

JANUARY/FEBRUARY 2017

FLIGHT LINES

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Air Force in Canada

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Readers are encouraged to submit articles and photos. All contributions published with the author's name is the opinion of the author and does not necessarily reflect the opinions and policies of the Canadian Warplane Heritage Museum. Responsibility for accuracy rests solely with the author.

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Cover: Fairchild Cornell being flown by Don Fisher. DOUG FISHER

AVIATION PHOTOGRAPHY



A presentation by
Eric Dumigan of his many
air-to-air images & stories!



SATURDAY JANUARY 28, 2017
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News

Welcome!

Welcome to the January/February issue of *Flightlines*. We have received many favourable and positive comments about the previous issue of *Flightlines*; about its new look, style and content and we welcome any feedback from the readership about each issue. Your comments and feedback will only help to make each issue better.

This issue of *Flightlines* has been laid out in the same format as the previous issue, with a few minor changes. In this issue *Flightlines* features a story about the Norwegians in Canada during World War II, and the RCAF's Harvard Demonstration Team. Other short articles are also featured, as well as the regular news columns and information for the membership.

I have been a member of Canadian Warplane Heritage Museum since 1975 and have been involved in many aspects of this wonderful organization - from sweeping the hangar floors, as a CWH pilot, assisting with various CWH committees, as a member of the Board of Directors, as Chairman and Director of the Hamilton International Airshow and served as the editor of *Flightlines* during the 1980s and 1990s. I have seen the organization grow and mature over the 40 years that I have been associated with the museum. Today Canadian Warplane Heritage Museum is known worldwide and has become one of the most respected aviation museums in the world. Let's document our history as it happens because soon we will all forget.

To ensure that we can maintain the schedule for *Flightlines* as we have set out, articles, news items and contributions are welcome from the membership of Canadian Warplane Heritage Museum and the readership for publication in *Flightlines*. Articles and features of historical significance are welcome, as well as short news items about what is happening around CWH and with its members. Not only are these news items interesting and keep the membership informed about the activities around the museum and its aircraft, they also help to record the history of Canadian Warplane Heritage Museum. As stated previously we need your input to ensure the success of *Flightlines*.

Bill Cumming, *Volunteer Editor*
museum@warplane.com

CF-104 Starfighter Refurbishment

AL MICKELLOFF



After 20 years of standing proudly at the entrance to the Canadian Warplane Heritage Museum, our CF-104 Starfighter was removed from the front lawn on 19 October 2016 for refurbishment. A special thanks to Double D Crane Services from Burlington for their assistance as well as our own Engineering and Maintenance Department. Over the winter months, it will receive some TLC including some new paint and markings. This will also give us the opportunity to do some non-destructive testing to the mounts before it goes back up in the spring.

DAVID BLAIS



New Afghanistan War Monument at the Canadian Warplane Heritage Museum



DAVID BLAIS

Ground breaking ceremony at the Canadian Warplane Heritage Museum.



DAVID BLAIS

Glenn Gibson, Honorary Lieutenant Colonel of the Argyll & Sutherland Highlanders of Canada emceed the ceremony.

On 13 October 2016 a ground breaking ceremony took place at the Canadian Warplane Heritage Museum for a new Afghanistan War Monument. It was the first step in the construction of a permanent monument to the members of Hamilton's military garrison and other Hamiltonians who served with the Canadian Armed Forces in its operations in Afghanistan and South West Asia 2001 to 2014. It will commemorate the service related deaths of Private Mark Anthony Graham (2006), Major Raymond Mark Ruckpaul (2001), Sergeant Shawn Allen Eades (2008), Corporal Justin Matthew Stark (2011) and honour all other Hamiltonians who served in Afghanistan and related operations.

The striking design of the Hamilton Afghanistan War Monument is based on the highly recognizable LAV III armoured vehicle, which was extensively employed in Canada's Afghanistan operations and which continues in active service today.

The Hamilton monument project was initiated by the veterans' support group North Wall Riders Association Steel City. All construction costs will be borne by the NWRA, the regimental trusts and associations of Hamilton units and citizens from all walks of life. Trade Port International and the Canadian Warplane Heritage Museum have generously provided the site. The organizing committee is grateful to Canada Company for its support of the project. The monument is expected to cost \$40,000 and be installed in the spring of 2017.

Canadian Forces LAV III in Afghanistan.



DND

CWH's fully restored "Spirit of Little Norway" Cornell CF-CVF wearing the colours and markings of the Royal Norwegian Air Force as used in Canada during World War II.
DOUG FISHER



Spirit of Little Norway

by Doug Fisher

The Fairchild Aircraft Company of Hagerstown, Maryland, was awarded a US Army Air Force contract in 1938 for a tandem cockpit, primary trainer with a 175 hp six cylinder inline Ranger engine designated the PT-19. They named this aircraft the Cornell after the famous University. To fulfill further military contracts the PT-19 was modified to also accept the seven cylinder 220 hp radial Continental engine. This version was designated as the PT-23.

