

MARCH/APRIL 2017

# FLIGHTLINES

CANADIAN WARPLANE HERITAGE MUSEUM

Immortal Beech 18

The KLB Club

419 Squadron  
Anniversary Flight



# Making a Difference



Once in a while I will find myself alone after hours in the museum with the lower night lighting of the hangar gently illuminating these historic and special aircraft. In these quiet moments that I consider myself privileged to experience - my thoughts go back to all those who have served our great country in time of need, as well as, to all the members, volunteers and staff of the Canadian Warplane Heritage Museum over the last 44 years who have created and contributed to this fantastic organization.

In short I would sum up all these individuals, both past, present, and future, as people who have given of themselves to work together as a team to pursue worthy goals and to "Make a Difference".

One such member of the museum family who made a difference was the late Norman Philip Etheridge who for eight years was the head of the FM213 VR-A Lancaster Restoration Project. Under his guidance, FM213 was restored to flying condition and took to the air again in September 1988 as the "Mynarski Memorial Lancaster".

Since that time, about 3 million people have come to the museum just to see this aircraft and nearly 5,000 members have experienced a flight in her. In addition VR-A has flown with multiple military aircraft including Hurricanes, Spitfires, Mustangs, P-40s, Corsairs, Mosquitos, Helldiver, Sabre, B-25s, B-17s, B-24, B-29, B1B, Vulcan, CF-18s, the Snowbirds and most notably the BBMF Lancaster, PA474, the only other flying Lancaster in the world.

Untold countless millions of people from Canada, the United States, the United Kingdom and other countries have also been able to see VR-A perform at many large airshows throughout North America, the UK and the Channel Islands. Since her restoration VR-A has flown just under 2,000 flight hours and about 15 pilots who never thought they would ever be lucky enough to fly her have become Lancaster Aircraft Captains.

Without the leadership of Norm Etheridge and the contribution of his team, combined with the efforts of the Lancaster Support Club and the museum management of the day, FM213 might still be a gate guardian; but that was not to be because all these people believed in "Making a Difference". It is now our turn to continue this tradition in our collective efforts to "Make a Difference".

With Sincere Gratitude,

David G. Rohrer, CD  
*President & Chief Executive Officer*  
Canadian Warplane Heritage Museum





MARCH/APRIL 2017

# FLIGHTLINES

## CANADIAN WARPLANE HERITAGE MUSEUM

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**Cover:** Museum pass and break by our Beech 18. KOOL SHOTS



**AIR FORCE DAY**  
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**JULY 8th**

**CANADA 150**  
HAMILTON 2017

Reflect  
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# News

## 2017 – The Year Ahead

This year marks an important milestone for Canada as we celebrate the 150th anniversary of Confederation. Although the country's biggest celebratory birthday events are taking place in Ottawa, many celebration activities and events are also taking place throughout the year around Hamilton as well as communities and cities across the country. It is a great opportunity to strengthen our sense of what it means to be Canadian.

In 2017 Canadian Warplane Heritage will be celebrating Canada's Sesquicentennial with a number of special events. In addition to the regular summer special events and activities, CWH will be presenting Air Force Day in July as one of Hamilton's *Canada 150 Signature Events*. Our Lancaster will also be painted and flown in the temporary markings of Canada's first Lancaster KB700, the *Ruhr Express* thanks to a grant provided in collaboration with the Hamilton Community Foundation, the Government of Canada and other agencies and donors. After an absence of over 25 years, The Classics of the Golden Age will be returning in September, presenting vintage vehicles indoors in period settings with our aircraft. And also this year, CWH will be partnering with the City of Brantford and Brant County to present the 2017 Community Charity Airshow in late August.

This coming year will be a busy time for the Canadian Warplane Heritage Museum. Willing hands are required to help with all the events and we encourage the membership to take part and assist with the events. Watch for updates for these and other CWH activities on our website, in *Plane Talk* and *Flightlines*.

In this issue of *Flightlines*, we feature our immortal Beech 18 and a photo story of 419 Squadron's anniversary aircraft with CWH's Lancaster. We are also introducing a new regular feature in this issue of *Flightlines*: A Spotlight on a Member profile. Elsewhere in this issue is the story of the Canadian connection to the KLB Club, as well as the regular news items and aircraft updates. Enjoy and keep us informed how we are doing.

