#### **BOMBER COMMAND MUSEUM NEWSLETTER**

Spring 2023



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



#### **BOMB AIMER PERSPEX REPLACED**

-With assistance from our friends at the Lincolnshire Aviation Centre, the museum acquired and recently installed a replacement for the damaged perspex blister on our Lancaster FM159.

#### PRESIDENT'S REPORT

As I look out the window, I see the last of the snow disappearing. Spring has sprung and just around the corner is our summer season.

As with many of the seasons past, this year promises to be a busy summer season. We are starting off the year with the 80th anniversary of the Dams Raid, where we will be featuring a special 80th Anniversary edition Dambuster Bomb Sight. We have five sights signed by the late Johnny Johnson who sadly passed away last December. Other special events include the Rocky Mountain Model club, car shows and in late August we will be hosting our 'Bikes and Bombers' event. Our only scheduled night run is September 15th. The museum will be open summer hours, starting May 1st. Summer hours are Thursday – Monday; 10:00 – 5:00. The full summer schedule can be found on the museum's website.

Another exciting change at the museum is a revamp of our front entrance and gift shop. The area has been opened more allowing for greater movement and visibility. This also greatly improves the Virtual Reality exhibit. If you have not yet had the opportunity to try this, now is the time. While the exhibit can be experienced sitting down, the full experience is to walk around with in the virtual world. You can move back and forth in the fuselage visiting the different crew stations, you can also step outside and fly along with the aircraft. You can even move beyond the windows and look in from the outside.

I am very excited for the 2023 season and look forward to seeing old friends and making new ones along the way.

-Rob



#### THE DAMS RAID -EIGHTIETH ANNIVERSARY COMMEMORATION

This special event will feature a Lancaster engine run and a presentation by Richard de Boer.

### 'Après le Deluge'

"What Happened to 617 Squadron and its Crews after the Dams Raid?"

#### Saturday May 13th -1:00 \* Lancaster Engine Run -2:00

The story of 617 Squadron's legendary operation that breached two dams that supported Hitler's Ruhr Valley's infrastructure is well known. Richard will present the squadron's remarkable history as a 'special duty' squadron that followed the Dams Raid including additional low-level operations, a challenging D-Day operation, attacks on the Battleship Tirpitz, precision bombing against V-1, V-2, and V-3 weapons and submarine pens, and the use of the Lancaster and other aircraft for low-level target marking.

The president of the Calgary Mosquito Society, Richard has had a life-long interest in aviation history and is a knowledgeable, experienced and dynamic presenter. This will be a good one!



















**BCMC Spring 2023 Page 2** 

## THE DANGERS OF LOW FLYING -AND NOT JUST TO PILOTS -A Horse is Struck by a 2 FIS (Vulcan) Aircraft



A Crowfoot Indian pony was struck by a Canadian Air Force training plane in WW II, and both pilot and pony survived!! This story sounds like something out of Ripley's Believe It or Not, but believe me, it really did happen.

To give you some background first, the late Frank Medicine Shield bred and raised horses years ago that were known as the Bee Crowfoot Indian ponies -The last of the great buffalo ponies. Frank lived on the Blackfoot Reserve, a vast expanse of land that borders the town Milo in southern Alberta. Pretty well every cowboy in that area owned one of the horses, the best of which weighed in at around 900-1000 pounds. These horses roamed the wild open spaces of the reservation and seldom saw a man except when they were gathered up for branding and gelding.

In 1940, an old friend of mine, George Nelson, bought and started the pony in the photograph. The pony was four years old. After World War II got going, George turned his pony back on the reserve when he joined the Army and went overseas. In 1941, there was an Air Force Training Centre (2 Flying Instructor School) near the small town of Vulcan, not far from Milo. The young pilot trainees used to buzz over the Blackfoot Reserve. [2 FIS was based just 28 kilometres east of Nanton.]

One Frigid winter day (it was around 30 below) a little band of these buffalo ponies was sheltering in a coulee on the reserve when a group of trainees on maneuver came flying over. They swooped low over the ponies - much too low - and before they could pull up, one pilot felt a slight jolt. He immediately began to have trouble and could not gain any altitude, so he landed on frozen Lake McGregor.