The Cornell featured a fabric covered welded steel tube fuselage. The remainder of the aircraft used plywood construction, with a plywood sheathed centre section, outer wing panels and tail assembly. The control surfaces were of metal structure covered with fabric. The landing gear was fixed with the large wheel track giving good ground handling.

In Canada, Fleet Aircraft Limited located in Fort Erie, Ontario built 1642 Cornells under license, both the PT-23 and PT-26 versions. The PT-26 was distinguished by an enclosed canopy and improved heating system suited for the all weather operations in Canada. All PT-26s were equipped with the 200 hp Ranger engine. The RCAF selected the Cornell as a successor to the Tiger Moth and Fleet



CANADIAN WARPLANE HERITAGE MUSEUM



Cornell CF-CVF in civilian ownership, date unknown.



Rare colour archival image of the original "Spirit of Little Norway" Cornell during World War II.

Finch, which the RCAF realized in 1941 were already becoming obsolete. The RCAF accepted the first Cornells in 1941 and retired the last one in 1947.

Although PT-26 Cornells were also manufactured in Canada for the US Army Air Force, none were delivered to the United States. Most of the USAAF order was sent to the RAF under Lend Lease, with the balance going to the RCAF. Some Canadian built Cornells were shipped to Africa and India to be used in training schools. Twenty Canadian built Cornells were also used by the Royal Norwegian Air Force at their two wartime bases in Ontario.

Brampton Flying Club where Percy Briscoe took over ownership. Briscoe was a long time member of the Flying Club and the owner of a hardware/bicycle shop in Port Credit, Ontario. He was also an avid collector of just about anything antique. His house was a mini museum with his basement stuffed full of antiques and collectables. The backyard of his property was full of vintage cars and motorcycles and this is where CF-CVF wound up – stuffed under a few trees in the backyard of the house and minus the wings.

Don Fisher had been a founding member of the Ontario Aviation Historical Society (OAHS), which is now named the Great War Flying Museum (GWFM) in Brampton, Ontario. The museum had built a full scale replica of the Fokker D.VII using a Ranger engine as the power plant. Fisher and Briscoe were friends and prior to his death in 1984, Briscoe donated the Cornell to the OAHS so they could use the Ranger engine in the D.VII.

THIS IS WHERE CF-CVF WOUND UP – STUFFED UNDER A FEW TREES IN THE BACKYARD OF THE HOUSE

In late 1943, a series of wing failures with the Cornell aircraft occurred, requiring reinforcement of the main spar. After the war, many Cornells were sold for civilian use, but the wing spar problem continued and required stringent annual inspections. This weakness greatly reduced the number of surviving Cornells.

Cornell II FV702 c/n 1070 was taken on strength by the Royal Canadian Air Force on 22 September 1944 with the No. 3 Training Command in Victoriaville, Quebec. On 15 January 1945 the plane was transferred to No. 1 Air Command and stored at the No. 5 Reserve Equipment Maintenance Unit at Picton, Ontario. Subsequently the Cornell was struck off strength on 6 May 1947 when it was given as "free issue" to the Royal Canadian Flying Clubs Association for use at the Ottawa Flying Club and put on the Canadian Civil register as CF-CVF.

Registered to B. Ruther of Toronto, Ontario, in 1964 the Cornell ended up at the

CWH's Cornell at Percy Briscoe's residence in Mississauga prior to recovery in 1984. DOUG FISHER





Engine test run during restoration. BRUCE MACRITCHIE

RETIRES OF FLEET AEROSPACE (FORMERLY FLEET AIRCRAFT LTD.) RESTORED CORNELL CF-CVF TO FLYING CONDITION

condition. This was the second Cornell the retirees had restored; the first being restored as the Spirit of Fleet II as a dedication to the 1000th Cornell originally produced by Fleet and named the Spirit of Fleet in 1943. CF-CVF was painted in the colours of one of the Royal Norwegian Air Force Cornells that was named the Spirit of Little Norway.

Little Norway was a training base set up for the Norway at Toronto Island Airport in Ontario, Canada. The Cornells delivered to that location were flown by American pilots and painted in the standard US training colours of blue and yellow. The colours of the Norwegian flag (red, white, and blue) were then painted on the wings and tail. The Norwegians named some of their aircraft and serial number 163 was the Spirit of Little Norway. As a dedication to these brave Norwegians who trained in Canada, it was decided to paint CF-CVF in those colours and markings.

The restored Spirit of Little Norway Cornell is a remarkable tribute to the Norwegian Air Force pilots that trained in Canada, the employees of Fleet Aircraft, and all those involved in saving and restoring her.

During 1984, Fisher enlisted the help of some of the other members of the OAHS to recover the Cornell and a young Doug Fisher was there to capture the recovery on film. The Cornell was in pretty sad shape with the centre section having rotted very badly. The men tied the main gear together with a rope and put the tail up on Fisher's snowmobile trailer and loaded it behind Ron Hollett's Suburban. The aircraft was then towed 15 miles up McLaughlin Road in Brampton to the home of the OAHS at the Brampton Flying Club.

