# Message from the Chief of the Air Staff

Fall 2007, Vol. 5, No. 3

# A New Era for Canada's Air Force

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LGen Angus Watt, Chief of the Air Staff, tours the cockpit of Canada's first CC-177 Globemaster III, which brings a new strategic airlift capability to Canada.

t is a tremendous honour to have been given the privilege of commanding the highly skilled and dedicated men and women of Canada's Air Force. I am indeed fortunate to be Chief of the Air Staff (CAS) at this time as the Air Force is in better shape than it has been for many years. Not only are new aircraft beginning to arrive, but there has also been important progress in many areas.

Enhanced command and control concepts, significant improvements in training and education, substantial investments in national procurement and needed reinvestment in our infrastructure are contributing to a more

relevant and effective Air Force for Canada. Our focus on investing in our people – the professional men and women who selflessly contribute to the economic and physical security of Canadians every day, around the clock - is resulting in a highly-skilled, welleducated and disciplined force that is among the best in the world.

I plan to carry on improving Canada's Air Force, conducting long-range planning, and looking out to the next decade and beyond to ensure that Canada's Air Force will remain capable of contributing to the security of Canadians into the future.

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#### **Priorities**

Canada's Air Force continues to be heavily involved in all three Canadian Forces (CF) priorities: Current Operations; Transformation; and Connecting with Canadians.

#### **Current Operations**

The Air Force is making a significant contribution to CF operations in Afghanistan. Indeed, although it is not generally well known, there is a considerable cadre of Air Force personnel participating in the mission – approximately 20 per cent of every contingent.

Specifically, the Air Force runs the main sustainment base in the region transporting Canadian troops and equipment in and out of theatre - and has now been doing so for nearly six continuous years. Together with the Army, the Air Force also operates the tactical unmanned aerial vehicle (UAV) flights in Afghanistan that provide valuable intelligence, surveillance and reconnaissance for the troops on the ground. Canada also provides dedicated tactical airlift to the NATO-led **International Security Assistance** Force (ISAF) throughout Afghanistan using a CC-130 Hercules transport aircraft. Canada earns considerable credit within ISAF by delivering this highly valued service – transporting personnel and cargo, and air dropping supplies into remote or dangerous regions.

At home, the Air Force maintains a high operational tempo to keep supplies and personnel moving through its major air

"This air bridge [is] essential to the success of the mission..."



LGen Angus Watt salutes Battle of Britain veterans during the national commemoration of the famous battle.

base in Trenton, Ontario to overseas missions. This air bridge, and the effort our men and women make to keep it working, has been recognized by the Chief of the Defence Staff as essential to the success of the mission in Afghanistan.

But our focus is not and cannot be exclusively on operations in Afghanistan. Canada's Air Force is employed throughout the world, whether providing humanitarian assistance or providing air transport to meet Canada's priorities. Every day the Air Force is very much focused on 'Canada First'. We remain committed to the NORAD mission, alert to air operations over Canada and prepared to respond to threats at any time. We stand ready and continuously execute our search and rescue mandate, we provide air transport and we patrol Canada's North and our maritime approaches. Canada's Air Force conducts fast-paced operations continuously, around the clock, every day of the year.

#### **Transformation**

Changes to our operational headquarters in Winnipeg, the establishment of Air Component Elements in each of Canada Command's regional Joint Task Force headquarters and the implementation of a daily Air Tasking Order that provides commanders throughout the CF confirmation on how our aircraft and personnel are delivering the required and requested effects, have made the Air Force more effective. While much of the turbulence of organizational transformation witnessed over the past two years has begun to settle down, we continue to transform other areas of the Air Force into a more relevant and capable component of the CF, able to meet current and future needs.

One of my first official duties as CAS was to welcome a brand-new aircraft – the CC-177 Globemaster III – into the Air Force. The CC-177 is a perfect example of transformation in action, because it is not just a new aircraft, it is a whole new capability. We have never had anything like it. And that's the first of many capability changes to come.

By 2009, we expect to receive the CH-148 Cyclone helicopter. This replacement for the Sea King will be a tremendous force multiplier for the Navy, the Air Force and the Canadian Forces as a whole. We are already exploring new opportunities for using the capabilities that this new helicopter will bring.

The third area of transformation is adopting an expeditionary mindset. Although elements of our Air Force have always been deployable, we are transforming the Air Force into an organization that is expeditionary in nature – not operating from static bases, but able to operate throughout Canada and around the world. Progress in this



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area will accelerate when a new Air Expeditionary Wing is set up in Bagotville over the next few years. This Wing will form the nucleus of an expeditionary capability that will permit the Air Force to deploy to a relatively spartan site, set up a military airfield and operate aircraft under austere conditions.

#### Connecting with Canadians

It is vital to our future that the Air Force demonstrates its everyday relevance to Canada and Canadians. We need to show Canadians what Canada's Air Force is doing on their behalf, but we are challenged by the fact that most of our bases are located outside urban areas and many of us do not have everyday contact with most Canadians.

We need to explain what we do, how we do it, and why. We have found that when we take the time to connect with Canadians, they're always impressed, always supportive and, above all, they relate to the pride and professionalism of the men and women who serve in Canada's Air Force. This is not a task just for generals, colonels and chief warrant officers; our captains, our warrant officers, our corporals and our sergeants have tremendous experience and compelling stories that they can share. To help them tell their stories, the Air Force has set up a Speakers' Bureau through which organizations will be able to request members of the Air Force to speak with their audiences.