Bill Cumming, Volunteer Editor  
museum@warplane.com

## Ruhr Express Lancaster



The first day of August 1943 was a proud day for the workers of Victory Aircraft Limited and for all Canadians. Sixteen months after the arrival of the blueprints had arrived at Malton, the first Canadian built Lancaster KB700 rolled off the assembly line; an impressive accomplishment. Named the *Ruhr Express*, much publicity was made of its christening, first flight and its departure to England. It was an occasion for which the country could be proud. On 2 January 1945 the *Ruhr Express* was returning to England following its 49th operational mission, a raid to Nuremberg, and while landing at its home base, KB700 experienced hydraulic problems. The aircraft ended up in a farmer's field where it collided with a trench digger, rupturing its fuel tank. The crew escaped but the ensuing fire destroyed the aircraft. The loss was sad because the plans were to fly the *Ruhr Express* back to Canada following its 50th mission for a triumphant return and as a memorial to the Canadians who built and flew Lancasters.

To commemorate these accomplishments as part of Canada's 150th celebrations this summer, CWH's Lancaster FM213 (also known as VeRA, KB726, or the Mynarski Memorial Lancaster) will be painted and flown in the temporary markings of Canada's first Lancaster KB700, the *Ruhr Express*. The temporary markings will only be applied to the port side of the aircraft and the usual VR-A, KB726 markings will remain on the starboard side.

This initiative is made possible by the Community Fund for Canada's 150th in collaboration between the Hamilton Community Foundation, the Government of Canada, and extraordinary leaders from coast to coast to coast.

Further information about the *Ruhr Express* Lancaster will be presented in the next issue of *Flightlines*.



Canada



CANADIAN WARPLANE HERITAGE MUSEUM



Birchall Leadership Award 2017 recipient, Chris Hadfield.



Leonard Birchall, the Saviour of Ceylon.

## Birchall Leadership Award Dinner 2017

Internationally-recognized astronaut Chris Hadfield, one of Canada's modern heroes, will be honoured in Hamilton this fall with the prestigious Birchall Leadership Award, created in honour of a Canadian World War II hero. The award will be presented at a gala at the Canadian Warplane Heritage Museum on October 28th, 2017. Colonel Hadfield, through his work in space and here on earth, exemplifies Birchall's qualities including the ability to lead in the face of difficulty or adversity to promote the welfare and safety of those under his command.

The Birchall Leadership Award is presented annually to honour the memory of Air Commodore Leonard Birchall (1915-2004), who was an exemplary leader during World War II in combat and in prisoner of war camps, and post-war as a senior RCAF commander. The 2017 Award Dinner is being jointly hosted by the Canadian Warplane Heritage Museum and the Royal Military Colleges Club (RMC Club) Hamilton branch.

For more information about the Award Dinner and ticket information please refer to [birchallhamilton2017.com](http://birchallhamilton2017.com).

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**FREE ADMISSION**  
 DONATIONS WELCOME  
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Logos for Brantford, County of Brant, and Canadian Warplane Heritage are visible.



## Norm Etheridge Last Flight



Norm Etheridge, Chief Engineer of the Canadian Warplane Heritage's Lancaster restoration.

On 27 January 2017 the Canadian Warplane Heritage Museum lost a great friend, Norm Etheridge. Norm was the Chief Engineer of the Canadian Warplane Heritage's Lancaster restoration project during the 1980s.

Norm joined the Royal Navy in 1942 as an Artificer Apprentice (Aircraft) at the age of 18. With the Royal Navy, Norm was taught everything there was to know about aircraft manufacture, overhaul and repair on all types of aircraft, from fabric covered to stress skin.

Retiring from the Royal Navy in 1957, Norm and his family moved Oshawa, Ontario where he was employed by Field Aviation Canada Limited. With Field, he was a Flight Engineer and eventually their Chief Engineer with their B-17s, P-38s, PBY Canso and B-26 aircraft, just to name a few.

Norm was first approached by Dennis Bradley and Alan Ness in 1972 to assist with the import of CWH's first Firefly CF-BDH into Canada.

Then in 1982, Norm was asked to lead the project to restore Lancaster FM213 to flying condition, and with a dedicated crew of students and volunteers preceded with the project, which culminated in the flight of C-GVRA in September of 1988. "They asked me to rebuild the Lancaster but they didn't tell me it was all in little bits." Norm ultimately became the driving force that ensured she returned to the skies once again.

As the Lancaster restoration was underway, Norm assisted Harry Smith with the rebuild of our Cessna Crane and was requested by Air Canada to lead their maintenance crew with the refurbishment of their 1937 Lockheed 10A, CF-TCC. The Lockheed was flown across Canada in 1986 on the airline's 50th anniversary tour, and it is still airworthy today.

### 'WALK WORTHY'

The skills acquired by the people he mentored on projects are Norm Etheridge's aviation legacy. Norm once remarked, "In my life, words have been very important to me. As a young boy, I learned a phrase from the Scriptures in Sunday school 'Walk Worthy'. These words have been a yardstick for me in all that I have done..." Thank you Norm for your many years of work, support and dedication to Canada and the preservation of Canadian aviation history.



