

BOMBER COMMAND MUSEUM NEWSLETTER

Spring 2019

Volume 33 Issue 1



Bomber Command Museum of Canada
Box 1051; Nanton, Alberta; T0L 1R0
www.bombercommandmuseum.ca
newsletter@bombercommandmuseum.ca



SUMMER HOURS

Until April 30: Weekends (10-4)
May 1-June 30: Daily (10-4)
July 1-August 31: Daily (9-5)
Sept. 1-Oct. 15: Daily (10-4)

JUST SOME OF THE REASONS TO VISIT THE MUSEUM THIS SUMMER

- Our Cessna Crane is on display and will be running at some of our special events.
- Tiger Moth #1214, that spent WW II training pilots at 5 Elementary Flying Training School at High River, will be on display soon. It is a runnable aircraft as well, giving us four to choose from at our Engine Run Days.
- We'll soon have a second simulator for use by museum visitors.
- Visitors can now experience the incredible 'Virtual Reality' Bomber Command raid to Berlin.
- An impressive line-up of Engine Run Days and Special Events are planned.
- New merchandise is now available in our Gift Shop, including a large selection of quality, gently-used aviation books.
- Check out the progress on the Mosquito and Anson in our Restoration Hangar.





2019 SPECIAL EVENTS

April 27	<u>Engine Run Day</u> <i>-Cessna Crane Debut</i> <i>-First Engine Run</i>
May 25	<u>Engine Run Day</u> <i>-Tiger Moth 1214</i> <i>-First Engine Run</i>
June 1	<u>Art Takes Flight</u> <i>-Exhibition and Sale</i>
June 8	<u>Engine Run Day</u> <i>-Model Contest</i> <i>-Spitfire Swing Dance</i> <i>-Night Run</i>
June 29	<u>Engine Run Day</u> <i>-Mosquito Celebration Day</i>
July 20	<u>Engine Run Day</u> <i>-Bikes and Bombers</i> <i>-Show and Shine (cars)</i> <i>-Bomber Girls Fashion Show</i>
Aug. 4	<u>Engine Run Day</u> <i>-Bazalgette VC 75th Run</i>
Aug. 5	<u>Engine Run Day</u> <i>-Nanton Parade Day</i>
Aug. 23	<u>Engine Run Day</u> <i>-Night Run</i> <i>-Nanton/Senantes Twinned Communities Celebration</i>
Aug. 24	<u>Engine Run Day</u> <i>-Ian Bazalgette VC 75th Commemoration</i>
Sept. 20	<u>Engine Run Day</u> <i>-Night Run</i>
Sept. 21	<u>Engine Run Day</u> <i>-TBA</i>

As you likely know, the Bomber Command Museum of Canada makes every effort to restore our aircraft to runnable/taxiable status. The good news this spring is that with two new runnable aircraft in the hangar, we have twice as many aircraft to choose from and start-up during our 'Engine Run Days'.

The Lancaster is, of course, always the highlight and will be run-up at every 'Engine Run Day' -generally twice. As well, our Bristol Hercules engine will be started at every 'Engine Run Day'.

As you can see on the schedule, the first run-up of our Cessna Crane and Tiger Moth 1214 will be featured during the early part of the summer. (Please remember that all engine run-ups are subject to the aircraft not having any technical problems. Check our website immediately prior to the day to confirm that the aircraft will be running.)

There are no engine runs at 'Art Takes Flight' but there will be an impressive display of fine art and crafts filling the main hangar. -and they will be for sale.

We're pleased to have the Rocky Mountain Model Club back, hosting their Western Canada Regional Model Contest. The hangar will be filled with tables showcasing a wide variety of model aircraft, vehicles, ships, and other items. This will be followed by a 'Spitfire Swing Dance' and the first night-run of the summer -although in June it may be more of a twilight-run.

Our always popular 'Bikes and Bombers' day will again be combined with the AMAC Field of Dreams Charitable Show and Shine in the baseball diamond to the north of the museum. As well as aircraft, automobiles, and motorcycles, we will again be hosting the 'Bomber Girls Fashion Show'.

August 4th will be the 75th Anniversary of S/L Ian Bazalgette's Victoria Cross Flight and we'll have a special Sunday run-up of the Ian Bazalgette Memorial Lancaster to honour this heroic Albertan.

Nanton Parade Day is when all the museum's vehicles make their annual tour around the town. A Lancaster run-up will follow and we're always pleased to have a large turn-out of present and former Nantonites visiting the museum on that day.

Our feature event in August will celebrate the tenth anniversary of the twinning of the Town of Nanton with the Village of Senantes in France and commemorate the 75th Anniversary of Ian Bazalgette's VC Flight. We hope to have a delegation from Senantes attend as well as members of the Bazalgette family. S/L Bazalgette's flight ended just outside of Senantes and he is buried in their churchyard.

And to wind up the summer, we'll have our best (darkest) night run and a final event on September 21st.

Please check our website for updates, engine run times, and finalized details immediately prior to the event.

LANCASTER MID-UPPER GUN TURRETS NOW DISPLAYED SIDE-BY-SIDE

Some of our displays in the main hangar have been re-arranged and we now have the two Lancaster mid-upper turrets displayed side-by-side, making it much easier to compare the two.

Almost all Bomber Command turrets had no armour, and light, low-calibre guns.

American designed bombers carried more air-gunners, heavy, high-calibre guns, and their turrets were armour-plated.

Although they could not defend themselves as well as the American bombers, Bomber

Command aircraft carried significantly heavier payloads to their targets.

All Lancaster bombers carried front, mid-upper, and rear gun-turrets except for a few special operations. Mid-upper turrets were mounted on top of the aircraft, about mid-way down the fuselage. The two that were placed on Lancasters were the American-built, Martin 250 CE mid-upper turret and the British-built, Fraser-Nash FN-50 mid-upper turret. They are very different.



