

JULY/AUGUST 2017

FLIGHT LINES

CANADIAN WARPLANE HERITAGE MUSEUM

B-25 "HOT GEN"

The RCAF &
the Mitchell
at War

YELLOW PERIL
Merrill McBride's
Experience





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JULY/AUGUST 2017

FLIGHTLINES

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Cover: Dave Rohrer brings the B-25 "Hot Gen" up close. KOOL SHOTS



**FEATURING
A CHANCE TO
WIN
A TOUR OF**

*Jay Leno's
Garage*

**SEPT. 23,
2017**

News

SUMMER 2017

We are now well into the summer of 2017 and the activity level in and around the Canadian Warplane Heritage Museum has intensified.

During the month of May we saw the museum aircraft being prepared for the flying season, and the first summer events have taken place at the

museum during the month of June. Looking forward into July, August and September, events and activities are planned for most weekends during this time frame. One of the major events is Air Force Day taking place on July 8th, presenting aircraft of the past, present and future. This is a Canada 150 Hamilton signature event featuring current RCAF aircraft and current members of the Air Force, as they join with the museum to celebrate our shared values, our achievements and our place in the world. Other significant events include the Community Charity Airshow to be held at the Brantford Airport at the end of August, and the return of the Classics of the Golden Age indoor car & aircraft show in mid September, featuring the world renowned creation, the 1935 Bugatti Aerolithe which won International Historical Car of the Year in 2013. A full list and details of the summer activities is printed in this issue of *Flightlines*.



Captain Matthew "GLIB" Kutryk with Hamilton Air Cadets.
"GLIB" started his flying career as an Air Cadet. DAVID BLAIS

Just as this issue of *Flightlines* was being finalized and being readied for publication, the Canadian Warplane Heritage Museum was fortunate to host Captain Matthew "GLIB" Kutryk and the 2017 Demonstration CF-18 Hornet. The Hornet is strikingly painted to celebrate the 150th anniversary of the Confederation of Canada, and honours the history of the RCAF and Canadian Armed Forces as a part of Canada's proud history. The official logo for Canada 150 is placed throughout the design on the aircraft. The Demonstration Hornet was in Hamilton as part of a media event to kick off the City of Hamilton's 150 Celebrations as well as the Community Charity Airshow.

This issue of *Flightlines* features a short article about the B-25 Mitchell during World War II with the RAF, and a story of the dedication of the CWH B-25. This issue also includes an interesting and informative story of a life experience flying the Harvard aircraft, along with the regular news items and other museum happenings. Enjoy this issue of *Flightlines* and let us know how we are doing!

Bill Cumming, Volunteer Editor
museum@warplane.com



CANADIAN WARPLANE HERITAGE MUSEUM

Hamilton Afghanistan War Monument Unveiling Ceremony

On 3 June 2017, a large crowd attended the outdoor Unveiling Ceremony at the Canadian Warplane Heritage Museum of the Hamilton Afghanistan War Monument - a permanent monument to members of Hamilton's military garrison and other Hamiltonians who served with the Canadian Armed Forces in operations in Afghanistan and South West Asia between 2001 and 2014.

Construction costs for the Hamilton Afghanistan War Monument were covered by the veterans' support group, North Wall Riders Association Steel City, the Canadian Warplane Heritage Museum as well as the regimental trusts and associations of Hamilton units and private individuals. The Canadian Warplane Heritage Museum also provided the site and will continue to maintain the monument.

"We are pleased and proud to be a key partner in the realization of this Afghanistan War Monument in Hamilton which recognizes the fallen soldiers from our community, as well as, the duty, service and sacrifice of all who served during the Afghanistan campaign. LEST WE FORGET" - Canadian Warplane Heritage Museum President & CEO David G. Rohrer, CD.



Hamilton Afghanistan War Monument - Light Armoured Vehicle (LAV) III. DAVID BLAIS



DAVID BLAIS

CF-104 Starfighter

Once all of the fleet of airworthy aircraft are back online for the busy flying season, effort will be refocused back to refurbishing the CF-104 Starfighter to get her back on the pedestal out front of the Canadian Warplane Heritage Museum. It has already had one day of soda blasting but requires one more, then will be washed, painted and the markings reapplied. The mounts still need to be NDT'd so we are more than likely looking at the end of the summer before she is pointed to the sky once again.

VINTAGE WHEELS & WINGS JULY 17, 2016



News



Two Great Car Shows

Classics of the Golden Age – This show returns after a few decades hiatus on September 9 and 10, 2017, once again organized by CWH member Paul Cronkwright, is an indoor display featuring classic cars and aircraft from the early teens to the 60s. Come and enjoy fabulous classic cars including Chrysler, Cord, Hudson, Studebaker and Packard to name just a few, all blended

in with our spectacular collection of vintage Canadian military aircraft all inside under one roof. The star attraction for this year's show will be a 1935 Bugatti Aerolithe, supplied by CWH member David Grainger from The Guild of Automotive Restorers and as seen on *Restoration Garage*.

