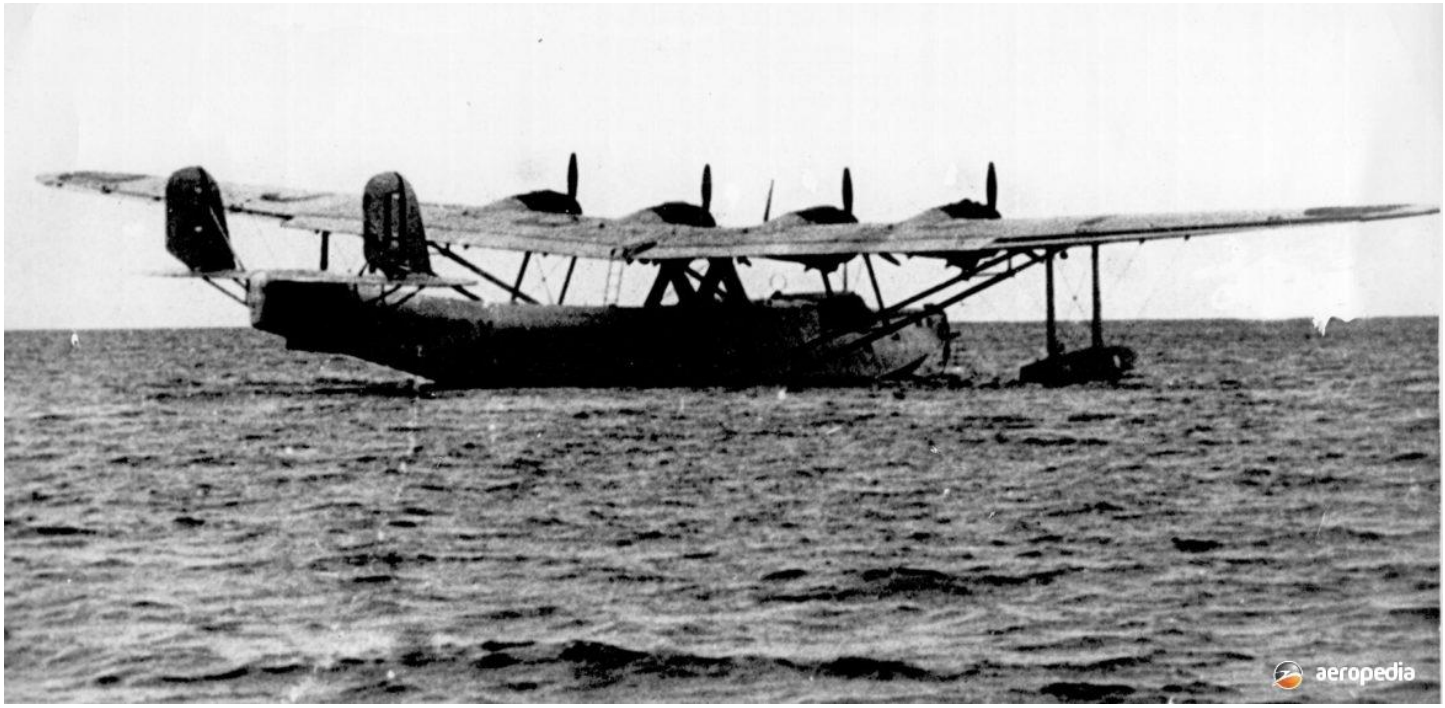
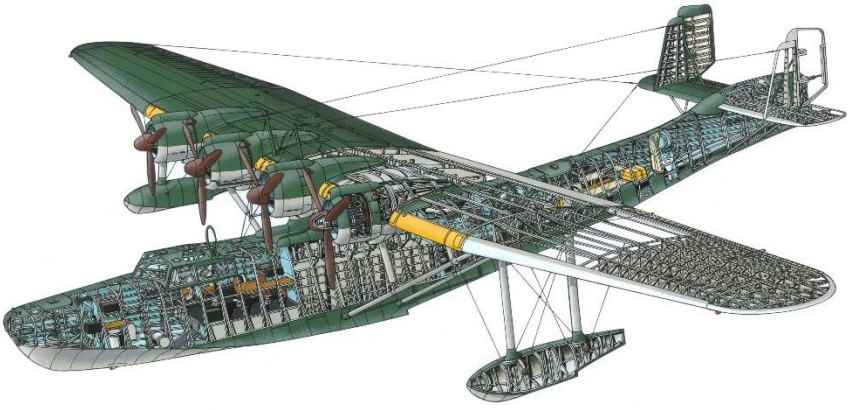
KAWANISHI H6K ‘MAVIS’



