



Contrails

MANITOBA AEROSPACE

A PUBLICATION OF THE
MANITOBA AEROSPACE ASSOCIATION
MARKETING COMMITTEE

DECEMBER 2015

NEWS • EVENTS • INFORMATION



MESSAGE FROM THE EXECUTIVE DIRECTOR - KEN WEBB



No more dreaming – we are definitely having a white Christmas!

As we approach the end of one year and the beginning of the next, it's a good time to look ahead, set some goals and make some plans. And that's what we have done.

A major project for the MAA in 2015 was to renew our strategic plan - identifying what members want, what is happening in the local, regional and international environments, what the best practices are for industry associations, and what are the key issues driving the Manitoba aerospace economy. The aim was to define what the MAA should be doing and what our goals and priorities should be.

MAA Strategic Plan 2015-2018

With a 70% response rate to the member's survey, you told us what is important to you, what we are doing well, and what our priorities should be. You also provided many comments on what our strengths are, and where we need to improve or do more.

Combining your feedback with an environmental scan; a review of the current state of the Association; an analysis and risk assessment of opportunities and

challenges; and a review of strategic plans from aerospace organizations from across the country, the board identified five strategic priorities:

- Support cluster development, SMEs and regional supply chains
- Advance innovation, research & technology
- Ensure supply of a skilled workforce
- Provide advocacy, branding and promotion
- Ensure a relevant, collaborative and sustainable organization

Moving Forward

Cluster development - In support of business development we will work to increase the capability and capacity of our regional companies with programs such as the new national supplier development program. We will look to improve market access by providing training in accessing ITBs, and in understanding the new defence procurement strategy and its value proposition process. These two new policies will strongly influence Canadian industry's participation in more than \$600B in government procurements over the next 20 years.

We will continue to host inbound trade missions from foreign governments, companies and OEMS; and work with our economic development agencies at all levels of government. We'll work to increase regional supply chain interaction and support centers of excellence in areas such as composites, additive manufacturing, sensor technology, engine testing, welding and joining, robotics and automations, and the new NRC Factory of the Future. All our activities will include a focus on the needs of SMEs.

Innovation - The Manitoba Aerospace Research and

Inside this issue:

30th Anniversary of ENGAP	Page 3	ACS Acquires Rotor-Tech	Page 9
MAA Board of Directors	Page 3	StandardAero Renews Contract	Page 10
All-Stars Awards	Page 4	GE Closing US Engine Plant	Page 11
New CARIC Regional Director	Page 5	Aviation Test Facility Gets Upgrade	Page 11
Cadorath Becomes a DAO	Page 7	MB Aerospace Golf Tournament	Page 13
StandardAero Has New Owners	Page 7	Magellan Acquires Lawrence Ripak	Page 15
Boeing Debuts First 737 MAX 8	Page 9	Upcoming Events	Page 16



MESSAGE FROM THE EXECUTIVE DIRECTOR - KEN WEBB



Technology Council (MARTC) will lead our innovation agenda; implement our technology road map; and ensure our R&D priorities are included in the national aerospace agenda.

MARTC and the new CARIC regional office will help build the innovation culture within our aerospace community, with three collaborative research projects already approved. Look for CARIC sponsored workshop and activities throughout the year.

Skilled workforce - MAHRC has been an exceptional leader in workforce development and career awareness programming in the aerospace industry and will continue to ensure that the education system provides the quantity and quality of workers we need. They will provide custom training for industry and individual companies; ensure a steady supply of students and workers into aerospace careers; and help companies access the Canada Manitoba Jobs Grant, the new worker training support program.

We will also enhance our student awards program. With the increasing success of the annual Golf Tournament and All-Star Awards Gala as fundraising events we raised \$30,000 in 2015 and have grown our endowments to over \$170,000. This will allow us to increase the value of all six awards to \$1,000 each in 2016, and to add a new award for an engineering technology student at Red River College.

Advocacy - Based on the members' survey, advocacy, branding and promotion are the most important reasons members join the MAA.

We will ensure that aerospace continues to be regarded as a strategic industry in Manitoba and Canada; that the Manitoba aerospace cluster and its members are present and highly visible on the local and world stage; and that aerospace is regarded as a career of choice.

We will also ensure government and community leaders are well informed on the aerospace industry; that we are well connected with the AIAC and its national and international activities; and that our brand is strongly represented in the media,

across industry, and through our website and regional events.

Organization - To do all of this we need to ensure a relevant, collaborative and sustainable organization.

We will need to identify and align the resources available to us both inside and outside the organization; review and optimize our relationships with our closest collaborators like MAHRC, CARIC, and AIAC; and develop a strategy to leverage and partner with other associations and events.