Vintage Wheels & Wings – This long running popular outdoor show, organized by CWH member Bill Rouw and crew, is one of the summer highlights for both car and aircraft enthusiasts. Bring your vintage vehicle on July 30, 2017 to be part of the show or just drop by to view the beautiful collection of vintage cars and aircraft. Car owners may take pictures in front of a vintage aircraft for a minimum donation of \$5 to the Museum. We consider a VINTAGE vehicle to be one that was manufactured 20 years ago or more. Admission is regular rates for visitors but is free for car driver and one passenger who displays a vehicle in the show.

Talking Turkey

When you look at the Avenger these days, she certainly looks ready for flight but is she? The volunteer crew certainly get asked almost daily WHEN? As a restoration project gets close to completion, it's difficult to predict a first flight date.

Firstly, the Avenger still has some corrosion repairs to be completed to the starboard wing. Secondly the biggest unknown for timing would be the approval of paperwork. All of the documentation and paperwork for the issuing of the Flight Certificate Permit need to be submitted to Transport Canada. Then that paperwork that documents all of the work that has been done throughout the restoration process must be approved by Transport Canada. That process can be intensive and can take more time than originally hoped for. So, depending on how all of these processes go, the Avenger may or may not fly this season. While our expectations and hopes are that it is this year, it could be next year. FINGERS CROSSED!



AL MICKELLOFF

Ruhr Express Debut



AL MICKELLOFF

To commemorate Canada's 150th celebrations this summer, our Lancaster has been decorated in the temporary markings of Canada's first Lancaster KB700, the Ruhr Express. 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.



Canada



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\$22⁹⁹
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B-25 Mitchell "Hot Gen" T-Shirt

Canadian Warplane Heritage Museum exclusive t-shirt of the B-25 Mitchell with Hot Gen nose art.

In World War II Air Force slang "gen" meant "Inside information", so, getting the "Hot Gen", meant getting the latest gossip.

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The 2017 CF-18 Hornet features an elegant design that celebrates Canada's 150th birthday.

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JULY/AUGUST 2017

FLIGHTLINES





The RCAF & the Mitchell at War

by Hugh A. Halliday

North American Mitchell II, 'NULI SECUNDUS' – 180 Sqn, RAF Foulsham, July 1943. RAF MUSEUM

During the Second World War, Royal Canadian Air Force squadrons flew many types of aircraft in a variety of roles. Looking over this history, it is worth noting that no Canadian squadron operated in the medium bomber role closely identified with tactical bombing. The greater part of RCAF personnel operating overseas in Mitchell medium bombers did so as members of Royal Air Force squadrons.

First flown in August 1940, the North American B-25 Mitchell was made famous by the United States Army Air Force Doolittle Raid on Japan in April 1942. Even today this type of aircraft lives on as a star in the 1970 satirical war film *Catch-22*. Almost 11,000 of the type were built. Of these, a total of 910 were diverted to the RAF under the Lend-Lease program. Many of these aircraft crossed the Atlantic, but some were retained at No. 111 Operational Training Unit (OTU) in Nassau, No. 13 OTU in England or diverted to No. 5 OTU at Boundary Bay, B.C. At the OTU schools, this type was used to introduce pilots to a tricycle undercarriage.

The first Mitchells to reach the RAF were 23 B-25Bs which were designated Mitchell I. These planes were used exclusively for training and familiarization and never achieved operational status. The first operational B-25s to serve with the RAF were B-25Cs and Ds, which were designated Mitchell II by the RAF. Altogether, 167 B-25Cs and 371 B-25Ds were delivered to the RAF as Mitchell II.

The largest number of RCAF aircrew to fly in Mitchells served in RAF medium bombers in Britain. Four squadrons—Nos. 98, 180, 226 and 320—operated in the Second Tactical Air Force as No. 139 Wing. Before D-Day in June 1944 they attacked flying bomb sites, rail yards and supply depots in France and Belgium; after D-Day their target lists were extended to road junctions



CANADIAN WARPLANE HERITAGE MUSEUM

and bridges. Operating at 10,000 feet and below, their principal enemy was flak which took down bombers almost randomly. The Luftwaffe spent little time on countering well escorted Mitchells.

From December 1943 to November 1944, No. 139 Wing was commanded by Group Captain Clarence R. Dunlap, RCAF. His appointment was questioned by some RAF officers who felt that as the RCAF had no medium bomber squadrons, it was inappropriate for such a formation to be headed by a Canadian. Such talk raised the hackles of Air Marshal Harold Edwards who was fiercely nationalistic. Dunlap had recently commanded No. 331 Wing in North Africa; that should be enough. As it was, Air Marshal Sir Basil Embry, commanding No. 2 Group, which included No. 139 Wing, agreed with the appointment. Dunlap eventually completed 35 sorties with the Mitchell wing.

