



ALBERTO SANTOS DUMONT

PALMIRA (CURRENTLY NAMED SANTOS DUMONT), BRAZIL, 1873 - GUARUJÁ, BRAZIL, 1932

As a child, Santos Dumont read the works of Verne avidly, admired the flight of birds and enjoyed playing with paper balloons in popular festivities. No wonder that, while studying Engineering in France, he gave free rein to his passion. He flew for the first time in 1898 and soon he designed his own balloons: streamlined, light and self-propelled. He received the Henry Deutsch Award after doing a full turn around the Eiffel Tower with a blimp and landing in a nearby park. The evolution of his designs led him to build airplanes later. With the 14bis, a model featuring a motor of his own, he performed in 1906 a 60-meter flight (for some people, the first airplane flight). Because it was impossible for him to pilot and, at the same time, check his pocket watch, Cartier created for him its first wristwatch. The advancements of Santos Dumont contributed significantly to the progress of aeronautics, as he made all his findings available in the public domain. Seeing how airplanes became terrible weapons during World War I, he fell into a depression that lasted for the rest of his life. The Brazilian government gave him an award with a motto inspired in the words of Camões: "Por céus nunca dantes navegados."



JESÚS FERNÁNDEZ DURO

LA FELGUERA, ASTURIAS, SPAIN, 1878 - SAINT-JEAN-DE-LUZ, FRANCE, 1906

A grandson of the businessman Pedro Duro, who established the first Spanish steel mill, Jesús Fernández Duro studied Mechanical Engineering in Paris, where his early readings of the books of Verne inspired him to get his balloon pilot licence. He loved automobiles, and in 1902 performed the longest car trip so far, from Xixón, Spain, to Moscow, Russia, and back, for a total of 10,000 kilometres. Then he turned his sight to the sky. He built a balloon, the *Alcotán*, with which he performed several demonstrations in Spain. In 1905, his support proved essential in the creation of the Real Aero Club de España; and, in 1906, he became the first aeronaut to cross the Pyrenees in a balloon, in a trip from Pau, France, to Guadix, Granada, Spain, a feat that earned him the Pyrenees Cup. However, he never received that award, because he died shortly thereafter due to typhoid fever while he built an airplane in Saint-Jean-de-Luz to compete against another pioneer, Santos Dumont. He was a Knight of the Legion of Honour of France, a country where he was widely appreciated.



JUAN OLIVERT

CULLERA, VALENCIA, SPAIN 1888-1949

The research work of several historians has led to the certainty that Juan Olivert was the first pilot that managed to take off with a motor-propelled airplane in Spain. He was a rich landowner, and he wanted to fly since he was a child, an obsession that earned him in his hometown the nickname Volaoret. He studied Industrial Engineering in Barcelona and invested part of his estate to build a biplane based in a design of his teacher, Gaspar Brunet. The aircraft was assembled at the Rosell i Vilalta workshop of Barcelona, and was transported to Valencia in order to be shown at the Regional Exhibition of 1909. King Alphonse XIII, a big fan of aeronautics, took an interest in the model and pulled some strings so that the town council would contribute with 25,000 pesetas to buy the motor. The army allowed the use of military land plots in Paterna to perform the first speed and motor tests. Olivert never intended to fly but, on 5 September 1909, his airplane rose a couple of feet from the ground and flew forty meters until the scared and inexperienced twenty-two-year-old pilot turned off the motor before the aircraft could fly the skies.



GASPARD-FÉLIX TOURNACHON, NADAR

PARIS, FRANCE, 1820-1910

In 1861, a still anonymous Jules Verne met at the Scientific Press Club the photographer Nadar, maker of portraits, passionate about aerostatics and author of the first aerial photographs in history. At that time, Nadar had undertaken a very ambitious project: building a huge balloon, *Le Géant*, featuring a propeller for navigation and an on-board photographic studio. Jules Verne caught his friend's enthusiasm for flying craft and published in 1863 the novel *Five Weeks in a Balloon*. That year, two scientific toy makers who had developed small helicopters, Gabriel de la Landelle and Gustave de Ponton d'Amécourt, proposed Nadar to create a research and experimentation centre named Society for the Promotion of Aerial Locomotion with Heavier-than-Air Craft, with its address at Nadar's home, and funded with the price of tickets for flights in *Le Géant*. Verne supported the project as a critic and thus, thanks to the meetings of the Society, he was able to access state-of-the-art innovations in aeronautics, which led to the literary creation of an amazing aircraft like Robur the Conqueror's *Albatross*.