

CENTENARY OF ECAUSSEVILLE AIRSHIP HANGAR

Project

1. Introduction

A huge reinforced concrete nave, 150 meters long and 30 meters high, which is located a few kilometers from Cherbourg and Ste-Mère-Eglise (Normandy), the Ecausseville Airship Hangar is the only survivor of the hangars built by the French Navy: during World War I, the latter had installed fourteen ballooning bases, in mainland France and overseas, to house its airships in charge of fighting German U-boats.

The monument has an undeniable heritage value and the site has great potential for tourism or for other activities ; but the building is today in a state of relatively advanced degradation: everyone agrees on the need to intervene very quickly to ensure its future//to save it for future generations.

The commemoration of its centenary will be a great opportunity to shine the media spotlight on this exceptional site, to educate the public, the local officials, the community of architects, building and public works companies, tourism players to the issues of its restoration and its future once restored.

2. The Hangar

2.1 The historical monument

The Hangar is the second hangar of the Naval Ballooning Base (NBB), called Montebourg (in fact, Ecausseville), the first hangar built was wooden (1917-1931). The NBB of Montebourg worked for airships, from March 1917 to February 1920, and during this period hosted 16 airships.

Designed for airships of up to 20 m in diameter, our hangar has the following dimensions: 150 m long, 40 m wide at the base, 24 m wide and 30 m high at the center.



It is a remarkable work of human engineering which is entirely made up of reinforced concrete, including cover and structure: its higher section has a geometry of a reversed "catenary curve". Built by Etablissements Fourré and Rhodes (now in the EIFFAGE Group), it was fully completed in 1920.

After the abandonment of airships by the Navy, the base receives the Mobile Group of Heavy Artillery Coast and Antiaircraft Defence (155 and 90 guns).

From 1940 to 1944, the site was used by the German occupants as a warehouse and suffered, curiously//ironically, no bombing during the D-Day and the Battle of Montebourg, which largely destroyed the city only 4 km away: this is a real mystery whose key may be found one day in the American archives.

After the D-Day, the Americans used it as a repair, storage and maintenance centre of vehicles and small arms, connected to the railway line Paris-Cherbourg.

Between 1967 and 1969, a part is reserved to the Military Applications Directorate of the Commission for Atomic Energy (CEA), for the

development and testing of balloons which would hang the first French H bombs in Mururoa.

In 1999, the hangar and the surrounding 7 ha are purchased from the Navy by the French-American Association of Norman Airfields of the 9th US Air Force.



In February 2003, the Hangar was classified as an Historical Monument and the Association of Friends of Ecausseville's Hangar (AAHDE) was created.

Property of the Community of Agglomeration of the Cotentin (CAC) since 2017, the Hangar has been maintained and preserved thanks to the tireless work of the AAHDE.

Indeed the AAHDE has had a crucial pioneering role through its activities in maintaining the Hangar and its site in good condition and making it known to the general public in Normandy and further afield.



2.2 The life of the site

In 2018, the Ecausseville Hangar site has hosted more than 11 000 visitors.

2.2.1 The permanent exhibition

The AAHDE has created a museum whose purpose is to retrace, with educational panels, models, mannequins in uniform and many authentic objects:

- The history of airships and especially those of the Navy;
- The history of the construction of the Hangar and the presentation of its particular architecture;
- The development of the Montebourg (Ecausseville) Naval Ballooning Base;
- The life of this base, after the era of airships to the present day;
- The Battle of Montebourg and the Second World War in the district;
- Lift tests conducted between 1967 and 1969 by the CEA during the Cold War ;
- The status of achievements and ongoing developments on today's airships.



2.2.2 Events

The Hangar site offers many opportunities for the organization of indoors or outdoors events, whether aimed at small or larger audiences :

- Film tournages for filmmakers looking for an original setting;
- Tests and demonstrations of aerostatic equipment, outside the tourist season, for designers and firms needing to be protected from prying eyes (far from any home), to be sheltered from the wind and benefiting from a high vaulted height;

- Fun activities related to ballooning, such as Aéroplume®;



- Various exhibitions, militaria exchanges, flea market, etc. ;
- Reception place in an unusual environment;
- Meetings of collectors ; aeromodelists, sportsmen for a cultural stage;
- Outdoor events for a wide audience (airspace free of any nearby obstacles).



A very good illustration of this flurry of activities is the parachutage of 80 paratroopers, dropped from three C47 (DC3), in front of more than 10 000 spectators gathered at the site on the occasion of the 70th anniversary of the D-Day on June 7th, 2014.

This event was renewed this year on June 8th, 2019 for the 75th anniversary of the D-Day.



3. The Centenary Project

Our project is to commemorate the centenary of the Hangar **in 2020** with a range of activities and events as proposed below:

- Presenting to the public an exceptional temporary exhibition ;
- Organizing a symposium ;
- Concluding the Centenary Project with a solemn closing reception.

3.1 An exceptional temporary exhibition

Proposed during the period of the summer holidays, from July to late September, the exhibition will feature unusually public lending parts by museums, airships builders or individuals. At the same time, the permanent exhibition will be improved.

