

# THE HANGAR FLIGHT MUSEUM



*Nicolas Mailloux photo*

**By Pierre GILLARD**

English version reviewed by  
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Alberta has several very good museums dedicated to aviation and The Hangar Flight Museum is undoubtedly one of them.

It is located south of Calgary International Airport near several aviation companies, some of which have a world-class reputation, and the Southern Alberta Institute of Technology (SAIT) Art Smith Aero Centre.

## **Facilities.**

The main building, which currently houses most of The Hangar Flight Museum's collection, dates from 1941. It was built as part of the British Commonwealth Air Training Plan (BCATP) and was occupied at the time

by the No. 37 Service Flight Training School.

The purpose of the BCATP was to train airmen and airwomen of the Commonwealth during the Second World War. Canada was chosen as the primary training location due to, among other things, relatively easy access to essential resources, vast airspace, and low likelihood of enemy attack. Thus, more than 130,000 airmen, including 17,000 women, benefited from the program implemented in numerous facilities across Canada, including in Calgary.

The Hangar Flight Museum building was one of 7,000 similar facilities built in support of the BCATP. It was

used for various activities, including sports. One of the airmen who probably attended this training center was F/O Peter Middleton, the grandfather of Kate, the Princess of Wales. F/O Middleton was stationed in Calgary from 1942 to 1944.

Left vacant and unused for some time after the war, the building became the main base for Bullock Helicopters. This company, a pioneer in the operation of rotary wing aircraft in Alberta, mainly provided support for oil exploration, search and rescue as well as the transport of seismic crews and their equipment. Bullock was also one of the very first users of the SE3130 Alouette II in Canada, the world's



***The Hangar Flight Museum is located in two hangars located south of Calgary International Airport and is easily accessible (Pierre Gillard photo).***

first mass-produced turbine-powered helicopter.

One of the first tasks undertaken by Evan Bullock and his team was to remove

the original wooden floor and pour a more practical concrete slab in its place. In addition, an extension was built. It is currently home to the Museum's gift shop. At the time, it was used for

reception and administrative offices.

Other companies later occupied the hangar, the last of which was Kenting Helicopters. In 1985, the hangar was offered to Bill Watts, founder of what was then called the Aero Space Museum. Fortunately for this fledgling organization, Kenting Helicopters had already paid the rent for the building for the rest of the year and generously granted this advance of funds to the museum. This allowed it to benefit from free rent during its first months of existence, which was appreciated.



***The structure of the hangar, which was part of the facilities of the British Commonwealth Air Training Plan during the Second World War, was admirably restored in 2021 (Pierre Gillard photo).***

Over time, the infrastructure was adapted to the evolution of the museum, its projects and its collections. In 1997, new, wider doors were installed in the hangar,



**Left: Bullock's Bell 204B CF-BWR during a communications unit lifting operation in front of the building that would later become The Hangar Flight Museum. Note that this was the first Bell 204B registered in Canada. Right: A view taken inside Bullock's hangar. There are Bell 204Bs and Alouette IIs, which at the time constituted the bulk of the fleet of this leading-edge company** (Bob Petite et The Hangar Flight Museum collections).

allowing larger aircraft to join the rest of the collection under cover. Subsequently, other improvements were made to the building. In 2015, new windows were installed and the roof covering and the collections storage area were renovated. A new ventilation and air conditioning system was also installed. In 2021, the wooden trusses of the main hangar, having reached the venerable age of 80 years, were renovated and reinforced.

In the meantime, a large tent hangar was acquired to house larger aircraft such as the Avro Lancaster and the Douglas DC-3. But the canvas covering the metal structure of the hangar has been damaged on several occasions by wind and snow loads causing regular headaches for the staff in charge of the museum!

Currently, the facilities continue to be maintained, renovated or extended on a regular basis. Thus, the Lancaster and Memorial rooms have been modernized for activities carried out as part of school programs or for young people, as well as for the rental of spaces during private or corporate events.

A new main entrance will be built soon to improve accessibility to the museum. A fundraiser is being organized to cover the costs of this project.

### **Aircraft.**

The first element that distinguishes The Hangar Flight Museum is the variety



**A new entrance will be built soon to better accommodate visitors. On the left, we can see the end of the tent hangar and, on the right, the old hangar dating from the Second World War** (Pierre Gillard photo).