The Cornell was tucked into the OAHS's hangar and subsequently had the Ranger engine removed for their use. The remains of CF-CVF were then donated to the Canadian Warplane Heritage Museum.

After the CWH acquired the Cornell it was placed in storage. Later, retirees of Fleet Aerospace (formerly Fleet Aircraft Ltd.) restored Cornell CF-CVF to flying

Norwegian Air Force in Canada by Bill Cumming



Norwegian Air Force Douglas DB-8A Nomad at Little Norway, Toronto Island Airport, 1941. NORWEGIAN PUBLIC ARCHIVES

On 9 April 1940 in the early days of World War II, Norway was invaded by Germany. Prior to 1940, a small number of military aircraft of domestic designs or built under licence were operated by the Norwegian Army and Navy. As war seemed imminent in the late 1930s, modern aircraft were bought from abroad, including 12 Gloster Gladiator fighters from England and 6 Heinkel He115s from Germany. Aircraft orders were also placed with United States companies prior to the invasion of Norway in 1940.

Of the American ordered aircraft, only 19 comparatively modern Curtiss P-36 Hawk fighters were

delivered to Norway before the invasion, but none were combat ready. All 19 Norwegian P-36s were captured by the German invaders and were later sold to the Finnish Air Force. None of the other American aircraft ordered by Norwegian government were delivered to Norway.

The Norwegian forces could not mount a sustained defense of the country. Following the defeat of the Norwegian forces, King Haakon VII and his family along with key members of the government and military, left Norway in June 1940 on HMS

Devonshire for England. Many Norwegians followed suit and escaped to England to continue the fight against the German invaders.

After arriving in England, the Norwegian government-in-exile began the process of setting up a new base of operations. The government-in-exile planned to establish a training centre in France for the Norwegian Air Force prior to the fall of France. Considering the situation in Europe during that time in 1940, the

only viable alternative was to search for suitable locations in Canada. Bernt Balchen, a Norwegian aviator was instructed

by the Norwegian government-in-exile to immediately begin negotiations with the Canadian government for the establishment of a main training centre at the Toronto Island Airport.

The Norwegians set up their camp on a piece of property across from the Toronto Island Airport, which was near the Tip Top Tailors building and the Toronto Ball Park. Construction of buildings on the new Norwegian training centre began in early September 1940 and by 10 November 1940 "Little Norway" was officially opened. The first commander was Hjalmar Riiser-Larsen.

THE NORWEGIANS SET UP THEIR CAMP ON A PIECE OF PROPERTY ACROSS FROM THE TORONTO ISLAND AIRPORT

The second batch of P-36 Hawk aircraft that were ordered from the United States prior to the invasion of Norway were delivered to Little Norway. Other aircraft delivered to Little Norway from the order placed with the United States prior to the invasion included 36 Fairchild PT-19 trainers and 33 Douglas DB-8A-5/A-33s - an export version of the Northrop A-17 Nomad.

The Fairchild supplied PT-19s were not ideally suited for the Canadian climate and were eventually retrofitted with the larger 200 hp engine and canopies, which converted the aircraft to the PT-26 standard. Under the auspices of a Lend Lease Agreement, an additional order of 50 PT-26 and PT-26A Cornells was placed with the first deliveries being received in 1942.



Norwegian Cornell PT-26s at Muskoka Airport, winter 1944.
NORWEGIAN PUBLIC ARCHIVES

677 AIRCREW AND 2646 NON-FLYING PERSONNEL GRADUATED FROM THE LITTLE NORWAY TRAINING CAMPS CONDUCTED AT TORONTO AND MUSKOKA

Norwegian pilot trainees started their flying career on the Cornells at Toronto Island Airport. The elementary flying program was set up with the same program as being utilized at the British Commonwealth Air Training Plan schools in Canada. Instruction was initially conducted in Norwegian, but as the Norwegians became more proficient in English, the major part of the instruction was done in English. After the Norwegian student graduated from Little Norway, the Norwegian student pilots received advanced and operational training at one of the Service Flying Training Schools in Moose Jaw (flying Harvards), Camp Borden (flying Yales, Harvards and Douglas A-33s, an

update of the A-17 Nomad) or Hagersville (flying Ansons). As part of the agreement, some Norwegian instructors were based at these schools, but most of the instructors were Canadian. The Norwegians were the only other group in Canada other than the British that had a separate flying Training operation under the control of the BCATP.

After the United States entered into World War II, traffic at the Toronto Island Airport greatly increased. In 1942 Little Norway was moved to the Muskoka Airport, which is located about 100 miles north of Toronto. The Norwegians also purchased a 430 acre recreational retreat east of Huntsville. To the Norwegians, it was known as "Vesle Skaugum" or 'Home in the Wood', the name of the Norwegian King's residence. This facility was used primarily for rest and basic training. The RCAF purchased the Toronto training centre, although the original aerodrome at Toronto Island was still at the disposal of the Norwegian Air Force.