The road to a Mitchell squadron usually led through No. 13 OTU at Bicester, England. Many of the RCAF personnel passing through had already met while attending No. 34 OTU at Pennfield Ridge, N.B. Pilots at No. 13 OTU normally received about three hours of dual instruction on Mitchells, followed by 27 hours flying in sole control; about a third of this consisted of formation flying. Navigators logged about the same hours or a bit more. Many also took courses in airfield defence, learning how to use rifles and Sten guns in the event of having to defend a continental airfield; No. 139 Wing was based in Belgium from November 1944 onwards.

Trainees also learned field craft, in case they were shot down behind enemy lines. A common event was an evasion exercise whereby dozens of aircrew were taken to remote areas, dropped off, and told to "evade capture" while being hunted by British Home Guard and police.

TRAINEES ALSO LEARNED FIELD CRAFT, IN CASE THEY WERE SHOT DOWN BEHIND ENEMY LINES.

It is difficult to say how many Canadians served in Mitchells; a conservative estimate would put it at 250. In Britain and Europe, at least 51 members of the RCAF were killed while flying in this type. Two died while attending No. 13 OTU; three died in 1943 in accidents with No. 21 Sqn.; 13 were killed with No. 98 Sqn.—one in a flying accident, the others on operations; 14 with No. 180 Sqn., six of which were classified as accidents, and 18 with No. 226 Sqn., all of which were operational.

Mitchells flew both daylight and night missions. Although respected as an airplane, crews disliked the wing spar which hindered contact between the pilot and bomb aimer and the gunners in the rear.

No. 139 Wing crews were respected for their accuracy. By 1945 they were permitted to bomb within 500 yards of

the front lines, a thousand yards if aiming with radio aids. Mitchell tactical bombers tended not to catch the public imagination which was accorded to rocket firing Typhoon fighters or hill

hugging strafing Spitfires. The war against bridges and marshaling yards was nevertheless vital to infantry operations, minimizing enemy mobility and opposition. Canadian airmen engaged in such work perhaps deserved a few more press releases.

The Royal Canadian Air Force was an important user of the B-25 Mitchell although most of RCAF operational service with the Mitchell was postwar – but that is another story.

Editor's Note: This article is provided by the Legion Magazine (April 2013) and has been modified for Flightlines.



Canadian airmen next to their Mitchell, July 1944. CANADIAN FORCES



Mitchells of 98 Squadron, Moelsbroek, Belgium, 1944. IMPERIAL WAR MUSEUM



Mitchell II, 98 Sqn, RAF, based at Dunsfold, Surrey on a bombing mission over a flying bomb site. IMPERIAL WAR MUSEUM



Remembering “Hot Gen”

by Mo McIntosh

In November 1999, CWH member George Van Iderstine passed away in his 89th year. He was unbeknownst to most members but his legacy lives on in our B-25 Mitchell “Hot Gen”. George Van Iderstine flew as a crew member in the original “Hot Gen” in 1944 as a wireless air gunner. I first met George in May 1993. He became the inspiration of my research of 98 Squadron, which later led to my involvement in the dedication of “Hot Gen” in September 1994.

George joined 98 Squadron in 1944 after being on staff of No. 4 Air Observers’ School in London, Ontario. Along with George, his crewmates in “Hot Gen”

were Paddy Thompson, navigator/bomb aimer; Al “Dunky” Duncan, pilot; and Norman Prowse, air gunner. George first brought to the attention of the B-25 crew the story of “Hot Gen” in 1992. At that time he showed pictures of himself in front of original “Hot Gen” during WW II. The B-25’s nose art was subsequently changed shortly afterwards.

CWH’s Mitchell was built by North American Aircraft at their Kansas City plant in early 1945, one of 4,390 Model B-25Js. It never saw service with the military and was flown as a corporate transport plane for most of its life between 1946 – 1974. Amongst its owners was Northern Pump Company of Minneapolis, King Korn Premium Stamps, Chicago and The Bendix Corporation. It was withdrawn from use in 1974 and placed in open storage in Wilmington, Delaware.

UPON ITS ARRIVAL INTO HAMILTON,
THE MITCHELL ANNOUNCED ITS ARRIVAL
BY DROPPING A LOAD OF RIPE WATERMELONS
FROM THE BOMB BAY

In the beginning of 1975, Alan Ness and Dennis Bradley began to look for a B-25. They saw an ad in *Trade A Plane* magazine and decided to look at it. Bradley, Ness and engineer Gary Taylor went to Wilmington. The asking price was \$10,000 as is or \$12,000 delivered. A jeep and ground power unit were thrown in, as well as two van loads of spares. They did not know \$2,000 was for ground transport.

In May 1975, a crew was sent down and after a week’s worth of work, CWH’s B-25 Mitchell finally arrived at Hamilton Airport flown by Harry Kelly, stepping in at the last minute after their US

charter pilot backed out. Upon its arrival into Hamilton, the Mitchell announced its arrival by dropping a load of ripe watermelons from the bomb bay. The B-25 was in aluminum finish, sporting the words “She’s a Silver Lady” on her nose.

