



**Conditions de visites**

- 1 3 7 8 10 included in a themed tour itinerary  
Information : Service du Patrimoine - Hôtel Hèbre de Saint-Clément 05 46 82 91 60
- 2 open visits or guided tours  
Centre International de la Mer 05 46 87 01 90
- 4 9 open visits or guided tours  
Musée national de la Marine 05 46 99 86 57
- 6 visit to the Naval School of Medicine wing  
05 46 99 59 57
- 5 11 open visits or guided tours - www.hermione.com
- 12 open visits - Service Historique de la Défense exhibition area 05 46 87 74 90
- 13 special visits - Information : Service du Patrimoine - Hôtel Hèbre de Saint-Clément 05 46 82 91 60
- 14 visits by appointment  
Association ANAMAN 05 46 83 37 00 - 06 72 64 86 84
- 15 open visits or guided tours  
Maison du transbordeur 05 46 83 30 86 Discovery



Created from the ground up in 1666, Rochefort is the town of invention par excellence. For over two hundred and fifty years, Rochefort was a pilot naval dockyard. The town's function and location led men to surpass themselves, to experiment and to ceaselessly invent.

The long work of cleaning up the swamplands began with Humphrey Bradley and Pierre Siette during the reigns of Henry IV and Louis XIII. At Rochefort, the town's grid layout, the monumental buildings along the Charente, the reworked and domesticated surrounding area, the river infrastructures and aeronautical activities point to the work of engineers. Some of them are well known, whereas others are less famous.

Whether they were engineering school graduates or earned their laurels through personal efforts, whether they were of local origin or not, whether they made a career in the navy, hydraulics, civil engineering or civil and military industry, they all left their stamp on the history of this unusual town and the area around it.

A tribute to their creative spirit, designed as a pathway of discovery leading from the most well-known sites to the most unexpected ones, was indispensable!

*Griffonnement dressé pour expliquer la peur, quant, très souvent, les soldats, rangés dans des redents du feu, que font leurs camarades, placés dans d'autres redents opposés.*

**1 Louis-Nicolas Vardin de Clerville, > the vauban opponent**

👁 Vestiges of the urban rampart, Avenue William-Ponty, rue de l'Echauguette, Vauban Roundabout

A respected figure in the king's court, the Chevalier de Clerville (1610-1677) embarked on a military career before becoming a renowned engineer. Faithful to the king during the Fronde rebellion,

he led a number of sieges, which entitled him to the protection of Cardinal Mazarin. Named General Commissioner of Fortifications in 1659, he was entrusted with numerous defensive constructions from Lille to Marseille and, at the same time, supervised work on the Canal du Midi, a major undertaking. Despite incessant conflicts opposing him to the famous Vauban, Louis XIV maintained his trust in the Chevalier de Clerville until his death. At Rochefort, Louis-Nicolas Vardin, Chevalier de Clerville, designed the rampart which encircled the town, as well as the large explosives magazine at Porte du Martrou, which currently houses the conservatory of music and dance.



**2 François Blondel, > a prestigious authority**

👁 Corderie royale, rue Jean-Baptiste Audebert.

An engineer, soldier and diplomat, François Blondel (1618-1686) was a gifted dabbler who slaked his thirst for knowledge by travelling



through Europe, the East and the Antilles. Called to Rochefort for the creation of the Arsenal (1666), he designed some of the first buildings, in particular the emblematic Corderie Royale (royal rope-making factory). In 1670-1671, he was put in charge of building several monumental gateways in Paris (Porte Saint-Antoine, Porte Saint-Bernard and Porte Saint-Denis). At the same time, he was promoted to the po-

**3 Jean-Jacques-Emmanuel de Saccardy, > the network man**

👁 Place Colbert.

The scion of a line of engineers who were from an aristocratic family in Touraine, Jean-Jacques-Emmanuel de Saccardy was a figure whose career was eclipsed by more well-known personalities. Although he was chief engineer for town constructions for a short time only (from 1744 to 1752), he was in charge of a major worksite involving the creation of a catchment and drinking water supply network. The emblematic



monument of this worksite is the fountain on Place Colbert, with sculptures which were made in 1758 by the king's sculptor, Jean-Joseph Bourguignon. A recurrent issue in town history, the supply of drinking water was resolved only in 1876, when the water reservoir on Rue Gallieni began operation.



JJE de Saccardy - Elévation du pont du quai aux vivres (1749)

**4 Onésime Augias, > the draughtsman**

👁 Hôtel de M<sup>me</sup> d'Amblimont, place de La Gallissonnière.

