## F6F-3 Hellcat

## eduard

### 1/48 Scale Plastic Model Kit



#### WEEKEND edition

There were few aircraft of WW2 that could be described with such one-sided outcome in terms of kill-to-loss ratio as the Hellcat. The performance step compared to its predecessor was enormous.

Representing another step in the "cat" line of the Grumman aircraft, Hellcat was a unique type right from its beginnings. As the war in the Pacific theatre moved on, it was more and more evident the Hellcat's predecessor, Wildcat, which carried the bulk of the strain of the Pacific air war in 1942 on its shoulders, is somehow inferior to the Mitsubishi Zero.

#### With an eye on experience

Grumman designers were working on a successor to F4F Wildcat since 1938 (i.e., just three years after the Wildcat had been developed), so they were not to start from the scratch when designing the XF6F-1. But the original plan to further develop the F4F with more powerful engine was scrapped in order to deliver what Navy and Marine Corps needed. To find their real needs, Grumman team worked with experienced F4F pilots and US Navy Bureau of Aeronautics (BuAer). There were many inputs from pilots, like a higher position of the cockpit od sloped forward fuselage for better pilot's view. Finally, the design was completely different compared to the Wildcat, with wing position moved from center of the fuselage to its lower part, although not fully low-wing design. The wing fold mechanism allowed for both hydraulic or manual folding around diagonal axis pivoting system. Folded stowage position of the outer parts of the wing was parallel to the fuselage with the leading edges pointing down. Instead of the Wildcat's fuselage-mounted narrow-track main undercarriage operated manually the new fighter got robust wide track wingmounted hydraulically operated main gear legs, rotating 90° while retracting backwards into the wing.

#### More power needed

The Wright R-2600 Twin Cyclone 14-cylinder two-row radial engine of 1,700 hp (1,300 kW) was originally intended for new carrier-based fighter, but the BuAer directed Grumman to use more powerful 18-cylinder Pratt & Whitney R-2800 Double Wasp 2,000 hp (1,500 kW) engine for second prototype as the engine already proved itself in use with the F4U Corsair.

The change necessitated strengthening the airframe, but the change paid off, as the performance was raised significantly. The first prototype with the Cyclone engine flew for the first time on June 26, 1942, the XF6F-3 powered by the Double Wasp made its maiden flight on July 30, 1942. Two months later the first production F6F-3 powered by R-2800-10 engine made its inaugural flight (October 3, 1942) and the type reached its operational readiness with VF-9 on the deck of USS Essex in February 1943.

The name Hellcat was chosen to continue with the habit of "cat fighters" for Grumman designs. The name not only suggested the place to which the enemies would be sent, it was also a play on words. The term in the old west referred to barroom brawlers, and that was what the Navy wanted: A tough fighter with hard fists, that could also

absorb some punishment. The Hellcat was some 60 percent heavier than the Wildcat and was also more heavily armed with its six .50 in (12,7 mm) M2 Browning machine guns in the wing with 400 rounds per gun. It had a more powerful engine, carried more fuel and was generally of a more robust design. It was, after all, over twice as heavy as its main adversary, the A6M Zero. The initial version, F6F-3, was followed by the F6F-5, also night fighter variants were developed.

#### Shooting turkeys

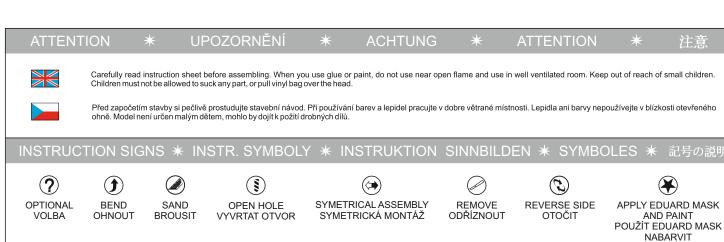
The first combat engagement of the enemy occurred on September 1, 1943, when an H8K Emily was sent down in flames by two Hellcats. The advantage over Japanese fighters was well demonstrated by Hellcat pilots on February 16, 1944, when, in the vicinity of Truk, they sent down over 100 Japanese fighters and destroyed more than 150 of them on the ground for the loss of only four own aircraft. Five days later, in the Marianas, a further 160 enemy aircraft were destroyed in the air and on the ground.