During the fall of 1975, the B-25 was moved into the hangar and the restoration of the aircraft began. New engines were installed, all fuel, oil and hydraulic systems were overhauled, and the civilian interior was replaced by a military one. The CWH B-25 was officially test flown on 8 May 1976 and then painted in the colour scheme of a B-25 Mitchell III, HD372 of 98 Squadron RAF as flown by RCAF F/O J. W. David Pudney of Vancouver, BC.

It was felt in 1993 that it was time to re-dedicate the B-25 to broaden the scope. The dedication was to include all



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Canadians who served in 98 Squadron and to all members who were recipients of the DFC. The new scope pleased Mr. Pudney who felt that there were so many others who deserved the honour.

On 17 September 1994 the re-dedication took place and approximately 40 honourees came to celebrate and to remember and honour all Canadians who were in 98 Squadron and all Canadian Distinguished Flying Cross recipients. It was a very successful and joyous day.

Some of the attendees from 98 Sqn were:

- Ken Walkerdine - everyone called him Gremlin because he was so quiet.
- Lorne MacFarlane - he was a B-25 pilot. His most outstanding raid was his participation in D-Day.
- Dr. Lionel "Hank" Hastings - He participated in D-Day operations with 98 Sqn and was a member of the "Guinea Pig Club" after crashing in an Anson during WW II.
- George Van Iderstine - he is one of three surviving members of the original "Hot Gen" crew as of 1994.
- J. W. David Pudney - he retired from the RCAF in the rank of Group Captain. He won his DFC during Mitchell operations with 98 Sqn in 1944.
- Lloyd Groombridge - was a 98 Squadron crew member.
- John Yarwood - was a B-25 pilot with 98 Squadron.
- Johnny Mackenzie - current treasurer of the Canadian Wing of the 2nd Tactical Air Force, Medium Bombers Association.

The dedication ceremony became a reunion of sorts. I watched as old friends reunited with one another. In one instance, Ken Walkerdine and Lionel Hastings reunited after 50 years. The last time they had seen each was after an air crash that had almost claimed Dr. Hastings' life. David Pudney flew in for the ceremony from Spain. It was delightful to see him hug a fellow squadron member Lloyd Groombridge who uttered, "this is the first time I've ever been hugged by a Brigadier General".

I had received a letter from Richard Martin, a 98 Squadron pilot from England who could not be with us at the dedication. In his letter he told me a story of how they found engraved on a disc that was placed by a person unknown in the navigation compartment of their Mitchell. On it was inscribed Psalm 139 verses 8 to 11:

*"If I ascend to the heavens you are there.
If I make my bed in hell, you are there.
If I take the wings of the morning and dwell in
uttermost parts of the sea, even there thy right
hand shall hold me.
If the darkness covers me, and the light about me
be night, so shall the night be as bright as day."*

This was read by CWH member Rev. Chuck Beaton during the dedication ceremony. Richard Martin's crew decided to leave the plaque in their Mitchell which they flew until their tour of duty was over.



Dennis Bradley greeting pilot Harry Kelly when the B-25 arrived into Hamilton following its flight from Wilmington, Delaware, May 1985.
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P/O J. W. David Pudney, RCAF 1944.
CANADIAN WARPLANE HERITAGE MUSEUM

Life in 98 Squadron was forever filled with all sorts of adventures. One of the air gunners insisting on flying in his pajamas with his suit over them. One night, while returning to base after a night of revelry, Paddy Thompson fell down a coal chute while walking too close to a house and became wedged in tighter than a cork in a bottle. It took the efforts of the entire party to free him.

George Van Iderstine and some fellow squadron members "obtained" a baby grand piano by putting in the bomb bay compartment of their Mitchell and bringing it back to their base. They kept it out in the field where they waited with their planes before taking off for their bombing raids. They used to sing songs and it helped keep up their spirits. Before taking off for their missions, they used to say to other squadron members, "have a good one". It was something that they said for superstition reasons and it meant a lot to them.

To this day the identity of the artist of "Hot Gen" still remains a mystery but in all likelihood one of the 98 Squadron ground crew. There were two aircraft with the same "Hot Gen" nose art. Both aircraft were ultimately destroyed by heavy flak.

**TO THIS DAY THE IDENTITY OF THE ARTIST OF "HOT GEN"
STILL REMAINS A MYSTERY BUT IN ALL LIKELIHOOD ONE
OF THE 98 SQUADRON GROUND CREW.**

Through George I was granted a unique perspective of the stories and history of 98 Squadron. He was also responsible for helping find a good number of the surviving members of 98 Squadron.

This dedication wouldn't have been possible without the support of the crew at the time – Brock Mason, Stewart F. Brickenden, Sten Palbom, Gary Lounsbury, Ken Elder, Wayne Roberts, George Copeland and my husband, Steve McIntosh and countless others.



CWH's Mitchell when operated by Northern Pump Company, circa 1955, registered as N75755. CANADIAN WARPLANE HERITAGE MUSEUM

DOUG FISHER



The Other B-25

by Bill Cumming

In 1978 Jerry C Janes of Vancouver, BC acquired a B-25J Mitchell which had been operating by the Minnesota Aircraft Museum. This particular aircraft was built as a B-25J in 1945 and served with the United State Air Force until 1960.