Le premier grand hydravion produit par Kawanishi fut le résultat d’un stage des ingénieurs de cette firme chez Short, en Grande-Bretagne. C’était un hydravion quadrimoteur à coque, à aile parasol, et de construction entièrement métallique. Le prototype, désigné **H6K1**, vola pour la première fois le 14 juillet 1936 ; il était équipé de quatre moteurs Mitsubishi Kinsei-43 de 000 Ch, comme les cinq appareils de présérie, les **H6K2**. Ceux-ci furent officiellement adoptés par la Marine Impériale en 1937 et deux d’entre eux , transformés en transports de VIP sous l’appellation **H6K3**, entrèrent en service en janvier 1938. Deux autres furent acquis par *Japan Airlines* pour le transport civil. Avec une nouvelle motorisation de quatre Mitsubishi Kinsei-46 de 1070 Ch, le **H6K4** (***Mavis*** *pour les alliés*) fut, avec 127 exemplaires, la version la plus importante d’une production totale de 217 appareils jusqu’à la fin de 1942. Avec neuf hommes d’équipage, quatre mitrailleuses de 7.7mm, un canon de 20mm et une vitesse de 380 km/h, l’engin pouvait emporter deux torpilles de 800 kg ou une tonne de bombes à plus de 4800 Km de distance ; il était plus performant que les grands hydravions occidentaux du moment : Dornier Do-24, Breguet 521 et Consolidated PBY-2 Catalina. Une sous-version, **H6K4-L**, moins armée mais avec plus de fenêtres, pouvait transporter 18 passagers. Une nouvelle motorisation, constituée de quatre Mitsubishi Kinsei 51 de 1300 Ch donna naissance à la version **H6K5**, produite à 36 exemplaires. Ce modèle avait des performances supérieures à celles des grands et plus lourds hydravions américains de seconde génération comme les Consolidated PB2Y-3 Coronado et Martin PBM-3 Mariner. Mais ces qualités étaient en partie dues à l’habituel défaut de la plupart des avions japonais de cette époque : absence de blindage et de protection des réservoirs.

