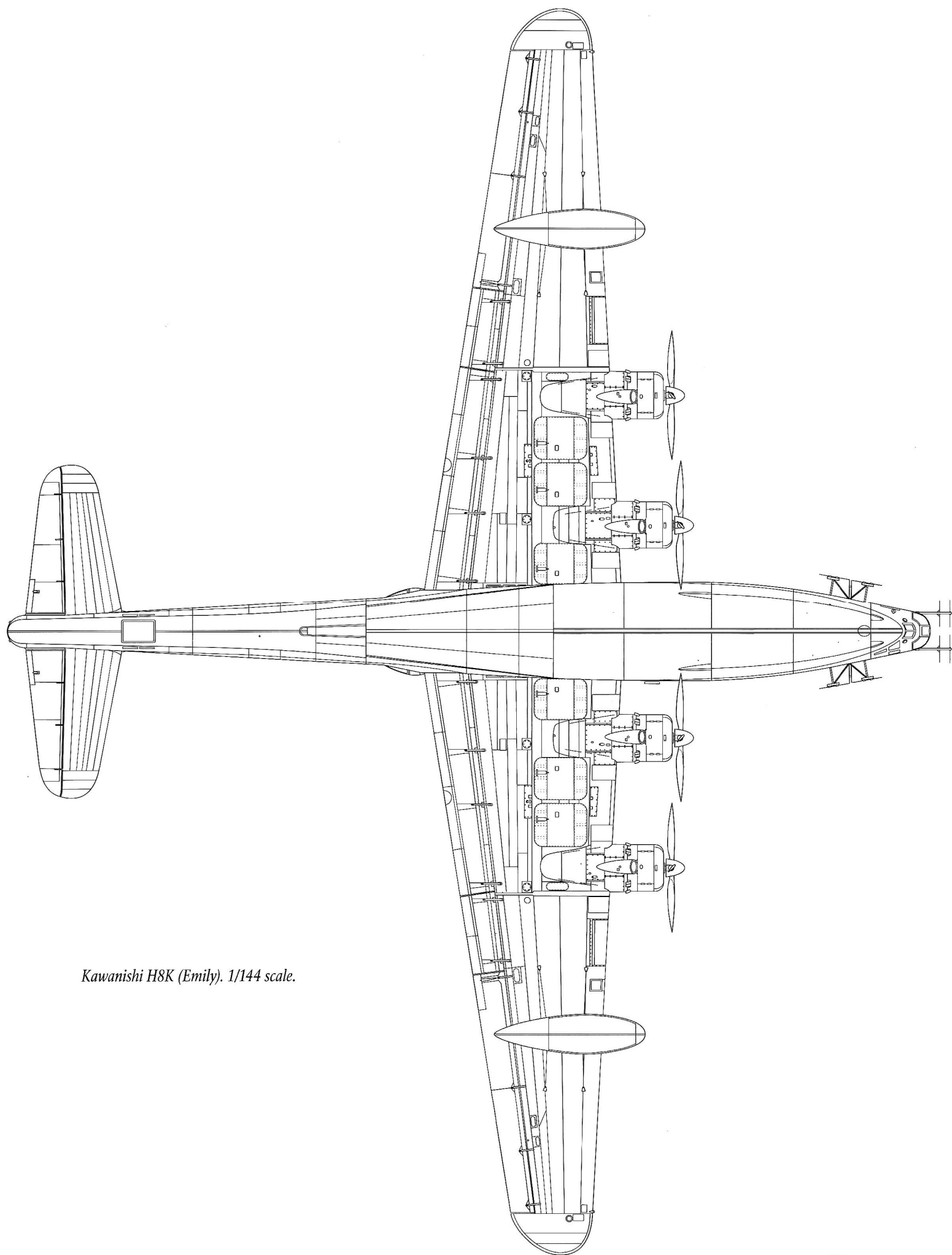
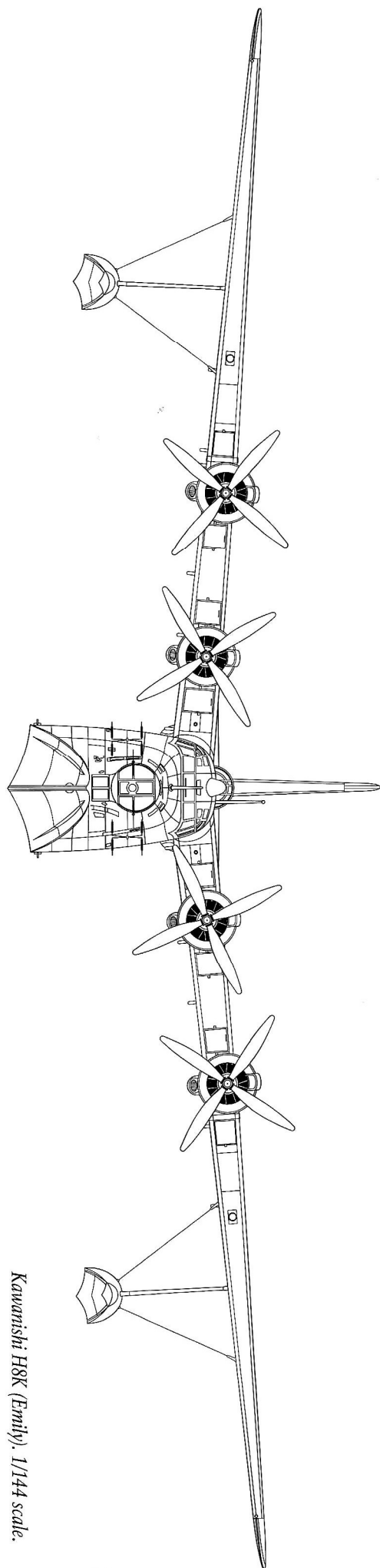


