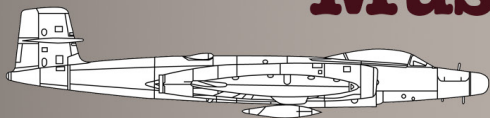


# Musée de l'aérospatiale du Québec

Québec Aerospace Museum



## The Aerospace Industry Showcase at Saint-Hubert

Corporate Brochure 2024-2025





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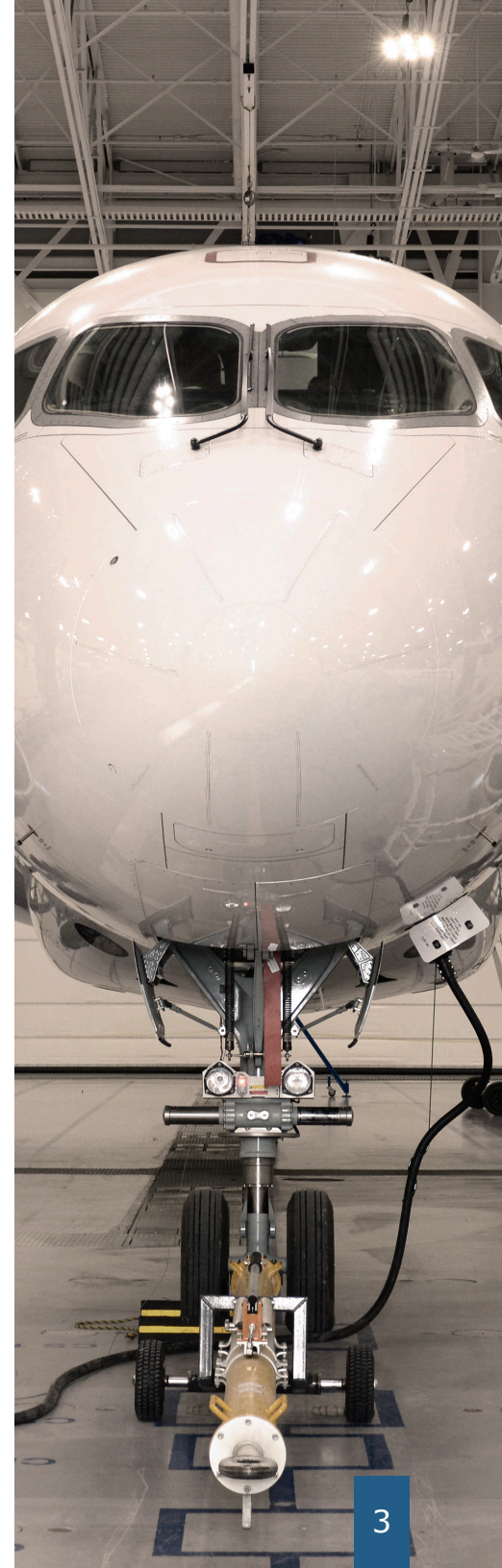


# Mission Statement

*“Become the showcase of the aerospace industry of Quebec and Canada by highlighting its heritage and achievements within the framework of infrastructures established at the Saint-Hubert airport, this by calling on to the latest museum technologies and techniques. Its approach will be educational, immersive and educational.”*



***A student from the “Avionics” group at the École nationale d’aérotechnique working on a QAM’s ground power unit. This illustrates our commitment to involving the education community in the museum project (Pierre Gillard photo).***





# A Unique Quebec Project

The Québec Aerospace Museum (QAM) is a non-profit organization (NPO) established in August 2018 with the mission of promoting the aerospace industry and its rich heritage in general.

The main idea is to offer a showcase of this industry to the general public on a permanent basis.

In this capacity, the NPO is now developing plans to establish an innovative aviation and space museum at Saint-Hubert Airport, located 12 km east of downtown Montreal, Quebec. This project will be carried out in compliance with the requirements of the Société des musées du Québec (SMQ).

The Montreal metropolitan area is home to one of the world's leading aeronautical manufacturing and

innovation hubs, with five world-leading aerospace companies having major manufacturing and R&D centres here – Airbus, Bombardier Aéronautique, Bell Textron, CAE, Pratt & Whitney Canada – and Montreal also the headquarters of Air Canada, Air Transat, ICAO and the Canadian Space Agency.

However, apart from the Montreal Aviation Museum in Sainte-Anne-de-Bellevue – a QAM partner – there are no major air and space museums in the region.



*The three founding members of the Québec Aerospace Museum, from left to right: Pierre Gillard (Director of Operations and Secretary), Gilbert McCauley (President) and Éric Tremblay (Treasurer) (Guy Puthomme photo).*



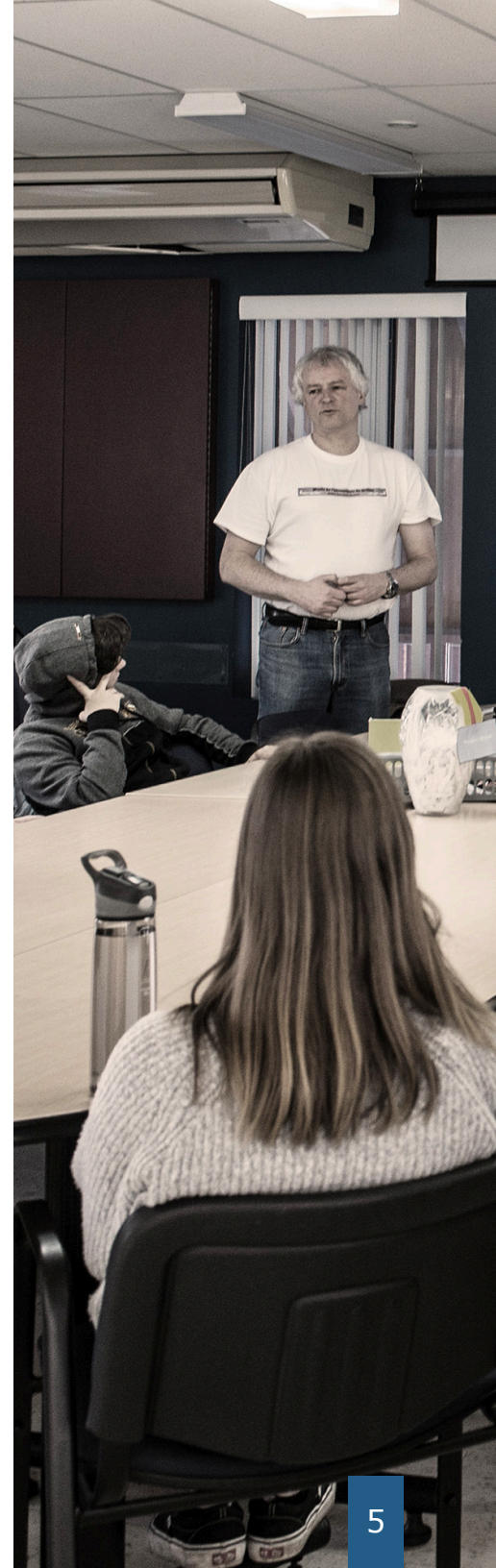
# An Original Vision

Achieving the QAM's mission involves a number of objectives, including positioning the Quebec aerospace industry as a central theme for all of the Museum's heritage, educational and community outreach activities including those designed to promote aviation and space to young people and the general public.

The Québec Aerospace Museum will also provide a direct return to the

community with value-added programs that will provide many social, academic and economic links to Quebec's aerospace ecosystem.

In addition, the QAM has a specific mandate to enhance educational and career opportunities for women, First Nations and Inuit throughout the aviation and aerospace industry of Quebec and Canada.





# Filling an Important Gap

There is an important gap that needs to be filled when it comes to the promotion of aerospace trades in Quebec between the virtual promotion of careers by industry organizations like Aéro Montréal and CAMAQ and the youth outreach programs conducted by technical schools.

Workforce studies indicate that young people start to consider careers in aviation when they are teenagers and it's important for the aviation industry

to engage young people as early as possible.

Aviation museums around the world already play an important role promoting aviation careers and STEM education and QAM can provide this missing link in Quebec. This could be achieved, for example, by creating interactive, educational and fun activities that arouse the interest of younger generations in flying and the aerospace industry.