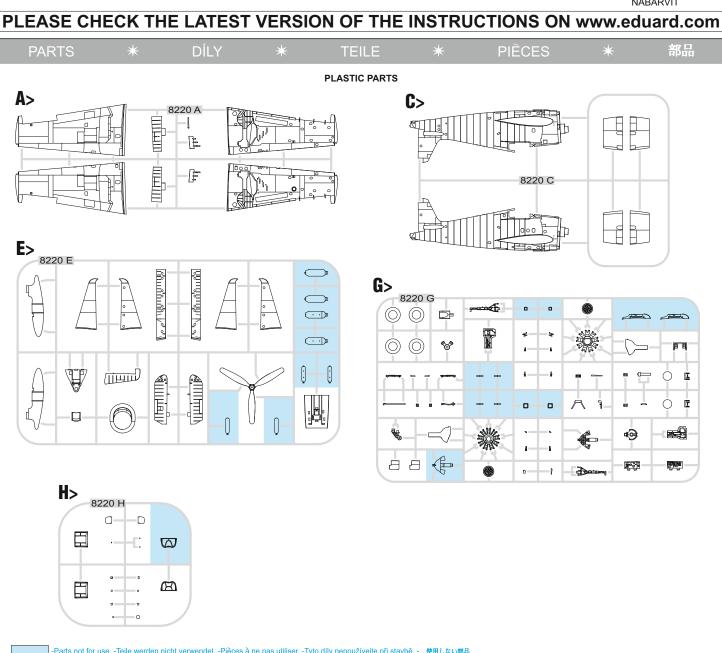
Often one-sided nature of combats was even more evident in the battle for the Philippine Sea that culminated on June 19, 1944, in the legendary "Great Marianas Turkey Shoot". There Hellcat pilots claimed some 350 enemy aircraft destroyed in total. A further "turkey hunt" took place between October 12 and 14, 1944 over Formosa, now with some 300 enemy aircraft destroyed for the loss of 27 Hellcats. Other major combat was seen over the Japanese islands during the first half of 1945. Although the Hellcats were progressively replaced by their stablemate F4U Corsair, they served in the combat role until the end of the war. Under the designation F. Mk.I and Mk.II, several hundred Hellcats served with the Royal Navy, notably in the Atlantic and also in the Far East.

According to statistics, there were 12,275 Hellcats produced and for the loss of 270 of them, the Hellcat pilots claimed 5,156 kills. That accounts for over half of USN and USMC victories during the war!

#### The kit: F6F-3 Hellcat

The initial production version of the Hellcat was armed with six .50 in (12,7 mm) machine guns as a standard. Later production aircraft had single bomb rack installed under each side of the wing, inboard of the undercarriage bays. Together with the fuselage hard point, late production F6F-3s could carry a bomb load of more than 2,000 lb (910 kg). Also, six 5-in (127mm) HVARs could be carried. There were windows right behind the canopy on each side of the fusleage; these were later deleted with the F6F-5. The windshield of F6F-3 was a rounded plexiglass piece with internally mounted armor glass, while the F6F-5 had the armor glass integrated in the windshield (which was thus flat). The engine cowling had bulged area around the exhausts below the cooling regulation flaps, while the F6F-5 with more powerful variant of the Double Wasp had the cowling changed in shape and lacked the bulge.



