

the

OBSERVAIR

**Ottawa Chapter Newsletter
Canadian Aviation Historical Society**



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CHAIRMAN'S MESSAGE

There were three significant developments in Canadian aviation heritage to report this month.

First, OEX Recovery, the company behind the Raise the Arrow project, released underwater video of what they believe to be two Avro Canada CF-105 *Arrow* free-flight test models. These models were fired by Nike rockets into Lake Ontario off Point Petre, Ontario to gather aerodynamic data early in the *Arrow's* development. They may have also found a number of associated items, including what they believe to be *Velvet Glove* and *Sparrow II* missiles. OEX Recovery will resume work on Lake Ontario in June-July 2018. They are working with Scarlett Janusas Archaeology Inc. and the Canadian Conservation Institute in planning for the raising of at least one of the models. The underwater video of the dive can be seen here: <https://drive.google.com/file/d/0B3pfmYEilOjTX204UFpNM3ZiMFE/view>

Second, early in October, Avro *Lancaster* Mk. 10AR, KB882, was moved from Edmundston, New Brunswick, to its new home at the National Air Force Museum of Canada, Trenton, Ontario. It was disassembled by military and civilian technicians from the RCAF's Aerospace and Telecommunications Engineering Support Squadron (ATESS) and the National Air Force Museum of Canada. *Lancaster* KB882 is slated to be unveiled, fully restored, on the 100th Anniversary of the formation of the RCAF, 1 April 2024. Additional details and images can be found in these two RCAF News Articles: <http://www.airforce.forces.gc.ca/en/news-template-standard.page?doc=edmundston-lancaster-kb882-transferred-to-national-air-force-museum-of-canada/j7oyvh0m> and <http://www.airforce.forces.gc.ca/en/news-template-standard.page?doc=update-on-lancaster-kb882/j7oyw60j>

Finally, as I mentioned to those in attendance at our September meeting, starting this month and running until the end of this season, the Canadian Aviation Historical Society Ottawa Chapter **meetings will be held in the Main Theatre of the Canadian Aviation and Space Museum, not the Bush Theatre**. The Bush Theatre is being used by Algonquin College and we will have no access to it for the rest of the season. The Main Theatre is located directly across from the main entrance doors underneath the suspended Snowbirds *Tutor*.

*Kyle Huth
Chairman*

Find us on Facebook at: <https://www.facebook.com/CAHSOttawaChapter>
The Observair is the newsletter of the Ottawa Chapter, Canadian Aviation Historical Society (CAHS), and is available with membership. Membership fees are payable in September. Any material for *The Observair* newsletter should be directed to the Editor: Kyle Huth
All matters relating to membership should be directed to the Secretary/Treasurer: [Mat Joost](#)

Kyle Huth
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Research Group
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Refreshments

PAST MEETING: HELPING WIN THE BATTLE OF BRITAIN – THE CAN/RAF IN BOMBER COMMAND

There were 50 members and guests in attendance at our September meeting to hear Mathias Joost talk about CAN/RAF personnel in RAF Bomber Command during the Battle of Britain. Mathias outlined his reasons for researching this topic, which included dispelling the common myth of “the Few” being limited to RAF fighter pilots and giving some credit to Bomber Command aircrew for helping to win the Battle of Britain.

Starting with Hugh Halliday’s estimate of 1800 Canadians enlisted directly in the RAF during the Second World War, Mathias estimated that there were at least 200 CAN/RAF aircrew in RAF Bomber Command from the start of the war until the end of the Battle of Britain. Both Hugh and Mathias agreeing that there can be some difficulties agreeing who could be considered Canadian.

Through his research, Mathias was able to identify 110 Canadians who flew at least one operational flight with RAF Bomber Command during the Battle of Britain (between 10 July and 31 October 1940). He also found there were at least 49 CAN/RAF casualties and prisoners of war prior to the Battle of Britain and at least 16 Canadians who were no longer with front line squadrons by that time (they had either completed their tours, posted to training squadrons, or were injured).