First test flight after restoration of the Lancaster on 11 September 1988.  
From left to right: BBMF Pilot Tony Banfield, Tim Mols, Norm Etheridge and co-pilot Bob Hill.



# Member Profile



## Wesley (Wes) Allen

The success of the Canadian Warplane Heritage Museum depends in large part on many dedicated members and volunteers. We would like to recognize their individual contributions and we begin by introducing Wesley (Wes) Allen, one of the volunteer tour guides at the Museum.

Wes was raised in Farnham Centre, Quebec

and as a teenager, obtained his Private Pilot's Licence before joining the Royal Canadian Air Force in June 1954. After going through the Aircrew Selection process and completing his Pilot Training on the Harvard and T-33, Wes was posted to Portage La Prairie and Saskatoon instructing on the T-33. He went on to fly the CF-100 with 440 Squadron in Zweibrücken, Germany; CF-101 with 416 Sqn Chatham, and an exchange tour with the USAF at Reese Air Force Base, Lubbock, Texas instructing on the T-38. Following a one year stint at Land Forces Staff College in Kingston in 1971, Wes served as the Mobile Command Flight Safety Officer at St. Hubert, Quebec for three years, before returning to fly the CF-101 with 409 Sqn Comox. He was then posted to Air Defence Group Headquarters in North Bay in 1978, to serve as the CF101 Staff Officer Ops and Training.

In 1980, Wes was promoted to Lieutenant Colonel and appointed the Senior Staff Officer Ops at 22 NORAD Region HQ in North Bay. Checking his log books, Wes notes that he has flown CWH's Harvard IV CF-UUU (RCAF 20213), T-33 (RCAF 21275) and CF-101 Voodoo (CAF 101045).

In August 1981, Wes was appointed as Commanding Officer, 21 Radar Squadron, St. Margarets, New Brunswick, and then, in July 1983 he was posted to Ottawa as a National Defence Headquarters Staff Officer, Directorate of Military Operations Coordination (NDHQ-DMOC). In this role, Wes was responsible for coordinating military support for non-defence agencies which included support to all Royal and VIP visitors to Canada. He was fortunate to have met Her Majesty Queen Elizabeth II during her visits to Canada in 1984 and 1986 as well as several other members of the Royal family. He also met Pope John Paul II during his visit to Canada in 1984. During the time Wes was in the RCAF, he accumulated 7000 flying hours on 8 different military aircraft types. Wes retired from the Canadian Forces in 1989 in the rank of Lieutenant Colonel but continued to be employed in NDHQ-DMOC as a civilian employee until 1991.

Wes and his wife Fran currently reside in St. George Ontario. Wes joined the Canadian Warplane Heritage Museum in 1997 and has helped with the Speakers Panel and Voices program. In addition to his duties as a Museum Tour Guide, he serves as a ground host for the Lancaster members' flights. Wes also served in this role during the Lancaster's tour of Great Britain in 2014. In recognition of Wes's service to the Museum, he was recognized with the Alan Ness Award in 2015.

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# THE KLB CLUB

by Yves Larrue



A Halifax B III of 427 Squadron similar to the one shot down by the German Air Force on 8 June 1944 while on a mission to bomb the railway yards at Acheres France. Wireless Air Gunner Sgt. Carter-Edwards parachuted from the Halifax before it crashed.

The KLB Club (initials for Konzentrationslager **B**uchenwald) was formed on 12 October 1944, and regrouped the 168 Allied airmen who were held prisoner at Buchenwald Concentration Camp between 20 August and 19 October 1944. Twenty-six of these airmen were Canadians. 166 survived Buchenwald, while two died of sickness at the camp.

In June 1944, just before and after the landing in Normandy, the Allied Air Forces undertook a bombing campaign to systematically destroy railway facilities and major road bridges to impede the movement of the German forces and prevent the moving of reinforcement towards Normandy. Many of the main rail facilities were in the Paris area and in Northern France and a lot of bombers were shot down over that area at that time, resulting in a large number of downed crewmen attempting to escape.

By then, the escape lines had been requested to stop travels towards Spain, as roads and railroads were targets for bombers, travel was perilous and took a long time. They were instead asked to keep the airmen in hiding until advancing allied forces could reach them. In response, the resistance networks hid many of the downed airmen locally; but safe shelters were in short supply in the countryside, so many airmen were moved nearer Paris where there was a better chance to hide or join an escape line that was still functioning.

One of the largest sheltering networks south west of Paris was called the Réseau Picourt and one of its members, by the name of Jacques Desoubrie, had assumed the task of moving escapees to or near Paris. But Jacques Desoubrie was actually a Gestapo agent (he had joined in 1941) and he regularly delivered his charges to the Gestapo offices in Paris. Since, for security reasons, the Paris shelter networks and the Picourt network were not communicating, the Picourt people never knew what went on with Jacques Desoubrie.

