

The signing of the Change of Command certificates in Ottawa - outgoing CAS, LGen Angus Watt (left), Gen Walt Natynczyk, CDS, and incoming CAS, LGen André Deschamps (right).

Now that I have had a few months to settle into the seat as the new Chief of the Air Staff (CAS) and Commander of Air Command, I am happy to report that my takeoff was smooth and the mission so far is going extremely well. With Major-General Tom Lawson in the right seat as the new Assistant Chief of the Air Staff, and Air Force personnel at all levels continuing to serve so capably and professionally, we are poised to continue the outstanding work of my predecessor, Lieutenant-General Angus Watt, who is now fully ensconced in his well-deserved retirement.

It truly is an honour and a privilege to be the new CAS. The change of command parade took place Oct.1, 2009 at the Canada Aviation Museum (CAM) in Ottawa. As we prepared to

bid farewell to the celebrations marking 100 years of powered flight in Canada at the end of 2009, it seemed only fitting to gather at the CAM, surrounded by aircraft that trace the history of Canadian aviation—and our Air Force—from its very beginnings. I hope that you, your family and your colleagues were able to partake in some of the many Centennial of Flight activities, events and celebrations that took place over the past year to honour our rich past and celebrate our exciting future.

The momentum continues

Although we may not be able to predict how the history books of tomorrow will treat the Air Force, the facts are indisputable—over the past couple of years we have received more new equipment,



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transformed more of the way we do business and sustained more domestic and overseas operations than in recent memory.

We have fielded the new CC-177 Globemaster III heavy airlifters that are performing stellar work in the Afghanistan theatre, at home and elsewhere in the world. We will soon see the arrival of new C-130J model Hercules transport aircraft to replace the oldest airframes in our current CC-130 Hercules fleet, and, most recently, we signed a contract for new CH-147F Chinook helicopters that will meet our medium- to heavy-lift helicopter requirements for years to come. We also established the Air Wing in Afghanistan, which provides vital support and increased security to Canadian and coalition forces in theatre. As well, our personnel programs continue to be transformed in order to keep pace with new realities.

My intent, therefore, is to build on the successes achieved by my predecessors, in line with the *Canada First* Defence Strategy, and focus on three key areas—operations, equipment and people.

Success in operations

My immediate priority is success in operations. We will maintain our tempo in Afghanistan, support the 2010 Olympics in February, and, a few short months afterward, support the G-8 Summit—all the while maintaining a close watch over our responsibilities here at home and abroad. Some of these domestic and international operations are high profile, while others "fly below the radar".

"My intent is to focus on operations, equipment and people"

Rest assured, however, that they all have an effect. One only has to look at the impact that a single CH-124 Sea King helicopter and its crew—known as Palomino 16—had when it deployed with Her Majesty's Canadian Ship *Winnipeg* on counter-piracy operations near Somalia in 2009. Two members of that crew, Master Corporal David Tillotson and Major James Hawthorne, received "Commander of Canadian Expeditionary Force Command" commendations for their calm and decisive actions that contributed to the capture and subsequent boarding of the pirate vessel. Another Sea King is currently embarked onboard HMCS *Fredericton*, deployed on a similar mission. Watch for coverage of Op Hestia in Haiti in the next edition of *Crew Brief*.

Over the next several months, we will ensure that all our operational priorities are balanced and that we continue to have positive effects during this very critical period.

ON THE COVER

A crew member of Sea King 406 removes ammunition from the helicopter after a day of training onboard HMCS *Fredericton*. HMCS Fredericton was enroute to a six-month mission to the Arabian Sea, the Gulf of Aden and the Horn of Africa to conduct counter-piracy and counter-terrorism operations alongside our NATO and Coalition partners. The mission continues until May 2010.

(PHOTO: CPL PETER REED)

Integration of capabilities

My second priority is the integration of new capabilities. We have new C-130J Hercules, CH-147F Chinooks and CH-148 Cyclones arriving very soon. We will need to integrate them as rapidly, effectively and seamlessly as possible into our current capabilities while at the same time training crews and sustaining operations. As a backdrop to that, we are also continuing to lay the foundation for new fleets in the future—fleets such as fixed-wing search and rescue aircraft, unmanned aerial vehicles, our next generation fighters and multi-mission aircraft to replace the CP-140 Aurora.



CPL DARCY LEFEBVRE

People are the Air Force's most important resource. Search and rescue technician Sgt Dan Villeneuve of 103 (Search and Rescue) Squadron, 9 Wing Gander, N.L., was coordinator of SAREX 2009.

Our most important resource

My most mission-critical element is also my most important resource—our people. Without the dedicated, professional men and women of the Air Force, we would not be where we are today. They provide the knowledge, the drive and the leadership to move our initiatives and operations forward.

"My most important resource – our people"

We will continue to work towards ensuring our people have the best possible training and careers, and the best possible personal and family support that the Canadian Forces can deliver. I truly value each and every person in the Air Force. We need their expertise, their knowledge, and their mentorship of our new members – especially now as we integrate our new technologies and capabilities in this time of high operational tempo.

FROM THE CHIEF OF THE AIR STAFF

I am also dedicated to attracting and welcoming new members to the Air Force family. Our serving members are the key to transferring knowledge to them and building their pride in our profession and heritage. All of us in the Air Force are partners in providing the most exciting and gratifying career and life experience that anyone can aspire to.



MCPL ROBERT BOTTRILL

A master gunner sits in the door gunner's position in a CH-146 Griffon helicopter and fires the new Dillon Aero 7.62mm M134 Minigun during a training exercise at the firing ranges in Afghanistan.

Best in class

Adding these three priorities together, my overall goal is to be "best in class" for our size. Pound for pound, person for person, we will deliver world-class service in terms of operational effect, people, training and resources. We will marry high technology with the right resources, and great people with great training.

We have always had tremendous spirit in the Air Force. Now—with the way ahead mapped out in the Canada First Defence Strategy—we have a positive commitment to the resources that will enable us to do the job. I am encouraged by this; everyone in the Air Force and all Canadians should also be encouraged.