There were, on average, three CAN/RAF aircrew in every squadron in RAF Bomber Command during the Battle of Britain; No. 149 Squadron had at least seven CAN/RAF aircrew, while Nos. 78 and 99 Squadrons each had at least six. At the beginning of the war, it was not uncommon to have two Canadians in the same bomber crew, but by mid-1940 one Canadian per crew was the norm.

Some Canadians of note included Squadron Leader Garfield Wallace Prior of No. 10 Squadron who flew 18 sorties from July to October 1940, earning a DFC citation on one operation. He was killed in action 22 November 1943 on a raid against Berlin. Gordon Learmouth Raphael, DSO, DFC and Bar, flew at least 11 sorties with No. 10 Squadron during the Battle of Britain. During that time, he was involved with testing a new night camera and later in testing exhaust baffles that reduced the glare of exhaust flames. He was killed on 10 April 1945 when his Spitfire collided with a Dakota. John “Moose” Fulton flew 21 sorties with No. 99 Squadron during the Battle of Britain. He was given command of the newly-formed 419 Squadron on 12 December 1941 and was killed in action 28-29 July 1942. After his death, the squadron was given the nickname “the Moosemen” in his honour, the only RCAF squadron to do so.

During the Battle of Britain, Bomber Command increased its attacks on Luftwaffe airfields in occupied Europe and Germany. As Mathias stated, “The effectiveness of these attacks has not been evaluated but it likely was no more than harassment value as the Luftwaffe used many airfields and the damage done was little more than cursory, but there was the nuisance value and the lack of sleep for air and groundcrew.”

On the night of 25/26 August, RAF Bomber Command sent a force of 81 aircraft to bomb Berlin; the first time such numbers were used against a single target. This was done in retaliation for the Luftwaffe’s bombing of London the night before (this was due to a navigational error on the part of the Luftwaffe bomber crew). The attack on Berlin was repeated on the nights of 28/29 August and 31 August/1 September 1940. Little damage was done during these raids, but they caused Adolf Hitler to order the Luftwaffe to bomb London, giving RAF Fighter Command time to rebuild and recover its command and control systems in No. 11 Group. This switch in targets by the Luftwaffe is regarded as a turning point in the Battle of Britain, and it was RAF Bomber Command’s doing.

To invade Britain, Germany assembled an array of vessels and barges in the Channel ports. This did not go unnoticed by RAF photo reconnaissance aircraft and, early in September, the Battle of the Barges began, with RAF Bomber Command attacking the Channel ports almost nightly. These attacks destroyed 10-12% of barges and vessels assembled, damaged or destroyed port infrastructure, and caused Germany to strengthen its air defences of the Channel ports (at the expense of the protection of Germany). The loss of barges is considered a factor in the German cancellation of invasion plans.

As Mathias said, “In the end, “the Few” should be seen as more than just the fighter pilots. RAF Bomber Command aircrew played their role in winning the Battle of Britain, and Canadians were amongst this group.”



Wing Commander John “Moose” Fulton
DSO, AFC, DFC © 419squadron.com

Kyle Huth



RAMBLING THROUGH RECORDS

Winston Claude Mawatari was born in Toronto, 15 June 1920, the son of Kazuo Mawatari and Winnifred Mawatari and he had two sisters. But for his name, he was a typical young Canadian – a caddy for five years earning pocket money in school. He played hockey, rugby, and baseball. He was an office and sales clerk before the war, selling clothes and books, and tried to join the RCAF before being drafted. He was also identified as being Anglican.

Mawatari was drafted into the Canadian Army under terms of the National Resources Mobilization Act on 28 August 1941. He trained or served at the following locations:

No. 22 Canadian Army (Basic) Training Centre, North Bay, 8 September to 27 October 1941.

No. 18 Artillery Training Centre, Dundurn, Saskatchewan, 25 October 1941 to 4 February 1942.

A23 Canadian (Armoured) Basic Training Centre, Newmarket, 5 February to 9 March, 1942. During this period, he was applying for the RCAF. In a Medical Report, dated 17 February 1942, Squadron Leader D.H. Hubbs wrote, "An alert lad who is well motivated; has flown on five different occasions since in service. He is keen on flying and determined to be a fighter pilot. He is ambitious and wishes to be given a chance to show his ability; should be an excellent pilot."