A sentry at Camp Little Norway, Muskoka, Ontario 1944.
NORWEGIAN PUBLIC ARCHIVES



The training continued at Muskoka until February 1945, when the Little Norway training camp was moved to RAF Winkleigh in Devon, England.

A total of 677 aircrew and 2646 non-flying personnel graduated from the Little Norway training camps conducted at Toronto and Muskoka. Although separate from the BCATP, this program was coordinated with the BCATP and was prominent in the Canadian public eye. Over the course of the war, Norwegian aircrew shot down more than 225 enemy aircraft, participated in the destruction of six submarines and damaged five more. Their contribution to victory was impressive, and could not have been made possible without the facilities of Little Norway in Canada to rearm, re-train and re-establish itself.





A Scarborough Man's Part in the Battle of Britain



by Douglas Cockell



Bob Cockell with a Spitfire, probably at Hornchurch. DOUG COCKELL COLLECTION

222 Squadron (marked ZD-D) and 603 Squadron (marked XT-M) Spitfires at Hornchurch, 1 September 1940.

In 1955 Arthur Robert Cockell and his family emigrated from Edinburgh, Scotland to start a new life in Scarborough, Ontario. It was only ten years earlier that he had been demobilized from his Second World War service with the RAF.

Bob had been a part of the Second World War from the beginning. He had begun serving in the Royal Auxiliary Air Force—what Americans call the reserve—in the years leading up to the war, spending his weekends and spare time at RAF Station Turnhouse while he worked as a carpenter. When war was declared, the reserves were embodied into the RAF and Bob quickly became a flight sergeant and armourer. 603 Squadron, City of Edinburgh, had been one of the first fighter squadrons to give up the Bristol Bulldogs and Hawker Harts of the thirties for Spitfires, so they were ready when war broke out.

The Luftwaffe made an early strike at the train bridge over the Firth of Forth that connected Scotland's urban lowlands with northern cities like Inverness and Aberdeen. Along with Glasgow's 602 Squadron, it was the Spitfires of the 603 that rose over the wide salt water estuary and the North Sea to defend the bridge's beautiful Victorian arches.

Each fighter had eight small calibre Browning machine guns synchronized to converge at attack distance—which had to be alarmingly close for the guns to do fatal damage. Bob Cockell would have loaded the belts of bullets wound in their cylindrical canisters into the wings of the Spitfires, gluing doped fabric patches over the leading edge gun ports to streamline them, ready for battle—and that night spent cartridges fell like chestnuts into privet hedged gardens and the grey stretches of the Firth. When it was over, the bridge was undamaged and the Scottish

Spitfires had shot down the first German aircraft of the war on British soil.

During the Battle of Britain, it was Air Marshall Dowding's policy to rotate northern squadrons down to the front line to relieve stations like Biggin Hill that were taking the full brunt of the bomber raids when airfields themselves were the prime targets. So 603's pilots found themselves being scrambled from battle weary Hornchurch. 603's Squadron motto was "Gin Ye Daur"—Lest You Dare—and at war's end it had one of the highest kill rates of any squadron in the Battle: fifty eight German aircraft destroyed with a loss of thirty Spitfires. The Hornchurch C.O. called them "Perhaps the greatest squadron of them all".

As the focus of the war shifted to the Japanese and their incursions into the east, Bob Cockell was sent to India. As an armourer, he

was expected to train Indian servicemen to use the ammunition, guns and bombs a local resistance force would need, but the job was constrained by time lines and political considerations that were out of his hands and

**"AND IF THE DON SIGHTS DEVON,
WE'LL QUIT THE PORT OF HEAVEN, AND
WE'LL DRUM THEM UP THE CHANNEL
AS WE DRUMMED THEM LONG AGO."**

he had to watch men fly off to their deaths before they could be adequately trained. It's not surprising that this kind of service, compounded by bomb disposal duties, would leave him shaken and uncomfortable talking about the war when he finally stepped off the train at Edinburgh's Waverley Station to re-enter civilian life.

It's hard to quantify the valour and sacrifice the war demanded of airmen like Bob Cockell. Before he passed away in Scarborough at the age of sixty six, Bob's favourite poem was "Drake's Drum"—about Sir Francis Drake's part in defeating the Spanish Armada, and he liked to quote the lines: "And if the Don sights Devon, we'll quit the port of heaven, and we'll drum them up the channel as we drummed them long ago."



Aircraft Updates

Bolingbroke Progress

by Wayne Ready

The restoration of CWH's Bolingbroke aircraft began in the mid 80s after the recovery of seven and a half Bolingbroke airframes from western Canada. A dedicated volunteer crew have devoted many hours to completing the restoration work on the aircraft to date. Raising funds, finding parts, and sourcing companies to help with various equipment to assist with the airframe restoration was a constant search.