#### Three Themes

I have three main themes or focus areas that I use to guide our work in developing Canada's Air Force over the next ten years. In fact, they form the essence of my work as CAS. These themes are: Raise, Train and Equip.

#### Raise

We need to attract the best people in Canadian society, develop their skills and challenge them professionally – ensuring their opportunities are second to none. And we need to retain them as long as possible. We are looking at a series of measures, including career portability,

more seamless transfer between the Reserve and Regular Forces, and developing people-friendly policies that will better meet the expectations of youth as well as currently serving airmen and women.

#### Train

The Air Force has made considerable progress in adapting to the new technologies of the 21st century to meet its training needs, but there is still a way to go. We need to focus the training where it is needed the most, and take advantage of emerging technologies to train more effectively at less cost.

#### Equip

We need to ensure our Air Force has the equipment and infrastructure needed to perform its tasks in support of Canada. In addition to the acquisitions such as the CC-177, the Cyclone, and an unmanned aerial vehicle (UAV) to meet the needs of the CF, there are six major equipment areas on which I intend to focus:

- C-130 J model Hercules aircraft that are urgently needed to replace the oldest of our Hercules fleet;
- Chinook heavy-medium lift helicopter, a key capability that we need to bring back into the Canadian Forces;
- A fixed-wing search and rescue aircraft to permit the Air Force to continue providing immediate assistance to Canadians in peril;

# "We need to attract the best people in Canadian society"

- Utility aircraft for the North to replace the ageing Twin Otters, thus ensuring this capability in a most important region of our country;
- A Canadian multi-mission aircraft to provide a manned, fixed-wing intelligence, surveillance and reconnaissance (ISR) platform to replace the Aurora; and
- A next-generation fighter capability to replace the CF-18 when it is expected to retire towards the end of the next decade.

This is a message of continuity and change. It is my intention to continue to make improvements that will make Canada's Air Force more effective and relevant to Canadians and to the men and women serving their country in the Air Force uniform. I hope you will enjoy the new look of this issue of Crew Brief and find the content informative and useful. As we strive to continuously improve, your feedback to the editor is not only welcome, but also vital.

I am truly honoured to be your CAS, and I look forward to your continued interest, involvement and support for Canada's Air Force during my tenure as I 'reach for the stars'.



LGen Steve Lucas (left) turns over command of Canada's Air Force through the Chief of the Defence Staff, Gen Rick Hillier, to LGen Angus Watt (right) during a ceremony in July 2007.



# Air Expeditionary Wing

C anadian Forces Base Bagotville, Quebec, home of 3 Wing, one of two CF-18 fighter Wings in Canada, is expanding.

CFB Bagotville will also become home to 2 Air Expeditionary Wing. The new Wing is being developed to transform Canada's Air Force into an effective, combat-capable, flexible, and responsive force able to deploy, operate and re-deploy from austere locations in Canada and around the world.

"If Canada's Air Force is to effectively support its operations, it must develop a robust expeditionary capability," said former Defence Minister Gordon O'Connor this past summer. "It must be trained, equipped and structured to rapidly deploy wherever it is needed, in Canada or around the world. And it must be able to operate autonomously for as long as it is needed."

"We needed an expeditionary Air Force. We didn't have that – [in the past] things tended to be *ad hoc*," said

Lieutenant-Colonel Bruce MacLean with the Directorate of Air Strategic Plans. "With this Wing, Air Force members will train together as units, train as they'll fight and fight as they trained. So when they deploy they'll know the people and the equipment they're deploying with. It's a more predictable way to deploy that prepares them better – very much how the Army already works."

The new Wing will be composed of a Command Element, an Operations Support Flight, and a Mission Support Flight implemented in two stages, with an initial increase of personnel to CFB Bagotville in 2008. It will eventually grow to a force of about 550 and be supported with new equipment and infrastructure.

While CFB Bagotville is where the main Expeditionary Wing will be located, LCol MacLean said other parts of an expeditionary force will be brought together from other Wings across the country. The new Expeditionary Wing is planned to be fully operational by 2015. ■



A CC-130 Hercules on the flight line at the Theatre Support Element (TSE) at Camp Mirage, where the Air Force is proving concepts to assist in its transition to a more expeditionary force.



# 429 Squadron Reactivated to Fly New CC-177

On July 18th, 429 (Transport) Squadron at 8 Wing Trenton, Ontario was reactivated as the Squadron that will operate the new CC-177 Globemaster III aircraft for the Canadian Forces.

429 Squadron will play a pivotal role in the Canadian Forces' employment of the tremendous capability these aircraft bring to Canada.

"Being given the responsibility to shape a new role with such an incredible aircraft is indeed a daunting and very exciting task for each Squadron member," said Lieutenant-Colonel David Lowthian, Commander of 429 Squadron. "I am impressed each day as I walk into the Squadron – ground crew are putting critical technical publications together and are very eager to start continuation training programs, while aircrew are preparing themselves for possible upcoming missions and simulator training sessions."

"All members are pouring their creative energies into making 429 Squadron look and feel like a Squadron, and that is because each of us is extremely proud to be part of the unit charged with taking the CC-177 Globemaster III higher, faster, heavier, further, and deeper than our traditional transport aircraft," said LCol Lowthian.

"In the near future we look forward to supporting our troops in Afghanistan and those deployed elsewhere around the world," he said. "Domestic interests will be on our planning horizon as well. The most important mandate at the moment is building a trained and experienced core of personnel so we can multiply our abilities as the number of qualified ground and aircrew increases."





429 Squadron's Colour – the flag recording its battle honours – is marched to the reactivation parade by (L-R) Sgt Dean Desaulniers, Capt Rob Doucette and Sgt Paul Makarchuk.