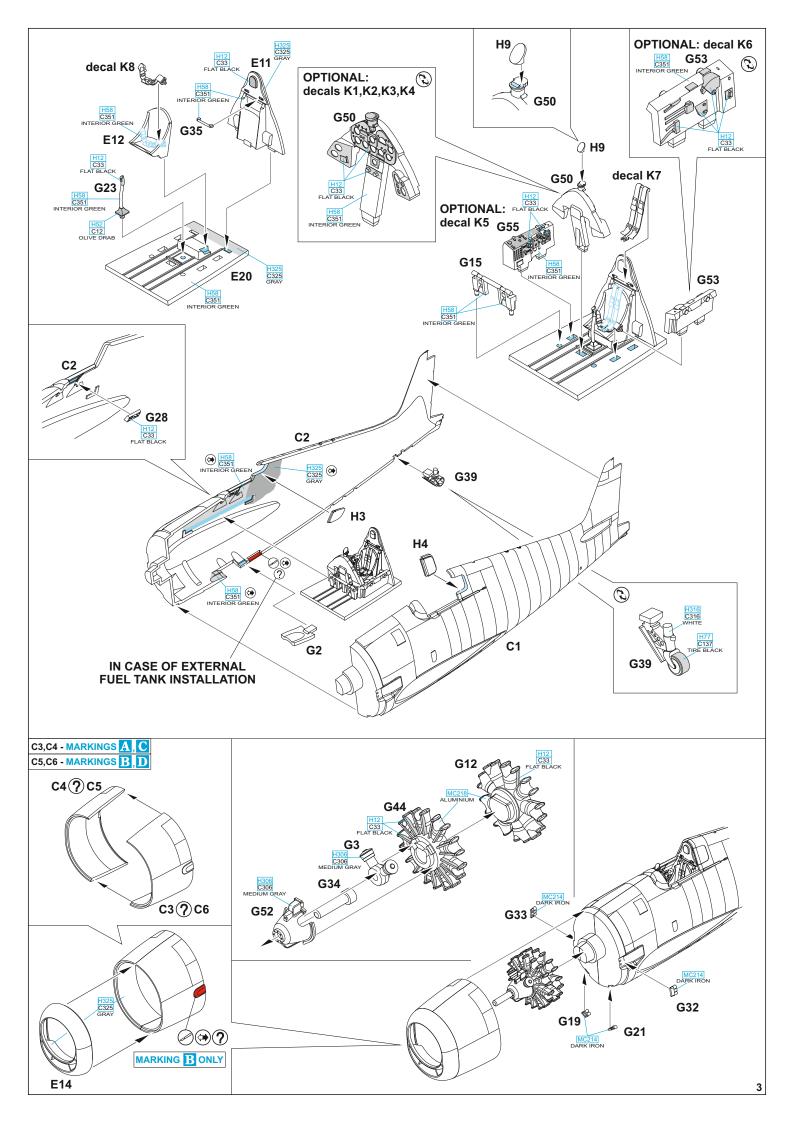


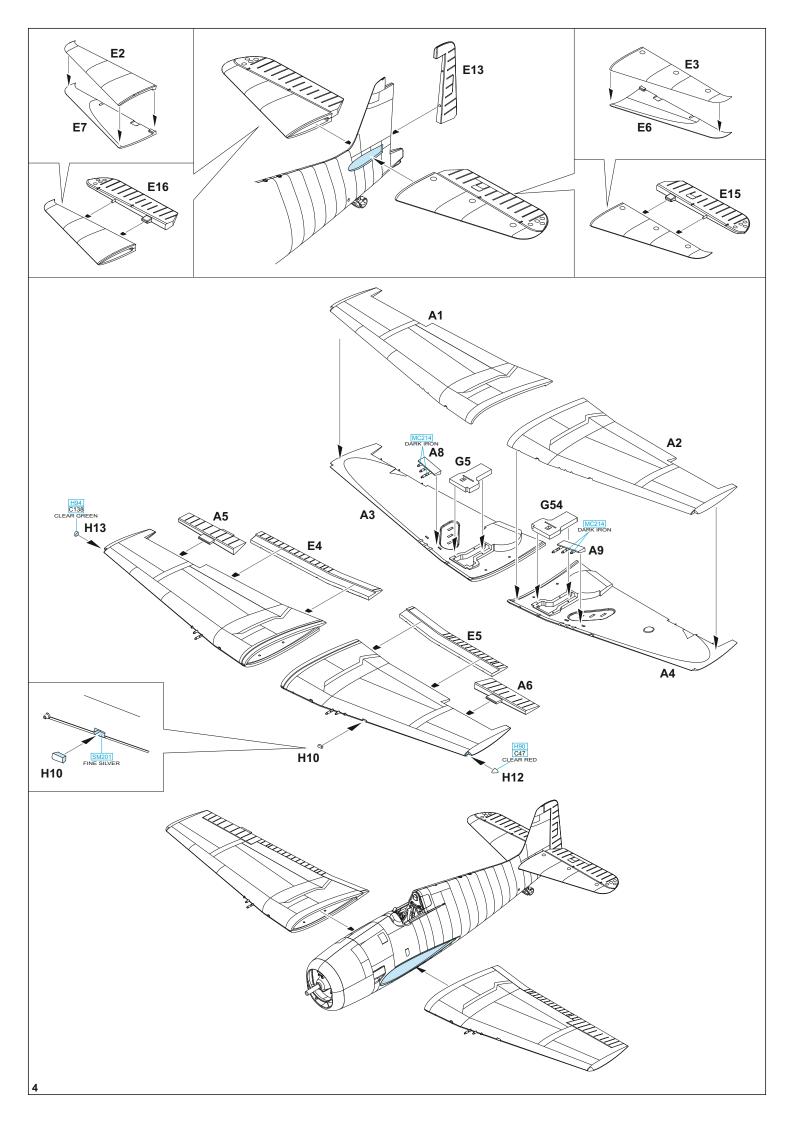
Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