The Bolingbroke has challenges that differ it from other WWII aircraft - mainly, the steel over aluminum spars in the wings and centre section. All the steel had to be replaced, a task that required locating special and rare steel, bending to proper shape and installation. Locating the steel took time, as did the forming of the spar sections and the tedious task of drilling the countless holes for the rivets.

The team has completed restoration of the centre section and attached the cockpit and fuselage as well as the tail tab. The rudder and elevators are structurally finished as well as the tail wheel assembly. The landing gear has been completely rebuilt and installed. Wiring has been put in place awaiting other areas to be finalized. The team is also working on the wings in preparation for installation to the airframe.

A big step forward is the restoration of the 920 hp Bristol Mercury engines for the Bolingbroke which are currently at an engine rebuild shop. The propeller blades have also been tested; but four blades were rejected leaving only two usable blades out of six blades required.



BILL CUMMING

The Bolingbroke will be refinished to the colours and markings of No. 119 'Hamilton Tiger' RCAF Squadron from WWII. It will also carry aircraft #714 (DM-L) which flew out of Yarmouth, Nova Scotia patrolling the waters for submarines and performed escort duty for convoys. After the restoration has been completed, it will be the only example of a Canadian built Bristol Bolingbroke in the world.

The next time you are at the museum stop by the Bolingbroke restoration project. The Boly Crew is happy to talk to you about the aircraft.



New panel section "Cleco'd" in position. GORD DUNN

Tracker Tidbits

by Bob Freeman

Restoration work on the museum's Tracker aircraft continues and we have good news to report.

CWH staff and the volunteer crew were aware of corrosion under part of the left hand side fuselage skin at the aft/main fuselage joint. But we were all unaware of just how extensive the corrosion was and more importantly, just how much damage had been done to the underlying structure.



Talking Turkey

by Don Coit

The museum's Grumman Avenger TBM-3E Serial No. 53858 is one of 7,546 produced by Eastern Aircraft Division of General Motors. It was accepted by the US Navy in June 1945 and saw service in the United States and Europe until June 1956 when it was moved to the Arizona desert. In 1972 it was purchased and converted to a water bomber in California and then a sprayer when it was purchased by Forestry Protection Limited in New Brunswick.

The museum purchased the Avenger in 2009 with the assistance of a generous donor and transported it to Hamilton. For the past seven years CWH has been restoring the aircraft to flying condition and when completed it will represent an Anti Sub AS-3 Avenger number 324 of the Royal Canadian Navy.

The restoration of the Avenger is nearing completion with all the major components on or ready to go back on the aircraft. However there is still a way to go with its restoration as every system



CWH's Avenger on the aircraft jacks for the landing gear swings and testing. The aircraft has now been removed from the jacks, the wings have been folded and restoration continues towards its completion to flying status. AL MICKELLOFF

has to be inspected, tested and adjusted to make sure everything is operating to specification and then complete the paper work and submit it to MOT for approval.

NEW COMMUNICATION ANTENNAS AND STROBE LIGHT HAVE BEEN INSTALLED

Testing of the landing gear operation has been completed recently. The landing gear retracts, descends properly, drops and locks when the emergency cable is pulled. With the Avenger now removed from the aircraft jacks, the wings have been folded in preparation for winter storage in the hangar. New communication antennas and strobe light have been installed and the next projects in the restoration process are to install the ailerons and set up the aileron trim tabs and have the radios and transponder installed.

An outside company was contracted to work on the problem and a few weeks ago they removed the affected skin. As the saying goes "Sometimes, you just have to win one!" – and we have. The two contractors drilled out approximately 800 rivets in just 4 hours and removed the skin. Corrosion was limited to the skin and underlying shims (between skin and frame) meaning that the repair will be relatively easy, requiring a new skin and shims to be made. CWH staff have started work on the replacement skin panel & shims; the photo shows this new panel "Cleco'd" in position on the aircraft for fit checking. – yes it fits!

The volunteer crew will mitigate the very minor surface corrosion spots found on the underlying structural components and soon we hope to have the sound of riveting reverberating through the hangar and that new panel back on the aircraft. If you take a careful look at the similar panel on the right hand side of the aircraft, it can be seen that this panel has also been replaced at some time during the aircraft's life prior to CWH; thus it would appear this problem was not uncommon.

GOLDILOCKS

The Moose Jaw Harvard Aerobatic Team by Bill Cumming



Probably the most famous picture of the RCAF Moose Jaw Harvard Aerobatic Team "The Goldilocks" performing their famous seven plane 'crazy formation' in 1963. None of the Harvards at this time were not painted with the blue cowling, wing tips and rudder stripes. On the wing is F/L Bob Dobson. DND/CPL. WRIGHT

Without a doubt the most colourful military aircraft of the post war years have been the various types flown by the aerobatic teams of the world's air forces. Most of the major air forces maintain an official Flight Demonstration Team, which serve as a recruiting tool and for public relations. Some squadrons within today's modern military aviation have "unofficial" squadron display teams, usually consisting of three or four airplanes. They appear during the air show season at a few local air shows and community events.