The Martin turret on the closest Lancaster in the above photo is electrically powered and contains two .50 calibre machine guns. Four ammunition boxes each carried 200 rounds.

American bombers such as the B-24 Liberator and B-26 Marauder carried Martin turrets. Only the last 276 of the 431 Canadian-built Lancasters, including our museum's aircraft, were fitted with the Martin. All British built Lancasters were equipped with Fraser-Nash turrets.

The Martin carried .50 calibre guns and lots of armour plating. It weighed much more than the Fraser-Nash and so was placed closer to the wing. The air-gunner's view was quite limited.

The Fraser-Nash turret in the Lancaster beyond contains two, relatively light, .303 Browning machine guns that were fed from two ammunition boxes that each held 1000 rounds. The turret is hydraulically powered by the starboard-outer engine. It has a sling type seat, and no armour protection for the air-gunner.

Virtually all Lancasters that saw combat were equipped with FN-50 turrets as were Stirling Mk. III bombers. The bulbous shape of the Fraser-Nash created more drag than the Martin but provided much better visibility for the air gunner.

THE DE WINTON FLAGPOLE

31 Elementary Flying Training School was a Royal Air Force station located 13 kilometres east of the Town of De Winton, just south of Calgary.

In 2016, this flagpole was located lying in long grass, adjacent to the foundations of buildings that were part of the training base. It was then donated to the museum.

As part of the restoration, a significant section of rotten wood was removed and replacement section spliced in and the section made round again. Large cracks will be filled and the flagpole painted white as it was when it towered over the parade square at RAF De Winton during World War II.



Restoring the De Winton flagpole

[A 'VIRTUAL REALITY EXPERIENCE' IS NOW AVAILABLE AT THE MUSEUM](#)

During September 1943, two BBC reporters accompanied a Lancaster crew on a raid to Berlin. The incredible audio recording they made forms the basis of this breathtaking experience in 'Immersive Virtual Reality', putting you inside the bomber with the crew as it completes a most dangerous operation. It's the closest one can get to actually experiencing a raid with Bomber Command.



“The authenticity of the audio combined with virtual reality means the user can now relive the past with an intensity not previously possible.”

\$10 - A 15 Minute Experience

[BCMC NEWSLETTERS](#)

Our Museum has been publishing a bi-annual newsletter continuously since the spring of 1987. This is our sixty-fifth newsletter.

They're all archived on our website and are a wonderful record of our museum's own history.

Bomber Command Museum of Canada
1987 Spring & Summer Newsletter

[The President's Corner](#)

(Spring 1987)

[Our First Newsletter Ever !](#)
[Lancaster Society Aims](#)
[1986 Accomplishments](#)
[Avro Anson II](#)
[The British Commonwealth Air Training Plan](#)

[The Lancaster X](#)
[Restoration Committee Report](#)
[Proposal Committee Report](#)
[Building Committee Report](#)
[Finance Committee Report](#)

FORTY-EIGHT OPERATIONS WITH 405 SQUADRON

Born in Scotland, Doug Renton moved with his family to Victoria BC when he was a child. He initially enlisted as a radio mechanic, but 're-mustered' to aircrew and trained as a navigator.

Doug completed 48 operations as a navigator with No. 405 PFF Squadron RCAF, flying with F/Lt. Lawrence L. 'Mac' MacKinnon DSO DFC. Doug and his crew flew during what was the most dangerous period of Bomber Command's war, when what became known as the Battle of Berlin was on -in fact, Doug logged eleven trips to the 'Big City'.

He also participated in the infamous Nuremburg Raid when Bomber Command suffered its worst losses of the war -106 aircraft lost. 545 airmen were lost that night, more than were lost in the entire Battle of Britain. Doug was extremely fortunate to have survived forty-eight operations during these most-dangerous months.

Following his 29th operation, Doug was awarded the DFC. The recommendation letter reads, "This officer is a highly efficient navigator

who has completed 29 operational sorties against such heavily defended enemy targets as Berlin, Leipzig, and Frankfurt. The courage, skill and devotion to duty displayed by this officer in the performance of his duties has set a fine example to his crew and the squadron generally."



'Johnny' Fauquier (left) and Doug Renton

Doug Renton not only wrote a detailed diary entry following each of his operations, he supplemented it with newspaper clippings of the day. It is one of our museum's archives' most prized documents.

Visit the 'Chronicles' section of our museum's website to see Doug's complete diary and all his newspaper clippings -It's over 100 pages.

Operation #3 - MUNICH - SOUTH GERMANY.

This operation took place on the night of Oct 2/3, 1943. Our trouble started when the rear gunner had to have his turret doors jammed shut. Later his turret went up/s and remained so for the duration of the trip. We got very far south of track and ended up doing a time-wasting leg over Switzerland. The visibility was very good & it looked lovely. We were 19 mins late getting to the target which was visible well over a half hour before we reached it. It was quite a hot target with lots of searchlights, flak & fighters which followed us all the way to the French coast, dropping flares continually. As we crossed the English coast, just past Beachy Head our "Lu" & "if" equipment blew up scaring hell out of the w/op & myself, thinking we had been hit by flak. We found we had not enough petrol to reach base so we called up

The first segment of one of Doug's forty-eight diary entries

MEMBER'S SECTION

PLEASE NOTE THAT WE ARE A VOLUNTEER-DRIVEN, REGISTERED CHARITABLE SOCIETY.
We depend upon private donations for our operation and development. Please help if you can.

-Support the Bomber Command Museum by becoming a member:

Membership Benefits:

- Donations are not expected at the museum
- Free access to Lancaster fuselage tours
- Free Lancaster cockpit tours (during special events when available)
- Free 'Berlin Blitz' virtual reality experience

Membership Options:

- Annual: \$40
- Museum Supporter (5 years): \$250
- Lifetime: \$1000
- Wing Commander's Club: \$5000

-If you were a member in 2018, we encourage you to renew for 2019.