In closing, we have many opportunities and a huge range of rewarding careers in the Air Force—from firefighter to fighter pilot. I want to imagine a young man or woman looking to the sky and thinking "that's the place for me". I hope all members of the Air Force will join me in telling that person: "now is the time to make your dream a reality. You can make a real difference to your fellow Canadians and to the world."

For those serving in the Air Force and those who are thinking of a career with the finest organization in the country, remember this: the future can be yours in Canada's Air Force.

Lieutenant-General André Deschamps Chief of the Air Staff Commander of Air Command



CPL DANY VEILLETTE

Aircraft technician MCpl Marc Quade inspects the inside of the nose of a CH-124 Sea King helicopter embarked on HMCS Ville de Quebec.

Honorary Colonel **Pamela Wallin** Proud to Serve

SENATOR PAMELA WALLIN WAS INVESTED AS THE FIRST HONORARY COLONEL TO REPRESENT THE AIR FORCE AS A WHOLE ON NOV. 16, 2009. SHE DELIVERED A STIRRING SPEECH AT HER INVESTITURE THAT WAS BOTH INFORMATIVE AND MOTIVATIONAL. HERE IS AN EDITED TRANSCRIPT OF HER REMARKS.

It's a special honour to serve as an honorary colonel to Canada's Air Force because I join a respected and dedicated group of Canadians already in that role. And I promise to do my best to further the bond between Canadians and those who defend them.

As [Parliamentary Secretary] Laurie Hawn mentioned, I've just returned from Afghanistan with Defence Minister [Peter] MacKay and [Industry] Minister Tony Clement. We attended November 11th ceremonies there with the family members of seven of our fallen soldiers. We travelled throughout Afghanistan to Kandahar, to four forward operating bases (FOB), up to the Dahla Dam; and we did it all in Canadian Chinook [helicopters] piloted by Canadians with air cover from Canadians in the Griffon [helicopter]. And walking out our last morning onto the airfield at KAF [Kandahar Airfield], it did my heart good. It was a moment of great pride that we are now seeing our troops properly equipped and able to do their work.

Recommended new equipment

It was one of the recommendations of the Independent Panel on Canada's Future Role in Afghanistan that I was part of that concerned our Air Force particularly and the need for [a] secure medium-lift helicopter capability and high performance, unmanned aerial vehicles. Now, thanks to all of the hard work of the Air Force, this is all a reality. You are saving lives, and you are directly affecting combat operations. And believe me, it's working.

Sometimes you feel a little guilty as a Senator or a VIP when you travel into theatre and you use the precious air assets—and ground—to move around. But our pilots on the day that we were moving between the FOB were on triple duty that day, moving other Canadian soldiers and supplies, moving the so-called VIPs, but also spotting IED [improvised explosive devices] activity, calling in support, and blowing up some newly-planted devices, saving some Canadian lives.

Our mission in Afghanistan has matured, and we are at the very heart of the allied effort. We are considered and acknowledged by our allies—including General [Stanley] McChrystal, who we had a chance to meet with—to be the brains of the operation. And they're all looking to put a little bit more "Canada" in their efforts. I remain convinced that we are in the right place for the



right reasons. We chose to be there. Just as our allies had, we responded to the attacks of 9/11 that killed our citizens, and we joined the American-led Operation Enduring Freedom. But because we continue to be threatened both here and there, as others try not only to kill us but to undermine what we believe in and what we stand for, we chose to stay in a very significant way. We sought out that Kandahar assignment for NATO in 2005, sending 2,500 of our young men and women into the toughest part of a very tough neighbourhood.

Presence justified

And in Afghanistan there is no doubt of the monumental humanitarian need or of the security imperative. As we said in our report in the independent panel, our presence in Afghanistan is fully justified, whether considered from the point of view of international law, humanitarian need, or Canadian or global interest in security. If we are not willing to lend our military resources when asked to do so by the United Nations in a mission coordinated by NATO in a country whose democratically elected government wants us and whose citizens desperately need us, then we wonder where and when we would do so. Calls for retreat fail to understand just how successful we are being. What we need is resolve to finish the task.

Success is possible for the Afghans and for us because success is stability and a sense of hope, and we are getting there. That is our exit strategy. As one observer once noted, if you can't offer people a vision of what a government should do, then you won't be able to persuade them about the things it shouldn't do. This is precisely what our civilian and military volunteers are doing. It is powerful, and it is the right thing to do, and it is changing minds and hearts. Canada, I believe, has chosen to shed its status as a spectator nation. This mission is a worthy cause, and our troops are anything but timid souls.

Air Force at forefront

Whether saving the lives of millions from the brutality of the Nazis, saving the world from unchecked Soviet aggression in the Cold War, or saving the lives of men and women and children who would otherwise be at the mercy of the Taliban in Afghanistan today, Canada's Air Force is at the forefront.



MCPL ANGELA ABBEY

A door gunner and flight engineer keep a watchful eye from the ramp of a CH-147D Chinook helicopter during a mission in Afghanistan. HCol Wallin flew aboard Chinooks while in Afghanistan.



HCol Wallin chats with Second Lieutenant Chris Martin at the Birchall Leadership dinner in Calgary in late November where she was the Master of Ceremonies

I'm honoured to be here in some small way to become a part of this great tradition of service. As my mother and father taught me life's most important lesson, it was this: character always trumps genius. You can be the smartest person in the room, but if you are not kind and decent, honourable and fair when it is most difficult to do so, then all the brains in the world are for nought. Canada's military has shown itself to be a group of men and women of character in difficult times. I thank you for all that you do every day and for the opportunity to walk amongst you. 🐬

THERE ARE APPROXIMATELY 50 AIR FORCE HONORARY COLONELS. REPRESENTING UNITS AND SQUADRONS, FOR MORE INFORMATION PLEASE VISIT THE HONORARY COLONEL WEBSITE UNDER "OUTREACH" AT WWW.AIRFORCE.GC.CA.