In 1980, the Mitchell was registered to the Canadian Warplane Heritage as C-GCWJ. The aircraft was flown to Edmonton where it was restored by members of 418 (Auxiliary) Squadron. Mitchells were predominately operated by the post war RCAF with 418 "City of Edmonton" Squadron and 406 "City of Saskatoon" Squadron from 1946 until 1958 assigned to the light transport and emergency rescue roles. A number of Mitchells were also operated by the Air Navigation School as navigational trainers.

The restored aircraft was finished in the colours and markings representing a Mitchell operated by 418 Squadron in 1955-56, "City of Edmonton"; RCAF 5262; HQ 262. Mitchell C-GCWJ was operated by Jerry Janes on behalf of CWH until 1985 when it was sold into the US market.



CANADIAN WARPLANE HERITAGE MUSEUM

Keep Us Flying

July 2017

Dear Friend,

Once again it is time for the Canadian Warplane Heritage (CWH) "Keep Us Flying" fundraising campaign. Let me tell you why I consider this campaign to be such an important and worthwhile endeavor.

My name is Wes Allen. I served with the RCAF, the Canadian Forces and the Department of National Defence for 38 years. I am now in my twentieth year as a volunteer and supporter of the CWH. I'm a Tour Guide and also try to help out where ever I can.

This year marks the 100th Anniversary of Vimy Ridge, where Canadian soldiers prevailed under very difficult circumstances and great personal sacrifice. The "Books of Remembrance" housed in the Memorial Chamber in the Peace Tower of the Parliament Buildings in Ottawa list the names of the more than 118,000 Canadians who died in the service of Canada. Some of these people were my compatriots and several were my friends and although they died during the relative peace of the Cold War, they gave their lives every bit as willingly as those who died at Vimy Ridge.

Like the "Books of Remembrance", we say that every day is Remembrance Day at the CWH, and, indeed it is. But it is so much more! How many times do we stand at a war memorial, bow our heads and say "Lest We Forget", only to turn away and get on with our daily lives. At the CWH, though, it is impossible to forget because as you turn away, there is all the activity of our many programs. I see the excellent leadership and dedication of our staff; I see the willing enthusiasm of our many volunteers; I see the interest and attention of our many visitors; I see the happy, smiling faces of the students attending our school programs; I hear the roar of vintage aircraft engines; and, I can't wait to see and hear that big round Wright Cyclone on the Avenger crank up for the first time. What I'm trying to say is that, while the CWH may appear to be a static memorial, it is in fact a living and very operational memorial, one that is constantly being upgraded and improved and we need your help to keep it that way.

Over the last 45 years the CWH has received the generous financial support from thousands of people and organizations who have, and continue to, support our efforts, yet there is always a need for more: whether it be for our restoration projects, our aircraft and facilities maintenance programs, our flying program or just everyday operations. We all hope that we can count on your ongoing support to the CWH to "Keep Them Flying!

We thank you for your help in the past and thank you for your interest in keeping the CWH a living, vibrant and evolving memorial to Canada's fallen. LEST WE FORGET!



Wes Allen
Canadian Warplane Heritage Volunteer

PLEASE MAIL CHEQUE TO
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OR GO ONLINE TO WARPLANE.COM TO MAKE YOUR DONATION

JULY/AUGUST 2017

FLIGHTLINES





The Yellow Peril

by Merrill H. McBride

One bent Harvard Mk. IV 20404 as it appeared the day after the night of May 28-29, 1956. BILL MCBRIDE COLLECTION

Editor' Note: This article was written many years ago following a training accident at Claresholm, Alberta. The article is presented as it was written.

The runway lights disappeared under the port wingtip and as I spun my head around they were passing under the starboard wing as well. Straight ahead was completely black. It was well after midnight on the morning of May 29, 1956 and a suddenly very wide awake Flight Cadet was being taken for an unscheduled ride by 2 1/2 tons of deception in a yellow over coat, all of it firmly strapped to my backside.

Until a few seconds earlier I had been tired but relaxed, (a combination that time and experience would teach me is rather risky in any aircraft, but lethal

in a Harvard), after having flown six or seven hours in this machine, starting at 10 AM, the preceding morning. I had completed a long night cross country around midnight, taken a fast turnaround and been airborne for an hour doing night circuits in what was to be the completion of the night portion of our Harvard training at No. 3 Flying Training School Claresholm, Alberta. On the approach to this landing I had decided that I would do one more circuit and then pack it in, being just too tired for any more of this.