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## THEY WERE HERDED INTO CATTLE CARS & SENT INTO THE DEPTHS OF EAST GERMANY

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About that time, Hitler had ordered all downed airmen caught in civilian clothes, even if they still had their dog tags, to be treated as spies and not POWs. The Abwehr (Army

Intelligence) did not abide by that rule but the Gestapo and the SD (Security Service) did. So, instead of being classified as military prisoners-of-war, the airmen delivered to or captured by the Gestapo, were accused of being spies and saboteurs and they were incarcerated in the Fresnes Prison, a civilian jail just outside of Paris.

Though they were subjected to beatings and other forms of cruelty, they did not lose hope of being liberated by the approaching Allies. However, on the morning of 15 August 1944 – ten days before the liberation of Paris – they were herded into cattle cars and sent into the depths of East Germany. Theirs was the last train to leave Paris for the Buchenwald Concentration Camp. During the trip, one of the airmen managed to escape along with 2 French





army officers, but the remaining 168 airmen arrived at the Buchenwald Concentration Camp on 20 August 1944. The group included 82 Americans, 48 British, 26 Canadians, 9 Australians, 2 New Zealanders and 1 Jamaican.

Most airmen doubted they would ever get out of Buchenwald because their documents were stamped with the acronym "DIKAL" (Darf in kein anderes Lager), or "not to be transferred to another camp".

At the time, Buchenwald was a forced labour camp with a population of about 60,000 inmates, most of them being Russian POWs (the USSR was not a signatory of the Geneva Convention). The group however decided to stay together as a unit under the command of the senior Officer, Sqn Leader Phillip Lamason, a New Zealander, and to conduct all their actions, such as marching to roll calls, in accordance with military discipline. For several weeks Lamason negotiated with the camp authorities to have the airmen transferred to a POW camp, but his requests were denied.

The story is a bit muddled as to how the Luftwaffe heard of the airmen in Buchenwald, but in late 1944, a Luftwaffe staff Officer, Hannes Trauloff, came to the Camp to investigate. One story is that Lamason managed to send a message to a nearby Luftwaffe base via a Russian camp inmate who was working at the airbase. What is certain is that there was some contact at Buchenwald between Trauloff's team and the airmen.

Upon returning to Berlin, Trauloff reported to his superiors, among them Air Marshall Gallant, who went to see Hermann Goering, the commander of the Luftwaffe. Fearful of possible retaliation against German POWs, Goering secured permission from Hitler to transfer the airmen from Buchenwald to Stalag Luft III in Sagan (of Great Escape fame). On 19 October 1944, 156 of the airmen were moved by the Luftwaffe to Sagan, supposedly seven days before their scheduled execution. Ten more were moved over the next few weeks. Two died in Buchenwald (1 US, 1 British).



Framed memento presented to Sgt. Carter-Edwards by Commanding Officer 427 Special Operations Aviation Squadron Lieutenant Colonel Jeff Orr at the Canadian Warplane Heritage museum on 25 August 2015. 427 SQUADRON ASSOCIATION

The KLB Club continued meeting after the war and one of the Canadian members (Sgt Willie Walderam) wrote a poem about their experience ("A Reflection", to be found in the book "168 Jump Into Hell", by Arthur Kinnis and Stanley Booker, Victoria, 1999). Time has taken its toll and many of the Club members have now departed this world, but the Canadian Warplane Heritage Museum was privileged to have hosted a ceremony on 25 August 2015 when the 427 Special Operations Aviation Squadron recognized one of its own, Wireless Air Gunner Sgt Edward Carter-Edwards, a surviving member of the Club.

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### 427 SPECIAL OPERATIONS AVIATION SQUADRON RECOGNIZED ONE OF ITS OWN

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In 1942, at the age of 19, Edward Carter-Edwards of Hamilton enlisted in the RCAF and trained as a Wireless Air Gunner. He was eventually posted to 427 "Lion" Squadron, which was the RCAF's eighth bomber squadron formed overseas. When WAG Carter-Edwards joined it, 427 Squadron was based in Leeming, North Yorkshire and it flew Handley-Page Halifax B. Mk. III.

On 8 June 1944 – two days after D-Day – WAG Carter-Edwards' aircraft, Halifax LV987 (Squadron code ZL-K), was shot down as it returned from bombing the railway yards at Acheres, France, about 24 kilometres north-west of Paris. It was WAG Carter-Edwards' 23rd mission. A German night fighter snuck in underneath the Halifax and fired at it, setting the left wing on fire. The Halifax crew bailed out: all survived; 5 escaped and re-joined the allied lines but 2, WAG Carter-Edwards and Gunner C.W. Ford, were captured.