Kawanishi H8K (Emily). 1/144 scale.



Kawanishi H8K (Emily), 1/144 scale.



Kawanishi H8K (Emily). 1/144 scale.

to fly a reconnaissance mission over Pearl Harbor to locate the positions of enemy aircraft carriers. The task was very important for a planned invasion of Midway Island. The operation was aborted because enemy warships were spotted at the rendezvous point at the French Frigate Shoals Atoll. The new flying boat was positively evaluated, although take-off was very difficult for pilots due to pitching of the aircraft. A new procedure was developed to make the take-off easier. A red *Kanzashi* (ribbon) was placed on the pitot tube in front of the windscreen. During take-off the pilot would keep the *Kanzashi* aligned with the horizon, thus maintaining a 5° angle of attack.

Production of the H8K flying boats was slowly starting. Between 1941 and 1942, only fourteen H8K1 Model 11 flying boats were built. Some of them were fitted with more advanced Mitsubishi *Kasei* 12 engines. The new flying boats with their outstanding range soon became a useful reconnaissance tool. The H8K flying boats flew reconnaissance missions over the Indian Ocean, reaching India. They bombed Colombo, Trincomalee, and Calcutta. They would reach the northern shores of Australia and flew over the mid Pacific. The changing conditions of warfare called for an increase in armour protection of the boat. At the request of the *Kaigun Koku Honbu*, the H8K2 Model 12 was created. All its fuel tanks were protected and the crew's seats were protected by 20 mm armour plates. The fuel tank protection comprised several layers of hardened rubber, layered with a substance that expanding on contact with fuel. The aircraft was powered by Mitsubishi MK4Q *Kasei* 22 engines with water and methanol injection, producing 1,850 hp at take-off. A new cowling for the *Kasei* 22 engines was tested on the first H8K prototype. The higher power of the engines allowed for an increase in take-off weight, which allowed an enlarged fuel capacity to 18,880 litres. The shape of the bow and the vertical tail was changed. Defensive armament was strengthened to five Type 99 Model 1 20 mm cannons and four Type 92 7.7 mm machine guns. The new H8K2 Model 12 version had a better performance, including a 100 m shorter take-off run. Starting from 1943, H8K flying boats started to replace the H6K. They were used by the *Yokohama Kokutai*, *Yokosuka Kokutai* and 14th *Kokutai*, later renamed to 801st *Kokutai*, 851st *Kokutai* and 802nd *Kokutai* respectively.

