

# Aerospace

\$3.50

TORONTO  
Aerospace  
Museum  
DOWNSVIEW PARK

Newsletter Summer 2008

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FUNDRAISING DINNER

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**ARROW First Flight**  
March 25, 1958



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First Flight July 30, 1958

**GOLDEN ARROW**  
**50<sup>TH</sup>**

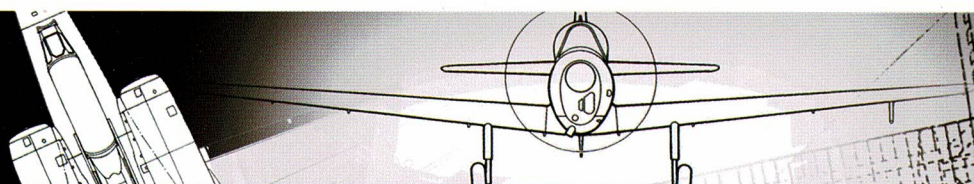
Guest of Honour  
**JAMES C. FLOYD**

**1943**  
**Stinson**  
**V-77 CF-CAJ**  
**Flies for Museum**

Toronto Aerospace Museum, Downsview Park, 65 Carl Hall Road, Box 1, Toronto, Ontario M3K 2E1

[www.torontoaerospacemuseum.com](http://www.torontoaerospacemuseum.com)

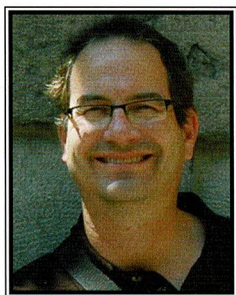




## NEW MEMBERS NOV. 2007 - MAY 2008

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**Cover Photo:** Eric Dumigan photographed Stinson V-77 CF-CAJ over Genesee, NY in July with Glenn Goldman at the controls. More images of the V-77 can be found at [www.airic.ca/html/stinsonv77.html](http://www.airic.ca/html/stinsonv77.html).



*Kenneth Swartz, Editor*

### NEWSLETTER EDITORIAL COMMITTEE:

Wayne Barrett, Richard Banigan,  
Robert Cohen, Claude Sherwood,  
Kenneth Swartz.

### PHOTOGRAPHERS:

Eric Dumigan, Andrew Cline, Brian Quan,  
Kenneth Swartz, Parr Yonemoto, Gary Tahir.

### DESIGN AND PRODUCTION:



[altitudegraphics.com](http://altitudegraphics.com)

## MUSEUM INFO

Toronto Aerospace Museum  
Downsview Park

65 Carl Hall Road, Box 1  
Toronto, Ontario M3K 2E1

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Web site: [www.torontoaerospacemuseum.com](http://www.torontoaerospacemuseum.com)

E-mail: [tam@bellnet.ca](mailto:tam@bellnet.ca)



### HOURS

- Wednesday 10 a.m. to 8 p.m.
- Thursday through Sunday 10 a.m. to 4 p.m.
- Open Holiday Mondays 10 a.m. to 4 p.m.
- Closed Christmas Day and New Years Day
- Closed Monday & Tuesday during winter except by appointment

### ADMISSION PRICES

- TAM Members FREE
- Adults (+18) \$8.50
- Seniors (+60) \$6.50
- Students (with ID) \$5.50
- Family (2 adults & 2 students) \$21
- Children under 5 FREE
- School Groups and Groups of 10 or more, please contact John Harper, Education Director at Tel: 416-638-6078, Fax: 416-638-5509, or E-mail: [tam@bellnet.ca](mailto:tam@bellnet.ca)

### MUSEUM MEMBERSHIP

#### INDIVIDUAL

One Year \$30 – Two Year \$50

#### FAMILY (2 ADULTS & 2 CHILDREN)

One Year \$50 – Two Year \$80

#### SENIOR (65+)

One Year \$25 – Two Year \$40

#### STUDENT

One Year \$15 – Two Year \$25

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John Harper, Director of Education Programs  
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#### DISPLAYS COMMITTEE:

Claude Sherwood, CEO

#### FUNDRAISING COMMITTEE:

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#### MARKETING COMMITTEE:

Robert Cohen

#### NEWSLETTER COMMITTEE:

Kenneth Swartz & Richard Banigan

#### MEMBERSHIP COMMITTEE:

TBD (Volunteer opportunity)

#### OPERATIONS COMMITTEE:

Peter Uus, Member

#### DATA & SYSTEMS COMMITTEE:

Brian Quan & Ken Dugdale

#### VOLUNTEER COMMITTEE:

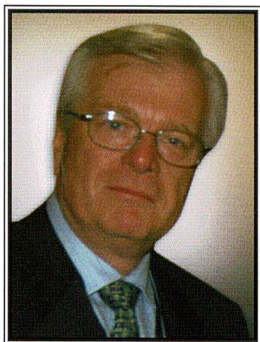
Natasha Bowes

#### HEALTH, SAFETY & SECURITY COMMITTEE:

Mike Holland

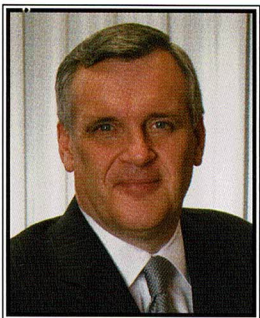


## CHAIR'S MESSAGE



It's with great delight that I introduce *Aerospace*, the redesigned Toronto Aerospace Museum newsletter to celebrate the 10th anniversary of our Museum.

The museum has come a long way since our founders proposed an aviation museum for the historic The de Havilland Aircraft of Canada Limited factory on the site of Canadian Forces Base Toronto in Downsview. The base was closing and Canada Lands Corporation accepted our proposal for a museum, opening the door to great achievements such as the renovation of our historic facilities, construction of a full scale replica of the Avro Arrow, and the ambitious restoration of the City of Toronto's rare 1945 Avro Lancaster Mk. X bomber FM 104.



The Honourable David C. Onley

As we celebrate this important anniversary, the Board is very pleased to announce that the Lieutenant Governor of Ontario, The Honourable David C. Onley, has agreed to become the Honorary Patron of the Toronto Aerospace Museum. As a co-founder of the Aerospace Heritage Foundation of Canada, His Honour has long supported the recognition of important Canadian technological achievements such as the Arrow. He was an early supporter of the museum as a reporter for CITY-TV and in October 2006 served as master of ceremonies at our magnificent Avro Arrow Rollout Gala dinner.