No. 4 Light Anti-Aircraft Regiment, Debert, Nova Scotia, 9 March to 29 May 1942.

On 29 May 1942, he successfully transferred to the RCAF at No. 16 Recruiting Centre, Halifax, remaining on strength there until 18 August 1942. His education was considered below average. At this point, the opinions of three officers are worth noting:

His mother is Canadian, father the offspring of a Japanese and a Welsh woman. (Flying Officer F.K. Stevens)

Steady type. Even-tempered, composed. Not disturbed by difficult situation (Jap ancestry). Intelligent and alert. (Flying Officer J.L. Thomas)

This applicant is Pre-Enlistment prospect. Should have careful check on father's naturalization before enlistment. Appears to be bright and intelligent but somewhat slow. Little evidence in appearance of Japanese descent in face or physique. (Author uncertain).

He then followed a familiar route for aircrew trainees – No. 1 Manning Depot, Toronto (19 August to 9 October 1942); No. 1 Training Command Headquarters, 10 October 1942 to 6 February 1943 (attached to de Havilland, 10 October 1942 to 19 January 1943), and No. 1 Initial Training School, Toronto, 7 February to 17 April 1943. This was academic work only – a Link Trainer test was the closest he came to flying. He placed 45th in a class of 59. Squadron Leader R.C. Chandler graded him as Pilot material and wrote, "A youthful, enthusiastic airman with plenty of dash. He is keen and will give his best at all times. Second aircrew recommendation, Air Bomber."

His next step was No. 7 Elementary Flying Training School, Windsor, Ontario, 18 April to 12 June 1943 (Fleet *Finches*). He placed 15th in a class of 15 but, although his ground school marks were mediocre, he placed seventh in actual flying. Squadron Leader G.A. Tambling wrote, "Flying ability 'Good average'. Needed occasional check on discipline."

His career ended at No. 14 Service Flying Training School, Aylmer, Ontario. He had flown 37 hours 55 minutes dual and 33 hours 30 minutes solo when, on 24 June 1943, he was killed in a flying accident. *Harvard* 2946 crashed 3/4 miles northeast of Corinth, Ontario, and he was instantly killed. A post mortem examination for carbon monoxide found nothing.

The fact that there was "little evidence in appearance of Japanese descent" undoubtedly eased the way for him in both the Army and the Air Force. His self-confidence was also evident ("Not disturbed by difficult situation."). Nevertheless, his name alone jumped off the page of every document. He may have been a footnote in history – but he was also unique.

Hugh Halliday



YOWza – Images of recent sightings at Ottawa’s Macdonald-Cartier International Airport (MCIA) (YOW)

This page is contributed and coordinated by CAHS Ottawa Chapter member Rod Digney



First Air’s Boeing 737-436 (msn 25839), C-FFNM, displaying images of Canada Post’s Canada 150 stamps on its port side, 14 June 2017. See too the image to the immediate right. © Rod Digney



That same aircraft as seen to the left, Boeing 737-436 (msn 25839), C-FFNM, was caught being repositioned in the hangar at YOW on 11 October 2017, the day before the formal launch of First Air’s new branding. © Rod Digney



British Prime Minister Theresa May came to Ottawa on this Royal Air Force Airbus Voyager KC3 (Airbus A330-243MRTT, c/n 1363), ZZ336, on 18 September 2017 for meetings with Canadian Prime Minister Justin Trudeau. Normally operating from RAF Brize Norton as a 3-point air-to-air refueller and standard transport, Voyager ZZ336 is reconfigured with a VIP-interior with 58 business-class seats for long-range VIP trips such as this.

