# A6M3 Zero Type 32

## eduard

### 1/48 Scale Plastic Model Kit



# ProfiPACK edition

The Mitsubishi Zero became the symbol of the Japanese air power during WWII. The A6M3 Model 32, introduced by the Japanese Naval Air Force in 1942, was initially considered a new type of aircraft by the Allied forces.

During the 1920s and 1930s the Japanese aircraft industry was oriented towards the production of foreign license-built aircraft. However, the armed forces, especially the Navy with regard to the specifics of the Chinese and Pacific battlefields, came up with requirements that foreign aircraft designs did not offer. Hence, Mitsubishi Heavy Industries developed the Type 96 naval fighter aircraft, better known as the A5M Claude. The head of the design team was a young Japanese engineer, Jirō Horikoshi. With an engine that lacked some power, he managed to design a light and fast fighter with a fixed landing gear, which had no comparison in the world regarding maximum speed. In October 1937, Mitsubishi and Nakajima were approached to develop prototype 12-shi Carrier-based Fighter. The requirements were so extreme, and in some cases contradictory, that the two design teams investigated whether they could be less stringent. Nakajima eventually withdrew from the project, while the criteria for the prototype were even raised based on experience on the Chinese battlefield.

In the end, Horikoshi's team managed to meet the technical specifications, not only thanks to the aerodynamic design and a new type of light alloy used for the aircraft's skin, but also thanks to the Nakajima Sakae 11 engine. During the flight tests, the wing surface suffered cracking during overload, and aileron control during high-speed maneuvers had also to be addressed. The new fighter had powerful armament of two cannons and two machine guns, extremely long range (over 1,800 km) and excellent maneuverability. The new fighter reached top speed of 533 km/h at an altitude of 4,550 m. However, it lacked armor and other protective features and the structural speed limit was only 600 km/h.

The new aircraft entered service in 1940 powered by 940 hp engine Sakae 12 and received the official designation Rei shiki Kanjō sentōki (Type 0 carrier fighter), with the "zero" being derived from the imperial year 2600 (1940). Japanese pilots usually abbreviated it as Rei-Sen. That was also the origin of the name Zero, often used by Allied pilots instead of the official code name, derived from the male name Zeke. As part of the Navy's system, the new aircraft was given the designation A6M, where A6 meant that it was the sixth type of carrier fighter to enter service, and M stood for the Mitsubishi company name. Zeros, specifically the A6M2 Type 11, had been successfully deployed on the Chinese battlefield since the summer of 1940, but their existence eluded Western intelligence because no one wanted to believe reports from China that suggested the Japanese had a world-class fighter.

#### Further development

Further modifications to its design were made during 1941, creating the A6M2 Type 21. Total of 740 A6M2 aircraft were produced by Mitsubishi by June 1942 with additional 800 delivered by Nakajima by February 1944. The gun armament was improved and variants with magazines for up to 150 rounds could be used on the Type 21.

After the Allied landings on Guadalcanal, the IJN fighter units came up with a request for a Zero with the Sakae 21 engine, but with the range comparable to A6M2. Designers at Mitsubishi modified the wing including design of fuel tanks. The wing looked similar to the one of Type 21, but the range was even 100 miles longer. This version was designated A6M3 Type 22, the extended gun barrels planes were designated Type 22a.

Another version was the Type 52 with shortened wing-span. Production began in early 1944 and Type 52 was very similar to the Type 22a. Soon the exhaust system was modified to help increase the speed of the aircraft. The Type 52a had enlarged cannons ammunition supply of 125 rounds per weapon. The Type 52b saw the installation of a 13.2 mm machine gun on the right side of the fuselage. For the Type 52c, two 13.2 mm machine guns were fitted in the wing and the 7.7 mm machine gun on the left side of the fuselage was deleted. Eight racks for small caliber bombs or rockets were added to the wing. For night-fighting purposes, a forward-firing cannon in the fuselage behind the cockpit was installed in some Zeros, designated as A6M5-S. In total, Mitsubishi and Nakajima produced more than 5,000 A6M5s.

The last combat-deployed variant of the Zero was an aircraft with a reinforced structure for dive bomber purpose (Type 62). Later, the A6M7 was equipped with the Sakae 31 engine producing 1,130 hp. This fighter-bomber variant was designated as Type 63.

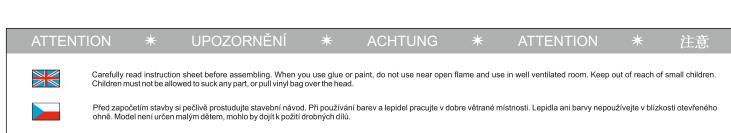
Several hundred aircraft were also modified from the A6M2 Zero Type 21 and A6M5 Type 52 to the two-seaters A6M2-K and A6M5-K, produced from January 1943 and May 1944 respectively.

#### The kit: A6M3 Zero Type 32

In 1942, Mitsubishi started mass-production of Zeros with a two-stage compressor Sakae 21 engine, delivering up to 1,130 hp. The heavier engine required modification of the engine cowling and also fuselage had to be shortened as well as the wingspan. The modified version was designated A6M3 Type 32. The speed limit was raised but the range was reduced, and 340 examples were produced from June to December 1942. The Allies at first believed that this was a new type of fighter. Therefore, they gave it a separate codename Hap, later changed to Hamp.

The Zero Type 32 was put into service on several aircraft carriers in the second half of 1942, but did not stay in that role for long. The backbone of the carrier force continued to be the Zero Type 21, gradually supplemented by the Type 22 and later the 52.

The main areas where the Zero Type 32 was deployed from mid-1942 onwards were New Guinea, Indonesia and New Britain. Because of their shorter range, these aircraft were used primarily for airfield defense, bomber interception and, where possible, escort flights. Allied airmen encountered them over northwestern Australia, during the fighting over the Solomon Islands and during the raids on Rabaul.



#### INSTRUCTION SIGNS \* INSTR. SYMBOLY \* INSTRUKTION SINNBILDEN \* SYMBOLES \* 記号の説明





OHNOUT



**BROUSIT** 



OPEN HOLE SYM
VYVRTAT OTVOR SYM

SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ

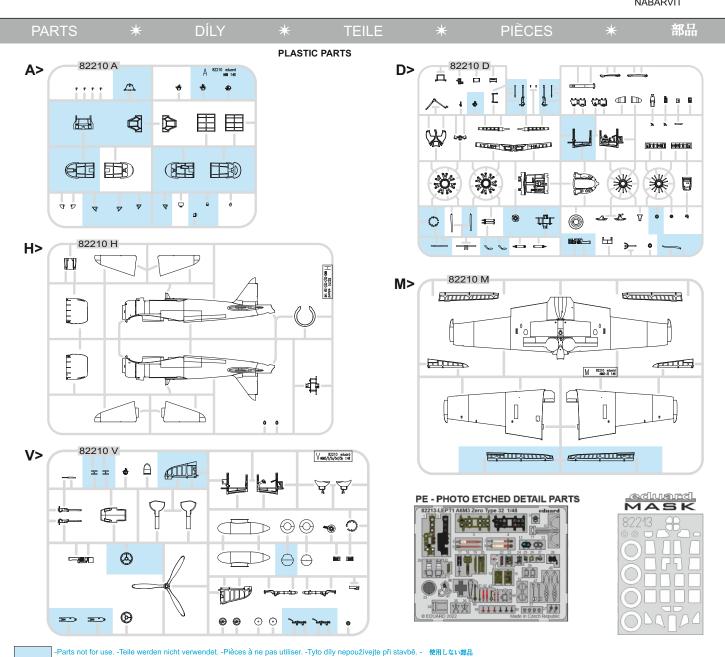


REMOVE REVERSE SIDE ODŘÍZNOUT OTOČIT

(2)



APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT



**FARBEN** 

GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H2	C2	MMP-047	BLACK
H8	C8		SILVER
H11	C62	MMP-001	FLAT WHITE
H12	C33	MMP-047	FLAT BLACK
H24	C58		ORANGE YELLOW
H25	C34		SKY BLUE
H47	C41	MMP-012	RED BROWN
H58	C351	MMP-059	INTERIOR GREEN
H63	C57		METALLIC BLUE GREEN
H70	C60	MMP-056	GRAY
H77	C137	MMP-040	TIRE BLACK

C47

**BARVY** 

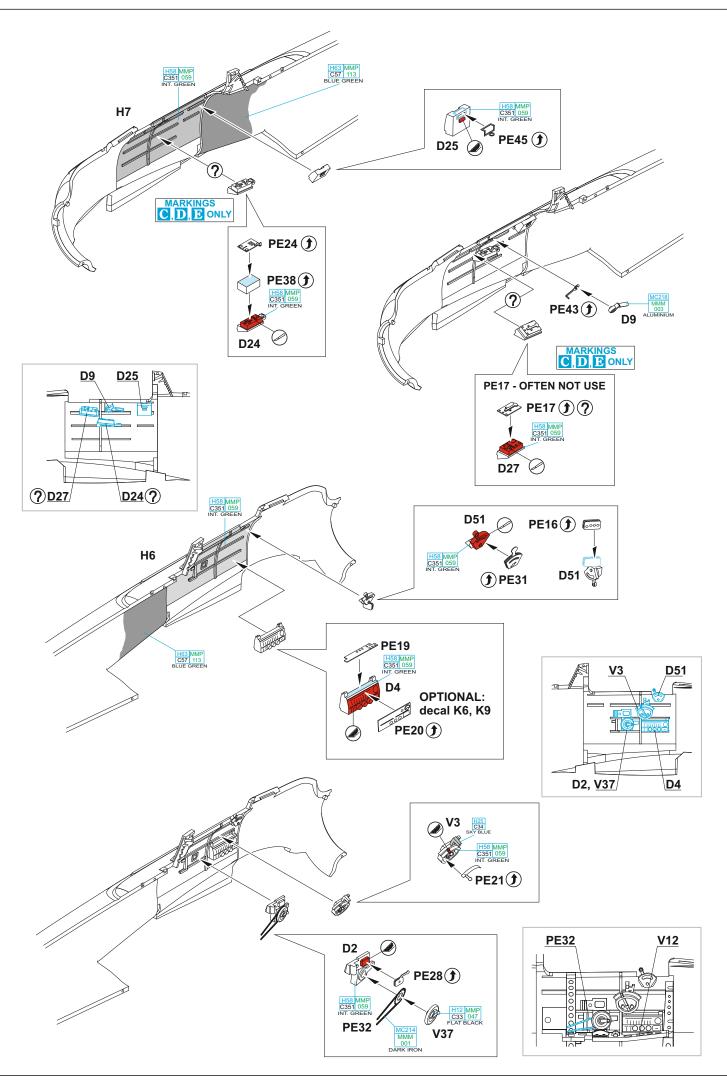
CLEAR RED

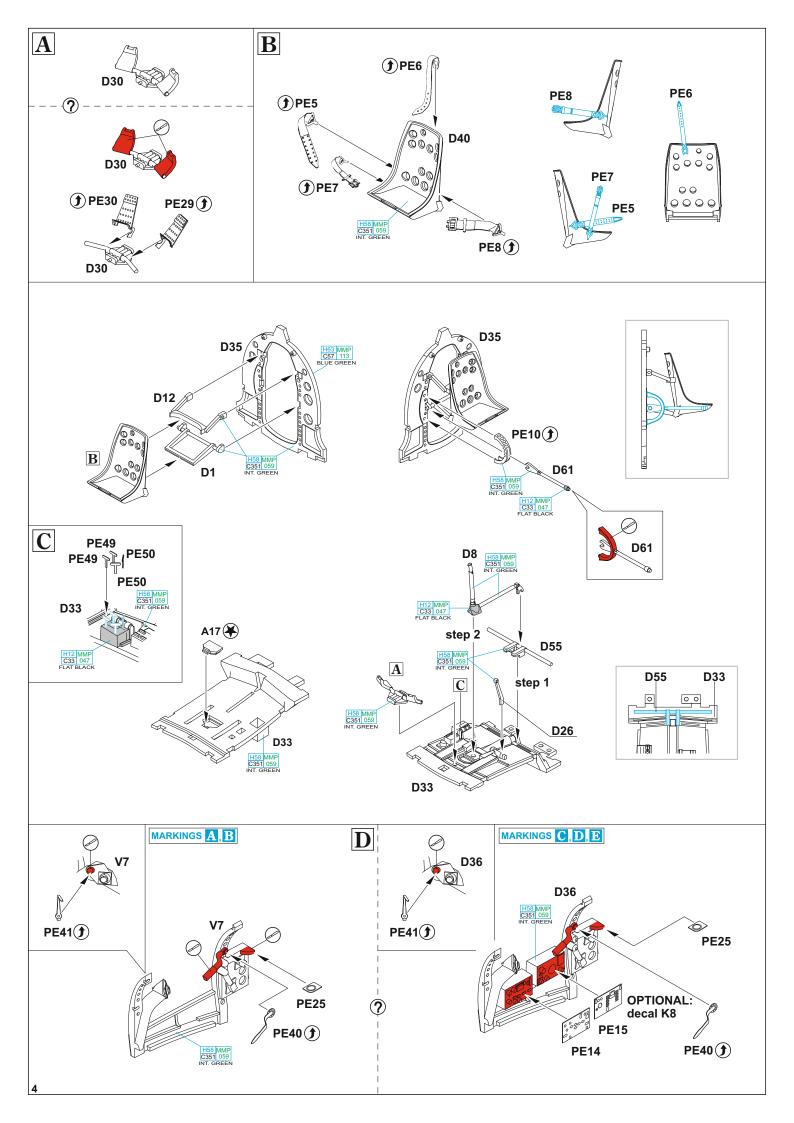
GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H93	C50		CLEAR BLUE
H336	C336		HEMP
H417	C117	MMP-051	RLM76 LIGHT BLUE
	C124		DARK GREEN
	C125	MMP-108	COWLING COLOR
	C131	MMP-115	RED BROWN
Mr.METAL COLOR		METALLICS	
MC214		MMM-001	DARK IRON
MC218		MMM-003	ALUMINIUM
MC219		MMM-009	BRASS
Mr.COLOR SUPER METALLIC		METALLICS	
SM201		MMC-001	SUPER FINE SILVER