Townspeople came out to help, noticed blood on the propeller, and asked what happened. The airmen explained they were flying low and felt a jolt ... and now they realized they must have hit one of the horses. They had marked the spot on their map, and that's how the small herd of ponies was found. It was George Nelson's pony that had been struck, and George never knew it happened until he returned from the war in 1946.

As the photo shows, the pony's neck was almost completely severed. The folks around Milo figure that when the pony fell, the wound filled with snow and that, coupled with the bitter cold weather, staunched the flow of blood and saved the pony's life. When George returned, he began to ride his pony again, and told me later that on a frosty morning, the ol' pony could still blow up and give him a ride for his money. The pony died at age twenty-four on the Nelson's Ranch near Milo.

#### **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 include:**

- Donations are not expected at the museum
- Free access to Lancaster fuselage tours
- Free Lancaster cockpit tours (during special events when available)
- \*Please check our website for details of membership options and benefits

#### **Membership Options:**

- Annual: \$40
- Family: \$75
- Museum Supporter (5 years): \$250
- Lifetime: \$1000
- Wing Commander's Club: \$5000

-If you are currently a 2022 member, we encourage you to renew for 2023.

-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) Family(\$75) Museum Supporter(\$250) Lifetime(\$1000) Wing Commander(\$5000)		
MEMBERSHIP AMOUNT:	\$	
ADDITIONAL DONATION:	\$	
TOTAL AMOUNT ENCLOSED	D: \$	
[An official receipt for tax purposes will be issued for donation of \$25 or more]		

#### **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: visitorinfo@bombercommandmuseum.ca or 403-646-2270

#### AN UPDATE FROM THE CALGARY MOSQUITO SOCIETY

-The Wooden Wonderers . . .

We've been at it for over ten years now. For one thing, I wonder when we'll get done? Certainly can't fault our dedicated corps of Saturday volunteers as we continue with a strong turn out every weekend. I wonder if it's the donuts that keep everyone coming back?

A lot of effort has been focused on the wing over the past few months. With the acquisition of the proper plywood last October, we have begun the process of stripping the top skin from the wing and have two new panels cut and fitted already. The top skin of the Mosquito is actually double layered for most of its span with 1" stringers between the layers.

One of the significant challenges is removing the top skin from many stringers as the glue still seems to be holding firm here. We tried peeling a skin and ended up splitting the stringers. Can't have that, so we settled on using a router to remove the top skin. In other words, that means turning 454 square feet into sawdust!

Lots of effort also centered on the main undercarriage, which famously is sans hydraulics. Come see the rubber blocks. Lots of cleaning there. We have built a steel frame in which to reassemble the gear and get it to swing. With the leading edge of the Mosquito wing being 7' 6" off the ground, the gear is surprisingly long.

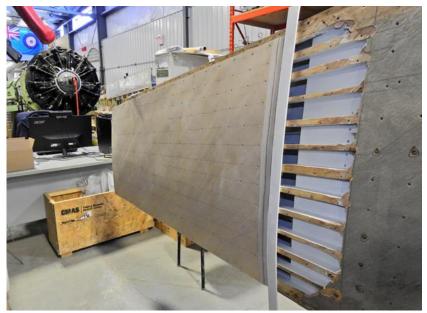
In the fuselage we have two of our crew steadily restoring and reinstalling the bits and systems, with Don in the back and Andy in the front. Again, come check out the progress and take a look at the photos at each station to see how we have progressed.

Finally, we are still working on the Hurricane's Merlin with the help of Brian Taylor and have decided to build a test stand to ground run the engine before we drop it back into the airframe. That also means having to scrounge up the bits and pieces for a test club prop like the one on the Bristol Hercules engine. As there is a spare engine being put together for the Lanc we will probably pass the test stand and prop on the Bomber Command and split the costs.

July 15<sup>th</sup> is Mosquito Celebration Day. Mark it now and plan to come see us.