© Will Clermont



Belgian Prime Minister Charles Michel travelled to Ottawa aboard this Belgian Air Force Airbus A321-231 (c/n 1004), CS-TRJ, on 21 June 2017 for a 3-day visit to Canada. © John Buffam



Delivery of the Canadian Coast Guard’s seven Bell 412EPI medium-lift and 15 Bell 429 light-lift helicopters is now complete. Seen on the Department of Transport’s ramp at YOW on 26 June 2017 were Bell 412EPI (s/n 37024), C-GCGP, (f/n 945), and Bell 429 (s/n 57251), C-GCRU, (f/n 446).

© Rod Digney



Employees at General Dynamics Mission Systems got a sneak peek at the RCAF’s new Sikorsky CH-148 Cyclone maritime helicopter on 29 June 2017 when ship 148821 spent the day at the firm’s facilities in Bells Corners. © Rod Digney

WEBSITE HELP NEEDED: HISTORIC CCAR PROJECT

The Historic CCAR (Canadian Civil Aircraft Register) Project website (<http://www.historicccar.ca/>) has now been up and running for the past 18 months, and loading the data has been slow but steady.

For some time we have been hoping to add images but have been stymied by lack of time and expertise. We have been given, or loaned, thousands of images and John Rodney has waged a valiant battle trying to keep ahead of the scanning process. The website people have coded the initial version of the "Photo Gallery" page on the website and now we NEED YOUR HELP in implementing this feature.

There are several ways you can help:

Administration: We need someone to help us set up procedures to control the "flow" of images into the online system. We have set up the appropriate storage files and now need a system to add images (using FTP, according to the web guys), and to make sure that we don't accidentally try to add an image that we have already loaded.

A new file ("Gallery File") needs to be created and implemented; this is the file that connects a particular aircraft to its photos (if any). When we set up our index file we included a column with a unique code for each valid registration/aircraft, which is independent of the Sequence Number that appears on the screen. This code makes use of the last four of the registration and adds a unique alpha character (i.e. the second use of CF-AAA becomes FAAA.B). We have been using this code in naming the images as they are scanned. We also add pertinent data (photographer, date and location of the image, *et. al.*) to the image name. Creation of records for the "Gallery File" would follow the following steps:

Create a folder of images;

Create a directory of that folder and store as an Excel file;

Use the "Text to Columns" feature of Excel (and maybe a very simple Excel function) to split the image name into its separate fields;

Add to "Gallery File".

Technical: We need someone with technical knowledge in image processing. Our images are of many types, but the website can only use .jpg. There are a number of free software programs which will change non-.jpg to .jpg. Also, many of our images are very large, so we need to be able to reduce such images to a smaller size.

Copyright: We need someone to advise us on copyright issues.

If you would like to help in this exciting project, please contact John Rodney, preferably by e-mail [_____](mailto:john@historicccar.ca)



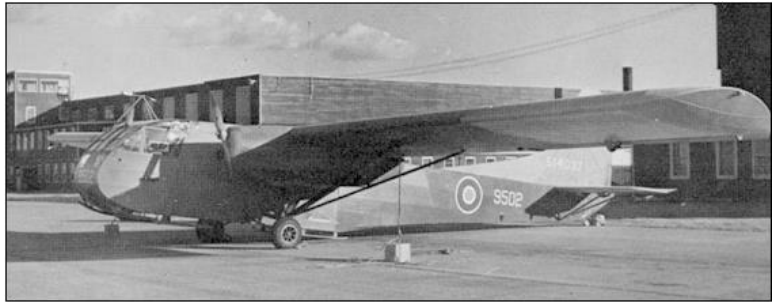
Some images from CAPCON 2017 at the Canadian War Museum on 30 September 2017. *Below:* a 1/400 scale model of HMCS *Magnificent* with a complement of

Avengers and H04S-3 helicopters on deck. *Top Right:* a 1/96 scale Vickers *Viscount* in Trans-Canada Air Lines livery. *Bottom Right:* a 1/72 scale Airspeed *Horsa* Mk. II glider in Operation *Overlord* markings. This was the sole entrant in the award category sponsored by the CAHS Ottawa Chapter.



