

# Building the Foundation

AIAC Pacific 2014/15 Report



Aerospace Industries  
Association of Canada

L'Association des industries  
aérospatiales du Canada



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The background of the top half of the page is a teal-colored image featuring several circular gauges and dials, likely from an aircraft instrument panel. The gauges have various scales and markings, including numbers and letters like 'N', 'E', 'S', 'W'. One prominent gauge in the center has a scale from 0 to 20 and is labeled '100 FEET PER MIN'.

## Executive Summary

AIAC Pacific was established in response to BC's aerospace leaders and the Aerospace Industries Association of Canada sensing an opportunity for the BC industry to increase its capabilities and elevate its national stature. The Emerson report on Aerospace and Space and the Jenkins report on Leveraging Defence Procurement had been released a year earlier, spurring the federal government to begin work on policy and funding initiatives aimed at increasing the long-term competitiveness of Canada's aerospace, space and defence industries. In BC, the newly elected provincial government identified aerospace as a strategic sector and committed to investing \$5 million over five years to unify and accelerate the growth of the BC aerospace industry. The establishment of AIAC Pacific and the opening of an office in BC paved the way for AIAC to join forces with the BC government in April 2014 on a program to pursue the mutual aerospace goals of the government and the industry in BC.

In the first year of its partnership with the Province of BC, AIAC Pacific initiated a number of programs and activities that laid a solid foundation for achieving BC's aerospace goals. 2014/15 highlights included:

-  Opening a BC office of the Aerospace Industries Association of Canada, establishing a direct link between BC aerospace companies and the Canadian operations of global aerospace firms.

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-  Creating connections with the BC industry through regular communications, information sharing, networking events and a membership program.

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-  Completing an Economic Impact Analysis and Capabilities Study revealing that the industry generates annual revenues of \$2.4 billion and direct GDP of \$1.3 billion, and employs 8,300 British Columbians. The study represented an essential first step in positioning the BC industry to do more business with global aerospace companies.

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-  Signing on to serve as the BC and Alberta office for the Consortium for Aerospace Research and Innovation in Canada (CARIC), a federally funded initiative launched nationally in 2014.

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-  Joining the national Supply Chain Committee responsible for the implementation of the supply chain recommendations of the Emerson Report.

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-  Initiating analysis of how best to position the BC industry to capitalize on the newly developed Defence Procurement Strategy and Value Proposition Guide to attract more federal procurement investment to BC.

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-  Successfully staging the Aerospace Defence and Security Expo (ADSE) at the Abbotsford International Airshow, attracting close to 400 delegates including a number of global original equipment manufacturers (OEMs).

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-  Leading six domestic and international market access missions to enable the BC Industry to make national and international connections and pursue business opportunities.

In the 2015 provincial budget the BC government re-affirmed its commitment to the BC aerospace industry continuing the work underway to advance the province's aerospace objectives. With the foundational pieces in place, AIAC Pacific will turn its attention in year two to building capabilities and capacity, and to positioning the industry for business growth. The strategy will focus on BC's identified Key Industrial Capabilities (KICs): Space; Advanced Manufacturing; ISS-MRO; Special Mission Aircraft; and Aviation Training.

# Message from the Chair

BC's aerospace industry has a lot going for it: world-class companies, highly-skilled employees, a track record of excellence, and proximity to the Pacific Rim and the world's largest aerospace cluster in Northwest Washington.

We believe, however, that there is room for significant growth – especially in light of the dramatic increase in aerospace manufacturing that is expected globally over the next twenty years. That is why our provincial government announced last year that it would partner with AIAC Pacific to develop a unified aerospace cluster in British Columbia, as part of a five-year commitment to support the growth of our sector.



The recently completed economic impact and capabilities study of our sector indicates that aerospace can indeed contribute significantly to British Columbia's economy as a driver of both jobs and investment. However, we cannot do it alone or in isolation.

Key to our success will be leveraging the momentum that AIAC and the national aerospace industry have achieved. AIAC's robust national and international partnerships, particularly with the federal government, as well as the many programs it offers to its members, are essential to our success in BC, and we must keep that strong connection at the heart of our efforts.