JOINT TASK FORCE AFGHANISTAN AIR WING

The JTF-Afg Air Wing comprises all the CF air assets in the southwest Asia theatre of operations. The wing's helicopters transport troops and cargo, thus reducing the requirement for ground convoys that expose troops to ambushes, land mines and improvised explosive devices.

The JTF-Afg Air Wing is made up of the following sub-units:

- Theatre Support Element (TSE), providing aviation technical and logistics support services to JTF-Afg from a base in the Persian Gulf region.
- Tactical Aviation Unit, conducting personnel and cargo transport missions from Kandahar Airfield and the TSE, with three CC-130 Hercules transport aircraft and crews from 8 Wing Trenton, Ont.
- Canadian Helicopter Force Afghanistan, operating from Kandahar Airfield, including eight CH-146 Griffon helicopters, with crews and ground staff from 408 (Tactical Helicopter) Squadron, Edmonton, Alta.
- Six CH-147D Chinook medium- to heavy-lift helicopters, with crews and ground staff from helicopter squadrons across Canada, to conduct personnel and cargo transport missions.
- Six Mi-8 medium-lift helicopters chartered with their crews and ground staff from Sky Link Aviation of Toronto.
- Unmanned Aerial Vehicle Detachment, providing intelligence gathering, surveillance and reconnaissance services in support of Task Force Kandahar and Regional Command (South), the ISAF (International Security Assistance Force) formation covering the provinces of Kandahar, Helmand, Uruzgan and Zabul, equipped with the CU-170 Heron UAV. 🔫

Click Here" for World Class Training

As the Air Force strives to become best in class, it makes sense to provide members with the best, most technologically advanced training available in the world today and deliver it in a way that will ultimately help to ensure success in operations. One of the ways the Air Force is doing that is though a new e-learning system known as AFIILE, or the Air Force Integrated Information and Learning Environment.

Put

simply, AFIILE

uses web portal

technology to link students,

instructors, training resources

and course management

capabilities into a seamless

says Major Denis Forest of the Directorate of Air Programs at National Defence Headquarters, the section responsible for implementing AFIILE. "The Air Force has always used a mix of learning methods such as lectures, DVDs and computers to create a blended learning solution. AFIILE is the next generation of blended learning.

We've taken this approach—one that instructors and students have used for many years - and brought it all together on a single electronic platform."

Using an advanced set of commercially available software, AFIILE could, in the virtual computer realm, allow a student to be in two places at the same time—an aircraft technician at 14 Wing Greenwood, N.S. could see a 3-D model of a CP-140 Aurora landing gear schematic that is actually sitting on a server at 16 Wing Borden, Ont. Through shared resources and virtual online training, AFIILE increases the amount of time a student can spend on a task, reduces the time he or she needs to achieve proficiency and helps enable "first time right" performance when the student begins work on a real piece of equipment. As a result, AFIILE will help reduce training costs and improve training throughput.

Generational information gap

"We are very quickly losing members with expertise," says Warrant Officer Colin Drolet, the training and standards warrant officer at 8 Air Maintenance Squadron at 8 Wing Trenton, Ont., home to more than 600 aircraft technicians who work on the CC-130 Hercules and the CC-177 Globemaster III aircraft.

"We have this huge gap between older technicians who are retiring and new students coming in. New technicians on the hangar floor won't have the luxury, like I had, of going to the old war-dog corporal on the hangar floor and saying, 'Ralph, I've never seen this before, what do I do?' And he'll say, 'just go over there and do this and this, and it'll fix it for you'. This won't be available to them."

system. It turns schools and classrooms across Canada into a single, virtual classroom where all students learn the same material. Reference material is available simultaneously, course materials can be shared, amended and improved from any training location, and student training can be monitored and tracked from any Air Force school.

Meeting learning styles

Capt Jeremy

GRAIN 3-D software plore the workings

piece of equipment on

a touch-screen tablet-style portable computer

It may sound complex, however, the young recruits of today want to be trained this way and the Air Force is turning their learning style into reality.

"What we want people in the Air Force to understand is that this new training system is not a revolution. It is an evolution," NGRAIN, one of many learning tools available through AFIILE, allows a user to rotate, zoom into, disassemble and reassemble a 3-D model of a piece of equipment. The user will be able to explore the equipment in many ways such as 'exploded' view, X-ray view and MRI-style. In the future, technicians and aircrew will learn many of their skills through a variety of course learning materials, from PowerPoint presentations to NGRAIN 3-D models, which will be stored centrally and made available to students across the country using DND's intranet.

TRANSFORMATION

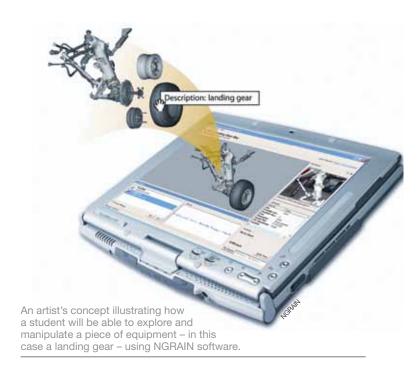
Instead of asking 'Ralph', students will be able to turn to AFIILE to see how something works. And instead of the information source being a single person's memory, AFIILE will capture the knowledge and experience of many users and trainers across the country and hold them in a single, easily accessible database.

There are even plans to build 3-D models of all Air Force fleets with their associated systems and subsystems so students can learn and train without ever leaving their computer.

"[We are doing] all sorts of things that didn't fit our traditional mould. We are struggling to catch up with that and it is important to be able to share our training resources to take advantage of other people's training experience," says Captain Stephanie Hale, an air combat systems officer and senior aircrew standards officer at 404 (Maritime Patrol and Training) Squadron, 14 Wing Greenwood, N.S.

"It is now more than a nicety that we embrace learning and training tools like AFIILE ... it is a necessity," she says. "We are no longer able to train adequate numbers, given our personnel and resource shortages, unless we begin to employ 'force multipliers' of knowledge and skill like AFIILE."