Building on the steady progress over the last 10 years, last year the Board renewed the Museum's Strategic Plan to better reflect our vision and goals, and guide our development and new fundraising initiatives.

It has long been recognized that our displays and exhibits are central to the "visitor experience" and learning opportunities we provide our core constituencies – students, aviators, industry, veterans, residents and tourists.

To support the development of our visitor experience, in late 2007 we contracted Lundholm Associates Architects to develop a new Exhibitions Development Concept that would highlight the Museum's key themes, lessons and artifacts. The company is an internationally-recognized and award-winning museum consultant, planner and designer, and its founder Michael Lundholm has over 35 years of private architectural practice, including seven years as the Director of Architecture for the National Museums of Canada. The study was funded by Heritage Canada, with matching funds provided by member donations and board allocations.

The Lundholm study provides a conceptual framework for developing a comprehensive and detailed design for our exhibits, building on the earlier TCI Development Study which identified five core key themes – Aerospace Innovation and Research; Toronto Aviation History; Science of Flight; Aircraft Restoration; and Civil Aviation & Transport. The report also recognizes the national significance of the de Havilland Canada heritage buildings on this site since 1929.

The Exhibitions Development Concept provides an excellent foundation for the museum to launch a major fundraising initiative later this year.

A number of other initiatives and events have also reflected the Board's determination to move Museum development forward.

In celebration of the 50th anniversary of the first flight of the Avro Arrow in 1958, the museum launched a commemorative Arrow wrist watch program under the leadership of Robert Cohen. This superb fundraising initiative has sold almost 800 watches, generated significant revenues, and generated hundreds of new supporters of the museum.

In recognition of the Arrow 50th anniversary, the museum also hosted the *Golden Arrow* fundraising dinner on March 29 which attracted 280 Avro veterans, fans and guests to our facility at Downsview Park. The evening was an outstanding social and financial success and an event to be remembered.

This year's annual Wings & Wheels Heritage Festival attracted a much broader range of exhibitors, visiting aircraft and vehicles. Attendance increased and we enjoyed support from the Canadian Armed Forces which brought four aircraft to the show. This year we hired a consultant to put the Festival on a more solid commercial footing and we went through an learning process. A big thank you is extended to Parc Downsview Park Inc., to our corporate sponsors – Bombardier Aerospace, Q107 and Altitude Graphics – and especially to our Museum staff and our many dedicated volunteers!

More recently, the Museum has entered into negotiations to acquire some historically significant artifacts for our collection, including aircraft. More details will be released once the deals are firm.

Looking ahead, we've also started assembling a team to lead a major fundraising campaign. The 'fundraising case' is in development and we're actively identifying potential donors and sponsors.

The future of our museum rests with the people who keep our front door open, engage our visitors, renew our vision, and selflessly undertake hundreds of tasks every week. Thank you one and all!

**WAYNE BARRETT**



Aviation Innovation Gallery Concept



## GOLDEN ARROW FUNDRAISING DINNER

The Toronto Aerospace Museum marked the 50th anniversary of the first flight of the Avro CF-105 Arrow with a memorable *Golden Arrow* fundraising dinner on March 29, 2008. The first flight of the CF-105 Arrow took place on March 25, 1958 at Malton Airport and was witnessed by thousands of people.

The fundraiser drew 268 supporters and 12 guests to the Museum for the largest sit-down dinner ever held within our four walls, with attendees coming from as far away as Halifax and Vancouver for a great celebration.

Guests of honour included The Lieutenant Governor of Ontario, The Honourable David C. Onley, and Her Honour, Ruth Ann Onley, and former Avro Senior Vice President and Director of Engineering James C. Floyd, with his wife Irene. Parc Downsview Park Inc. was represented by Tony Genco, President and CEO, and the City of Toronto by Maria Augimeri, the Councillor for York Centre.

Many of the evening's attendees were associated with the development of the Arrow or Iroquois engine in the 1950s, with some launching their aviation careers much earlier building Lysander, Anson II, Hampden or Lancaster aircraft at Malton during the Second World War.

The celebration included speeches and presentations, the screening of original Arrow film footage, and a video tribute to the late RCAF test pilot Norm Ronaasen who was designated to fly the Arrow. There was also a large silent auction of aviation books, prints and clothing, author's book tables, models, the traveling museum exhibit *Avro Arrow - A Dream Denied*, and lots of reminiscing.

The planning and management of the evening fell on the shoulders of two museum volunteers and members - event Chairman Michael Deschamps and Vice-Chairman Robert Cohen - supported by their families, museum staff, dozens of volunteers, and members of the No. 845 Avro Arrow Air Cadet Squadron.

The Master of Ceremonies for the evening was actor/director/producer Art Hindle, who played Col. Fairchild in the 1997 TV production *The Arrow*, and plays Mayor Pete Braga in the hit TV series *Paradise Falls*.

Hindle set the tone for the dinner by reading the poem *High Flight*, by John Gillespie Magee Jr., which has become a mantra for aviators.

Wayne Barrett, Chairman of the Museum, welcomed the guests and thanked them for their support. He recognized the Museum's debt to Parc Downsview Park Inc. which is building a valuable community asset. Barrett highlighted how the work of hundreds of museum volunteers and tens of thousands of museum visitors complemented Downsview Park's mission and supported the development of Canada's first urban national park.



**The Honourable David C. Onley**

The Honourable David C. Onley was introduced by Barrett as the co-founder of the Aerospace Heritage Foundation of Canada (AHFC) and a long-time supporter of the museum. It was then revealed to guests that the Lieutenant Governor of Ontario had agreed to become the Honorary Patron of the Toronto Aerospace Museum.

"Thank you for mentioning the patronage role," said Onley, as he began his dinner speech. "This was one of the easiest decisions I have had to make since becoming Lieutenant Governor."

And "thank you also for inviting me back," he added, recalling how he was also a guest speaker at the *Arrow Plus 30* dinner held on the 30th anniversary of the Arrow first flight. "As I reviewed my speech from 20 years ago, I was amazed by how many things have changed and how many have not changed at all."