With the Allies' developing offensive in the Pacific, the H8K flying boats were frequently utilized for evacuating Japanese garrisons from islands isolated by the enemy. The successful experiment with the 3-*Shiki Ku* 6-Go *Musen Denshinki* (Type 3 airborne radar Model 6) or the H-6 radar installation on the H6K4 flying boat led to equipping the H8K boats with the same system. The Yagi type antennae were mounted in the aircraft's bow. This increased the possibility to search for sea targets. In the same year two more units began using the H8K1. They were the 901st *Kokutai* and 902nd *Kokutai*, which flew patrol missions and convoy protection operations.

Since the H8K flying boats were more and more frequently utilised as transport aircraft, their home factory in Kohnan rebuilt the first H8K1 prototype into a transport variant, with the factory designation K-30. In November 1943 the dorsal turret and the port and starboard beam gun positions were removed. The fuselage interior was modified to house 41 passenger seats. Along the fuselage sides, round windows were installed. After tests the aircraft was sent to Yokosuka, where it served as an executive aircraft for the Headquarters. It was given the name *Asahi* (Morning sun). Simultaneously the Kawanishi factory in Naruo began producing the transport version, designated "Type 2 Navy transport flying boat Model 32 *Seiku*" (H8K2-L Model 32). The boat's large fuselage was divided into two decks. The lower deck stretched from the bow to the end of the second step. It was divided into two compartments. The top deck, divided into three compartments, started at the wing centre section and ended at the tail. The fuselage, depending on its version, was adapted to mount 29 seats for VIPs or 64 seats for troops. Defensive armament was limited to one flexible Type 2 13 mm machine gun in a bow turret and one Type 99 Model 1 20 mm cannon in a tail turret. In 1944 a total of 24 and in 1945 12 H8K2-L flying boats were built. Most of them served in the transport 1081st *Kokutai*.

- Four 14-cylinder, air-cooled, radial Mitsubishi MK4T-B *Kasei 25 Otsu* (Ha-32-25 *Otsu*) with 1,825 hp (1,342 kW) attake-off, metal four-blade propellers with variable pitch and 3.9 m diameter, fuel capacity 18,880 l (H8K4).
- **Armament:**
 - Five flexible Type 99 Model 1 20 mm cannon and three flexible 7.7 mm Type 92 machine guns (H8K1 prototype).
 - Two flexible Type 99 Model 1 20 mm cannon and five flexible 7.7 mm Type 97 machine guns (H8K1 Model 11).
 - Five flexible Type 99 Model 1 20 mm cannon and four flexible 7.7 mm Type 92 machine guns (H8K2, H8K3, H8K4).
 - One flexible Type 99 Model 1 20 mm cannon and one flexible 13 mm Type 2 machine gun.
- **Bomb load:** Up to 2,000 kg, usually 2x800 kg, 8x250 kg, 16x60 kg bombs or two Type 91 torpedoes of 800 kg each.