AFIILE began in mid-2008 and will be implemented in three phases over about four years at 24 Air Force units across Canada. AFIILE is a joint effort between the Air Force as sponsor and the Information Management Group as implementer.



Simulation Sitrep

The concept of virtual training also extends to air crews and commanders through Distributed Mission Training (DMT).

The Air Force's vision is to create a capability to link training devices within common synthetic environments to carry out collective training. Just as we can now play computer games against our opponents anywhere in the world via the internet, the Air Force has begun to advance its training model in the same way.

DMT, sometimes known as Distributed Mission Operations, is a shared training environment that includes live (real time, real aircraft), virtual (simulated) and constructive simulations (command and staff personnel engaged in large-scale simulations) that allow participants to train individually or collectively at all levels of war.

As part of Air Force transformation—and in line with the increased prevalence of DMT among allied forces—the Canadian Forces Aerospace Warfare Centre (CFAWC) at 8 Wing Trenton, Ont., has, over the past three years, been developing a distributed simulation capability. Although the Air Force has not yet formally adopted a DMT concept of operations, the capability is in line with the Canadian Advanced Synthetic Environment (CASE) project as well as strategic guidance.

CFAWC is working closely with the CASE project (located at the Canadian Forces Experimentation Centre in Ottawa) and the Directorate of Information Management Security in Ottawa for this development.



Tactical helicopter crews recently carried out virtual training missions on the CH-146 helicopter at a Carleton University simulation laboratory as part of the Canadian Advanced Synthetic Environment project.

Current efforts are focused establishing a permanent link between the CFAWC detachment at Shirley's Bay Ottawa and 22 Wing North Bay, Ont. to carry out routine DMT activities. Virtual training initiatives will also focus on continued Canadian participation in coalition Virtual Flag exercises, that established relationships and infrastructure for routine DMT activity with the United States Air Force.

FIRST C-130J HERCULES LOADMASTERS TRAINED

The key to integrating new fleets such as the new C-130J Hercules is having crews fully trained and ready to fly in time for the arrival of the first aircraft. The first of the J-model loadmasters have passed their training and are anxiously waiting for the opportunity to fly the new aircraft.

Warrant Officer Rick Barrett and Sergeant Sean Walsh, both loadmaster instructors at 426 (Transport Training) Squadron, 8 Wing Trenton, Ont. recently became the first two Canadian Forces loadmasters to graduate from the initial C-130J loadmaster course in Little Rock, Arkansas. They set an example for future Canadian J-model loadmasters through their hard work and dedication. The United States Air Force training establishment in Little Rock praised the Canadian loadmasters



as true professionals who exceeded all expectations.

(left)
WO Rick Barrett
(right)
Sat Sean Walsh



The first CC-130J rolled out of the Lockheed Martin Aeronautics Systems paint facility in Marietta, Georgia on Jan. 12, 2010. The Hercules spent 12 days in the hangar as 17 painters washed, primed and painted the aircraft using 75 gallons of paint.

The initial C-130J loadmaster course is three months long, and the candidates learn how to operate the new enhanced cargo compartment system as well as basic aircraft systems such as fuel management.

Upon completion of their basic course and "on-the-job" seasoning training, WO Barrett and Sgt Walsh will be qualified to operate the C-130J anywhere in the world in both strategic and tactical roles.

Four other loadmasters and ten pilots have been on course in Little Rock, where training will be conducted over the next two years. Canada bought 17 C-130Js to replace its aging CC-130 Hercules fleet. The first Canadian aircraft is expected to land at 8 Wing Trenton, Ont. in 2010 with the others following at regular intervals.

Exercise Coalition Virtual Flag

Roughly 18 months ago, the Canadian Forces Aerospace Warfare Centre detachment in Ottawa received an invitation from the U.S. Air Force (USAF) for Canadian participation in a USAF-led coalition DMT exercise. Exercise Coalition Virtual Flag (CVF) 09-4 encompassing USAF, Canadian Forces, Royal Air Force and Royal Australian Air Force participation, CVF 09-4 was successfully carried out in September 2009.

CVF 09-4 incorporated coalition players into the Virtual Flag series of exercises, training warfighters in a representative wartime environment via distributed simulation. CVF 09-4 successfully linked Canadian, Australian, British and American simulators across 21 sites in a common synthetic environment while providing training to more than 200 system and sensor operators, pilots, joint tactical air controllers and command and control personnel.

The virtual exercise was staged out of the USAF Distributed Mission Operations Centre in Albuquerque, New Mexico. Canada participated from Ottawa using two CF-18 Mission Rehearsal Tactical Trainers developed under the CASE project and a forward air controller simulation developed by Defence Research and Development Canada in Toronto and relocated to Ottawa for CVF 09-4.

CVF 09-4 was deemed successful from both technical and operational perspectives. Many of the post-exercise observations call for the continued support for low-cost, rapid development, distributable mission trainers.



(L to R) Jack Dougherty, Vice President of Boeing's H-47 programs, Defence Minister Peter MacKay, Industry Minister Tony Clement, Dave Gossen of IMP Group, and then-Chief of the Air Staff LGen Angus Watt following the announcement in Halifax, N.S. of a contract to purchase 15 CH-147F Chinook helicopters.

It was a great day for the Air Force and the Canadian Forces in August 2009 when Defence Minister Peter MacKay and Industry Minister Tony Clement announced that a contract valued at approximately \$1.2 billion had been awarded to the Boeing Company for the purchase of 15 CH-147F Chinook helicopters.

In addition to purchasing 15 helicopters, the project will involve 20 years of in-service support and maintenance valued at approximately \$2.2 billion, with an option to extend the contract to the life expectancy of the aircraft.

"This contract ensures the Canadian Forces are a first class, modern, flexible force capable of defending Canada and Canadian interests at home and abroad," said Minister MacKay. "These helicopters are key to [help keep] Canadians safe and secure."

The purchase of the CH-147F Chinooks gives the CF a new ability to reach remote locations in a wider range of geographic areas and challenging environments inaccessible by land transport or fixed-wing aircraft. These helicopters are invaluable assets in responding to natural disasters here at home and while deployed anywhere in the world.