# Behind th

When visiting a museum, whatever it is, it is quite rare for the public to be admitted to the administrative part or the workshops. During the visit of The Hangar Flight Museum by three members of the Québec Aerospace Museum in March 2023, they had the privilege of being able to visit «behind the scenes».

Managing a museum is often much more complex than it seems. The challenges are many: administration, financing, management and enhancement of collections, communications and the organization of events are only the most important that appear at first glance. There are several others depending, very often, on the nature of the museum's mission.

Several interesting and revealing aspects of the orga-



*Top: Just because it's old doesn't mean it can't be neat and tidy!*

*Center: General view of the woodworking workshop. We can note on the workbench a Cessna Crane elevator being restored.*

*Opposite: The Hangar Flight Museum has a fine collection of assorted uniforms neatly stored in a storage room.*

*(Pierre Gillard photos).*

# e Scenes!

nization of a museum can therefore be observed during such an opportunity.

Thus, during the visit made by the three members of the MAQ, two workshops could be seen. One was intended for general mechanics and the machining of parts, while the other was dedicated to woodwork. In the latter, our three visitors were able to observe the repair of a Cessna Crane elevator.

Of course, there are also rooms where the archives are concentrated, in particular the many technical manuals of the museum's aircraft, as well as the pieces and artefacts of the collection awaiting exhibition that could be observed.

*Above: View of the general mechanical workshop where it is possible to carry out all kinds of repair work on aircraft components as well as to machine parts.*

*In the middle: An important aspect when restoring aircraft or, subsequently, maintaining them, is having the correct technical documentation.*

*Opposite: Storage of various materials, equipment and artefacts. All these elements are, of course, carefully inventoried!*

*(Pierre Gillard photos).*





of aircraft on display, some of which are particularly rare, such as the magnificent Barkley Grow T8P-1 CF-BQM mounted on floats. Both civil and military aircraft are part of the collection and some are quite unusual in an aviation museum, such as the 7th example of the Cessna 188 AG Wagon crop duster. Also special, the second De Havilland Canada DHC-6 Twin Otter to have been produced. It is presented in the colours of Kenn Borek Air, a company based in Calgary and renowned, in particular, for its operations in the Arctic and Antarctica.



When one enters the main building of the museum, one immediately notices the very beautiful organization of the exhibited planes which are admirably presented and highlighted.

Thus, we will certainly notice the Avro 652 Anson Mk. II, perfectly restored and whose covering of one of the two



***Above: The De Havilland DH-82C Tiger Moth, the Avro 652 Anson Mk. II and the CCF Harvard 4 are three representative aircraft of the BCATP.***

***Middle: The refit of the CCF Hurricane Mk. XII is nearing completion.***

***Opposite: The magnificent replica of the Curtiss JN-4 "Jenny".***

*(Pierre Gillard photos).*

wings is transparent in order to be able to contemplate its very beautiful wooden frame. This aircraft was constructed from a collection of parts from a variety of incomplete airframes found in Southern Alberta. Indeed, after the Second World War, many aircraft of this type were sold, sometimes for as little as \$25, and many of them ended up on farms where some were used as chicken coops and parts such as batteries, tires and wheels were removed. Subsequently, several museums acquired these wrecks and carcasses in order to reconstruct some Ansons. Back to square one, in a way!

The largest aircraft in the museum's collection is the Avro Lancaster Mk. X FM136 (Serial No. 31341) of the Royal Canadian Air Force. Built in 1945 by Victory Aircraft, it was, however,



**Top: A replica of the Silver Dart, Canada's first motorized airplane to fly in 1909, "flies over" museum visitors.**

**Middle: The 1936 Waco EQC-6 Custom Waco 10 Cabin Series is another very beautiful aircraft that can be admired by the public.**

**Opposite: Although bearing the colors of the RCAF, the Sabre of the museum is in fact a North American P-86A-1-NA American version.**

(Pierre Gillard photos).





***On this view, we can note the diversity of the planes presented. Above is the Quickie Q-2 C-GRNI, in the middle the Aeronca 7AC Champion CF-KOL and below the De Havilland DH.100 Vampire CF-RLK (Pierre Gillard photo).***

never assigned to a squadron that participated in combat missions during the Second World War. Returned to Canada after the conflict, it was converted to a maritime patrol version and was based in Greenwood, NS, then in Comox, BC, before being

withdrawn from service in 1961. Then exhibited at Calgary airport for 30 years, it joined the museum in 1992 where it was restored for display by volunteers. Note that this imposing machine is officially owned by the City of Calgary!