Once at full strength, 429 Squadron is expected to have about 180 personnel, including aircrew, technicians and support staff to ensure Canada's new aircraft get the attention and use they need.

"429 Squadron has long been recognized as a versatile unit that has proven itself in numerous roles: bombing missions in World War II, repatriation of prisoners after the war, training missions for several trades, and most recently, before being stood down in 2005, as one of our busier and more reliable airlift Squadrons," said LCol Lowthian during the reactivation ceremony.

LCol David Lowthian, Commanding Officer of 429 (Transport) Squadron, salutes during the parade re-activating the squadron.

### The Arrival of Canada's First CC-177 Globemaster III

anada's first CC-177 Globemaster III strategic lift aircraft made its inaugural flight into Canada and touched down for the first time on Canadian soil August 11<sup>th</sup> at the Abbotsford International Air Show in British Columbia.

"In the Canadian Forces we hear talk about transformation and a lot has been accomplished," said Lieutenant-General Angus Watt, Chief of the Air Staff. "What you see here is transformation in action. This is transformation you can see, transformation you can touch, transformation you can feel."

More than 60,000 aviation enthusiasts witnessed the inaugural appearance of the CC-177 Globemaster III at the air show.

"I am proud to see the Canadian flag on our new CC-177 Globemaster III," said LGen Watt. "The CC-177 is not just a new aircraft, it is a new capability. This represents the beginning of a new era for airlift capabilities for the Canadian Forces."

The aircraft was on display to the public until 1 p.m., then it conducted two flypasts before heading to its home base at 8 Wing Trenton, Ontario, making its first delivery of 41,000 kg of equipment and passengers.

On Sunday August 12<sup>th</sup>, 8 Wing Trenton hosted a welcome ceremony for the CC-177.

"As Commander of Air Command, there's nothing I like to do better than welcome new aircraft. And this is a special day for Canadians because the CC-177 is quite an aircraft!" said LGen Watt during the ceremony.

"We purchased this aircraft not just for the Air Force, but also for the Canadian Forces. It's a Canadian aircraft for all our interests that will provide support for at least 30 years. You can imagine all the thousands of passengers and millions of tonnes of cargo it will carry in that time."

Colonel Mike Hood, 8 Wing Commander, was just as elated.

"I couldn't be happier welcoming the latest aircraft to 8 Wing," said Col Hood, adding that Trenton is the air mobility hub and nexus of expeditionary capability in the Canadian Forces.

"Today is proof positive of Air Force transformation and renewal. I think all of us at 8 Wing can be proud that we're part of an institution that values our contributions and is willing to ensure that the men and women of the Air Force have the best equipment available to execute our missions."



Maj Jean Maisonneuve, aircraft captain, pilots Canada's first CC-177 from Abbotsford to Trenton.

The second CC-177 arrived October 18<sup>th</sup> and the last two will arrive in 2008. The acquisition is part of a commitment from Canada's new government to provide the CF with a strong strategic airlift capability to use at home and abroad. From transporting light armoured vehicles to Afghanistan to providing domestic relief in crises such as the Manitoba floods, the CC-177s will ensure that CF personnel can help wherever and whenever needed, reducing response time, increasing load capacity and protecting Canadians better.

"It's a phenomenal plane. Some of the things that we're seeing, and the things it can do are mind-boggling," said Sergeant Dean Desaulniers, an aviation technician with 429 (Transport) Squadron. "All the guys are really excited about it."

In contrast to the CC-150 Polaris – with its limited cargo-carrying capacity – that the CF has used for strategic airlift in the past, the Globemaster III can carry heavy generators, water purification equipment, hospital units and food supplies that might be needed in emergency situations near and far to save lives.



Canada's first CC-177 arrives at its new home at 8 Wing on August 12th

# **EQUIPMENT & CAPABILITIES**



Members of the Mobile Air Movements Section unload pallets of supplies from the CC-177 on the tarmac at Kandahar Airfield, Afghanistan.

The Globemaster's capability will also fulfill a key NATO requirement and demonstrate that Canada is a leader among its allies. It will allow Canada to make timely and relevant contributions to international operations that few other countries can.

"The only other aircraft that is bigger than this is the C-5 Galaxy, but it

needs 8.000 feet to land!" said Master Warrant Officer Dan Daniels, formerly of the CC-177 Project Management Office in Ottawa. "With the Globemaster we can land with only 3.000 feet. It impresses me that it can fly high, it can fly fast, and it can land on short runways in austere locations with a lot of weight. It exceeds anything we've ever had before."

The CC-177 was operational within two weeks. Its first mission was a delivery of 30 metric tonnes of emergency relief supplies to Jamaica following Hurricane Dean on August 23rd, and its first mission into Afghanistan followed on August 29th with 35,000 kg of equipment on board, destined for Canadian troops.

### Modernization of CF-18 - Phase II

anada's CF-18 Hornet fighter aircraft ✓ are undergoing a mid-life upgrade to ensure that the Canadian Forces has a modern and interoperable fighter fleet for at least another decade.

The aircraft, which were introduced in the Air Force 25 years ago, are now emerging from their second phase of modernization. Phase I was completed last year. The latest upgrades include implementing a data-link system allowing connectivity with other jets; an airborne warning and control system to maintain full awareness of the environment; a helmet-mounted colour display; a new missile countermeasures flare dispenser; and a crash-survivable data flight recorder.

