### 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 manufacturing and R&D centres here mission of promoting the aerospace Airbus, Bombardier Aéronautique, Bell industry and its rich heritage in general. Textron, CAE, Pratt & Whitney Canada

The main idea is to offer a showcase of of Air Canada, Air Transat, ICAO and this industry to the general public on a the Canadian Space Agency. 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 (SMO).

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 - and Montreal also the headquarters

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 community with value-added programs industry as a central theme for all of aerospace ecosystem. the Museum's heritage, educational and community outreach activities In addition, the QAM has a specific including those designed to promote mandate to enhance educational and aviation and space to young people career opportunities for women, First and the general public.

The Québec Aerospace Museum will Quebec and Canada. also provide a direct return to the

a number of objectives, including that will provide many social, academic positioning the Quebec aerospace and economic links to Quebec's

> Nations and Inuit throughout the aviation and aerospace industry of







### Filling an Important Gap

There is an important gap that needs to engage young people as early as to be filled when it comes to the possible. promotion of aerospace trades in Ouebec between the virtual promotion Aviation museums around the world of careers by industry organizations like Aéro Montréal and CAMAQ and the promoting aviation careers and STEM 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

already play an important role education and QAM can provide this missing link in Quebec. This could be achieved, for example, by creating interactive, educational and 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 OAM (Pierre Gillard photo).

### A Showcase for the Industry

endless.



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

The general public in Quebec and Moreover, for several decades, the Canada know little about the aerospace sector has been growing continuously industry and the opportunities it but cyclically. During more difficult represents. The career possibilities are 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 technical schools, and universities, aircraft equipment, testing, manufacturing, FBO, finance, management, helicopters, interiors, leisure, maintenance, ground service material, equipment, engines, new technologies, operations, space, etc.





### Educational

regularly invited to actively participate engineering students at ÉTS. in student projects or activities that enhance student education and the The first of these involved designing development of the museum. This a jig to support QAM's Avro CF-100 includes aerospace-related institutions to facilitate structural repairs and such as the École des métiers de reinstallation of the landing gear on l'aérospatiale de Montréal (ÉMAM), the École nationale d'aérotechnique objective was to design trolleys and (ÉNA) and the École de technologie their accessories to store and move supérieure (ÉTS), as well as other wings, tail, as well as wingtip tanks educational institutions related training, such as the Univestité consisted of imagining a trailer allowing du Québec à Montréal (UQÀM) and easy and safe storage and movement Collège Montmorency which have well- of the CF-100 fuselage. regarded museology programs.

Education is an integral part of QAM's Three projects have been carried out vision. Schools and universities will be to date with groups of mechanical

> this rare jet fighter. In the second, the offering of the same CF-100. And the third



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 fuse-lage 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 To this should be added the joint Museum's recent achievements include organization with the City of Longueuil organizing community and student visits to local aerospace businesses Aerospace Heritage Days" held in and Canadian Space Agency, the École nationale d'aérotechnique (ÉNA) and Saint-Hubert Airport.

"Saint-Hubert/Longueuil two September 2019 and October 2023, constant participation in several ENA 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 Aerosalon in June 2019 at Saint-Hubert airport (Pierre Gillard photo).

### **Community Integration**

the Museum developing educational programs available in Quebec. programs that support the social aircraft.

QAM officials see an important role for easily enroll in traditional educational

reintegration of people living on the Therefore, QAM plans to develop margins of our society. This could alternative educational pathways that include practical training in aeronautical could eventually lead young people to technology while working on QAM a career in the aviation industry at a later date.

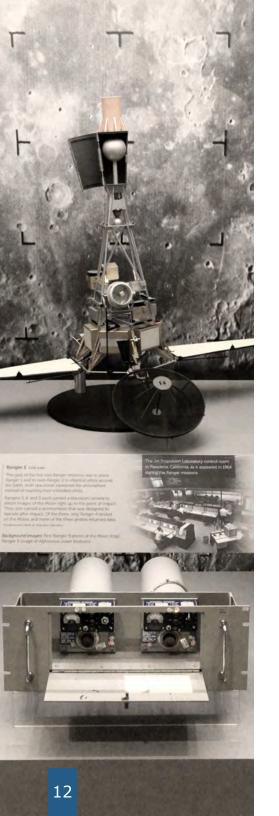
living in our community who cannot already exists and must be assessed.