We must also continue to work together as a provincial industry, in tandem with our partners in government and in the academic and research communities. We need everyone's involvement to continue to build this cluster, and all ideas are welcome.

We are grateful for the tremendous support we have received to date from the provincial government, from AIAC, and of course from our members and partners here in BC

Our first year of work on this important initiative has delivered several significant achievements; but there is much more to do. This report highlights those achievements as well as the steps that we must take next, and we are excited to continue moving forward.

David Schellenberg  
Chair  
AIAC Pacific

# Message from the President and CEO

AIAC Pacific was created out of the recognition that, while maintaining a strong national voice is essential to the aerospace industry's long-term success, developing robust regional strategies and relationships are just as essential. Thanks to the excellent support and partnership of the BC government, AIAC Pacific's first year has laid a strong foundation for the growth and competitiveness of a unified aerospace industry in British Columbia.

In only one year, we launched a revitalized provincial association; conducted an in-depth economic impact and capabilities study; hosted the largest-ever Aerospace, Defence and Security Expo (ADSE); coordinated the BC and Western presence at several national and international trade shows; and became the regional representative for CARIC, the national collaborative research network. This document fully outlines each of these achievements and more.

We are taking the energy and momentum that we have built, both provincially and nationally, into the next phase of this agreement. We are proud to work with the government of British Columbia, and we thank them for their support and vision. We are also proud of our industry and of the work and dedication that companies of all sizes have shown to working together and developing an association that will act as the voice of the BC industry at the provincial and national levels.

A strong foundation has been laid, but the work is just beginning. We look forward to continuing to build a strong BC aerospace industry that will drive jobs and growth not only in BC but all across Canada, and we invite you to join us as we move forward together.



Jim Quick  
President and CEO  
Aerospace Industries Association of Canada





## Introduction

The following report charts the evolution of AIAC Pacific through to the conclusion of the first year of its partnership with the Province of British Columbia – a partnership to which the government has committed \$5 million over five years to fund a program aimed at unifying and accelerating the growth of the aerospace sector, creating jobs and attracting investment to BC. It traces the government and industry actions that led first to the Aerospace Industries Association of Canada (AIAC) establishing an office in BC, then to the BC government commencing its five-year funding program. It catalogues AIAC Pacific’s record of achievements in the first year of the provincial partnership (April 1, 2014 to March 31, 2015), in the context of program deliverables and other steps taken to lay the groundwork for advancing a BC aerospace strategy. The report concludes with a look-ahead at AIAC Pacific’s focus for the future, along with a look-back at some BC aerospace industry success stories – stories which illustrate the true potential for achieving the government’s vision of how BC aerospace will contribute to a vibrant economic future for the province.

# Standing Up, Standing Together



Industry and government come together in April 2014 to announce first-year funding for the BC aerospace partnership with AIAC Pacific. L to R: Hon. Mike de Jong, BC Minister of Finance; Jim Quick, AIAC President & CEO; Hon. Teresa Wat, BC Minister of International Trade; Dave Curtis, Viking Air President & CEO and AIAC Vice Chair.

AIAC Pacific and its partnership with the Province of BC were born out of the shared vision of industry and government who recognized that tremendous opportunities lay ahead for the Canadian aerospace industry – and that government policy and financial support would be necessary in order for the industry to realize its full potential.

The Emerson report on aerospace and space, and the Jenkins report on leveraging defence procurement, were issued in late 2013 and early 2014 respectively. Together, they offered 33 recommendations regarding ways in which federal programs and policies could be better used to elevate the long-term competitiveness of the Canadian aerospace, space and defence

industries, and set in motion a series of federal policy and funding initiatives.

In the spring of 2013 the newly elected BC government identified aerospace as a strategic sector and committed to invest \$5 million over five years to unify and accelerate the growth of the BC aerospace industry. At the same time, Western Economic Diversification Canada (WD) inked a two-year, half-million dollar agreement with AIAC to facilitate greater Western Canadian involvement in domestic and international aerospace-related events, and to enhance market access and supply chain development opportunities for Western small and medium-sized enterprises (SMEs).