**I FELT FOR THE FLAP LEVER AND RAISED IT,
OPENED THE THROTTLE AND, AS SPEED BUILT UP,
STARTED TO RAISE THE TAIL.**

The landing was routine and respectable. I felt for the flap lever and raised it, opened the throttle and, as speed built up, started to raise the tail. Just as the midpoint was reached the engine quit. I don't to this day know why, and things happened so quickly that I could never be sure of what transpired in the next three seconds, but I do recall looking down to the left console tray where the fuel selector was

located. Before I could find it in the darkened cockpit, the engine was roaring again, the cut having lasted for only a second. The only noise I could hear over the engine was me going into the emergency pucker mode with

a snap later reported to have been heard in Calgary.

Looking up again, I noticed with some concern that the runway lights had been turned off. With considerably more concern, I then realized that they had not been turned off but merely moved.

The whole world had swung sixty degrees to the right. Jumping on the right brake and rudder pedal I attempted



CANADIAN WARPLANE HERITAGE MUSEUM

to swing the machine back onto the centre line of the runway but, as is usually the case with the Harvard or any of its North American cousins; the corrective swing to the right was even more unmanageable than the original dart to the left. The runway pattern at Claresholm was the standard wartime triangle and I was heading into the middle of that field. I couldn't recall anything other than smooth grass in the infield so I decided to keep the beast as straight as possible and try to get her stopped. I chopped the throttle, started to bring the tail down and began to feel the welcome flood of relief as the situation came back under control.

My first indication that this might not be the case was when the main wheels left the aircraft. I have

never learned what it was that I hit in the dark, but I suppose some fool had built a ditch or hangar or something there. In any event, shortly after leaving the runway, all hell broke loose. The undercarriage snapped off at the oleo legs and, in the process, pitched the machine first onto one wingtip, then the other, and finally onto its nose. The noise was horrendous. The tail came up and I could feel the aircraft going over on its back, but just before the balance point it stopped and decided to crash back down, right side up. Now it seemed very quiet. My radio was still working and I punched the throttle button to tell the tower where I was. They acknowledged. Then I noticed the humming sound. I sat fascinated in the red glow of the cockpit lights and saw a sort of vapour rising around the edges of the cockpit.

"Christ!" ...Suddenly, I came back to reality!

The hum was the magnesian compass inverter. Switches and fuel were still on, smoke was rising, and I still had the airplane firmly strapped to my backside. I snapped off my harness, turned everything off, and went over the side, tout-de-suite, to see with relief that the smoke was only dust, but that my beautiful 20404 was a horrible mess, lying on her belly with a squashed nose, bent wings, and a remote landing gear installation. I was certain it was a write off, but again, this time happily, I was wrong.

Mark IV Harvard 20404 was repaired and put back into service, where it undoubtedly suffered more indignities at the hands of 'sprog' pilots with high intentions but low time. Then it took off its uniform and joined the flow of redundant veterans into civvy street. When last heard of it was registered as a civilian airplane, location now unknown.

Not all of the Harvards made the civilian registry though. During the late 1950s the Harvard Mk. IIs and IIAs were considered outmoded by the RCAF and released for sale through the Crown Assets Disposal Corporation (CADC), but since the engines were in shorter supply, were sold as airframes only. Oddly enough, these came with propellers, starters, generators, etc.

Prices were low, perhaps too low. I personally bought a Mk. IIA airframe, completely overhauled including instruments, radio, etc. for \$250. I had seen a flyable overhauled aircraft purchased for as little as \$650. Not many survived.

The low price meant that the scrap yards could melt them and still make a dollar. A CADC policy

adopted with the Chipmunk aircraft in later years, that of selling only one or two to a customer, might have prevented much of this but that policy was too late for the early releases.

Pilots with Piper PA13 or Cessna 180 aircraft time thought that it was just another tail dragger and, with little or no checkout time, would dot the countryside with little pieces of yellow, not usually fatally but destructively. American buyers came up and took them south, where they were often treated better than they were at home. Some owners who had afforded the low purchase price found that they could not afford the maintenance cost, so the machines sat in a hangar until that became too costly and then they went outside to rot. Some are still there.

Still, many of the Harvards have survived. Why? Those who have owned or even flown one, know the answer. The surplus Harvard, T-6, SNJ, or whatever you wish to describe it as, is one of the best and most practical sport planes ever built. Most ex-military pilots who trained on them remember them with affection and considerable respect. Most also agree that those service types who have gone through the pipeline since the Harvards were phased out have a large empty space in their flying careers.

First, what is a Harvard ... ? It is not an AT-6, a T-6 or an SNJ. It is a specific aircraft model, based closely on these basic designs, built to RAF and later RCAF specifications as well as those of a few other countries. The Mark I, II and IIA were wartime models while the Mk. IV was postwar. They were built under licence by several companies but I will restrict my remarks to those in which a Canadian would be interested.

OWNERS WHO HAD AFFORDED THE LOW PURCHASE PRICE FOUND THAT THEY COULD NOT AFFORD THE MAINTENANCE COST

A total of 15,495 T-6, SNJ, Harvard variants have been built. No models of the Mk. I, distinguished by its fabric fuselage and rounded rudder, are known to exist in this country. The Mk. II and IIA are identical with the exception of some minor armament changes, and several of these are flying, a number of them in the United States. They were built by North American Aviation, and in Canada, by Noorduyn and Canadian Car and Foundry. Although identical, no matter where they were built, each aircraft must be licensed under the type approval applicable to the country of manufacture.

