F4F-3 Wildcat

<u>eduard</u>

1/48 Scale Plastic Model Kit



WEEKEND edition

At the outbreak of the War in the Pacific, the Wildcat was the main fighter aircraft on the carrier decks of US Navy ships. While the Japanese Zero was faster and more maneuverable, Wildcat pilots still achieved reasonable success in combat with them.

In the early 1930's Grumman company became a major supplier of fighter aircraft to the US Navy with the FF biplane and its successors, the F2F and F3F. By 1935, however, the biplanes were reaching their limits and with the XF4F-1 prototype (factory designation G-19) Grumman failed against the cantilever monoplane Brewster F2A-1 Buffalo in the US Navy's competition for a new fighter. The XF4F-1 prototype was retained as a backup, but at Grumman they realized biplanes had become obsolete, so they redesigned it as an all-metal mid-wing monoplane, designated the XF4F-2 (G-18).

The fuselage was adopted with only minor changes, the wing employed the newly-developed NACA 230-series airfoil. It was powered by a 1,000 hp (750 kW) Pratt & Whitney R-1830-66 Twin Wasp engine with a single-stage single-speed supercharger. The 110 gal (415 l) fuel tank was located beneath the cockpit with a 20 gal (75 l) reserve tank behind the pilot's seat. Armament consisted of two .30 (7.62 mm) machine guns in the fuselage and two .50 (12.7 mm) machine guns in the wing. There were also provisions for two 100lb (45kg) bombs under the wing. A structurally complex and manually operated undercarriage was adopted from previous designs.

The first flight of the XF4F-2 was made on September 2, 1937, and in April 1938 comparative trials were conducted with the XF2A-1 Buffalo and also with the Seversky XFN-1. Although the Wildcat prototype was the fastest, reaching 290 mph (466 km/h) compared to 280 mph (450 km/h) for the Buffalo and 250 mph (402 km/h) for the XFN-1, it still did not meet the Navy's requirement of 300 mph (482 km/h). And because it lagged behind the Buffalo in some areas it was eventually not ordered, while Brewster received an order to deliver 54 units of the production version of the F2A-1 Buffalo. This was because the Buffalo handled better, was powered by less complicated Cyclone engine and had the advantage of a hydraulically operated landing gear. Grumman did not give up, however, and began work on an improved version of the Wildcat with designation XF4F-3 (G-36).

On the third try

The fuselage was lengthened to 28 ft (8.53 m) but otherwise was almost unchanged. The wingspan was also increased from 34 ft (10.36 m) to 38 ft (11.58 m) with squared-off tips. A P&W XR-1830-76 engine with a two-stage, two-speed supercharger rated at 1,200 hp (890 kW) was selected. The prototype made its maiden flight on February 12, 1939 and reached a speed of 333,5 mph (537 km/h). As deliveries of the Buffaloes were delayed, the Navy decided on August 8, 1939, to order 54 Grummans, which were named Wildcat. The first of these was delivered in February 1940.

The production F4F-3s had changed armament as the .30 fuselage machine guns were removed and four .50 guns were installed in the wing instead. The F4F-3 wing did not yet have a folding mechanism, this was not introduced until the F4F-4 version and was an interesting innovation pioneered by Leroy Grumman. He designed the Sto-Wing system with a central pivot. Instead of the normal lift, the outer wing sections were folded flat alongside the fuselage. The F4F-4's armament was also reinforced up to six .50 machine guns in the wing.

In the British service

Even before the US Navy ordered the new aircraft, France rushed in, ordering 81 aircraft with the export designation G-36A. These were powered by the Wright R-1820-G205A-2 Cyclone engine with a single -stage, two-speed supercharger, developing up to 1,000 (850 kW). Armament was to consist of six 7.5 mm Darne machine guns. However, these aircraft never made it to the customer. After the fall of France, they were rebuilt to British specification (the armament changed to four .50 machine guns) and were sent to the Fleet Air Arm. Here they served under the name Martlet (changed to Wildcat in January 1944) and were intended to be just a stopgap solution before the arrival of the two-seat Fairey Fulmars. Eventually, however, they served with the FAA until the end of the war. Their last aerial victory came in March 1945, when they shot down four Bf 109s over Norway. In all, 1,200 Wildcats of various versions were delivered to the FAA.

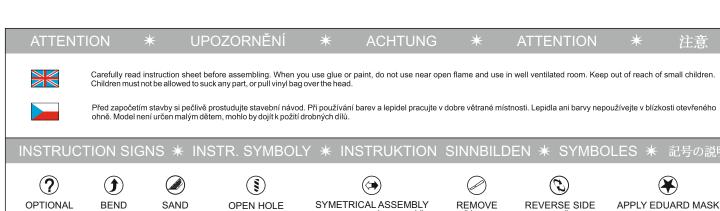
Pacific Lumberjack

The Wildcat was the main carrier-borne fighter of the US Navy and USMC at the time of the attack on Pearl Harbor and as such had to face a new and dangerous adversary, the Japanese Zero. Although the Wildcat lagged it in terms of performance and maneuverability, its rugged design, quite a strong armor protection and self-sealing fuel tanks made it much more capable of taking damage in combat. In addition, the American pilots were also helped by the defensive tactics developed before the outbreak of the war by Lt. Cmdr. John S. "Jimmy" Thach which was named the Thach Weave after him. It was based on crossing the flight paths of cooperating aircraft, in which the attacked pilot "brought" the enemy behind right in front of the barrels of wingman's machine guns. During the fighting for Guadalcanal, Wildcat pilots then used the "hit and run" high altitude ambush tactics with success. Between August 1 and November 15, the Americans lost 115 Wildcats to 106 Japanese Zeros at Guadalcanal.

It was not until 1943 that new American fighter aircraft appeared that significantly outclassed the Japanese Zeros. Grumman replaced the Wildcats with F6F-3 Hellcat, Vought added the F4U-1 Corsair to the naval force. Thus, by early 1943, Grumman stopped the production of the Wildcat, but General Motors carried on under the designation FM-1 (identical to the F4F-4 version, but with four machine guns) and FM-2 with a more powerful engine.