Richard de Boer, Prez









# Vickers Wellington Mk. III Z1604 ZL-U 427 Squadron Royal Canadian Air Force RCAF Croft

F/O C.A. Taylor (Pilot) P/O G.A. Martin (Navigator) P/O D. Mortimer (Bomb Aimer) Sgt. W.F. Baker (WAG) Sgt. W. Lumsden (Air Gunner)

On 3 January 1943, Wellington Z1604 was the first of six 427 Squadron aircraft to take off on the first operation launched by 6 Group RCAF. They were tasked with laying mines off the Friesen Islands.

Despite 10/10ths cloud and bad weather over the drop area, three of the aircraft successfully placed their mines. All returned safely, although one Wellington was struck by flak which left a one square-foot hole in its starboard wing.

#### <u>NEW 'MUSEUM OPERATIONS' BOOKS -SPECIAL OFFER</u>

'Bomber Command Operations Night Run Up August 16, 2021'
'Bomber Command Operations to July 2021'
'Bomber Command Is Back July 24, 2021'

Three colourful photo books of museum operations are now available in the gift shop and online. Each book is 40 pages and highlights activities during demonstrations and engine runs from 2021 and earlier. The photos celebrate the return to full operations after the season lost in 2020.

Each hard cover book is forty pages, filled with full page colour images and retails for \$34.00 plus shipping. We are offering a set of all three books for \$90 with free shipping while they last. Call the Gift Shop at 403-646-2270 or order online.







#### THREE OF TWENTY-FOUR OKAY

-Handwritten notes on this new addition to our archives make clear the loss rates faced by BCATP graduates, in this case from 4 Bombing and Gunnery School in Fingal, Ontario.



#### SPITFIRE REPORT

Since our last report we have acquired some further items. It's always tough to find items across the big pond but we have people that support us from different countries which is an immense help to finding and acquiring these items. A big shout out to all of our supporters as without you, bringing the Spitfire to life is not possible.

We have acquired frame 17 just recently. It is still in the UK but we have secured it. The Spitfire crew have been working with the Lancaster nose perspex replacement as well as getting our gift shop expansion some help which shifted our focus of building but our crew are getting back to work soon on the build.

If I can ask for our supporters to dig into the piggy banks and make it out to our great museum this summer, buy a T-shirt or a widget to help us put the proceeds into building this great aircraft.

Many thanks and we will hope to have more great things to report next time.



Recently acquired radiator for the Spitfire's Merlin

#### **BUILDING EXPANSION**

We have been making good progress on the expansion front over the past few months. Our volunteer fundraising leader, Wendy Kennelly, has been busy organizing meetings and investigating prospects for possible funding opportunities. We are also meeting with building executives to update our new estimates post-Covid.

A possible trip to the Royal Aviation Museum of Western Canada, in Winnipeg, is planned to discover how they raised the funds to build their state-of-the-art complex. It is an impressive accomplishment.

In conclusion, we are re-energized and confident that our efforts will be realized in the near future.

#### **NEW SIGNAGE WILL ATTRACT NORTHBOUND TOURISTS**

The museum has installed a new billboard adjacent to Highway #2 at Stavely, about nineteen kilometres south of Nanton. An older sign was in tatters and faded to black and white. The new billboard is forty feet wide by ten feet high and will be viewed by 9000 north bound vehicles per day most of the year and 12,000 vehicles per day during July and August. It will advertise the museum to northbound traffic originating in southern Alberta and BC, and the United States.



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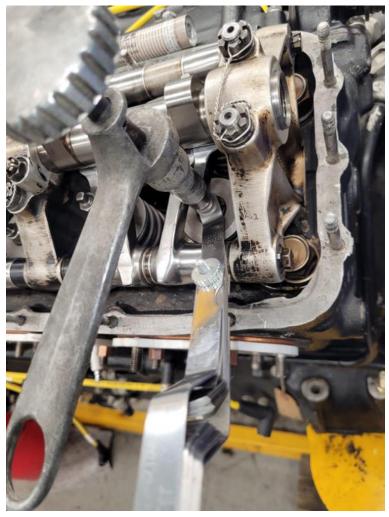
<u>LANCASTER NEWS</u>
-Some photos from our engine shop as the Lancaster's 'Fifth Merlin' is assembled.