-For further details and to join the Bomber Command Museum visit:

<http://www.bombercommandmuseum.ca/membership.html>

or,

Complete the following form and mail to:

Bomber Command Museum of Canada; Box 1051; Nanton, Alberta; T0L 1R0

BOMBER COMMAND MUSEUM MEMBERSHIP INFORMATION

NAME: _____

ADDRESS: _____ CITY: _____

PROVINCE: _____ COUNTRY: _____ POSTAL CODE _____

EMAIL ADDRESS: _____

MEMBERSHIP TYPE (Please circle):

Annual (\$40) Museum Supporter (\$250) Life (\$1000) Wing Commander (\$5000)

MEMBERSHIP AMOUNT: \$ _____

ADDITIONAL DONATION: \$ _____

TOTAL AMOUNT ENCLOSED: \$ _____

[An official receipt for tax purposes will be issued for donation of \$25+ and memberships of \$250+]

VOLUNTEER OPPORTUNITIES

Volunteer at the Bomber Command Museum of Canada:

- Welcome visitors at our front desk and help them enjoy and learn at the museum.
- Work on a restoration project in our well-equipped metal and wood shops.
- Assist in our library and archives.

Contact: visitorservices@bombercommandmuseum.ca or 403-646-2270

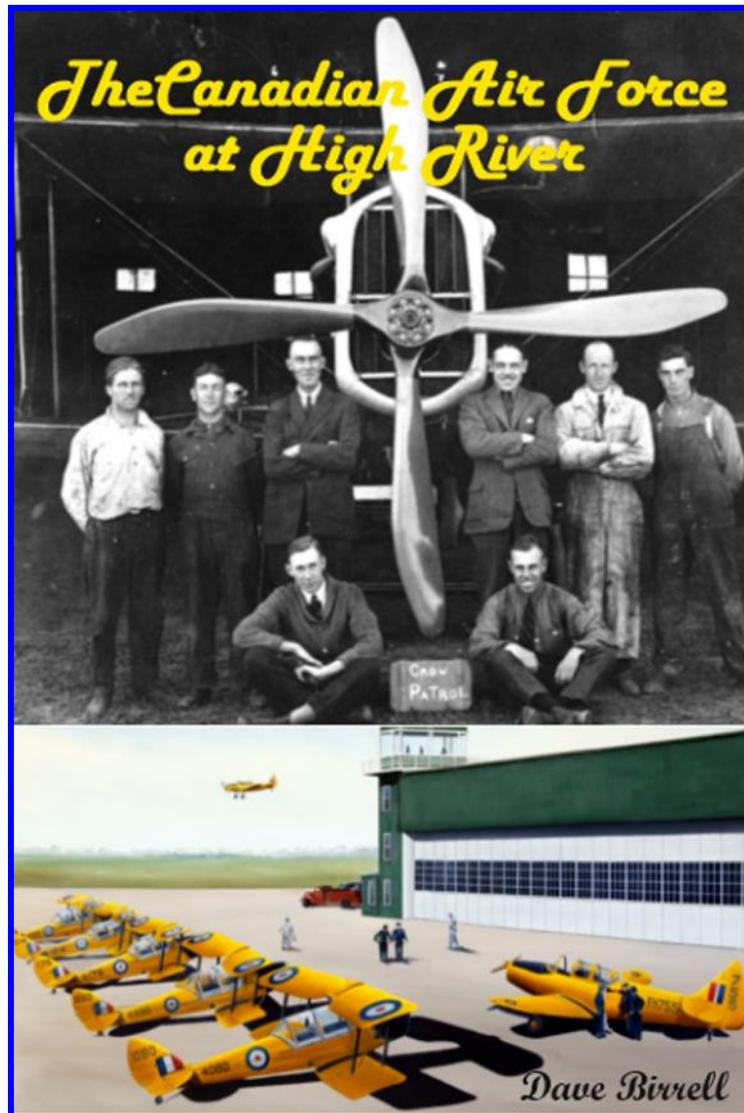
'THE CANADIAN AIR FORCE AT HIGH RIVER'

During January of 1921, land prices in the Calgary area were too high for the fledgling Air Board of Canada, so an empty field northeast of the town of High River was selected as the site of one of Canada's first 'Air Stations'. Throughout the 1920's, aircraft based at High River made hundreds of flights over the forests of the foothills and mountains of southern Alberta as part of a fire-protection program, pioneering work in radio was done, aerial photography surveys were completed, record breaking parachute jumps were made, and legendary civilian and military pilots such as Jock Palmer, Punch Dickens, and Freddie McCall came and went.

Following a decade of relative inactivity on the site and with Canada at war, the Royal Canadian Air Force returned and, within a very few months, an Elementary Flying Training School was operating on the airfield. A close relationship was developed between the Town of High River and the Flying School. As well as training pilots, the air force, in conjunction with the citizens of High River, entertained royalty, fought floods and wildfires, and hosted community sports days and dances.

More than a quarter of a million hours of flying were recorded at 5 EFTS as 106 classes of novice pilots were graduated and went on to Service Flying Training Schools for further training and to receive the coveted RCAF pilot's wings. With the sheer volume of training, augmented by the pressures of wartime, there were tragedies at 5 EFTS as well, with fifteen young airmen losing their lives.

Published by the Bomber Command Museum of Canada, 'The Canadian Air Force at High River' is based largely on the work of Bruce Gowans and Carl Jones. The book is available at the museum and through our 'On-Line' store.



FACEBOOK PAGES TO FOLLOW

Your best source for museum news is **FACEBOOK**. You'll receive all our bulletins, newsletters, and more. So please, 'Like Us' on [Facebook](#) to keep up-to-date with all the happenings at the museum.

Like <https://www.facebook.com/Bomber-Command-Museum-of-Canada-2078465865762100> for current news.