Another imposing and unmissable aircraft on display at the museum is the Douglas DC-3 CF-BZI (Serial No. 13448). Originally built in 1942 as a C-47A-25-DK Skytrain for the U.S.A.A.F. during the Second World War, in 1956, it was brought to Canada operating for Inter-Provincial Pipelines of Edmonton with the registration CF-BZI. In 1967, it passed into the hands of Northwest Territorial Airways of Yellowknife, but on May 13, 1971, it suffered an accident on Somerset Island (Inuktitut Kuuganajuk) in Nunavut. Acquired by Buffalo Airways, it was then transferred to the museum. Restored, it has since been exhibited there equipped with skis.

As for rotary wings, the few helicopters that are part of the collection are all emblematic. Indeed, we can note a Bell 47G reassembled by SAIT students from components coming from several helicopters of this type, an RCAF Sikorsky S-51 Dragonfly (9607), a Sud-Aviation SA318C Alouette II (C -FTQD) having flown for several companies, as well as one of the three Aérospatiale SE3160 Alouette III (C-FCAZ) having been used by the Canadian Coast Guard. Finally, outside, is the Sikorsky S-55 CF-JTI repainted in the colors of Associated Helicopters and having belonged, in particular, to Joe McBryan of Buffalo Airways.

In addition to the aircraft already mentioned, the Royal Canadian Air Force is also well represented with an Avro CF-100 Canuck Mk. IIID (18126, currently under restoration), a Canadian Car & Foundry Hurricane Mk. XII (5389), a Canadian Car & Foundry Harvard 4 (20273), a De Havilland DH.82C Tiger Moth (CF-CJO/3886), a De Havilland DH.100 Vampire (CF-RLK/10), a McDonnell CF-101B Voodoo (101021, displayed outside) and a North American P-86A-1 Sabre (47-0606) depicting Canadair CL-13B 23175.

A few other planes are also worth mentioning. We think in particular of the splendid Waco EQC-6 CF-AZM, the Aeronca 7AC Champion CF-KOL, the Auster/Taylorcraft Mk. VII CF-KYB, the Quickie Q-2 C-GRNI, the replicas of Curtiss JN -4 «Jenny», Siver Dart and Sopwith Triplane, as well as the Cherokee II Modified glider CF-REI.

*Some of the museum's aircraft displayed in the tent hangar and outside, seen from top to bottom: The Avro Lancaster Mk.10R FM136 «Jenkin's Express», the Douglas DC-3 CF-BZI in the colors of Northwest Territorial Airways, the Department of Transport's Beechcraft D18S Expeditior CF-GXC and the McDonnell CF-101B Voodoo wearing the insignia of 416 Squadron of the Royal Canadian Air Force (Pierre Gillard photos).*



# The Barkley-G

*From U.S.A*



*Bearing the registration CF-BQM, the Barkley-Grow T8P-1 from The Hangar Flight Museum is the eighth aircraft of this type from a total production of 11 units (Pierre Gillard Photo).*

In 1935, the Bureau of Air Commerce, the predecessor of the FAA, put out a call for tenders for a light twin-engine aircraft intended to transport inspectors on their rounds within the country. Vice-Admiral Archibald S. Barkley and Harold B. Grow joined forces to develop an aircraft that met the desired criteria. Thus was born the T8P-1 (meaning «8-passenger transport, first version) equipped with two Pratt &

Whitney Wasp Junior SB engines of 400 horsepower each and a fixed landing gear. In April 1937, it made its first flight with pilot Frank Cordova, but too late to win the Bureau of Air Commerce contract.

Nevertheless, the T8P-1 seemed to be of interest to several potential customers. But, more expensive than the Beechcraft 18 and less efficient than this one

on many points, it did not obtain the expected success. The Barkley-Grow Aircraft Company then quickly found itself in financial difficulty and the assembly line established in Detroit, as well as the prototype and six production aircraft, were transferred to the Canadian Car & Foundry Company of Montreal which was, at the time, the exclusive worldwide distributor of the T8P-1 excluding the United States.