There are many marginalized people The demand of an education facility



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 replica of Fairchild Aircraft of Canada's and artifacts must be preserved and Bristol Bolingbroke bomber production displayed in attractive, educational line at Longueuil during the Second 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

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**

most visible aspect of the museum's aircraft parts, avionics equipment, and collection mandate. Various collection aviation instruments. activities have already begun, including the partial restoration of an Avro Research and discussions are also Force and later as a flying testbed for Pratt and Whitney Canada. This rare Canada War Museum in Ottawa.

aircraft they plan to retire from their Quebec aviation history.

In terms of heritage, aircraft are the training programs, in addition to

CF-100 Canuck jet fighter, that once underway to obtain a Sikorsky CH-124 served with the Royal Canadian Air Sea King maritime helicopter, built in Longueuil that was recently retired from the Royal Canadian Air Force, as aircraft is on loan to OAM from the well as an Airbus Helicopters SA318C Alouette II helicopter used by Hydro-Québec to support the development of The École nationale d'aérotechnique the important James Bay hydroelectric (ÉNA) has also been open to the project in northern Quebec. These donating to OAM of various obsolete aircraft, and others helped shape



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 Indi Longueuil and

and Canadian 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.

interest of the aerospace industry, different representatives from 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 Quebec Aerospace Museum plans The City of Longueuil is closely to become a full member of the Quebec associated with the QAM project which aerospace industry 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-So that decisions are made in the 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.

### ustry and Ecosystem of d Montérégie

associated with the Longueuil/Saint-Hubert Aerospace Innovation Hub.



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

Furthermore, the QAM's approach is The QAM is already a member of the also part of a desire to participate in Canadian Aeronautical Preservation the development of the Saint-Hubert Association (CAPA) which represents airport area, in particular by being 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 Ouébec Aerospace Museum In the absence does not yet have a physical exhibition infrastructure, activities and events space, it is building relationships with can be organized on private sites at the all the stakeholders required to achieve this goal.

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 Other mainstream expanded. activities, such as "Introduction to and its pioneers. Aerospace Days," will be organized.

of permanent airport, such as FBOs, or in educational facilities.

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



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**

received several important donations until such time as the Museum has including avionics equipment, model the appropriate hangar infrastructure magazine collections, aircraft parts, of volunteer technicians from the manufacturers' plates and other objects QAM will ensure they receive regular secure storage facilities as they await preservation. future exhibit.

In recent months, the museum has These aircraft will be stored outside airplanes and helicopters, books and to house them. However, a team - all of which need to be housed in maintenance to ensure their long-term



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 avionics, landing gears, systems, is aircraft restoration. Presently, due to etc., also tractors, track vehicles and a lack of hangar space, this can only other ground support equipment. Our take place when we can find suitable volunteers are capable and ready to premises at Saint-Hubert airport.

restore all of these.

Besides aircraft themselves, restoration But here too, availability of workshops involves such components as engines, 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

from partnerships with No 438 "City of in transit to the Museum collection." Montreal" Tactical Helicopter Squadron On ÉNA property, the QAM has a 40at CFB Saint-Hubert, which provides foot maritime container housing the temporary outdoor storage space, Mortensen glider as well as a small and ENA, which has provided indoor workshop. working space on an occasional basis.

office of QAM at its H18 hangar facility. Services FBOs have shown themselves is found.