*The Smithsonian National Air and Space Museum in Washington DC is an example to follow and a source of inspiration for the QAM (Pierre Gillard photo).*



# A Showcase for the Industry

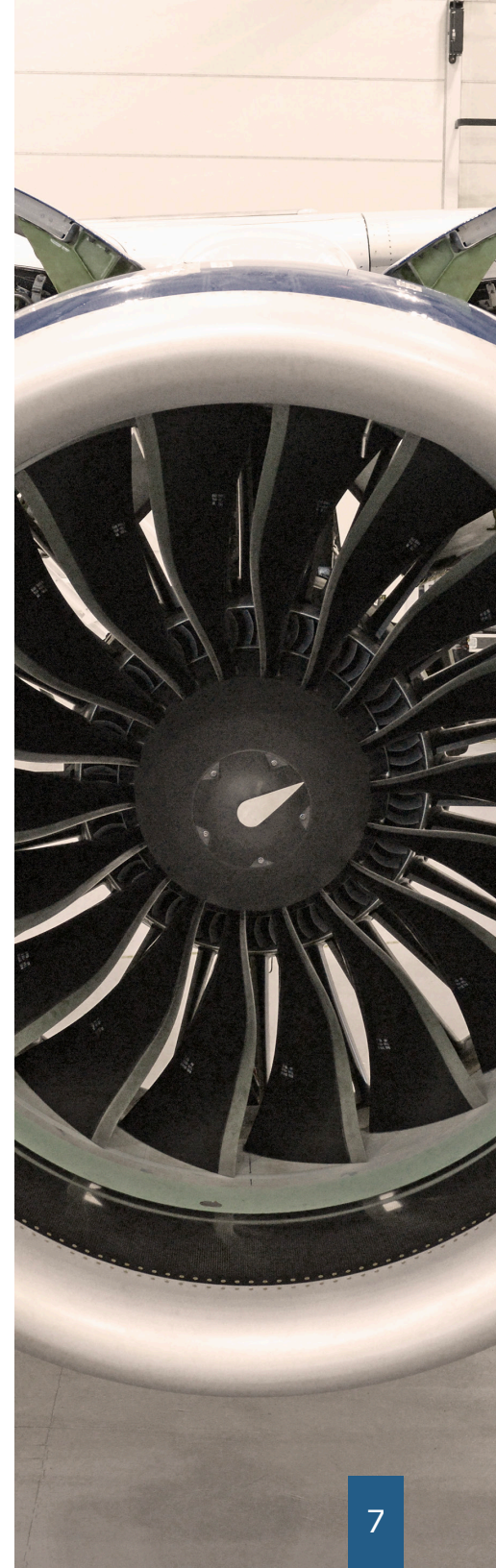
The general public in Quebec and Canada know little about the aerospace industry and the opportunities it represents. The career possibilities are endless.



***All industry sectors will be represented in the QAM project (Pierre Gillard photo).***

Moreover, for several decades, the sector has been growing continuously but cyclically. During more difficult times, its general profile diminishes. This is why there should be a permanent showcase representing all aerospace activities on an on-going basis.

This showcase should represent the many activities, elements and themes constituting aerospace from airports to arts, commercial, business or private aviation, avionics, design, amateur construction, gliding, development, flight and technical schools, universities, aircraft equipment, testing, manufacturing, FBO, finance, management, helicopters, interiors, leisure, maintenance, ground service material, equipment, engines, new technologies, operations, space, etc.



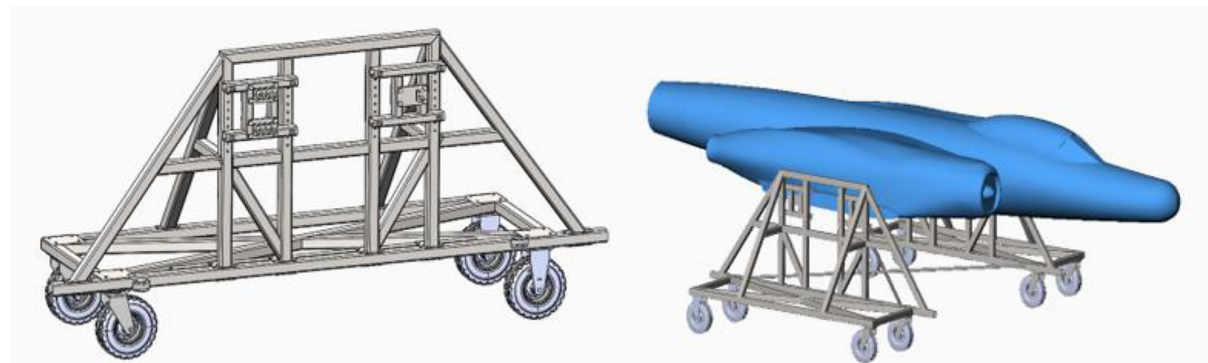


# Educational

Education is an integral part of QAM's vision. Schools and universities will be regularly invited to actively participate in student projects or activities that enhance student education and the development of the museum. This includes aerospace-related institutions such as the École des métiers de l'aérospatiale de Montréal (ÉMAM), the École nationale d'aérotechnique (ÉNA) and the École de technologie supérieure (ÉTS), as well as other educational institutions offering related training, such as the Université du Québec à Montréal (UQÀM) and Collège Montmorency which have well-regarded museology programs.

Three projects have been carried out to date with groups of mechanical engineering students at ÉTS.

The first of these involved designing a jig to support QAM's Avro CF-100 to facilitate structural repairs and reinstallation of the landing gear on this rare jet fighter. In the second, the objective was to design trolleys and their accessories to store and move wings, tail, as well as wingtip tanks of the same CF-100. And the third consisted of imagining a trailer allowing easy and safe storage and movement of the CF-100 fuselage.



*Illustrations of the jigs designed by mechanical engineering students to support the Avro CF-100 Canuck being restored by QAM volunteers (ÉTS).*



# Integration

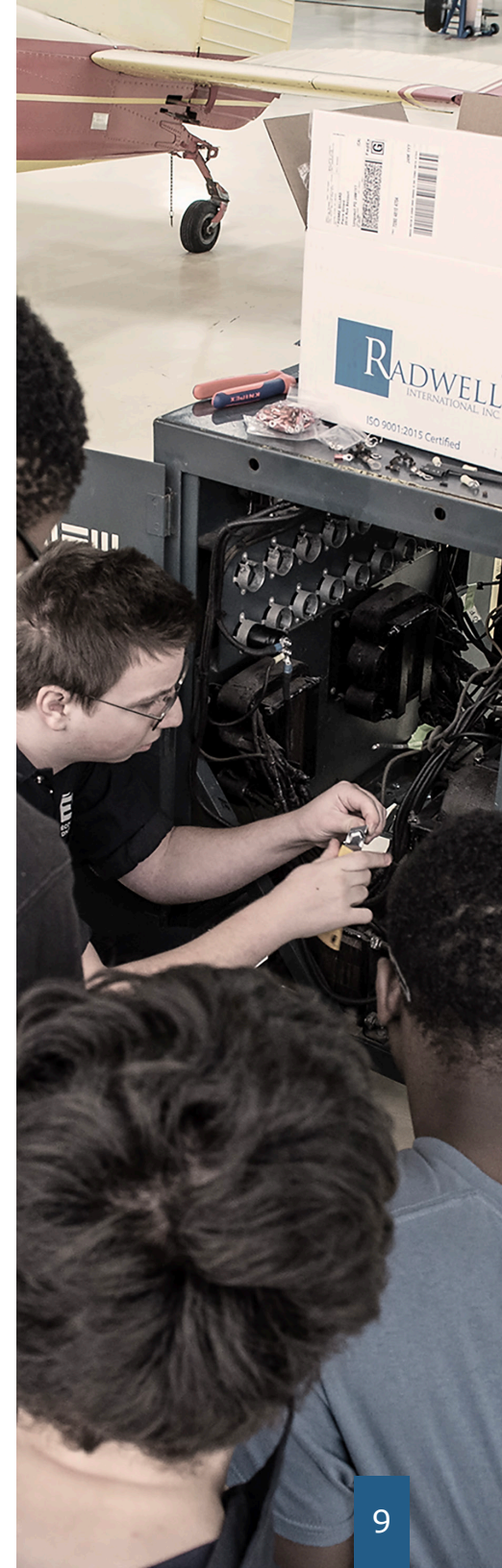
Since 2022, extracurricular activities involving students from the ÉNA Avionics Program have taken place every Wednesday during class sessions. During these activities, students work on several projects to restore QAM ground support equipment to operational condition as well as aircraft avionics and instruments. This allows them to gain experience complementary to their teaching as well as to develop their manual skills in a real situation.

On the UQÀM side, four students from the Master's in Museology program wrote a report during the fall of 2023 analyzing the state of the QAM museum project while setting out several relevant advice for its development according to the standards of the Société des musées du Québec (SMQ).

These initiatives perfectly illustrate the vision of integrating the educational community into QAM projects.