Join <https://www.facebook.com/groups/112232095483062/> to be part of our curated public group.

Join <https://www.facebook.com/groups/421463138044802/> for updates regarding our Lancaster restoration.

Join <https://www.facebook.com/groups/229404577405876/?ref=hovercard> to follow our Anson restoration.

[THE MUSEUM'S 'NOSE ART DATABASE' IS NOW AVAILABLE ON-LINE](#)

"The name and nose art made it feel she was 'our' aircraft and would always bring us home." -Jack McIntosh DFC (pilot of 'Medicine Hat')

During World War II, the personalization of an aircraft by giving it a name, painting an image on it, and in many cases doing both began in the early months of the war, increased in frequency as the war progressed, and reached its peak in 1945. A bomb tally was often added as well and this provided a powerful visual record of the success and longevity of the aircraft.

If a bomber crew was assigned a particular aircraft, they were sometimes able to choose the name and artwork and this enabled a powerful bond to develop between the men and the machine. Often, but not always, the name and the artwork were directly related to the letter designation for the particular aircraft within the squadron. So, for example, if a crew were assigned the squadron's 'D' aircraft, names such as 'D for Daisy', 'Devastating Dog', or 'Dipsy Doodle' were possibilities.

The presence of cameras on wartime bases was actively discouraged so in many cases, nose art was painted on an aircraft and the aircraft was lost before even an unofficial photograph could be taken. In other cases only poor quality, distant shots of a nose art adorned bomber were taken and, of course, during the early 1940's colour photos were very rare. At war's end, there was little interest and thousands of aircraft were scrapped with little note being taken of any artwork.

Over the past several years, the museum has been building a collection of photos and related information regarding Bomber Command nose art. We now have over 850 different nose art images



and over 1700 photos. Many of the nose art images are seen in just a single image whereas other images are recorded in several different photos.

With our collection now available on our website, it is hoped that renewed interest in this special art-form will be generated. If you have photos or information that does not appear, please forward the images and related information and we'll add it to our collection. Remember though, our collection is limited to nose art that was on Bomber Command aircraft.

The Bomber Command Museum displays some fifty-seven examples of 'replica' nose art. As well, we have an extensive section on the subject on our website regarding nose art.

Check-out the on-line Nose Art Database at:

https://www.bombercommandmuseum.ca/noseart_database.html

[KEEPING CURRENT . . .](#)

If you change your email address, please remember to let us know at newsletter@bombercommandmuseum.ca.

If this newsletter has been forwarded to you and you would like to receive future newsletters directly, please advise by email to newsletter@bombercommandmuseum.ca.

This newsletter has been sent to members and supporters of the Bomber Command Museum of Canada. To have your name deleted from our list please advise newsletter@bombercommandmuseum.ca.

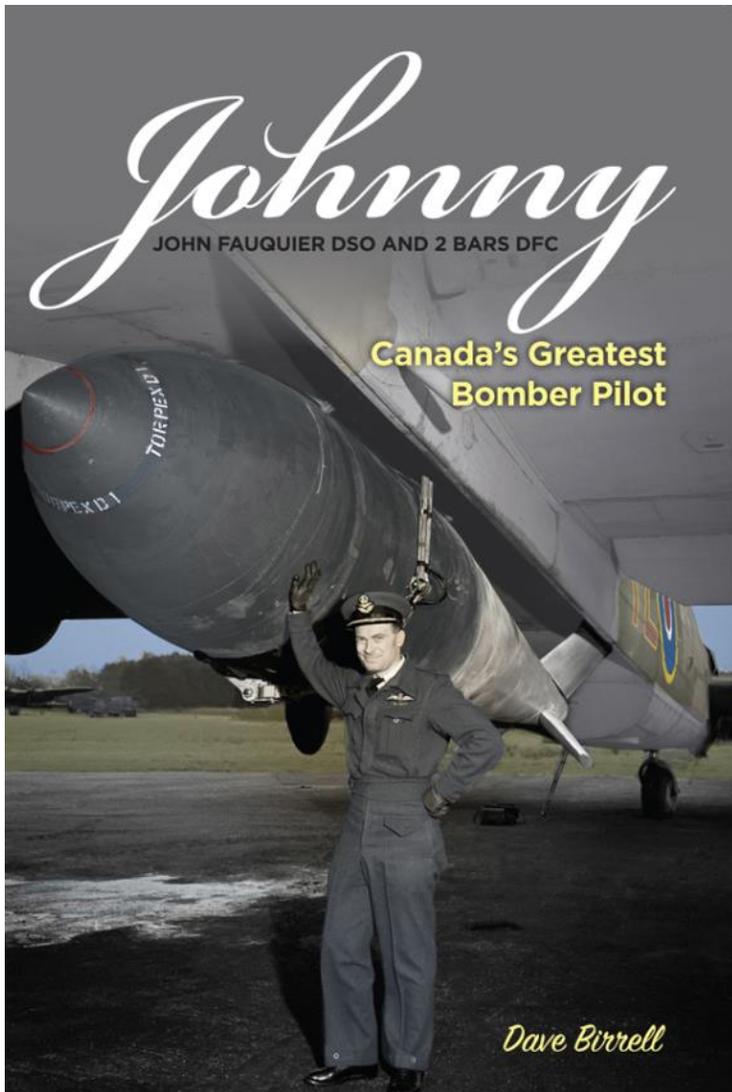
We encourage you to forward this newsletter to others who you feel may be interested.

Our newsletters are also available via [Facebook](#) and [Twitter](#).

GRAND SLAM REPLICA NOW UNDER CONSTRUCTION

Our Museum has built and displays full-size replicas of the 'Upkeep' (bouncing bomb) and the 'Tallboy' (12,000 pound) bomb. Now we're building a full-size replica of the 'Grand Slam' (22,400 pound) bomb. Johnny Fauquier, the RCAF's most decorated airman, commanded 617 Squadron during the last months of World War II. He dropped six of the forty-one Grand Slams that the squadron used to destroy submarine pens, railway viaducts, and other targets.

