerospace Technologies -Dr. Fassi Kafyeke, Bombardier
- NRC Aerospace Program Update –
  Dr. Ian Potter, National Research Council
- Canada's Response to the Emerson Review -Brian Gear, Industry Canada Aerospace, Marine and Defence
- Additive Manufacturing James Janeteas, Cimetrix

The signature closing event was an Executive Power Panel, where executives from leading aerospace companies across Western Canada shared their insights, forecasts and opinions on

how Canada will compete in this dynamic, explosive and fiercely competitive industry.

Although out-of-province attendance was down a bit over previous years – a trend notice by other conference organizers this year - the 270 registrations was one of the highest ever for the event.

Feedback during the event and from the post-Expo QA surveys indicated very engaged and highly satisfied delegates, with 86 per-cent rating the conference either 4 or 5 on a scale of 1-5, and 84 per-cent indicating that it provided useful information or ideas that could enhance collaboration or innovation in their organization.

While a solid program and high quality speakers make for a good program, it doesn't happen without supporters and a strong organizing team. Thank you to Western Economic Diversification and Manitoba Entrepreneurship Training and Trade; to our many sponsors lead by Boeing (Partner), Magellan (Platinum), Standard Aero (Platinum), EMTEQ (Gold) and GE Capital (Gold); and to our many volunteers.

The final thank you goes to the outstanding efforts of the Planning Committee: Terry Trupp (Boeing - Chair), Barbara Bowen (MAHRC), Karleigh Danowski (Magellan Aerospace), Julianne Toogood (StandardAero) and Melanie Rennie (Plan It Management, Inc.)













### AEROSPACE & AVIATION IN MANITOBA (AAIM) DAY

Friday, May 24th, 2013 marked the seventh anniversary of AAiM Day. The aerospace and aviation communities worked together to provide a learning experience for Grade Six students. It is designed to provide awareness activities that relate to careers in the aviation and aerospace industries and it is correlated with the Manitoba Grade Six Science curriculum unit on Flight. The program has grown to include approximately 700 students from both urban and rural schools as well as private and home-school organizations. The program was a one-day event held at Red River College - Stevenson Campus.



Approximately 150 volunteers help out with AAiM Day and come from the following organizations:

AAiM Day "Host" Organizations:

- Manitoba Aerospace Human Resources Council
- 2. Boeing Winnipeg
- StandardAero
- 4. Magellan Aerospace
- 5. Career Trek
- 6. Red River College Stevenson Campus
- 7. Manitoba Rocketry Group
- 8. Tec Voc High School
- 9. Women in Science and Engineering (WISE), University of Manitoba
- 10. 17 Wing (Air Force)
- 11. Air Cadet League of Canada (MB) Inc.

The program ran in both the morning and afternoon and around 350 students participated in each session. The students were organized into



groups of about 30 and took part in six 20-minute hands on activities in the following areas:

- 1. Aircraft Inspection: students learned to identify parts of aircraft by taking on the inspection roles of aircraft maintenance engineers. They had a thrilling experience this year because they were able to inspect two military aircraft a Dash 8 and a Griffon helicopter.
- 2. Flight: students learned about the fundamentals of flight and built and flew paper airplanes.
- 3. Manufacturing: students learned about what composite materials are used in aircraft and manufactured their own composite part.
- 4. DC-9 Theatre: students learned that it takes more than pilots and flight attendants to make an aircraft fly.
- 5. Rocketry: students learned about rockets and designed and launched a small paper rocket.
- 6. Crater Fun: students learned about both space science and craters by recreating a variety of craters falling from the sky.

The Honourable Peter Bjornson, Minister of Entrepreneurship, Training and Trade toured the event with the Board of Directors of Manitoba Aerospace Association. The weather was perfect for the day and the students truly enjoyed their experiences and involvement in the activities that help make science fun!

For more information, please contact Barb Bowen bbowen@manitoba-aerospace.mb.ca or Rachelle Hallett rhallett@manitoba-aerospace.mb.ca

#### MANITOBA AEROSPACE STUDENT AWARDS

For the past seven years, Manitoba Aerospace has been making cash awards to students who are graduating from a select group of educational institutions and plan to make a career in the aerospace industry. The dollars for these awards come from the proceeds of the annual All Stars Awards Dinner. Students from the following educational institutions receive the awards:

- Tec Voc High School
  - Welding
  - Machining
  - Aerospace Technology
- · Murdoch MacKay Collegiate
- Neeginan College of Applied Technology
- RRC Stevenson Campus
- Faculty of Engineering, University of Manitoba

Since 2010, the student nominations are evaluated against a list of core values that a committee of industry representatives from Argus Industries, Boeing Winnipeg and StandardAero determined were the most important characteristics for workers in our industry. Those identified core values/

characteristics are:

- Team Work
- Reliability
- Work Ethic
- Integrity
- Innovation

In the past seven years, we have awarded over 40 awards to deserving students who we believe will continue to uphold the core values of our industry!