Cam supports lock wired and cotter pinned



Setting exhaust valve clearance



Special Merlin tool for setting clearance



Finished product ready for cam timing

#### 'THE CANADIAN BOMBER COMMAND EXPERIENCE'

-The museum has now published its seventeenth book. Written by five different authors, these books are all based on material from our extensive library and archives and all pertain to the history we present at the Bomber Command Museum of Canada. Check them out.

-They're available at the museum or through our on-line store.

During the Second World War, some 40,000 young Canadians were trained in Canada and sent overseas to serve in the massive effort that was Bomber Command. 10,400 were killed.

Through four hundred archival photos, this book presents their experience -from their recruitment and joining the Royal Canadian Air Force, through their training in Canada and in the United Kingdom, and finally their service with Bomber Command Squadrons in the UK in combat in the skies over Europe.

As well as telling the story of these men and women, the book and its photos describe the development and operation of the British Commonwealth Air Training Plan, the huge effort to operate and support the strategic bombing offensive, and the development of the Royal Canadian Air Force.



#### 10 REPAIR DEPOT (CALGARY) by PETER WHYTE

-Best known for his Canadian Rockies artwork and having the Whyte Museum of the Canadian Rockies named for him and his wife Catherine, Peter Whyte served as an RCAF photographer and war artist. The museum has detailed information and photos related to all six of the BCATP facilities that operated in Calgary in our on-line archives.





RCAF No. 10 Repair Depot opened in June of 1941, on a site to the south of No. 3 SFTS that had opened in October, 1940. No. 10 RD was responsible for the overhaul and repair of all aircraft flown at BCATP bases in No.4 Training Command -essentially all of Alberta, British Columbia, and parts of Saskatchewan. Recovery of aircraft damaged in accidents was also performed by personnel of No. 10 RD.

Aircraft repaired at No. 10 RD used the No. 3 SFTS runways for flight testing before delivering the aircraft to BCATP Schools. No. 10 Repair depot closed in September 1945, at the same time as No. 3 SFTS.

The hangars and other buildings that were part of No. 10 Repair Depot were located northwest of the junction of Crowchild Trail and Glenmore Trail.

#### HALIFAX NEWS

-The 'Halifax Project', operated by Halifax 57 Rescue for the Bomber Command Museum of Canada, is going great guns and we want to tell you the latest.

We are well along with the rebuild of the center-wing and now adding the wing leading edges and trailing edges, SEE PHOTO of the ribs going on at KNOX TECH. --- or look at Facebook -- "REBUILDSHOP" -to see the rebuilt wing.

We have acquired from our friends at Yorkshire Air Museum in the UK a complete left outer wing panel, another 28 feet of wing! SEE 3rd PHOTO

Plus we have acquired (12) new Halifax propeller blades from the Newark Museum in the UK, see photo of our lineup of blades. SEE 4th PHOTO of the stunning line up, almost as rare as diamonds, this lot.

Our collection of Hercules engines for the Halifax is growing, as we have EIGHT engines to make 4 runners, with #2 Hercules being installed on our engine-run trailer for this season's engine run events, she should be ready to run in about 2 weeks, she is a rebuilt- brand new Hercules.

We are going to pick up Hercules #8 in the USA at the end of April, cost will be \$6,000. (plus transport) for the entire engine. Can you donate to the "Halifax Project" and help us pay for this engine? Any amount would be appreciated!

Don't forget we will be diving and saving our RCAF Halifax HR871 off the coast of Sweden, more on this later as we prepare to dive and salvage all we can in late July-early Aug 2023.

More parts and items for the Halifax rebuilt are being located and saved from all over the world and we need you support to keep going. You can contact us at BCMC or Halifax 57 Rescue at

#### 57rescuecanada@rogers.com

Great progress on all fronts. You can see all our reports on the "Halifax Project" - just Google this: "Fundrazr 417498"

For you Facebook fans, remember to visit Facebook page, look for: "REBUILDSHOP"

Please donate and help us save a Halifax for BCMC in Nanton, Alberta. Let us celebrate THE RCAF 100<sup>TH</sup> Anniversary with great ADVANCES ON THE Halifax in 2024.