3.2 A symposium

The symposium will be organized around four main themes following :

- the history of the Ecausseville Hangar site ;
- the architecture & heritage of the Hangar ;
- the restoration of the Hangar ;
- the future of the site.

To date, it is planned to hold a session by theme, each of which can be between 4 and 5 communications, according to the topics and the speakers. Each session will conclude with a round table.

The duration of the conference will be two days.

3.2.1 History of the site

The objective of this theme is to deepen the knowledge of the history of the Hangar over a hundred years and to share it : indeed, there are still periods poorly known that we have yet to explore.

This part is intended for local historians and specialists in this field. It is also open to the subject's enthusiasts.

Possible themes

Below, some themes as examples

- ❖ Airships and submarine warfare ;
- ❖ The history of the Ecausseville site: period of airships;
 - Why an airship hangar in Ecausseville?
- ❖ The operation and maritime operations of the Montebourg Naval Ballooning Base during WWI;
- ❖ The history of the Ecausseville site: after the airships;
- ❖ The history of the Ecausseville site: the WWII;
 - The period of the German occupation ;
 - The fights of the Liberation ;
 - The American period: graffiti.
- ❖ How to better make it known the history of Ecausseville?

3.2.2 Architecture & Hangar heritage

The purpose of this session devoted to the architecture of the Hangar (the Historical Monument) is to highlight the innovative construction techniques for the time and present a comparative approach.

This part is aimed more specifically at architects and architecture students.

Possible themes

Below, some themes as examples.

- ❖ The reinforced concrete construction at the time ;
 - ❖ The hangar, masterpiece of reinforced concrete construction;
- A principle (the inverted catenary curve vault) and remarkable features (joints, reinforced concrete cover ...).
- ❖ The rivalry of the Lossier and Freyssinet construction systems;
 - ❖ The hangar of Augusta in Sicily¹?
 - ❖ The descent of the hangar in the airport architecture.

3.2.3 Restoration of the Hangar

The objective of this theme dedicated to the restoration of the Hangar is to explore all issues related to its restoration and the funding thereof.

- ❖ This theme is intended primarily for architects and construction companies specialized in the restoration of the concrete . This will be an opportunity to discuss innovative and possible

restoration solutions, compatible with an historical monument.

- ❖ Secondly, we will discuss the possibilities and conditions of financing, especially through corporate sponsorship.

Possible themes

Below, some themes as examples.

- ❖ Current state of the hangar ;
The hangar is in danger and time is working against us. It is urgent to restore it.
 - ❖ Innovative technical solutions for the renovation of concrete tiles;
 - ❖ Innovative technical solutions for door restoration;
- For the record, see the ideas of Didier Costes or Philippe Tixier and the quotes of Eiffel and CMN.
- ❖ Financing, corporate and popular crowd funding
 - ❖ ...

3.2.4 Future of the site

The purpose of this theme devoted to the future of the hangar site is to explore the possible uses of the site, once the hangar (monument) restored and to emerge , through the symposium, solutions to guide the CAC, its owner, in his approach of restoration of the monument and enhancement of the site.

This session is open to stakeholders in the tourism and industrial sectors.

- We will take into account the rehabilitation of the « Y hangar » of Meudon (Paris area) and the modernization of the Museum of Air and Space (Musée de l'Air et de l'Espace, MAE). The airship industry is not dead: we can learn about current airship developments. It is also an opportunity to rethink the museography and scenography of the museum.
- An industrial activity on the site could come in addition (hydrogen, drones, electric plane or flying electric vehicles of the future ...).

Possible themes

Below, some themes as examples.

- ❖ The renewal of the Y hangar of Meudon
- ❖ Airships at the MAE
 - Renovation of the airship "La France" and its installation in the large gallery
 - The airship / airship collections presented and in the reserves
- ❖ The airships today
- ❖ New related technologies
 - The hydrogen sector
 - drones

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<http://www.hangarteam.it/Versione%20francese/Francese%20home.htm>

- Flying electric vehicles of the future .
- ❖ A renewed museography and scenography
- ❖ The hangar, gateway to tourism on the East Cotentin.

To reinforce the search for solutions, we propose, moreover, to launch a **competition of ideas** with the communities of students in architecture, marketing, tourism and cultural engineering ...

3.3 Solemn Closing of the Centenary

As the festive and friendly part of the Centenary Project, the closing reception will be the opportunity to welcome prestigious guests from different horizons such as local officials, donors, families of sailors descendants... We are indeed in contact with descendants of Navy officers who have flown airships Montebourg. We ~~could also look~~ are also looking into the possibility of contacting the descendants of the builders of the Hangar, including Mr. Lossier.

4. The organization of the projet

4.1 Patronage of the project

This project driven by the AAHDE is supported by the Community of Agglomeration of Cotentin (CAC), owner of the site.