John and Andy are the experienced master-craftsmen who built our Tallboy several years ago. They're ready to go and have the proven talent and experience to build the Grand Slam. As is the case with our Upkeep and Tallboy, we will be able to place the Grand Slam into our Lancaster's bomb-bay for special events.



'Johnny' Fauquier and a Grand Slam
The museum has published 'Johnny's' biography.
It's available at the museum or through
our On-line Giftshop.

The museum has been unable to locate detailed drawings of the Grand Slam, so we visited the Royal Air Force station at Coningsby in Lincolnshire to measure up a real one. This is the home of the Battle of Britain Memorial Flight that operates the RAF's flying Lancaster and several Hurricanes and Spitfires.

Our museum's friends there offered us a tour through the BBMF Hangar, following which and amidst the roar of RAF Typhoons taking off, we took dozens of detailed photos and numerous measurements of this enormous weapon.

The latest from John and Andy is that a large space has been cleared in John's shop and construction of the Grand Slam replica is underway.

Thanks to those of you who supported the project through our crowd-funding appeal.

'GEMINI FLIGHT' -THE STORY OF NANTON'S WARREN TWINS

Born in Nanton, Alberta, identical twins Douglas and Bruce Warren trained together at High River and Medicine Hat, Alberta. They went on to fly Spitfires together from Dieppe to Normandy, completing their wartime service as the two flight commanders on 66 Squadron.

Following the war, the twins' careers diverged, but both made significant contributions to the Royal Canadian Air Force during the Cold War. Bruce became a test pilot with Avro Canada, flying the Jetliner and CF-100 prototypes. Douglas flew the Canadair F-86 Sabre in Korea and Europe as the commanding officer of 410 'Cougar' Squadron.

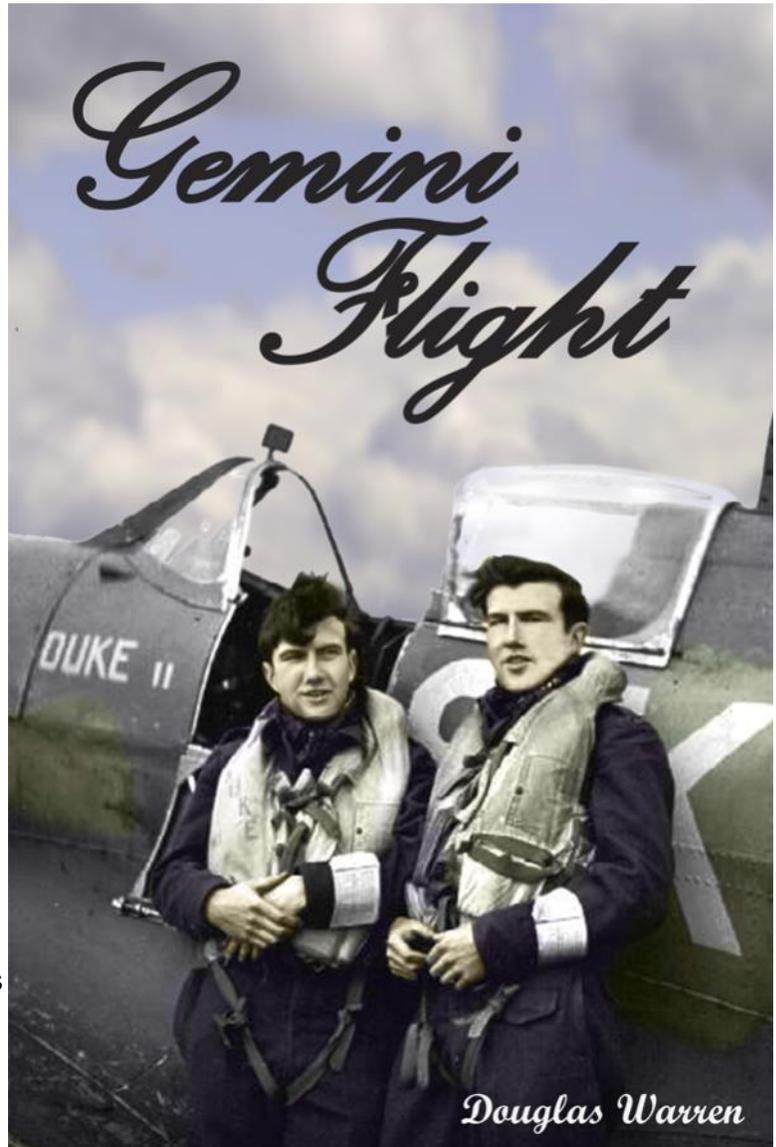
Arguably the most renowned of the hundreds of Nantonites to have served in Canada's armed forces, the Warren Twins have been reintroduced to their hometown through Duke's association with the Bomber Command Museum of Canada.

The great majority of 'Gemini Flight' focuses on the Twins' wartime flying. It was written by Doug Warren and self-published in May 1997.

Museum author, Dave Birrell, has written the description of Bruce Warren's post-war career. Most of the description of Doug's post-war career was written by Doug. These extensive sections are taken from various chapters of Larry Milberry's books, 'The Canadian Sabre' and 'Sixty Years'.

The 'Foreword' has been provided by one of today's experienced RCAF fighter pilots, LCol. James Kettles, the current commanding officer of 410 'Cougar' Squadron RCAF.

Published by the Bomber Command Museum of Canada, 'Gemini Flight' will soon be available at the museum and through our 'On-Line' store.



LANCASTER FLARE CHUTE RESTORED AND INSTALLED

During the late 1980's members of the Nanton Lancaster Society recovered a number of flare chutes from wartime RCAF Lancasters that had been scrapped on farms in southern Alberta. This winter our Lancaster crew chose the best of these, restored it to its former glory, and installed it in the aircraft.