This kit: F4F-3 Wildcat

The F4F-3 had standard armament of four .50 (12.7 mm) machine guns in a wing. The wing did not have folding mechanism and the poor design of the installation of the machine guns was responsible for their frequent jamming. The shortage of two-stage superchargers led to the introduction of the F4F-3A version, which received the P&W R-1830-90 engine with a single-stage two-speed supercharger. These aircraft were not popular due to their inferior performance (top speed was only 502 km/h). In June 1942, 17 of F4F-3s and one F4F-3A were converted to the photo reconnaissance F4F-3P with a Fairchild F-56 camera mounted behind the pilot's seat in place of the reserve fuel tank.



OPTIONAL VOLBA

OHNOUT

BROUSIT

VYVRTAT OTVOR

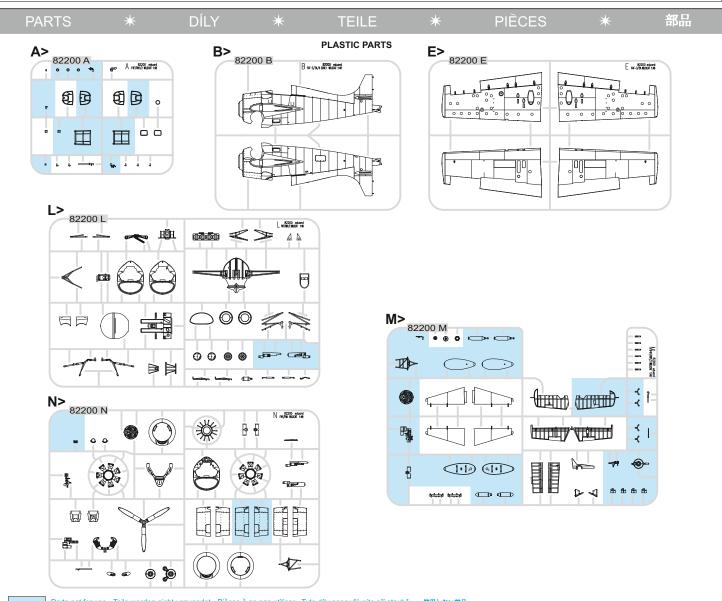
SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ

REMOVE **ODŘÍZNOUT**

REVERSE SIDE OTOČIT

APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

PLEASE CHECK THE LATEST VERSION OF THE INSTRUCTIONS ON www.eduard.com



FARBEN

-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

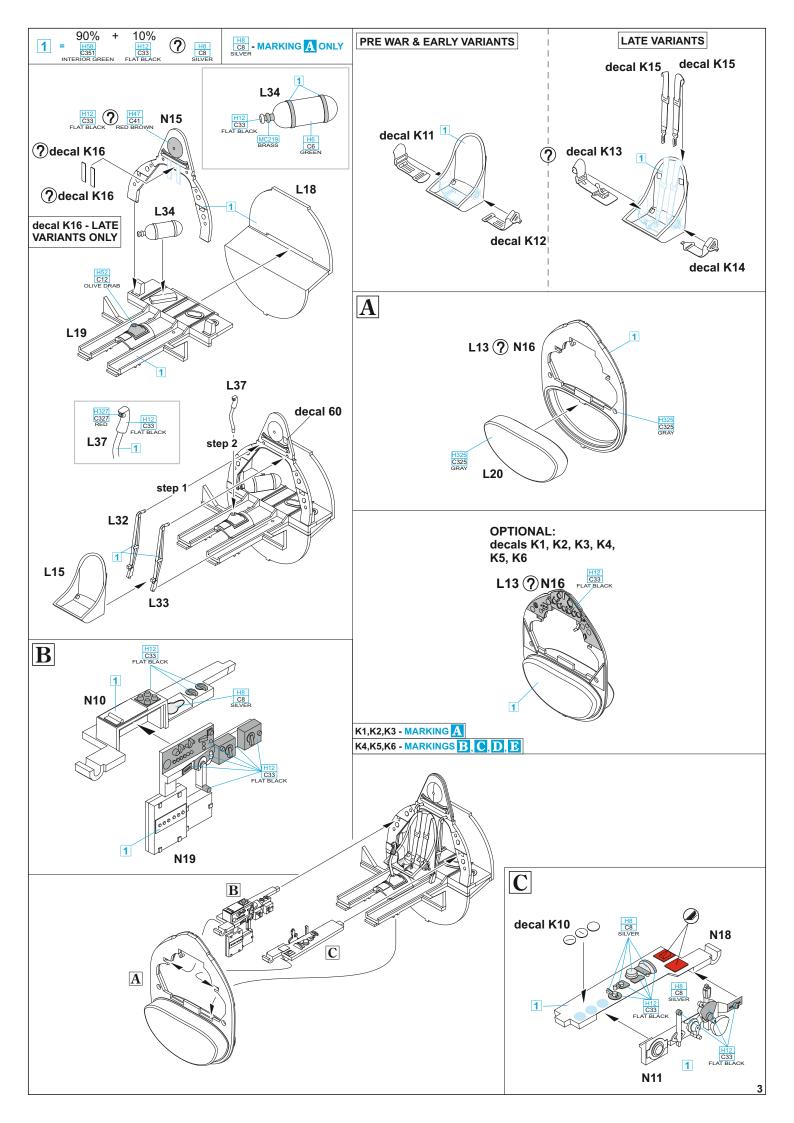
BARVY

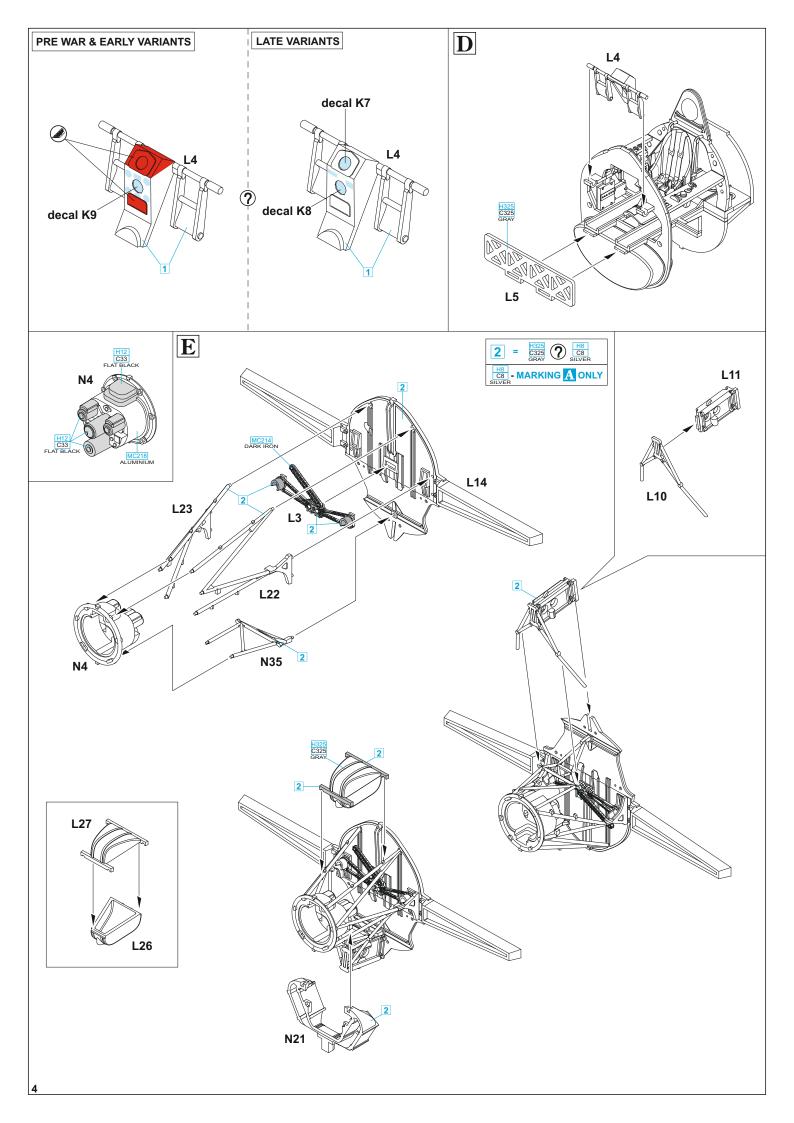
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GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H1	C1	WHITE
H2	C2	BLACK
H6	C6	GREEN
H8	C8	SILVER
H12	C33	FLAT BLACK
H26	C66	BRIGHT GREEN
H47	C41	RED BROWN
H52	C12	OLIVE DRAB
H58	C351	INTERIOR GREEN
H77	C137	TIRE BLACK
H85	C45	SAIL COLOR
H90	C47	CLEAR RED
H93	C50	CLEAR BLUE

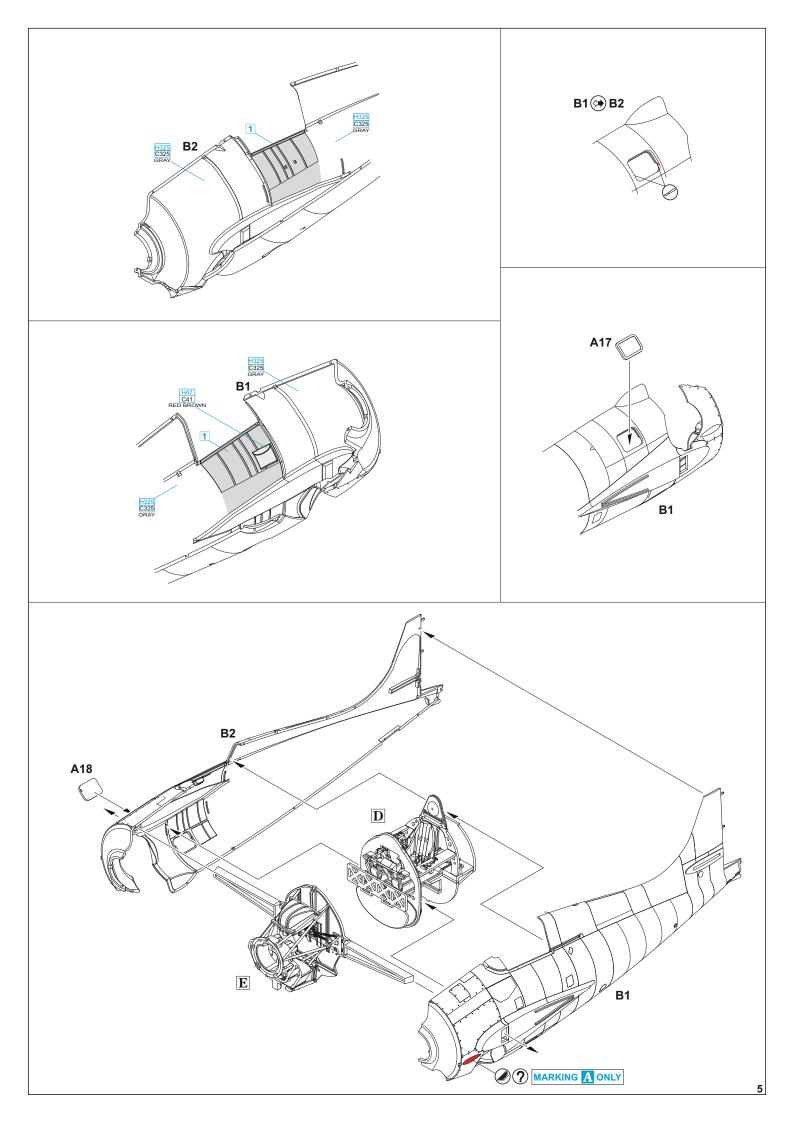
GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H94	C138	CLEAR GREEN
H306	C306	MEDIUM GRAY
H316	C316	WHITE
H325	C325	GRAY
H327	C327	RED
H329	C329	YELLOW
	C367	BLUE GRAY
Mr.METAL COLOR		
MC214		DARK IRON
MC218		ALUMINIUM
MC219		BRASS
Mr.COLOR SUPER METALLIC		
SM201		SUPER FINE SILVER

