

FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE

Ballooning Commission

Hall of Fame

Isaburo Yamada

Inducted 2016



<Isaburo Yamada>

Born 1863 in a samurai family at Wakayama 5 years before Meiji revolution.

At age 26 (1888) learned rubber processing technology from a visiting European engineer

in Osaka. It took 3 years for him to master skill to make rubber floating tube, as life supporting equipment. Established a factory in Shiba-Takanawa, Tokyo. Started to produce tubes. Invented a foldable rubber life supporting tube.

One day a high ranking military officer, friend of him suggested that it is time to invent a weapon to attack enemy from air. This made Isaburo to think of object to float in air.

The first manned balloon in Japan was in 1877. This was to communicate with ally when surrounded with enemy. But it was never used in actual war.

Isaburo started to develop hydrogen balloon in 1897.

In 1900 he invented a cylindrical kite balloon and applied a patent for it.

Army those days found it useful as observation deck. During Japan-Russia war in 1904

two of his kite balloons were used to observe enemy vessels and torpedo at Port Arthur.

In 1907 Isaburo started to develop a balloon with engine.

About those days a British, Hamilton brought an one man airship, 220 cubic m, 18m long and made a demonstration flight at Ueno Tokyo. This gave Isaburo various practical idea for his airship development. He tested the shape of ship by models in running water with red ink in it. Similar idea to wind tonnel. Yamada Airship #1 made the first flight from Osaki to Komaba, Tokyo on 8 September 1910. It was 30m long, 1600 cu.m. 14hp. This was the first practical manned airship produced in Japan

He repeated several flights with this and in February 1911 He constructed Yamada #2 airship which was 33m long, 1500 cu.m. 50hp.

Yamada #3 was completed in July that year which was 1700 cu.m. with twin 150 hp Engines. He has flown distance of 20km with this. This airship was sold to China in 1912. However because of trouble with revolution in China Isaburo could collect only 15% of the price. Isaburo died at the age of 51 due to diabetes.

He was the Japanese pioneer of balloons and airships.

Weather Balloon Mfg. Co. was extablished by Isaburo. Today this company is producing various high altitude weather balloons. And kite balloons.

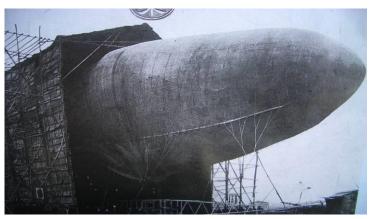
This data is from Kiyoshi Toyoma, Isaburo's great grandchild.



<Japanese Stamp of 1999 showing "Yamada No.1" and aircraft "Kai No.1" >



<Yamada No. 2>



 ${<}{\rm Yamada}$ No.3 at WUHAN China ${>}$



<Isaburo Monument at Wakayama with his great-grandchildren and his daughter>



Y-19沿革8 日立公害調查 大正 山田式繁留気球



Y-20沿革8 日立公害調查 大正 山田式繁留気球