Type	H8K1 Model 11	H8K2 Model 12	H8K2-L Model 32	H8K3 Model 12	H8K4 Model 22	H8K4-L Model 33
Dimensions						
Wing span [m]	38	38	38	38	38	38
Length [m]	28.118	28.130	28.130	28.130	28.130	28.130
Height [m]	9.150	9.150	9.150	9.150	9.150	9.150
Wing area [m ²]	160.00	160.00	160.00	160.00	160.00	160.00
Weights						
Empty [kg]	15,500	18,380	16,900	18,470	18,200	15,233
Takeoff [kg]	24,500	24,500	26,683	24,500	24,500	26,683
Maximum takeoff [kg]	31,000	32,500			32,500	
Payload [kg]	9,000	6,120	9,783	5,930	6,300	11,450
Wing loading [kg/m ²]	153.12	153.12	166.77	153.12	153.12	166.77
Power loading [kg/hp]	4.00	3.31	3.61	3.31	3.50	3.65
Performance						
Maximum speed at 5,000 [m]	433	454	420	470	454	420 ¹
Cruising speed at 4,000 [m]	296	296	296			296
Landing speed [km/h]	126	130	130			130
Climb to 5,000 m in	11'53"	10'26"	10'37"	7'30" ²	10'12"	
Ceiling [m]	7,630	9,120	8,780		9,120	
Range [km]	4,720	6,420	2,397	4,700	2,350	
Maximum range [km]	7,200	7,160	4,440	8,220		
Flight time [h]	15.9	24.3	21.1			

¹ at 4,000 m.

² at 4,000 m.

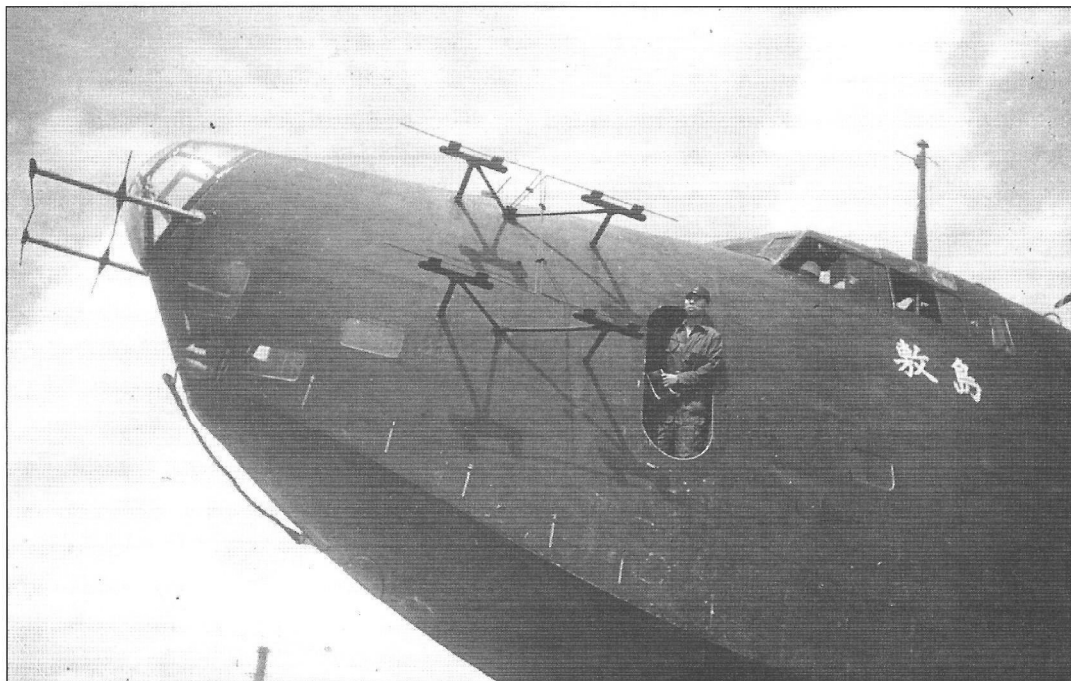
Production

Kawanishi Kokuki Kabushiki Gaisha in Naruo and Kohan	
H8K1 prototype (1940)	1
H8K1 pre-production (1941)	2
H8K1 Model 11 (1941–1942)	14
H8K2 Model 12 (1943–1945)	112
H8K2-L Model 32 (1943–1945)	36
H8K3 Model 22 (prototypes 1944)	2
H8K4 Model 33 (rebuilt in 1945 from H8K3)	2
Total	167