“We are very pleased that BC’s world leading aerospace industry will be expanding and working to attract more contracts around the world. This means fulfilling a commitment we made as part of BC’s Jobs Plan to create more jobs for British Columbians.”

*Shirley Bond, Minister of Jobs, Tourism and Skills Training and Minister Responsible for Labour, April 8, 2014.*

## BC industry takes the lead

With the Emerson recommendations taking shape, an aerospace-supportive government re-elected in BC, and federal funding in place to boost market access for western aerospace firms, a group of BC aerospace industry leaders drew up a plan to capitalize on these developments. A critical first step would be for the BC industry to forge stronger linkages with national programs, and for Ottawa-based AIAC to become more involved in the regions. AIAC Pacific was founded with a mandate to promote and develop aerospace business in BC by acting as an industry advocate and by facilitating the BC industry's participation in national and international programs designed to enhance business development, investment and global competitiveness. Further, through AIAC Pacific the BC industry could leverage AIAC's established network, brand and programming to pursue business development opportunities in Canada and around the world.

## Governments gear up

In the first budget of its new mandate, the BC government identified AIAC Pacific as the partner that would help "grow the province's world-leading aerospace sector and help attract additional global aerospace and defence contractors to BC." A few months later, in April 2014, BC Finance Minister Mike de Jong and BC International Trade Minister Teresa Wat joined AIAC President Jim Quick and AIAC Vice Chair Dave Curtis at Viking Air's facilities in Sidney to announce \$1 million in funding for the BC aerospace industry through AIAC Pacific – the first installment of the government's commitment to the industry of \$5 million over five years.

Also in April 2014, AIAC announced the creation of the Consortium for Aerospace Research and Innovation in Canada (CARIC), a national collaborative research network to be based in Montreal with regional offices across the country. Establishment of a structured national research initiative was a key Emerson recommendation, and the first network of its kind. In August 2014, at the Aerospace, Defence and Security Expo (ADSE) in Abbotsford, the federal government followed through on its commitment to support aerospace R&D by announcing \$30 million in funding for the initiative.

In the spring of 2015, the BC government re-affirmed its commitment to the BC aerospace sector and to continuing its partnership with AIAC Pacific. In his 2015 budget speech, Finance Minister Mike de Jong stated: "We need to support a growing economy,



Hon. Michelle Rempel, federal Minister of State for Western Economic Diversification (WD) speaks during the ADSE 2014 opening ceremonies. WD funding support has been crucial to enhancing market access and supply chain development for Western aerospace SMEs.

and growing international trade. That includes moving forward with the Province's commitment to provide \$5 million over five years to further expand and grow BC's world-class aerospace cluster. The second installment of funding will continue the work that has been launched, aimed at expanding markets and attracting more global business and investment to BC.

# Building the Foundation

The partnership between the BC government and AIAC Pacific centres on an overall program goal of unifying the BC aerospace cluster, attracting global investment and accelerating the growth of the industry. The first-year agreement specifies the following objectives:

- Increase collaboration amongst BC industry partners
- Enhance market access and expansion of international trade opportunities
- Develop a globally competitive supply chain
- Improve the R&D capabilities of the BC aerospace industry
- Capture BC's fair share of federal program, procurement and research funding
- Leverage provincial training programs and opportunities

Guided by these goals and objectives, AIAC Pacific set out to create a platform for delivering on a series of projects. The first year program focused on “standing up” and commencing a number of initiatives to engage with the industry, analyze sector strengths and weaknesses, showcase industry capabilities, establish national and international ties, link BC firms with national programs and identify business opportunities. AIAC Pacific is proud to report on a full first year of activities and accomplishments, and on building a foundation for enabling the BC aerospace sector to realize its full potential, bringing investment, economic activity and jobs to BC.

## Putting down roots

Responding to the industry's call for AIAC to have a greater presence and involvement in BC, the association established its first regional office – AIAC Pacific – and further signalled its commitment to the BC industry and the provincial government by hiring a Vice President dedicated to advancing AIAC's efforts in BC. AIAC Pacific, through channels established by the association's national office, provides BC aerospace companies with a direct link to the Canadian operations of global aerospace firms.