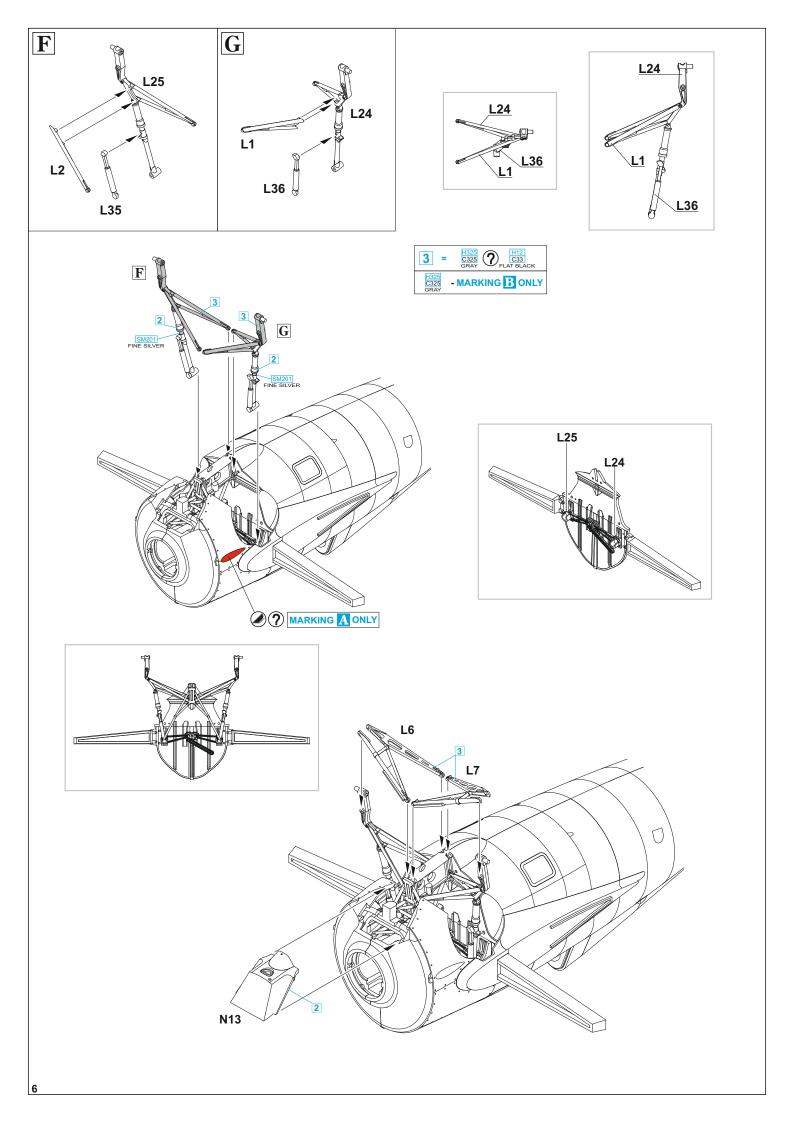
PEINTURE

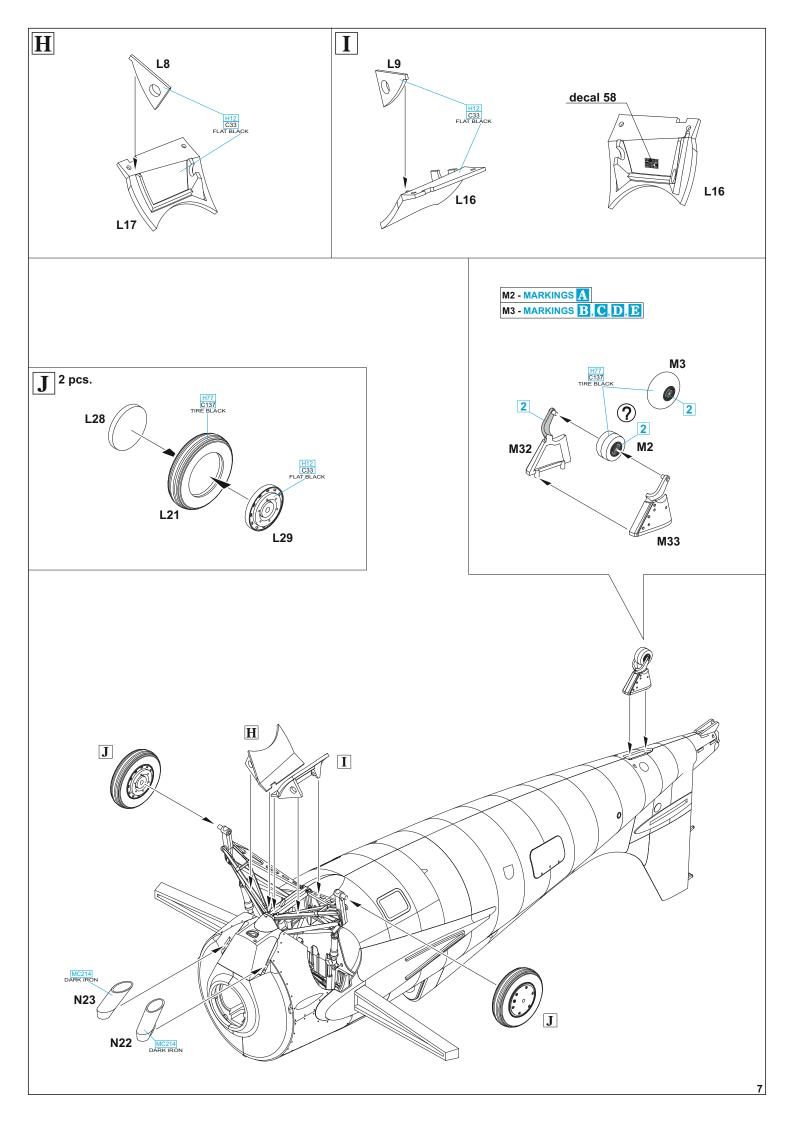
COLOURS

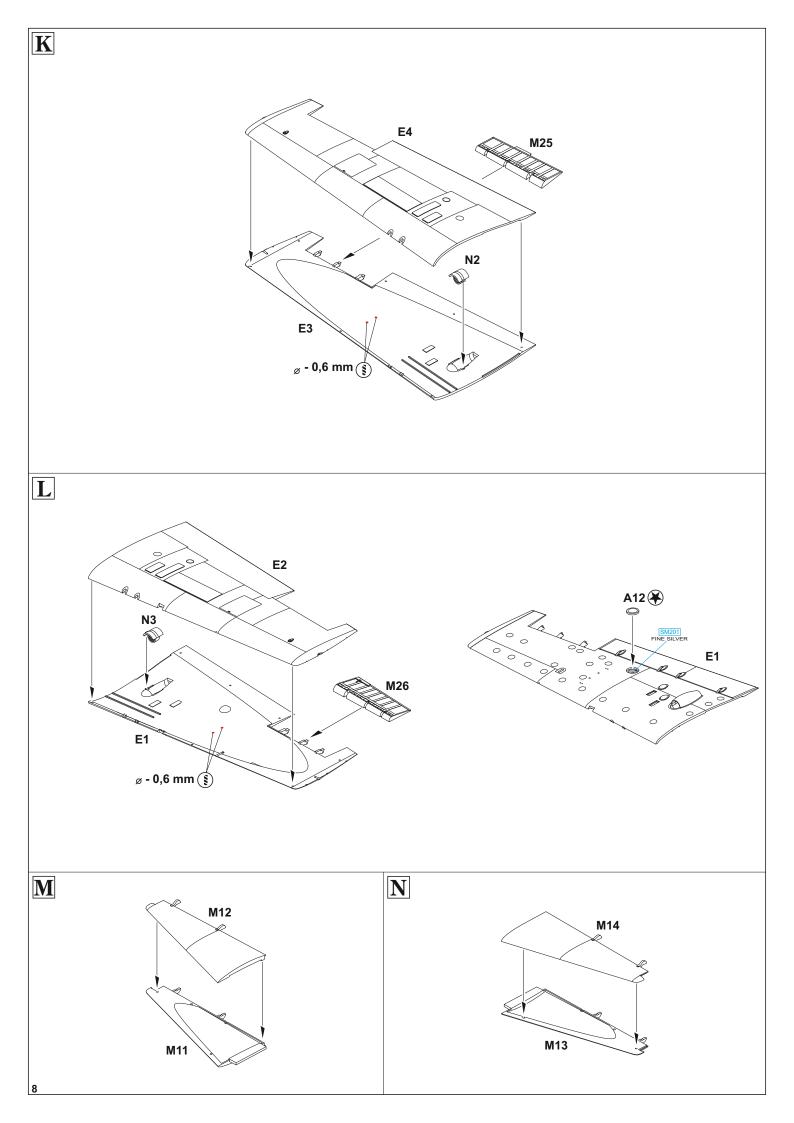


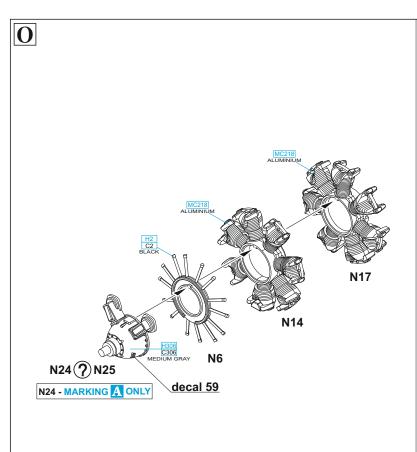


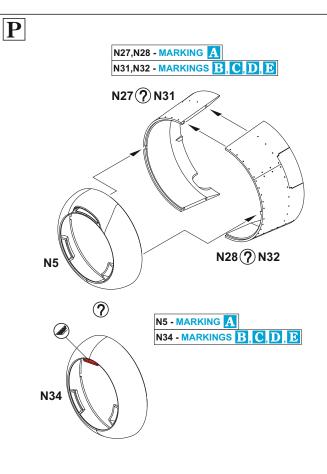


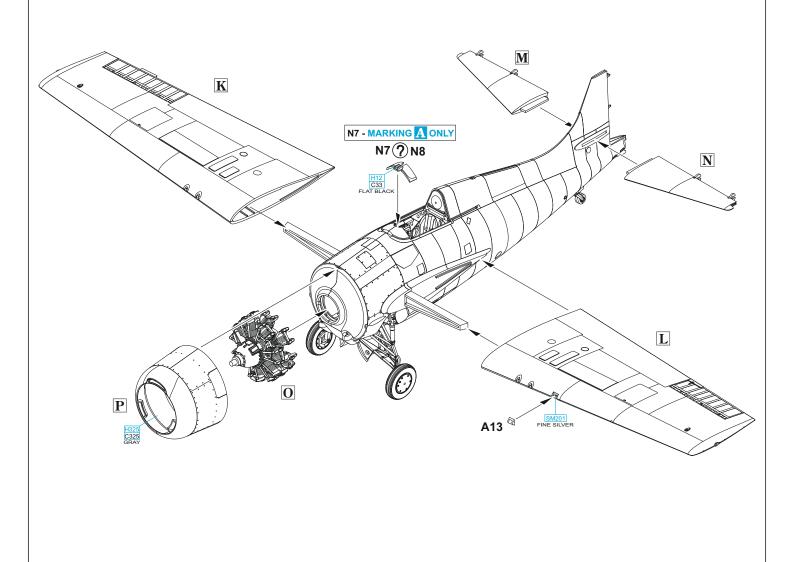


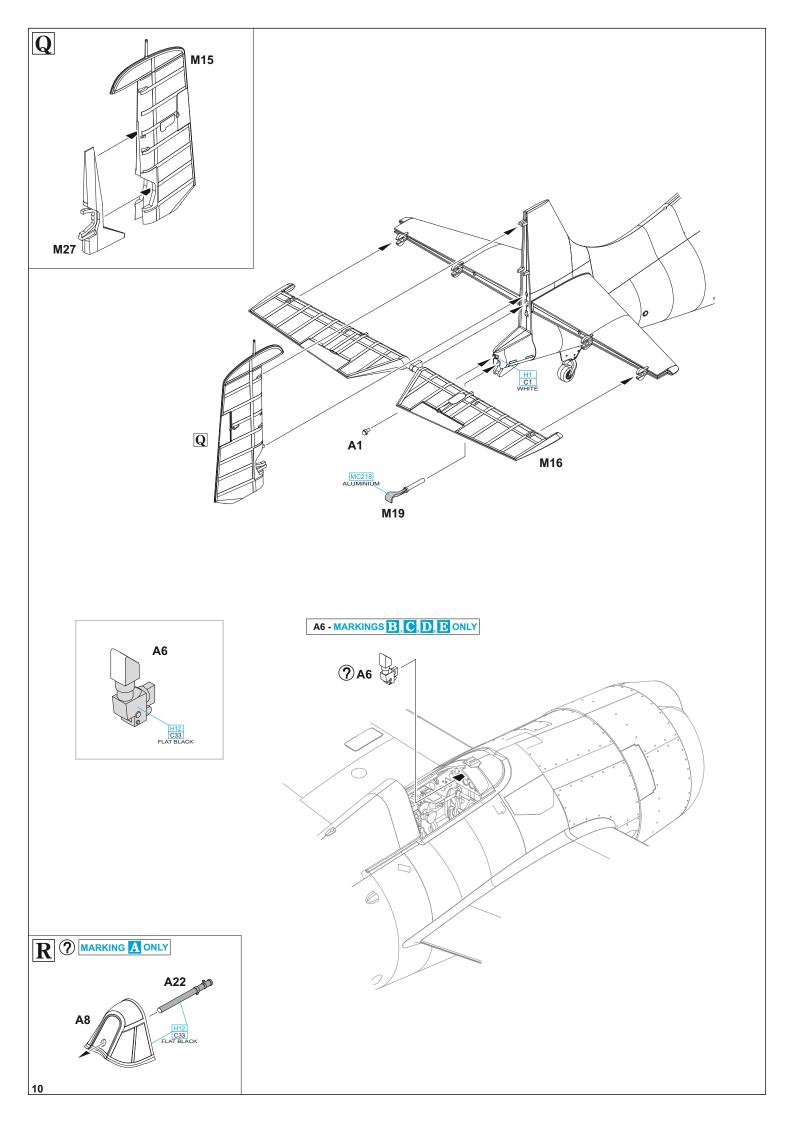


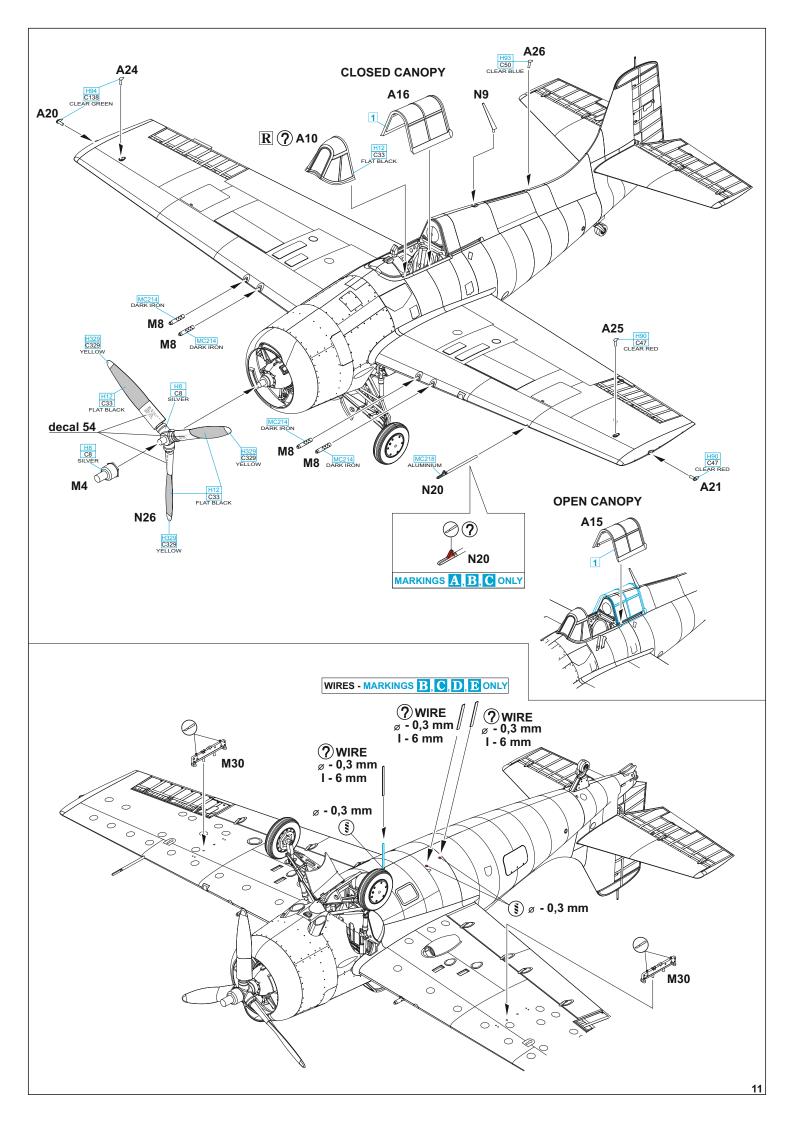






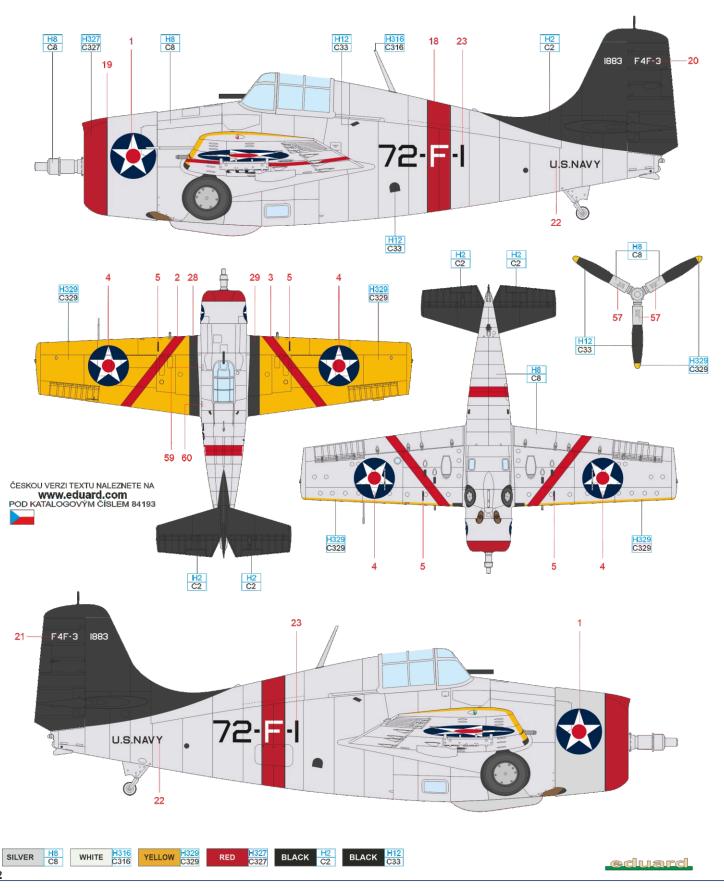






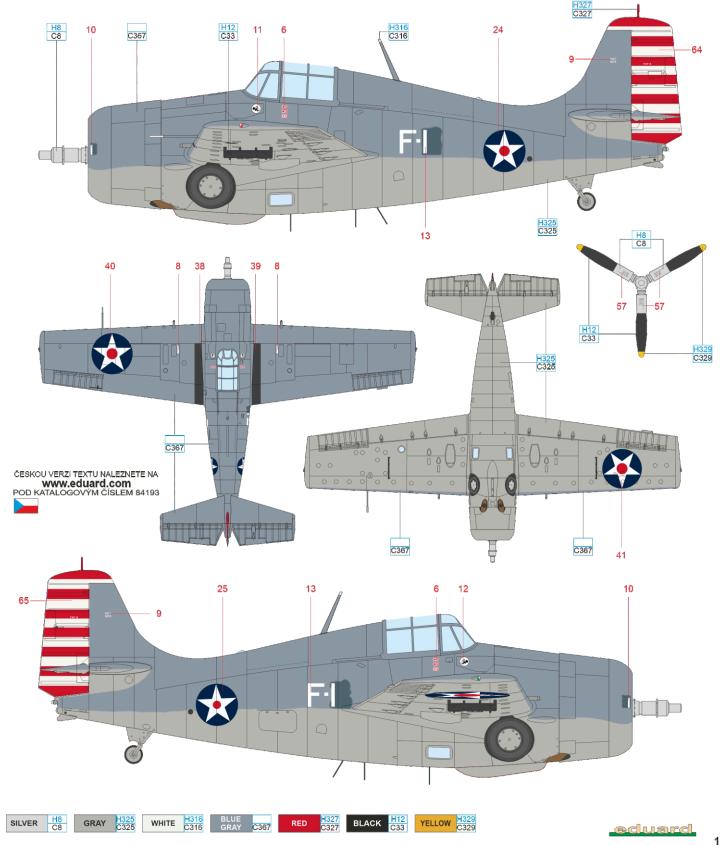
A BuNo. 1883, VF-72, USS Wasp (CV-7), December 1940