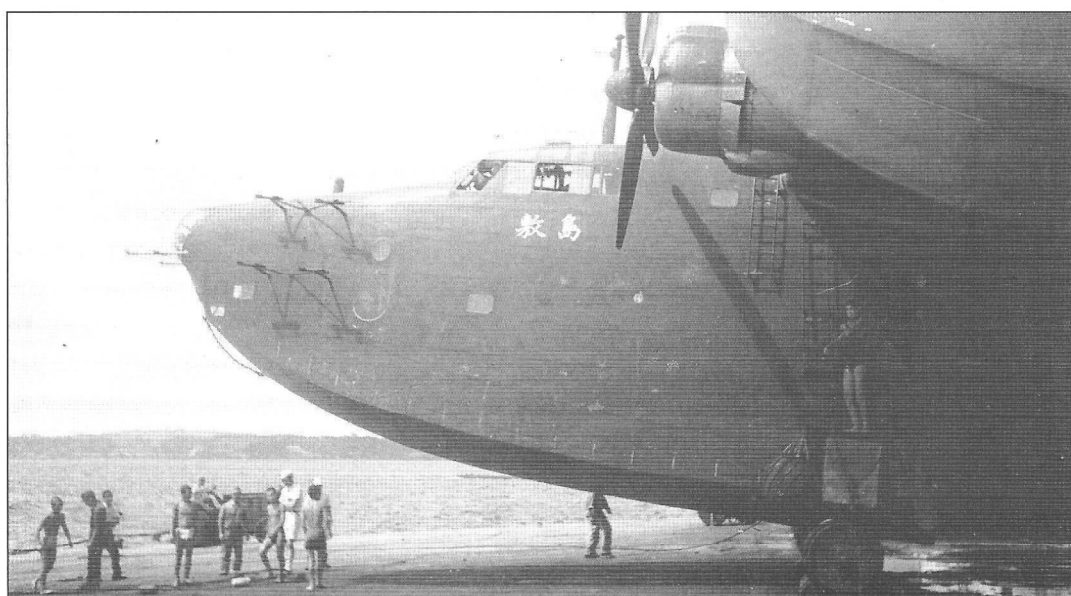
Kawanishi H8K1
transport version,
named “敷島”(Japan).

It was used for
transporting high-
ranking officers. The
aircraft was equipped
with the 3-Shiki
Ku 6-Go Musen
Denshinki 4-Gata sea
search radar with the
Yagi type antennae
mounted in the nose
section of the fuselage.

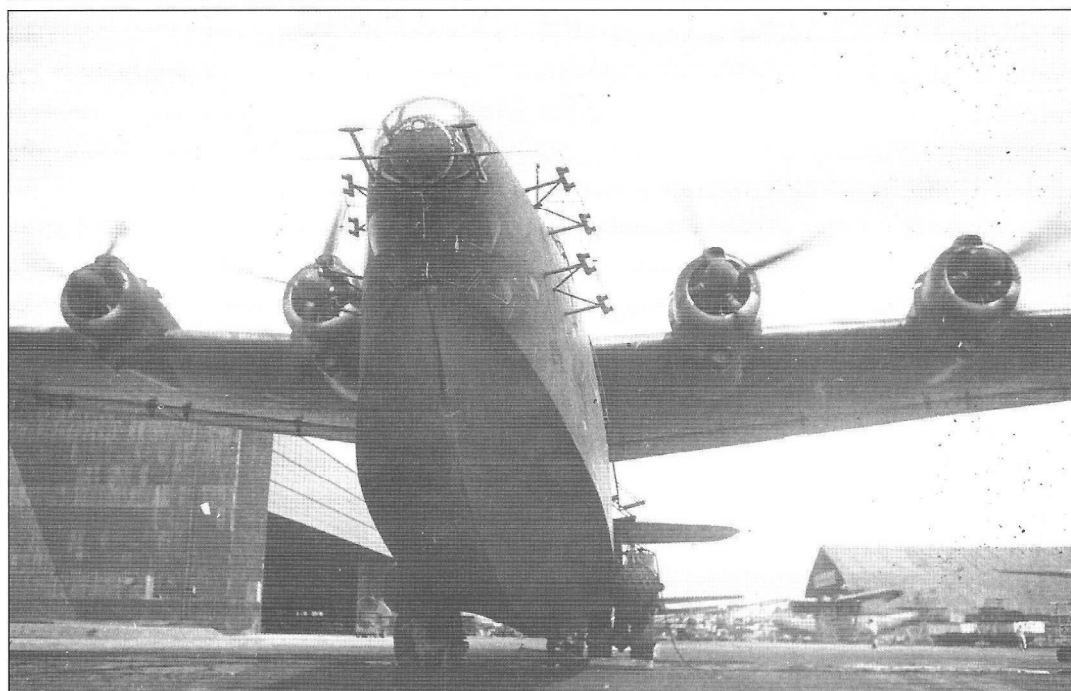
This was not for
patrol but for avoiding
the enemy.