Most importantly, we need to ensure we know and serve our members, and have a clear and compelling value proposition for you.

These five priorities identify what we need to do - and where we need to go - to add value for our members. They are our roadmap to serve you for the next three years.

Moving On

Next year will bring a new road map for me as well, as I will be stepping down from the Executive Director role by the time the Spring has sprung.

As this may be my last newsletter, I would like to take this opportunity to thank each of you for your support to the aerospace community, the Association, and to me as your executive director.

My time with the Association has been tremendously rewarding, and it has been a true gift to work with so many creative, passionate and dedicated colleagues.

The next two decades are set to be a period of unprecedented growth in the aerospace and aviation industry. I shall continue to enjoy hearing of all the successes of Manitoba's aerospace companies. With the great leadership and collaborative spirit that we have here, I know there will be many.

Wishing everyone the joy and wonder of the season, and a new year full of peace, happiness and good health.

Do good things...



30TH ANNIVERSARY FOR THE ENGINEERING ACCESS PROGRAM

On Oct 2, 2015 during Homecoming weekend, the Engineering Access Program (ENGAP) housed within the University of Manitoba's Faculty of Engineering hosted its 30 anniversary. ENGAP is a program specifically designed to support indigenous learners seeking to complete an engineering degree at the University of Manitoba. Since the program began over 100 indigenous people have received an engineering degree with ENGAP's support.

Our 30th celebration was an unqualified success. Over 90 people from the business community, the University, the indigenous community, current students, joined together with over 40 past-graduates for an evening of fine dining and entertainment.

The highlight of the day's events was the unveil-

ing of ENGAP's 30th anniversary commemorative plaque in the atrium of the Engineering and Information Technology Centre. This statue-like plaque designed by indigenous architect Dave Thomas of Ayshkum Engineering Inc. is now the centrepiece of the engineering atrium. It masterfully incorporates wood, steel, and rubber with the spirit and lines of a canoe to pay homage to the technology and engineering of the first peoples of this land while at the same time honouring the 105 graduates of ENGAP.

If you ever happen to find yourself at the University of Manitoba, take some time to wander over to the Engineering and Information Technology Complex and take a look at the commemorative plaque. You won't be sorry.

MAA BOARD OF DIRECTORS

MAA/MAHRC held their annual joint AGM at the Hilton Hotel on Thursday, October 1, 2015. The slate of directors and officers elected for 2015/16 include:

Kim Olson, President
StandardAero
Senior Vice President Engineering

Stacy Evans, Treasurer
StandardAero
Accountant, FP&A

Don Boitson
Magellan Aerospace, Winnipeg
Vice President and General Manager

Bob Hastings
Pointman Canada
President

Daniel Verreault
GE Aviation
Director, Canada MSO

Kim Westenskow
Boeing Canada Operations
General Manager

Ken Webb, Executive Director
Manitoba Aerospace Association

Udaya Silva
B/E Aerospace Canada
Vice President and General Manager

Leo Sousa
Cormer Aerospace
President

Greg Anderson
Manitoba Aerospace Human Resource Council
Chair

Wendell Wiebe
Manitoba Aerospace Human Resource Council
Executive Director & GM

Leslie Yakimishyn
Aerospace Marketing & Communications Committee
Chair

MANITOBA AEROSPACE ALL-STARS AWARDS OF EXCELLENCE DINNER



The 14th Annual Manitoba Aerospace All-Stars Awards of Excellence Dinner took place on Thursday, November 19 at the Victoria Inn in Winnipeg.

The dinner was a great success and raised almost \$20,000 for the Manitoba Aerospace Student Awards Endowment Fund.

Congratulations to all of the award recipients. Listed are this year's winners.

Barb Bowen

Manitoba Aerospace Human Resources Council (MAHRC)

Award of Excellence for Education and Training



Rick Jensen

Boeing Winnipeg (retired)

Award of Excellence for Builder



Leo Sousa

Cormer Group Industries

Award of Excellence for Leadership



StandardAero eShop Order Implementation Team

Award of Excellence for Innovative Business Practices and Teamwork

NEW CARIC REGIONAL DIRECTOR



Welcome to Loren Hendrickson, P. Eng., the new Regional Director for CARIC Central Region (MB/SK).

Loren brings to CARIC over 20 years of design, manufacturing, research and development, testing and management experience in the aerospace industry.