Ford was captured and sent to a POW camp, but Carter-Edwards had initially evaded the German search parties and hid successfully in the countryside for a few weeks. He was betrayed by Desoubrie who delivered him to the Gestapo in Paris. He was initially interned in the Fresnes Prison, then was sent to the Buchenwald Concentration Camp until the Luftwaffe managed to transfer the airmen to Luft Stalag 3 Sagan. Jacques Desoubrie was eventually captured in Germany after the war and executed in 1949.

# 419 Squadron Anniversary Flight

by Eric Dumigan



The 75th Anniversary Hawk RCAF #155217 in front of their hangar at CFB Cold Lake, Alberta painted in 419's Squadron wartime colours dedicated to Wing Commander John "Moose" Fulton DSO, DFC, AFC.  
CANADIAN FORCES



CANADIAN WARPLANE HERITAGE MUSEUM





The Royal Canadian Air Force's 419 "City of Kamloops" Squadron celebrated their 75th anniversary of the squadron during 2016 by painting one of their CT-155 Hawk trainers – RCAF #155217 - in a paint scheme that celebrated 419's World War II heritage.

Artist Jim Belliveau, known for his CF-18 Demonstration Jet designs, created the paint scheme for the Hawk that was painted at Flying Colours in Peterborough, Ontario. The Hawk sports the traditional green and brown topside camouflage and black underside worn by the 419 Squadron bombers in WW II. The "Moose" nose art is dedicated to Wing Commander John "Moose" Fulton DSO, DFC, AFC, the First "Mooseman". Registration KB799 represents a Lancaster Bomber while the call letters VR-W represent the Wellington Bomber flown by Wing Commander John Fulton who was the first commanding officer of 419 Squadron. On August 2nd, 1942 "Moose" Fulton and his crew were shot down by a night fighter while returning from raid on Hamburg. 419 Squadron also flew Halifax Bombers during the war.

The 75th Anniversary CT-155 Hawk was unveiled at 4 Wing Cold Lake, Alberta on 2 June 2016. Currently, 419 Squadron is a Tactical Fighter Training Squadron that conducts a NATO Flying Training Canada program (NFTC) preparing pilots from Canada, Denmark, England, Italy and Singapore to fly CF-18 fighter class aircraft. Procedures include air-to-air and air-to-ground combat operations. Following in the footsteps of the WW II British Commonwealth Air Training Plan, NFTC provides Canada and her allies a complete military pilot training program. NFTC is a training program offered by the RCAF and partnered with CAE who provide aircraft maintenance and flight simulator support.

The Canadian Warplane Heritage's Lancaster teamed up with the 75th Anniversary CT-155 Hawk at the 2016 8 Wing Trenton Quinte International Airshow to perform a photo flight together. On the evening of June 23rd the CWH's B-25 Mitchell, flown by James Bradley, was used as a photo-ship to photograph Dave Rohrer flying the Lancaster with Maj Carl "Sleepy" Cottrell flying the Hawk. For 2016, the Lancaster wore two identities, on the star-board side it retained 419 Squadron markings VR-A while on the port side it wore the temporary markings of WL-O Lancaster KB895 of 434 Squadron.



# Aircraft Updates

## Harvard Happenings by Bill Cumming

If you have been walking through the hangar lately, you would have noticed the engine and wings have been removed from CWH's Harvard CF-UUU. Triple Uniform was acquired by CWH in the fall of 1972 and has been one of the most active aircraft in the fleet; providing pilot training as well is one of more popular aircraft in the 'Buy a Flight' program. Due to the high usage of the aircraft it was necessary to undertake an inspection of the aircraft and complete repairs to correct any deficiencies found. Both the engine and propeller have been sent out to shops for their inspection and repairs as necessary before the aircraft can be returned to operational service. To replace CF-UUU for the 2017 flying season, CWH's other Harvard Mk. IV C-FVMG is now operational and ready to take to the skies.



Harvard CF-UUU minus its wings and engine undergoing a full inspection. *BILL CUMMING*



Harvard C-FVMG is now operational for the 2017 season. *KOOL SHOTS*

## Beechcraft V35 Bonanza by David G. Rohrer



Thanks to the kindness of our Honorary Lifetime Board Member Sandy Thomson we now have a 1966 Beechcraft V35 Bonanza aircraft in our collection. While this aircraft is not a military pattern aircraft it is a convenient and economical aircraft to own and operate and will allow us to keep an aircraft in service over the winter for pilot currency and also for use in support of certain administrative and logistical tasks.

All of the pilots who wish to fly this aircraft have been asked to make a \$500 donation to the "Bonanza Fund" in addition to their annual pilot fees and as a group are most grateful to Sandy Thomson for his kind generosity.