4.2 Project management

The coordination and the animation of the project will be achieved by a **Steering Committee** , composed mainly of members of the AAHDE as :

- Philippe Belin , former industry, founder and president of the AAHDE from 2003 to 2016 ;
- Jean-Max Gabet, former head of a design office and vice- president of the COBATY-Manche Association ;
- Philippe Pâris², former Aeronautics Engineer with Thales , now a senior consultant, passionate of aviation story and local history, international speaker and author.

Outsiders are also welcomed to join the team according to their specialty.

4.3 Project endorsement

A **Scientific Committee** will advice the Steering Committee on the historical , technical , cultural and touristic aspects of the Project. The

Committee will include several experts in the following areas:

1. For the history of the site : local historians and specialized academics ;
2. For the Architecture of the hangar : heritage curators, architects, concrete specialists , academics ;
3. For the Restoration of the hangar : heritage conservators, architects, concrete specialists , academics ;
4. For the future of the site : tourism stakeholders and representatives of the aerospace / aerospace and new technologies industry;

Among others, this Committee will validate the call for papers and select the participants and their communications. Moderators for the sessions will be members of this Committee.

To date, Professor Barjot³, Professor of Contemporary History at Paris-Sorbonne University , has agreed to chair this Committee.

4.4 Communication

The goal of the Centenary Project is to make the hangar more widely known, not only locally, but also at national and international level, to:

- the architects community;
- building contractors (corporate sponsorship);
- stakeholders of tourism development;
- stakeholders of industrial development, where appropriate;
- the public (popular crow funding);
- ...

4.5 Planning

We are considering the following schedule :

1. Temporary exhibition : from the beginning of July to mid October 2020 ;
2. The symposium will be held on 8 and 9 October 2020 at the Conference Centre of the Airborne Museum in Sainte-Mère-Eglise (Manche).
3. The solemn closing of the Centenary will take place on October 10, 2020 at the Hangar site.

² <https://www.linkedin.com/in/philippe-paris-31307b54/>

³ <http://lettres.sorbonne-universite.fr/IMG/pdf/D-BARJOTweb0809.pdf>

5. Partners

Since its creation, the AAHDE has been able to establish and maintain numerous contacts in very diverse environments , such as the corporate world (in particular, through the Steering Committee which advised the association from 2010 to 2016), that of the organizers of shows, that of the filming of films and clips, that of associations (flea market, skydiving, reenactors, heritage, etc.), and many others ...

The aim is also to approach targeted partners by asking for:

- their intellectual participation , as counsel or speakers / moderators at the symposium ;
- their material participation as lenders of equipment ;
- and/or their financial participation in various forms (grants, donations, advertisements).

5.1 Consulting and Stakeholder Partners

Below , possible partners identified to date. To complete.

5.1.1 History of the site

- SAHM Valognes : Society of Archeology and History of Manche, section of Valognes ;
- AD50 : The Manche Department Archives;
- SHD-Cherbourg: Service Historique de la Défense (Defence Historic Archives), Cherbourg branch;
- ARDHAN: Association pour la Recherche et la Documentation de l'Histoire de l'Aéronautique Navale (Association for Research and Documentation of the History of Fleet Air Arm).

5.1.2 Architecture and restoration of the hangar

- DRAC : Direction Régionale des Affaires Culturelles (Regional Directorate for Cultural Affairs);
- ABF : Architectes des Bâtiments de France (French Monuments Architects) ;
- ACMH : Architectes en Chef des Monuments Historiques (Historical Monuments Chief Architects) ;
- Heritage Architects;
- Architects and students in architecture;
- COBATY ;
- Companies or groups (EIFFAGE, VINCI, BOUYGUES, FREYSSINET, CMN, CimBéton, STTRES, IMGC...) ;

- Fondation du Patrimoine (Heritage Foundation) ;
- ...

5.1.3 Future of the site

- CD50 : Conseil départemental de la Manche (Manche Department Council);
- Tourist Office of the CAC ;
- Master students in cultural and tourism engineering;
- Culture & Patrimoine (tenant of the Y hangar in Meudon);
- Airship manufacturers of today;
- CCI (Chamber of Commerce and Industry), Cherbourg;
- Normandie AeroEspace (NAE) ;
- Players of the industrial development ;
- ...

5.2 Partner Lenders of Materials

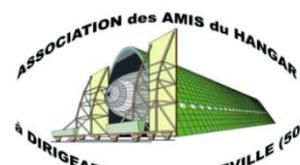
- MAE : Musée de l'Air et de l'Espace ;
- SAFRAN Museum; EIFFEL wind tunnel ;
- Airship manufacturers of today;
- Individual partners.

5.3 Funding partners

The budget needed to commemorate the Centenary of the Hangar is the subject of another document.

Can be considered as possible sponsors :

- Communities , such as the CAC, the Manche Department, the Normandy Region, Europe;
- Heritage operations support institutions, such as the Civil Aviation Memory Mission (which has already announced its support) ;
- Advertising advertisers: companies, banks and traders. Financing in return for advertising on different media (hangar website, logos at the museum, cinema, flyers, ...).
- Donors.



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