The aircraft used by these teams are not modified for air show demonstrations and did not wear the high visibility paint schemes of an official aerobatic demonstration team. Able to demonstrate 'non-aerobatic routines' for their audience, the squadron display teams are a welcome addition to the air show circuit as they help to fill requests that the official demonstration team cannot honour. Many display teams appeared for only one or two years. A few squadron display teams survived for a number of years but disbanded either due to funding issues or equipment retirement.

Since the end of World War II, the Royal Canadian Air Force has been able to form a number of flight demonstration teams.

Many of these have been the squadron display team, but one of the greatest "official" aerobatic teams formed during the days of the RCAF was the "Golden Hawks". They were reputed to be the finest aerobatic team of their day. Equipped with the Sabre Mk. V, and later the Sabre Mk. VI jet fighter, they performed before millions of people each year in North America. But their reign was not to last forever and they would only survive for five air show seasons, being disbanded in 1964.

MANY DISPLAY TEAMS APPEARED FOR ONLY ONE OR TWO YEARS

During the summer of 1962, officials of Moose Jaw, Saskatchewan requested that aircraft from the local military air base take part in the city's exhibition. RCAF Station Moose Jaw was the home of the advance flying training school and was equipped with the Harvard Mk. IV aircraft. The notion of a new aerobatic team featuring the Harvard was first proposed by veteran pilot F/L Murray Neilson, a staff instructor with the Flying Instructor School. The pilots selected for the team were instructors stationed at the Moose Jaw training base, and the display team was known officially as the Moose Jaw Harvard Aerobatic Team. In planning the display, one enterprising officer thought of doing an imitation of the famed "Golden Hawks". A reporter, after seeing this Harvard



team at their first public performance, dubbed the team "The Goldilocks" in his news story. This name remained with them for the next two seasons. The Goldilocks team was equipped with seven Harvard aircraft painted bright yellow; the standard colour of the training aircraft of the Royal Canadian Air Force. Seven flight instructors were assigned to the team, while an eighth officer flew the spare aircraft, managed the team, and acted as air show commentator. Towards the end of the "Goldilocks" career, their aircraft would be painted with bright blue engine cowlings, blue wing tips and blue stripes on the rudder. Each aircraft would also carry a large team number on both sides of the engine cowls.

HIGHLIGHTS OF THE TEAM PERFORMANCE WAS THE "CRAZY FORMATION"

The Goldilocks were quite capable of doing precision aerobatics, but were restricted in their manoeuvres by a dictum from Training Command HQ that specified 'no full looping manoeuvres, and no rolling in formation'. This made it rather challenging to come up with an interesting routine. But the instructor pilots were best known for their mad formations which they described as the formations flown by their inexperienced pupils at Moose Jaw. One of the highlights of the team performance was the "crazy formation", a manoeuvre where four aircraft flew at a different angle, yet maintained formation. Some had one wheel down, some both, with wings sprouting in all directions. This was achieved by cross-controlling the aircraft and exchanging components of the undercarriage with Harvard Mk. II undercarriage. The aircraft were actually flying parallel, but appeared to be on a collision course at times. The Goldilocks ended their flying display with a seven plane 'crazy formation' which became their trademark, and was a sight to be long remembered by spectators and proved to be one of the highlights of their show.

The Goldilocks entertained crowds throughout Canada, took part in several Air Force Day celebrations and appeared at the Canadian National Exhibition.

The Goldilocks seven plane formation over the Saskatchewan countryside.
PUBLIC ARCHIVES CANADA



National television covered their appearance at the National Air Force Day Air Show at Rockcliffe, appearing with the Golden Hawks.

By 1963, the success of the Goldilocks grew. Air Force headquarters, noticing this success and the publicity the team was receiving, ordered that the name 'Goldilocks' be dropped and replaced it with the name "Moose Jaw RCAF Aerobatic Team". Headquarters also restricted performances to accredited air force shows. However, the Goldilocks were disbanded at the end of the 1964 air show season. During the period of time that the Goldilocks existed, they had demonstrated their prowess and the versatility of the Harvard before millions of people. The Harvard aircraft was being phased out of service and was being replaced with the new Canadair CL-41 (CT-114) Tutor jet trainer.

Goldilocks opposing solos routine.
PUBLIC ARCHIVES CANADA





Chuck McWilliams in Harvard CF-RZQ as part of the Canadian Warplane Heritage Museum's Harvard Demonstration Team. *JIM HOOVER*

Canadian Warplane Heritage Museum – Harvard Demonstration Team

In the fall of 1972, the decision was made to add a Harvard to the CWH's small collection of aircraft. A Harvard Mk. IV was located at the Lindsay (Ont) Airport. The Harvard had landed on the ice on Lake Simcoe two winters before, causing some minor damage. An inspection of the Harvard was completed by Merrill McBride and he pronounced it relatively sound. After installing a new battery, the engine started immediately - after 2 years in the open: money changed hands

and the Harvard belonged to CWH. The Harvard was flown back to CWH's base at Mount Hope and the winter of 1972 was spent restoring the aircraft and repainting it into its former RCAF colour scheme. Since that time, Harvard Mk. IV CF-UUU "Triple Uniform" has been the backbone of the museum's pilot training program.