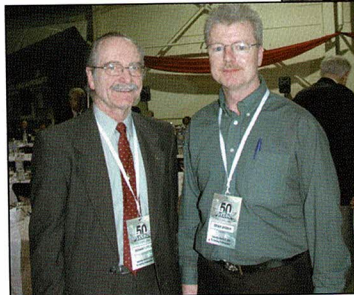
Michael Deschamps  
and Art Hindle



Bryan Wood, Jim Floyd and Geoffrey Grossmith



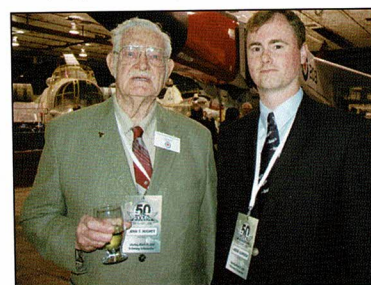
Fred Hiltz, Albert Wallace  
and Sheldon Benner



Richard Littler from Halifax  
with Brian Brown



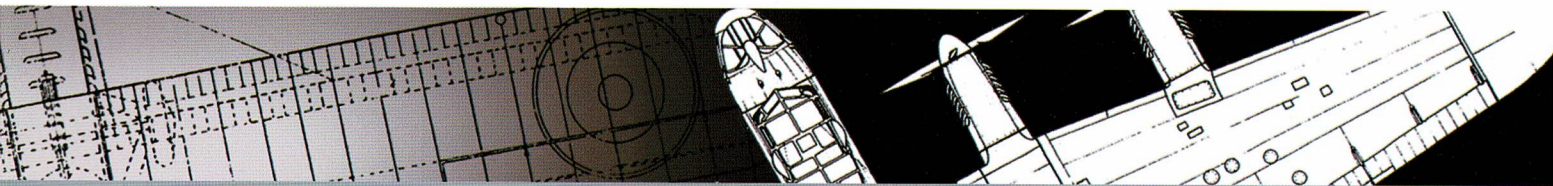
280 people attended the dinner



John Hughes with Jason Eldridge  
from Vancouver







Arrow Plus 30 event in 1988, Onley read a quote from John Buchan, who wrote "No great cause is ever lost or won. The battle must always be renewed. And the creed must always be restated."

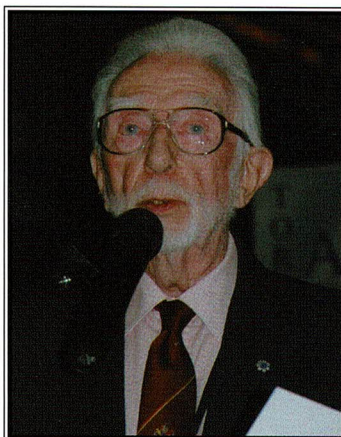
Onley said that "the Arrow represents that quote." He said that aviation pioneers such as the Wright brothers had their opponents, as did the designers and builders of the Arrow, and the founders and builders of the Toronto Aerospace Museum. "When we say 'The battle must always be renewed,' we mean that with mankind and technology, we always have to keep proving ourselves, because no matter what the record of success there are always narrow minds and vested interests that will be opposed."

"The upside of this process is that it provides Canadians with a physical legacy - a touchstone - where they can feel and touch greatness and understand the bases on which this great nation has been built," Onley said.

"On the 30th anniversary of the Arrow, hundreds of people took up the challenge ... until at last we can see in this amazing building this amazing Arrow model ... which is a vision, a living reminder, of our past and future in aerospace and aviation.

"In the name of her majesty Queen Elizabeth, I want to say to all of you who sparked that dream in the 1950s, and showed this world what this nation was capable of, and to all those of you who have helped keep this dream alive: we thank you, and we salute you!," Onley concluded.

In recognition of the Lieutenant Governor of Ontario's long-time support, Museum chairman Wayne Barrett presented him with Avro Arrow 50th anniversary watch - serial No. 001.



**James C. Floyd**

The second speaker of the evening was James C. Floyd, who started working for A.V. Roe and Company in the UK in the 1930s, and following his postwar move to Canada, progressed to Senior Vice President and Director of Engineering at A.V. Roe Canada, guiding development of the Arrow.

"This is a very important anniversary, the 50th of the first flight of the Arrow," said Floyd, as he greeted many former co-workers.

"I would like to say a few words about the people, my group of engineers; because with every project a (development) team takes on, the hardware is the final evidence as to if you and your colleagues did a good a job.

Bill and Leva Calver



"We had over 1,000 engineers and technicians working on the Arrow. They were the very best team ever assembled anywhere, as were the people in production, in the shops, and in sales and service. Avro Canada had become the Mecca for engineers from all over the world.

"I felt that with those people we could have done anything ... but the half-witted politicians threw it all away," said Floyd, referring to the Arrow cancellation of 1959.

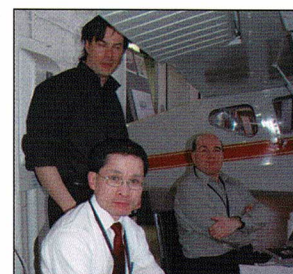
"What the engineers did afterwards is a testament to their ability," said Floyd. Some of the engineers went with Floyd to the UK and worked on the first government-funded study for a supersonic airliner, which later became the Concorde. Others went to de Havilland Canada, Atomic Energy Canada, and other aerospace employers where they made major contributions.

"Unfortunately most of the Arrow team have now flown off the planet. I have polished my wings in preparation for takeoff, but it has taken a little longer than I expected. Perhaps I should take a shuttle to the other place," he said smiling.

"For any of you have worked at Avro Canada or Orenda, and the families of those that worked there, I wish God's blessing. They and their families can be very proud of what they did 50 years ago," Floyd concluded.

The Golden Arrow fundraising dinner proved to be a brilliant success and is another milestone in the Toronto Aerospace Museum's mission to celebrate and publicize Canadian aviation innovation. View more photos at <http://avroarrowfirstflight.cachelan.com/>

**Kenneth Swartz**



Volunteers Brian Quan, Andrew Walz ad Joe Burtinsky



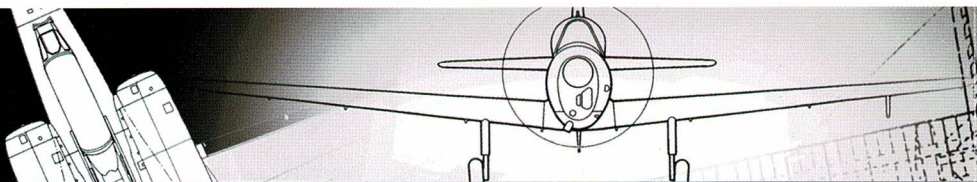
Special thanks to Brian Quan, Joe Burtinsky, Shoshana Teitelman, Christine Mason, John Kozak, Frank & Mary Gaspar, John & Mary Bailey, Ken Swartz, Claude Sherwood, Norma & Tara Deschamps, and Jason Eldridge.

