

# Toronto Aerospace Museum Newsletter

Pub #1670042

Spring 2000

Volume 1, Issue 1



# MISSING

## AVRO LANCASTER FM104

**Wingspan: 102 feet**

**Height: 20 feet 4 inches**

**Length: 69 feet 6 inches**

**Approx. Weight: 40 000 lbs**

**Date Last Seen: November 7, 1999**

**Location Last Seen: Lakeshore Boulevard, Toronto**

5610

# Management Report

By Nat Mchaffie, Executive Director

It's nearly spring and time for a very brief report on our activities as we look forward to Saturday bar-b-ques by the hangar doors, long, light evenings and summer flying.

Spring also brings a new start for our museum with the election of our Board of Directors at the Annual General Meeting. We have a strong new Board combining the knowledge and perseverance returning members and fresh energy from our new members. Please Welcome: Nick Doran, Chairman; Steve Glogowski, Vice Chairman; Marilyn Dickson, Secretary; Al Sablatnig, Treasurer; Ron Burger; Ian Farrar; Olana Hastings; Mike Libanio; Bob Murphy; Bill Tee; Andrew Walz; Terry Ward; George West. The A.G.M. was well attended by about 75 members, many of whom stayed on for an afternoon of "hangar talk", wine and food.

1999 was the year we really got ready to open. There was far more to do behind the scenes than we had realized - plumbing, roof repairs, ceiling repairs, electrical work, emergency lights, exit signs, fireproof columns for the mezzanine, etc. etc. Equally important has been the development of our active volunteer teams who independently plan and achieve the museum's work. We now have teams for Acquisitions, Communications, Displays,

Education, Tours, Building maintenance, Gift Shop, Machine Shop, Membership and Safety.

At the present time the management teams are occupied with budgets, planning for the coming year and getting ready for the public on a permanent basis starting with the Toronto Aviation and Aircraft Show, May 5 to 7. From lay-outs and displays to staff rosters to cleaning to no-parking signs, this last month already feels like it is last minute. I frequently hear from other museums that they are impressed by the speed of our progress. Our volunteers have a lot to be proud of.



L - R: Andrew Walz, Terry Ward, Michael Libanio, Ron Burger, William Tee, Olana Hastings, Bob Murphy, Nick Doran, Al Sablatnig, Steve Glogowski  
Absent: Marilyn Dickson, Ian Farrar, George West

## Upcoming Events

April 13, 2000 TAM Members Night 7pm at the museum Guest Speaker will be Mr. Joe McBrien. Mr. McBrien is a retired RCN officer who flew Panther jets off the American aircraft carrier U.S.S Oriskany. He will be giving a slide presentation about daily life on the Oriskany during the Korean War. Contact: Paul Cabot, (416) 231-8841

April 22, 2000 Introduction to Gliding - Erin Soaring Contact: Eddie Cazes; Hm. (905) 709-7990, Wk (416) 663-1312 Ext. 23, eddie@dscope.com

May 5, 2000 Official opening of the Toronto Aerospace Museum Tentative time is noon at the museum. This is it !!! Please make every effort to be there. This will be an important time for the museum. We are inviting a lot of politicians and we want to prove to them that the museum deserves their support. For further information contact Nat (416) 638-6078.

May 5-7, 2000 Toronto Aviation & Aircraft Show The show will take place in the hanger beside the museum. Contact: 1-877-To-Fly-In (863-5946) <http://www.aviationshow.com/>

May 17, 2000 Introduction to Gliding - Erin Soaring Contact: Eddie Cazes; Hm. (905) 709-7990, Wk (416) 663-1312 Ext. 23, eddie@dscope.com

May 27-28, 2000 Muskoka Airshow Contact: (705) 687-1620 <http://www.muskoka.com/airshow>

June 3-4, 2000 St. Thomas Airshow Contact Tom Walsh (519) 659-3298 <http://www.ontarioairshows.com>

June 17-18, 2000 Hamilton Airshow Contact: (905) 528-4425 <http://www.hamiltonairshow.on.ca>