Two CF-18 prototypes from the Phase II Modernization Program were tested successfully at the Naval Air Warfare Centre in California and at the Aerospace Engineering and Test Establishment at 4 Wing Cold Lake,



A test flight of the Phase II modernized CF-18 over Cold Lake.

Alberta. The first fully-modernized CF-18 was delivered in August from Boeing, which is performing the upgrades on 79 aircraft.

"This modernization ensures that the CF-18 fleet remains combat-effective, globally deployable and able to play an important role over the next decade as the Air Force transforms to meet the 21st century security needs of Canada," said LGen Angus Watt, Chief of the Air Staff.

The CF-18 fighter jets are essential in protecting Canadian sovereignty, contributing to the defence of North America within NORAD, and providing a credible contribution to the UN, NATO, and coalition-led peace operations.

The Air Force has created the Next Generation Fighter Capability Office to begin looking for a viable fighter option to meet Canada's needs when the CF-18 reaches its estimated life expectency (ELE) towards the end of the next decade.

# EQUIPMENT & CAPABILITIES

# **Update on Cyclone**

This summer, Sikorsky, the manufacturer of CH-148 Cyclone helicopters, reported good news – successful ground testing of the helicopter's fly-by-wire technology designed to improve the manoeuvrability, safety and effectiveness of aircraft.

The fly-by-wire system electronically links the controls inside the cockpit with the exterior of the aircraft, enabling the aircraft to manoeuvre the way the pilot intends. By eliminating the traditional mechanical method and replacing it with fly-by-wire, maintenance costs are reduced and performance is greatly improved.

"We're on track toward system certification and then providing the Canadian Forces with these state-of-the-art helicopters," said Dan Hunter, Sikorsky manager for the Cyclone program.

Canada will begin receiving 28 Cyclone helicopters in early 2009. Sikorsky is now test flying prototypes of the Cyclone at the Sikorsky plant.



Canadian participation in the Cyclone project will involve a variety of companies from across Canada. This means that Canadians will work on the Cyclone's advanced mission systems, electronics, software development, airframe and engine. Work on the helicopter project will continue over the next 20 years.

#### Improvements to Air Force Infrastructure

There are infrastructure upgrades on the horizon for 19 Wing Comox, British Columbia, 12 Wing Shearwater, Nova Scotia and 14 Wing Greenwood, Nova Scotia.

19 Wing Comox, which performs critical search and rescue missions on Canada's west coast, will receive upgrades to its runway – including repaving and installing new runway lighting – construction of 70 new apartments for personnel, training quarters, a mess hall and a kitchen, and renovations on roadways to improve traffic flow, safety, and security. Plans for a new health care facility are also being developed since the existing medical/dental facility is more than 60 years old and too small to operate efficiently.

"All these projects are in fact life cycle replacements of existing infrastructure and therefore will contribute to improving operation and maintenance of this aerodrome," said Captain Peter Weatherley, Construction Engineering Officer at 19 Wing Comox.

On the east coast of Canada, 12 Wing Shearwater will also receive a facelift. Shearwater is one of the oldest military airfields in Canada, having been home to Canada's air squadrons for the past 80 years – longer than any other Canadian military air base.

As the home of the Air Force's new CH-148 Cyclones and CH-124 Sea King operations, Shearwater will need to have the space and improved infrastructure to support the aircraft and its services. As a result, the landing area, taxiway, lighting and training areas will be updated.

In addition, three support facilities will be constructed: 423 Maritime Helicopter Squadron Facility, 12 Air Maintenance Squadron Facility, and 12 Wing Common Support Facility. The facilities are expected to be finished in April of 2009, shortly after the arrival of the first CH-148 Cyclone.

14 Wing Greenwood, home to long-range surveillance patrol operations in Canada and abroad as well as search and rescue operations, will also receive infrastructure upgrades. Plans include the construction of a new control tower, fire hall, health care facility and a refuelling tender garage and maintenance facility. These will replace facilities that no longer meet current and future requirements and improve services and operations. As well, the recapitalization of the Hornell Centre, which houses the Wing's operations' centre, will improve central operations and training.

#### 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.





# **OPERATIONS & EXERCISES**

# Mobile Air Movements - Key Role in Afghanistan Mission



Mobile Air Movements Section (MAMS) personnel prepare to unload freight from the CC-150 Polaris Airbus at the Theatre Support Element (TSE) at Camp Mirage. The TSE provides an air bridge to Afghanistan.

anadian Air Force personnel have been stationed at Camp Mirage in southwest Asia since October 2001 when the campaign against terrorism began after the September 11<sup>th</sup> terrorist attacks in the United States. Since then, the Air Force has flown thousands of hours, transporting tonnes of goods and thousands of personnel to the area in support of the mission in Afghanistan.

"All passengers arriving from or going to Canada pass through southwest Asia, as does most of the cargo"

The CF plays a key role in the NATO-led International Security Assistance Force (ISAF) mission in Afghanistan where they help improve security and assist in rebuilding a stable, democratic, and self-sufficient Afghan society. Canada is there along

with 37 other nations as part of a UN-sanctioned mission.

Among the Air Force units supporting air transport operations, is 2 Air Movements Squadron's Mobile Air Movements Section (MAMS). While the Squadron is based at 8 Wing Trenton, the MAMS members come from all over Canada. Their work includes packing and preparing air freight, and loading and unloading aircraft cargo and passengers in support of airlift operations.

In Afghanistan, the Air Force is responsible for transporting tonnes of equipment and thousands of personnel into and out of the country. "All passengers arriving from or going to Canada pass through southwest Asia, as does most of the cargo," says Master-Corporal Steve Fortin from 3 Wing Bagotville, Quebec, who is serving in Kandahar, Afghanistan. "That's why the MAMS teams are so critical to the success of this mission."