Loren is very familiar with Manitoba's aerospace community. He has worked with Boeing, Magellan and GE Aviation; helped to establish the Canadian Composites Manufacturing Research and Development (CCMRD) consortium; served on the industry advisory board to the University Of Manitoba Faculty Of Engineering; and chaired the Composites working group as part of the Manitoba Aerospace Technology Road Map. Prior to joining CARIC Loren was Manager of Boeing Research and Technology (Winnipeg).

In his new role as Regional Director for the CARIC network, Loren will help industry and academia collaborators develop and implement aerospace research projects from TRL levels 1 through 6. He will also help provide support and leadership to the Manitoba Aerospace Research and Technology

Committee (MARTC) and the implementation of the Manitoba Aerospace Technology Roadmap.

With MAA members already engaged in three CARIC projects, including the recently accepted "Fusion Welding Technologies in the Structural Repair of Aluminium and Magnesium Alloys" led by StandardAero, CARIC is already helping advance aerospace innovation in Manitoba.

If you would like to know more about how CARIC can help you, or how you can participate in CARIC projects in other regions, Loren is ready to help. The CARIC regional office is located at the Composites Innovation Centre, 158 Commerce Drive, in Winnipeg and you can reach him at Loren.Hendrickson@caric.aero

We are excited to welcome Loren and look forward to his knowledge and ideas.

About CARIC

The Consortium for Aerospace Research and Innovation in Canada (CARIC) is a non-profit organization established with the Government of Canada's financial support. Its mission is to foster the collaboration of researchers from the aerospace industry, academia and research centres, and launch initiatives whose primary purpose is to promote responsive, impactful R&D.

SPECIAL OFFER TO SMEs TO PARTICIPATE IN THE SINGAPORE AIRSHOW

Be part of a high-profile Western Canadian delegation at Singapore 2016!

The Singapore Airshow (SAS) is the largest aerospace and defence exposition in Asia. At the last show in 2014, the SAS welcomed over 1,000 participating companies from 47 countries, and 274 delegations from 76 countries. Deals worth US \$32 Billion were announced.

The Manitoba government has reserved booth space within the Canadian pavilion at SAS 2016 (February 16-21), and is making a special offer to encourage SMEs to participate.

Through the Commercialization Support for Business Program, Manitoba Jobs and the Economy is offering up to \$10,000 per eligible company to help cover related travel and participation:

- 50% of economy airfare for up to two company employees;
- 50% of trade show booth costs or free shared space in the Manitoba booth;
- 50% of costs to develop new/translate marketing materials;
- companies must apply and be approved prior to the show / developing materials; and

SPECIAL OFFER TO SMEs TO PARTICIPATE IN THE SINGAPORE AIRSHOW (CON'T FROM PG 5)

- eligibility will be assessed on a first-come, first-served basis

In addition, Western Economic Diversification is sponsoring a Western Canada Aerospace booth along with a special Western Canadian reception. Manitoba companies are encouraged to use the Manitoba and Western Canada booths as their "home base" throughout the show.

Companies will also be eligible for a limited number of passes to the exposition, and will have access to meeting space and activities hosted by the Government of Canada.

To coordinate applications or obtain additional information contact either Robert Manson (robert.manson@gov.mb.ca) or Donna Roberecki (donna.roberecki@gov.mb.ca).

SPECIAL OFFER FOR THE WESTERN CANADIAN COMPANIES ATTENDING THE PNAA CONFERENCE



The two-day Pacific Northwest Aerospace Alliance (PNAA) conference runs February 10-12, 2016 in Lynnwood (near Seattle), Washington. The conference offers an excellent opportunity for Canadian aerospace companies interested in networking with OEMs, Tier 1 integrators and SMEs connected to the Pacific Northwest aerospace cluster, and in hearing from leading analysts and industry experts on emerging opportunities in today's global aerospace supply chain.

With funding support from Western Economic Diversification Canada, a discount of \$500 is avail-

able for up to five Manitoba SMEs to participate as part of the Western Canadian delegation. In addition, as MAA is an affiliate member of the PNAA, MAA members qualify for PNAA member registration rates.

For more information or to view the complete conference program, visit the conference website through <http://www.pnaa.net/>

For information about registering as part of the Western Canadian delegation, contact me at kenwebb.maa@mymts.net or 204.799.7660

CADORATH BECOMES A DESIGN APPROVAL ORGANIZATION



Design Approval Organization (DAO) status with Transport Canada Civil Aviation (TCCA).

“Cadorath has joined a very small and elite group of organizations in North America that can design, develop and approve our own engine and drive-train repairs for rotary and fixed wing aircraft,” says President and CEO Gerry Cadorath.