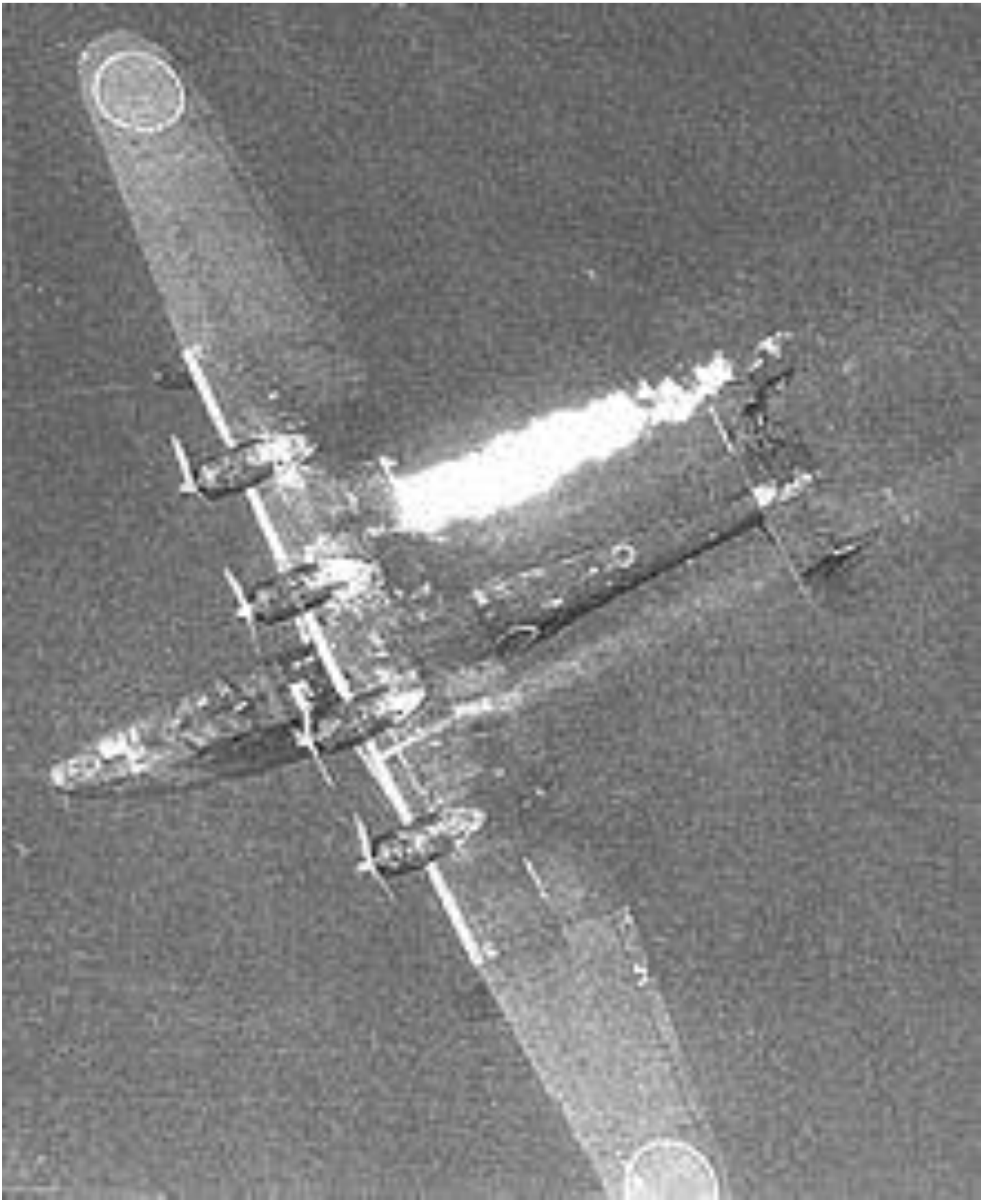


Source : https://www.avionslegendaires.net/avion-militaire/kawanishi-h6k-mavis/

Version anglaise wikipédia

The **Kawanishi H6K** was an Imperial Japanese Navy flying boat produced by the Kawanishi Aircraft Company and used during World War II for maritime patrol duties. The Allied reporting name for the type was **Mavis**; the Navy designation was "Type 97 Large Flying Boat" (九七式大型飛行艇).

Design and development



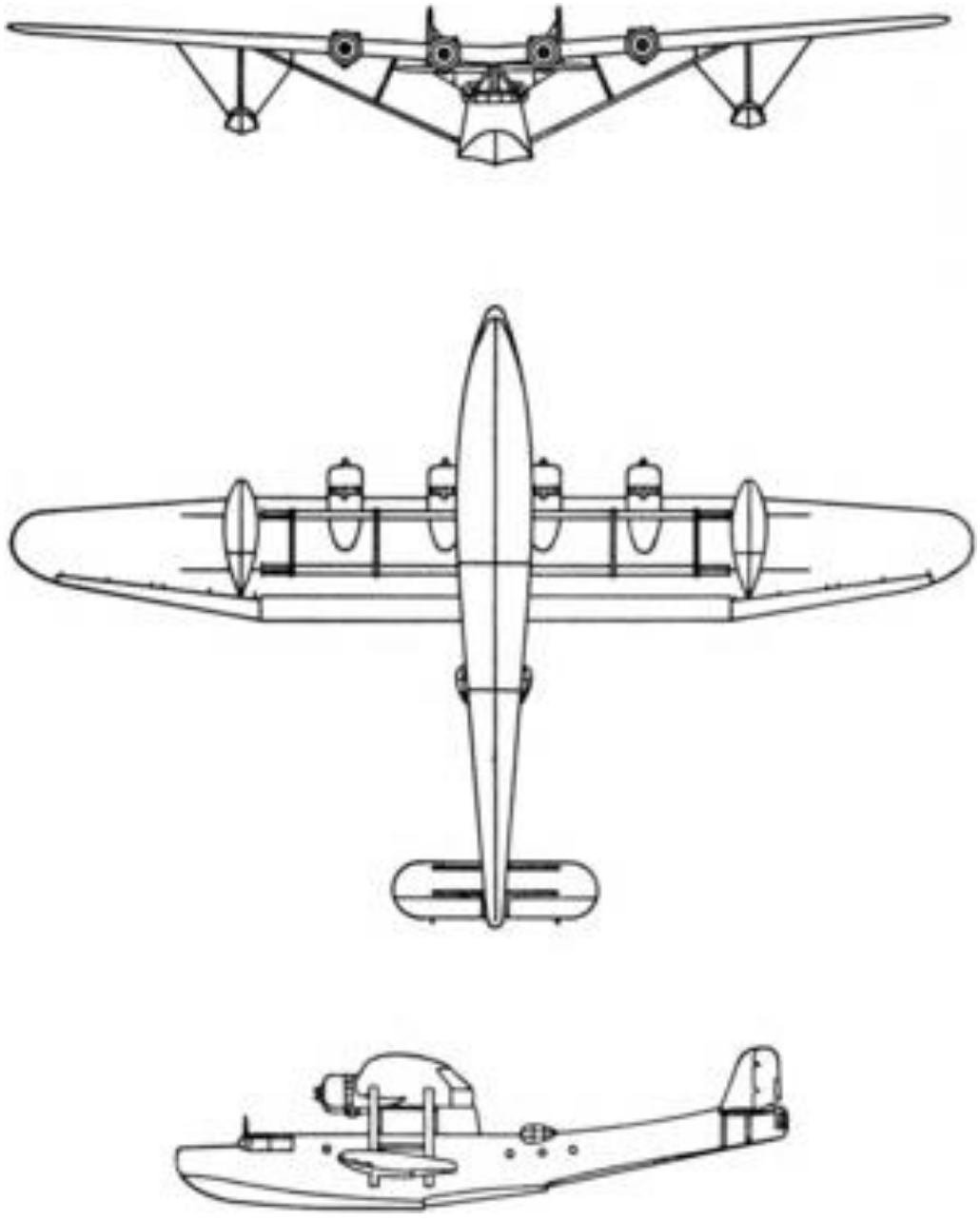
An H6K with a burning wing.