Canada's CC-130 Hercules transport planes also provide tactical airlift for ISAF forces throughout Afghanistan. "I'm proud to say that the Hercules aircrews landing and taking off from here consistently tell me that my team is the best in the theatre because of their efficiency," says MCpl Fortin. "I handle the details for every Canadian flight that arrives and leaves from Kandahar – such as the number of passengers per flight, the cargo to be loaded on each aircraft, and coordination with ISAF for flights within the country. It's my job to ensure that the people under my orders have accurate information on every flight we handle here."

About 20 per cent of the approximately 2,500 CF personnel serving with Joint Task Force Afghanistan are from the Air Force. Many are stationed at the Kandahar Airfield, including members of the Tactical Unmanned Aerial Vehicle Flight, a joint Army-Air Force unit that flies unmanned aerial vehicles to provide vital intelligence, surveillance and reconnaissance for the Canadian soldiers on the ground. Additional Air Force personnel are members of Canada's Provincial Reconstruction Team (PRT) at Camp Nathan Smith in Kandahar City. Others are assigned to other military headquarters, a support base, and civilian organizations.



Canadian Forces Traffic Technician MCpl Steve Fortin of the MAMS takes a cooler of medical supplies off the ramp of a Canadian-chartered llyushin cargo aircraft on the tarmac at Kandahar Airfield in Afghanistan.



# **Exercise Maple Flag XL**



An F-15C Eagle from the  $65^{\text{th}}$  Aggressor Squadron takes off at Exercise Maple Flag XL (MF 40).

This year 4 Wing Cold Lake, Alberta conducted the 40<sup>th</sup> Maple Flag exercise since 1978, providing Canadian and allied aircrew with realistic training in a modern simulated air combat environment. The exercise, which ran from May 22<sup>nd</sup> to June 15<sup>th</sup>, tested air operations involving several coalition forces and live ground defence.

For the first time, this year Exercise Maple Flag also included Special Forces, transport aircraft and an expanded role for helicopters.

"Where else in Canada can you conduct missions with radar ground threats...and be part of a mission package that could be 50 or so aircraft?" said Captain James Brown, Detachment Commander for the Canadian CC-130 Hercules contingent. "A lot of coordination is involved in the planning process and many lessons are learned as the exercise unravels."

The  $65^{\text{th}}$  Aggressor Squadron from Nellis Air Force Base in Nevada, flying F-15C Eagles, also participated for the first time this year.

Lieutenant-Commander Charles Brown, a member of the American 'Strike Fighter Squadron Thirty One' that flies F-18 Super Hornets, experienced his first ever Exercise Maple Flag. LCdr Brown said it was a great opportunity to train with other NATO nations and while most of his training is normally done over water, the low-level opportunities at 4 Wing Cold Lake provided an excellent opportunity for him fly over land in a vast open space.

# **Exercise Ardent Sentry**

Ardent Sentry is a series of exercises in which the Canadian Forces first participated in 2005. This year, Exercise Ardent Sentry/Northern Edge 07 was held in May, involving Canada Command, NORAD, the United States Northern Command, numerous partner agencies and departments, as well as several states in the U.S.

The aim of the exercise was to practice military assistance to civil authorities, bi-lateral planning, communication, information sharing and emergency coordination.

As the Canadian organization responsible for the conduct of all routine and contingency domestic operations, Canada Command tasked three of its six Regional Joint Task Forces in Alberta, British Columbia and the Northwest Territories to coordinate responses to a variety of threats and events. Scenarios involved threats to infrastructure, air and maritime security.

# **Exercise Falcon Virgo**

In July, NORAD also conducted Exercise Falcon Virgo in Washington, D.C. The exercise included a series of training flights designed to test NORAD's intercept and identification operations and procedural tests of Washington's Visual Warning System.

NORAD has conducted exercise flights like this throughout the U.S. and Canada since the birth of Operation Noble Eagle, conceived in response to the terrorist attacks on September 11<sup>th</sup>, 2001. Since then, NORAD fighters have responded to more than 2,300 possible air threats in the United States, Canada and Alaska, and have flown more than 46,000 sorties.

# **Operation Nanook**

From Iqaluit and the Baffin Island to the Hudson Strait, from August 7th to 17th, CF personnel participated in Operation Nanook 2007 as part of a Canada Command sovereignty operation. Canadian Forces sovereignty patrols and operations in the north such as these improve northern surveillance and reconnaissance, and strengthen Canadian presence.

During the operation, Joint Task Force North (JTFN) trained for domestic operations in support of other government departments. The joint operation involved Air Force, Army and Navy personnel and resources, conducted in close cooperation with the Royal Canadian Mounted Police and the Canadian Coast Guard. ■

A CP-140 Aurora maritime patrol aircraft surveys the northern tip of Ellesmere Island, near the North Pole, during Op Nanook.





# **OPERATIONS & EXERCISES**

#### **Air Force Operations**

anada's Air Force participates in many operations. Personnel may be called upon to fly people or cargo in support of humanitarian aid, diplomatic missions, or support operations for troops in war zones. The Air Force works closely with the Army and Navy in domestic and foreign operations.

Whether they're flying aircraft, maintaining aircraft, or as part of an operation on the ground, Air Force personnel can be found with the Canadian Forces worldwide: Task Force Afghanistan; Operation Alert in Ellesmere Island in the north; Sinai with Operation Calumet; Sudan with the UN's Operation Safari; and Darfur, Sudan with Operation Augural.