AL MICKELOFF



CANADIAN WARPLANE HERITAGE MUSEUM

## Talking Turkey by Don Coit

Since the last Avenger update in the previous issue of *Flightlines*, two new communication radios have now been installed along with the new transponder, transponder altitude encoder and a GPS in the Avenger. A four station intercom system has also been completed and all this equipment has been tested.

We are now working on the mechanical connections for the instruments in the cockpit, pressure lines and vacuum hoses, and installing instruments in the instrument panel as the connections are completed. The next step is to research all the labels required in the cockpit, get them drawn up, made up and installed.

The 24 volt battery has been installed on the shelf that we installed at the back of the rear cabin. Two 12 volt batteries were originally installed at the front of the aircraft but we moved the battery to the rear to obtain proper balance of the aircraft because of the removal of the original turret from the TBM-3E. We have also installed 120 lbs. of lead in the fuselage below the tail which should give us a proper balance, but we will not know for sure until everything is installed in the aircraft and we perform a weigh and balance check. We have also obtained an original arrestor hook which will also add extra weight at the rear of the aircraft when installed.



Work is proceeding well on the front cockpit instrument panel, showing the installation of the new GPS and radios. DON COIT

## Tracker Tidbits by Bob Freeman

Progress continues to be made on the Tracker restoration. CWH staff completed the manufacture of the replacement fuselage panel and shims and has nearly completed the installation of the panel on to the aircraft. The volunteer crew took advantage of the better access to remove, test and refurbish parts in that area of the fuselage. In addition, work has started in earnest on the port wing. The wing will be stripped, inspected and prepared for re-painting. All flight surface control mechanisms will be removed, inspected, repaired and re-installed. Comparing this wing to the starboard wing, it seems to be in much better condition; possibly due to being repaired back in 1968 by Enheat Aircraft, Nova Scotia after an accident. Flight control surfaces also appear in good order, so it is hoped that restoration of this wing can be completed quickly.

Long awaited spare parts have arrived recently. Both wings needed new wing fittings to replace cracked or corroded parts. These are the special fittings that lock into the centre wing sections when the wing is deployed to flight position (rather than folded). These new parts have to be accurately matched to the old ones so that they interface correctly with the locking pins in the centre section. This will provide an interesting challenge for the machine shop personnel, CWH technical staff and restoration crew to accomplish!





# Canadian Warplane Heritage's IMMORTAL BEECH 18

by Bill Cumming

KOOL SHOTS

Much controversy has ensued over the years as to the origin of the design of the Beech 18. Many stories exist, both known and unknown concerning the Beech 18's design origin, but due to the passage of time and the dimming of memories it is unlikely the true story will ever be known. What is known is that the Beech 18 was developed in a time when the state of art of aircraft design forced similarities with numerous aircraft manufacturers. In a statement by Walter Beech "the modern twin-engine aircraft should have a rudder behind each engine for optimum control." In addition to the Beech 18, Lockheed developed the Lockheed 12A Electra Junior and Barkley-Grow Aircraft developed the T8P-1. All aircraft were similar in size, were twin-engines on low cantilever wings and featured an all-metal fuselage construction, with a twin tail and rudder design.

The prototype Beech 18 rolled out of the factory in early January 1937. On 15 January 1937 James N. Payton took the Beech 18 aloft after exploratory taxi test on its first flight which lasted 50 minutes. Designated as the Beech Model 18-A, the prototype was powered with Wright R-670, 320 hp engines. Production of the Beech 18 aircraft started later in 1937 with a total of 6 Beech 18s produced that year.

The last three production aircraft were delivered in November 1969. Beech Aircraft manufactured 7,062 new Beech 18s for the military and civilian market in various configurations since 1937, as well remanufactured 1,918 Beech 18s for the military post-war. As best as can be determined, only a few hundred Beech 18s remain operational in the world today.



Expeditor C-GZCE sitting outside of CWH's Hangar #4 at Mount Hope Airport in early 1982. CANADIAN WARPLANE HERITAGE MUSEUM



CANADIAN WARPLANE HERITAGE MUSEUM



In January 1982, Canadian Warplane Heritage acquired Beech 18 C-GZCE. Manufactured in 1946, it was completed as a model D18-C with Continental R-9A engines for Florida Airways, registered NC80213. In 1949, Spartan Aero in

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### BEECH TODAY IS FLOWN REGULARLY

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Tulsa, Oklahoma changed the engines to Pratt & Whitney Wasp Jrs and the aircraft changed designation to D18-S. Following the engine conversion, the Beech served with Rausch Aviation of Teterboro, New Jersey. In 1953, the aircraft was acquired by Carl Millard from Rausch Aviation. Registered as CF-HII, it was operated by Millard for only one year before selling the aircraft to International Nickel Company of Canada (INCO). INCO operated the Beech until 1957 when it was placed in storage. Removed from storage in 1963, CF-HII was modified for float installation. For the next ten years, the float-equipped Beech 18 flew in support of INCO mining operations across eastern Canada during the summer season and was hangared in Toronto during the winter months.