We also wish to thank our corporate supporters: Adam Robinson, Robinson Show Services, Diamond Estates/Lakeview Cellars, Sleeman Breweries, Altitude Graphics, and Gervais Rentals.



Twenty-three former Avro and Orenda employees posed for a picture in front of the Arrow replica





## WINGS & WHEELS HERITAGE FESTIVAL

With an increased focus on indoor displays and exhibitors, this year's Wings & Wheels Heritage Festival attracted a larger audience and generated increased revenues for the Toronto Aerospace Museum.

Fabulous weather over the two days brought out large crowds, and increased participation by the Canadian Armed Forces provided a rare opportunity in Toronto for the public to view military up close on the ground.

This year many of the museum exhibits were shifted to The Hangar to provide more public visibility and visitor contact. The fly-in participants represented a greater cross section of Canadian aviation from vintage biplanes to military aircraft, helicopters and a privately-owned military jet.

This year's show celebrated the 80th anniversary of The de Havilland Aircraft of Canada Ltd., the 50th anniversary of the first flight of the Avro Arrow, and highlighted aircraft flown by the Canadian Armed Forces.

Vintage aviation highlights included a rare de Havilland D.H. 83 Fox Moth, a D.H. 87B Hornet Moth, our museum-operated Stinson V-77 and a Waco Taperwing A.T.O. The Air Force brought four aircraft to Downsview comprising a CF-18 from CFB Bagotville, a Lockheed CP-140 from CFB Greenwood, a Bell CH-46 Griffon from CFB Petawawa and a Snowbird CT-114 Tutor from CFB Borden. The air force crews were excellent ambassadors and delighted many children with cockpit visits.

The *Wheels* theme of the Festival also received strong representation with many classic cars, trucks, motorcycles and military vehicle vehicles displayed.

A special thank you goes out to the staff and volunteers who made this year's Wings & Wheels Heritage Festival another development milestone.

A special thank you to our co-host Parc Downsview Park Inc., and our corporate sponsors: Bombardier Aerospace, Q107, and Altitude Graphics. We'd also like to acknowledge the generous support of the Canadian Armed Forces for aircraft and ground exhibits.

*Kenneth Swartz*



The Avro Arrow replica greeted visitors as they entered the large indoor display hall (Ken Swartz)



Our Avro Lancaster Mk X FM 104 was a star attraction in the large Festival exhibit hangar (GT)



Festival highlights included a 1943 Stinson V-77 classic aircraft, Norton 850 Commando motorcycle, and a 1953 Morgan +4 convertible (Andy Cline)



The Museum has launched a fundraising campaign to acquire George Neal's rare D.H. 87B Hornet Moth biplane, C-FEEJ (ED)



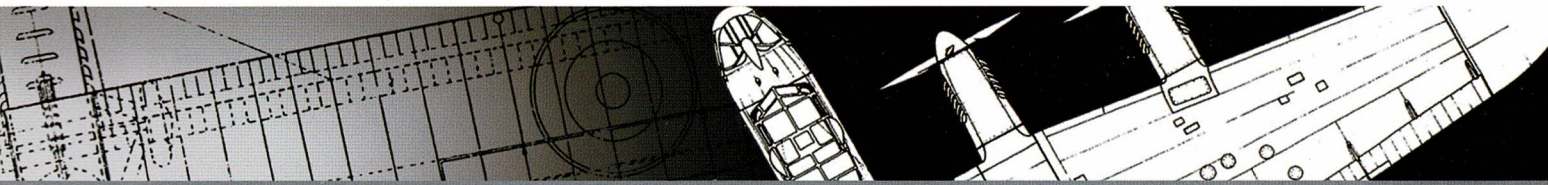
Vintage Wings flew 1932 D.H. 83 Fox Moth C-FYPM to Downsview to celebrate de Havilland Canada's 80th birthday (Ken Swartz)



Vintage Wings' Waco Taperwing A.T.O., CF-BPM (ED)







CITY TV interviewing Jeff Lewis, pilot and co-owner of the Aerovodochody L-29 Delfin jet trainer that flew both days (Ken Swartz)



80 classic cars attended over two days (GT)



L-29 Flypast (Eric Dumigan)



Alexandra Tahir having fun in the CF-101 Voodoo cockpit trainer (Gary Tahir)



A team from CFB Borden welcomed hundreds of visitors to sit in the cockpit of an authentic CT-114 Tutor once flown by the *Snowbirds* (Eric Dumigan)



Vintage Motorcycle (Eric Dumigan)



CH-146 Griffon from 427 Special Operations Aviation Squadron, CFB Petawawa (Eric Dumigan)



Volunteer Murray Vaughan with former RCAF Instructor Harry Sklar, who flew the Museum's Tiger Moth 3874 at RCAF Virden. Postwar, Sklar founded a major furniture maker (Ken Swartz)

The Museum's Avro CF-105 Arrow posing with a CF-18 from No. 425 Squadron and Lockheed CP-140 Aurora from 404 Squadron (Andy Cline)



### Special Thanks

Special thanks to the WWHF 2008 Committee, including Paul Cabot, Natasha Bowes, Kenneth Swartz and Claude Sherwood of the Museum, consultant Eamonn Flynn, Meline Beach and Rebecca Cotter of Parc Downsview Parc Inc., Pat Gonsalves of Q107, Lance Kessler of Bombardier Aerospace, and Louise Jackson.

A thanks you is also extended to the Motor City Car Club for organizing the *Show and Shine*, and to the Buttonville Flying Club for flight operations support. We also appreciated the support of the following businesses: Grand Prix Kartways for on-site reception facilities, Jeff Healey's Roadhouse for flight crew entertainment, and the Travel Lodge and Comfort Inn for CAF crew accommodation.



## 50TH ANNIVERSARY: DE HAVILLAND DHC-4 CARIBOU



One of the most remarkable aircraft developed by de Havilland Canada (DHC) was the twin-engine DHC-4 Caribou, which flew for the first time 50 years ago on July 30, 1958.