With this delegation, Cadorath no longer relies on external approvals to take a repair from development to production. Instead, it has optimized its engineering department to design, substantiate, test and approve extended repairs in-house. Cadorath is one of the few companies that can support both power plant and dynamic components under one roof.

As a DAO, Cadorath has the authority to generate

After three years of hard work, employees in Cadorath’s engineering and quality assurance departments are flying high. The company earned

approved data which is accepted by the Bilateral Aviation Safety Agreement, ensuring compliance with the regulations and standards within the Federal Aviation Administration (FAA).

In an industry that’s facing tougher rules than ever before, Cadorath is in a good position to expand its internal repair capabilities and help customers stay ahead of evolving compliance requirements.

“This achievement truly reflects the investment we are willing to make to support our customers and provide engineered design solutions for the challenges they face,” said Shane Zakaluk, Engineering Department Head at Cadorath.

Zakaluk and the Cadorath team are excited to bring a higher level of service to the maintenance, repair and operation industry and to continue fulfilling their company promise of “More UP Time” as a DAO.

Cadorath is a family owned and operated company that provides superior solutions and products to a global client base through its Canadian office in Winnipeg, Manitoba, and its U.S. offices in Lafayette, Louisiana, and Orion, Illinois.

STANDARDAERO SET TO SOAR UNDER NEW OWNERS

Source: Winnipeg Free Press July 25, 2015

Before Veritas Capital closed its \$2.13-billion acquisition of StandardAero earlier this month, a number of the New York private equity firm’s partners flew to Winnipeg and toured the facilities.

In one of his first interviews since the deal was closed, Russell Ford, StandardAero’s CEO, said that tour helped seal the deal.

“They came to Winnipeg, I took them through and introduced them to employees and managers, and I stepped out of the way and let these guys tell them what they do,” Ford said in a phone interview from StandardAero’s head office in Scottsdale, Ariz.

“The Veritas guys walked away and said, ‘Wow

you have a terrific team here. These are the type of people that we want to work with.’ “

StandardAero has had a series of private equity owners over the years and has managed the transitions well.

Ford said there will be no exception this time other than that the company is poised to grow.

The company’s former owners, Dubai Aerospace Enterprise, planned on a seven-year hold, and it was not a big surprise earlier this year when rumours started to circulate it was on the market.

Veritas was one of about a dozen interested parties that were approached. Veritas’s focus on aerospace, defence, electronics and technology



STANDARDAERO SET TO SOAR UNDER NEW OWNERS (CON'T FROM PAGE 5)

companies will make it a good partner for StandardAero.

Ford -- who is regularly in Winnipeg and is on the road far more than he is in his Scottsdale office -- said StandardAero is in excellent shape to further solidify its position as one of the largest independent aerospace maintenance, repair and overhaul companies in the world.

For starters, it is bursting at the seams in its Winnipeg operations, the largest by far of its 15 global facilities.

Ford said the company will be adding about 100 people across its network in the next six months -- including in Winnipeg where it has about 1,400 workers -- and more growth is expected next year.

Earlier this month, StandardAero took possession of a 70,000-square-foot building on Allen Dyne Road formerly owned by Magellan Aerospace.

That adds to the 600,000 square feet of space it already had in Winnipeg.

As well, Ford said renovations after a fire in one of its buildings a year ago have resulted in a re-configuration of some of the operations and new investment.

Included is a new operation to manufacture and repair components that has been added to StandardAero's Winnipeg portfolio of gas turbine engine MRO and helicopter work.

The company operates a stand-alone engine component factory in Cincinnati, down the street from the General Electric engine plant. Ford said its new Winnipeg shop is part of a strategy to capitalize on opportunities in that market.

"We know that market (components and component repairs) is highly fragmented," he said.

"The big OEMs (original equipment manufacturers) don't want to deal with 500 suppliers that are doing \$10 million to \$20 million in annual revenue. They would rather deal with a multibillion-dollar company like StandardAero that has been around for 100 years with a proven track record."

He said management is working with Veritas on an acquisition strategy that could see StandardAero go after some smaller component companies to increase its capacity or take up the order book and put new work through the facility in Winnipeg.

The company's partnership with GE in the \$50-million cold weather-testing facility for next-generation engines in Winnipeg is part of StandardAero's strategy to align itself closely with engine manufacturers.

When the maintenance cycle comes up for those new engines, StandardAero will be top of mind.

"It seems logical that they would more likely go to the maintenance company like us that actually helped them develop the engine," Ford said.

"We know it as well as they do."

He said the company is helping Honeywell write the maintenance manual for a new engine, and there are other opportunities to work with Pratt & Whitney and Rolls-Royce on some of their next-generation engines.