In January 1974, the floats were removed and the Beech 18 was flown to Guatemala, registered TG-JIQ and utilized by INCO for hauling men and equipment to mine sites. Returning to Canada in 1976, the Beech acquired its present registration C-GZCE. A change of ownership found the aircraft moving to Saskatchewan in 1977 where it saw limited service as a parachute jump ship. C-GZCE was briefly owned by Condor Aviation of Hamilton and Skyline Aviation of Kitchener, and in December of 1981 the aircraft was purchased by Dennis Bradley who donated it to Canadian Warplane Heritage.

RCAF Expeditor HB143 at Edmonton in August 1948 still painted in its olive drab over neutrality gray colours. It looks like the door has been replaced with an olive drab door probably from another Expeditor and the rudders have new fabric installed and are still in silver dope. NATIONAL ARCHIVES CANADA



Restoration of C-GZCE during the winter of 1983-84.

Under the direction of CWH member Brian Harrington, the "Beech Boys" (Brian, Bob Small and Paul Cronkwright) began the process to restore C-GZCE, outside as well as the inside. Although C-GZCE never saw military service, the decision was made to restore the aircraft into the colours of an early RCAF Beech 18, Expeditor Mk. 1 HB143, circa 1944.

The original HB143 was built under a United States Army Air Corp contract as a UC-45B, USAAF serial number 43-35455 in 1943. It was transferred to the RAF under the Lend-Lease Act as HB143 and subsequently transferred to the RCAF, being received at RCAF Station Rockcliffe in February 1944. Expeditor HB143 was assigned to a RCAF Photo Section based in Edmonton, still painted in its factory applied scheme of Olive Drab over Neutrality Gray colours. As a photo survey version equivalent to the model F-2A-BH, it carried four fuselage cameras. In 1949, HB143 was converted to a Mk. 3MN Navigational Trainer and was later rebuilt to the Mk. 3T standard by MacDonald Brothers Aircraft in 1953. It continued to serve with the RCAF as an aircrew trainer,





eventually serving with both 442 and 443 Squadrons in the light transport role until retirement from military service in 1966. HB143 was sold by Crown Assets in 1966 and assigned Canadian civil registration CF-KAX but was struck from the Canadian aircraft registry in 1969.

When acquired, Beech C-GZCE wore the red, white and blue paint scheme of INCO. The first steps toward its total restoration began with the application of the previously noted olive-drab and grey military colors and markings. As well the first year of restoration work was also devoted to general mechanical maintenance and clean up of the Beech 18.



"The Beech Boys" – from left to right - Brian Harrington, Paul Cronkwright and Bob Small displaying the "EAA Warbirds – Best Transport" award for 1986. CHUCK SLOAT

### BEECH C-GZCE WORE THE RED, WHITE AND BLUE PAINT SCHEME OF INCO

The winter of 1983-84 saw the passenger seats, headliner and flooring removed and the bulkhead, separating the pilot's compartment from the passenger cabin replaced. Cabin ventilation systems and electrical wiring and control cables were inspected and replaced where necessary. Although the aircraft is painted to represent an example utilized by the photo unit during WWII, a decision was made to restore the interior to that of a VIP Expediter in use during the same period. New light grey, padded headliner and grey carpeting was installed. The passenger seats were re-upholstered in a matching grey and blue woolen material and, to top it off, RCAF tartan curtains were hung in the windows.



CWH's Twin Beech when it was in Guatemala and operated by Exmibal SA as TG-JIQ. 1977. MIKE ODY COLLECTION VIA GEORGE TRUSSELL; PHOTOGRAPHER ROGER CHAPMAN







AL MICKELLOFF

The winter of 1984-85 was spent in removing and inspecting the fuel tanks, cleaning out, stripping and re-priming the fuel tank bays as well as other compartments and reinstalling the tanks. During the following winter of 1985-86, the undercarriage was removed, the wheel wells stripped, cleaned, primed and repainted and a completely new undercarriage, including brakes and tires was installed. All the hard work by the "Beech Boys" paid off when Canadian Warplane Heritage's Beech 18 C-GZCE was judged the "EAA Warbirds of America Best Transport" at the 1986 Oshkosh Fly-In and Convention.

As part of the Canadian Warplane Heritage transport fleet, the Beech today is flown regularly. It has proven to be a reliable performer and has participated over the years at many airshows and events from Oshkosh, to Geneseo and around southwestern Ontario. Still meticulously maintained, CWH's Beech 18 is used to transport members and parts between various airports, and is actively engaged in the member's flights program today. To quote Edward Phillips, noted aviation author - "The venerable Twin Beech was born in peace, matured by war and eclipsed by technology after more than 50 years of faithful service - an airplane that has become a legend in aviation history".