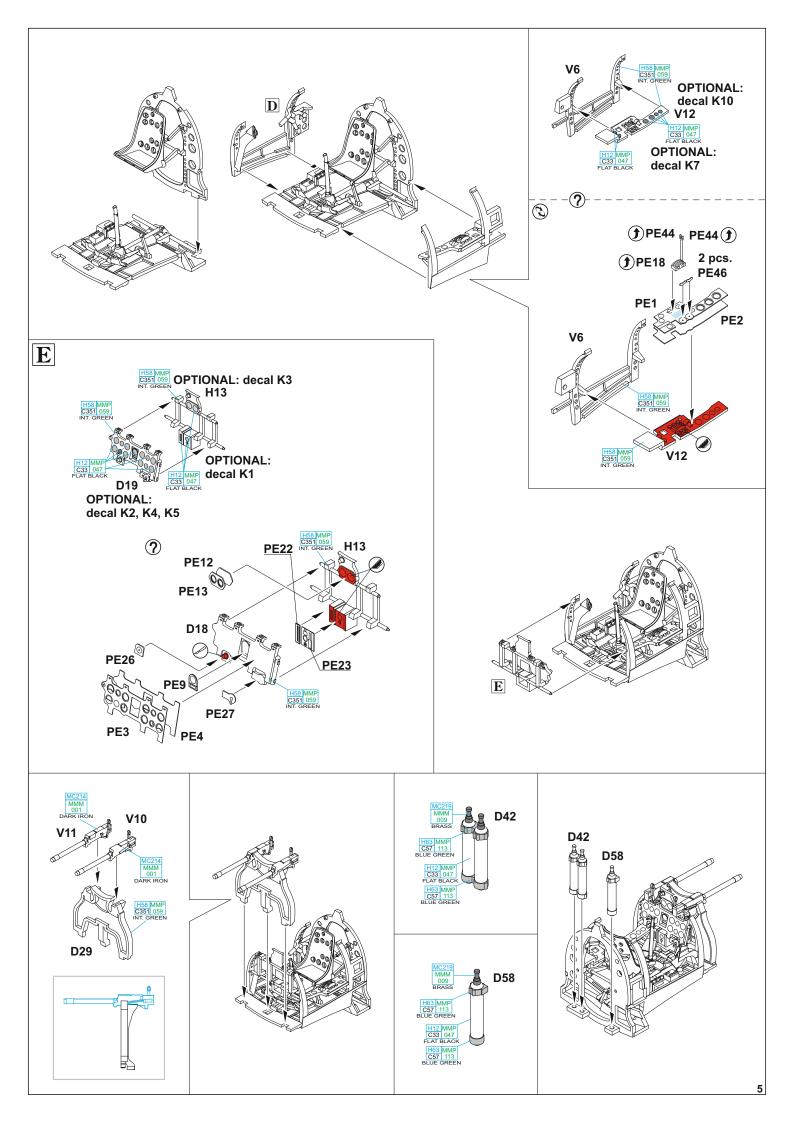
**PEINTURE** 

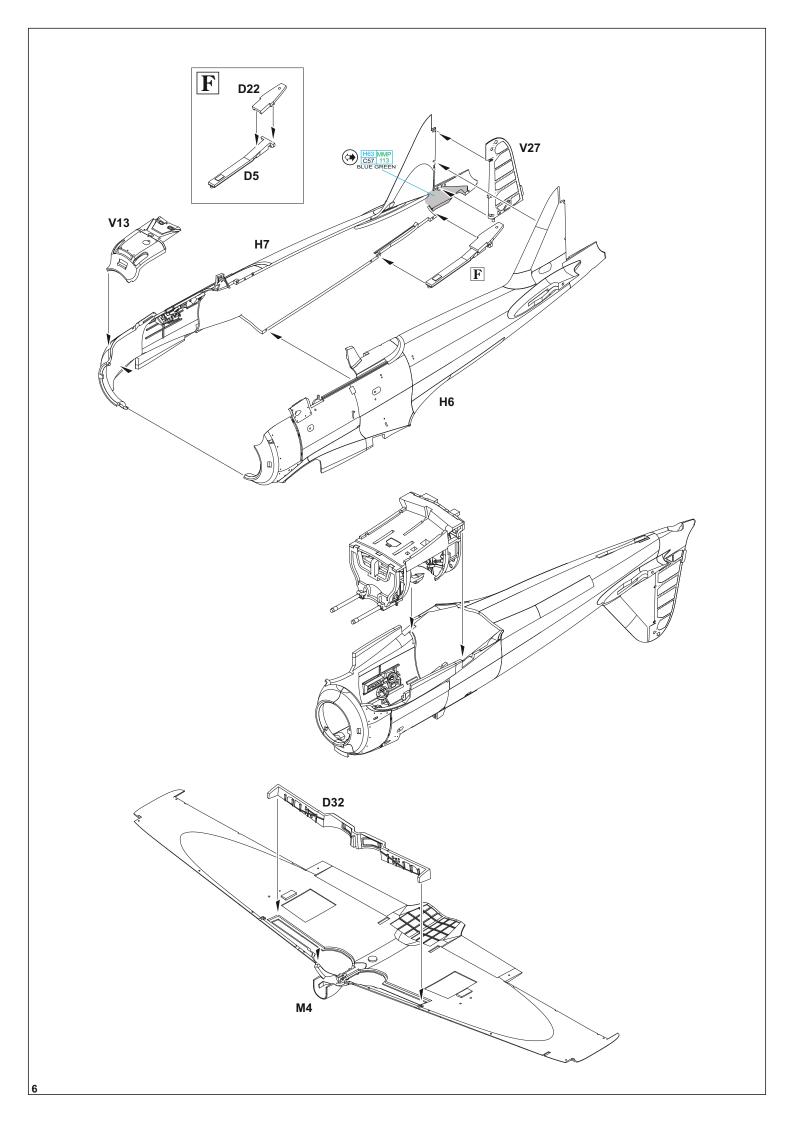
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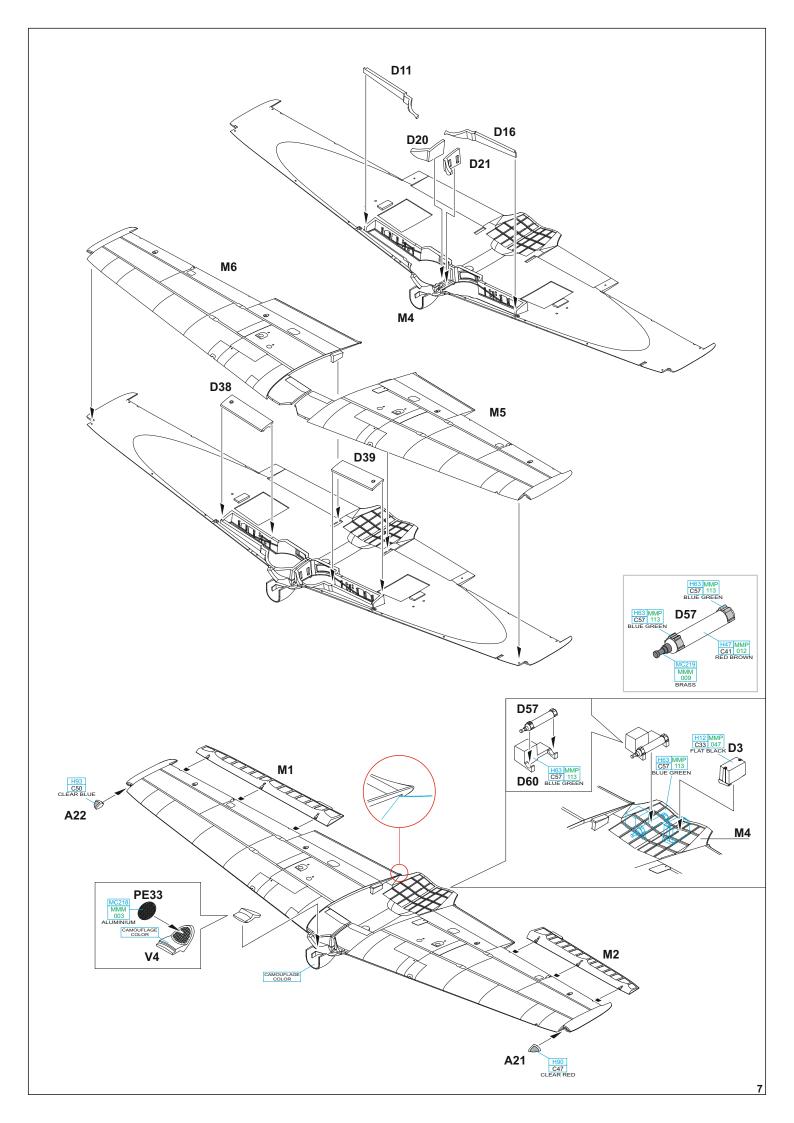
**COLOURS** 