At present, the Museum is benefiting ready to accommodate a few planes

Several aerospace companies and The Museum has also received support schools, such as Bombardier, ÉTS, from Nolinor, which hosts the head Héroux-Devtek, and Pratt & Whitney Canada, have offered to store QAM Chrono Aviation and Lux Ground equipment until a longer-term solution



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 **PHASE 3:** Expansion of the facilities by develop, appropriate infrastructure will adding a larger hangar to accommodate have to be rented or built. In order to larger aircraft as well as having a accommodate these to the growth of covered exhibition space to display the Museum, four phases have been larger equipment. identified, as follows:

**PHASE 1:** Use of existing infrastructures a 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 mediumsized aircraft as well as establish a exhibition/educational permanent space, offices and on-site storage.

Construction **PHASE** of 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**

museum attendance figures (before 20-year development phase. 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 vear.
- Aéroscopia (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).

The greater Montreal region is one of Of course, other major aerospace the world's major aerospace centers, centres like Seattle and Toulouse have and the establishment of a local air had a head start, but a Montreal museum and space museum has the potential to with a similar aerospace industry focus create a significant tourist attraction. will almost certainly attract many local Here are some well-known international and international visitors over a 10- to

> 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 Hazardous all volunteers, is without compromise. System (WHMIS). To this end, the QAM makes regular payments to the Commission des First aid training is also provided to normes, de l'équité, de la santé et de volunteers. la sécurité du travail (CNESST), which represents a regular business expense. Finally, the QAM has its own first

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

Information Materials

aid resources and basic emergency equipment.



Workplace health and safety training is Leaders, Jean Riffou and Pierre Gillard, took provided internally for the benefit of QAM a first aid course organized by CNESST (QAM members (Pierre Ménard photo).



photo).

### **Communications**

communications, both internally and Harassment in the Workplace and for externally, are important in order to Processing of Complaints. keep both members and the outside world informed, in particular, about The outside world can also keep museum activities.

kept informed by emails. A space is also and Facebook and LinkedIn pages. The reserved on our website for members. Annual Report is also distributed to The website offers exclusive content companies in the aerospace sector in as well as such official documents as: Quebec and Canada, and to all museums Administrative Rules, Occupational via CAPA (Canadian Aeronautical Health and Safety Policy, Policy for the Preservation Association).

As for any organization, the QAM's Prevention of Psychological or Sexual

informed about the QAM through traditional means of communication Within the organization, members are and social media such as our website



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 the organization. Donations, and cash funds.

funding available Government is 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 advances from members, have been essential to allow the organization to grow during this start-up period.

The OAM 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**

This resulted in our plan for corporate membership cards depending membership.

were defined according to the level community members, etc. of membership: bronze, silver, gold and platinum. In exchange for their Thus, joining as a corporate member corporate contributions, receive a tax receipt and a certificate financially and gives a chance through of recognition. In addition, their logo its courtesy passes to others to enjoy appears regularly in our brochures, the captivating world of aerospace. website and Annual Report.

Since the QAM represents the aerospace But that's not all, because the industry in Quebec and Canada, an originality of the approach includes original approach was needed to how a company or institution becoming finance its activities and management. a QAM member receives "courtesy" their membership level. These may be distributed among employees, Four categories of corporate members customers, pupils or students, visitors,

members lets a company support the QAM



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





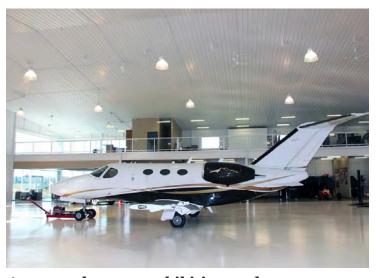
### A Project-Based Approach

The QAM envisages two categories Then comes the financing stage where 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-bycase 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.

of operations to be managed, each 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 young people these particular goals on a voluntary interest the general public. basis.

Thus, for example, following a moment. perception study conducted among

in Ouebec, projects mentioned, the QAM also Aéro Montréal cluster issued 12 emphasizes the place of women and recommendations to attract the next First Nations and Inuit in aerospace. generation to aerospace trades, To this end, members of the Board of from which the QAM intends to draw Directors can devote themselves to inspiration to develop new activities to

In the future, OAM's leaders will remain The QAM also undertakes to follow attentive to the evolution of the industry industry recommendations in general. in order to adapt to the realities of the





Within the activities of the OAM, 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*).