The first production batch of Wildcats, a total of 49 aircraft, was delivered in a pre-war color scheme. This means that the fuselage and lower wing surfaces were painted in aluminum color, while the upper wing surfaces were painted yellow. Insignias on the wings were placed in all four positions, and on the fuselage, they were either painted on the nose or on the engine cowling. The insignia position indicated the neutral status of these aircraft. The affiliation to individual ships was determined by the color of the tail surfaces. Aircraft with black coloring belonged to the aircraft carrier USS Wasp (CV-7). Stripes on the wings and the coloring of the front part of the engine cowling identified which section within the unit the aircraft belonged to. In the case of red coloring, it was the first section, and if the machine had the entire front part of the engine cowling and a stripe on the fuselage painted in the section color, it was the leader's machine of that section. This Wildcat served with VF-72 between the years 1940 and 1941. From the deck of USS Wasp (CV-7) and the ground base at Guantanamo Bay, Cuba, it participated in Neutrality Patrols, which were meant to ensure the neutrality in the coastal waters of the United States and the Caribbean, as declared by President Roosevelt on September 4, 1939. It was lost on May 8, 1942, during the Battle of the Coral Sea, where it operated from the deck of USS Yorktown (CV-5) as part of VF-42 squadron.



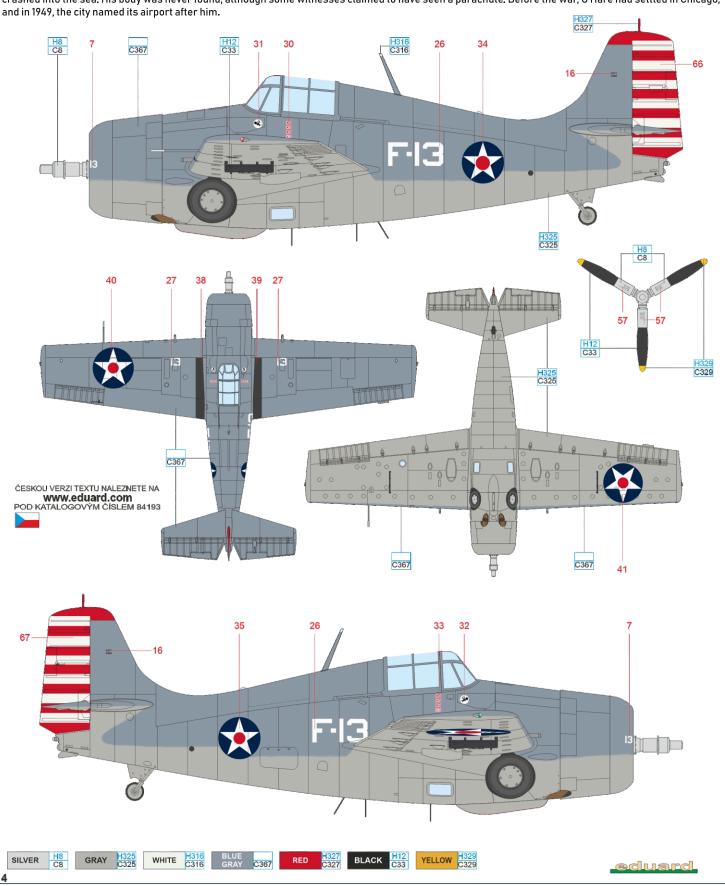
BuNo. 3976, Lt. Cdr. John S. Thach, CO of VF-3, USS Lexington (CV-2), April 1942