For example, the CH-147F Chinooks could be used to assist civil authorities in responding to emergencies such as floods, forest fires and earthquakes, helping to keep Canadians safe and secure. Added robust capabilities, which are first and foremost designed to maximize the safety of passengers and crew, means that a fleet of 15 aircraft will meet the operational requirements of the Air Force to carry out their missions.

The CH-147F Chinooks feature a newly designed, modernized airframe, a Rockwell Collins Common Avionics Architecture System cockpit, and BAE Digital Advanced Flight Control System. The advanced avionics provide improved situational awareness for flight crews with an advanced digital map display and a data transfer system that allows storing of pre-flight and mission data.

Additional features include:

- Long-range fuel tanks with twice the fuel capacity.
- A self-protection system that protects its occupants against modern threats such as missiles.
- An infra-red and electro-optical camera that increases the safety and capabilities of the aircraft.
- An improved electrical system to safely power the aircraft systems.

The first test flights are expected to occur by summer 2012 while the first aircraft will begin to arrive in Canada by 2013. Initial Operational Capability is anticipated the following year. Aircraft will be delivered a rate of approximately one aircraft per month with all aircraft being delivered over a 12 month period.

Strategic Air-to-Air **Refuelling:**

The Comeback Kid

When the Air Force retired its fleet of Boeing 707 tankers in the mid-1990s, the Canadian Forces lost the ability to refuel CF-18 fighter jets over long periods of time and long distances. CC-130 Hercules tankers were based at 17 Wing Winnipeg, Man. for shorter distance, tactical refuelling; however, sustaining our fighters in a more significant way was severely curtailed.

Former Air Force and Canadian Forces leaders recognized the importance of having a strategic-air-to-air refuelling (SAAR) capability and struck a project office earlier this decade to bring back the capability using the Air Force's current CC-150 Polaris

(Airbus A-310). After several years of diligent staff work by many individuals at many different levels within the Department of National Defence and the Canadian Forces, and retrofit work by industry in Germany, 437 (Transport) Squadron achieved its Initial Operability Capability for SAAR over the summer. Work is underway to have the Polaris reach its Full Operational Capability.

A CC-150 Polaris (Airbus A-310) extends its air-to-air refuelling pods to two CF-18s during an air demonstration at 8 Wing Trenton, Ont.

CH-146 Escort Surveillance System to Enhance Operations

The Interoperable Griffon Reconnaissance Escort Surveillance System (INGRESS) project began in late 2007 in order to enhance the operational capabilities of the CH-146 Griffon helicopter.

The project focuses mainly on sensor systems and armament. In terms of the sensor, the MX-15HDi, which is an electro-optical and infrared system produced by L3 Wescam of Burlington, Ont., is now installed on helicopters both in Canada and in Afghanistan. In addition to the MX-15HDi itself, a new cockpit display, moving map display and hand controller complete the sensor suite. The armament, called the GAU-21, which is a .50-calibre weapon, was procured through a Foreign Military Sales contract with the U.S. Navy. It is currently in the test and evaluation process for clearance on the CH-146 Griffon.

Members from 408 Squadron who recently deployed to Afghanistan are the first to introduce the MX-15HDi to deployed operations. Combined with the already operational 7.62 mm M134D weapon system, aircrews are more effectively able to perform escort missions for both aviation and ground assets. Fielding of the GAU-21 weapon system will provide another tool to CH-146 Griffon crews, permitting them to select firepower appropriate for the mission.

A CH-146 Griffon helicopter sits on the airstrip awaiting its next orders at Kandahar Airfield. The DMX-15HDi sensor can be seen mounted on the centre of the helicopter above the skids

Be it in Afghanistan or Canada, INGRESS-equipped CH-146 Griffon helicopters are being fielded to provide enhanced escort and surveillance capabilities with state-of-the-art technology. The short timelines associated with the fielding of the equipment has required all levels of command to work in harmony to achieve success.



In line with the Canada First Defence Strategy, there is a need to update and replace dated defence infrastructure to meet the challenges of the 21st century. The Government of Canada has made significant investments in defence infrastructure this year at Air Force bases across Canada. The following is a summary of some of the projects announced by Defence Minister Peter MacKay over the past few months:

- **4 Wing Cold Lake, Alta.** \$135 million in projects which include upgrades to underground utilities and roads for the wing and residential housing units; the construction of a new cold supply storage building; and, the relocation of an aviation fuel tank.
- 8 Wing Trenton, Ont. Six infrastructure projects totalling \$334 million for the construction of a maintenance hangar for the CC-177 Globemaster III; the construction of an air mobility and training centre; the construction of an electrical/mechanical engineering and transportation garage; the construction of a refinishing facility for the Aerospace and Telecommunications Engineering Support Squadron; the construction of a training accommodation building and the construction of materiel distribution centre.
- **3 Wing Bagotville, Que.** \$108.8 million in defence infrastructure in Quebec which includes \$32.7M for 3 Wing Bagotville, Que. for a transportation, electrical and mechanical engineering services garage.

- **14 Wing Greenwood, N.S.** More than \$66 million in projects, including the construction of a new health services centre; a refuelling tender garage; a fire hall; improvements to an existing hangar; an aircraft mobile support equipment storage facility; and an intermediate framework distribution facility.
- **9 Wing Gander, N.L.** \$42.5 million in construction projects, including a facility to house 91 Construction Engineering Flight as well as two multi-purpose facilities to consolidate 9 Wing support units.
- 5 Wing Goose Bay, N.L. \$300-million in funding for the 5 Wing Remediation Project. Project work involves environmental assessments to confirm the extent of contamination, followed by appropriate remedial action such as removal of free-phase fuel product from the subsurface, treatment or risk management of contaminated soil and groundwater, and removal of waste material. This work will be implemented in phases.