"The OEMs have more new engines on their drawing board today than in the last 15 years," Ford said. "Why would they want to take precious engineering resources who are working on the new engines and have them work on the repair processes for a 10-year-old engine when we could do that for them?"

BOEING DEBUTS FIRST 737 MAX 8



Thousands of Boeing employees in Renton, Washington, celebrated the completion of final assembly of the first 737 MAX 8 on Dec. 8, 2015.

“Today marks another in a long series of milestones that our team has achieved on time, per plan, together,” said Keith Leverkus, vice president and general manager, 737 MAX, Boeing Commercial Airplanes. “With the rollout of the new 737 MAX – the first new airplane of Boeing’s second century – our team is upholding an incredible legacy while taking the 737 to the next level of performance.”

The production-complete airplane rolled out of the Renton factory and into the paint hangar on Nov. 30, 2015, the precise date determined when the

MAX development schedule was defined more than four years ago. The freshly painted 737 MAX 8, named the Spirit of Renton, was revealed to employees in a special teal version of the Boeing livery. After celebrations are complete, the airplane will undergo pre-flight preparation in the factory before departing for Renton Field to continue flight test readiness. The airplane is on track for first flight in early 2016.

With the second and third 737 MAX 8 flight test airplanes currently in final assembly and the fourth (and final) in sub-assembly, the 737 MAX remains on track for first delivery to launch customer Southwest Airlines in the third quarter of 2017.

The 737 MAX incorporates the latest technology CFM International LEAP-1B engines, Boeing designed Advanced Technology winglets, and other improvements.

The 737 MAX 8 is the first member in Boeing’s new family of single-aisle airplanes – the 737 MAX 7, MAX 8, MAX 200, and MAX 9 – to begin production. The 737 MAX family has nearly 3,000 orders from 60 customers worldwide.

ACS ACQUIRES ROTOR-TECH INTERNATIONAL



Advanced Composite Structures (ACS), a leading provider of rotor blade and composite structure repair technologies for fixed-wing and rotary-wing aircraft, has acquired Rotor-Tech International.

The purchase of Rotor-Tech International, based in Stockton, Calif., further expands ACS’s share in the North American helicopter market. This acquisition follows on the successful launch of two Rotor Blade Repair Service Centers with the signing of a Technical Support agreement in 2010 with the Oceania Group based in Auckland, New Zea-

land and the establishment in 2012 of ACS-Florida based in Sanford, Fla. “The combination of Rotor-Tech International with our experience and proprietary tools and processes will provide our customers with significantly improved service offerings,” said Bruce Anning, vice president of technical operations for ACS.

ACS will leverage Rotor-Tech’s existing staff and operations as the base on which significant additional capabilities will be added. “The integration of the ACS group of companies will take place quickly during 2015. Our customers will receive superior quality services and can expect an expanding range of services as the process is completed,” said James Anning, president of ACS.



GIRLS IN AVIATION DAY WAS A HUGE SUCCESS

On Saturday, September 26th, the Winnipeg branch of Women in Aviation International (Northern Spirit) hosted our local Girls in Aviation Day at the Royal Aviation Museum of Western Canada. Over 100 girls (between the ages of 8 and 16), and their parents were introduced to seven different careers in aviation and aerospace.

Volunteers from StandardAero, Magellan Aerospace and Boeing helped make the event a success. The Winnipeg event was one of 45 events

held around the world, and because of hard-working, dedicated volunteers thousands of girls were introduced to aviation as a career and lifestyle.

Girls in Aviation Day by the numbers:

- 45 events
- 48 chapters participated in events (some worked together on one event)
- Events in seven countries

Plans are underway to make this an annual event.



STANDARDAERO RENEWS CONTRACT FOR FRENCH AIR FORCE C-130 T56 ENGINE MRO SERVICES

StandardAero recently won a competitive bid to renew its contract with Atelier Industriel de l'Aeronautique (AIA) to perform T56 engine maintenance, repair and overhaul services for the French Air Force fleet of 14 C-130 military transport aircraft. The contract is valued at a maximum of 6.8 million Euros.

All engine services will be performed at StandardAero's Winnipeg, Canada facility and the contract begins in December, 2015.

"StandardAero is proud to continue our support for a highly valued customer after successfully winning a competition with our primary European competitors," said Marc Wittingen, Vice President of Military Engine MRO Sales for StandardAero. "This contract strengthens our position in the European T56 market and demonstrates StandardAero's effective and competitive ability to support customers globally."

AIA is the primary engine MRO provider for the French Air Force, maintaining a variety of engine models. AIA is also responsible for outsource requirements when local capacity is not available or sufficient.