In the spring of 1973, the Canadian Warplane Heritage Museum formed a Harvard Demonstration Team. The initial

team members consisted of Robert (Bobby) Small, with his Harvard CF-UZW; Alan Ness, who flew CF-UUU; Charles (Chuck) McWilliams with his Harvard CF- RZQ and James (Jim) Vernon with his Harvard CF-WPK. The Harvards were painted in an authentic reproduction of RCAF "Goldilocks" aircraft of 1964.

DR. NORMAN SHRIVE TOOK OVER AS PILOT OF "TRIPLE UNIFORM"

In 1974 Bobby Small sold his Harvard and the team now consisted

of three aircraft. Chuck McWilliams was the team leader and Jimmy Vernon remained with the team. Alan Ness became involved with the Firefly CF-BDH as its demonstration pilot and Dr. Norman Shrive took over as pilot of "Triple Uniform" with the Demonstration Team. George Stewart became the formation back up pilot and formation instructor.

The CWH Harvard Demonstration Team performed at many air shows in Ontario and the eastern United States including



an appearance at the EAA Warbirds of America convention at Oshkosh. The team, consisting of Chuck McWilliams, Norm Shrive and Jimmy Vernon, was recognized with a special award at the convention for their formation flying display during the Harvard/T-6/SNJ flybys.

In February 1975, Mike Hutchins acquired a "basket case" Harvard Mk. IV and following a seven month restoration process, C-FVCJ took to the air once again. Bobby Small occasionally flew C-FVCJ for the 1976 airshow season as Mike Hutchins was checking out in the Harvard in preparation for joining the Demonstration Team during the 1977 airshow season.

The Harvard Demonstration Team remained as a unit until 23 September, 1978 when it flew its last demonstration at the CFB Trenton Air Show and, as they say in military jargon, "the team was stood down". After the display both Chuck McWilliams and Jimmy Vernon sold their aircraft.

The public's request for Harvard demonstrations in the 1979 airshow season saw three plane formations with Norm Shrive flying CF-UUU, Mike



In 1981 the Avro Anson Mk. V joined the Harvard demonstrations for some airshows. It added a new dimension to the flying displays and presented a rather unique formation. *THE HAMILTON SPECTATOR*

Hutchins in C-FVCJ and Peter Gutowski in C-FVMG, a Harvard Mk. IV that had been generously loaned by CWH member Sid Bonser for airshow displays. By this time the Harvards had reverted to the standard RCAF yellow colours. In 1981 the Avro

AS THEY SAY IN MILITARY JARGON, "THE TEAM WAS STOOD DOWN"

Anson Mk. V was invited to join the Harvard demonstrations for some airshows. It added a new dimension to the flying displays and presented a rather unique formation. The memory of the Goldilocks will probably live on for many years to come. At many air shows which are staged around North America each summer, two or more Harvards/Texans/SNJ's can be seen flying together in formation along the show line, just as the Goldilocks did many years ago.



The Canadian Warplane Heritage Museum's Harvard Demonstration Team. *JIM HOOVER*

Upcoming 2017 Closures

January 11 to 17 Inclusive

February 28 to March 7 Inclusive

March 28 to April 5 Inclusive

2017 Calendar

Here is our preliminary 2017 Schedule of Events:

January 28 AVIATION PHOTOGRAPHY
by Eric Dumigan

February 18 to 20 HAMILTON'S KIDS-FEST

February 24 to 26 HAMILTON WOOD SHOW

March 18 ANNUAL GENERAL MEETING

March 26 HERITAGECON XI Model Contest & Sale

June 17 to 18 Come fly with us at FLYFEST

July 8 RCAF DAY featuring current RCAF aircraft on display

July 15 LANCASTER DAY

July 30 VINTAGE WHEELS & WINGS

August 12 BCATP FLY-IN

September 9 to 10 CLASSICS OF THE GOLDEN AGE indoor car show

September 23 SKY'S THE LIMIT Charity Auction

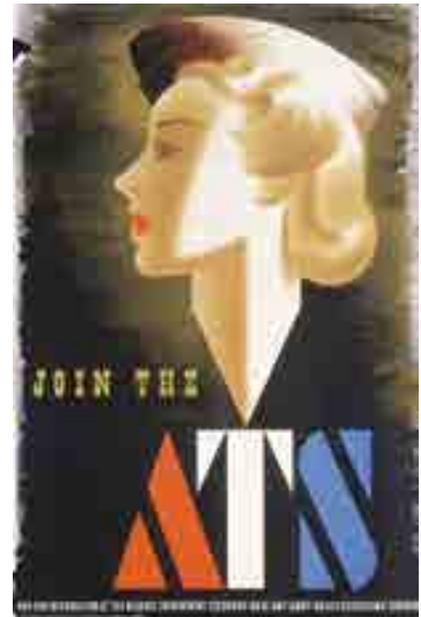
November 18 SWING OUT TO VICTORY Dinner & Dance

*Please visit warplane.com for additional updates. Dates subject to change. Additional events still to be added.