For more on Air Force operations, log on to: http://www.airforce.forces.gc.ca/site/opdocs/abroad 5 e.asp



The flight crew of a CC-130 Hercules during Op Boxtop last year, a bi-annual operation to resupply Canadian Forces Station Alert in Canada's far north.



### New Chief of the Air Staff



Lieutenant-General Angus Watt

he command of Canada's Air Force offi-L cially changed hands at a ceremony held July 26th at the Canada Aviation Museum in Ottawa.

Lieutenant-General Angus Watt assumed command of the Air Force, taking over from LGen Steve Lucas at a ceremony presided over by General Rick Hillier, the Chief of the Defence Staff.

"The Air Force has made remarkable strides under the command of LGen Lucas," said LGen Watt. "The Air Force is truly on the path of renewing, revitalizing

and developing its capabilities to help face Canada's defence and security challenges in the 21st century. I look forward to having the opportunity to lead the highly professional men and women of Canada's Air Force in this important mission."

As the Commander of Air Command and Chief of the Air Staff, LGen Watt will advise the Chief of the Defence Staff on Air Force issues. He is also responsible for generating and maintaining combat-capable, multi-purpose air forces to meet Canada's defence objectives.

LGen Watt began his career as a CH-124 Sea King helicopter pilot. His recent appointments have included Director of Operations for NORAD, Assistant Chief of the Air Staff, and Deputy Commander (Air) for the NATO International Security Assistance Force (ISAF) in Afghanistan.

LGen Lucas retired after 38 years of distinguished service.

## **New NORAD DComd**

ieutenant-General L Charlie Bouchard took over as Deputy Commander of North American Aerospace Defense Command (NORAD) on August 2nd at Peterson Air Force Base in Colorado. LGen Bouchard



Lieutenant-General Charlie Bouchard

replaces LGen Eric Findley, who retired after 39 years of military service.

LGen Bouchard last served as Commander of the Canadian NORAD Region, 1 Canadian Air Division, and the Combined Forces Air Component Commander for operations in Canada.

"NORAD is about the security of our two nations during interesting and challenging times, and much more," said LGen Bouchard. "It's about a relationship between two great allies who share a desire for liberty, peace and harmony. My commitment to NORAD will be to serve to the best of my abilities and to foster growth in every aspect of this relationship." ■



### New Commander for 1 Cdn Air Div/CANR

n Tuesday, July 17th, Major-General Marcel Duval became the new Commander of 1 Canadian Air Division/ Canadian NORAD Region (1 Cdn Air Div/CANR). LGen Duval replaced LGen Charlie Bouchard, who assumed the duties of Deputy Commander of NORAD.

"I have large shoes to fill and look forward to working with the men and women of the Air Force to continue our mission of serving and protecting Canadians at home and those who are deployed," said MGen Duval, who most recently worked as Deputy Commander of CONR Continental U.S. NORAD Region at Tyndall AFB, Florida.

Then-Chief of the Air Staff, LGen Steve Lucas, officiated over the ceremony, which was also attended by the incoming Chief of the Air Staff, LGen Angus Watt, LGen Marc Dumais, Commander of Canada Command, and a number of Canadian and American military leaders. General Victor 'Gene' Renuart, Commander of NORAD and United States Northern Command in Colorado Springs, presided over the Canadian NORAD Region change of command.

1 Cdn Air Div/CANR was created in 1997 as part of a major re-organization of Air Command. Operational level activities are consolidated into 1 Cdn Air Div/CANR Headquarters. CANR provides aerospace surveillance, identification, control and warning for the defence of Canada and North America.

1 Cdn Air Div is responsible for providing CANR with combat-ready air forces to meet Canada's commitment



LGen Charlie Bouchard (left) and MGen Marcel Duval at the change of command ceremony.

to the defence of North America and maintaining the sovereignty of North American airspace.

NORAD assets are positioned throughout Canada and the U.S. and can respond to any air sovereignty threat in a matter of minutes and CANR CF-18 Hornet fighter aircraft are on continuous alert.

# Message from the New CWO AF

It is quite an honour to be appointed to the position of Chief Warrant Officer of the Air Force. It is a unique privilege to be given the opportunity to represent and serve the men and women of the Non-Commissioned Members' (NCM) corps.

After 32 years of service in various functions and positions, I am being given the chance to give something back to the organization and the people who have taught me and given me so much.

Not many organizations will take the time to take unskilled individuals, teach them an occupation from the ground up and provide them with the opportunity to develop their technical, professional, personal and leadership skills to surpass any of their own original aspirations. Having recently spent some time with several of my NATO colleagues from other countries, I feel now, more than ever, that our NCM corps is among the best, if not the best, trained group of professionals in the world.

As I look to the future, I see many opportunities and challenges for currently serving and future personnel. The ongoing transformation of our support structure and the acquisition of new equipment are but two perfect examples.



CWO Rene Couturier was appointed the new CWO of the Air Force by LGen Lucas in July

I would like to thank the Air Force community for everything they do every day and I look forward to meeting Air Force personnel individually during future Wing visits.