Following the end of the war, Canadian-built Lancasters were flown back to Canada, some to enter the still-ongoing conflict in the Pacific. However the war with Japan ended in August 1945 and hundreds of Lancasters ended up being stored in southern Alberta because of its dry climate.

Eventually, many ended up being sold to farmers who used them as 'hardware stores' that offered a vast assortment of metal, tubes, wire, pipes, and other items. Many flare chutes ended up in farmer's junk piles.

The flare chute is one more item ticked off the list as we restore Lancaster FM159 to its wartime configuration.



EXPANSION UPDATE

We have been making good progress on soil and environmental testing in the past couple of months. After doing several bore-holes on the building and taxi way areas, BDT Engineering concluded that “site conditions are good for the proposed building expansion”!

ISL Engineering has prepared a site development plan for the expansion, but we have a few concerns with landscaping and drainage. Once these have been addressed, we can go to the town with our proposals.

I would like to extend our best wishes to one of our committee members, Rick Everett, who has had to resign due to family health issues. Best of luck, Rick.

Sincerely,

Dan Fox

Expansion Committee Chairman



A SECOND FLIGHT SIMULATOR

For the past several years, visitors to the museum have enjoyed our flight simulator within which they are able to fly a Lancaster bomber. It's so popular in fact, that we're in the final stages of building another. The existing simulator is placed within an actual Avro Anson cockpit. Our new one will be placed in an actual Cessna Crane cockpit.

The markings on the Crane will be those of #8127, an aircraft that served with 3 Service Flying Training School at Calgary. Signage will tell of the tragic event in the skies over the city that 8127 was involved in.



WHITLEY NF-V

The only one of the twin-engined bombers designed from the outset for night operations, the Whitley played a key role in Bomber Command operations until the advent of the four-engined aircraft in 1942. Thanks to Terry, this fine model has joined models of other Bomber Command aircraft on display at the museum.

This aircraft of RAF 138 Squadron, NF-V, crashed in poor weather on 20/21 April 1942 when returning from a Nickle operation (dropping leaflets). Pilot P/O I.A. Miller and Observer F/S W.E.J. Lines of the RCAF along with two members of the RAF lost their lives that night. P/O Miller and F/S Lines were two of 280 members of the RCAF who sacrificed their lives in Whitleys while serving in RAF Bomber Command Squadrons. Other Canadians who had enlisted with the RAF prior to the war were lost on Whitleys as well.



[HALIFAX PROJECT UPDATE](#)

Greetings to all our supporters and fans in this "cool" period of the year when we are waiting for "spring to sprung" and we can get into action on recovering Halifax HR871 from underwater off the coast of Sweden..

We are making good progress with the foundation of our Halifax bomber, the REAR spar of this vital Halifax structure being assembled by our wizard team in Ottawa at Knox Tech. See the photo of the left half of the REAR spar being assembled in the jig. (the front Main spar and giant wing ribs are already rebuilt!)

We have just concluded our H57RC trade with the Crash '40-'45 Museum at Aalsmeer, Holland where we traded an 1154 and 1155 radio to them along with a bomb-aimers computer. They gave back to us the two pristine Halifax propeller spiders (with all the prop bearings and fittings), plus an almost perfect condition Hercules oil cooler and cowling for a Halifax.

See below at the blue table filled with Halifax propeller parts including our first propeller blade, These spiders, the steel triple-spoked items seen there, form the world's largest collection of de Havilland 55/20 propeller units for our Halifax.

The cost to trade, crate, transport, and import these prop parts (which collectors will tell you do not exist any more) was just over \$1500. We need you to know we are finding super rare Halifax parts but not without cost. Please donate to help us cover our costs.

In Copenhagen, Denmark on Jan. 17 I met with Jan Christensen and Erik Skog, our dive recovery team leaders of SCSC. Also attending, after driving three hours! was Gustav Fredericksen - the new addition to our recovery team and boat owner of the "River Thames 50 foot (17 meter) salvage tugboat.

Much was discussed for the preparations of the 2019 summer recovery schedule of Halifax HR871 with all details being ironed out on tools, operations, and arranging manpower for all the salvage dives we have planned.

My body clock had just started to return to normal when I was invited to speak at the Alberta Aviation Museum in Edmonton on Jan. 24. We raised over \$2100. in donations from those people who attended my program in Edmonton!

Please do NOT think we have enough funding to do all we set out to do. Just about half of the \$62K we have raised from all you good people has been already used on the Halifax Project. You have seen, though, that we have been good stewards of your donations and we are making progress.

So please support us by donating and saving RCAF Halifax HR871 for the BCMC.

Donate at <https://fundrazr.com/417498> or send funds for "Halifax Project" to the BCMC office.

WE LEAVE NO HALIFAX BEHIND.
-by Karl Kjarsgaard



The left half of the Halifax rear spar



A rare Halifax propeller blade and associated parts

OPERATION RECORD BOOKS FOR CANADIAN SQUADRONS

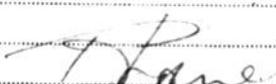
The Operation Record Books (ORB'S) of a Bomber Command Squadron detail every operation flown by the squadron. Although there is some variation from squadron to squadron, they generally include, for each aircraft that departed on an operation, the aircraft type and serial number or letter designation, the names of the crewmembers, the target for the raid, the ordinance or bomb load, the take off and return time, and a summary of the operation as written following the crew's debriefing.

Following the acquisition of digital files from Archives Canada, the museum has recently

completed a project that makes the 'Operation Record Books' for the Canadian Bomber Command Squadrons readily accessible to museum researchers and others.

These will be used for museum projects and to assist other historians and family members who are seeking details regarding a Bomber Command airman.