WE LEAVE NO HALIFAX BEHIND.
Karl Kjarsgaard – Project Manager - Director
- H57RC and BCMC



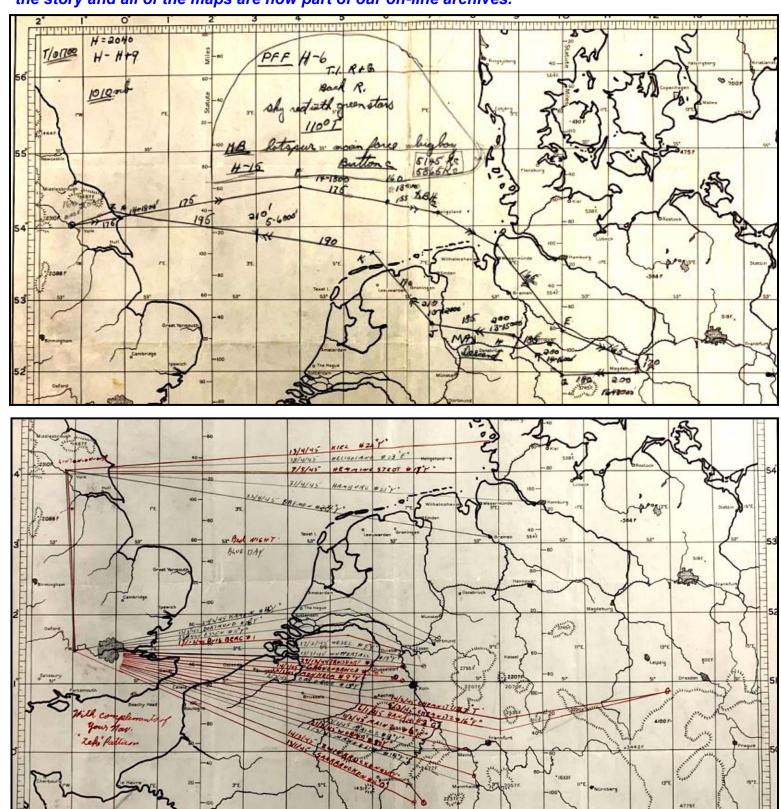






#### **ZEKE'S MAPS**

-WO2 J.E. 'Zeke' Pattison was F/Lt Hutcheon's navigator. Following their tour of operations with 408 Squadron, Zeke managed to save his navigation maps for the crew's operations and they correlate with F/Lt Hutcheon's logbook pages. The flight track details and other notes on the maps provide insights into the demands placed on a Bomber Command navigator. WO2 Pattison's logbook as well as a number of photos and Zeke's maps were recently donated to the museum and the story and all of the maps are now part of our on-line archives.



Zeke made this summary of his crew's operations immediately following the war. The note at bottom-left indicates that he gave this to Robert Hutcheon, his pilot.

#### ANSON #7481 PROGRESS REPORT

Winter always seems like a good time for projects and Annie has certainly benefited from this winter's cold grip. The tail plane especially.

The "Tale of the Tail" (I couldn't resist) has extended just over a decade. While we had drawings for most of the construction, this wasn't so for the tail cone. The very back piece that sits under the rudder, is detachable from the tail plane itself to allow access to the elevators and related hardware. After much searching and digging all that could be found was an angled photo in one of the manuals and a general arrangement drawing that lists all the drawings that I was missing. From these, a few careful measurements, a few head scratching guesses, and a whole lot of luck, the tail cone now has some shape to it and a fairly decent fit as well.

The lynch pin of the whole assembly was the angled photo that appears in the original maintenance manual. While photo was taken at an angle, I was able to use some trick photography to "Un-angle" it. I found that by holding my camera at a similar angle the resulting photo was once again square as if taken from overhead. I still didn't know the correct dimensions but at least I had a starting point. The dimensions came from the tail plane.