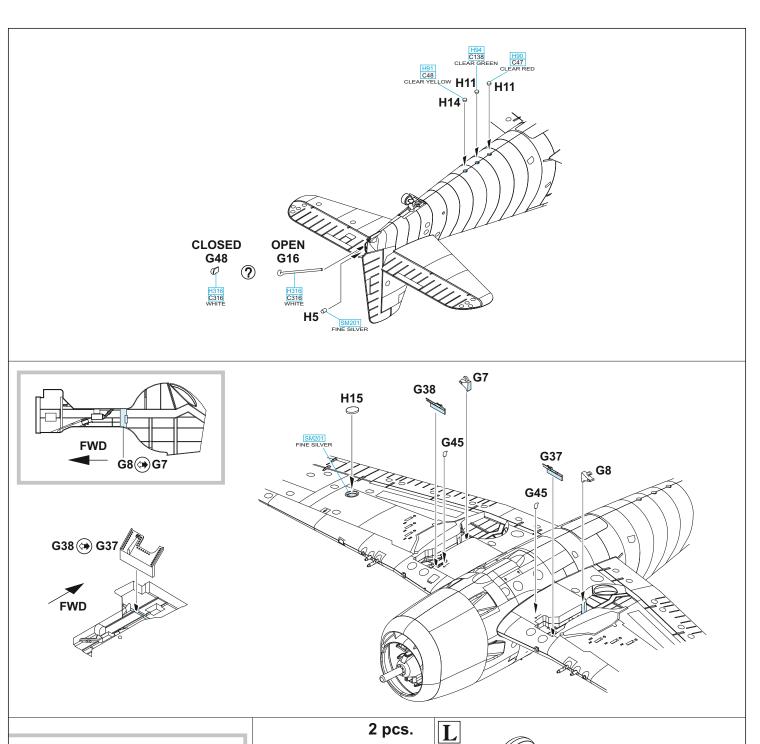
COLOURS \* BARVY \* FARBEN \* PEINTURE

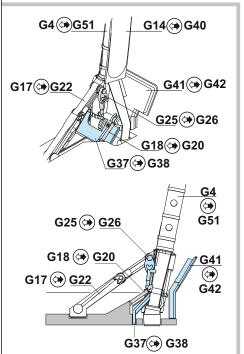
GSi Creos	(GUNZE)	
AQUEOUS	Mr.COLOR	
H11	C62	FLAT WHITE
H12	C33	FLAT BLACK
H18	C28	STEEL
H52	C12	OLIVE DRAB
H54	C365	NAVY BLUE
H56	C366	INTERMEDIATE BLUE
H58	C351	INTERIOR GREEN
H74	C368	SKY
H77	C137	TIRE BLACK
H90	C47	CLEAR RED
H91	C48	CLEAR YELLOW
H93	C50	CLEAR BLUE

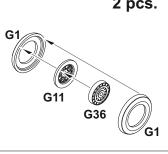
GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H94	C138	CLEAR GREEN
H305	C305	GRAY
H306	C306	MEDIUM GRAY
H316	C316	WHITE
H325	C325	GRAY
H327	C327	RED
H329	C329	YELLOW
Mr.METAL COLOR		
MC214		DARK IRON
MC218		ALUMINIUM
Mr.COLOR SUPER METALLIC		
SM201		SUPER FINE SILVER 2