Per Ardua Ad Astra

Chief Warrant Officer René Couturier Chief Warrant Officer of the Air Force ■

# 25<sup>th</sup> Anniversary of the **NATO E-3A Component**



A NATO E-3A makes a final approach to the airfield at NATO Air Base Geilenkirchen, Germany. This year marks the 25th anniversary of its Main Operating Base.

his year marks the 25th anniversary of the NATO E-3A Component ■ Main Operating Base at the Geilenkirchen Air Force Base in Germany. NATO Air Base Geilenkirchen, located in a small wooded area called Teverener Heide adjacent to the Dutch border, has played a major role in supporting NATO's mission of safeguarding security and freedom for more than two decades. Celebrations took place from June 15th to 17th at Geilenkirchen, with aircraft and exhibits from participating NATO nations including Canada, which sent a CP-140 Aurora long-range patrol aircraft from 14 Wing Greenwood, Nova Scotia.

The celebration attracted more than 130.000 visitors.

"There is no other internationally integrated crew anywhere in the world like the one we have here at the component," said Brigadier-General Stephen Schmidt, the NATO Airborne Early Warning and Control Force E-3A component commander. "Multinational crewmembers from nations that would normally never have the opportunity to work together are flying side-by-side every day and it has worked out great."

The current fleet based in Geilenkirchen consists of 17 E-3A Airborne Warning and Control Systems (AWACS) aircraft and three training and cargo aircraft. The duties of AWACS range from air surveillance to air support and reconnaissance. They're capable of detecting air traffic over large distances and at low altitudes, and can transmit data directly from the aircraft to command and control centres on the ground, sea or in the air, anywhere in the world. Fourteen of NATO's nations contribute operational resources to the component, including Canada.

The Canadian contingent, under the command of Colonel Manfred Arndt, consists of more than 100 personnel; the largest Canadian unit deployed permanently outside of Canada. Canadian aircrew are employed in each of the three AWACS squadrons, one of which is commanded by a Canadian.

Most recently the component supported anti-terrorism missions for the G8 Summit. It has also provided cover for the summer Olympic Games in Athens, the funeral of Pope John Paul II, and support for victims of Hurricane Katrina.

# Happy Birthday 400 Squadron

n October 5th 400 Tactical Helicopter Squadron turned 75.

400 Squadron recently celebrated the anniversary with numerous events including a parade with heritage flypasts.

"400 Squadron has a very rich history going back beyond the Second World War, so it's a significant milestone," said Captain Lyle Holbrook, the 75<sup>th</sup> anniversary chairperson. "We have many battle honours on our flag. Even veterans from the Second World War attended the celebration."

400 Squadron was formed in 1932 as 'No. 10 City of Toronto Army Cooperation Squadron'. It was renamed 110 Squadron in 1937 and designated 400 'City of Toronto' Squadron in 1940.

During the war, 400 Squadron flew Lysanders, Tomahawks, Mustangs, and Spitfires, primarily in the armed and unarmed reconnaissance role. The Cold War saw the arming of the unit with Vampire IIIs and F86 Vs aircraft. Throughout the 1960s and 1970s, 400 Squadron, as part of 2 Air Reserve Wing, flew Expeditors and then the DeHavilland Otter. In 1981, the Squadron's conversion to helicopters began with the CH-136 Kiowa. Fifteen years later the CH-146 Griffons were phased in and are now the prime aircraft for the Squadron.  $\blacksquare$ 



To celebrate its 75th anniversary, 400 'City of Toronto' Squadron took flight over downtown Toronto earlier this summer.

# HISTORY & CELEBRATIONS

# Happy Birthday 402 Squadron



This fall, 402 'City of Winnipeg' Squadron – a.k.a. the 'Winnipeg Bear' – marked its 75<sup>th</sup> anniversary. In celebration, a reunion weekend was held August 17<sup>th</sup> to 19<sup>th</sup> at 17 Wing Winnipeg, with former members and friends attending from all over the country.

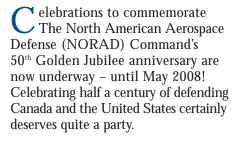
"There's a bit of friendly rivalry going on with 400 Squadron," admitted Sergeant Patrick McNorgan, from History and Heritage at 17 Wing Winnipeg – in a playful way. "They stood up the same day as us but they say they were first because of the time difference."

402 Squadron's gala weekend included a heritage morning in 16 Hangar – home of the Squadron. The celebration also showed off a privately owned Mustang Mark IV aircraft, recently painted with the squadron's yellow and blue colours as a tribute.

"The Squadron has also done wonders for the City of Winnipeg," said Sgt McNorgan. "There's really a great relationship between our city and our Squadron."

With both Regular Force and Air Reserve personnel, 402 Squadron currently flies and maintains the Canadian-designed and produced de Havilland Canada CT-142 Dash-8 navigation trainer in support of the Canadian Forces Air Navigation School. 402 Squadron's tasks include the conduct of both air navigator and airborne electronic sensor operator training flights, the maintenance and management of the Squadron's four Dash-8 aircraft and the operational training of Dash-8 aircrew and aircraft technicians. 402 Squadron also provides maintenance support to the Central Flying School and aircraft servicing for visiting and transiting military aircraft.

### NORAD Turns 50



While NORAD was activated in the United States on September 12<sup>th</sup>, 1957 in Colorado Springs, the formal signing of the agreement was May 12<sup>th</sup>, 1958, hence the prolonged celebrations.

NORAD members agree that this birthday celebration is a time to reflect on the good relationship between Canada and the U.S. and how important it is that the two countries grow and strengthen together.

"We're celebrating 50 years of dedicated service to the defence of North America

and we'd like to highlight NORAD's evolution over the years," says Major Jason Proulx, a Canadian officer at NORAD Headquarters in Colorado. "We are as relevant now as in the past but we have different mission sets and the public should know that we continue to be here for them, making sure they can sleep soundly at night knowing the skies and waterways are safe."