Although he was chief engineer for civil buildings and fortifications in Rochefort from 1752 to 1780, Onésime Augias did not leave behind any significant building inside the arsenal. This was because the period during which he was employed was not favourable to major projects. He is nonetheless a prominent figure of the eighteenth century, in particular because of the precious drawings made by the team he headed. Conserved today at the Historical Service of Defence at Vincennes, these documents were created in the offices of the Hôtel d'Amblimont,

formerly the official residence for naval engineers. They provide a remarkable picture of naval arsenal infrastructures in the eighteenth century, before the implementation of major reworking by his successor, Pierre Toufaire, on the eve of the French Revolution.



**5 Pierre Chevillard, > kingpin of the Hermione**

👁 Place Amiral Dupont.

Pierre Chevillard was part of a shipbuilding dynasty which included his brothers Henri (1737-1810), a chief construction engineer, Jean-Denis (1838-1804), also a construction engineer, and Paul (1748-1820). The man behind the floating prisons of Rochefort, Pierre Chevillard the Elder made numerous drawings for vessels built on the banks of the Charente



between 1768 and 1790. He designed 15 ships with 14 to 74 cannons; these corvettes, ships of the line and frigates were reputed for their ease of handling. He is also thought to have drawn the plans for the famous *Hermione*. This ship

had been borrowed a few years earlier by La Fayette to announce France's support of the American Revolution; it was chosen to be rebuilt as a symbol of the glorious past of the Rochefort arsenal.

**6 Pierre Toufaire, > man of the enlightenment**

👁 Ancien hôpital de la Marine, Avenue Camille Pelletan.



The author of layout drawings for the Hôpital de la Marine (naval hospital), Pierre Toufaire (1739-1794) was undoubtedly one of the most brilliant arsenal engineers. Originally from Châteaudun (Indre-et-Loire department), this man of the Age of Enlightenment was posted at Rochefort in 1774, where he remained until 1792. A talented engineer, a visionary urban planner, an architect and even a decorator, he was responsible for a

multitude of projects which improved both the town and the arsenal. His incontestable qualities led him to be placed in charge of building the barracks at Libourne (Gironde department), of designing the royal foundry at Indret (Loire-Atlantique department) in collaboration with his English colleague William Wilkinson, and of creating the first coke-fuelled foundry in France at Le Creusot (Saône-et-Loire department).

**Learn the story of Rochefort, a town of art and history...**

...in the company of a lecturer-guide certificated by the Ministry of Culture. Your guide knows all about Rochefort and will give you the keys to understanding the scale of a square, the layout of a neighbourhood or the successive metamorphoses of a landscape. If you have any questions, your guide will be pleased to answer them.

**Rochefort belongs to the national network of Villes et Pays d'Art et d'Histoire (Cities and Regions of Art and History)**

The Ministry of Culture and Communication attributes the Villes et Pays d'Art et d'Histoire label to communities committed to enhancing and promoting their cultural heritage, thereby guaranteeing the high quality of actions by the local architecture and heritage host and the lecturer-guides. Currently, a network of 167 cities, towns and regions throughout France are ready to share their knowledge and know-how with you.

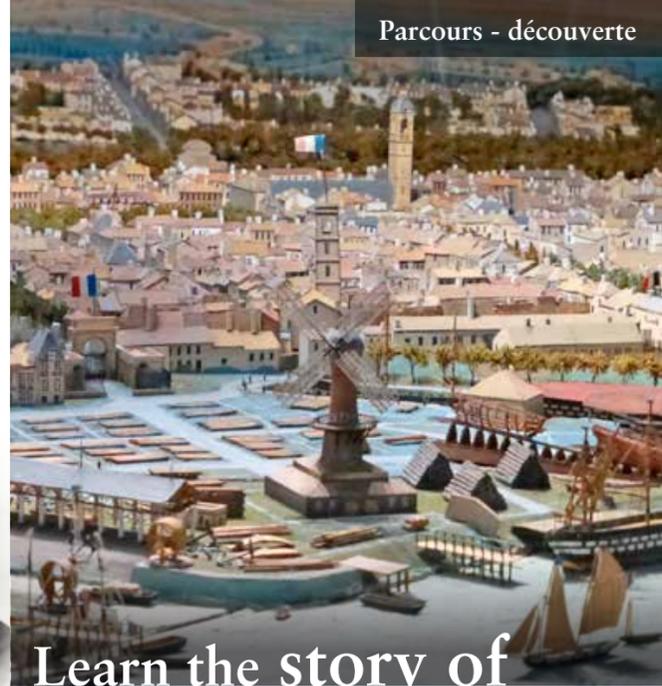
**Nearby,**

The regions of Angoulême, Châtelleraut, Ile de Ré, Melle and Montmorillon, as well as the cities and towns of Cognac, Parthenay, Greater Poitiers, Royan, Saintes and Thouars.