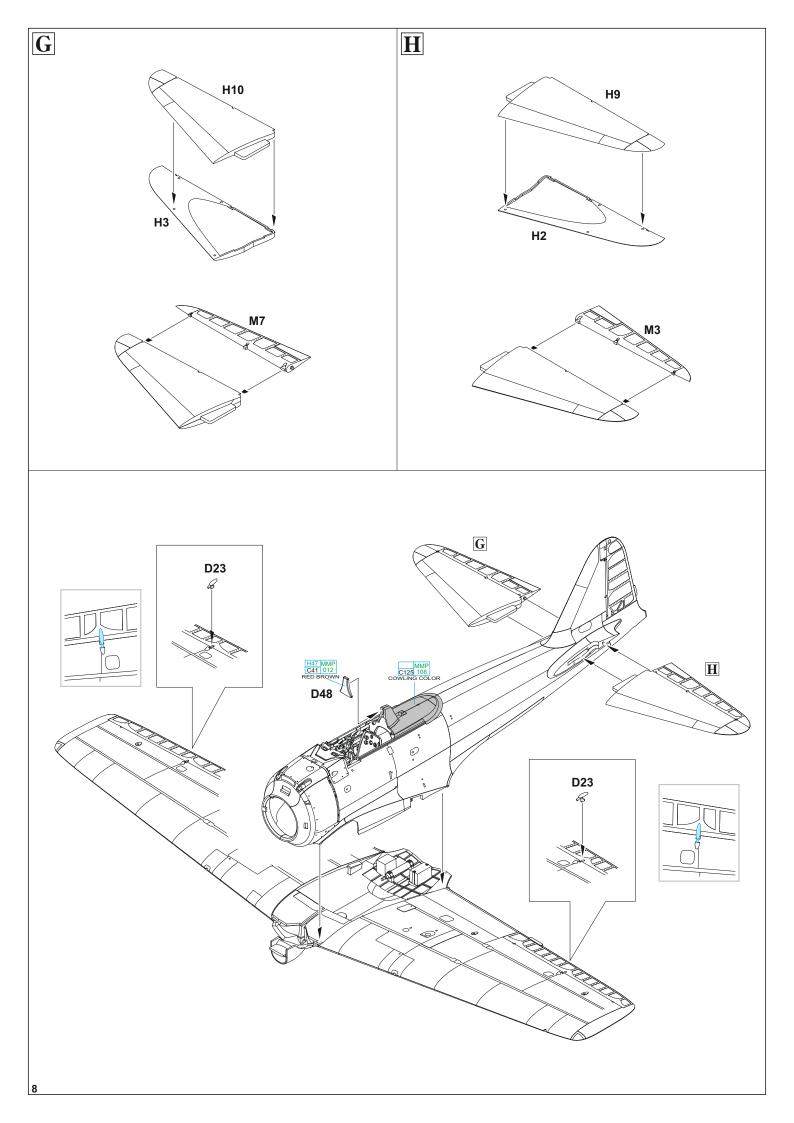


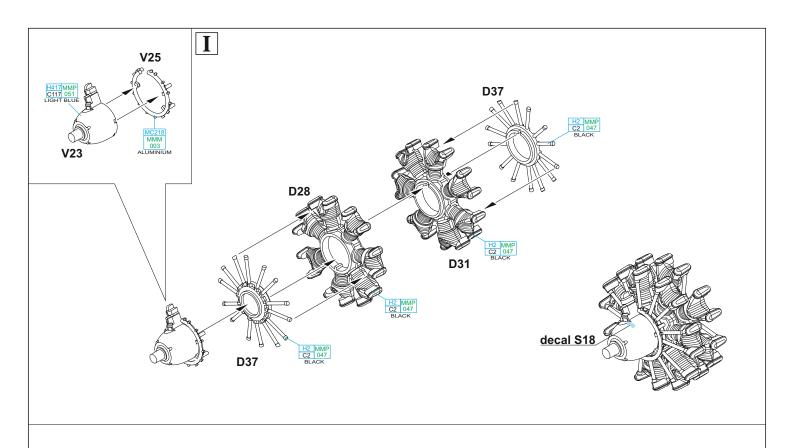


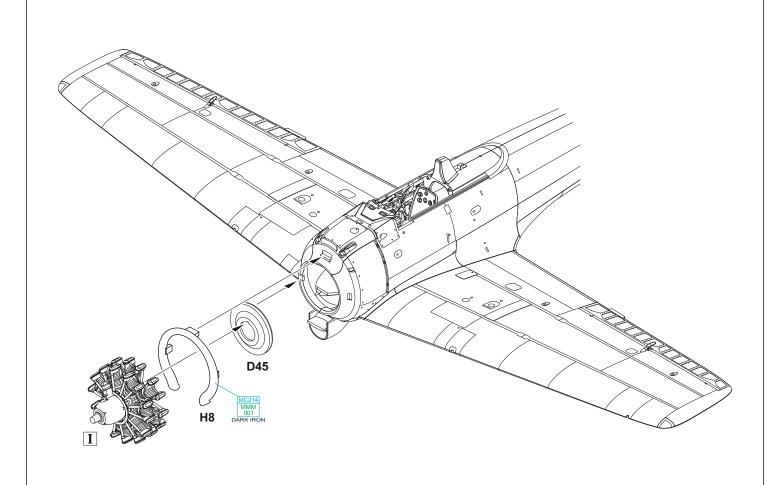


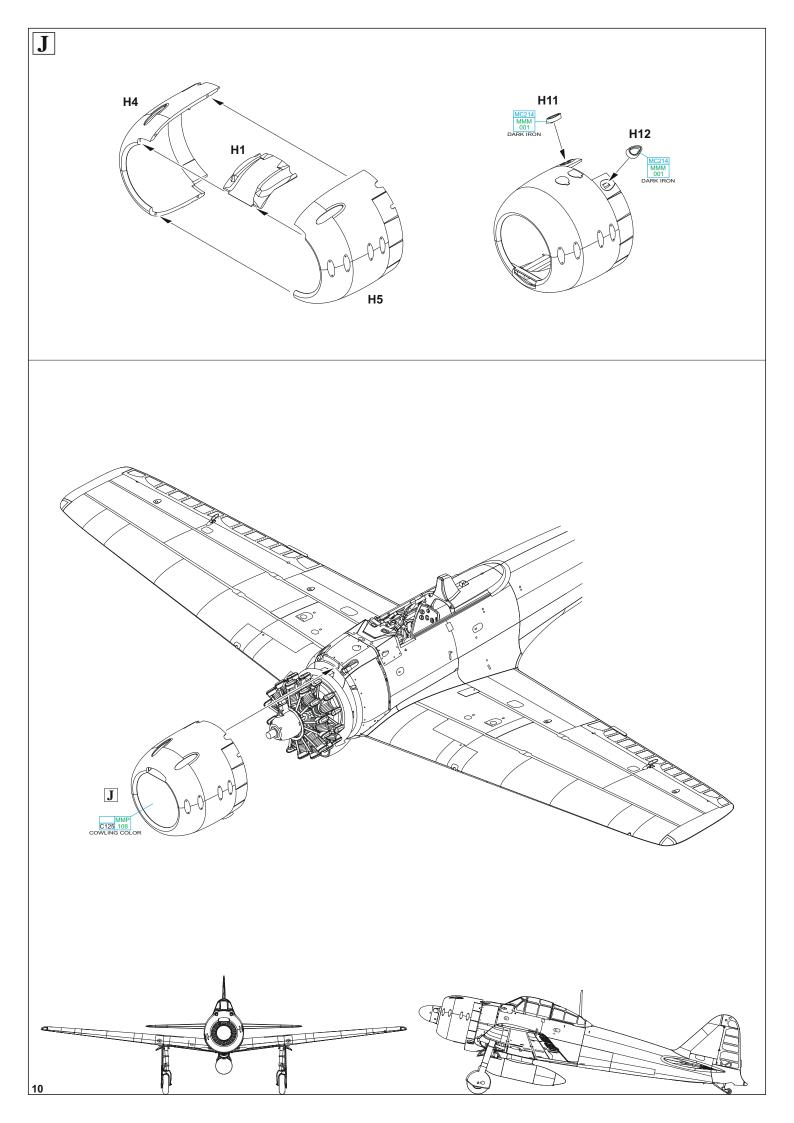


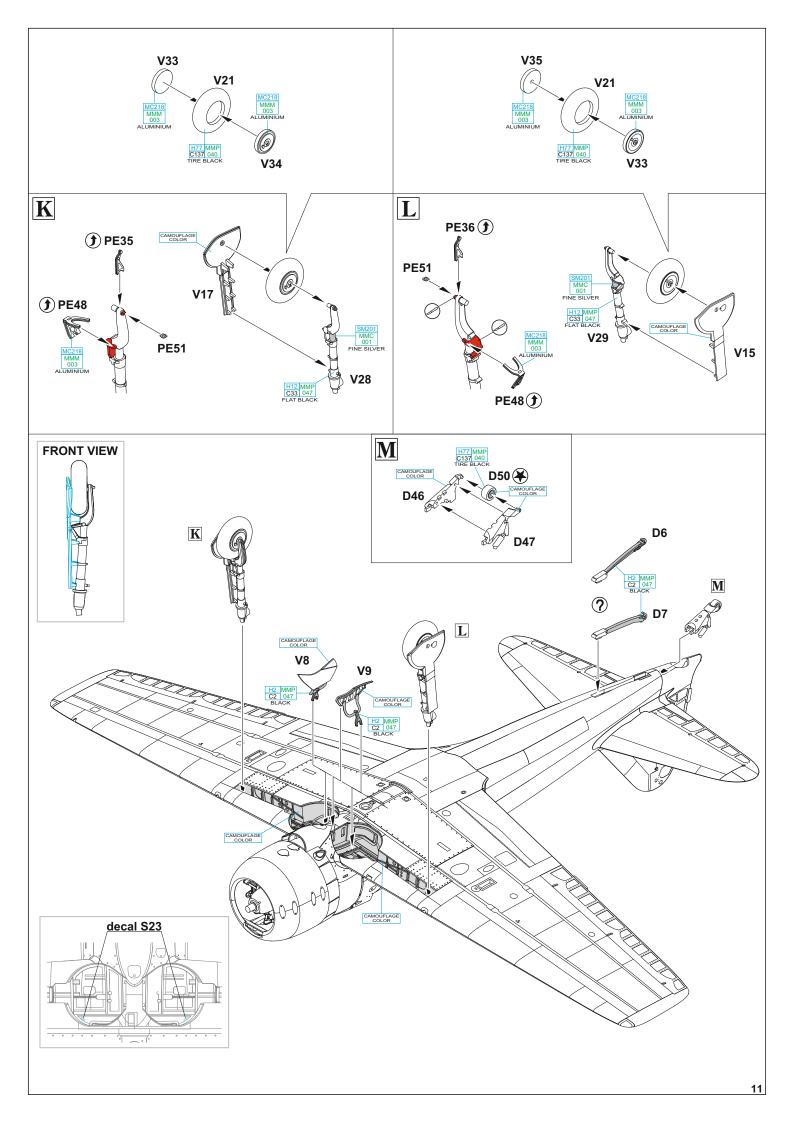


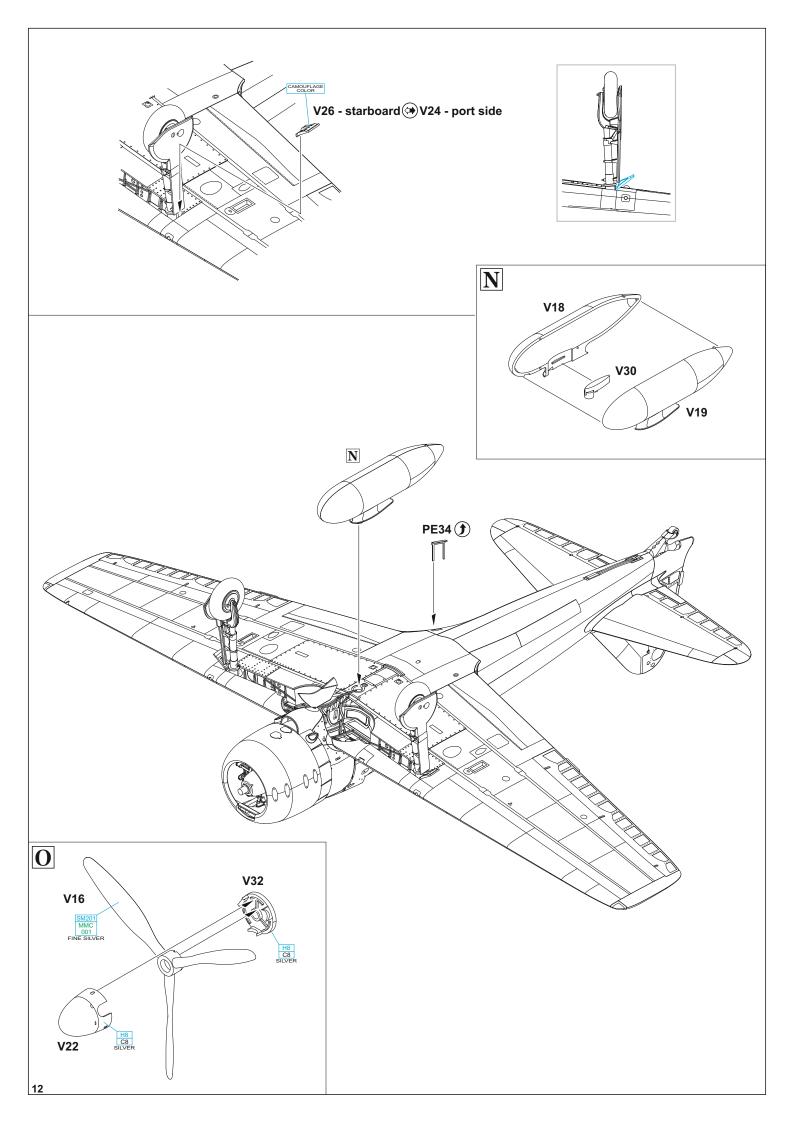


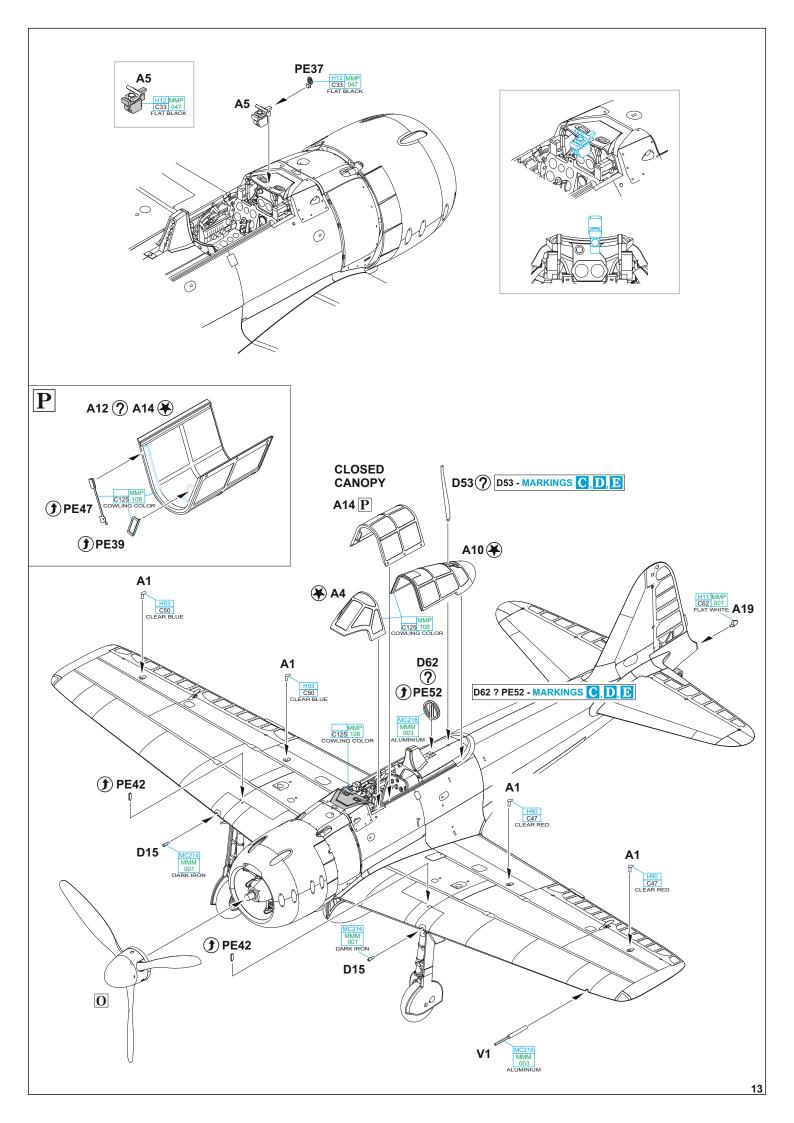


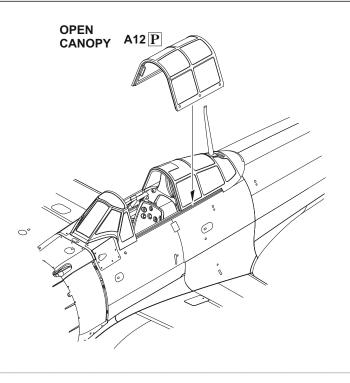




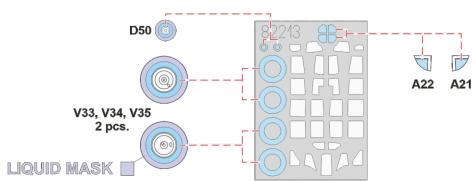


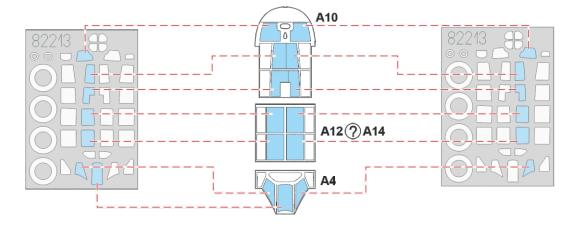


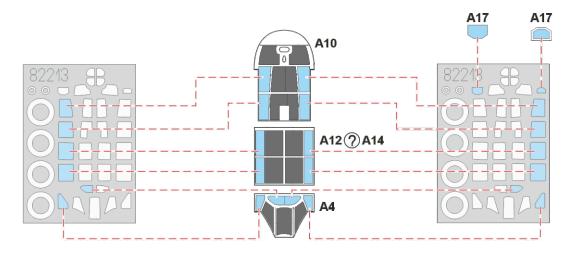






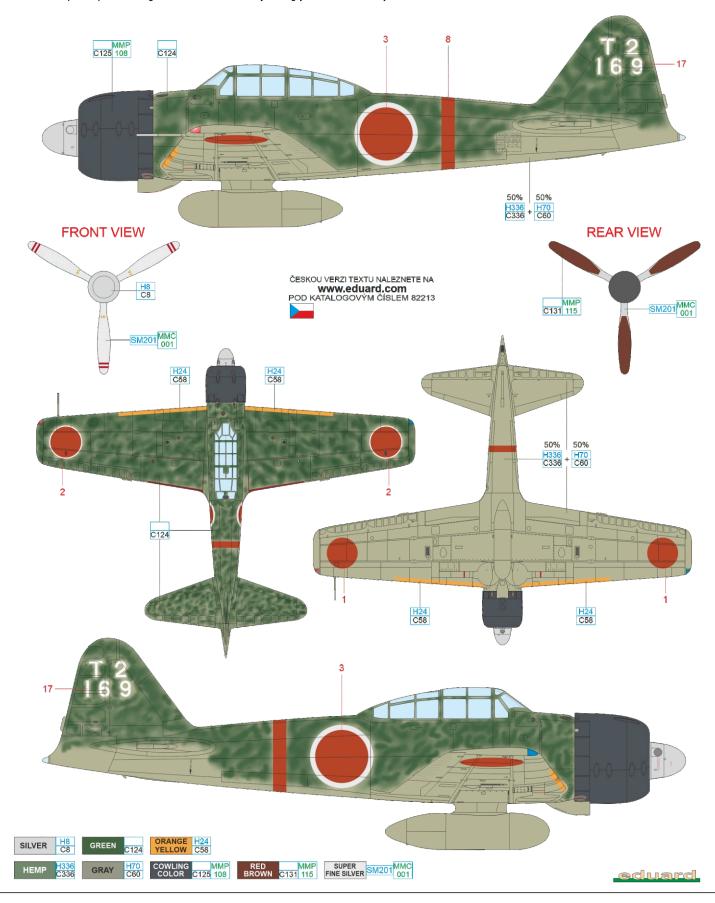






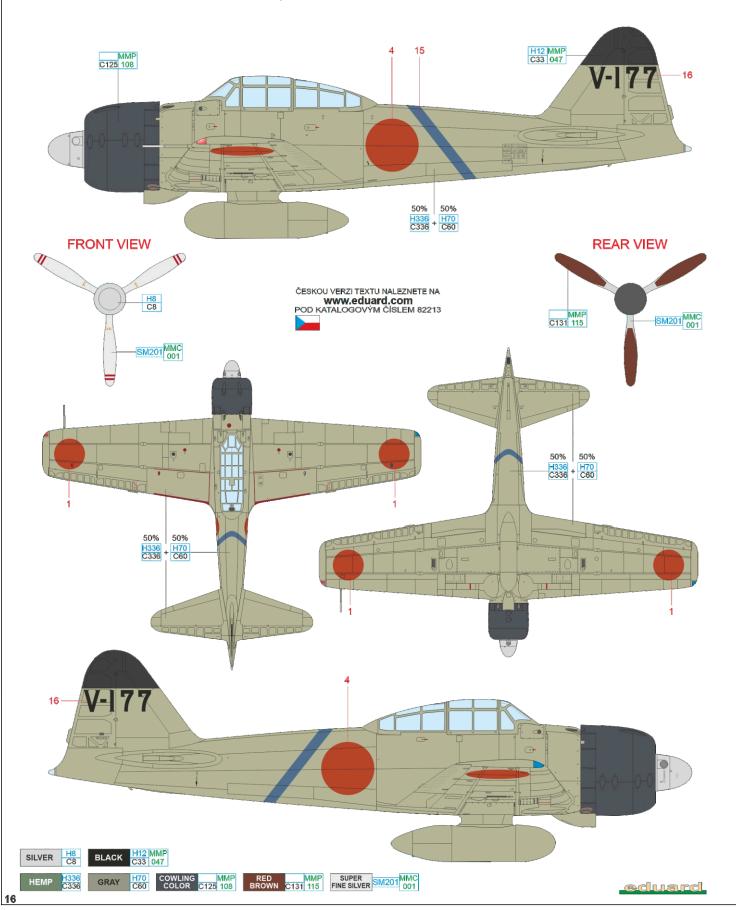
#### 🛕 Ldg. Sea. Kenji Yanagiya, Kōkūtai 204, Rabaul base, New Britain, April 1943

This aircraft is reconstructed with the field applied green paint typical for aircraft of this unit in early 1943. It has a dismantled radio station and antenna column to reduce weight. Leading Seaman Yanagiya made several operational flights with this plane during April 1943. He