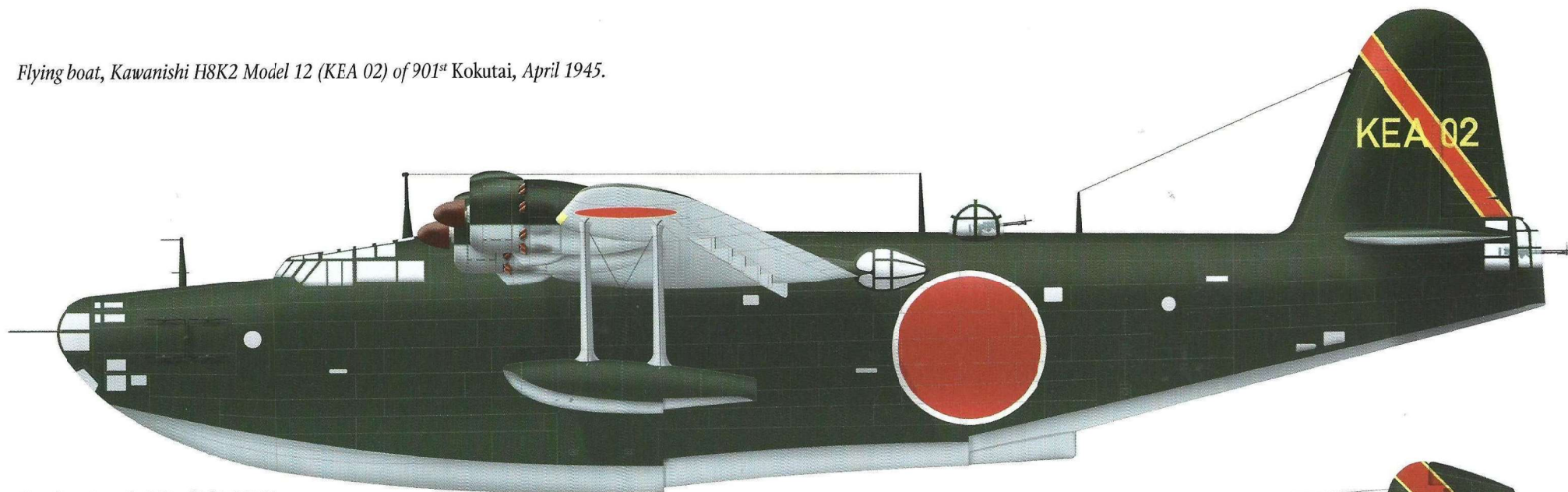
Side view of the 敷島's
front section of the
fuselage with a set of
the Yagi type radar
antennae.