StandardAero has serviced the Rolls-Royce T56/501 family of engines for more than 50 years and the company supports the largest and most diverse group of T56/501 customers in the industry. In addition, the company is responsible for the depot-level maintenance for over half of the T56/501 engines flying worldwide.

"Our experience and innovation have delivered market-leading technical developments and product enhancements that translate into unparalleled in-service improvements in aircraft availability and maintenance costs," Wittingen added.

GE CLOSING U.S. ENGINE PLANT, MOVING TO CANADA



Source: The Canadian Press September 28, 2015

General Electric is closing an engine manufacturing plant in Wisconsin and says it will invest US\$265 million to build a new one in Canada in a move to take advantage of Canadian export credit financing.

The company announced that work on the new plant, which will initially provide 350 jobs, is expected to be completed in 20 months.

The planned location of the new plant was not disclosed.

GE currently employs 350 at its manufacturing facility in Waukesha, Wis., building gas engines for compression, mechanical drive and power generation applications.

The company said the new state-of-the-art plant in Canada and will be a flexible facility that can expand over time and also support manufacturing requirements for other GE businesses.

“With today’s announcement, GE fully expects to expand its relationship with EDC (Export Development Canada) in support of the company’s Power & Water, Oil & Gas and Transportation businesses,” the company said in a statement.

While many countries have export credit agencies (ECAs) that support domestic manufacturing for export, the US does not. Congressional authorization for the U.S. export credit agency, the Export-Import Bank, lapsed on July 1.

“We believe in American manufacturing, but our customers in many cases require ECA financing for us to bid on projects,” said GE vice-chairman John Rice. “Without it, we cannot compete and our customers may be forced to select other providers.”

GE is currently bidding on US\$11 billion of projects that require export financing and the company noted that last year the EDC facilitated exports and investments of approximately C\$100 billion.

Most of the company’s 350 manufacturing employees in Waukesha are represented by the International Association of Machinists.

Union spokesman Frank Larkin said the U.S. Export-Import Bank “was one of those rare government programs that worked as intended; it protected American jobs and returned a profit to the U.S. Treasury.”

“Killing the bank means thousands of U.S. jobs will be needlessly sacrificed for an extreme political agenda,” he said.

The 81-year-old U.S. Export-Import Bank provided loans, credit guarantees and insurance to aid sales by U.S. companies. The bank’s charter expired June 30 when Republican members of Congress, who say the bank benefits only a few large corporations that don’t need government assistance, blocked a reauthorization vote.

AVIATION TESTING FACILITY GETS \$26 MILLION UPGRADE

Source: Winnipeg Free Press September 16, 2015

GE Aviation’s Winnipeg engine-test facility is about to undergo a \$26-million upgrade, extending its strategic value from strictly cold-weather testing to include a wider range of tests.

The GE Aviation Test Research and Development Centre (TRDC), located in the northwest corner of the Richardson International Airport property, was built in 2011 and has become an increasingly valuable asset to both GE and StandardAero, which operates the facility for GE.

Plans and design are underway to refit the facility. The most obvious change will be replacing the mammoth 800,000-pound wind tunnel and ice-crystal projector with one that is even larger. The work is scheduled to be completed by the end of the fall of 2017.

The \$26-million upgrade is necessary because GE is developing a new engine model substantially larger than ones currently being tested in Winnipeg.

AVIATION TESTING FACILITY GETS \$26 MILLION UPGRADE (CON'T FROM PAGE 9)



When the \$54-million TRDC was originally commissioned in 2011, it was almost exclusively used to do a series of cold-weather testing programs mandated by the U.S. Federal Aviation Administration (FAA).

But for the first time this summer, GE conducted endurance tests on one of its new LEAP (Leading-Edge Aviation Propulsion) engines that will be featured on new versions of a number of popular mid-sized jets, including the Boeing 737 MAX, the Airbus A320neo and the Chinese-made Comac C919.

"We've hit some major milestones," said Rob Baillie, a StandardAero employee who is the production manager at the TRDC. "We just finished the first summer test and the first endurance test."

The TRDC is also now doing endurance testing, dust-ingestion and hailstone-ingestion testing as well as bird-ingestion testing, where various-sized birds are fired into the engines at various speeds according to FAA requirements.

(Asked how they get the birds, all Baillie would say is, "We have a local company that supplies the birds.")

With a \$7-million annual budget, it is now manned by a full-time staff of 16, all but one of whom are StandardAero employees.