The Department of National Defence holds a large number of properties all across the country to support the Canadian Forces, including some 21,000 buildings, 2.25 million hectares of land, 5,500 kilometres of roads, and 3,000 kilometres of water, storm, and sewer pipes.

MORE INFORMATION ON THE AIR FORCE WEBSITE!

Be sure to visit **www.airforce.gc.ca** to stay up-to-date with things that are happening in the Air Force. Each weekday new stories are posted to the site, featuring what the men and women of Canada's Air Force are doing on behalf of all Canadians.





The tempo of operations within the Air Force continues to be high, both on the domestic front in terms of search and rescue, maritime surveillance, air sovereignty and in preparation for the February Olympics as well as overseas through Canada's commitments in Afghanistan and other missions.

While there has been much media attention on the stand-up of the new Air Wing in recent months, it is important to acknowledge the continued excellence in air transport being provided by CC-130 Hercules air, ground and support personnel in southwest Asia; CC-150 Polaris (Airbus A-310) and CC-177 Globemaster III crews who continue to provide critical sustainment flights of both troops and supplies as well as the continued, yet regrettable, repatriation of fallen comrades; and, the Tactical Unmanned Aerial Vehicle Flight staffed with personnel from across the Air Force. Members at all levels deserve a tremendous round of applause for the great work they are doing both domestically and on the international stage.



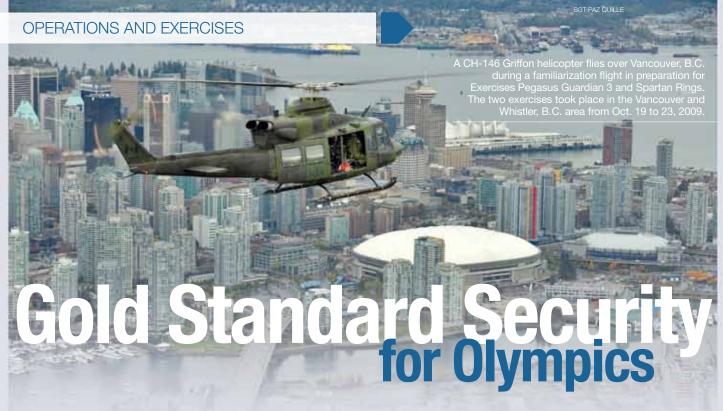
Canadian Forces personnel disembark a CC-177 Globemaster III strategic transport aircraft upon arriving at Kandahar Airfield.



Training is vital for Air Force crews to maintain their proficiency. Here, CF-18 fighter pilot Capt Reil Erickson, from 409 (Tactical Fighter) Squadron, 4 Wing Cold Lake, Alta., conducts a training flight over Cold Lake.



Sgt Pat Nevett, flight engineer from 407 (Maritime Patrol) Squadron, 19 Wing Comox, B.C., positions a propeller as part of a pre-flight check on the CP-140 Aurora aircraft, before departing on an Arctic sovereignty patrol.



The clock is ticking on the opening ceremonies for the Vancouver 2010 Olympic and Paralympic Winter Games that will be held in the Vancouver, B.C. area in February and March 2010. The Government of Canada (Heritage Canada) and the Vancouver Organizing Committee (VANOC) are leading the event which marks the third time Canada has hosted the Olympics.

Although the Minister of Public Safety has the overall responsibility for coordination of public communications concerning the security of the games, an Integrated Security Unit (ISU), led by the Royal Canadian Mounted Police (RCMP), has been established to coordinate security.

The Canadian Forces forms part of the ISU and will provide unique capabilities in support of the RCMP. Military support to the ISU, dubbed Operation Podium, is executed by Joint Task Force Games (JTFG) under the command and control of Canada Command. Some 4,500 Canadian Forces personnel are expected to participate.

Specifically, that means the following support by the CF:

- Planning support to the ISU.
- Air mobility support to the ISU.
- Maritime surveillance and port security operations.
- Mountain terrain surveillance.
- Search and rescue.
- Aerospace defence which will be provided by the North American Aerospace Defense Command (NORAD).
- JTFG would also lead any Canadian military support to consequence management in the Joint Operations Area if required during the games.

The CF has carried out a series of exercises to validate and confirm its readiness to perform assigned tasks for the games. 🥞



Aircraft commander Capt Rodney Miskey (right), briefs co-pilot Capt Maurice Patenaude (left), flight engineer Sqt Mike Hiltz (second from left), and RCMP constable Cpl Bob McCormick before their flight during Ex Spartan Rings.



The Air Force transported the Olympic flame from Athens, Greece onboard a CC-150 Polaris (A-310). Many members carried the flame at wings and installations across the country, including Canadian Forces Station Alert, Nunavut.



Capt Eric Cyr, with 438 (Tactical Helicopter) Squadron, St-Hubert, Que., conducts a reconnaissance mission from a CH-146 Griffon helicopter during Ex Spartan Rings.



A CH-146 Griffon helicopter crew practices a mountain-top landing during Ex Spartan Rings near Whistler, B.C.

First Air Force Sacrifice Medals Awarded

Captain Juli-Ann Dawn

Goose Bay, N.L. where she was

serving as a pilot of a CH-146 Griffon with 444 (Combat

Support) Squadron. She was

rescue tasking in the vicinity of

Davis Inlet, Labrador, endeav-

ouring to locate an overdue

returning from a search and

Capt Mackenzie died Jul.18, 2002 in a helicopter crash near

Mackenzie

The first 46 Sacrifice Medals to be awarded to members of the Canadian Forces were presented by Governor General Michaëlle Jean, on Nov. 9, 2009 at Rideau Hall in Ottawa. Twenty-one of the 46 medals were presented posthumously, including three that were presented to members of the Air Force who died while while serving in the CF. Twenty additional Sacrifice Medals are being presented posthumously to Air Force members while eight serving Air Force members will also receive the medal. Read more about the Sacrifice Medal and the criteria for receipt at www.cmp-cpm.forces.gc.ca/dhr-ddhr.