AIAC Pacific was well positioned to “hit the ground running” when the BC government announced in April 2014 its partnership with AIAC and funding for the first year of the aerospace agreement.

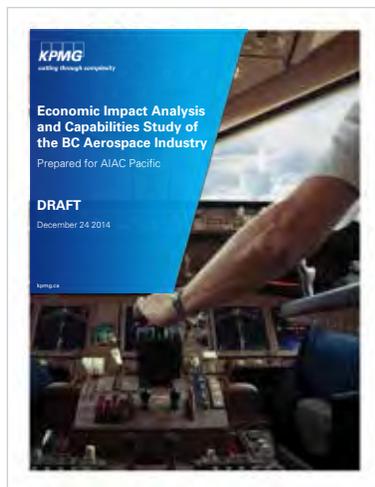
## Showcasing our industry

Immediately following the provincial funding announcement, AIAC Pacific grasped an opportunity to showcase the BC industry by taking over leadership of the Aerospace, Defence and Security Expo (ADSE), managed since 2012 by the City of Abbotsford. AIAC Pacific partnered with professional event managers PR1ME Strategies, and delivered an exhibition in 2014 that saw a significant increase in attendance and attention, attracting close to 400 delegates including a number of global original equipment manufacturers (OEMs) like Boeing, Lockheed Martin, Airbus, BellTextron, Rockwell Collins, Bombardier and Viking Air. ADSE is now the largest aerospace event in Canada outside of the Ottawa-Montreal corridor and forms a key part of AIAC Pacific's BC aerospace strategy.



## Understanding our potential

Through the fall of 2014, AIAC Pacific worked with a team of industry experts and consultants to analyze the economic impact and capabilities of BC's aerospace sector. The study, authored by KPMG, revealed that the BC aerospace industry:



- is comprised of over 160 companies, most of them small and medium-sized enterprises (SMEs)
- is the third largest aerospace sector in the country
- is a national leader in the Maintenance, Repair and Overhaul (MRO) sector as well as in the rapidly evolving In-Service Support (ISS) sector
- generates annual revenues of \$2.4 billion and direct GDP of \$1.3 billion
- employs 8,300 British Columbians directly, and supports another 14,300 to 19,800 jobs indirectly.

The study, completed in December 2014, is a centrepiece of AIAC Pacific's first-year program and represents a critical first step in identifying opportunities, developing strategies and positioning the BC industry to generate more business with global aerospace companies.

## Leveraging federal support to gain access to markets, supply chains and R&D

In May 2013, Western Economic Diversification (WD) announced a two-year, half-million dollar joint project with AIAC aimed at increasing Western Canadian SME involvement in national and international aerospace events, supply chain development and R&D collaboration related initiatives. When the AIAC Pacific office opened, AIAC assigned it responsibility for implementing the WD agreement on behalf of the Western Canadian aerospace industry, and for ensuring alignment with the provincial government's goal of full BC participation. With WD support, AIAC Pacific coordinated and led six western/BC delegations in 2014/15, as follows:



Western Economic Diversification Minister Michelle Rempel leads a tour of the Canadian Pavilion and Western Canada booth at the Farnborough International Airshow, July 2014.

- Aerospace & Defense Supplier Summit – Seattle, April 2014 – 7 BC companies and organizations represented
- Farnborough International Airshow – Farnborough, UK, July 2014 – 10 BC companies and organizations represented
- AIAC Day on the Hill – Ottawa, September 2014 – 8 BC companies and organizations represented
- Canadian Aerospace Summit – Ottawa, November 2014 – 25 BC companies and organizations represented
- Pacific Northwest Aerospace Alliance (PNAA) Conference – Lynnwood, WA, February 2014 – 25 BC companies and organizations represented
- AIAC Western Partnership Day/Day on the Hill – Ottawa, February 2015 – 9 BC companies and organizations represented



National and international conferences and trades shows – like the 2015 PNAA conference (left) and the 2014 Canadian Aerospace Summit (right) – offer valuable opportunities for BC aerospace firms to connect with Canadian and global OEMs and suppliers. BC was well represented at both events, with 25 companies participating in PNAA and another 25 attending the Summit.