also flew with it on April 18, 1943, while escorting Admiral Yamamoto to Ballale on Bougainville Island. The formation of two G4M Betty bombers and six Zeros was surprisingly attacked by P–38 fighters, both Bettys were shot down and Admiral Yamamoto was killed. Five of the six accompanying Japanese fighters were successively killed in action during the war, one of them being the second ranking naval ace, Shō-ichi Sugita (80 v.). The only survivor of the war would be Yanagiya. Born in March 1919, after completing flight training in March 1942 he was assigned to the 6<sup>th</sup> Kōkūtai, which was to be based at the captured Midway Atoll. From October 1942 he was deployed to Rabaul and in November his unit was redesignated Kōkūtai 204. In May 1943 he was promoted to Petty Officer 2<sup>nd</sup> Class, but on June 7 he was severely wounded in aerial combat off Russell Island and had to have his right arm amputated. After hospitalization and rehabilitation, he was able to continue flying with a prosthesis and served as an instructor until the end of the war. He achieved a total of eight individual victories and participated on eighteen shared kills. Kenji Yanagiya died in February 2008.



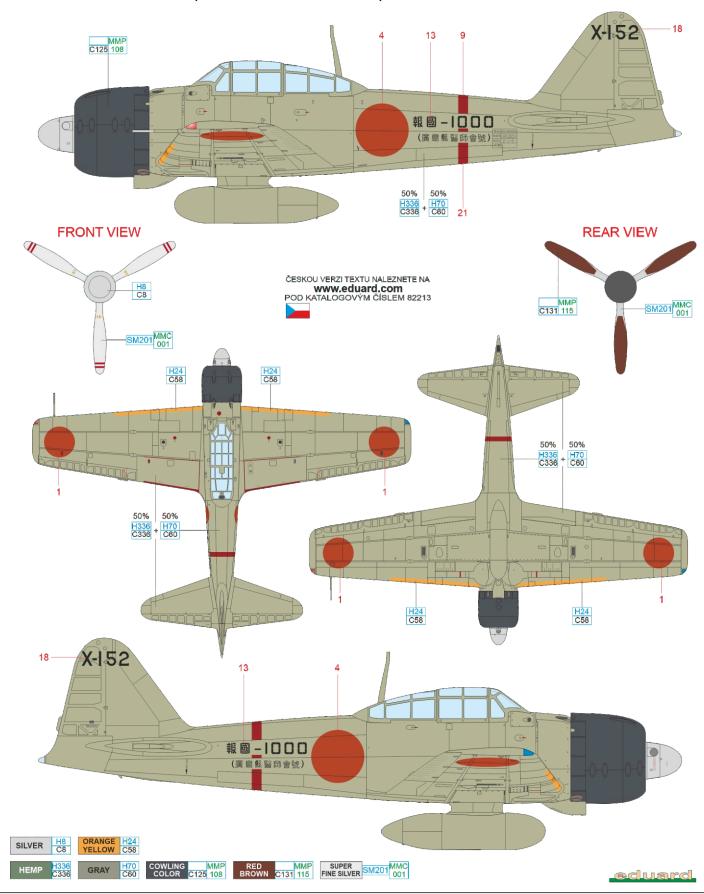
#### C/n 3018, Tainan Kōkūtai, Buna airfield, New Guinea, August 1942

The aircraft was produced on June 15, 1942, and on August 22 was assigned to Tainan Kōkūtai detachment in Buna. The aircraft was found by the Allies in an upside-down position during the capture of Buna on December 27, 1942. From its color photograph it is estimated that the tip of the tail surfaces were black, less likely red. It was flown by, among others, Buntaichō and the commander of the detachment in Buna, Lt. Kikuichi Inano, whose usual aircraft was a V-190. P02c Ichirōbei Yamazaki probably crashed with V-177 on August 23 