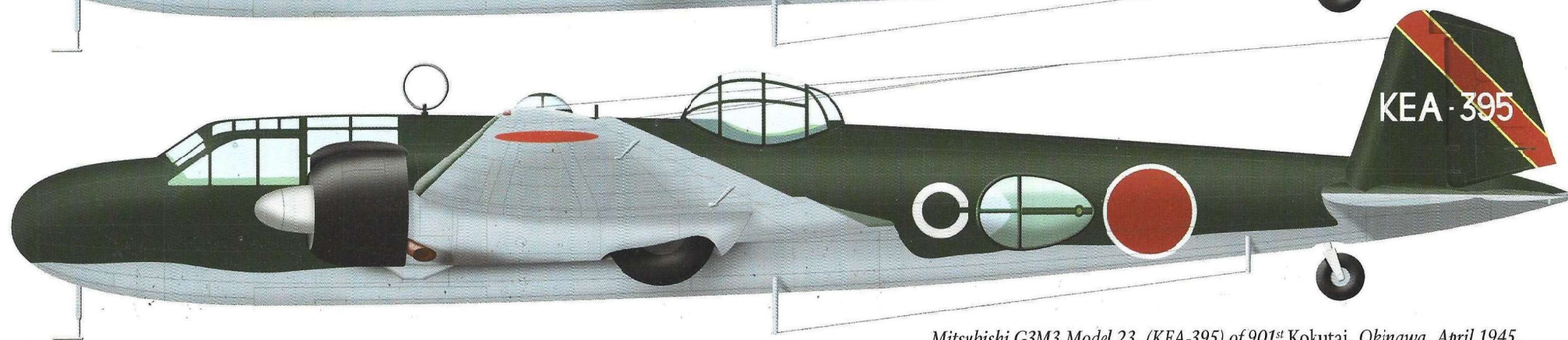
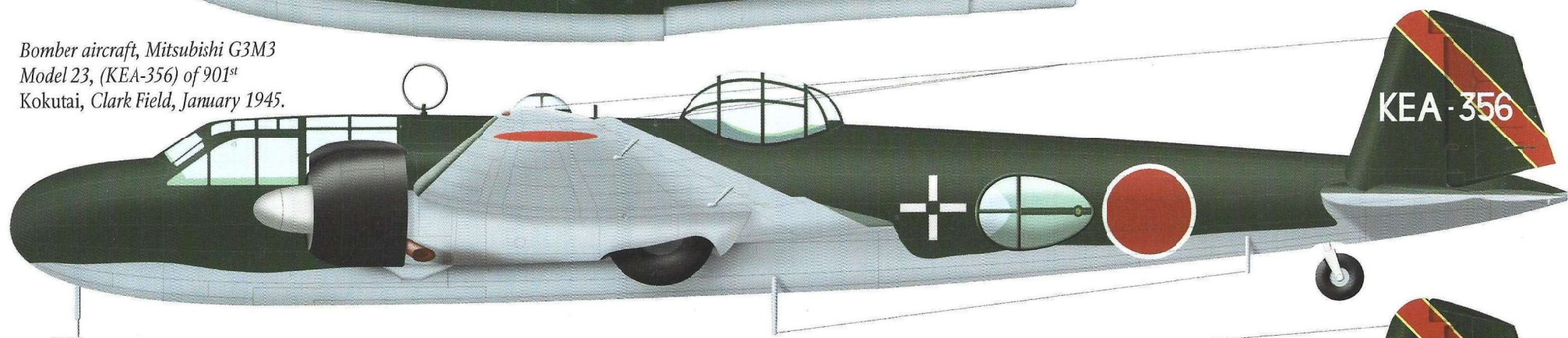
Front view with a set of
the type radar antennae.



Flying boat, Kawanishi H8K2 Model 12 (KEA 02) of 901st Kokutai, April 1945.



Bomber aircraft, Mitsubishi G3M3 Model 23, (KEA-356) of 901st Kokutai, Clark Field, January 1945.



Mitsubishi G3M3 Model 23, (KEA-395) of 901st Kokutai, Okinawa, April 1945.