The goal of these missions was to create a platform for BC and other western companies to make connections and pursue business opportunities. Through these missions, participating BC firms made valuable contacts by attending hundreds of meetings with Canadian and international OEMs and suppliers, with trade representatives, elected and non-elected government officials – and with each other.

AIAC Pacific is excited about joining CARIC’s national research network and driving the consortium’s research and technology development goals in BC and Alberta. This initiative fits perfectly with the BC government’s objective of increasing BC company participation in federal programs that support product technology and manufacturing innovation.”

*David Schellenberg, Chair, AIAC Pacific, April 15, 2015*

## Ensuring BC’s place in a globally competitive supply chain

The need to develop and strengthen the Canadian aerospace supply chain is a central theme of the Emerson report, and enabling BC to figure prominently in Canada’s aerospace supply chain is a key goal of the provincial government. To that end, AIAC Pacific joined the national AIAC-chaired Supply Chain Committee responsible for implementing Emerson’s supply chain recommendations. AIAC Pacific’s aim was to ensure strong BC representation and to advance the supply chain goals set out in the WD agreement, which were to ensure elements relevant to western Canadian companies are included in the national plan and implemented in a way that suits the western aerospace industry. The initiative led to the creation of an aerospace supplier development framework, and supplier guidelines and standards for SMEs, with the objective of accelerating the development of the western Canadian aerospace supply chain.



Ensuring BC plays a key role in the development of Canada’s aerospace supply chain is a central theme of both AIAC’s agreement with WD and AIAC Pacific’s partnership with the province.

The model and funding plan for the supply chain initiative crystalized with the federal government’s 2015 Economic Action Plan announcement that \$6 million would be committed to working with AIAC and provincial and regional stakeholders to create a national supply chain development initiative.

AIAC Pacific will work in the coming years to ensure BC companies, large and small, are integrated into the national initiative at the earliest opportunity, and to build a plan that will allow the aerospace supply chain framework to integrate with and complement other industrial sector supply chains in BC.

## Rising to the R&D challenge

With support from WD, AIAC retained Envision Technologies to research and develop an inventory of western research capabilities and a framework to connect researchers, organizations and companies, with the objective of promoting western research capabilities and promoting collaboration among the participants. The results of the consultations and research were presented at a CARIC roundtable held at ADSE in August 2014. The federal government also used ADSE 2014 as the platform to announce \$30 million in funding for CARIC to lead a five year collaborative program of aerospace research and development linking industry, academia and research institutions across the country.

Because BC trails other Canadian provinces in aerospace R&D investment, improving BC aerospace R&D capabilities and capturing a greater share of federal research dollars were specific objectives of the provincial first-year agreement. To help stimulate aerospace R&D activity and deliver federal funding support to BC, AIAC Pacific signed on in March 2015 as CARIC's regional office for BC and Alberta – one of



Since the launch of the Consortium for Aerospace Research and Innovation in Canada (CARIC) in April 2014, CARIC R&D information workshops have been held at ADSE, in Richmond (pictured above), Kelowna and Victoria.

five offices across the country that will form CARIC's national network.

To ensure the BC aerospace industry is aware of opportunities for R&D funding and collaboration, AIAC Pacific held an R&D Incentives workshop in Vancouver in the fall of 2014 and regional R&D information sessions in Kelowna and Victoria in the spring of 2015. All sessions were well attended by motivated industry leaders, eager to enhance their competitiveness through innovation and to help build a leading edge industry in BC.



AIAC acknowledged the BC government's unique contribution to aerospace with a "Certificate of Recognition" presented at the Canadian Aerospace Summit in November 2014. L to R: Dave Curtis, AIAC Chair; Barry Kohler, AIAC Past Chair; David Schellenberg, AIAC Pacific Chair; Hon. Mike de Jong, BC Minister of Finance; Jim Quick, AIAC President & CEO.