The aircraft was designed in response to a Navy requirement of 1934 for a long-range flying boat and incorporated knowledge gleaned by a Kawanishi team that visited the Short Brothers factory in the UK, at that time one of the world's leading producers of flying boats, and from building the Kawanishi H3K, a license-built, enlarged version of the Short Rangoon.[2] The "Type S", as Kawanishi called it, was a large, four-engined monoplane with twin tails, and a hull suspended beneath the parasol wing by a network of struts. Three prototypes were constructed, each one making gradual refinements to the machine's handling both in the water and in the air, and finally fitting more powerful engines. The first of these flew on 14 July 1936 and was originally designated "Navy Type 97 Flying Boat", later H6K. Eventually, 217 were built.[3]

Operational history

H6Ks were deployed from 1938 onwards, first seeing service in the Sino-Japanese War and were in widespread use by the time the full-scale Pacific War erupted, in December 1941. At that time of the war, four *Kōkūtai* (air groups) operated a total of 66 H6K4s.[4] The type had some success over South East Asia and the South West Pacific. H6Ks had excellent endurance, being able to undertake 24-hour patrols, and were often used for long-range reconnaissance and bombing missions. From bases in the Dutch East Indies, they were able to undertake missions over a large portion of Australia. However, the H6K became vulnerable to a newer generation of more heavily armed and faster fighters.[4] It continued in service throughout the war, in areas where the risk of interception was low. In front-line service, it was replaced by the Kawanishi H8K.

Specifications (H6K4 Model 22)



General characteristics

- **Crew:** 9
- **Length:** 25.63 m (84 ft 1 in)
- **Wingspan:** 40 m (131 ft 3 in)
- **Height:** 6.27 m (20 ft 7 in)
- **Wing area:** 170 m^2 (1,800 sq ft)
- **Empty weight:** 11,707 kg (25,810 lb)
- **Gross weight:** 17,000 kg (37,479 lb)
- **Max takeoff weight:** 21,500 kg (47,399 lb)
- **Powerplant:** 4 × Mitsubishi Kinsei 43 14-cylinder air-cooled radial piston engines, 750 kW (1,000 hp) each for take-off
  738 kW (990 hp) at 2,800 m (9,186 ft)
  (**H6K4 Model 2-3** and **H6K4-L** 694 kW (930 hp) Kinsei 46)

Performance

- **Maximum speed:** 340 km/h (210 mph, 180 kn) at 4,000 m (13,123 ft)
- **Cruise speed:** 222 km/h (138 mph, 120 kn) at 4,000 m (13,123 ft)
- **Range:** 4,797 km (2,981 mi, 2,590 nmi)
- **Ferry range:** 6,080 km (3,780 mi, 3,280 nmi)
- **Wing loading:** 100 kg/m^2 (20 lb/sq ft)
- **Power/mass:** 0.1731 kW/kg (0.1053 hp/lb)

Armament

- **Guns:**
- 1× 7.7 mm (0.30 in) Type 92 machine gun in nose
- 1× Type 92 machine gun in spine
- 2× Type 92 machine guns in waist blisters
- 1× 20 mm (0.79 in) Type 99 Mark 1 machine gun in tail turret
- **Bombs:**
- 2× 800 kg (1,764 lb) torpedoes

or

- 1,000 kg (2,205 lb) of bombs

Source : https://en.wikipedia.org/wiki/Kawanishi_H6K