"No project came closer to bankrupting DHC, yet the Caribou is credited with setting the company on the trail to world status in the industry," says historian Fred Hotson in his book *de Havilland in Canada*. With the Caribou, DHC entered the big leagues as an aircraft manufacturer in the late 1950s and is considered the original forerunner of the DHC-5 Buffalo, Dash 8 and Bombardier Q400. Following on the success of its postwar single-engine designs, de Havilland engineers commenced development of a new twin-engine transport that would combine the payload capability of the Douglas DC-3 with the short takeoff and landing (STOL) capability of the Beaver and Otter.

Development of the new aircraft commenced in 1954 at a time when the company had a large order book for Beaver and Otter aircraft.

Five different engine and airframe combinations were considered during the initial DHC-4 twin-engine design. The first concept, powered by a pair of Pratt & Whitney R-1830s, had a fixed tricycle undercarriage and rear clamshell doors, with a gross takeoff weight of 13,000 lb (5,850 kg). Ultimately, a US Army requirement for a three-ton payload STOL workhorse led to the selection of a pair of 1,450 hp Pratt & Whitney R-2000 power plants and a design with a gross weight of 28,500 lb (9,900 kg). With only a general specification and drawings to show, de Havilland received an initial order from the US in 1957 for five aircraft at a set price of \$500,000 each with delivery in 24 months. The prototype Caribou lifted off the runway at Downsview at 2:30 p.m. on July 30, 1958 on a two hour first flight. Museum member George Neal and the late Dave Fairbanks were the pilots and Hans Brinkman the flight test engineer.

The two Caribou prototypes (CF-KTK-X and CF-LAN-X) were subsequently modified with a 45 in. plug inserted in the forward fuselage to obtain required Centre of Gravity movement. Development and sales of the Caribou helped carry the Toronto aerospace industry through the dark days following the cancellation of the Avro Arrow in 1959.

A total of 307 Caribous were built at Downsview between 1958 and 1973. The largest customer was the US Army, which bought 164 and flew them extensively in Vietnam. Their surviving aircraft were passed to the USAF and the South Vietnam Air Force. The RCAF flew nine CC-108 Caribous on tactical and Search and Rescue duties within Canada and on United Nations missions to Egypt/Gaza, Yemen, Cyprus, India and Pakistan.

Other government customers included Abu Dhabi, Ghana, India, Kenya, Kuwait, Malaysia, Oman, Spain, Tanzania, Zambia. In 2008, the Royal Australian Air Force continues to fly a dozen Caribou aircraft on tactical transport missions.



The rapid development schedule and limited availability of wind tunnel facilities led DHC engineers to a unique approach to model testing to support aerodynamic research during the Caribou's development. Scale models of various Caribou designs were attached to the front of a truck and driven at high speed down the Downsview runway, and a rig was later developed to fly the Caribou models on the back of an Otter aircraft for rapid collection of aerodynamic data.

The Toronto Aerospace Museum owns two of the original aerodynamic models used by this unusual test program. One model is of a twin tail configuration with the upswept horizontal stabilizer initially considered, and the second model features a conventional single fin and large double slotted flaps covering the entire wing span, which reflects the design selected.



As often happens, the rare twin engine model (painted in contemporary CAF search and rescue colours) was unexpectedly received one day as a donation. In time it will be restored and incorporated into an exhibit telling the story of the Caribou and the people who designed, built and flew this remarkable aircraft.

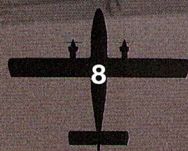
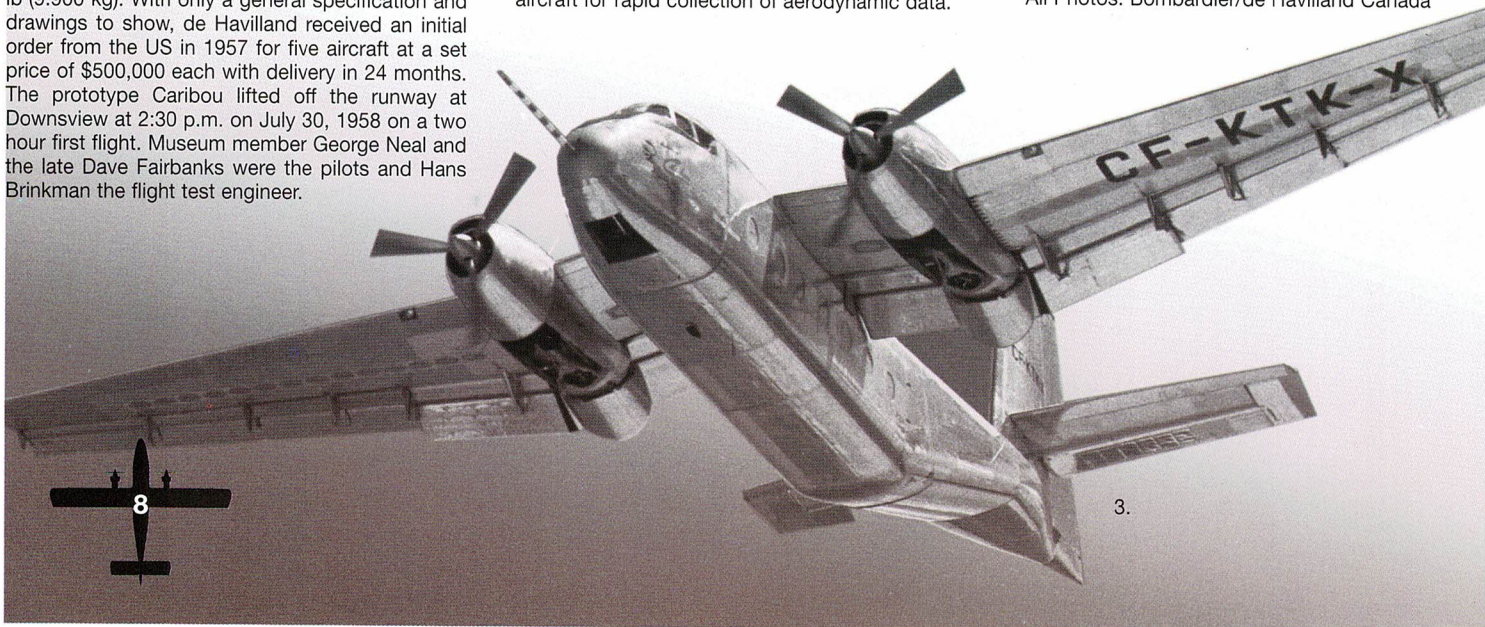
*The museum is seeking a DHC-4 Caribou to add to its growing de Havilland aircraft collection at Downsview. Your pledge of support will help us achieve this dream.*

Kenneth Swartz

Photos:

1. Prototype DHC-4 Caribou outside Downsview factory.
2. A Caribou model mounted on the back of the prototype DHC-3 Otter for aerodynamic testing.
3. Caribou No. 1 CF--KTK-X on it maiden flight, July 30, 1958.