THE GIMLI GLIDERS

Postwar, RCAF Station Gimli, Manitoba, was on a care and maintenance basis as a Reserve Equipment Maintenance Satellite (REMS), which was a storage site for Royal Canadian Air Force (RCAF) major equipment, including aircraft, and became a detachment of No. 10 Repair Depot Calgary, Alberta, from 1946 to 1950.



The RCAF's sole powered version of the *Hadrian II*, the Waco PG-2A, RCAF 9502.
© <http://www.indianamilitary.org>

The Waco CG-4A *Hadrian II* glider

The CG-4A *Hadrian II* glider was built by the Waco Aircraft Company (begun as, Weaver Aircraft Company) of Troy, Ohio, and fourteen other subcontractors. A total of 12,393 were produced during the war.

The CG-4A was a large 15-man glider which became the most widely used American glider in World War II. Waco also built an improved version of the CG-4A, designated CG-15A, and built a total of 428 of this type, one of which went to the RCAF postwar as serial No. 9504.

In 1944, the Northwestern Aeronautical Corporation of St. Paul, Minnesota, produced a batch of ten PG-2A-NW powered versions of the CG-4A fitted with two Ranger L-440-7 engines to allow it to return after a sortie. These powered gliders were assigned USAAF serial numbers 45-14034 to 45-14043.

The *Hadrian II* Gliders in the RCAF

The RCAF received a total of 30 CG-4A *Hadrian II* gliders in 1946 and 1947. These gliders were assigned serial numbers 9501 to 9530. Included in this batch was one PG-2A powered glider, serial No. 9502, and one CG-15A, serial No. 9504.

The first RCAF unit to use the *Hadrian II* gliders was the Winter Experimental Establishment at RCAF Station Edmonton, Alberta (better known as the WEE Flight), commanded by Squadron Leader (S/L) S.O. "Ozzie" Partridge. The first glider, No. 9501, appeared on strength at WEE Flight on 31 March 1946.

During the months of April to June 1946, S/L S.O. "Ozzie" Partridge was very busy giving familiarization flights to the following pilots: S/L E.L. Baudoux, S/L J.D. Summerville, Flight Lieutenant (F/L) G.D.A. Cameron, F/L J.J. Higgins, Flying Officer (F/O) W.H. McKenzie and F/O A.G. Robertson using gliders 9501, 9502, and 9504. Most of the flights being towed into the air by *Dakota* 654.

The main user of the gliders in the RCAF/Canadian Army was the Canadian Joint Air Training Centre (CJATC) at Rivers, Manitoba.

During the period October 1947 to November 1953, a total of ten *Hadrian II* gliders were used at Rivers, Manitoba. One of these gliders, No. 9517, was transferred to the National Research Council in Ottawa for a short time in 1951.

In November 1953, the gliders were declared obsolete and the Glider Flight at CJATC was disbanded.

On 18 May 1955, two of the Rivers *Hadrian II* gliders were transported to the range at Shilo, Manitoba, for use as targets. None of the Canadian gliders were saved for a museum.

A total of eleven *Hadrian II* gliders were never uncrated and in 1964 were sold in their original crates (the lumber in the crates being worth more than the gliders)!

The first gliders at Gimli

10 December 1946 – S/L R.F.E. Kempster, chief engineering officer at No. 10 Repair Depot, Calgary, was informed that the 24 gliders awaiting delivery to Gimli could not be freighted from Utah, USA, due to a shortage of coal in the USA.

16 January 1947 – F/L L.K. Firth proceeded to Gimli to supervise the unloading of the *Hadrian II* gliders being shipped in from the USA.

24 January 1947 – Preparations were underway at the Gimli detachment for unloading the gliders being shipped there for storage.

4 February 1947 – Four railcar loads of gliders arrived at Gimli airfield at 1600 hours.

25 February 1947 – Twelve railcar loads of gliders arrived at Gimli and work crews began unloading the gliders.

28 February 1947 – All the gliders at Gimli were unloaded and stored in hangars.

4 April 1947 – One railcar load of gliders arrived at Carberry, Manitoba, and were unloaded and stored there.

26 July 1947 – A crew at Winnipeg finished loading the Waco PG-2A powered glider, RCAF serial no. 9502, and were leaving for Gimli, where the glider was to be stored.