June 23-25, 2000 London Airshow & Balloon Festival Contact 1-800-Inflite (463-5483) <http://www.londonairshow.com>

July 26-Aug 1, 2000 EAA Airventure Oshkosh, Wisconsin Contact (920) 426-4800 <http://www.eaa.org>



# Percival Sea Prince T.MK.1 WF133

by Frank Artés

Our museum is fortunate indeed to now have as part of its collection, a flying Percival Sea Prince T.MK.1. For those who are unfamiliar with the type, it is a twin-engine, high-wing British design, that went into service with the Royal Navy as an aircrew trainer in the early 1950's. It could carry practice bombs, wing-mounted marine markers and anti-submarine indicators; however, our aircraft was used to train observers and telegraphists.

Built by the Percival Aircraft Company at Luton Airport in Bedfordshire, this Sea Prince first flew in April 1952 carrying the registration WF133 and was posted to 750 Squadron, RNAS Culdrose, Cornwall.

The aircraft's service career took it from one end of Britain to the other, with periodic assignments at various Royal Navy bases in Cornwall, Scotland, and Wales, plus a tour of duty in the Mediterranean. After 27 years of service, WF133 was sold to Robert Thorndyke,

who brought it to Oshawa where it was lovingly preserved by Bill Mackintosh.



L-R: Bill Mackintosh, Alan Dares, Terry Ward, Bob Thorndyke (donor), Ron Burger, Lawrence Campion, Front: Andrew Mackintosh

WF133 arrived at the museum on November 13th, piloted by Alan Dares, and is currently "winterized" on the airfield. Once the Sea Prince is moved inside, a comprehensive maintenance schedule can begin to keep the aircraft airworthy. As one of only two examples flying worldwide, this aircraft is a real "feather in our cap".

## Get Involved :

The Sea Prince Support Group is looking for volunteers to help maintain the aircraft and keep it in flying condition. It costs \$20 to join the group plus an additional monthly fee of \$5 to help defray the hourly flying expenses, and members will be eligible to fly in the aircraft. If

you would like to get involved contact Alan Dares, Project Coordinator: (416) 486-7662 for details.

# Arrow Targets

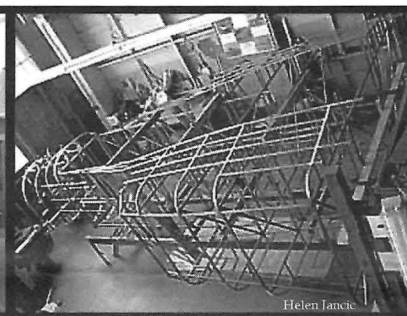
## Comments on the TAM Arrow Replica Project

By Claude Sherwood, Arrow Project Director

The Arrow Replica project is progressing nicely, but we need to accelerate its production. Over the last two years significant strides have been made due to kind donations of equipment, materials, funds and a developed engineering plan.



Helen Jancic



Helen Jancic

very desirable that the Arrow be completed by the end of the year 2000. If this target can be achieved, the public roll-out could happen on, or before, the 42nd anniversary of the Arrow's first flight. That's a day to look forward to with anticipation and pride

This full-sized replica is being fabricated at TAM in many large sections with a steel structure and an aluminum skin. A number of smaller parts are also being constructed in home workshops.

Work is nearing completion on the simulated cockpit and the Nose Section is well underway. It is planned to have these parts completed by the end of April, when they will be part of a "magical display" at the Toronto Aviation & Aircraft Show, May 5-7, 2000.

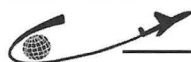
Construction of the wing and fuselage sections have started but the teams need more volunteers.

Currently, volunteers are also constructing a Sparrow II Missile, levers and arms for the Weapons Bay, the Tail Cone and a few other smaller parts. Plans are now available for more parts and components to be started and each one that is completed helps our progress.

Our overall schedule for completion of the Arrow Replica is quite ambitious. It is

Again this year the TAM has been invited to have an Arrow display at the CNE. The Nose Section is the likely Arrow component for this very public display.

Your participation in this special TAM project is now needed. If you're interested in participating, please contact the museum and we will get you involved in one of the teams helping to complete the Arrow Replica.