**Left: Group of ÉTS students who designed a new trailer in 2024 for storing and moving the fuselage of the Avro CF-100 Canuck. Right: The four UQÀM students in the Masters in Museology program who wrote a report on the QAM museum project in 2023. (Pierre Gillard photos).**





# Community Engagement

On the community and social level, the Museum's recent achievements include organizing community and student visits to local aerospace businesses and Canadian Space Agency, the École nationale d'aérotechnique (ÉNA) and Saint-Hubert Airport.

To this should be added the joint organization with the City of Longueuil of two "Saint-Hubert/Longueuil Aerospace Heritage Days" held in September 2019 and October 2023, constant participation in several ÉNA open days and of the Chrono Group, as well as at the 2019 edition of the Aérosalon.



***The fuselage of the Avro CF-100 Canuck 100760 being restored by QAM is displayed alongside the Douglas DC-3 C-FDTD of the Plane Savers team during the Aérosalon in June 2019 at Saint-Hubert airport (Pierre Gillard photo).***



# Community Integration

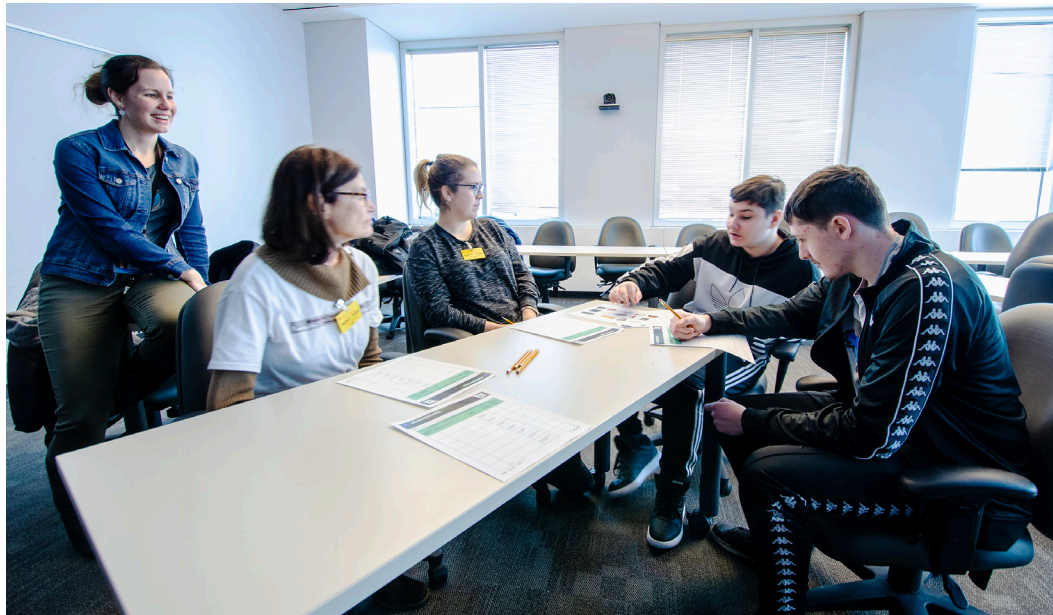
QAM officials see an important role for the Museum developing educational programs that support the social reintegration of people living on the margins of our society. This could include practical training in aeronautical technology while working on QAM aircraft.

There are many marginalized people living in our community who cannot

easily enroll in traditional educational programs available in Quebec.

Therefore, QAM plans to develop alternative educational pathways that could eventually lead young people to a career in the aviation industry at a later date.

The demand of an education facility already exists and must be assessed.



*In 2019, QAM organized a visit to Canadian Space Agency for young people affiliated with the Jonathan's House youth centre in Longueuil (Pierre Gillard photo).*





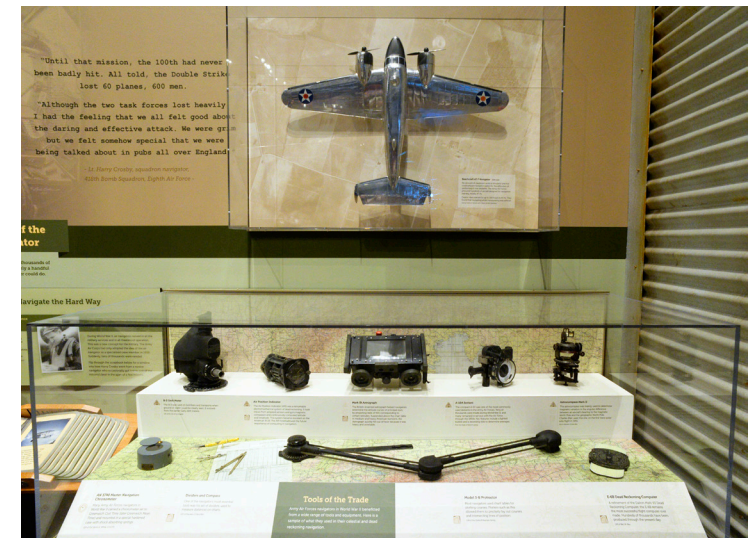
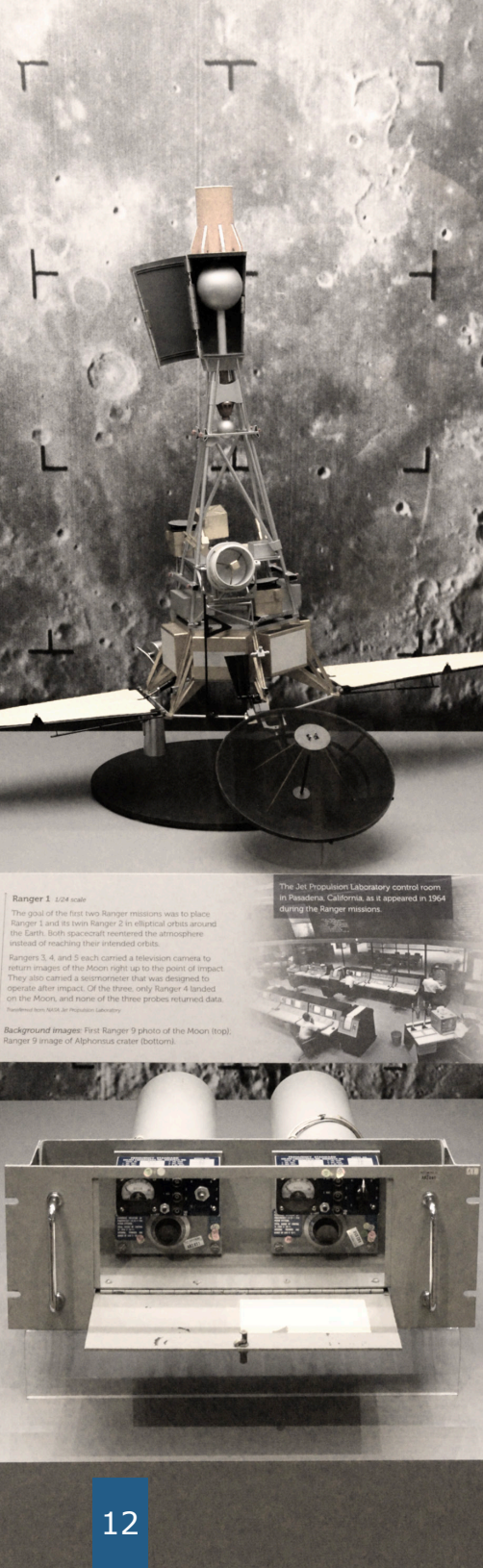
# Exhibit Strategy

The museum believes that aircraft and artifacts must be preserved and displayed in attractive, educational and even, in some cases, fun ways that leverage the latest interactive technologies. This is how the QAM adopted the SMQ Museum Code of Ethics so that the decisions that will be made regarding the development of the project will respect the requirements in this area.

The Montreal area is well-known as a world leader in aircraft manufacturing, flight simulation and aircraft systems development. The preliminary exhibit design for the Museum includes a full motion full flight simulator, a partial

replica of Fairchild Aircraft of Canada's Bristol Bolingbroke bomber production line at Longueuil during the Second World War, and functional displays of landing gear and avionics systems.

Space will also be highlighted with the construction of replicas of Canadian satellites and the creation of a space lab where visitors can perform various experiments.



***To provide a high-quality visitor experience, the exhibit strategy will see the close integration of artifacts with interactive communications technologies to maximize engagement (Pierre Gillard photo).***



# Heritage Preserved

In terms of heritage, aircraft are the most visible aspect of the museum's collection mandate. Various collection activities have already begun, including the partial restoration of an Avro CF-100 Canuck jet fighter, that once served with the Royal Canadian Air Force and later as a flying testbed for Pratt and Whitney Canada. This rare aircraft is on loan to QAM from the Canada War Museum in Ottawa.