In other words, a Mk. IIA built by Noorduyn must meet Canadian Type Approval 80 Issue 1, while its identical companion, manufactured by North American, must meet American Aircraft Specification #A-2-575, meaning different gross weight limitations, speed limits, placarding, control setups, etc. The Mk. IV, being Canadian built, meets Canadian Type Approval 80 Issue 1 but does not meet the American Aircraft Specification #A-2-575 and therefore cannot be licensed in the USA without considerable modification. In all it becomes rather complicated so, if in doubt, ask your local AME.

THE FUEL GOES THROUGH PRETTY QUICKLY, ALTHOUGH NOT SO QUICKLY AS SOME MIGHT THINK

What is the difference between the Mk. II or IIA and the IV? Quite a bit. Externally the easiest recognition feature is the canopy, which has larger window panes with fewer dividers on the Mk. IV than on the II. Also the Mk. IV has a slightly larger tail wheel and no armament installation panels on the wing. Since parts are interchangeable between models, some aircraft may be hybrids but a sure indicator is the presence of static vents on the rear fuselage of the Mk IV. Internally, the Mk. IV has a 24 volt electrical system (as opposed to 12 volts in the Mk. II), an extra 25 imperial gallons of fuel to make 110 imperial gallons, a much neater cockpit arrangement, and a modified hydraulic system. Although the Mk. II is usually slightly lighter in weight, a performance difference between models is negligible. In my personal opinion, the Mk. IV is the best of the entire Harvard/T-6/SNJ line.



Merrill McBride, RCAF Station
Gimli, Manitoba on T-33 Conversion
Course.
BILL MCBRIDE COLLECTION

What about operating costs? First, the bad news. The fuel goes through pretty quickly, although not so quickly as some might think. I have had a rate of 11 to 12 gals/hr at 110 kts by careful engine handling but the average is from 17 to 25 GPH depending on the type of flying (i.e. aerobatics, cross country, etc.).

Oil on a good machine might average 1 to 1 1/2 qts/hr. Insurance rates are usually high, particularly for low time pilots, and being over 5000 lbs gross weight, landing fees come into picture as well. Now for the good news. The maintenance costs are vastly overrated. An aircraft in good condition on a respectable preventive maintenance schedule should cost no more than, say, a Cherokee Arrow in an average year. The ease of access to all parts of the machine for maintenance is legendary and parts are still obtainable with relative ease at reasonable cost, although this will change. The Pratt & Whitney R1340 engine is a completely reliable thoroughbred and easy to work on. A word of caution though ... don't try to cut corners. A neglected Harvard can bite. A \$100 CCI inspection will not take you off of the firewall, unless your brother owns the shop.

Performance ...? Great. Economical cruise, 125 to 130 kts, high cruise at 150 kts, fully aerobatic, graceful and tough. In the air it is a responsive pussycat with marvelous visibility and no bad habits. On landing it is a treacherous pig that will give you no-sweat landings on ninety nine occasions and take you for a ride on the one hundredth. Proper training, self discipline in respect to detail, and constant alertness will, however, tame the beast and give many years of safe arrivals.



A final word. The Harvard is one of the most satisfying aircraft within the reach of the average income light plane pilot today. It has been said that if a person can fly a Harvard well he can fly almost anything. It does not require superhuman abilities but it does require care and self discipline. I, along with most service pilots, soloed with something over thirty hours total time, but that was after a long period in the classroom and with top notch instructors. If you should one day get the urge I would recommend the following points be heeded:

1. Get a thorough checkout by a competent and current instructor. Don't assume that the person offering to check you out is qualified merely because he says so or because he is a flying school instructor or an airline captain. Find out!
2. Read the books. Memorize the numbers and the checklist. It doesn't take that long and a busy circuit pattern is no place to read. A forced landing because you didn't know about the reserve tank standpipe or the voltage overload protector is expensive, embarrassing and dangerous.
3. Ensure that the cockpit intercom system works 100 percent. Flying without one can be frustrating and dangerous.
4. Have the time of your life.

Editor's Note: Harvard 20404 is still flying and was recently spotted visiting the Canadian Warplane Heritage Museum.

MERRILL H. McBRIDE

1937 – 1974

by Bill McBride



Merrill flew the CWH Corsair, seen still in US markings upon arrival at Hamilton.
BILL McBRIDE COLLECTION

Merrill McBride was my big brother in name only. Actually he never grew taller than five-foot-five and never weighed more than 120 pounds; which is rather remarkable given his voracious appetite for Coca-Cola and barbeque chips. He was a man of few words (our mother called him "silent-Sam"); although when he did speak he demonstrated a splendid sense of humour and an uncanny knack of finding the heart of any matter.