## Canadian Warplane Heritage's OTHER TWIN BEECH by Bill Cumming

In the 1980s, Canadian Warplane Heritage briefly operated a second Beech 18, C-FAID. Restored into the markings of an Expeditor 3TM with the polished aluminum fuselage, white fuselage top complete with the RCAF red and white stripe along the length of the fuselage, this Beech 18 remained with the Museum until 1988 when it is sold into the US market.

When the RCAF needed additional aircraft for its expanding Air Force training program to meet the commitments under the NATO pact to train crews from other nations, the Canadian Government placed an order with Beech Aircraft for 280 military Model D18S. Beech produced three models for the RCAF: the Expeditor 3N, Expeditor 3NM and Expeditor 3TM. Manufactured in late 1952 as an Expeditor 3NM, RCAF #2375, C-FAID was assigned to Air Defence Command and then to Air Transport Command during its RCAF career. Crown Assets sold the aircraft in 1967 to Priority Air Transport of Redwood, California for use briefly with the U. S. Postal Service.



Beech 18 CF-AID when owned by Ray's Flying Service from 1970 - 1977. This photo was taken at Winnipeg Airport, June 1972. TIM MARTIN/AERIAL VISUALS

In 1970 the Expeditor was returned to Canada and registered as CF-AID to Ray's Flying Service, Saskatoon, Saskatchewan. Rolf Yri of Surrey, BC acquired the aircraft in 1981 and restored the Beech to its former RCAF Air Transport Command markings. Beech C-FAID joined the CWH aircraft fleet in 1982 and was based in the Vancouver area, appearing at various aviation events and airshows. As far as I can recall it only made one trip out to the Hamilton area. In May 1988 C-FAID was briefly registered to Twin Air USA Ltd. of Rockford, Illinois but was delivered to the Dutch Dakota Association in Amsterdam. Following an extensive rebuild/restoration and registered as PH-KHV, this Beech 18 now flies with the Royal Netherlands Air Force Historical Flight in Dutch Air Force marking 'G-29' visiting airshows and displays in the Netherlands and throughout Europe.



CWH's other Beech 18, C-FAID during a brief visit to Hamilton Airport, September 1987. BILL CUMMING



## Upcoming 2017 Closures

February 28 to March 7 Inclusive

March 28 to April 5 Inclusive

## 2017 Calendar

March 18	ANNUAL GENERAL MEETING - 11am
March 11 to 19	MARCH BREAK - Including launch of Air Combat Zone
March 26	HERITAGECON XI Model Contest & Sale
June 17 to 18	Come fly with us at FLYFEST
June 26 to July 2	SENTIMENTAL JOURNEY - B-17 Visit
July 1	CANADA DAY - 150th Celebrations & Flypasts
July 7 to 9	VIMY FLIGHT - Tour visit of World War I replicas
July 8	AIR FORCE DAY - Past, Present & Future
July 30	VINTAGE WHEELS & WINGS
August 12	BCATP FLY-IN
August 30	COMMUNITY CHARITY AIRSHOW - At the Brantford Airport
September 9 to 10	CLASSICS OF THE GOLDEN AGE - Indoor Car Show
September 23	SKY'S THE LIMIT Charity Auction
October 28	BIRCHALL LEADERSHIP AWARD DINNER 2017 - Recipient Chris Hadfield
November 11	REMEMBRANCE DAY - Large indoor service
November 18	SWING OUT TO VICTORY Dinner & Dance

\*Please visit [warplane.com](http://warplane.com) for additional updates. Dates subject to change.

## From the Archives Department

by Erin Napier



Newly donated to the Museum's collection is a brass lamp depicting an RAF Air Sea Rescue boat from 150 Squadron RAF. The Marine Branch was a section of the Royal Air Force that operated watercraft in support of RAF operations. Shortly after the creation of the RAF, the Marines Craft Section (MCS) was created with the transfer of Royal Navy Air Service (RNAS) vessels and personnel. Originally tasked with the support of the RNAS and later RAF seaplanes, Marine Craft Section was to achieve its greatest size during the Second World War. This lamp features a rescue boat on a sea of waves with the 150 Squadron roundel on the front.

## How Can I Help?

Canadian Warplane Heritage Museum is proud to recognize those supporters who have made significant contributions to our Museum of the past few months and we are thrilled to add the following to our donor walls:

### "Friends of Flight" Hangar Doors - \$1,000 - \$4,999

A1 Air Conditioning & Heating

### "Friends of Flight" Memorial Hangar Doors - \$1,000 - \$4,999

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RCAF Veteran Harry Robert (Bob) Fraser, Lovingly Remembered by Family

### "Wings of Gold" Major Donor Wall - \$25,000 - \$49,999

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