The École nationale d'aérotechnique (ÉNA) has also been open to the donating to QAM of various obsolete aircraft they plan to retire from their

training programs, in addition to aircraft parts, avionics equipment, and aviation instruments.

Research and discussions are also underway to obtain a Sikorsky CH-124 Sea King maritime helicopter, built in Longueuil that was recently retired from the Royal Canadian Air Force, as well as an Airbus Helicopters SA318C Alouette II helicopter used by Hydro-Québec to support the development of the important James Bay hydroelectric project in northern Quebec. These aircraft, and others helped shape Quebec aviation history.



*The restoration of a Fairchild 82 bushplane built in Longueuil in the early 1930 is also part of the Museum's development plans (QAM archives).*







# Full Member of the Industrie Longueuil and

The Quebec Aerospace Museum plans to become a full member of the Quebec and Canadian aerospace industry and is already attracting leaders and volunteers from across the industry.

This will require greater integration and participation by the Museum in the activities of associations and groups across the aviation and aerospace ecosystem and Aéro Montréal cluster. Moreover, representatives sit on the "Relève et main d'œuvre" and "MRO" workshops, and participate, when appropriate, in several activities organized by the latter institution.

So that decisions are made in the interest of the aerospace industry, representatives from different companies in the sector sit on the QAM Board of Directors. Several members of the educational community are also present on the Board of Directors.

The City of Longueuil is closely associated with the QAM project which will respond to various crucial issues in the economic, tourist and heritage development of the agglomeration, in particular by improving the existing offer in terms of cultural and educational tourism. A municipal councilor is also invited as an observer to each meeting of the Board of Directors so that the City's point of view can be valued in the decisions that are made. The QAM has also already organized two aerospace heritage days jointly with the City of Longueuil.

It is obvious that an international-class museum established in Saint-Hubert would inevitably become a major tourist and heritage attraction in Montérégie in the same way as, for example, Exporail in Saint-Constant.



# Industry and Ecosystem of Montérégie

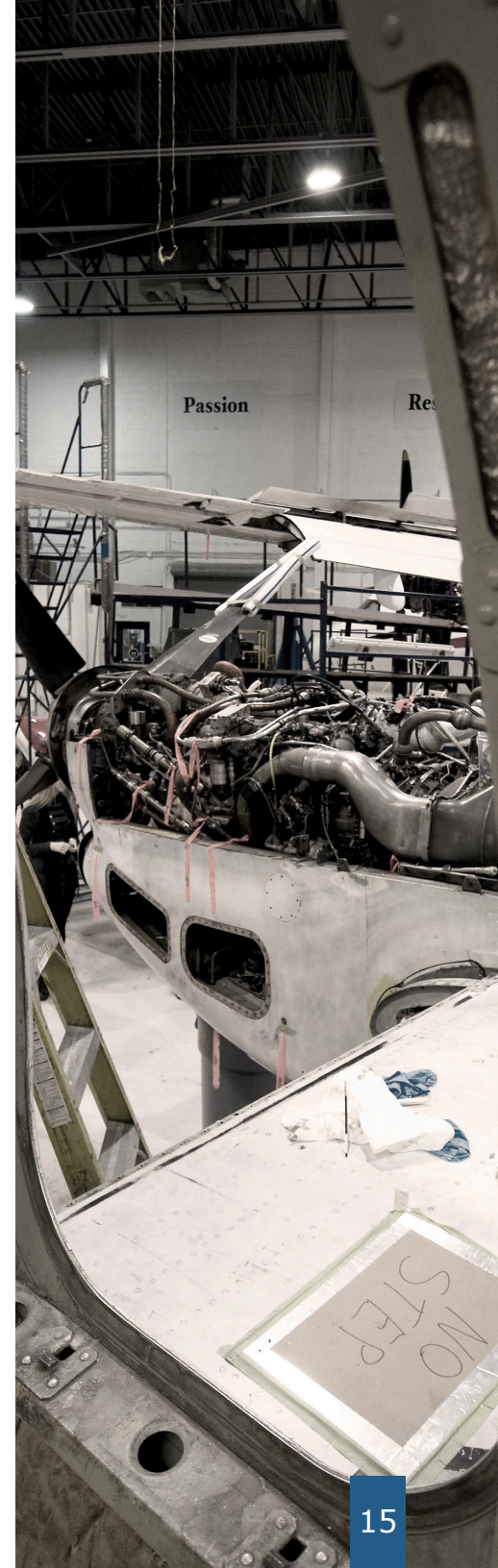
Furthermore, the QAM's approach is also part of a desire to participate in the development of the Saint-Hubert airport area, in particular by being associated with the Longueuil/Saint-Hubert Aerospace Innovation Hub.



***Flight simulation is an important part of the aerospace industry in Quebec. The QAM must highlight this fact (Pierre Gillard photo).***

The QAM is already a member of the Canadian Aeronautical Preservation Association (CAPA) which represents all aviation museums in Canada and the Canadian Aviation Historical Society (CAHS), which is Canada's oldest aviation heritage organization. In 2020, the QAM entered into a collaborative partnership with the Montreal Aviation Museum located in Sainte-Anne-de-Bellevue that will support the growth of both organizations. The Fondation Aérovision Québec was invited to join the QAM in the development of the museum project in Saint-Hubert. The organization is also in regular contact with several other aviation museums in Canada and abroad.

The museum is also a member of Volunteer Canada.





# Growing the Business

While the Québec Aerospace Museum does not yet have a physical exhibition space, it is building relationships with all the stakeholders required to achieve this goal.

In the absence of permanent infrastructure, activities and events can be organized on private sites at the airport, such as FBOs, or in educational facilities.

Currently, one of the Museum's top priorities is to increase its visibility. To this end, it is advocating that the annual Aerospace Heritage Day held in collaboration with the City of Longueuil be expanded. Other mainstream activities, such as "Introduction to Aerospace Days," will be organized.

Further updates to the QAM website are also planned to make it more visually attractive and interactive. The digital communications strategy also calls for the production of regular podcasts to highlight the aviation history of Quebec and its pioneers.



*The Canadian Space Agency booth attracted interest from visitors during the 2019 edition of the Aerospace Heritage Day (Jean-Charles Hubert photo).*



# Donations of Aircraft and Equipment

In recent months, the museum has received several important donations including avionics equipment, model airplanes and helicopters, books and magazine collections, aircraft parts, manufacturers' plates and other objects – all of which need to be housed in secure storage facilities as they await future exhibit.

These aircraft will be stored outside until such time as the Museum has the appropriate hangar infrastructure to house them. However, a team of volunteer technicians from the QAM will ensure they receive regular maintenance to ensure their long-term preservation.



*The Roland Duruble RDO2A Edelweiss aircraft is unique in the world. It was built in 1984 by Mr. Kenneth J. Taylor in Delta, BC. Arrived at the QAM in July 2021, it is stored outside at Chrono Aviation in Saint-Hubert where it is cleared of snow regularly during the winter by volunteers (Édouard Painchaud photo).*





# Restoration Work

One of the our most prominent activities is aircraft restoration. Presently, due to a lack of hangar space, this can only take place when we can find suitable premises at Saint-Hubert airport.

avionics, landing gears, systems, etc., also tractors, track vehicles and other ground support equipment. Our volunteers are capable and ready to restore all of these.

Besides aircraft themselves, restoration involves such components as engines,

But here too, availability of workshops and specialized tools is imperative.



*The QAM has a large collection of avionics equipment dating from the 1960s to the 1990s, some of which deserve to be refurbished (Pierre Gillard photo).*



# In “Solutions” Mode

At present, the Museum is benefiting from partnerships with No 438 “City of Montreal” Tactical Helicopter Squadron at CFB Saint-Hubert, which provides temporary outdoor storage space, and ÉNA, which has provided indoor working space on an occasional basis.

The Museum has also received support from Nolinor, which hosts the head office of QAM at its H18 hangar facility. Chrono Aviation and Lux Ground Services FBOs have shown themselves

ready to accommodate a few planes in transit to the Museum collection. On ÉNA property, the QAM has a 40-foot maritime container housing the Mortensen glider as well as a small workshop.

Several aerospace companies and schools, such as Bombardier, ÉTS, Héroux-Devtek, and Pratt & Whitney Canada, have offered to store QAM equipment until a longer-term solution is found.