## Taking centre stage

The provincial government's commitment to unifying and growing the BC aerospace sector stands out amongst all Canadian provinces, and it was therefore appropriate for the BC government to be recognized at the 2014 Canadian Aerospace Summit. As part of the Summit opening ceremonies, BC Finance Minister Mike de Jong accepted a Certificate of Recognition from AIAC and was given an opportunity to address the assembled Canadian and international delegates. "Our government's partnership with AIAC will help to build a unified voice for the aerospace industry in BC, and also nationally. In collaboration with AIAC we look forward to helping the aerospace industry continue to thrive and contribute to our province's jobs and economy over the coming years," said de Jong.



Hands across the border – AIAC Pacific signed a reciprocal membership agreement with PNAA during its annual conference in Lynnwood, Washington in February 2015.

At the Pacific Northwest Aerospace Alliance annual conference in Lynnwood, Washington, AIAC Pacific seized an opportunity to formalize and strengthen its relationship with PNAA whose core membership resides in the largest aerospace cluster in the world next door in Washington State. The signing of a reciprocal membership agreement between AIAC Pacific and PNAA was featured prominently on the conference program and represented a significant step for AIAC Pacific in offering the BC industry a voice at the regional, national and international levels.

BC’s aerospace industry has been demonstrating significant growth and innovation for some years now. That’s why this mutual cooperation agreement between British Columbia and Washington State is so important – it will help facilitate increasing trade between jurisdictions and drive economic competitiveness.”

*Teresa Wat, Minister of International Trade and Minister Responsible for the Asia Pacific Strategy and Multiculturalism, February 12, 2015*

## Creating connections

Responding to the provincial government’s objective of increasing collaboration among BC industry partners, AIAC Pacific started building the mechanisms that will enable it to serve as a hub for aerospace news, events and activities in BC. Shortly after its creation, AIAC Pacific launched a website featuring the latest developments in aerospace in BC and across the country, and which will – over time – function as a searchable directory of BC company capabilities. AIAC Pacific’s growing database of BC’s 160-plus aerospace related companies, as well as government, academic and other stakeholder contacts, allows for swift and direct communication, data gathering and information sharing with the industry and other stakeholders throughout BC.

The BC industry expressed a strong desire to meet and engage with others in the BC aerospace community, prompting AIAC Pacific to organize a number of networking receptions and lunches corresponding with workshops or to promote upcoming events. Industry responded, recognizing the value in making connections and building relationships – and in the power of collaboration.



As part of its efforts to connect and engage the BC aerospace industry, AIAC Pacific launched its membership program in January 2015. Pictured above, Phil Evans of TAG Aerospace (right) receives a Certificate of Membership from AIAC Pacific Chair David Schellenberg (left) and AIAC Pacific Vice President Jay Teichroeb (centre).

Responding to another industry request to connect, AIAC Pacific launched its first year membership program, with a handful of industry early adopters being the first to purchase an AIAC Pacific membership. Membership promotion will begin in 2015 in conjunction with delegate registration for ADSE 2015.



## Charting the Future – Focusing on the Customer

The first, foundational year of the partnership between AIAC Pacific and the BC Government centred on building a foundation and getting a number of programs and initiatives off the ground. In the next phase of the partnership, AIAC Pacific will shift its focus to positioning the industry for business growth, and identifying and targeting programs to pursue commercial opportunities. The strategy will be built around the Key Industrial Capabilities (KICs) identified as strengths and opportunities for the BC aerospace industry. The 2015/16 plan will concentrate on nine areas aimed at enhancing supplier capabilities and opportunities, and rolling out a comprehensive commercial growth strategy, as follows.

### **Supplier Development Activities**

- 1 Create a consortia model that will allow small BC businesses to compete for larger work packages within the global supply chain
- 2 Ensure early entry for BC firms into the roll-out of the National Supply Chain Initiative
- 3 Accelerate next generation technology development
- 4 Secure BC's share of federal procurement spending

### **BC Aerospace Industry Growth Strategy Activities**

- 5 Develop an emerging market access and export strategy
- 6 Build new capacity focused on BC Key Industrial Capabilities
- 7 Build aerospace research capacity and facilitate commercialization opportunities
- 8 Develop an aerospace internship and up-skilling program
- 9 Enhance the development of the Aerospace, Defence, and Security Expo at the Abbotsford Air Show

In addition, AIAC Pacific will continue efforts to increase communication and collaboration among BC industry partners.