All Photos: Bombardier/de Havilland Canada



3.



# EXHIBITIONS DEVELOPMENT STUDY

Lundholm Associates Architects recently completed an exhibitions development study for the museum to guide the Museum's exhibit development and support upcoming fundraising initiatives.

Michael Lundholm has over 35 years of private architectural practice, including seven years as the Director of Architecture for the National Museums of Canada, and his company is a well-known and respected museum consultant, planner and designer.

The study develops a focused interpretive strategy for visitors, a strategic approach to presentation and display of themes, history and artifacts on the aerospace story of the Toronto region, and finally the guidelines for creating more 'professional' displays throughout the museum.

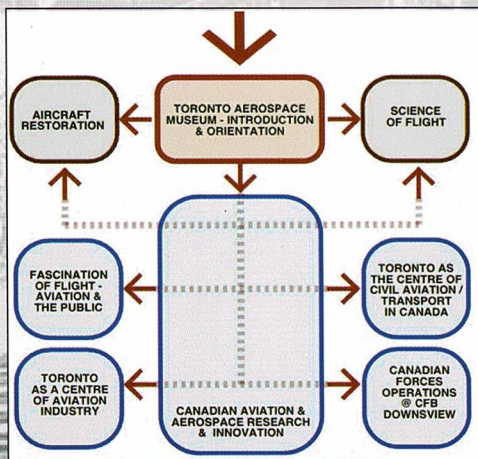
The design study was limited to the existing floor space occupied by the museum, even though it is widely recognized that more space will be required to accommodate the fully-assembled Lancaster, other aircraft the Museum plans to acquire, and future exhibits.

The interpretive plan considered 'Chronological' and 'Thematic' approaches, with a 'Thematic' approach favoured given the diversity themes and challenge of presenting a linear story in the existing building.

Six specific areas, or featured segments, are illustrated with three-dimensional drawings to suggest what a visitor experience might be like. Three such illustrations appear on this page.

The report recognizes the unique heritage and architecture of The de Havilland Aircraft of Canada Ltd. factory buildings and their transformation into a unique and engaging museum space.

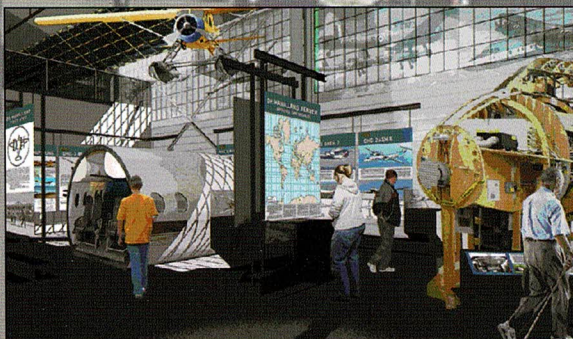
The Lundholm study will be used to support the Museum's exhibit development and fundraising efforts.



Interpretive Strategy - Alternative 2: Thematic Order



Toronto Aviation History Gallery Concept



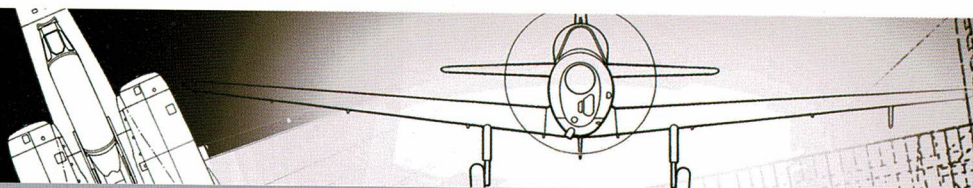
Canadian Aviation Innovation - de Havilland Canada Gallery Concept



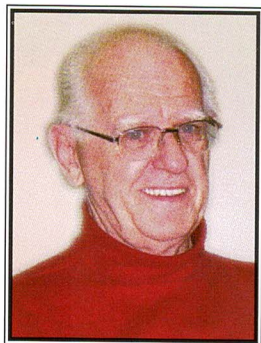
Science of Flight Gallery Concept







## CEO REPORT



Non-profit volunteer organizations such as the Toronto Aerospace Museum regularly need to renew their volunteer roster.

Hard work by many over the past few years has resulted in a growing number of visitors and increased participation in Museum programs, creating many new volunteer opportunities.

Recently, several of our long-serving volunteers have decided to pursue new careers or more fully embrace their retirement, leaving the Museum with a shortfall of volunteers to cover essential administration tasks. As a stop gap measure, Museum management and staff have stepped in to assist, putting in extremely long days, but this is not ideal or sustainable.

One critical area where we need immediate support is staffing the Gift Shop and Admissions desk. If you enjoy meeting the public and have a minimum of three hours a week to spare, we'd like to hear from you. Assistance is required now to support our expanded summer hours.

The recent e-mail appeal for volunteers has attracted some new talent, but more people are needed to maintain our growth.

Some of your members volunteer time to specific projects on a regular basis, while others work on the most pressing projects identified when they serve their volunteer shift. Both kinds of volunteers are required, as is a pool of *on-call* members

willing to respond at short notice for immediate needs.

In addition to the satisfaction and sense of community that volunteering breeds, Museum members also receive tangible benefits in the form of a year-end tax deductible receipt for travel costs, meals and other volunteer-related expenses that fall within Canada Revenue Agency guidelines.

Take the initiative and call the Museum office now to serve as a volunteer. Your support will be appreciated!