StandardAero is the world's largest independent engine-maintenance, repair and overhaul operation. Its management company is based in the Phoenix area, but Winnipeg is by far its largest centre with more than 1,300 employees. (StandardAero and GE Aviation won the 2012 Canadian American Business Council Achievement Award for their collaboration on the TRDC.)

Jorge Viramontes, the Winnipeg-based lead engineer with GE Aviation, said the Winnipeg facility is fulfilling an ever-increasing role for GE -- already responsible for about 60 per cent of the commercial aircraft engines around the world -- as it embarks on an unprecedented period of new engine development.

"This is a very unique era in GE aviation," Viramontes said.

"We are replacing pretty much all our engine lines."

That includes the LEAP engine, the Passport engine for the Bombardier Global 7000 and 8000 series, the HF120 for the Honda Jet and the large GE9X for the Boeing 777.

Although the LEAP engine is still in the testing phase with only about 30 in existence, GE has already booked more than 9,000 orders and commitments for the new engine.

"We are all going to start hearing lots about the LEAP engine," Viramontes said. "And last year we had the very first LEAP engine ever built -- serial number 001 -- here in Winnipeg for icing testing. It was pretty exciting."

That was likely an indication of the trust and commitment GE has shown the Winnipeg facility.

Another is the fact it would initially send its own technical staff up from Cincinnati -- GE Aviation headquarters -- to man the controls when a new engine test was put up on the test stand in Winnipeg.

Now it is entirely staffed by StandardAero.

Ken Webb, the executive director of the Manitoba Aerospace Association, said after only four years of operation, GE's TRDC has already become a strategic asset in the community, and it is about to become even more so.

"All the new engines have to be tested and certified," Webb said. "GE needed extra capacity, and having it in Winnipeg is a tremendous opportunity to capture a lot of the new activity from GE."

The TRDC also hosts a public-private sector research operation called West Canitest R&D Inc. (WestCaRD). Bob Hastings, the newly named president and CEO of WestCaRD, was emphatic about the support it receives from GE.

Next month, WestCaRD is hosting a number of GE research people in Winnipeg for a two-day symposium that will involve researchers from the University of Manitoba, Red River College and Winnipeg engineering firms.



MANITOBA AEROSPACE 2015 GOLF TOURNAMENT

The Manitoba Aerospace Association held its 5th annual golf tournament on Thursday, September 10, 2015. It took place on a beautiful fall afternoon at Larters Golf and Country Club.

The tournament was a Texas scramble and raised over \$11,000. The money raised will be put towards the Aerospace Student Awards Endowment Fund.

Thank you to everyone who came out in support of the Student Awards Endowment Fund, and we hope to see you again next September!

The winners of the day are (besides the students who will be benefiting from the Aerospace Student Awards bursaries) are:

1st Place: Kim Olson, Manny Atwal, Tyler Ross, and John Leroux

2nd Place: Cam Lawrence, Walter Czynnyj, Chuck Black, and Andrew Stuhldrier

3rd Place: Udaya Silva, David Vanderswaag, Greg Link, and Don Boitson

Putting Contest: Kim Olson

Men's Closest to the Pin: Greg Link

Women's Closest to the Pin: Peggy May

Men's Longest Drive: Del Halliday

Women's Longest Drive: Peggy May

The following photos are some of the teams who participated in the day's tournament.





In Support of the
Aerospace Student Awards Endowment Fund

2016
Golf Tournament



Place: Larters at St. Andrews Golf & Country Club
Format: Texas Scramble
Time: 1:00 pm Shotgun Start

\$175 / person

includes Green fee / Cart / Dinner / Prize

To register please contact Peter Ewert
(204)334-2107 ext. 207
pewert@larters.com

September 15, 2016

MAGELLAN AEROSPACE ACQUIRES THE ASSETS OF LAWRENCE RIPAK



A MAGELLAN AEROSPACE COMPANY

On November 16, 2015 Magellan Aerospace Corporation announced that it has, through a wholly owned subsidiary, Magellan Aerospace Processing, Long Island, Inc., acquired substantially all the assets of Lawrence Ripak Co. Inc. and Ripak Aerospace Processing LLC ("Ripak") for \$USD 23.7 million, subject to normal working capital adjustments. Ripak is an aerospace processing facility located in Long Island, New York. For more than 60 years Ripak has been in business providing a full range of non-destructive test (NDT) services, anodizing, plating, painting, shot peening and other processing to over four hundred customers worldwide.

Magellan's President and Chief Executive Officer, Phillip Underwood commented, "The acquisition of Ripak establishes a North American capability in processing that adds capacity and is complementary to Magellan's existing processing facilities in the UK, Poland and India." It is intended that the company will conduct business under the trade name of Ripak Aerospace Processing and will operate as an independent division reporting to Magellan's Vice President of North American Operations.