# FM104 Avro Lancaster History

by Glen Beauchamp

In 1944 Avro Lancaster Mk X FM 104 was built by the crown corporation Victory Aircraft Limited at Malton, Ontario (now part of Toronto). In January, 1945 the aircraft was flown to England and kept as a reserve with No. 32 Maintenance Unit, until the war in Europe ended.

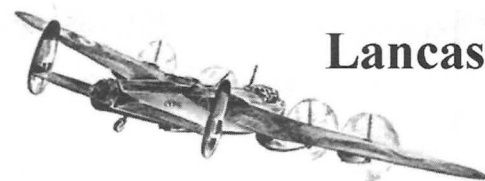
FM104 was sent back to Canada in June 1945 and stationed in Yarmouth, Nova Scotia, as part of the build up of 408 and 428 Squadrons RCAF. These Squadrons were to be part of Canada's "Tiger Force" for the continuing war with Japan, but peace came before the squadrons saw any service.

On August 13, 1945 FM 104 was officially handed over to the RCAF by the Mutual Aid Board and slated to be put in storage. However, by November 1945 it was converted to Search and Rescue configuration and posted to No. 10 Rescue Unit out of Argentia, Newfoundland. In April 1951 FM104 was again converted into a Maritime Reconnaissance role for anti-submarine patrol and posted to 107 Unit of Maritime Air Command, based out of Torbay, Newfoundland. The aircraft served with 107 Unit in various reconnaissance, search and rescue roles throughout the 50's and early 60's.

On February 10, 1964 FM104 was sold to the Royal Canadian Air Force Association, Toronto Region and took part in the Official Retirement of Lancasters. The celebration was held at RCAF Station Downsview on April 9, 1964. During the summer of 1964, FM104 was put on display at the Canadian National Exhibition.

In 1965 FM104 was donated by the Royal Canadian Air Force Association to the City of Toronto to be placed as a memorial along Lakeshore Boulevard near the CNE grounds. Responsibility for Lancaster FM104 was transferred to Heritage Toronto. After 30 years outdoors, corrosion, metal fatigue and vandals were threatening to destroy the aircraft. Heritage Toronto held a competition to find an indoor home and The Toronto Aerospace Museum was selected. With the support of many volunteers and sponsors FM104 was removed from its pedestal and transported to the museum's main building at CFB Toronto, formerly RCAF Station Downsview, where it originally retired some 36 years ago.

Now housed indoors, FM104 will undergo a complete restoration by dedicated volunteers and generous donors. Members and visitors are able to drop by and watch the restoration in progress.



**Lancaster**  
by M

The Lancaster Restoration Group was formed by an enthusiastic group of Toronto Aerospace Museum volunteers who are dedicated to the preservation and restoration of Lancaster FM104.

Since working together as a team on FM104's recovery, the Lancaster Restoration Group is currently working towards establishing a restoration plan, work area and educational resources.

Without the tireless efforts of so many members,





# Lancaster Recovery Date Of Events

by Michael Libanio

This is a brief synopsis of the careful, and painstaking recovery of Lancaster FM104 from the plinth on which the aircraft rested for 35 years. In every aspect, care was taken to label any and all small pieces that were removed from the aircraft and the utmost care was taken at all times to ensure the safety of volunteers on site, and of the aircraft itself. At no time during this process was any part of this aircraft damaged. Through hard work and dedication by volunteers and kind donation of services by our sponsors this recovery was a success and no damage was incurred by the aircraft.

Saturday, October 16, 1999 :  
All 4 props, spinners and engines removed, and delivered to the museum

Sunday, October 17, 1999 :  
Rudders and vertical stabilizers removed, and delivered to the museum.