after a dogfight with the RAAF's Kittyhawks of No. 75 Sq and suffered severe injuries. This fighter pilot originally served with the Ôita Kōkūtai and in the spring of 1942 was assigned to the 4th Kōkūtai in Rabaul and Lae. In April was integrated with his unit into the Tainan Kōkūtai. In March 1942 he was shot down over New Guinea, about 80 miles inland, after a dogfight with the crew of a Hudson bomber. With the help of friendly natives, he built a raft on which he sailed down the river for four days to his own troops. He was wounded over Port Moresby in May and had to undergo prolonged medical treatment after his August wound. In May 1943 he was assigned to Kōkūtai 251 (formerly Tainan Kōkūtai) and was killed in action off Rendova Island on July 4, 1943. In total, he achieved 14 victories.



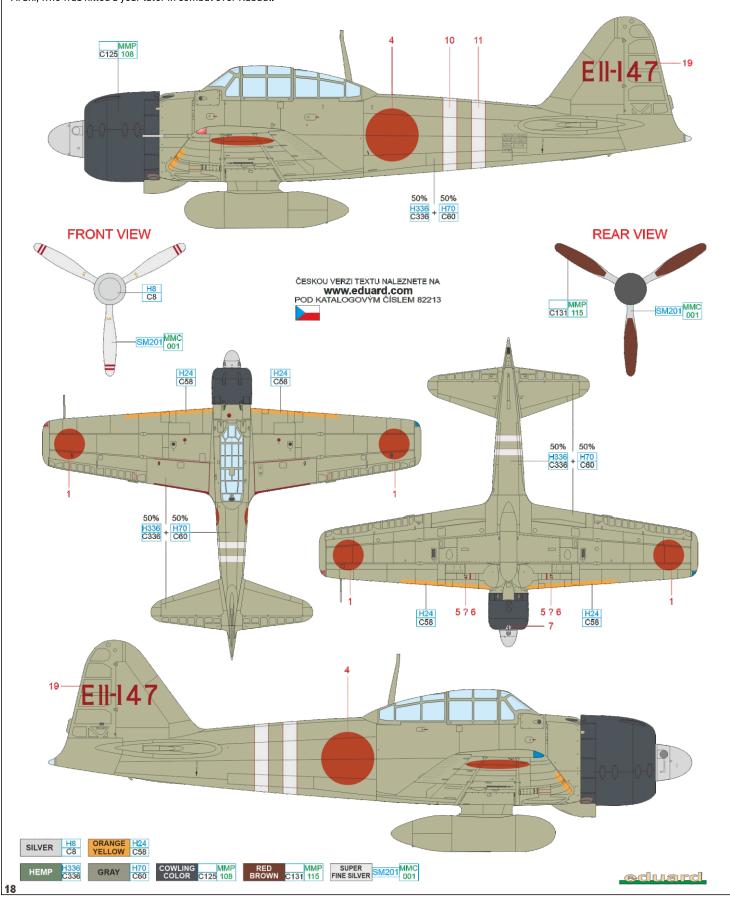
### P01c Kyoshi Itō, 3. Kōkūtai, Koepang airfield, Timor Island, September 1942