## Key Industrial Capabilities (KICs)

Establishing world-leading capability and capacity will be critical for BC to become a leader in a highly competitive global supply chain. New national programs such as the Defence Procurement Strategy (DPS) use KICs to drive the development of capacity and new capacity. As foreign and domestic OEMs look for suppliers and partners they will use KICs as a key measure.

Of the KICs identified for BC, several are nation-leading and provide BC with an opportunity to lead Canada's efforts to enhance its presence and position in the global supply chain. To be successful, BC needs to 1) understand and articulate the importance of these KICs to the supply chain; 2) develop programs to enhance key capabilities and to develop new capacity in those areas, and 3) ensure BC KICs have a full suite of partners (academia, government, other sectors) to allow the province to maximize its economic potential.



BC firms like MDA and Urthecast have helped put Canada on the map as global leaders in the space sector.

## BC's Key Industrial Capabilities

**Space** - BC is home to MDA, the largest space firm in Canada. MDA has a major opportunity to leverage its space capabilities into related sectors where sensing and other technologies are critical – such as forestry, resource extraction, pipeline construction and environmental monitoring. The space sector also has opportunities to develop and promote both upstream and downstream capacity. Global opportunities exist in the development of value added technology (e.g. remote sensing / earth observation for activities such as marketing Air Traffic Management).

**Advanced Manufacturing** - BC is also home to companies that have advanced manufacturing capability which presents two important opportunities for the province:

- A platform from which to lead the development of new manufacturing capacity and capabilities
- Creation of an environment to attract new Tier 1 and 2 investment to the province

**ISS-MRO** - BC has the largest ISS-MRO sector in Canada. Cascade Aerospace, KF Aerospace, MTU, and Vector Aerospace are all in market-leading positions and sell Canadian skilled labour and engineering services around the world.

**Special Mission Aircraft** - A BC capability that brings together multiple BC strengths including engineering design, advanced manufacturing, aircraft modification, TC/FAA/EASA certification, ISS-MRO and program management. These combined capabilities provide BC with the opportunity to create and maintain special mission aircraft for customers worldwide.

**Aviation Training** - BC's unique aviation history and geography has, over time, created strong capabilities, facilities, and know-how in training. Significant demand from Asia is evolving for aviation training – China, in particular, is a large market that BC is well positioned to serve.



Special Mission Aircraft like the RJ85 aerial firefighting tanker is a key example of the capabilities that companies like BC's Conair can offer to the world.

# BC Industry Makes Impressive Strides

While AIAC Pacific, through its partnership with the province and links to AIAC's national network, helps the industry access networks, markets and programs, it is ultimately the private sector that will drive BC's competitiveness in the global economy. AIAC salutes the BC aerospace industry for its ingenuity and determination, which led to significant milestones and achievements in 2014/15. Here is a sampling of recent BC aerospace initiatives and success stories.



## Anodyne Electronics Manufacturing

Anodyne Electronics Manufacturing (AEM) of Kelowna was selected by American Systems as a sub-contractor to design and manufacture the control keyboard for the new autopilot in NASA's fleet of T-38 Talon, twin-engine supersonic jet trainers used for astronaut proficiency training.

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## Cascade Aerospace

Cascade Aerospace acquired its first international military C-130 customer with the modernization and sustainment activities on two Mexican Air Force C-130K Hercules aircraft. Cascade's capabilities were developed through its C-130 fleet management program for the Canadian Airforce's Hercules fleet which was then leveraged into the international market for the first time with the Mexican contract. In April 2015 Cascade delivered the 100th C-130 to the RCAF.

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## Conair Aviation

Conair Aviation commenced operation of two next generation RJ85 aerial firefighting tankers with the US Forest Service and a third deployed to Australia. Conair is now completing the purpose engineering of its 5th RJ85 with plans to develop more for the domestic and international markets. Specialized mission aircraft such as the RJ85 are a Key Industrial Capability of the BC aerospace industry.