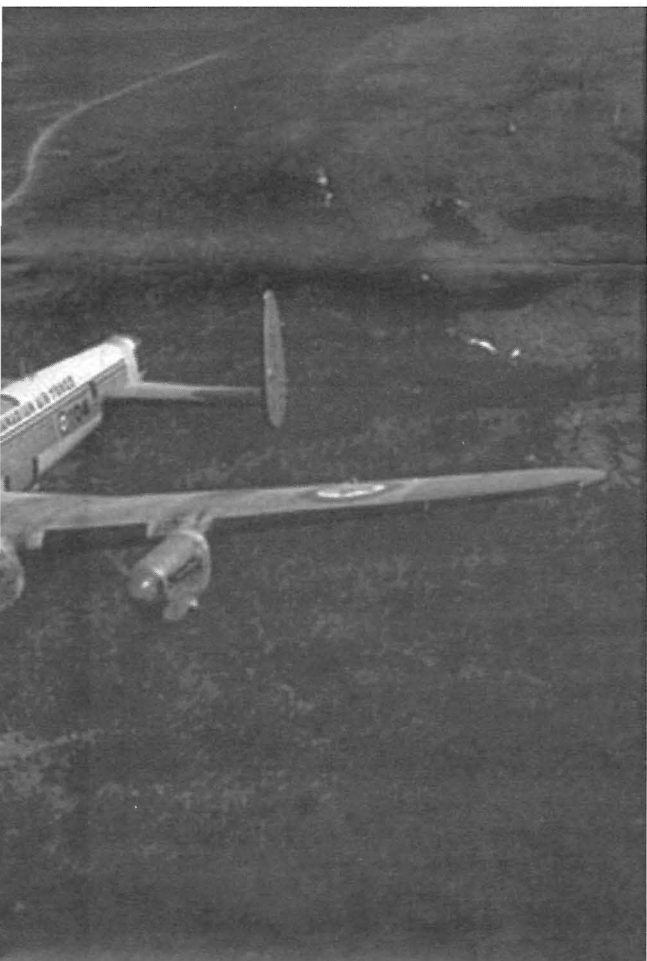
Saturday, October 23, 1999 :  
No major components were removed due to weather concerns

Sunday, October 24, 1999 :  
Port side wing removed, and lowered safely to the ground. No damage to the aircraft resulted. This wing was then placed on a transport truck for delivery to museum.

Saturday, October 30, 1999 :  
Starboard side wing removed, and lowered safely to the waiting transport truck for delivery to museum. The fuselage was lowered onto a specially constructed support, and bolted into place. From this evening on, various member volunteers stood watch over the Lancaster until removal to the main Museum building was possible.

Sunday, October 31, 1999 :  
Port and Starboard wings moved up to museum and placed on supports inside the building. Work continued on the main fuselage to clean and disassemble the fuselage.

November 6-7, 1999 :  
The fuselage is disassembled into components that allow for safe transport to the museum. Fuselage and components are carefully placed on supports inside the museum.



## Restoration Group

Michael Libanio

volunteers, sponsors, donors and The City of Toronto the success of this project would not have been realized. To all of you we say Thank You, and with your continued support and work we will succeed in preserving a proud piece of our Canadian aviation heritage which will serve to educate future generations.

If you are interested in becoming a part of the restoration team or if you would like to support us financially or through kind donation please feel free to contact Michael Libanio (416) 391-5634, [avarrow@home.com](mailto:avarrow@home.com)



Lorne Blunt

## TAM On The Road



**Flight 2000 by Michael Brigham:**  
On January 22, 2000 The Toronto Aerospace Museum had a presence at Flight 2000, the Aerospace Heritage Foundation of Canada's dinner celebration of the Avro CF-100 Canuck's 50th Anniversary of first flight. There were over two hundred people in attendance, including Jim Floyd, Don Rogers, Jan Zurakowski, and Astronaut, Col. Frank Borman. Special thanks to James Coward, Helen Jancic, Stephen Salmon and Terry Ward who represented the museum and spread the word.



**Heritage Showcase by Helen Jancic:**  
From February 18-20, 2000 The Toronto Aerospace Museum with the support of the Aerospace Heritage Foundation of Canada were invited to participate at Heritage Showcase which was located at Scarborough Town Centre. As a dual effort between volunteers of both organizations the event helped to increase public awareness. Special thanks to Michael Brigham, Mike McAllister, John Slade and Aaron Stapley for being enthusiastic representatives of the museum.