John Smith Thach was born on April 19, 1905, in Pine Bluff, Arkansas. After graduating from the Naval Academy in 1927, he spent two years of service on battleships and began pilot training in February 1929. He earned his pilot wings in 1930. During the 1930s, he served in various units, and in June 1939, he was assigned to VF-3, which he commanded from December 1940. This unit was embarked on the USS Lexington (CV-2) on February 10, 1942, as part of Task Force 11, with the target of Rabaul. Flying boats Kawanishi H6K Mavis were searching for the task force, and eventually, they succeeded in locating it. The Japanese spotted the convoy and dispatched a total of 17 G4M Betty bombers against it. "Jimmy" Thach, piloting his personal aircraft Fox-1, managed to shoot down one of the reconnaissance seaplanes during the morning patrol, achieving the squadron's first victory. The attack of bombers launched from Rabaul occurred around 16:30, and Thach, now flying Fox-13, led all operational Wildcats of the squadron against the attackers. The result was 15 shot-down Bettys, and he personally claimed two victories. The last combat action Lt. Cdr. Thach participated in was the Battle of Midway, where he, as the squadron leader, shot down four Japanese planes (3 × A6M Zero, 1 × B5N Kate). Later in the war, he served as the operations officer under Vice Admiral John S. McCain, the commander of Task Force 38. After the war, John Thach served as a commanding officer of aircraft carriers, and in the 1960s, he held high staff positions. He retired in May 1967 with the rank of Admiral and passed away on April 25, 1981. His Wildcat was camouflaged with Light Gray FS 36440 on the undersurfaces, and Blue Gray FS 35189 on the upper and side surfaces. The insignia on the rear fuselage and four positions on the wings were accompanied by 13 red and white stripes on the rudder.



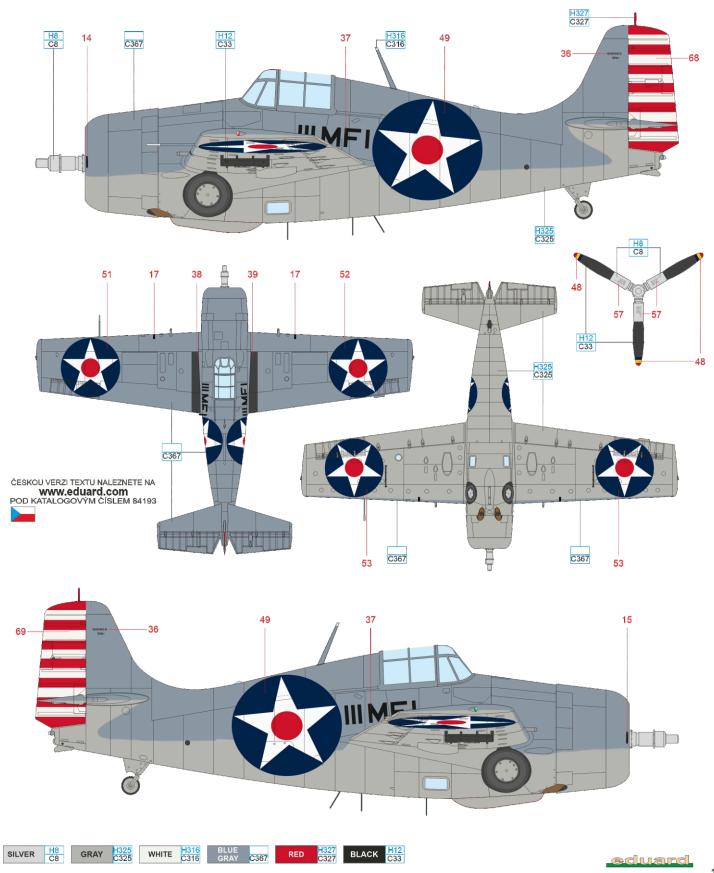
BuNo. 3986, Lt. Cdr. Edward H. O'Hare, VF-3, USS Lexington (CV-2), April 1942

Edward Henry O'Hare was born on March 13, 1914, in St. Louis, Missouri. After graduating from the US Naval Academy in 1937, he was commissioned as an Ensign and assigned to the battleship USS New Mexico (BB-40). In June 1939, he began flight training, which he successfully completed in May 1940. Then he was transferred to VF-3, based on the aircraft carrier USS Saratoga (CV-3). He became famous for his actions in February 1942 when, during the approach to Rabaul on New Britain, the position of Task Force 11 led by the aircraft carrier USS Lexington (CV-2), on which VF-3 was stationed at that time, was exposed. The Japanese dispatched two groups of Betty bombers toward the task force. Only "Butch" O'Hare and his wingman confronted the second group. Lt. O'Hare shot down three Bettys and severely damaged two others, disrupting the entire attack. On April 10, 1942, for promotional shots, two Wildcats were prepared: Thach's with the designation F-1 and the aircraft marked F-13, flown by Lt. Noel A. M. Gayler. However, during the filming, newly promoted Lt. Cdr. O'Hare took the place in F-13's cockpit. This Wildcat was camouflaged with Light Gray FS 36440 on the undersurfaces and Blue Gray FS 35189 on the upper and side surfaces. The insignia on the rear fuselage and four positions on the wings were accompanied by 13 red and white stripes on the rudder. Edward O'Hare did not survive till the end of the war. During a night action on November 26, 1943, while flying a Hellcat, he was likely hit and crashed into the sea. His body was never found, although some witnesses claimed to have seen a parachute. Before the war, O'Hare had settled in Chicago, and in 1949, the city named its airport after him.



BuNo. 3991, VMF-111 Samoa, 1942

Since its establishment in September 1925, this unit underwent several designations. It wasn't until July 1, 1941, that the unit was redesignated as VMF-111, a designation it held until its deactivation on November 26, 1945. At the time of the attack on Pearl Harbor, the pilots of the unit flew F4F-3 Wildcat aircraft, which the squadron retained in service until the beginning of 1943, when it transitioned to more modern Corsairs. In March 1942, the unit was moved to Tafuna Airfield (now Pago Pago International Airport) on Tutuila Island, part of the American Samoa archipelago. In July of the same year, the unit was relocated to the newly built Faleolo Airfield on Upolu Island in the same archipelago. Here, the unit spent a year as part of the defense of this territory, armed with Wildcats that had seen service with U.S. Navy squadrons operating from aircraft carriers. Wildcat with Bureau Number 3991 initially served on the aircraft carrier USS Saratoga (CV-3) and later, while part of VF-2, participated in the Battle of the Coral Sea. At the beginning of his service with VMF-111, nicknamed Devil Dogs, he carried insignias with red centers on the fuselage and wings and red and white stripes on the rudder.



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