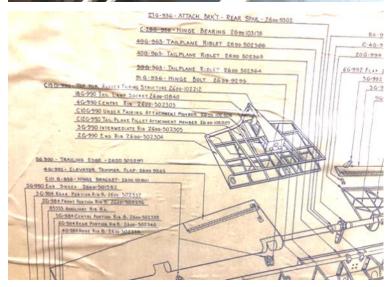
The photo with dimensions were entered into a drafting program and were used to produce a plan view of the tail cone. Fortunately, we have a side view drawing which shows the center rib outline. All that was left to determine was the two outer ribs and the inner middle ribs. This is where the head scratching guesses came in. I figured (hoped) that the outer ribs would be a match for the shape of the elevators. I transferred the shape from one of the elevators onto paper, which I then measured and used the dimensions to enter the shape into the drafting program as well. Theoretically I now had the center rib and the outer rib. I then used these two drawings to "loft" the middle rib. Now I had all the major pieces, or did I? even with all these pieces together and assembled, I did not have the measurements for

the fairing that sits under the rudder.

The Fairing between the tail cone and the rudder posed a challenge. With out mounting the tail plane and rudder to the fuselage I had no way to determine how high and how wide to make the fairing formers. The side view did show the spacing but if anything was off the assembly would be too tall and run into the rudder or too short and leave an unsightly gap. If only I had the original fairings, then I could easily validate the size and shape.













#### ANNUAL SPRING CLEANING AND ENGINE TEST RUN



Since the late 1990's, Air Cadet Squadrons from southeastern British Columbia have been spending three days each spring giving the museum a thorough cleaning and assisting with other tasks as required. This year fifty cadets and ten leaders from squadrons based in the upper Elk Valley, Fernie, and Cranbrook did their usual great job. In the photo, some of the cadets are watching our Lancaster Crew's engine test run following their winter maintenance.

#### FROM THE MUSEUM'S NEWSLETTER OF THIRTY YEARS AGO

-Our museum's Spring 2023 newsletter reported:

#### July 17, 1993 Dams Raid Commemoration Day -

We hope many of our members will plan on attending our Dambusters Commemoration Day on July 17. We will, of course, be honouring those involved in the heroic efforts by members of 617 Squadron, whose Lancasters carried the famed "Bouncing Bomb" and attacked the dams of the Ruhr Valley on the night of May 16/17, 1943.

We will have Ken Brown of Surrey, B.C., as our special guest for the day. Mr. Brown was a pilot on the Dambusters raid and was awarded the Conspicuous Gallantry Medal for his actions on this historic operation.

The plans for the day include special displays and events at the musteum from 10 a.m. to 5 p.m., and a performance by the King's Own Calgary Regimental Band at 3 p.m.

Introductions of our special guests will take place at 3:55 p.m. and a flypast by a Canadian Armed Forces C-5 at 4:00 p.m.

Following the flypast, a banquet will be held in the Nanton Community Centre, adjacent to the museum. Cocktails will be served at 4:30 with music by the KOCR Band. Dinner will be served at 5:30. Following dinner Mr. Brown will speak about his experiences with 617 Squadron.

Tickets are now available to members at \$20. We urge members to order their tickets early, as they will be made available to the public after June 1, 1993. Only 200 will be sold. Our previous events, The Ian Bazalgette Dedication in 1990 and our Official Opening last year were sold out and 350 tickets were available.

-A <u>video of Ken Brown's speech</u> is available from our museum's on-line archives.

#### THE GREAT BOMBER COMMAND NOSE ART DATABASE

-Our volunteers in the archives continue to track down and research additional nose art images to add to the collection.

Photos of both nose arts that are new to us and additional photos of nose arts that are in the collection already are regularly used to update the collection.

We find that when we promote the database through posts to various Facebook groups there is a remarkable spike to our statistics showing a significant interest in nose art and our database. We are pleased that visitors send us new photos and information as well as comments and suggestions.

One suggestion that we received from several users is to add a 'Search by Squadron Number' function which we have done.

The collection now includes 1166 unique nose arts and 2309 photos. Here's a link to The Great Bomber Command Nose Art Database Database.









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If this newsletter has been forwarded to you and you would like to receive future newsletters directly, please advise by email to office@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 <a href="mailto:office@bombercommandmuseum.ca">office@bombercommandmuseum.ca</a>...

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

Our newsletters are also available via Facebook.