***The QAM has a 40-foot shipping container converted into a small workshop and storage space (Pierre Gillard photo).***





# Infrastructure Development

As the QAM's collections and activities develop, appropriate infrastructure will have to be rented or built. In order to accommodate these to the growth of the Museum, four phases have been identified, as follows:

**PHASE 1:** Use of existing infrastructures or construction of temporary buildings at Saint-Hubert Airport or in the immediate vicinity to store aircraft and equipment.

**PHASE 2:** Construction or rental of a hangar to restore small and medium-sized aircraft as well as establish a permanent exhibition/educational space, offices and on-site storage.

**PHASE 3:** Expansion of the facilities by adding a larger hangar to accommodate larger aircraft as well as having a covered exhibition space to display larger equipment.

**PHASE 4:** Construction of a multifunctional building to accommodate the public in ideal conditions.



*The Kelowna Center of Excellence in British Columbia offers “museum” space (KF Aerospace image).*



# A Major Attraction

The greater Montreal region is one of the world's major aerospace centers, and the establishment of a local air and space museum has the potential to create a significant tourist attraction. Here are some well-known international museum attendance figures (before the COVID crisis):

- **Museum of Flight (Seattle, WA):** 500,000 visitors per year.
- **Imperial War Museum (Duxford):** 400,000 visitors per year.
- **Musée de l'Air et de l'Espace (Le Bourget):** 300,000 visitors per year.
- **Aérosopia (Toulouse):** more than 200,000 visitors per year.

Just imagine the direct and indirect returns to the Longueuil region of an air and space museum at Saint-Hubert Airport.

*Air and Space museums are very popular with tourists and the general public. Pictured is the Air Mobility Command Museum at Dover AFB, Delaware (AMC Museum photo).*



Of course, other major aerospace centres like Seattle and Toulouse have had a head start, but a Montreal museum with a similar aerospace industry focus will almost certainly attract many local and international visitors over a 10- to 20-year development phase.

We must also realize that we could create a world-class museum with a budget equivalent to the selling price of two Bombardier Challenger 350 or a Global aircraft.

The Quebec aerospace industry had total sales of about \$18 billion and employed 37,200 people in 2022. This must therefore be put into perspective to enhance the visibility of this vital economic sector for the province and the country.





# Health and Safety

The safety of our members, who are all volunteers, is without compromise. To this end, the QAM makes regular payments to the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), which represents a regular business expense.

In addition, the QAM has its own trainers authorized to give general training and also specialized health and safety training such as Workplace

Hazardous Materials Information System (WHMIS).

First aid training is also provided to volunteers.

Finally, the QAM has its own first aid resources and basic emergency equipment.



**Workplace health and safety training is provided internally for the benefit of QAM members (Pierre Ménard photo).**



**Leaders, Jean Riffou and Pierre Gillard, took a first aid course organized by CNESST (QAM photo).**



# Communications

As for any organization, the QAM's communications, both internally and externally, are important in order to keep both members and the outside world informed, in particular, about museum activities.

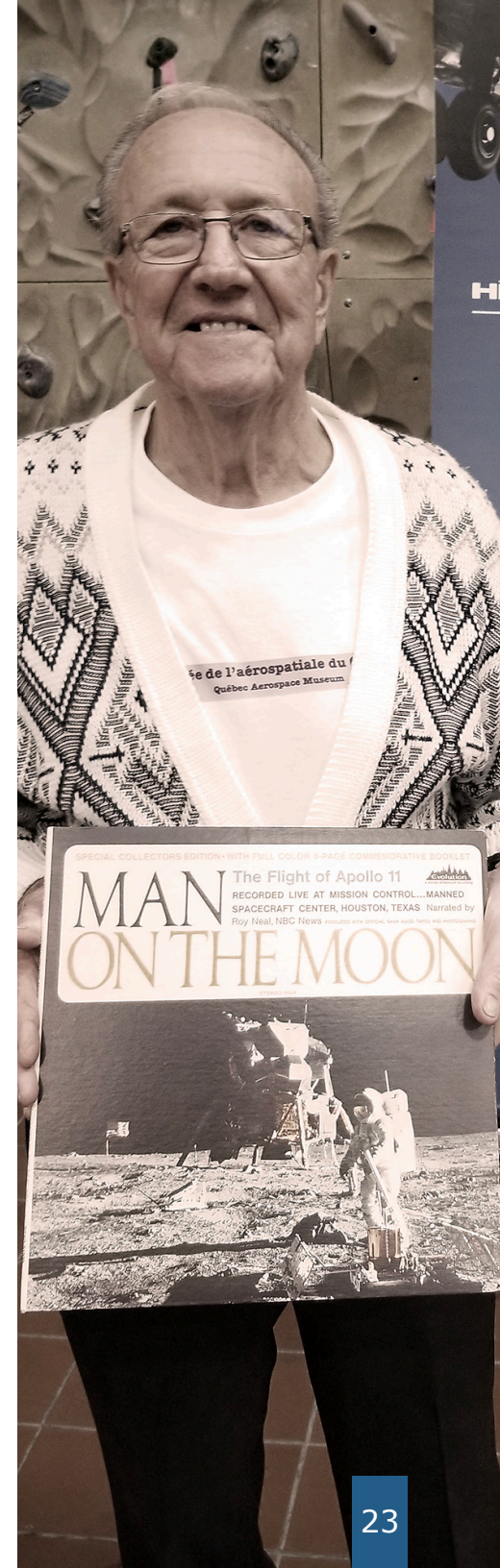
Within the organization, members are kept informed by emails. A space is also reserved on our website for members. The website offers exclusive content as well as such official documents as: Administrative Rules, Occupational Health and Safety Policy, Policy for the

Prevention of Psychological or Sexual Harassment in the Workplace and for Processing of Complaints.

The outside world can also keep informed about the QAM through traditional means of communication and social media such as our website and Facebook and LinkedIn pages. The Annual Report is also distributed to companies in the aerospace sector in Quebec and Canada, and to all museums via CAPA (Canadian Aeronautical Preservation Association).



**Contact and social activities with members are essential at the QAM** (Louise Gince photo).





# Fundraising

Fundraising for the Québec Aerospace Museum is at a crucial point in its development, with the museum actively working to tap government and private funds.

Government funding is available to non-profit museums, but this is conditional on a Museum having one or more permanent employees as well as an exhibition space open to the public on a permanent basis.

The museum must therefore already be open to the public before it can be officially recognized as a museum eligible for public funding!

In the current situation, the QAM can therefore only count on private funding, as well as the discretionary

contributions of certain government deputies and ministers who want to support the early stage develop of the organization. Donations, and cash advances from members, have been essential to allow the organization to grow during this start-up period.

The QAM is recognised by the Canada Revenue Agency (CRA) as a registered non-profit charity, which means it can issue tax-deductable receipts for all donations.



***The establishment of a museum that showcases the aerospace industry of Quebec and Canada will require financial support from governments to achieve its full potential (Pierre Gillard photo).***



# Corporate Members

Since the QAM represents the aerospace industry in Quebec and Canada, an original approach was needed to finance its activities and management. This resulted in our plan for corporate membership.

Four categories of corporate members were defined according to the level of membership: bronze, silver, gold and platinum. In exchange for their contributions, corporate members receive a tax receipt and a certificate of recognition. In addition, their logo appears regularly in our brochures, website and Annual Report.

But that's not all, because the originality of the approach includes how a company or institution becoming a QAM member receives "courtesy" membership cards depending on their membership level. These may be distributed among employees, customers, pupils or students, visitors, community members, etc.

Thus, joining as a corporate member lets a company support the QAM financially and gives a chance through its courtesy passes to others to enjoy the captivating world of aerospace.



***CPAQ-AERO, a flight school based at Saint-Hubert airport, has become the first corporate member of the QAM (Pierre Gillard photo).***





# A Project-Based Approach

The QAM envisages two categories of operations to be managed, each requiring appropriate financing.

There are the regular activities as well as the management of the organization already mentioned, then the projects. As these are ad hoc in nature, their funding is planned on a case-by-case basis. The QAM defines this as a “project approach”.

For a project to be completed, several steps occur. First, a project coordinator is appointed. He/she will then create a file containing all elements of the project, including administrative and technical aspects, as well as a budget for the realization of the project and another, if necessary, to establish its sustainability.

Then comes the financing stage where several strategies can be applied, but usually favoring those of partnership and sponsorship.



***Access to hangar, exhibition and storage space is the key to the effective start of a large majority of the activities of the QAM (JHL Aviation Services photo).***



# Specific Objectives

In addition to the objectives and projects mentioned, the QAM also emphasizes the place of women and First Nations and Inuit in aerospace. To this end, members of the Board of Directors can devote themselves to these particular goals on a voluntary basis.