This aircraft was purchased by Hiroshima Prefectural Medical Association, whose name is listed on the patriotic donation inscription (Hōkoku) No. 1000. It was flown by Kyoshi Itō, who used also Zero X-151 with Hōkoku No. 994. Itō was born in November 1921 in Murakami, Niigata Prefecture. He served on the torpedo boat Ōtori in 1939, in late 1940 got flight training at Tsuchiura Kōkūtai and in November 1941 was assigned for combat duty to 3<sup>rd</sup> Kōkūtai. With this unit he fought in the Philippines and Indonesia and took part in raids on Australia. In September and October 1942, with most of the 3<sup>rd</sup> Kōkūtai, he was involved in the fighting over Guadalcanal. In November his unit was redesignated Kōkūtai 202 and returned to Koepang. From the spring until September 1943, unit conducted combat flights over Australia, also with Zero Type 32 fighters. In November 1943, Itō received a written command commendation stating that he had shot down 23 aircraft and destroyed 9 on the ground. He then served as an instructor in Japan with the Ôita and Tsukuba Kōkūtai and joined the air combat in February 1945. After the war, he married the eldest daughter of the owner of the family construction company Katō in Murakami and adopted the family name Katō. Under his leadership, the company rose to the top position in Murakami, and he received the Medal with Purple Ribbon and the Minister of Construction Award. Kyoshi Katō retired in 1992 and died in July 2012.



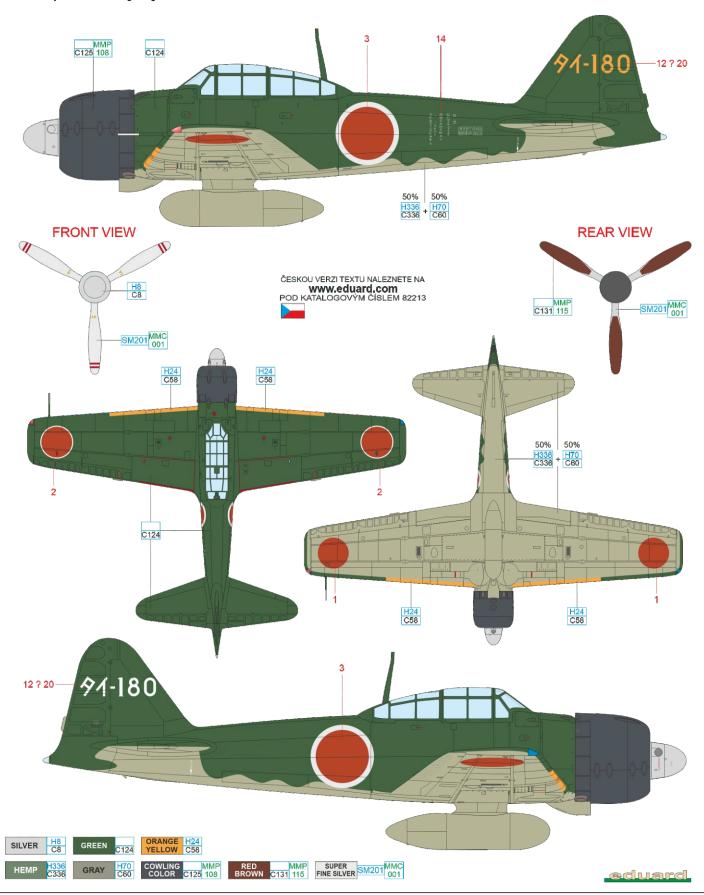
#### Zuikaku Fighter Squadron, aircraft carrier Zuikaku, October 1942

The appearance of the aircraft has been reconstructed to the condition in which the Zuikaku fighters took part in the Battle of Santa Cruz in October 1942. At that time, the yellow identification stripe on the leading edge of the wing was already in use. The Type 32 Zeroes was tested aboard the Shōkaku and Zuikaku carriers from July 1942. Some records indicate that smaller numbers of these machines were used by both carriers as early as August 1942 during the fighting in the Solomon Archipelago. During this period some of their fighters operated from land bases, probably with Type 32s. During the Battle of Santa Cruz, on October 26, 1942, each of these carriers had ten Type 32s in their armament in addition to the Type 21s. Because of their faster dive speed and shorter range, they were probably used primarily for CAPs. The commander of the fighters aboard the Zuikaku at the time was Lt. Ayao Shirane (9 victories), who led fighter escorts in two raids on the American task force during the battle. After the Battle of Midway, the Japanese improved their CAPs and patrolled in three flight levels during the Battle of Santa Cruz. Yet they were unable to stop a group of Dauntlesses from VB-8 and VS-8, which, without fighter escort, fought their way to the carrier Shōkaku and damaged her. The commander of the patrolling fighters from Zuikaku was Lt. Shigeru Araki, who was killed a year later in combat over Rabaul.



#### CPO Takeo Tanimizu, Tainan Kōkūtai (II), Tainan airbase, Taiwan, September 1944

This aircraft bears a non-standard and heavily weathered dark green paintjob. A production table of unusual finish was added probably after an overhaul. The inscription on its side mentions aerial combat and the shooting down of a B-24 bomber over Kaohsiung on August 31, 1944, and the shooting down of another B-24 during September 3. The name of the airman is not listed, but he was the instructor of this operational training unit, Chief Petty Officer Takeo Tanimizu. Lt(jg) Ki-ichi Tsuda was photographed next to the aircraft. Tainan Kōkūtai (II) shot down one B-24 of the 308<sup>th</sup> BG on August 31 and damaged another, its wreckage was found in 1996 in Guangxi Province. Takeo Tanimizu was born in April 1919 and completed his flight training in March 1942. Aboard the aircraft carrier Jun'yō, he took part in the attack on the Aleutians. He then served aboard the training aircraft carrier Kasuga Maru and in February 1943 was assigned to the fighter unit of the Shōkaku. From November 1943 he fought in the defense of Rabaul. In March 1944, he was assigned to Tainan Kōkūtai (II) in Taiwan and had a near fatal patrol flight on November 3, 1944, during which a Mustang of the 74<sup>th</sup> FS shot him down over a convoy entering the port of Amoy in China. Tanimizu suffered burns and after a month of treatment was assigned to Kōkūtai 203 in Japan. He participated in the defense of Kyūshū and the fighting over Okinawa. He achieved a total of 18 victories. Tanimizu died in March 2008.



## A6M3 Zero Type 32

## STENCILING POSITIONS