On 1 December 1950, No. 2 Flying Training School (FTS) was formed at Gimli with *Harvard II* aircraft. With this activity, Gimli once again became an active flying station.

The second gliders at Gimli

On 3 July 1952, the following entry appeared in the unit diary of No. 2 FTS. “The glider club was officially organized and now has three gliders.” However, the diary was very terse regarding the gliders and did not provide any further details.

The third glider at Gimli

On 23 July 1983, an Air Canada Boeing 767 (c/n 22520) C-GAUN, Flight No. 143 departed Montreal for a stop at Ottawa enroute to Edmonton, Alberta. Unknown to the crew of Captain Robert Pearson and First Officer Maurice Quintal, the aircraft had an electrical snag in the fuel quantity information system which was feeding incorrect data to the fuel quantity gauges in the cockpit. The fault was later found to be a cold solder joint. The crew believed they had a full load of fuel on board when in fact they had only half the amount of JP4 kerosene required to reach their destination.

After takeoff from Ottawa, the crew set course for Edmonton and ran out fuel at 41,000 feet over Red Lake, Ontario, with the port engine flaming out, followed shortly by the starboard engine. The sink rate quickly became 5,000 feet loss of altitude for everything 10 nautical miles forward.

The First Officer realised the 767 was sinking far too fast to reach Winnipeg and their only option was the disbanded Canadian Armed Forces base at Gimli which, unknown to the crew, was being used as a drag strip.

Fortunately, Maurice Quintal knew the location of Gimli, having been stationed there during his time in the RCAF. Just prior to the crash landing, the crew got the main landing gear down and locked, but the nose gear failed to lock down and collapsed on touch down. The Boeing landed in a long shower of sparks and grinding metal sending all the drag races and their crowd of fans fleeing. Both main tires blew out due to harsh braking.

There were 61 passengers and eight crew members on board. Only ten received minor injuries. The 767 was repaired on site and flown out. After additional repairs, the Boeing went back into service and continued to fly until retired. This event became a Canadian aviation legend known as the *Gimli Glider*.

R.H. “Bob” Smith

NOTE: Info from Operations Record Books of: No. 10 Repair Depot Calgary, Alberta; WEE Flight Edmonton, Alberta; CJTC Rivers, Manitoba; RCAF Station Gimli, Manitoba



RESEARCH CORNER

Please consider submitting summaries to the editor of your own research interest (50 to 100 words) for inclusion in future issues of the *Observair* Research Corner. [Maybe you might be interested in joining the Research and Projects \(aka Prayer\) Group?](#) We usually meet the second Tuesday of each month at 7:00 pm in the Board Room of the Canada Aviation and Space Museum. Please contact Erin Gregory if you are interested in participating.

NEXT MEETING OF THE OTTAWA CHAPTER CANADIAN AVIATION HISTORICAL SOCIETY



The CP-140 *Aurora* lands after a new crew with the Long Range Patrol (LRP) completes their first solo mission during Operation IMPACT in Kuwait on 25 June 2016. ©Royal Canadian Air Force

SECOND DAWN OF AURORA

Royal Canadian Air Force Lockheed CP-140M *Aurora* Operations in Libya in 2011 (Operation Mobile) and in Iraq/Syria from 2014 to the present (Operation Impact)

Colonel (Retired) Ernie Cable

Ernie Cable has been involved with the *Aurora* from the very beginning; first, as the Operational Requirements Manager in the Aurora Program Office and, later, in 1980, as the Commanding Officer of 405 Squadron, overseeing the transition from the CP-107 *Argus* to CP-140A *Aurora*. He retired from the Canadian Armed Forces in 1995. His last posting was as Deputy Commander Maritime Air Group, Halifax.

LOCATION: Main Theatre, Canada Aviation and Space Museum, Rockcliffe

DATE/TIME: Thursday, 26 October 2017 – 1930 Hours

LANDING FEES: \$1.00

Meetings include guest speakers, films, slide shows, coffee and donuts

Visitors and guests are always welcome