The QAM also undertakes to follow industry recommendations in general. Thus, for example, following a perception study conducted among

young people in Quebec, the Aéro Montréal cluster issued 12 recommendations to attract the next generation to aerospace trades, from which the QAM intends to draw inspiration to develop new activities to interest the general public.

In the future, QAM's leaders will remain attentive to the evolution of the industry in order to adapt to the realities of the moment.



***Within the activities of the QAM, a significant place will be reserved for companies representing the First Nations and the Inuit (Jean-Pierre Brossard et Pierre Gillard photos).***





# Our Aircraft

*The QAM currently has four aircraft in its collection. Each represents a particular sector of the aerospace industry.*



**Avro CF-100 Canuck Mk. 5D** : Bearing the military serial number 100760, this aircraft is unique in the world in that it served as a flying test bed for the development of the Pratt & Whitney Canada JT15D engine. This CF-100 was the last to fly. It arrived at the QAM on November 5, 2018, on long-term loan from the Canadian War Museum in Ottawa, ON (*Pierre Gillard photo*).



**Kitty Hawk Flyer** : This is an eVTOL (electric vertical take-off and landing aircraft) developed in California by a team of engineers, including Canadians. It represents the future of aviation and is unique in Canada. This Flyer bearing the serial number F26095 was delivered to the QAM on July 23, 2021. It is a gift from its builder, Kitty Hawk of Palo Alto, CA (*Pierre Gillard photo*).



**Roland Duruble RD02A Edelweiss** : Homebuilt aircraft made in 1984 by Kenneth J. Taylor in British Columbia, it is the only RD02A model of the Roland Duruble Edelweiss to be completed and flown in the world. The RD02A made its last flight on July 10, 2021 when its owner, Mr. Antoine Moulin, donated it to the QAM at Saint-Hubert airport (*Philippe Colin photo*).

**Mortensen 1PM** : Designed and built, but not completed, by the late Danish engineer Peder Mortensen who resided in Vaudreuil-Dorion, this glider, unique in the world, is being restored by a small team of volunteers. It was donated to the QAM in 2022 (*Pierre Gillard photo*).





# Our Collections

The QAM collections grow over time thanks to donations from individuals, companies or other organizations. Among these one can, for example, find old avionics equipment, instruments, plans and blueprints, technical manuals, landing gear and ejection seats, aircraft models, books and magazines, teaching materials or manufacturers' plates (Pierre Gillard photos).



## Claude Trudel

Citoyen de Longueuil (1953-2021)

et travaillé à Longueuil y a étudié dans un ymel où il a pu de- ées en dessin techn- nage de dioramas. tabilités en autodi- vie à travers diffé- ins et tableaux sur ince-fiction, pistes assorties de diora- ergure, maquettes ux connus ou issus . Il présentait plu- ettes lors de diffé- modélisme et rem- au fil des ans.

est artistiquement et euse était notam- celle de Léonard de admirait beaucoup.

niques

avait à Longueuil de pièces de plas- ce qui lui a donné lus approfondie des iction et des carac- il est devenu la ma- on travail créatif.

réalisées à partir de différents avions, eux spatiaux his- cience-fiction. Pour sales, il combine les

maquettes de vaisseaux spatiaux ima- ginaires d'envergure variées - la plus grande maquette de vaisseau spatial imaginaire qu'il a réalisée faisant deux mètres de long !

### L'aviation

L'intérêt de Claude Trudel pour le do- maine spatial s'est naturellement éten- du à l'aviation. Cette curiosité était aus- si due à une fascination générale pour les prouesses technologiques déployées dans la conception des avions modernes. Il a été un habitué des spectacles aé- riens de St-Hubert pendant plusieurs décennies, événements où il aimait ad- mirer de vrais avions en action.

À partir des années 1990, une partie de ses efforts de création de maquettes a été dédiée à l'aviation. Son intérêt por- tait principalement sur les avions dé- veloppés dans la période allant de la Seconde Guerre mondiale à la fin de la guerre froide, période qui l'intéres- sait déjà pour le développement spatial et les prouesses techniques et inven- tives déployées dans la conception et la construction des avions de cette époque. Son intérêt pour l'histoire des premières fusées le mené à s'intéresser au déve- loppement des avions allemands de la Seconde Guerre mondiale étant donné l'influence de l'aéronautique allemande sur le développement des programmes spatiaux russes et américains.

### Ceci est une présentation du

Musée de l'aérospatiale du Québec  
Québec Aerospace Museum

[www.maq-qam.ca](http://www.maq-qam.ca)

Rejoignez-nous ...  
Devenez membres !





# Two Majo

Most of the energy currently invested by the QAM concerns two specific projects. These aim to launch long-term activities intended to highlight the heritage of the aerospace industry in Quebec and Canada:

## **Avro CF-100 Canuck #100760:**

The plane is currently dismantled and stored at the Saint-Hubert garrison in the care of 438 Squadron.

The first stage of the project will consist of creating the fuselage support jig in order to install the landing gear and repair the lower part of the fuselage. The restoration of three landing gear legs acquired in Ontario should begin simultaneously.

Hangar space will have to be found quickly in order to be able to start work on the aircraft in acceptable working conditions.



*Above left: Avro CF-100 Canuck #100760 is currently disassembled and stored at the Saint-Hubert military base. Above right: QAM's intention is to restore it to static presentation with its nacelle containing the Pratt & Whitney Canada JT15D engine as it was when this photo was taken (Pierre Gillard and Marc Émond collection photos).*



# r Projects

Several requests for partnerships and sponsorships have recently been sent to various companies and schools. A favorable feedback is, of course, eagerly awaited.

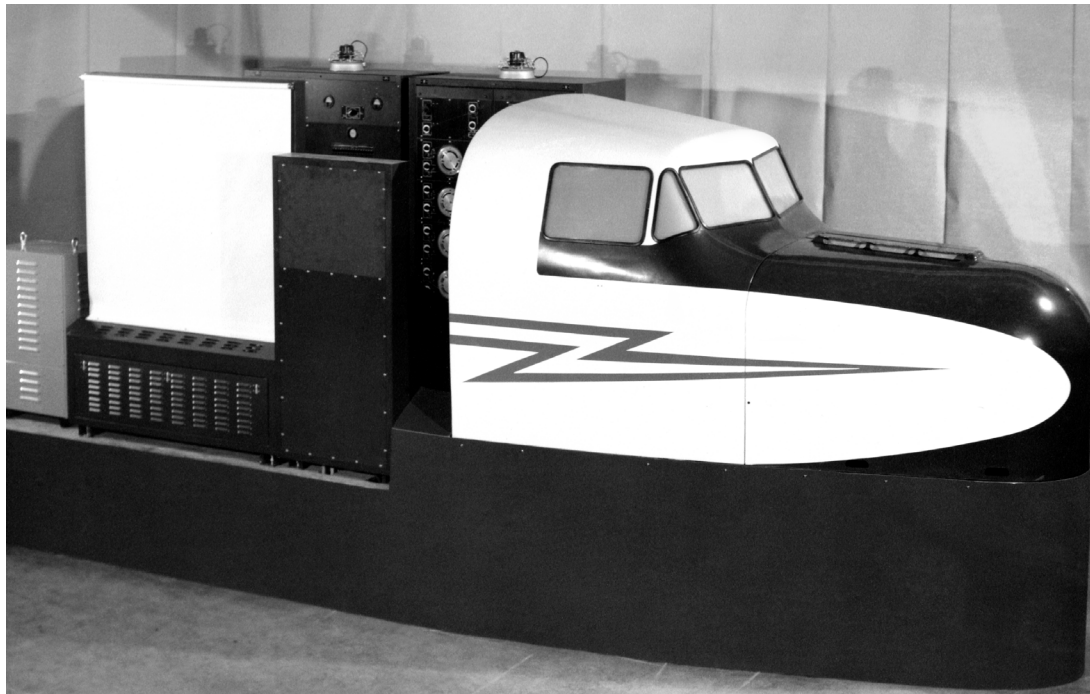
## **CAE "Twin Engine" Flight Simulator:**

The QAM acquired a "Twin Engine" flight simulator that was produced in 1958 by CAE Inc. in 12 copies for the Royal Canadian Air Force. It was

intended for procedural training of the crews of twin-engine aircraft, mainly the Beechcraft C-45 Expeditor, Douglas C-47 Skytrain/Dakota and Fairchild C-119 Flying Boxcar.

Once the QAM has sufficient infrastructure, this historic simulator will be kept in working order thanks to the support of CAE, which celebrated its 75<sup>th</sup> anniversary in 2022.

*View of the "Twin Engine" simulator as it was in the 1950s. The QAM intends to keep it in working order with the support of CAE in order to show one of the very first achievements of the Montreal company (CAE photo, Canav Books collection).*





# Infrastructure...

Having the infrastructure to actually start operations is a top priority for the QAM.