**Information**  
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**To learn more**  
<http://www.vpah-poitou-charentes.org/Rochefort>  
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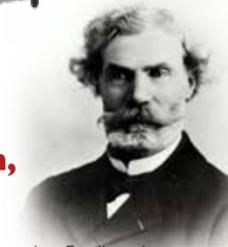
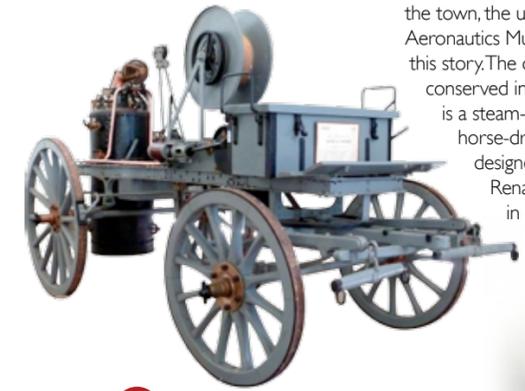




# Learn the story of Rochefort Engineering Genius

« The greatest quality of an engineer is to be a good observer. »

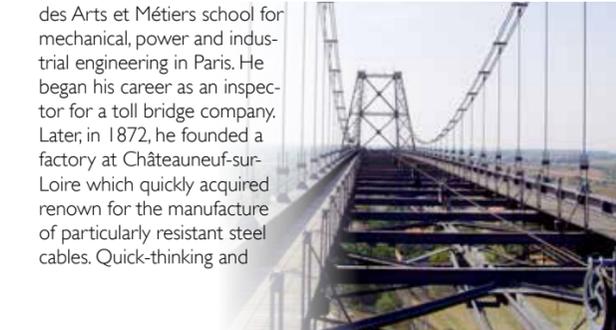
Ferdinand Arnodin, inventor of the transporter bridge; this maxim was displayed inside his factory at Châteauneuf-sur-Loire



### 15 Ferdinand Arnodin, > bridging the waters

👁 Musée national de la Marine, avenue Jacques Demy.

a tireless worker, Ferdinand Arnodin claimed the invention of the concept of the transporter bridge along with the Spanish architect and engineer Martin Alberto de Palacio (1856-1939), with whom he collaborated for the building of the Bilbao Bridge (listed as a World Heritage). In this context, he also designed the transporter bridge of Rochefort, which was inaugurated in 1900.



he headed it until his death. It was here that he developed the La France dirigible in 1884, along with Arthur Krebs; it was

also where the dirigible's first closed-circuit flight was made. Installed in the remarkable Dodin hangar located west of the town, the unusual Naval Aeronautics Museum tells this story. The oldest item conserved in the museum is a steam-powered and horse-drawn winch designed by engineers Renard and Krebs in 1879.

### 13 Ernest Polony, > an open mind

👁 Hôtel de commandement des écoles de gendarmerie (ancienne préfecture maritime), 2 rue Touffaire.

An Ecole Polytechnique graduate, Ernest Polony (1844-1901) was a civil engineer before being named director of hydraulic projects for the arrondissement of Rochefort from 1882 to 1900. Far from limiting himself to development of the arsenal, he also carried out numerous civil projects on the Charente



lighthouse on Ile de Ré and the well-known Fort Boyard. Promoted to the position of director of hydraulic works in 1846, he was made a Chevalier of the Legion of Honour during Napoleon III's visit to Rochefort in October 1852. On this occasion, the sovereign decided to add a new dry dock for top-tier ships to the arsenal. Its design was entrusted to Gustave-Adolphe Garnier, who died before the project was finished. Since 2012, the Napoleon III dry dock has been used as a wet dock for the replica of the frigate *Hermione*.



### 14 Charles Renard, > aeronautical pioneer

👁 Musée de l'aéronautique navale, A. Bignon Roundabout.

Although he was not from the region, Charles Renard (1847-1905) is far from unknown in Rochefort, where a naval aerostation was founded in 1916, representing the start of a long history which ties



projects. As director, he was in charge of finishing the Napoleon III dry dock (currently a basin for the *Hermione*) and of launching a breakwater project designed to protect Fort Boyard. An amateur astronomer, he was also interested in chemistry and politics, which led him to publish tracts, in particular on the proportional representation of minorities and on taxes. With a quick mind and a talent for social brilliance, Alphonse Courbebaisse rose to become a local public figure. Associated to all the major projects for the Rochefort arsenal during the Second Empire and the Third Republic, he designed the second Martrou barracks.

### 12 Alphonse Courbebaisse, > the career of a public figure

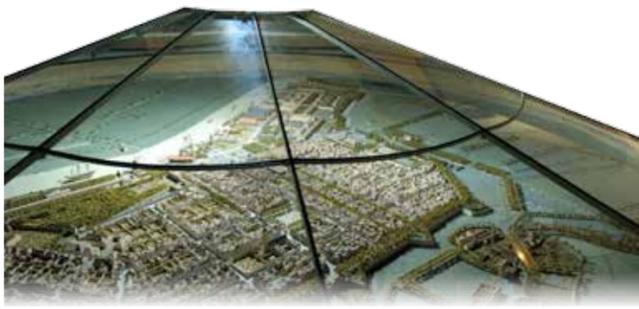
👁 Service historique de la Défense, Rochefort branch, 4 rue du Port.