# Grow T8P-1 ...

## to Canada

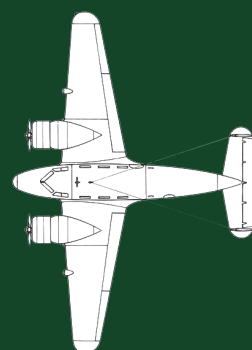


*A Canadian Pacific Airlines Barkley-Grow T8P-1 CF-BTX is seen unloading equipment on a lake in the Port Radium mining area in the Northwest Territories during the 1940s (Busse photo/NWT Archives, Wikimedia Commons).*

The Barkley-Grow T8P-1 was, in fact, of some interest for bush operations in Canada, as it could be equipped with Edo 65-9225A floats. The Canadian Car & Foundry was also responsible for having the skis certified in order to make this aircraft versatile and therefore attractive to the Canadian market. But in the end, only 11 copies were produced, including the aircraft built in the United States.

The Hangar Flight Museum's T8P-1 CF-BQM bears serial number 8 and was the last aircraft of its type to fly. Built in 1940, it served many Canadian companies such as Pacific Western Airlines, Canadian Pacific Airlines, Parson Airways, Sioux Airways, Northland Airlines Ltd and Associated Airways. It also had several private owners, the last of which, Roy Staniland, transported it from Quebec to Lake Chestermere before donating it

to the museum. It is one of three Barkley-Grow T8P-1s still in existence today, with the other two on display in museums in the Edmonton area.





In the tent hangar, we can also note the Beechcraft D18S Expedito CF-GXC of the Department of Transportation, the Bowers Fly Baby C-GWIZ, the Cessna 140 CF-OGD and the Piper J3C-65 Cub CF-MZP.

Finally, a Cessna Crane is being restored and, in some time, should join this magnificent and varied collection of aircraft of The Hangar Flight Museum.

### Other Exhibits.

In addition to aircraft, the museum's collection also includes many other very interesting objects and equipment, such as two fragments of old Japanese



**Top:** *Sud-Aviation SA318C Alouette II Astazou C-FTQD, seen here in August 1978 and operated by Quasar Aviation Ltd, is now on display at The Hangar Flight Museum (Kenneth Swartz photo).*



**Center:** *The Sud-Aviation SE3160 Alouette III C-FCAZ still wears the colors of the Canadian Coast Guard. It was donated to the museum by SAIT and is currently on display at the Seton Library in south Calgary (Kenneth Swartz photo).*

**Opposite:** *The Sikorsky S-55 CF-JTI, presented in the colors of Associated Helicopters, had a civilian career after flying for the Royal Canadian Air Force with serial 9628 (Pierre Gillard photo).*



***Among the museum's projects is this Cessna Crane being restored (Pierre Gillard photo).***

FU-GO balloon bombs that fell on Canadian soil.

An impressive collection of aircraft engines is also part of the museum's inventory. Among these, specialists will notice a Wright R-5 «Whirlwind» identical to that which equipped Charles Lindberg's «Spirit of St Louis», an English-built ADC Cirrus III made with surplus Renault engines during the 1920s or, more recent, a Canadair CL-13 Sabre Orenda Mk. 10, and an Allison T-40 that powered the Convair XFY-1 Pogo vertical take-off aircraft.

Quite unusual in a museum, the public can observe a

training module for flight attendants representing a cabin element of a Boeing 767 from Westjet.

Now on display with other simulators is the cockpit of one of the 12 «Twin Engine» simulators built by CAE in



***The collection of old engines is absolutely impressive (Pierre Gillard photo).***



***Among the unusual things that can be found in The Hangar Flight Museum, there is this Boeing 767 cabin crew training module donated by Westjet Airlines(above) as well as these elements of Japanese Fugo balloon-bombs (above) (Pierre Gillard photos).***

1958. It would seem that this is the only other remaining example of these, apart from the simulator of the Quebec Aerospace Museum which is complete with all consoles and electronic cabinets.

Also to be discovered are the wedding dresses made with recycled parachute fabric, and a section dedicated to hot air balloons. The collection of several small flight simulators includes one of the famous Link Trainers.

### **A Jewel to Discover!**

As you can see from the above, The Hangar Flight Museum is one of the most interesting aviation museums in Canada. Therefore, if you pass through Calgary, or if

you have a slightly longer layover at the airport, go for a visit; you won't regret it, that's for sure!