NORAD came about after the Second World War when the U.S. and Canada recognized they were vulnerable to enemy attack. As a result, the two countries decided to integrate their defence planning and strategies into a bi-national military command. In 1958 they signed the NORAD agreement, outlining how they were going to organize the command, what kind of operations they would undertake, and defence plans against possible attacks.



NORAD is charged with the missions of aerospace warning and aerospace control for North America. Aerospace warning includes the monitoring of man-made objects in space, and the detection, validation, and warning of attack against North America whether by aircraft, missiles, or space vehicles, through mutual support arrangements with other commands. Aerospace control includes ensuring air sovereignty and air defence of the airspace of Canada and the United States. The NORAD agreement has been renewed 10 times since 1958. The May 2006 NORAD agreement renewal added a maritime warning mission, which entails a shared awareness and understanding of the activities conducted in U.S. and Canadian maritime approaches, maritime areas and inland waterways.

### Remembering the Battle of Britain in 2007

anada's Air Force, together with the Air Force Association of Canada, commemorated the 67th anniversary of the Battle of Britain this year with events held across Canada.

"The Battle of Britain commemorations are becoming more popular and well-known due to increased public awareness of the military through our efforts in the reconstruction of Afghanistan," said Major Pat Thauberger, organizer of this year's event in Ottawa "I think it was a great and exciting opportunity for people to see vintage and modern aircraft flying in the same venue while also paying respect to the veterans on parade."

The Battle of Britain began in 1940 when the German Luftwaffe tried to gain air superiority over Great Britain before a planned sea and airborne invasion of that country during the Second World War. It was the largest and most sustained bombing campaign at that time. The failure of Nazi Germany to destroy Britain's Air Force is considered the Nazis' first major defeat. Historians have described it as the turning point of the Second World War. It was also the first battle to be won purely by air power.



A Hawker Hurricane Mk IV (front), a Supermarine Spitfire XVI (foreground) and a North American P-51 Mk IV from Vintage Wings of Canada conduct a flypast in Ottawa.

One hundred and three Canadians flew in the Battle of Britain between July and October 1940 and 23 lost their lives.

"It's important to celebrate the resilience of allies and triumph of the human spirit," said Maj Thauberger. "It's a way of connecting the past with the present."

#### The Bear and the Hornet



A CF-18 Hornet from 4 Wing Cold Lake flies next to a Russian Tu-95 Bear bomber on Sept. 5, 2007. The Canadian NORAD Region aircraft visually identified and monitored the Russian aircraft as they passed through the North American Air Defence Identification Zone (ADIZ) in international airspace. The Russian aircraft were taking part in a publicly announced exercise. All aircraft returned to their bases without incident.

# HISTORY & CELEBRATIONS

# Centennial of Flight

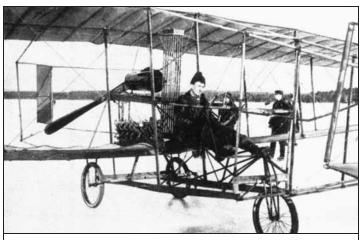
In 2009 Canada will celebrate its Centennial of Flight (CoF), marking the 100<sup>th</sup> anniversary of the first Canadian powered flight by the "Silver Dart" in Baddeck, Nova Scotia. Already activities are taking place across the country to spread the word about this milestone. The Air Force established a project office on May 1<sup>st</sup> to coordinate events and activities within the Air Force and facilitate communication with and amongst the many organizations wishing to celebrate the Canadian Centennial.

The 100<sup>th</sup> anniversary of powered, heavier-than-air flight in Canada is indeed something to celebrate. Brigadier-General Gaston Cloutier, Special Advisor to the Chief of the Air Staff on the Centennial of Flight says that no nation in the world owes more to flight than Canada. It opened up our country and provided a significant lifeline from coast to coast and to many northern areas.

"Aviation has done so much for this country," says BGen Cloutier. "In the 19th century the train linked Canadians but in the 20th century it was the airplane.



In the back poster from the left: Glenn Curtiss, F.W. Baldwin, Alexander Graham Bell, Thomas Selfridge, J.A.D. McCurdy – Members of the Aerial Experiment Association, who were responsible for the first flight of the Silver Dart in Canada. BGen Cloutier, organizing celebrations for Canada's Centennial of Flight in 2009, in front.



The Silver Dart, with J.A.D. McCurdy at the controls, on February 23, 1909.

The airplane linked communities that didn't have access to trains or roads, and communities in the north. We have the second largest country in the world and air travel is the most reasonable way to get you around."

While aviation opened up Canada in the early years, it continued to be crucial during both world wars, making significant contributions to Allied victories. In between wars, aviation also made a significant contribution to the development of our country, for example, by mapping Canada's north.

"(Military) aviation continues to play an important role within NORAD, NATO, and with current operations all over the world," says BGen Cloutier.

"We need to celebrate the outstanding accomplishments of aviation and tell these incredible stories to Canadians so they can understand the role military aviation plays in Canada and to increase confidence in the future of aviation."

BGen Cloutier says he'd like to see all the Air Force Wings across Canada celebrating Canada's Centennial of Flight.

"I'd like to see each airshow and open house in 2009 promoting the Centennial of Flight. I would also like to see publications educating youth on what military aviation has done. In addition, the Air Force outreach program for 2009 will be dedicated to the Centennial," says BGen Cloutier. "Activities and events will have five goals: historical, technological, educational, connecting with Canadians and attracting Canadians to serve in the Air Force."

Watch for updates at www.airforce.gc.ca as celebrations unfold.