A graduate of the Polytechnique and Ponts et Chaussées engineering schools, Alphonse Courbebaisse (1807-1886) worked at Cahors and Lorient before being summoned to Rochefort in 1860 to direct the work on hydraulic

### 10 Pierre-Marie Touboulic, > passion leading upward

👁 Musée d'Art et d'histoire, hôtel Hèbre de Saint-Clément, 63 avenue Charles-de-Gaulle.

Born into a family of modest means, Pierre-Marie Touboulic (1783-1859) had an atypical career and learned by experience, far from the classrooms of the top engineering schools. He spent nearly all of his career at Brest, where he was, in turn, a ship's boy at the age of thirteen, administrative clerk, petty officer, chief petty officer and head of the compass workshop before being sent to Rochefort (1833) and becoming a mechanical engineer (1835). This promotion consecrated the life of an imaginative, self-taught engineer who was enthusiastic about any new technology and concerned about transmitting his knowledge. After creating relief maps of Brest and Lorient in record time, he made one of Rochefort in 1834-1835. Today, this remains a precious tool for understanding the arsenal town of Louis XIV and Colbert.



### 11 Gustave-Adolphe Garnier, > designer of dry docks

👁 Napoléon III dry dock - Hermione basin, Place Amiral-Dupont

Originally from the Cognac region, Gustave-Adolphe Garnier (1803-1860) was a brilliant student at the Ecole Polytechnique. By the age of twenty-five, he was director of a civil engineering service. Attached to the Department of the Navy in 1839, he was posted to Rochefort, where he worked on prestigious projects, including the construction of the Phare des Baleines

across the Charente at Martrou before becoming mayor of Rochefort from 1848 to 1850. The town thought of



him as a benefactor and in his honour erected one of the cemetery's most beautiful funerary monuments.

### 9 Jean-Baptiste Hubert, > the art of invention

👁 Musée national de la Marine, 1 place de La Gallissonnière.



The son of a lock keeper from Picardy, Jean-Baptiste Hubert (1781-1845) was a tireless traveller who was a student at the Ecole Polytechnique before being named to the port of Brest and working as an engineer. Appointed to a position at Rochefort in 1805, he moved up to become director of naval construction. With a lively and fertile mind, he directed work on a series of ships, including the Sphinx, the French Royal Navy's first steamship. In addition, he developed numerous inventions (including machines to drill pulleys, spin hemp and twist ropes and a silt mill), symbolizing a period of Rochefort arsenal history which is as

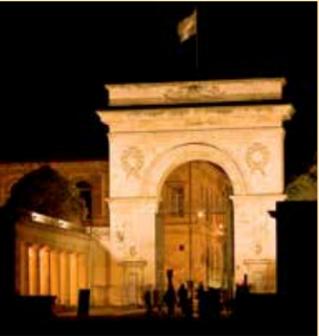


interesting as it is little known and now evoked only through the collections of the Musée National de la Marine (naval museum).

### 7 Antoine Mathieu, > unjustly forgotten

👁 Porte du Soleil, place de La Gallissonnière.

A graduate of the Ecole des Ponts et Chaussées (civil engineering), Antoine Mathieu (1774-1850) was one of the



key figures of the arsenal in the first half of the nineteenth century. He came to Rochefort in 1808 as a temporary engineer and quickly moved up the ladder to become director of shipbuilding, then director of hydraulic construction, a position he held until 1842. A man of neoclassical culture, he designed the town's first metal-framework buildings in 1808 and was also responsible for the rebuilding of several workshops along the Charente. His emblematic work is most assuredly the Porte du Soleil, a monumental arch indicating the main entrance to the arsenal, directly in line with Avenue de Gaulle.

### 8 Louis Masquelez, > the man with a cause

👁 Funerary monument, rue Amiral-Pottier.

A native of Lille and a graduate of the Ecole Polytechnique, the engineer Louis Masquelez (1781-1862) was appointed to a position in Rochefort in 1805. For several decades, he directed the last major phase of draining the swamplands around the town, all the way to Brouage. He redesigned the landscape by implementing a large number of ditches, channels and

artificial prairies; this created a healthier environment for the arsenal town of Louis XIV and Colbert by eradicating the dreadful fevers endemic to the area. Since his engineering skill was obvious to everyone, he was then put in charge of directing work on the building of the suspension bridge at Tonny-Charente (1839-1841). Later, he campaigned for the creation of a tunnel