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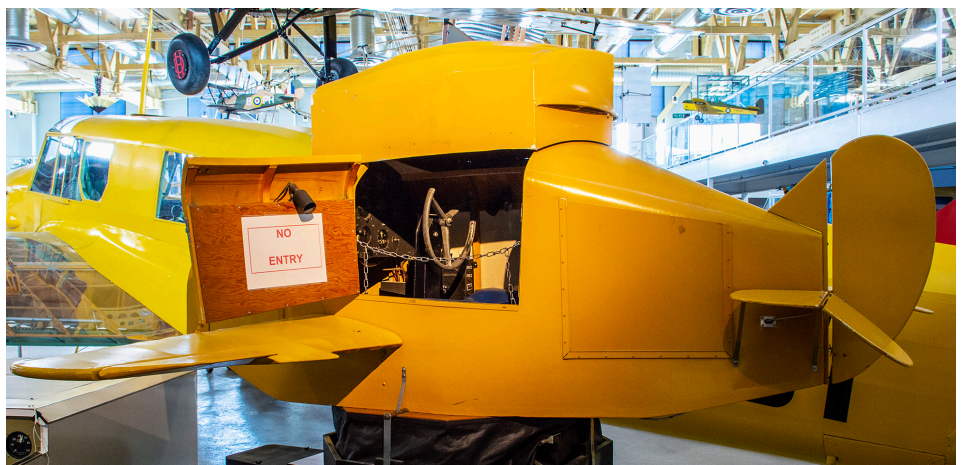


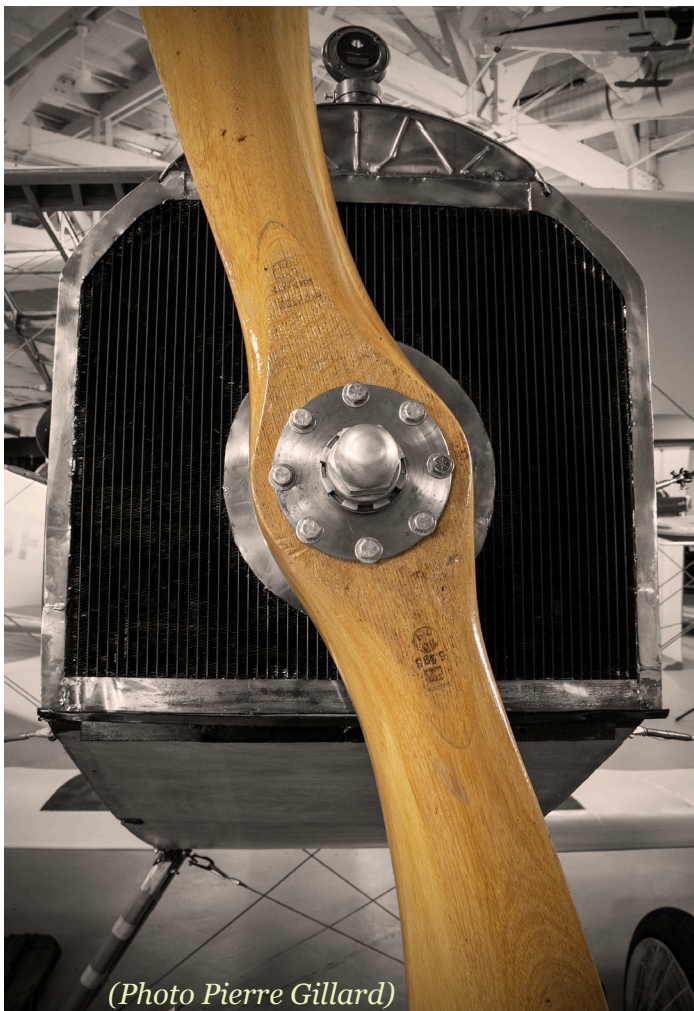
**Above: The cabin of one of the 12 CAE "Twin Engine" simulators dating from 1958.**

**In the center: Wedding dresses made with recycled parachute fabric.**

**Opposite: A "Link Trainer" flight simulator.**

*(Pierre Gillard photos).*





*(Photo Pierre Gillard)*



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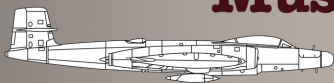
**[www.thehangarmuseum.ca](http://www.thehangarmuseum.ca)**

## **Pictures of The Hangar Flight Museum**

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