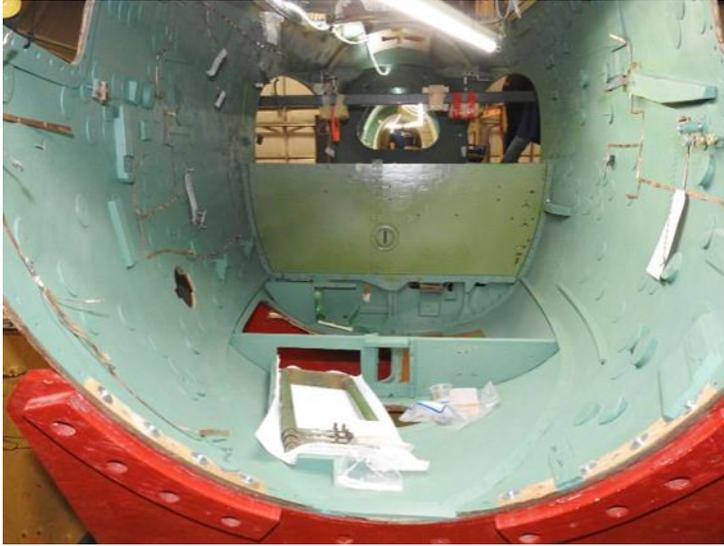
However, only 46% of Canadian Bomber Command aircrew served on Canadian (RCAF) squadrons. The ORB's of all Bomber Command squadrons are held by the British Archives.

AIRCRAFT TYPE & NUMBER		CREW	DUTY	TIME		DETAILS OF SORTIE OR FLIGHT	Ri
				UP	DOWN		
BY <u>NO. 405 R.C.A.F. SQUADRON (P.F.F.)</u> SECRET FOR THE MONTH OF <u>JANUARY</u> 19 <u>44</u> PAGE No. <u>17</u>							
56-56 60,000 5/43 T.S. 700							
LANCASTER III		(Continued)				BOMBING ATTACK ON "BERLIN" (CONTINUED)	
"D"	J.21434 F/O D.E. Biden, J.11222 F/O H.R. Farb, J.23590 F/O D.D. Carr, R.112893 W/O A.L. Weaver, R.194654 SGT S.E. Niskanen, R.194059 SGT G.L. Launey, GB.1677287 SGT E.A. Wilkinson.			1711	CRASHED 2314	(D) (F/O MAX D.E. BIDEN) <u>Bombload:</u> (Same as 'B'). 10/10 cloud from 6 to 7,000 feet in target area. Load released at 2013 hours from 18,500 feet by H.2.S. (good image). At target, T.I. Red was seen cascading through cloud and several sky-markers red/green were seen behind in good concentration of leaving. Aircraft was damaged by flak at 2146 hours and the F/E SGT Wilkinson was slightly wounded in right arm. Port wing was also damaged. Aircraft was attacked three times by an ME.110 on the way back from target. The enemy aircraft was first sighted at four hundred yards, heading astern below, immediately after direct hit by flak, causing fire in aircraft, thus no evasive action was taken. Enemy aircraft closed to a range of 150 yards before breaking to port quarter down. The rear gunner fired 100 rounds. The port outer engine was hit causing the rear turret to be u/s. The second attack came from port quarter up. Evasive action taken was a corkscrew to port. The mid upper gunner fired at 150 yards, approximately 150 rounds. The enemy aircraft fired a three second burst causing the hydraulic system in mid upper turret to be u/s. The third attack came from the starboard quarter up. Evasive action taken was a corkscrew to starboard. Enemy aircraft fired a three second burst. Gunners unable to fire due to hydraulic system shot away. Both air gunners saw tracers enter the enemy aircraft. Extensive damage done done to own aircraft. Navigator and wireless operator were slightly injured. Members of this crew who were injured were F/O Farb, W/O Weaver and SGT Wilkinson. Remainder of the crew were uninjured. Aircraft landed with wheels up at Coltishall owing to undercarriage being u/s owing to enemy action.	
"X"	J.19570 F/O A.R. McQuade, R.126353 W/O D.M. Lunney, R.133732 F/S R.H. Law, 1311594 F/S J. Fraser, R.185682 SGT W.C. Patten, R.123540 W/S G.E. Foster, GB.638686 SGT J. McCreadie.			1710	2314	(X) (P/O A.R. MCQUADE) <u>Bombload:</u> (Same as 'B'). 10/10 cloud at 7,000 feet in target area. Load released at 2013 hours from 19,000 feet by H.2.S. Nothing seen on arrival. Wanganui flares were seen dropping at same time own bombs and these were slightly to port. Too early for further observations. Landed base undamaged.	
"J"	J.4566 F/L W.A. Roberts, J.12736 F/O E.S. Guiton, J.22541 F/O D. Hackett, DFC, GB.181648 W/O A. Hazlehurst, GB.181648 R.35993 W/O P.R. Boileau, J.17658 F/O A.B. Schnltz, GB.1818902 SGT I.E. Smedley.			1713	MISSING	(J) (F/L W.A. ROBERTS) <u>Bombload:</u> (Same as 'B'). This aircraft failed to return from this operation and nothing has been heard from this crew since time of take off. This was Flight Lieutenant Roberts' 9th operation.	
						 (R.J. Lane) Wing Commander, Commanding, No. 405 Squadron R.C.A.F., P.F.F.	

Portion of the 405 Squadron RCAF Operations Record Book for 30/31 January 1944

CALGARY MOSQUITO SOCIETY UPDATE

Green is good: Not only does it mean that with spring our life giving plants have begun to sprout, but in the context of our Mosquito it means that structural repairs are complete and a new coat of paint can be applied to that area of the fuselage interior. Go ahead, stick your nose in either end of the fuselage and note the colour: Green is good. Green means progress and it means we can begin to reinstall parts to the interior of the fuselage.