**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*).

**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*).



### **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





### Two Majo

Most of the energy currently invested by the QAM concerns two specific projects. These aim to launch longterm 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

eagerly awaited.

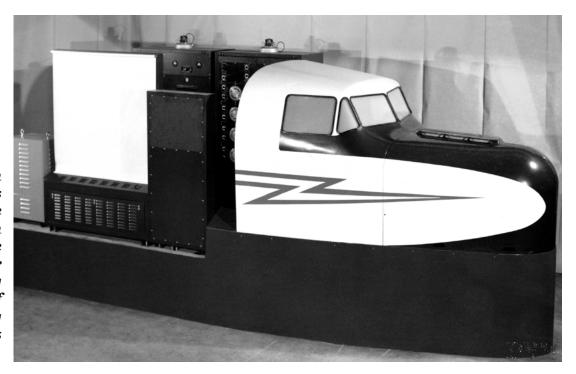
Several requests for partnerships and intended for procedural training of the sponsorships have recently been sent crews of twin-engine aircraft, mainly to various companies and schools. the Beechcraft C-45 Expeditor, Douglas A favorable feedback is, of course, C-47 Skytrain/Dakota and Fairchild C-119 Flying Boxcar.

#### **CAE"Twin Engine" Flight Simulator:** Once the QAM

flight simulator that was produced the support of CAE, which celebrated in 1958 by CAE Inc. in 12 copies for its 75th anniversary in 2022. the Royal Canadian Air Force. It was

sufficient has infrastructure, this historic simulator The QAM acquired a "Twin Engine" will be kept in working order thanks to

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 museum criteria of the SMQ. We could start operations is a top priority for the easily design a main hangar surrounded by several pavilions where thematic

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

technical operations, the QAM must by several groups of ÉTS students are also have suitable equipment as well ready to be built. They should allow as specialized or non-specialized tools. the safe storage and movement of the

In this regard, the QAM has already as its main components. basic tools received generously donated by one of its members. In In the future, other ground support addition, the ENA donated two ground equipment and tools will have to power units for aircraft that were non- be acquired, through donations or functional. These will be gradually purchases depending on the funds restored to working order as part of available. student activities.

In order to be able to carry out its Trailers and carts specially designed Avro CF-100 Canuck fuselage as well





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 OAM. 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*).

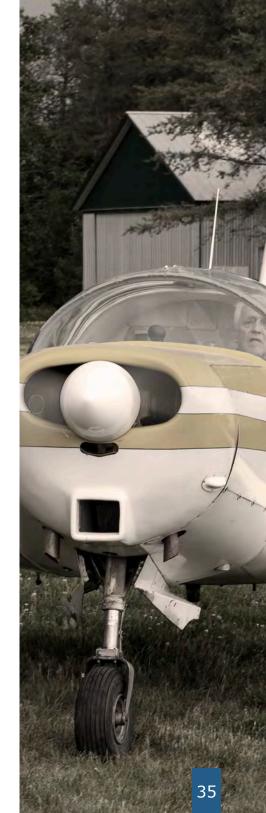
**Fairchild 82:** The QAM is interested in restoring a pre-war, made-in-Longueil Fairchild 82 to presentation condition. However, this project depends on having a hangar (*QAM archives*).





#### 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 QAM is committed to being fiscally broad-based financial support of the responsible and transparent when it corporate community and government comes to all museum activities and bodies, as well as the generosity of operations as today's public expects. visitors, members and private donors to thrive.



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

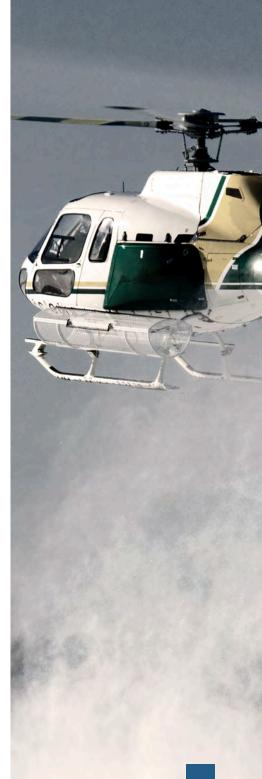
data recorded in the table below.

