EARLY AVIATION IN THE RISING SUN

by David Méchin

When the European powers were building colonial empires during the 19th Century, Japan had little to add to its list of conquests. Closed to the outside world by more than two centuries of isolationism and ruled by the successive Shoguns of the Tokugawa clan, the country was very backward in many respects.

The young emperor Mutsuhito, from the very beginning of his reign in 1868, which was known as the Meiji era, would put his country on the road to modernity by suppressing the feudal system and by implementing a whole series of reforms with the aid of foreign advisers. France played a major role in the modernisation of the Japanese Army and, more particularly, of the Navy, for whom the construction of several warships was begun under the direction of the Émile Bertin, a French naval engineer living in Japan from 1886 to 1890. This new military power allowed the country to become a colonial power itself, at the expense of China in 1895, by imposing its protectorate on Korea and by forcing China to yield the island of Formosa. In 1904, Japan entered into conflict with Russia, whose imperialism clashed with its own in Manchuria.
The Russian trading post of Port-Arthur was besieged and taken at the beginning of 1905 with resultant heavy losses. Then the Russian fleet, having come to an attempted rescue from the Baltic Sea, suffered a crushing defeat in the Strait of Tshushima during May.

BALLOONS AND DIRIGIBLES

The Meiji era coincided with the era of aerial conquest, in which technical progress, producing increasingly more miniature and powerful engines, allowed for the invention of the first, more or less, reliable dirigibles, which were quickly supplanted by the first aeroplanes.

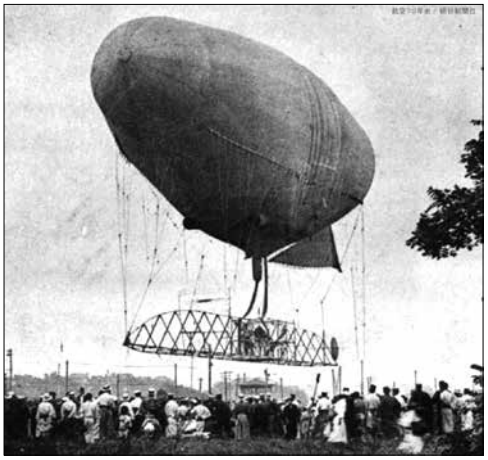
It must be pointed out that Japan, from time immemorial, had a long tradition of using kites. Local history is teeming with stories of the use of kites in lifting men, for military ends, to observe their own or enemy troops, as the story of the bandit Kinsuke Kakinoki recounts. He, wanting to avenge himself for the dispossession of his land, used such an apparatus in 1712 to reach the roof of the dungeon of Nagoya castle, where he dismantled the gold fins from statues of dolphins.

However, the deployment of captive balloons among European armies during the second half of the 19th century aroused the interest of the Japanese military, who made their first experimental ascent in 1874, at the cadet military school. The construction of the balloons took off in 1877, thanks to the purchase of French models. An industrialist by the name of Yamada Isaburô, owner of a lifejacket factory, specialised in their production during 1900 and selling his models to the Japanese Army, who successfully trialled them operationally at the siege of Port-Arthur to regulate artillery fire on enemy positions. This culminated in the creation of a permanent military unit of captive balloons during 1907.

Two years later, on 28 April 1909, the American balloonist Charles Hamilton flew a dirigible of his own design, inflated by hydrogen, from a field at Kawasaki. Driven by a small engine driving a propeller, he covered a modest controlled flight of several hundred metres, with an altitude of no higher than ten metres. Although this first flight was so limited, it excited enormous interest among the Japanese scientific and military worlds, who founded, two months later, the Provisional Company of Military Ballooning Studies (Rinji Gunyo Seiki Kikyu Kenkyu Kai), bringing together, in its administrative council, representatives of the Army, the Navy, the University of Tokyo and the National Meteorological Institute.

This company, which was interested in all types of flying machine, financed the development of a nationally designed dirigible, made by Yamada Isaburô, who probably drew his inspiration from Hamilton's machine. The Yamadi-Shiki No.1 was the first Japanese flying machine to bear the national red disc, the hinomaru, on its rudder. Propelled by a small 14hp engine, it made its first flight from a field at Osaka in September 1910. If not a complete success, for it had to be refilled with hydrogen to be able to do the return flight, it opened the way for other models, created by Yamada or directly from the plans drawn up by the Company of Military Ballooning Studies.

Yamada Isaburô and the Yamadi-Shiki No.1 dirigible.



FIRST HOPS

In parallel with the development of the dirigibles, the first gliders and then powered aeroplanes took flight. On 29 April 1891, an inventor by the name of Ninomiya Tyuuhaci succeeded in getting a large pilotless model plane to take off, utilising a propeller powered by elastic. Encouraged by his success, he undertook to build a machine capable of carrying a pilot and requested financial aid from the Army, which was not forthcoming. He abandoned his research into aviation