In March we held our Annual General Meeting with a new record high number of members in attendance. No doubt the impending completion of the Hurricane was an item of considerable interest to our supporters. The airframe is now in one piece lacking just the propeller to give it a complete look. A full coat of primer has been applied and the first colour has been sprayed on the underside of the whole airplane. If work on the various systems is not held up by parts issues, we may look at a first engine run attempt sometime in May. When we are successful, we will let you know and then we will hold a 'first public run' event up in Wetaskiwin at which time you are welcome to join us.



Still on the Hurricane front, we were very pleased to accompany the last wartime pilot of our Hurricane to Wetaskiwin so he could see his old bird in one piece. Gordon M. Hill is now 95 and flew our airplane when he was with 133 Squadron of the RCAF when they were based at Boundary Bay, BC and later Tofino in 1943. Gordon got overseas and joined 416 Squadron in October 1944 with his first cross channel posting in southern Holland just after the Market Garden operation. Gordon flew six marks of Spitfire as part of the Second Tactical Air Force advancing the western front into Germany. Attacking a variety of ground targets, Gordon said he really appreciated the heavier hitting power of the .50 calibre Brownings on the later Spitfires.



Circling back to the Mosquito you will see significant progress with new skins on the outside of the Mosquito. For a full tour of our restoration progress, join us at the Museum on June 29 for Mosquito Celebration Day which will include artifact displays, merchandise and souvenir sales, Lanc engine runs and more.

VICKERS WELLINGTON –NOT TO BE FORGOTTEN

Over the museum's history, Winston Parker has been a great supporter. Now one hundred years old, he still drops in and often mentions to us that, "You should have more about the Wellington in the museum." Winston was shot down in a Wellington and became a Prisoner of War. He has donated several items related to his POW experience that are on display at the museum. Winston also donated one of the very few pieces of artwork on display that features the Wellington.

Winston is correct. Compared to the attention given at the museum to the Lancaster in particular and more recently to the Halifax through the museum's Halifax project, attention to the Wellington has been limited, to say the least.

Yet of the RCAF airmen killed while serving with Bomber Command, 2586 (23%) were lost on Wellingtons. 3675 (33%) were lost on Halifaxes, and 3349 (30%) on Lancasters. Given these numbers, it's important that the Bomber Command Museum of Canada remember the contribution of the Wellington and the Canadians who flew on them.

The 'Wimpey' featured a geodetic form of construction and was Bomber Command's most formidable aircraft when war was declared. It participated in reconnaissance operations on the first day of the war and was involved in bombing attacks on German warships at Wilhelmshaven on the second. Five and one half years later, its final operation was a raid to Northern Italy in April 1945.

As well as bomber operations, Wellingtons served in several other roles, including that of being a primary aircraft at Bomber Command Training Units where 14% of the Canadian airmen lost were killed.



Winston pointing out the name of one of his friends who was killed on a Wellington



The museum's Wellington display including the print donated by Winston Parker and a piece of the geodetic framework of a Wellington



A 405 Squadron RCAF Wellington at Pocklington in 1942

D-DAY –BOMBER COMMAND’S CONTRIBUTION

- **2019 will see the 75th Anniversary of the D-Day Invasion of occupied Europe on June 6 1944.**
- **Bomber Command’s efforts prior to, during, and immediately following D-Day played a major role.**
- **Without the sustained attacks by Bomber Command on Hitler’s war machine, D-Day would not have taken place or, if it had been attempted, it might have been a costly failure.**

Beginning in April 1944, Bomber Command focussed on pre-invasion targets, their main goal being to prevent enemy forces in Normandy from being reinforced by rail. By 5 June (the day before D-Day), of the 37 rail targets, 22 were “sufficiently damaged to require no more attention” and 15 were “severely damaged.” The rail system linking France and Germany had been “most severely crippled.”

2198 minelaying sorties had been flown to protect the flanks of the invasion corridor. Military camps, ammunition depots, and explosive and armament factories had been attacked. Most of the enemy airfields assigned to Bomber Command were put out of action and 30 coastal batteries had been attacked.

Two diversions, ‘Operation Taxable’ and ‘Operation Glimmer’ took place to the north of the landing beaches during the night prior to D-Day. They involved bombers flying low over the sea in precise, elongated, overlapping circuits parallel to the coast, gradually closing in toward the shore. ‘Window’ (strips of aluminum foil that were excellent radar reflectors) was dropped at precisely timed intervals. This created the illusion on shore-based radar that large numbers of ships were approaching.

During the night of 5/6 June, Bomber Command flew 1211 sorties -nearly all in direct support of the invasion forces. 1012 aircraft attacked ten artillery batteries covering the invasion beaches. Due to cloud cover the results were not as successful as was hoped. There were successes however as the following communication sent from the Canadian Army to 6 Group Bomber Command reported, “Three of the four large guns received direct hits while the fourth had its barrel twisted by the blast. This raid undoubtedly saved many lives

for which the army is very grateful.”

During the night of 8/9 June, 483 bombers attacked railways to prevent enemy reinforcements from reaching Normandy. The first 12,000 pound “Tallboy” bombs were dropped on a railway tunnel near Saumur to block an enemy Panzer unit which was expected to move to the front. Placed with extreme accuracy, the huge bombs exploded under the ground, creating earthquakes that brought down large volumes of rock to block the tunnel entrance.

The German navy’s ‘E-Boats’ were fast motor-torpedo attack boats with a top speed of over forty knots. They were agile, larger, and more formidable than similar ships built by the British and Americans. The E-Boats based at Le Havre and Boulogne posed a significant danger to the shipping that was supporting the invasion. They were housed in bunkers with re-enforced concrete roofs and walls that were eight to eleven feet thick. Tallboys were again used and when Bomber Command left Le Havre, it was reported that 53 ships had been sunk.



Tallboy craters at the Saumur Tunnel



Railway marshalling yard at Tours, France



Destroyed E-Boat pens at Le Havre