Funding for the four phases of Saint-Hubert airport will celebrate its infrastructure development (see page 100th anniversary in 2027. It would 18) can be assessed based on current 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	<u>Phase 2:</u> Building allowing display and restoration work of <u>equiment</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 ideal remains the for location 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).

### **Contact Us!**

#### **Board of Directors:**

Gilbert McCAULEY, Pr'esident ff: gilbert@maq-qam.ca

Pierre GILLARD, Secrétaire: pierre@maq-qam.ca

Éric TREMBLAY, Trésorier : eric@maq-qam.ca

Laurie BRETON, Administratrice : laurie@maq-qam.ca

Hany MOUSTAPHA, Administrateur: hany.moustapha@maq-qam.ca

Haitham NACIRI, Administrateur: haitham@maq-qam.ca

#### **Management:**

Cyril CHAMBOND, Délégué au financement : cyril@maq-qam.ca

Gilbert McCAULEY, Coordonnateur aux Affaires fédérales et militaires : gilbert@maq-qam.ca

Stéphane DROLET, Responsable de la santé et de la sécurité au travail : sst@maq-qam.ca

Pierre GILLARD, Conseiller au développement institutionnel : pierre@maq-qam.ca

#### **Project Coordinators:**

Marc ÉMOND, Coordonnateur des expositions : marc.emond@maq-qam.ca

Jean-Guy BLONDIN, Coordonnateur du projet CRJ: jg.blondin@maq-qam.ca

Stéphane DROLET, Coordonnateur du projet Mortensen: stephane@maq-qam.ca

Pierre GILLARD, Coordonnateur des activités étudiantes : pierre@maq-qam.ca

#### Support and services:

Louise GINCE, Adjointe administrative : louise@mag-gam.ca

Éliette PROULX, Adjointe administrative : eliette@mag-gam.ca

Robert ST-PIERRE, Communications internes: robert@maq-qam.ca

Benoît de MULDER, Recherchiste : benoit@maq-qam.ca

Pierre MÉNARD, Webmaster/Photographe: pierrem@maq-qam.ca

Philippe COLIN, Animateur Facebook et LinkedIn: philippe.colin@maq-qam.ca

1 (450) 999-2871

6575 chemin de la Savane, Saint-Hubert, QC, J3Y 8Y9, Canada

www.maq-qam.ca





### We Th

#### Our corporate members:

**PLATINUM:** 





**BRONZE:** 



#### Our partner:



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















### nank:

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

BELL	Mobile Electrical Power Plant MMG-1A
CAE	Simulateur de vol CAE « Twin Engine »
CASAIR	Avro CF-100 Canuck #100760
CHRONO	Roland Duruble 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
Helicraft.ca	Soutien aux activités

HĒROUX DEVTEK	Entreposage de pièces d'avions
KITTYHAWK	Kitty Hawk Flyer eVTOL
LUX	Kitty Hawk Flyer eVTOL
CARADIAN WAR MUSEUM MUSEE CANADIEN DE LA GUERRE	Avro CF-100 Canuck #100760
NOLINOR Aviation	Hébergement du siège social
PASCAN	Soutien aux activités
ANT & WHITNEY	Entreposage de pièces d'avions
	Avro CF-100 Canuck #100760





### We Thank:

### People donating aircraft, materials, equipment or publications to the QAM:

Réjean AVON, Marc BIGAOUETTE, Pierre BINETTE, Dean BLACK, Daniel BRACKX, Jean-Pierre BROSSARD, Gilbert BUREAU, Thierry CARDON, Michel CÔTÉ, Yannick DELBECQUE. Patrick DESSUREAULT, Benoît de MULDER. Mathieu FOURNIER, Pierre GILLARD, Doug JERMYN,

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Guy LAPIERRE,
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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-qam.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