For more information about the Manitoba Aerospace Student Awards, please contact Barb Bowen – bbowen@manitoba-aerospace.mb.ca or Wendell Wiebe – wwiebe@manitoba-aerospace.mb.ca

### COMPETITIVE EDGE SUPPLIER DEVELOPMENT PROGRAM



We all know that suppliers are an integral part of any business's overall success. As such, they have the potential to be a positive or negative force. When suppliers are a positive force, materials arrive on time, materials are processed in a problem-free manner and costs are controlled. When suppliers are a negative force, materials often arrive late, processing problems occur, and the supplier is of little or no help in resolving such issues. Obviously, it just makes good sense to have good suppliers.

Three years ago, Manitoba Aerospace started the Competitive Edge Supplier Development program

or CESD to work with SMEs. CESD consists of 11 key business processes that are identified as being critical to managing a business and becoming an effective and positive supplier for OEMs and/or Tier One companies.

What are the results to date?

# THE AEROSPACE INDUSTRY IS INVOLVED AND EVOLVING!

- Almost 30% of Manitoba Aerospace member companies are enrolled in the CESD program
- The program is endorsed by the large aerospace companies in the local Manitoba sector
- Considerable industry commitment over the three years is reflected in the industry cash to inkind ratio.

#### COMPETITIVE EDGE SUPPLIER DEVELOPMENT PROGRAM (CON'T FROM PAGE 6)

## KEY FACTORS TO SME SUCCESS IN THE CESD PROGRAM

- Intensive time commitment from enrolled companies
- Moderate program delivery cost
- Steering Committee participation
- Resource Development

# THE CESD PROGRAM IS ENABLING COMPANIES TO ACHIEVE

- Improved productivity
- Evidence of improvement: accountability process requires quarterly reporting; recurring assessment results
- Senior leadership teams are fully engaged early in program
- Senior management is able to focus is on long term planning and execution rather than short term immediate fire-fighting
- Shop floor leaders are effectively using problem solving and issue escalation processes
- Improvement metrics are based on the individual strategic business plan and translated to cell/workgroup/shop floor metrics (Safety, Quality, Cost, Delivery, People)

- International OEMs (EADS-Airbus, BAES, Rolls-Royce) have recognized the value and effectiveness of the program upon which CESD is based – which translates to increased credibility for enrolled companies
- Companies are able to focus on key business processes with a credible method for measuring improvement
- New capabilities have supported growth, expansion, and more mature corporate infrastructure
- Mentorships have built relationships with representatives from the largest companies in sector
- Networking, collaboration and, in the future, shared services opportunities become available as part of a cohort of companies in the program.

This initiative is supported by the Province of Manitoba through Industry Workforce Development and by the Federal Government through both the departments of Western Economic Development and National Research Council.

For more information, please contact Wendell Wiebe wwiebe@manitoba-aerospace.mb.ca or John Kliewer at jkliewer@manitoba-aerospace.mb.ca.



#### Hold the date!

#### 2013 Manitoba Aerospace Dinner & Awards Evening

The 13th Annual Manitoba Aerospace Awards Dinner will be held on November 21st, 2013

#### Thursday, November 21st, 2013

Victoria Inn – Centennial Ballroom - 1808 Wellington Avenue Reception – 5:00 pm | Dinner – 6:15 pm Tickets: \$125 each | \$1,250 for a table of 10 \*plus GST

Please contact Ken Webb at kenwebb.maa@mymts.net for information on how to nominate a company, team or individual as an AEROSPACE ALLSTAR!

#### CANADIAN AEROSPACE REVIEW - UPDATE

On November 29th, 2012 the Honourable David Emerson released his two-volume Aerospace Review, with 25 "fiscally neutral" recommendations on how federal polices, programs and practices can be improved to help improve the competiveness of Canada's aerospace sector.

On February 12, Tom Jenkins, CEO of Open Text, delivered his report on "Leveraging Defence Through Key Industrial Capabilities". Together these two reviews will lay the foundation for Canada's aerospace and defence policy for years to come.

While private aerospace companies will ultimately drive Canada's competitiveness in the global aerospace industry, the reports recognize that "thoughtful well focussed and well implemented public policies and programs can play a critical role in facilitating this success". Included among the recommendations were:

- Making aerospace a priority in Canada's Science and Technology Strategy;
- Identifying key aerospace technologies and industrial capabilities for development in Canada and supporting them with a large-scale technology demonstration (commercialization) program;
- Enhancing national and international R&D collaborations;
- Making aerospace a key component of Canada's international trade agenda;
- Making innovation and contribution to Canada's economy key drivers for future military procurement decisions; and
- Fully leveraging Canadian procurement opportunities to strengthen Canadian supply chains through intellectual property development and technology transfer.