**CLAUDE SHERWOOD**

## BOARD OF DIRECTORS NEWS

### Annual General Meeting Confirms New Museum Directors

More than 60 members attended the Annual General Meeting on May 3, 2008. Volunteers Bill Killough, James Montgomery and Frank Gaspar were elected to be first-time members of the museum's Board of Directors, and Wayne Barrett and Lyle Abbott were re-elected for a second term. Directors Albert Peres, Kenneth Swartz, and Richard Banigan still have one more year to serve in their terms. The museum was fortunate to have many qualified candidates standing for election this year.

A big thank you is also extended to former chairman Robert Murphy, Lea-Anne Leavens and Len Fox who completed their terms on the Board. On a sad note, Board member James Calvert passed away suddenly on May 1, just before the AGM. James was a long time volunteer on the Avro Arrow replica project, and a member of the Finance Committee.

Wayne Barrett was subsequently confirmed as Chairman and Frank Gaspar appointed Vice Chairman. The Board also appointed Billy Lowe to replace Brad Chapman who has resigned. Billy Lowe is a long time pilot and member of the Buttonville Flying Club.

## OBITUARIES

**James Budd Harvey** died suddenly, at this residence in Streetsville, on Saturday January 12, 2008 in his 83rd year. Jim Harvey, beloved husband of Judith. Loving father of Pamela and her husband Peter Morgan. Grandfather of three grandchildren and four great grandchildren.

Jim Harvey spent most of his career at Avro and Orenda. He was the appointed the Aerospace Heritage Foundation of Canada (AHFC) appointee to the Museum's Board of Directors in 2007-2008.

**James Exley Calvert** died suddenly on May 2nd, 2008 in Toronto. Dear son of the late Aileen and Exley Calvert. Beloved husband of Mary (Power) Calvert. Much loved son-in-law of Charlotte Morgan. Dear brother-in-law of Don and Elizabeth McKibbin. Beloved uncle of Jennifer, Chris and Kerry McKibbin. A private service was held on May 5th, 2008. In lieu of flowers, the family asked that donations may be made to the Toronto Aerospace Museum.

James Calvert was one of the original volunteers on the Museum's Avro Arrow replica project. He attended the first planning meeting in February 1998 and was actively involved in construction of the cockpit tub and other parts of the replica. He was later elected to the Board of Directors and served on the Finance Committee.



2008-2009 Museum Directors: Bill Killough, Billy Lowe, Albert Peres, James Montgomery, Richard Banigan, Frank Gaspar, Wayne Barrett, Kenneth Swartz and Lyle Abbott



# MUSEUM & VOLUNTEER NEWS

## Canadian Centennial of Flight in 2009

In 2009 Canada will celebrate its Centennial of Flight, marking the 100th anniversary of the first powered flight of the Silver Dart in Baddeck, Nova Scotia. John McCurdy flew the Aerial Experiment Association's (AEA) fourth aircraft off the ice of Bras d'Or Lake on February 23, 1909. The Toronto Aerospace Museum will highlight the 100th anniversary of powered, heavier-than-air flight in Canada with a variety of special programs and events. Alexander Graham Bell founded the AEA.

## Welcome to New Staff Members

John Kozak is the new manager of our Runway 33 gift shop. John joined the Museum in 2006. He spent most of his career working as an actor and as the owner and director of a private school. Special thanks to Dave Drope for his term as gift shop manager. Dave stepped down earlier this year to spend more time travelling and at the cottage with Harriet, his wife.

Natasha Bowes is our new Museum Administrator, taking over from Rebekah Mitchell (nee Bebee) who became a new mother early this year. Natasha has been an active volunteer for a couple of years and key member of the Volunteer Committee

## Museum Featured in History Television Beaver Documentary

The de Havilland DHC-2 Beaver is the subject of a new documentary on History Television, featuring actor/pilot Harrison Ford. *The Immortal Beaver* tells the story about one of the most accomplished planes in history which was developed in 1947 in the main gallery of what is now the Toronto Aerospace Museum. Many of the interviews took place at the Museum's Beaver homecoming fly-in and symposium in May 2007. Director David Malysheff and Producer Arwen Hunter interviewed pioneer test pilots Russ Bannock and George Neal, historians Neil Aird and Kenneth Swartz, and many Beaver pilots, engineers and enthusiasts. A DVD will be available for sale later this year.

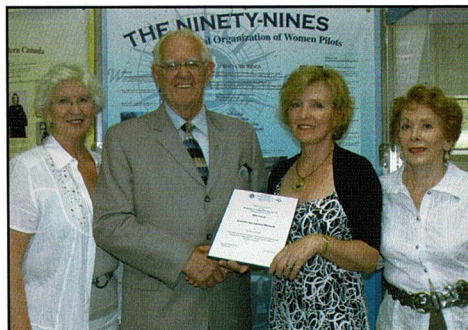


## Pilots of 10,000 Mile DHC-2 Beaver Flight to Visit Museum

On August 2, 2008, Seattle pilots Mark Schoening and Doug DeVries departed for a 10,000 mile flight around Canada via the famed Northwest Passage in a pair of DHC-2 Beavers on fixed floats. The pilots and their TV crew are scheduled to arrive in Toronto Harbour on Sept. 8, weather permitting. See [www.greatarcticairadventure.com](http://www.greatarcticairadventure.com) for updates.

## Museum Receives Ninety-Nines Award

The Museum has received the 2007 *Canadian Award in Aviation* from The Ninety-Nines, the international organization of women pilots. The funds will be used to protect the existing display on the Canadian Ninety-Nines pioneers and construct a display on Women in Aviation.



Museum CEO Claude Sherwood receives plaque from Ninety-Nines representatives, from left, Margo McCutcheon, Jocelyn LeCluse and Dee Birchmore.

## Downsview Park No. 101 Bus Service Now Permanent

TTC bus service to Downsview Park from Downsview station is now permanent. The bus operates from approx. 6:00 a.m. to 10:00 p.m. Monday to Friday and from 9:00 a.m. to 10:00 p.m. on weekends and holidays. A wheelchair-accessible Orion VII low-floor bus is used, and service is approximately every 20 minutes.

## 1943 Stinson V-77 Reliant Flies for Museum

For the last couple years, the Museum has hangared Barry Picov's beautifully restored Stinson V-77, CF-CAJ, at our facility at Downsview. This year, through an agreement with the owner, the Museum has been flying this beautifully restored aircraft for special occasions and at select air shows to promote our museum. The aircraft was one of 500 flown by the Royal Navy during the war. Retired Air Canada pilot Ken Patry flew the aircraft for a new film on pilot Amelia Earhart, and ex-Delta 767 pilot Glenn Goldman flew the aircraft to the Genesee 2008 *The Greatest Show on Turf* in July. Barry Picov is sponsoring all flying costs.