"This acquisition provides Magellan control over a comprehensive processing facility in the US, helping to secure a critical supply chain for our customers in the north eastern region of the United States," Mr. Underwood continued, "in addition it allows for the potential introduction of additional capabilities and applications, as our business continues to evolve."

Since 1952, Ripak has grown to a facility of more than 150 personnel with 97,500 square feet of processing capability. The company's quality system is Nadcap certified and provides a full suite of customer and Nadcap approved processes to their customer base.

GROWING THE MANITOBA AEROSPACE STUDENT AWARDS PROGRAM

The Manitoba Aerospace Student Awards Program provides financial awards to students to help them access rewarding, enduring careers in the aerospace industry.

The Association gives awards to six students each year – three awards are given to Vocational High School students, and three are given to post-secondary students at Red River College, University of Manitoba, and Neeginan Aboriginal College. The funds for these awards come from the proceeds from the annual All Stars Awards Dinner and Manitoba Aerospace Endowment Golf Tournament. In 2015 the Golf Tournament raised \$11,000 and the All-Stars Gala evening contributed another \$20,000.

With the generosity of our members and the good work of the Marketing and Communications Committee our endowments have grown to over

\$170,000 since they were started in 2007. Not only have we reached the point where the current awards can be self-sustaining, but we can also increase the value and the number of these awards.

For 2015 all six awards were increased in value from \$500 to \$600. For 2016 all awards will be increased to \$1,000 and a seventh award will be created for the engineering technology program at Red River College.

As we continue to grow our endowments we look to increase the value and number of awards even further.

So just remember, when you are working hard and having fun at the Golf Tournament, or bidding on auction items at the All-Stars Gala Awards, be generous - you are helping build our workforce for tomorrow.



MEET THE MANITOBA AEROSPACE MARKETING & COMMUNICATIONS TEAM

Manitoba Aerospace has a committee of dedicated individuals drawn from its members and associate members that work together to raise the awareness of the Manitoba Aerospace industry sector with target audiences via the combined efforts of the Manitoba Aerospace Association (MAA), Manitoba Aerospace Human Resources Council (MAHRC) and member organizations.

The committee works to position the Association as an information source for the Manitoba Aerospace industry, and to keep our members informed of related association activities.

The committee works with our members, various levels of government, the media, the general public, other committees of the MAA, and other related industry and associations to achieve its goals.

Manitoba Aerospace has an e-newsletter, Contrails, that is distributed to members and other interested parties three times a year, and contributes content

to the Manitoba Aviation and Aerospace magazine. The committee also organizes the Aerospace All-Stars Awards Dinner in November, and the golf tournament in September, both of which are fundraisers for the student endowment fund, organizes and hosts the Western Aerospace Association's conference every four years, and organizes Aerospace and Aviation in Manitoba (AAiM) Day at Red River College's Stevenson campus for grade six students. The committee also keeps the Manitoba Aerospace website up-to-date.

Your committee members are Terry Trupp (Boeing), Ken Webb (Manitoba Aerospace Association), Wendell Wiebe (Manitoba Aerospace Human Resource Council), Barb Bowen (Manitoba Aerospace Human Resource Council), Leslie Yakimishyn (Magellan Aerospace), Teresa Woyana (Acklands Grainger), and Don Fowler (StandardAero).

MANITOBA AEROSPACE EVENTS WINTER 2016

Machine Safeguarding for Robots

Industrial Technology Centre, Winnipeg, Manitoba
January 19, 2016

ConvergX - Oil & Gas meet Aerospace, Defence & Security

Calgary, Alberta
February 10-11, 2016

Pacific Northwest Aerospace Alliance (PNAA) Aerospace Manufacturing Conference 2016

Seattle North, Washington
February 9-11, 2016

Singapore Air Show 2016

Singapore
February 16-21, 2016

Manitoba Aviation Symposium

Winnipeg, Manitoba
March 2-3, 2016

Aerospace and Defence Supplier Summit

Seattle, Washington
April 14-15, 2016

CANSEC

Ottawa, Ontario
May 25-26, 2016

Centrallia

Winnipeg, Manitoba
May 25-27, 2016

Aerospace and Aviation in Manitoba Day (AAiM Day)

Stevenson Campus, Winnipeg, Manitoba
May 27, 2016

Manitoba Aerospace Week

Winnipeg, Manitoba
May 30 - June 3, 2016

*Wishing you and yours a safe
and happy holiday season!*