## Restoration News - Project Updates

By Frank Artés

**LAZAIR Sr.1** The Lazair Ultralight Project is well under way with the main fuselage components stripped of all corrosion and reconditioned to airworthy standard. These include the ruddervator, struts, main landing gear and nose wheel. The wings are in excellent condition structurally, although the wing covering material has yet to be assessed. The fuselage will be the first section to be assembled, and this should take place sometime this Spring. The Lazair project has several "wants", so please check the Classifieds Section below. - Thanks to Lorne Blunt

**GRUMMAN S-2 TRACKER** The largest intact aircraft in the collection has been getting a major clean up over the past few weeks in preparation for the official opening day. The Sono Bouy tubes, which had been temporarily removed, are due to be replaced in the rear of the engine nacelles that house the two Wright Cyclone radials. Thanks to George Hotham

**DH-82 TIGER MOTH** The Tiger Moth team is currently involved in manufacturing 40 plus wing ribs from aircraft grade Sitka Spruce, utilizing a rib jig, which also had to be made. This is a major project involving the upper and lower wings, and ailerons, which are to be built from scratch, as a complete new set. The cockpit instruments are "off site" at the moment being de-milled, a process which removes the radium-based light green paint from the dials and replaces it with a much less toxic material. - Thanks to Bob Murphy

**CANADAIR CT-114 TUTOR** The wheel wells, which house the main landing gear assemblies on the needle-nose Tutor, have been getting a lot of attention during the past few weeks, with corrosion removal. The wing flaps and ailerons are also being cleaned up and re-installed, as the crew expect to attach the wings to the fuselage within the next few months, making the aircraft a more complete exhibit for the public. Please check the Classifieds Section for "wants" on the Tutor project. - Thanks to Louis Tooulis and Bob Geoghegan

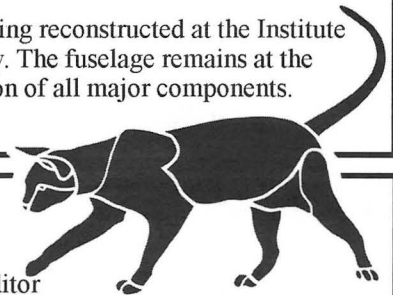
**THE ORNITHOPTER** The Ornithopter project is back on track. The wings are being reconstructed at the Institute for Aerospace Studies, University of Toronto with the fabrication of wing ribs well under way. The fuselage remains at the museum where the airframe has been completely stripped down to allow a thorough inspection of all major components. - Thanks to James DeLaurier

## Newsletter Team

Paul Cabot, Team Manager  
Frank Artés, Associate Editor

Helen Jancic, Layout Editor  
Frank J. Gaspar, Associate Editor

Did you enjoy this issue? Want to contact us or contribute? Contact Paul Cabot (416) 231-8841, paul.cabot@sympatico.ca



# Volunteers at TAM

By Frank J. Gaspar

Many people come together contributing their time and efforts to make TAM what it is. But, who are these people, where do they come from and what do they do? This column will be a regular feature providing some insight into a volunteer randomly chosen for each addition of the newsletter.



## Frank Piper

Frank Piper has been with TAM for two years and does "whatever" to help with the maintenance requirements around the museum. More than muscle power is required to move equipment around the museum. Frank is the man who rebuilt our forklift. Engines are his thing.

For the 1999 TAM exhibit at the CNE, Frank rebuilt a 1940's vintage Pratt and Whitney, 14 cylinder, air cooled, super charged Twin Wasp R1830 engine. By using cutaways, visitors are able to peer inside a functioning engine and observe the process that provided the power for the classic DC-3 aircraft. Working from pieces, it took Frank about 70 hours over three and a half months to assemble.

Frank's interest in TAM stems from his early career in the U.S. Air Force spanning thirteen years commencing in 1939. Specific aircraft on which he flew included the DC-3, DC-6, DC-7, B-17 and B-25. Upon leaving the Air Force, he established his own flying company - flying aircraft for assignments as diverse as crop dusting or for movies. Two movies featuring aircraft flights by Frank include "Fort Saskatchewan" and "River of No Return" - which starred Marilyn Monroe.