## Cessna 150 Restoration Project Arrives

In July, the Museum took delivery of the damaged hull of Cessna 150D, C-GPXM, for use in our educational programs. The aircraft is a gift from Peter Muehlegg of Skywagon City in Brechin, Ontario who acquired the Museum's Percival Sea Prince in 2006. The goal is to restore the Cessna with a complete set of working controls so it can enhance student education in our Science of Flight gallery. Peter Uus is heading up the volunteer team that will restore the Cessna.



Cessna 150 awaits rebuild

## Avro Lancaster Mid-Upper Turret Acquired

The Museum recently acquired mid-upper turret for Avro Lancaster FM 104 built by the Glenn Martin company of Baltimore. The mid-upper turrets of most RCAF Lancasters were removed when the aircraft were refurbished for postwar service. The turret was located in California and transported to Toronto with the assistance of volunteer Ken Mist, an employee of global logistics specialists Kuhne & Nagel. The turret is intact but has damage from a warehouse fire.



## MUSEUM VOLUNTEERS GAIN NEW BENEFITS

To recognize and award members who volunteer more than 100 hours a year to the Museum, a new appreciation program has been launched that allow qualified volunteers free or discounted admission to more than 35 museums, galleries and attractions across Ontario.

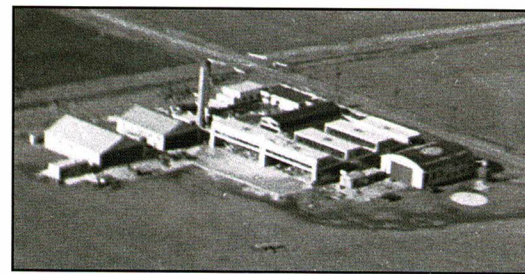
In order to qualify, an individual must be a paid up member and must have registered a minimum of 100 hours of volunteer activity with the volunteer committee in the fiscal year ending March 31, 2008. For further information, contact Natasha Bowes at the Museum office.



## The de Havilland Aircraft of Canada Limited Downsview Site - 1929-1940



The de Havilland factory opened on Sheppard Avenue in September 1929. The "Moth" hangar was built at Weston in October 1928 and moved to Downsview in 1928. Both of these buildings still exist and are the oldest surviving commercial aviation heritage buildings in Canada.  
View from south east.



In 1938, the hangar and offices were expanded to support Tiger Moth production for the RCAF.



Spring 1941 - Four new D.H. 82C Tiger Moths await delivery.  
Photos: Fred Hotson Collection/Toronto Aerospace Museum

## UPCOMING EVENTS 2008

- Sept. 20 – Canadian Aviation Historical Society Speaker Program, 1 p.m.  
*Memories of a CF-100 'Clunk' Crew*
- Sept. 24 – Volunteer Orientation, 7 p.m. – 8 p.m.
- Sept. 27 – Volunteer Orientation, 10:30 a.m. – 11:30 a.m.
- Oct. 1 – Volunteers Welcome Back BBQ, 6:30 p.m.
- Oct. 18 – Canadian Aviation Historical Society Speaker Program, 1 p.m.
- Nov. 11 – Remembrance Day Program
- Nov. 15 – Canadian Aviation Historical Society Speaker Program, 1 p.m.
- TBA – Holiday Season & Christmas Party
- Dec. 20 – Canadian Aviation Historical Society Speaker Program, 1 p.m.

### Other Regular Monthly Activities at Museum

- Wed. and Sat. Lancaster FM 104 Restoration Team  
CONTACT: Andrew Walz,  
maxwedge413@hotmail.com
- Wednesdays *Open Door* volunteer committee meetings, 7 p.m.
- 1ST AND 3RD Tuesdays  
Marketing Committee meeting  
CONTACT:  
Robert Cohen  
robcohen@rogers.com

## EDUCATIONAL PROGRAMS

The Toronto Aerospace Museum has a rich variety of programs for elementary and secondary school students, children and families. All special programs run from 10:00 a.m. - 3:30 p.m., and cost \$45 plus 5% GST. For further information and bookings, contact, John Harper, Educational Director Tel. 416-638-6078 or e-mail education.tam@bellnet.ca.

Here is a look at our upcoming events for 2008

- FUTURE PILOTS' DAY LEVEL I  
**OCTOBER 1** - (AGES 10-14)  
Meet pilots, "fly" a glider simulator, learn about flight controls, instruments, view aviation videos, etc.
- FUTURE PILOTS' DAY LEVEL II  
**OCTOBER 25** - (AGES 10-14)  
An extension of Level I, plus navigation, engines, weather, and "fly" in our real aircraft flight simulator.
- FUTURE PILOTS' LEVEL III FLIGHT DAY  
**OCTOBER 26** - (AGES 10-14)  
An extension of Level II, which includes a flight in the right cockpit seat of a Cessna aircraft over Toronto with a fully qualified instructor.  
Price \$115, plus 5% GST.

## VOLUNTEER OPPORTUNITIES

### OPERATIONS

**RECEPTION** - telephones, admissions and sales

**GIFT SHOP** - counter and e-sales, displays, inventory mgt.

**FACILITY** - Museum and display upkeep  
Information management - technical support

### EDUCATION PROGRAMS

**TOUR SCHEDULING** - bookings

**TOUR GUIDES/DOCENTS** - group guide, lectures

**OUTREACH** - public speaking, mall displays

**PROGRAMMING** - event planning and promotion

**LIBRARY** - administration, research, accessioning, archives

### BOARD COMMITTEES

**FUNDRAISING** - planning and implementation, writing grant proposals

**MARKETING** - development and distribution of PR materials

**MEMBERSHIP** - promotion, database management, mailings

**NEWSLETTER** - writing, layout, distribution

**VOLUNTEER** - outreach, training, job matching

**WEB SITE** - design and content updates

### PROJECTS

**ARCHIVES** - Historical research

**DISPLAYS** - planning, designing, constructing, upkeep

**AIRCRAFT** - restoring, repairing, refinishing

**SPECIAL EVENTS** - planning, organizing



## YOUR HELP IS NEEDED!