Merrill had two passions; his family and airplanes. He was barely 17 when he joined 424 Fighter Sqdn. as an instrument technician in 1954 and two years later was accepted for pilot training in the regular RCAF. Following graduation in 1957 Merrill flew CF-100's for a short time prior to returning to 424 Squadron in Hamilton. It is a measure of the man that on the first occasion that he was saluted by one of his old friends he immediately resigned his commission and rejoined the squadron as a LAC. In 1959 he purchased a Cornell for \$1,300. Nicknamed the "GoDam Greak", CF-GDG was the love of his life until replaced by the lovely Miss Jeanette Clement of Milton, whom he married in 1962.

De Havilland Aircraft provided both a job and a means to an AME licence. This, in turn, led to his founding of a small aircraft maintenance shop at Hamilton Airport. The original CONDOR AVIATION, it later joined with another company to become the home of the fledgling Canadian Warplane Heritage Foundation. As an experienced Harvard pilot, Merrill was called upon to provide check out training to several of our original members.

It is interesting to speculate what his role might have been had he lived to participate in the Museum's development. When he went down in a budworm TBM in 1974 the Museum was just getting started. Merrill was member number 34.

Upcoming 2017 Closures

November 27 to
December 5 Inclusive

2017 Calendar

July 30	VINTAGE WHEELS & WINGS
August 12	BCATP FLY-IN - CANCELLED
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 for additional updates.
Dates subject to change.

From the Archives Department

by Erin Napier

With the success of last summers' exhibition, *Anne Frank; A History for Today*, it is with great anticipation that we feature another travelling exhibit, *World War Women*. Originally presented by the Canadian War Museum in 2015, *World War Women* highlights women's involvement and contribution in both the military and Canadian home front during the Second World War.

The role of women in Canadian society changed dramatically during WW II. Women not only served in the military, but also began working at jobs that were traditionally held by men.

Canadian women embraced their new roles and responsibilities and helped contribute to the success of Canada's Victory Campaign.

During the war, many women took a wide variety of civilian jobs that had once been filled by men, working alongside them in factories, airfields, and farms. They built parts for ships, aircraft and manufactured ammunition. Female participation in the workplace was a first for Canada allowing Canadian women to show they had the skills, strength, and ability to do the work that men did.

World War Women from the Canadian War Museum will be on exhibit at the Canadian Warplane Heritage Museum from July 5 to November 19, 2017.



JULY 5, 2017 TO NOVEMBER 19, 2017



CANADIAN WARPLANE HERITAGE MUSEUM

9280 AIRPORT ROAD, MOUNT HOPE, ON L0R 1W0 CANADA 905-679-4183



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**SKY'S THE LIMIT Charity Auction -
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If you can help please contact Pamela Rickards at
905-679-4183 ext. 230 or pam@warplane.com.



CANADIAN WARPLANE HERITAGE MUSEUM

View from the Top



As we celebrate Canada's 150th Birthday, it is a perfect time to stop and reflect on how very blessed we are to be Canadians and to live in this great land. As a free and democratic society founded upon principles that recognizes the supremacy of God and the rule of law as declared in our Canadian Charter of Rights Freedoms that are enshrined in our Constitution, we are truly fortunate to call Canada our home.

With this sense of pride and gratitude in mind, the museum has planned a very full agenda for 2017 as well as another active flying season (See *EVENTS* at warplane.com).

As you may know the museum started the very first airshow in Hamilton in 1975 and eventually handed the Father's Day weekend show over to the Hamilton International Air Show Foundation which ran their last show in Hamilton in 2001. After a 10 year airshow hiatus in Hamilton, as we prepared to celebrate our 40th Anniversary

at the museum we re-introduced the CWH Hamilton Airshow in 2011 and conducted the most unique and largest airshows held in Canada up to and including our last show in 2015. Unfortunately, given the myriad of obstacles faced in holding an airshow at the Hamilton International Airport, it was not possible to continue with this initiative.

However, in consideration of Canada's 150th and at the request of the Rotary Club of Brantford, the CWH in partnership with the Rotary Club of Brantford and with the support of the City of Brantford, County of Brant and surrounding communities will present the Community Charity Airshow at the Brantford Municipal Airport on Wednesday August 30, 2017. The show will feature the Snowbirds, the CF-18 Demo "Hornet 01", our famed Lancaster "VR-A/Ruhr Express", B-25J "Hot Gen", DC-3 "Canucks Unlimited" and PBX Canso, all of which will fly in the show as our flying tribute to Canada. Further details can be found at communitycharityairshow.com.

Please accept my best wishes to you and yours for a happy, enjoyable, safe, and memorable summer as we celebrate Canada's 150th Birthday.

Per Ardua Ad Astra

David G. Rohrer, CD

President & Chief Executive Officer, Canadian Warplane Heritage Museum

BIRCHALL LEADERSHIP AWARD 2017

Royal Military Colleges Foundation
in Partnership with
Canadian Warplane Heritage Museum

October 28th

Air Commodore
Leonard J. Birchall

2017 Recipient &
Keynote Speaker
Colonel Chris Hadfield

RMC CMR

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