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## KF Aerospace

Over the winter of 2014/15, KF Aerospace (formerly Kelowna Flightcraft) constructed a fifth major hangar at its facilities at the Kelowna Airport, allowing for expansion to nine lines of heavy maintenance for customers such as WestJet, Aloha Airlines and Lynden Air Cargo, and to support modification programs such as Cargo Door and Combi conversions on B737 and B757 aircraft.



## Marshall Aerospace Canada

Marshall Aerospace Canada established its Canadian head office in BC, out of which the company's comprehensive Air, Land and Sea engineering and maintenance capabilities will operate to serve current and future military and civil contracts and customers. The facility located at the Abbotsford Airport will also act as Marshall's base for strategic growth in Canada and North America.

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## MDA

MDA achieved a number of key contract wins in 2014/15, with a significant number being implemented through the company's Surveillance and Intelligence business based in Richmond. For example, from October 17-28, 2014, MDA announced five contract signings of which all are being managed from Richmond:

- 1 to provide space-based monitoring services using RADARSAT-2 to support oil exploration and production activities;
  - 2 to provide additional support to the US Air Force high-precision flight path safety system;
  - 3 to provide a surface movement monitoring solution to customers in the oil and gas, and mining sectors;
  - 4 to expand RADARSAT business in China; and,
  - 5 to provide unmanned aerial vehicle surveillance services to the Royal Australian Air Force.
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## MTU Maintenance

MTU Maintenance recently signed three new international service contracts: with Air Costa, India's newest airline, to provide engine maintenance and LRU management; with Vuelos Economicos de Centro America (VECA) Airlines of El Salvador to provide LRU support; and with Volaris, one of the top airlines in Mexico, covering LRU services.

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## NGRAIN and Convergent Manufacturing Technologies

The Visual Analytics Research & Development Consortium of Canada (VARDEC) launched an initial collaborative research project with NGRAIN and Convergent Manufacturing Technologies to improve awareness of real-time sensor data using 3D virtual and augmented techniques in composite manufacturing environments. VARDEC is an industry-led research consortium initiated by The Boeing Company to continue its multi-year, active involvement in visual analytics research at Canadian universities and with Canadian industry.





### **Pacific Sky Aviation**

Pacific Sky Aviation, a sister company to Viking Air, commenced development of the world's first Twin Otter flight simulator and pilot training facility. Aviation training is a BC Key Industrial Capability.

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### **Urthecast**

Images captured by Urthecast cameras on the International Space Station are being incorporated into a first-of-its-kind short film for the 2015 Pepsi® Challenge™ global marketing campaign. Urthecast's Ultra HD video of worldwide locales will help make this an unprecedented brand partnership, which promises to combine the worlds of technology, music, film production, and storytelling like never before.

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### **Versaform Canada Corporation**

Versaform Canada Corporation was successful in securing statements of work for the Boeing 737 platform with several companies in Canada and the US. Versaform Canada manufactures stretch formed components to a variety of OEM aircraft requirements, including Boeing 787, 747, 737, Twin Otter, Global Express and Challenger.

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### **Viking Air**

Victoria-based Viking Air made its first aircraft sale in Fiji with a Viking Twin Otter Series 400 destined for a six star resort to be used for luxury transport for resort guests. Viking also became the first Canadian company to be named PNAAs "Company of the Year" in recognition of its rapid growth from aircraft maintenance and repair operation to an original equipment manufacturer and a leader in the Canadian aerospace industry.



## Conclusion

The first year of the partnership between AIAC Pacific and the Province of British Columbia has been one of building a foundation and building momentum – launching projects, delivering programs, analyzing the industry, defining goals and charting a course. Although much has been accomplished, much more remains to be done.

BC's aerospace industry and government leaders have articulated a vision, and issued a challenge – to create a unified BC aerospace cluster and accelerate the growth of the industry. Together, we envision a BC aerospace industry that is industrious, innovative and globally competitive. We share in the belief that many of the pieces are in place and with strong leadership, direction and support, BC's aerospace industry will prosper and contribute significantly to BC's economic growth and Canada's standing in the global aerospace arena.

AIAC Pacific is proud to have the opportunity to help realize that vision.

# Thank You

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