From the Archives Department

Exhibition - The Wildman Collection: The Art of Recruitment

In a time where the internet and social media were not even words in the dictionary, posters were a popular form of communication. The Bureau of Public Information and later the Wartime Information Board undertook an extensive propaganda campaign to generate support for the war. Each poster was created by an artist to entice the general public through colour, composition and design to become engaged in the war effort at hand. Posters were the ideal mode of conveying messages because they were relatively inexpensive to produce, they could be designed, printed and distributed in a relatively short period of time and they were visually stimulating. Recruitment and propaganda posters were printed in a wide variety of sizes and could be hung on everything from billboards, shop windows to theatres and even on buses and streetcars. The images made a statement without needing too many words or phrases, making an immediate impact on people's values and attitudes. After their main purpose was filled in the 1940s, we were left with works of art which tell the story of Canada's journey to make the ultimate sacrifice during one of the country's most historically important time periods.



A feature piece to this collection is an original 1941 Abram Games poster for the Auxiliary Territorial Service, affectionately known as the Blonde Bombshell. This poster was withdrawn from circulation after only five weeks. Following heated discussions in Parliament, the woman's image was deemed to be too glamorous, as some government officials felt the poster looked like a beauty advertisement. Yet during the posters five week run, the ATS had the highest recruitment rate during the war. This poster along with other original Abram Games works from the Wildman Collection are now on view in the Canadian Warplane Heritage Museum's Exhibit Gallery.

How Can I Help? Donate a Car



Donate A Car Canada accepts vehicle donations for the Canadian Warplane Heritage Museum. They provide free towing in many areas across Canada, or you can drop off your vehicle to maximize your donation. When you donate your RV, boat, motorcycle or other vehicle to the Canadian Warplane Heritage Museum through *Donate A Car Canada* it will either be recycled or sold at auction depending on its condition, age and location. *Donate A Car Canada* will look after all the details to make it easy for your charity to benefit. After your vehicle donation is complete, the Canadian Warplane Heritage Museum will send you a tax receipt within 45 days!

For more information, contact Pam Rickards, Vice-President - Operations at 905-679-4183 ext. 230 or pam@warplane.com.

To donate visit warplane.com/donate/car-donations.aspx



CANADIAN WARPLANE HERITAGE MUSEUM

Lest We Forget



On December 7, 2016 the museum was the site of a Memorial Service for a hometown hero, Captain Thomas McQueen who tragically lost his life when his RCAF 401 Squadron CF-18 went down during a training exercise at 4 Wing, Cold Lake, Alberta on November 28, 2016.

During the Memorial Service Doctor McQueen when speaking about his dear son Thomas, mentioned that he took his first aircraft ride here at the Canadian Warplane Heritage Museum as a boy and that it was fitting that his final flight, so to speak, be here at the museum. As many of you may know Thomas was a vibrant member of our museum family. As a young lad he attended our aviation summer camp programs and then returned to be our museum co-op student who helped teach these summer camp programs to new students. Thomas was a very gifted, talented, and special young man who touched everyone who had the pleasure to meet him in a very caring way and we will always be blessed to have known Thomas as one our museum family members. Although Thomas was only with us for a short while, his passion for military aviation and ability to dream big, and then pursue his dreams with all his might are a great example and reminder to us all, that we can and should do the same concerning our own dreams!



So wherever you may find yourself on the "Road of Life" today let us all take note of this remarkable young man, Captain Thomas D.W. McQueen, who served his country proudly, who lived his life in full measure, and chased his dreams with all his might and strength. For in so doing Thomas taught us that it is not the number years one is on the Earth that determines the value of a person's life, but rather how one uses that precious time to make the world a better place for having been here.

Godspeed Captain McQueen.

Ad Astra

A handwritten signature in black ink, which appears to read "D. Rohrer".

David G. Rohrer C.D.

President & Chief Executive Officer, Canadian Warplane Heritage Museum

A promotional poster for an exhibition. The background is a collage of images: on the left, a close-up of a pilot's face wearing goggles and a leather flight helmet; on the right, a stylized graphic of a woman's face in profile, reminiscent of a World War II recruitment poster. The text is arranged in horizontal bands: "EXHIBITION" in large white serif font on a red background; "The Wildman Collection: The Art of Recruitment -" in black serif font on a yellow background; "Posters from the Second World War" in large black serif font on a blue background; and "NEW EXHIBITS JUST ADDED" in white serif font on a dark blue background at the bottom.

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