Robert McMullen receives Sacrifice Medal from Governor General Michaëlle Jean on behalf of his late wife Capt Juli-Ann Mackenzie.

fishing vessel. Capt Mackenzie's fellow pilot, Capt Colin Sonoski, also died in the crash.

Corporal Kirk Noel

Cpl Noel, a search and rescue technician with 413 (Transport and Rescue) Squadron, 14 Wing Greenwood, N.S. was aboard a CH-149 Cormorant helicopter on a night training mission on Jul. 12, 2006, when the helicopter crashed into the ocean.



Cpl Kirk Noel's Sacrifice Medal is received by Wavey Noel, his mother, and Phoebe Noel, his grandmother.

SGT SERGE GOUIN

Angela Priede receives the Sacrifice Medal on behalf of her late husband, MCpl Darrell Jason Priede.

Sergeant Duane Brazil and Cpl Trevor McDavid also lost their lives.

Master Corporal Darrell Priede

MCpl Priede was an imagery technician attached to CFB Gagetown, N.B. He was deployed with the International Security

Assistance Force's Regional Command South Headquarters at Kandahar Airfield, as one of two imagery technicians working in their Public Information Office. He was travelling on board a U.S. Chinook Helicopter on May 30, 2007 when the helicopter went down. Five American soldiers and one British soldier also died.

Physical Fitness Enables Selfless Act



As a SAR tech, Sgt Jean Paul Benoit (seen here jumping out of a CC-130 Hercules) must maintain the highest fitness level possible.

The Canadian Forces
Fitness Strategy
stipulates that the
health and physical
fitness of Canadian
Forces members are
essential and critical
components of
operational readiness.
Military personnel must
possess a higher
degree of health and
fitness than the general

Canadian population to function in complex and demanding environments where strength and endurance could be the difference between success and failure of an operation.

Sergeant Jean-Paul Benoit, a search and rescue technician with 413 (Transport and Rescue) Squadron at 14 Wing Greenwood, N.S., knows it can also mean the difference between life and death as he carries out his job. But recently, it made a huge difference to his family's life.

In Oct. 2009, Sgt Benoit donated a kidney to his ailing mother, Joan. He was the best match, and had determined through

research there would be no major impact on his ability to perform his duties as a SAR tech.

His father, Captain Paul Benoit, an infantry officer currently serving as the detachment commander at the Canadian Forces Recruiting Centre in Fredericton, credits his son's quick recovery from the surgery to his extremely high physical fitness level. "A testament to J-P's fitness level was that less than 24 hours after surgery he was on his feet and making the trek down the hall of the hospital to see his mom and to see how she was progressing," says Capt Benoit.



Sgt Benoit in hospital with his mother, Joan.

Sgt Benoit exemplifies excellence in fitness and the SAR tech motto, *That Others May Live*. But, as Capt Benoit says, "it has had a truly deeper meaning to our family."

AIR FORCE SPEAKERS BUREAU FLIES HIGH



LGen André Deschamps presents Maj Leo Phillips with his Air Force Speakers Bureau Award in Ottawa.

While still in its early stages, the Air Force Speakers Bureau is enjoying tremendous success, thanks to people such as Major Leo Phillips who are reaching out into communities across the country, proudly and passionately telling the Air Force story.

Maj Phillips, administration officer at 22 Wing North Bay, Ont., recently received the Air Force Speakers Bureau Award from the Chief of the Air Staff (CAS), Lieutenant-General André Deschamps for his "outstanding contribution to the Connecting with Canadians agenda".

Other award recipients included Brigadier-General Gaston Cloutier, Special Advisor to CAS on the Centennial of Flight; CC-130 Hercules pilot Major Micky Colton from 424 (Search and Rescue) Squadron, 8 Wing Trenton, Ont.; Captain Richard Eshaya, an operations watch officer at the Canadian Expeditionary Force Command in Ottawa and search and rescue technician Master Warrant Officer Gavin Lee from Canada Command in Ottawa.

If you know of an organization that is looking for a dynamic, interesting speaker, call 613-945-0511 or e-mail speakersbureau@forces.gc.ca. Visit www.letstalkairforce.forces.gc.ca to learn more.

Senior Leadership Changes

Four key changes to senior leadership positions within the Air Force occurred in 2009:

- Lieutenant-General André Deschamps assumed the position of Chief of the Air Staff following the retirement of Lieutenant-General Angus Watt.
- Major-General Tom Lawson assumed the position of Assistant Chief of the Air Staff following the appointment of Lieutenant-General André Deschamps as CAS.
- Lieutenant-General Marcel Duval assumed the position of Deputy Commander, NORAD, from Lieutenant-General Charlie Bouchard who is now Deputy Commander of NATO's Joint Force Command, Naples, Italy.
- Major-General Yvan Blondin was appointed Commander of 1 Canadian Air Division in Winnipeg, Man., replacing LGen Marcel Duval.



Capt Perry Matte (left) and OCdt Greg Matte attended the ceremony during which their father (second from right), a master corporal, received his retirement certificate.



BGen Greg Matte (left) and BGen Perry Matte.

Scoring the rank of general in the Air Force isn't easy. Making it a family tradition—even less so.

Yet that's exactly what Brigadier-Generals Perry and Greg Matte accomplished when

Greg got his first-star rank last year, one year after his brother, Perry, did the same.

"It's convenient when it's your brother who's your peer," said BGen Perry Matte. "You can discuss like issues and problems and see how the other person is handling it."

The two, who are posted in Ottawa and have distinguished Air Force careers under their belts, say it's nice to have their families in the same city. BGen Perry Matte is Director General Capability Development, while in 2009 BGen Greg Matte was posted from his position as Director Air Requirements to a new job as chief of staff at Canada Command.

Ask either of them how they got a taste for the military, and the answer is the same, "Our father, who passed away when he was about 54, finished off as a master corporal, just shy of 32 years in the military.

"He was an air frame tech, so most of his postings were on air bases," said BGen Perry Matte. "It doesn't take long to see air shows and aircraft flying to say, 'That's what I want to do'."

"He was very proud of both of us," said BGen Greg Matte.