This infrastructure should, at a minimum, make it possible to begin restoration work on aircraft and aeronautical equipment, and to store the collections and materials of the QAM. It could be integrated into both “Phase 1” and “Phase 2”.

“Phase 2” should make it possible to comfortably welcome the public on a permanent basis while meeting the

museum criteria of the SMQ. We could easily design a main hangar surrounded by several pavilions where thematic exhibitions linked to the different industries in the aerospace sector in Quebec and Canada would be held.

Thus, while evaluating the so-called “Phase 1” options as opportunities arise, QAM officials are studying multiple options for “Phase 2”, this in order to be in time to inaugurate a minimalist museum in time to celebrate the Saint-Hubert Airport centenary in 2027.



***Above left: Example of a hangar similar to the “Phase 2” building envisaged for the QAM. In this case, we are talking about a budget of \$4M to \$6M. Above right: An option to consider for “Phase 1”, and even for “Phase 2” is the use of a “dome” type hangar, the cost of which is around \$100K (JHL Aviation Services and Pierre Gillard photos).***



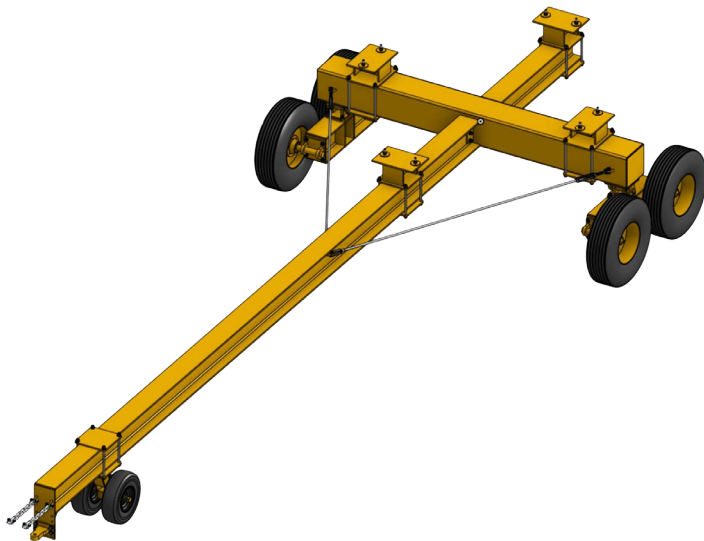
# ... And Equipment

In order to be able to carry out its technical operations, the QAM must also have suitable equipment as well as specialized or non-specialized tools.

In this regard, the QAM has already received basic tools generously donated by one of its members. In addition, the ÉNA donated two ground power units for aircraft that were non-functional. These will be gradually restored to working order as part of student activities.

Trailers and carts specially designed by several groups of ÉTS students are ready to be built. They should allow the safe storage and movement of the Avro CF-100 Canuck fuselage as well as its main components.

In the future, other ground support equipment and tools will have to be acquired, through donations or purchases depending on the funds available.



***Above left: Trailer used to transport the fuselage of the Avro CF-100 Canuck designed by ÉTS students according to specifications drawn up by the QAM. Above right: One of the two GPUs received from ÉNA. This provides either AC or DC power (ÉTS picture and Pierre Gillard photo).***





# Some Projects



**Bombardier (Canadair) CRJ 100/200:** A coordinator has been appointed to build a file for the acquisition of an aircraft of this type representing the most important commercial success ever recorded by the Canadian aerospace industry (*Pierre Gillard photo*).

**Airbus Helicopters Alouette II "Hydro Quebec":** A complete file to acquire an Alouette II Astazou helicopter in Italy is ready. This helicopter had flown in the past for Hydro Quebec. All that is missing is funding, and therefore a sponsor, to see this historic helicopter return to *La Belle Province* (*Édouard Painchaud photo*).



**British Aerospace Jetstream :** The Jetstream enabled the development of regional air transport in Quebec from Saint-Hubert airport under the banner of Pascan Aviation. It would therefore be legitimate for an aircraft of this type to appear in the QAM collection (*Pierre Gillard photo*).

**Cessna 208B Grand Caravan :** The QAM approached Federal Express for a possible donation of a Cessna Grand Caravan. This aircraft should allow people to see the importance of the Pratt & Whitney Canada PT6A engine in the worldwide general aviation sector (*Alan Wilson photo*).





# s Under Study

**Sikorsky CH-124 Sea King:** All of the Royal Canadian Air Force's Sea King helicopters were decommissioned and the aircraft that were not preserved were sold to a company in British Columbia. We are evaluating a possible acquisition of such a helicopter and its transport to Saint-Hubert. Most of the Canadian Sea Kings were built in Longueuil and Saint-Hubert (*Pierre Gillard photo*).



**Replica of the Fairchild assembly line:** During the Second World War, the Fairchild factory in Longueuil assembled a number of military aircraft, including Bristol Bolingbrokes. The project aims to reconstruct part of the assembly line for this type of aircraft (*Pierre Gillard photo*).



**Fairchild 82:** The QAM is interested in restoring a pre-war, made-in-Longueuil Fairchild 82 to presentation condition. However, this project depends on having a hangar (*QAM archives*).



**Realization of replicas of Canadian satellites:** Canada's contribution to space is very important. One way to showcase it would be to make replicas of satellites designed and made in Canada. A coordinator would be needed to initiate this project (*Pierre Gillard photo*).





# Soaring to the Future

All aviation museums require the broad-based financial support of the corporate community and government bodies, as well as the generosity of visitors, members and private donors to thrive.

QAM is committed to being fiscally responsible and transparent when it comes to all museum activities and operations as today's public expects.



***The restoration of the CF-100 #100760 remains a top priority for the Museum (Pierre Gillard photo).***



# Support Sought

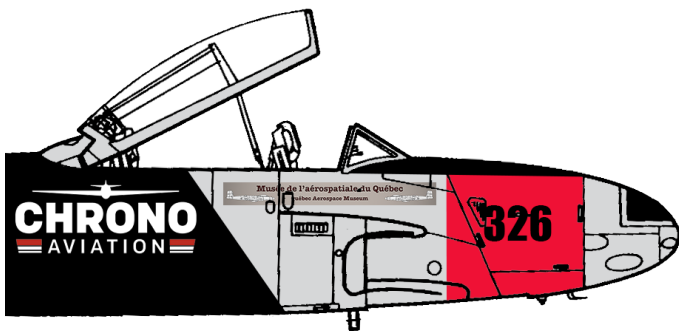
The founders of the Québec Aerospace Museum are asking the aerospace industry, corporate community and local authorities to contribute generously to a fundraising campaign focused on the realization of “Phase 1” and the launch of “Phase 2” of the QAM infrastructure plan, as well as to its community and heritage engagement programs.

The support can be provided in several forms:

- Corporate financing to cover operating costs.
- Financing of specific projects (CF-100, ground support equipment, development of Phase 1 storage areas, Phase 2 hangar, aircraft restoration, or others).
- Loan of premises, hangar spaces, exhibition spaces or storage spaces.
- Donation of material, equipment or tools.
- Recruitment of volunteers to support general or specific projects.
- Secondment of management staff to support QAM objectives.

Of course, all contributions will be highlighted by QAM in its membership communications and media relations activities.

The Museum would be happy to provide more specific information regarding anything referenced in this presentation and has detailed briefing documents available, on request, describing all QAM current projects. Please do not hesitate to contact us!



*Example of a mobile Canadair CT-133 Silver Star education display to be developed with the support of Chrono Aviation in Saint-Hubert (Pierre Gillard image).*







# Our Priorities and Goals for 2024-2025

It is imperative to ensure the functioning of the organization in a sustainable way before considering any development. Financing, therefore, remains the main objective of the QAM for the current financial year.

With the development of activities and the steps that will have to be taken with a view to establishing a functional museum envisaged for 2027, it is imperative to quickly hire a general director. In order for the project to be carried out in compliance with SMQ requirements, the person who will be hired must have experience in museology. Of course, funding for this hiring will be necessary.

Regarding infrastructure, the immediate need is to have an adequate location to accommodate at least two or three 40-

foot shipping containers to store items from the ever-growing collection as well as equipment and small aircraft. In this case, the issue is more at the level of the location loan than the financing itself.

Of course, all projects in progress or ready to begin remain the core of QAM activities for which funding is also required. New “general public” events could also be organized in the coming months.

Thus, overall, excluding the funds necessary for the start of the development of “Phase 2” of infrastructure, the budget envisaged for the 2024-2025 financial year is around \$100k which is appropriate to finance.