The federal government and Canada's parliament were quick to respond. A 26 member all-party Aerospace Caucus was formed within parliament to provide advice to government. Three Manitoba MPs, Joyce Bateman, James Bezan and Lawrence Toet are members of the caucus. Budget 2013 identified a number of first steps in implementing the reports, including streamlining

of the Strategic Aerospace Development Initiative (SADI), the creation of an Aerospace Technology Demonstration Program, the development of a National Aerospace Research and Technology Network, and improving the ability of Transport Canada to respond to the growth in demand for aircraft certifications brought about by innovation and new technology.

Having engaged closely with the review throughout the entire process, the Aerospace Industries Association of Canada (AIAC) has created an implementation strategy to help move the report into action. Seven technical committees have been created to continue providing industry input and leadership as the government develops its new programs and policies. Manitoba industry and the MAA have representatives on the AIAC board and a number of the key committees.

Manitoba industry has also been quick to respond to the opportunities provided by these developments. In December Manitoba led a pan-western Canada industry review and response of the Emerson reports to Western Economic Diversification. In January, sixty representatives from across the Manitoba aerospace sector gathered in an intensive two-day workshop to assess the Emerson reports. In March, the Manitoba Aerospace Association used industry's analysis of the Emerson and Jenkins reviews to brief MP Joyce Bateman from the Aerospace Caucus.

As a result of the January workshop, Manitoba industry is undertaking a Technology Roadmapping (TRM) assessment to identify the key aerospace technologies and capabilities that will drive innovation in Manitoba's aerospace industry over the next 10 to 20 years. This "foresighting" project will identify the technologies and the strategies needed to keep our companies growing in this intensely competitive and technology based industry. It will also ensure that Manitoba is prepared to participate when Canada identifies its key technologies and industrial capabilities for the aerospace and defence sectors. The TRM will be completed by September.

Being the third largest aerospace cluster in the

### CANADIAN AEROSPACE REVIEW - UPDATE (CON'T FROM PAGE 8)

world's fifth largest aerospace country, Manitoba is a significant contributor to Canada's aerospace economy. We have much to offer, and much to gain, as the Aerospace Review brings changes to Canada's Aerospace and Defence policies.

(Originally published in spring 2013 edition of Manitoba Aviation and Aerospace)

#### MANITOBA AEROSPACE ASSOCIATION 3RD ANNUAL GOLF TOURNAMENT

Mark your calendars for Thursday, September 12th to participate in the 3rd 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/manitobaaerospace-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.

Hope you can join us, see you there!



#### SPECIAL ANNOUNCEMENT

Congratulations to the 2012/13 Manitoba Aerospace Gold Medal Winner, Reid Hearsum.

Reid is a mechanical engineering student at the Faculty of Engineering, University of Manitoba.

#### MANITOBA AEROSPACE EVENTS - FALL/WINTER 2013/2014

2013 Aerospace, Defence & Security Expo

Abbotsford, British Columbia August 7 – 8, 2013

**Trade Mission MAKS 2013 International** 

**Aviation & Space Salon** 

Moscow, Russia August 27, 2013

Manitoba Aerospace Week

September 9 – 13, 2013

**Black Brant Gallery Opening** 

Manitoba Museum September 10, 2013

**MAA Members' Meeting** 

Manitoba Museum September 10, 2013

**Manitoba Aerospace Golf Tournament** 

Larters at St. Andrews Golf & Country Club

September 12, 2013

**MRO Europe** 

London, UK

September 25 – 27, 2013

**Aviation Expo** 

Beijing, China

September 25 – 28, 2013

**MAA/MAHRC Annual General Meeting** 

Hilton Suites Hotel, Winnipeg

October 3, 2013

BIOFIBE2013

Winnipeg, Manitoba October 15 – 17, 2013

**AIAC 2013 Canadian Aerospace Summit** 

Ottawa, Ontario October 16 – 17, 2013

ATAC Annual General Meeting & Tradeshow

Montreal, Quebec

November 17 – 19, 2013

**Dubai Air Show** 

Jebel Ali, Dubai

November 17 - 21, 2013

**Manitoba Aerospace Dinner and Awards Evening** 

Victoria Inn, Winnipeg November 21, 2013

Forum Innovation Aérospatiale 2013

Montréal, Quebec

December 2 – 4, 2013

Satellite 2014

Washington, DC

March 10 – 13, 2014