Military careers are part of the bloodline in the Matte family. In addition to their father having been in the Air Force, their grandfather served in the Second World War.

Newest Honorary Colonels

In recent months the following people have been appointed honorary colonels by the Minister of National Defence:

Senator Pamela Wallin – Air Force at large, National Defence Headquarters, Ottawa.

Allan Watt, Vice President Communications, Broadcasting and Publicity for the Edmonton Oilers – 42 Radar Squadron, 4 Wing Cold Lake, Alta.

Dr. Paul J Byrne, President and Chief Executive Officer of Grant MacEwan College in Edmonton, Alta. – 419 (Tactical Fighter Training) Squadron, 4 Wing Cold Lake, Alta.

Major-General (Ret'd) Brock Horseman – 400 (Tactical Helicopter) Squadron, 1 Wing Kingston, Ont.

Major-General (Ret'd) Skip Armstrong – 429 (Transport Squadron), 8 Wing Trenton, Ont.

2009 Air Force Association of Ganada Award Recipients



(L to R, top to bottom) MWO Tom Fielding, LCoI Duane Lovegrove, WO Claudette Saunders, CoI Chris Coates, MWO Jack Lamarche, LCoI Steve Will, CWO J.P. Morin. Group shots, top to bottom: Representatives from 413, 424 and 439 Squadrons and the Joint Rescue Coordination Centre at 8 Wing Trenton, Ont. members of the Aerial Experimentation Association 2005, and representatives of the Hawk One team, are joined by LGen André Deschamps, CAS (seen in all three group photos).

The Air Force Association of Canada (AFAC) presented its annual awards on Oct. 17, 2009 at the National Air Force Museum of Canada at 8 Wing Trenton, Ont.

Several Air Force members received awards, including Warrant Officer Claudette Saunders, who received the Air Marshal C. Roy Slemon Award for Air Person of the Year, and Master Warrant Officer Tom Fielding, who received the Flight Lieutenant D.M. Grant, DFC Award for Air Reservist of the Year.

The Canadian Helicopter Force (Afghanistan) won the Air Marshal W.A. Bishop, VC Memorial Trophy for its "outstanding and meritorious achievements in aviation". The air search and rescue award, The Mynarski, Trophy, went to the combined units of 413 Squadron, 424 Squadron, 439 Squadron and the Joint Rescue Coordination Centre at 8 Wing Trenton. The Gordon R. McGregor Trophy, awarded for outstanding achievement in air transportation, went to 440 Transport Squadron, Yellowknife, N.W.T. for its air utility support during Operation Nunalivut.

The HMCS *Ville de Quebec* Helicopter Air Detachment won the RCAF Golden Hawks Trophy, awarded for achievement in military aviation. The "Hawk One" team won the NORAD trophy, awarded to honour the dedication and contribution of the NORAD team, for flying its refurbished F-86 Sabre Jet in celebration of Canada's Centennial of Flight (CoF).

The J.A.D. McCurdy Trophy went to the members of the Baddeck, N.S. Aerial Experimentation Association 2005 organization for constructing an airworthy replica of the Silver Dart one hundred years after the first Silver Dart took flight. The AEA 2005 team was able to bring to life aviation of a century ago for Canada's CoF.

For more on the AFAC Awards, read Issue 37 of The Maple Leaf online at www.forces.gc.ca





Retired Canadian astronaut Bjarni Tryggvason flew the Silver Dart replica in Baddeck, N.S. on Feb. 22.



The Centennial Heritage Flight performs in formation during the Vintage Wings of Canada open house in Gatineau, Que.

It is no exaggeration to say that in 2009 the Air Force connected with millions of Canadians during the Centennial of Flight celebrations at air shows, sporting events, exhibitions, musical reviews, industry gatherings and of course through media coverage on radio, television, in newspapers and over the internet.

What began as a vision back in 2007 when the Air Force stood up the Centennial of Flight project office under the management of Brigadier-General Gaston Cloutier became a business model for the Air Force—to work with the civilian aerospace sector and other federal government departments to tell Canadians about the many accomplishments in military and civilian aviation in order to increase awareness and pride in aviation and the Canadian Forces.

Some of the initiatives included:

- Development of a CoF brand for military and civilian marketing collateral such as websites, brochures, educational booklets and DVDs, aircraft tail markings and promotional items to name a few.
- Creation of the Centennial Heritage Flight, a one-of-a-kind formation of three aircraft the fully refurbished "Hawk One" F-86
 Sabre (purchased by Vintage Wings of Canada, piloted by retired Air Force pilots and maintained by retired and serving Air Force aircraft technicians); the CF-18
 Century Hornet, painted in a CoF colour scheme, displaying "100 names [of aviation greats] for 100 years"; and, a CT-144 Tutor repainted in the colours of the Golden Centennaires air demonstration team.

- Creation of the *Imagine* DVD series chronicling the history and mission of the Air Force.
- Creation of a CoF historical calendar featuring daily historical highlights.
- Release of a CoF Royal Canadian Mint coin and Canada Post stamp.
- Assistance to CBC and Radio-Canada to develop a four-part, nationally-televised TV documentary series entitled Canada Above and Beyond/Pour l'amour du ciel.
- Development of a military and civilian CoF video which was played at all **Tim Hortons'** restaurants across Canada at no cost during the month of July.
 - Rededication of the Memorial Gates at 8 Wing Trenton, Ont. and many other air shows and events at Air Force wings across the country.
 - Production of 15,000 copies of the book "Professionalism, Excellence and Teamwork: Canada's Air Force" at no cost to the Air Force.

Public awareness is key to success in operations. Canadians are more aware than ever of what Canada's Air Force does on their behalf 24/7, thanks, in part, to the outstanding CoF messaging and celebrations that were held across Canada in 2009. Here's to the next 100 years of aviation.



The Snowbirds wowed the crowds at 8 Wing Trenton, Ont. during the re-dedication of the British Commonwealth Air Training Plan Memorial Gates at 8 Wing on July 4, 2009.