During this time he started buying, selling and rebuilding aircraft - a business he still continues. Commercially, Frank flew as a flight engineer with Wardair on DC-10's in the early 80's. Still flight qualified, Frank continues to fly and is currently rebuilding a 310 Cessna Twin which he purchased at a U.S. Customs / drug repossession auction in Miami.

Aviator and mechanic, Frank has dedicated his life to flight.

## "Wants" - Classified Section

Golf Tournament : Anyone interested in attending a TAM Golf Tournament please contact Paul Leclerc (416) 291-2329

Wanted : Motor for Table Saw  $\frac{3}{4}$  horse, 110 or 220 v, 60 cycle, 1750 RPM, with capacitor start. To fit a 10" Beaver tablesaw. Contact: Lawrence Campion in the machine shop (416) 638-6078.

Wanted Air Show Posters : The museum is interested in acquiring Air Show Posters. If you have any that are in good shape and you don't want them anymore. Please consider donating them to the museum. Contact: Nat Mchaffie in the front office (416) 638-6078.

Wanted "Hall" Airspeed Indicator : The Lazair project is looking for a "Hall " Airspeed Indicator with a top speed marked at 55 mph. Also needed is a suitable Compass. Contact: Lorne Blunt (416) 233-8603

Wanted "Needle Nose" Fairing : The CT-114 Tutor project is looking for an original "needle nose" fairing for the aircraft. They are currently using a similar type from a DC-3 but it needs some modifications in order to fit. Also needed is a second complete Tutor airframe which will be utilized for parts. Contact: Louis Tooulas (416) 423-8112

Wanted Quark Express : If any member has a recent copy of Quark express please contact Paul Cabot at (416) 231-8841, paul.cabot@sympatico.ca

Wanted Financially Skilled Members : Any members with a financial background or an interest in finance willing to volunteer their skills are needed. Contact Al Sablatnig (416) 480-2992. The handling of accounting is a huge undertaking and any help is appreciated.

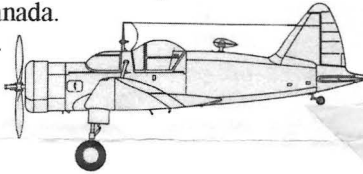
Airshows/Special Events : Anyone interested in going to airshows and related aviation events with a group of TAM members can contact Paul Cabot at (416) 231-8841, paul.cabot@sympatico.ca



## Spring 2000 TAM Test

All entries must be received by May 31, 2000. The winner will receive a \$5 Gift Certificate for the Gift Shop. Please send your answers to The Toronto Aerospace Museum Office by mail, Fax (416) 638-5509 or Email paul.cabot@sympatico.ca. Winners and answers will be published in the next issue.

1. Who was willing to buy the Avro C102 Jetliner for his airline, TWA?
2. What was the only 6 engined jet to serve with the RCAF?
3. Our Tracker is equipped with MAD boom. What does MAD stand for?
4. Which was the first aircraft in the RAF to have retractable landing gear? A number of these were manufactured in Canada.
5. Name a de Havilland aircraft named after a rodent.
6. Can you identify this aircraft? →



Congratulations to Clive Reddin and Al Saunders who were the winners of the December Tam Test. They both won a Canadian Aviation Calendar donated by the Gift Shop.

The answers were:

1. CF-100 Canuck
2. Cessna RG172
3. Sea Prince
4. Memphis Bell
5. Skycrane



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www.torontoaerospacemuseum.com



## New Gift Shop Items

### Books:

Canadair, The First Fifty Years  
Canadair Sabre  
DeHavilland In Canada  
Power, The Pratt & Whitney Story

### Key Chains:

Tutor (pewter) - You could call it the "Pewter Tutor"

### Lapel Pins:

Lancaster (pewter)

### Clothing:

T-Shirts, Henley's and Hats with TAM logo  
(delivery anticipated by the time you read this)

Toronto Aerospace Museum

would like to thank

Gibson Printing Company Limited

for all their help in putting this  
newsletter together.



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