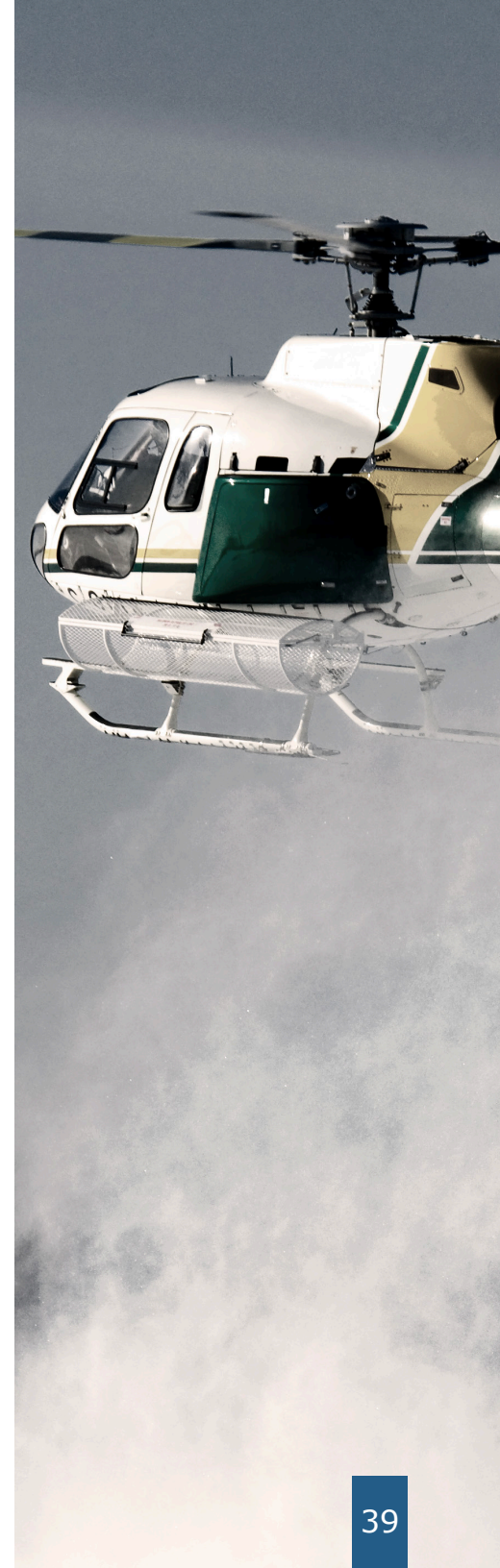


# Infrastructure Financing

Funding for the four phases of Saint-Hubert airport will celebrate its 100th anniversary in 2027. It would therefore be appropriate to have at least "Phase 2" completed in order to enhance this centenary event.

Deadline:	Objective:	Estimated Budget:
2023	Phase 1: Minimum room to start restoration works on our CF-100 – Exterior storage area for aircraft – Storage of equipment and collections - Acquisition of ground support equipment and tools.	\$ 100,000 – \$ 150,000
2025	Phase 2: Building allowing display and restoration work of <u>equipment</u> and aircraft – Administrative facilities.	\$ 4M - \$ 6M
2026-2027	Phase 3: Addition of hangar and display space.	\$ 6M - \$ 9M
2027-2028	Phase 4: Completion of a multifunctional building.	\$ 30M - \$ 50M

*Saint-Hubert airport remains the ideal location for the establishment of QAM infrastructure due to the available space, easy access and its rich historical past (Pierre Gillard photo).*





# Achievements

## Events and exhibitions :

Ongoing since April 2024 - Saint-Hubert: "Royal Canadian Air Force Centenary" showcase at ÉNA.

01-10-2023 - Saint-Hubert: Aerospace Heritage Day (jointly organized with the City of Longueuil).

23/24-09-2023 - Saint-Hubert: Participation in "Aéro Expo" event at Chrono Aviation's.

01-06-2023 - Saint-Hubert : Participation in "Vins de prestige" at ÉNA.

11-02-2023 - Saint-Hubert : Saint-Hubert: Open Day at ÉNA.

19-11-2022 - Saint-Hubert : Saint-Hubert: Open Day at ÉNA.

07-05-2022 - Centre des Sciences, Montreal: Participation in "Vitrines 2022" event organized by Aéro Montréal.

July 2021 till April 2024 – Saint-Hubert: "Claude Trudel – Citizen of Longueuil" showcase at ÉNA.

January till June 2021 - Saint-Hubert: "Aviation in Canada" showcase at ÉNA.

16-02-2020 - Saint-Hubert: Open Day at ÉNA.

17-11-2019 - Saint-Hubert: Open Day at ÉNA.

28-09-2019 - Saint-Hubert, QC: Aerospace Heritage Day (jointly organized with the City of Longueuil).

06/07-09-2019 - Saint-Hubert, QC: Open Days and Recruitment at Chrono Aviation.

24-08-2019 - Sainte-Anne-de-Bellevue, QC: Family Day at the Montreal Aviation Museum.

01/02-06-2019 - Saint-Hubert: Aérosalon.

17-02-2019 - Saint-Hubert: Open Day at ÉNA.

11-11-2018 - Saint-Hubert: Open Day at ÉNA.



**QAM participation during family day at the Montreal Aviation Museum in Sainte-Anne-de-Bellevue on August 24, 2019 (left) and in an open house at ÉNA (above) (Pierre Gillard et Philippe Colin photos).**



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We Th

Our corporate members:

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Companies and organizations donating aircraft,  
materials and equipment to the QAM:

ΔοΔ<sup>c</sup>  
Air Inuit

K I T T Y H A W K

CAE



Fondation  
Aérovision Québec



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HANGAR  
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# Bank:

## Companies and organizations participating in QAM projects and supporting its activities:

	Mobile Electrical Power Plant MMG-1A
	Simulateur de vol CAE « Twin Engine »
	Avro CF-100 Canuck #100760
	Roland Durable RD02A Edelweiss C-GIWY
 Le génie pour l'industrie	Avro CF-100 Canuck #100760 Équipement de soutien au sol
 ÉCOLE NATIONALE D'AÉROTECHNIQUE	Ground Power Unit AFSG-1 Mobile Electrical Power Plant MMG-1A
	Soutien aux activités

	Entreposage de pièces d'avions
	Kitty Hawk Flyer eVTOL
	Kitty Hawk Flyer eVTOL
	Avro CF-100 Canuck #100760
	Hébergement du siège social
	Soutien aux activités
	Entreposage de pièces d'avions
	Avro CF-100 Canuck #100760







# We Thank :

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Yannick DELBECQUE,  
Patrick DESSUREAULT,  
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Christian LAKE,  
Guy LAPIERRE,  
Gérard LEBLANC,  
Nicolas MAILLOUX,  
Danielle MATEAU,  
Gilbert McCAULEY,  
Antoine MOULIN,  
Édouard PAINCHAUD,  
Claude PERRON,  
Marc-André VALIQUETTE.

*Nice looking little dish bearing the image of Quebecair made on the occasion of the 25<sup>th</sup> anniversary of the company (1946-1971). This is a donation from Gérard Leblanc (Pierre Gillard photo).*





## Overview of the Aerospace Industry.

The aerospace sector in Quebec, in 2022, had sales of \$18 billion and employs 37,200 people. Nearly 80% of Quebec production is exported outside Canada. In 2022, the aerospace industry ranked first in Quebec exports, with 10.9% of Quebec's total exports.

Over the last 25 years (1997-2022), sales of the Quebec aerospace industry have experienced average annual growth of nearly 5%.

The strength of the Quebec aerospace industry is based on the presence of numerous world-class prime contractors and equipment manufacturers.

Such a concentration of first-class prime contractors and equipment manufacturers, active in a wide variety of major fields (avionics, landing gear, systems integration, space systems, etc.), has no equivalent in the world.

This is why Montreal is among the major international aerospace centers, with Seattle and Toulouse.

These dominant companies rely on a group of 215 SMEs, which act as subcontractors or suppliers of products belonging to the entire range of specialties necessary for the assembly of an aircraft, from the machining of parts to the most advanced sophisticated softwares.



***... A showcase to present this industry at Saint-Hubert soon ?***

***Support the QAM and its projects !***



[www.maq-gam.ca](http://www.maq-gam.ca)



*Uncredited pictures: André Bourassa, Pierre Gillard, Louise Gince, Pierre Hamel, Kitty Hawk and NASA  
Translation: Pierre Gillard, Larry Milberry and Kenneth I. Swartz  
Layout: Pierre Gillard and Pierre Ménard, Longueuil, July 2024*