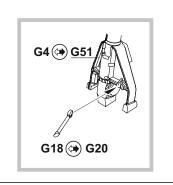


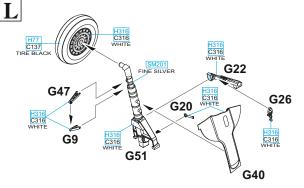


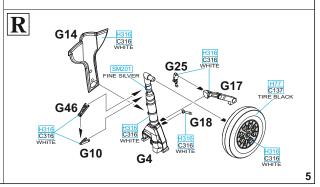


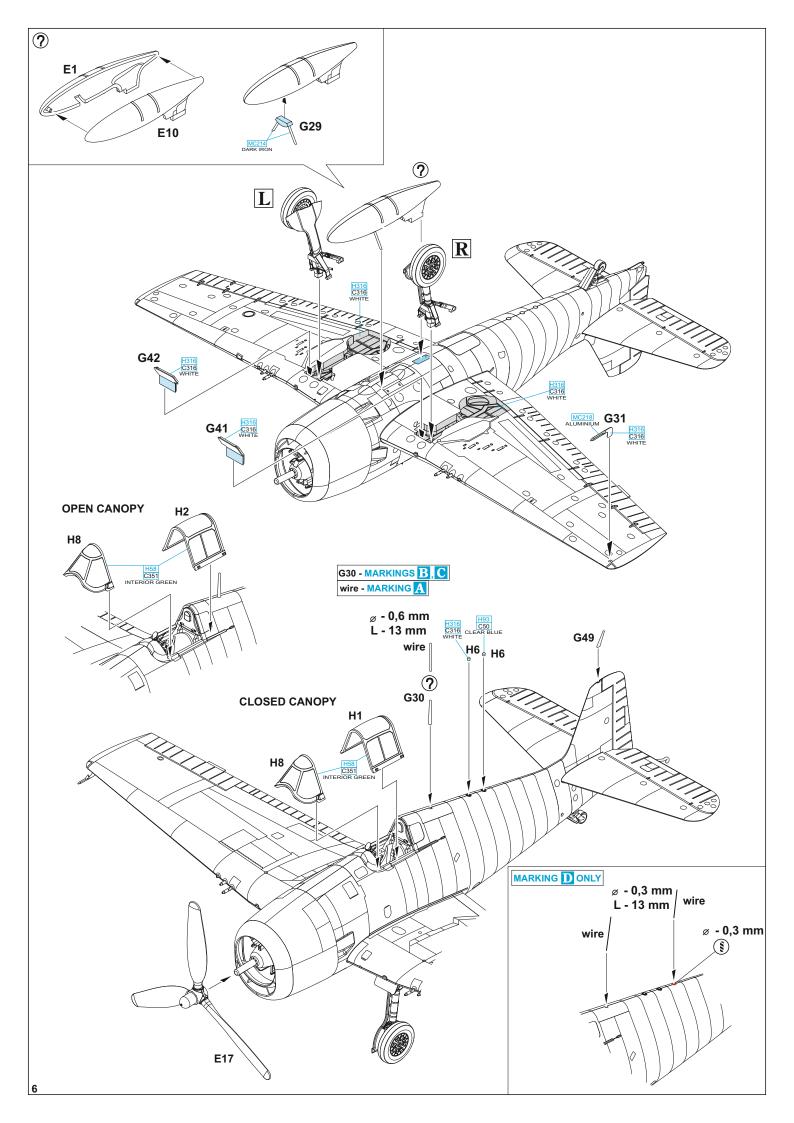






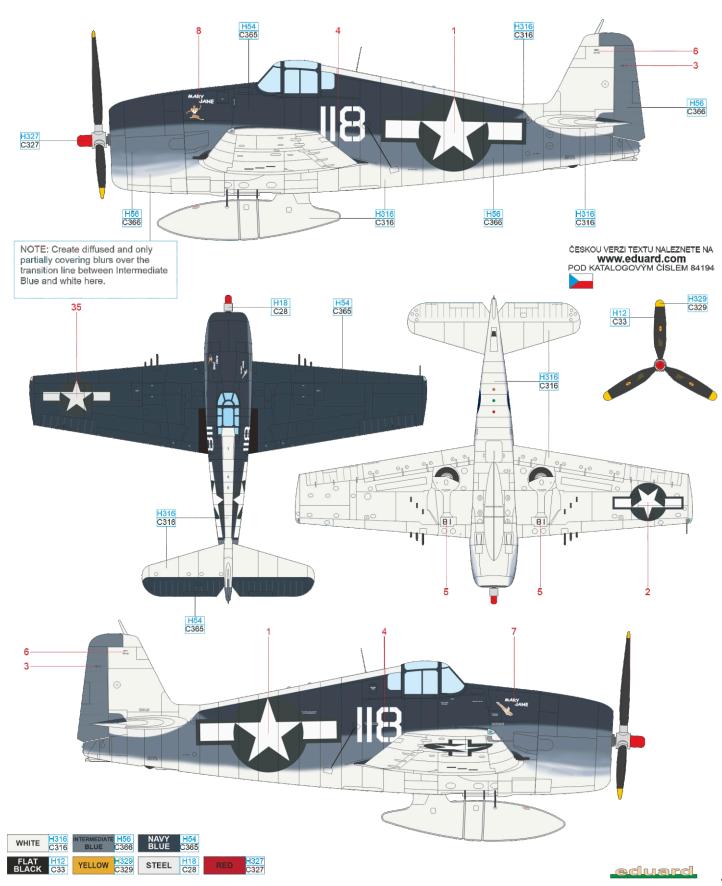






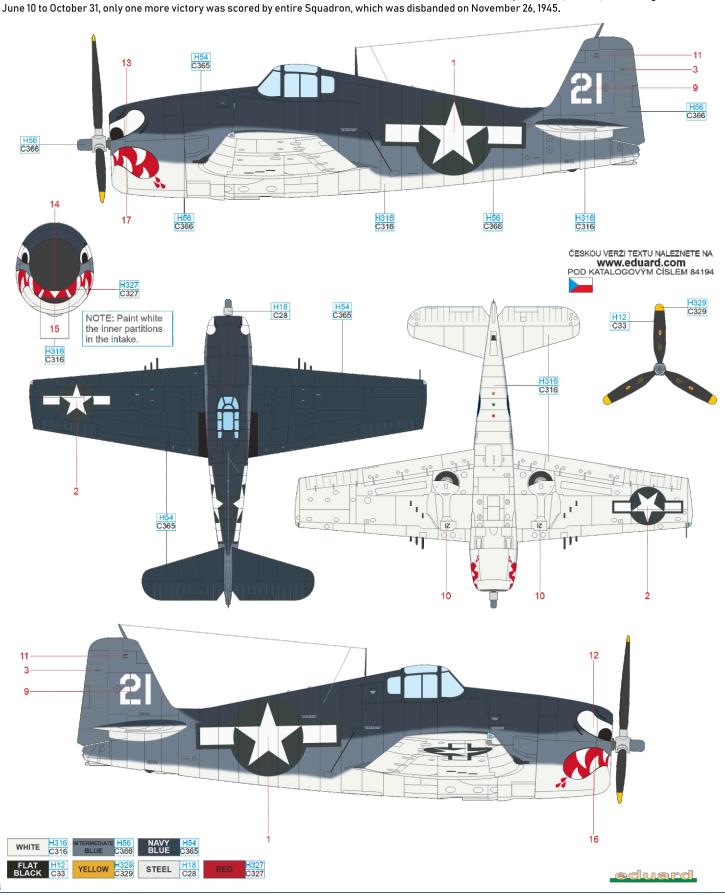
#### 🛕 VF-34, Green Island (Nissan Island), Papua New Guinea, March-April 1944

The history of VF-34 is rather uncommon as it was assembled in just four weeks and thrown immediately into an action in the final phase of the Operation Cartwheel (neutralization of the Japanese base on Rabaul). Of 45 pilots just one had seen any combat. The unexperienced unit was not attached to any Air Group and leaved San Diego on February 13. After they equipped themselves with all needed on Espiritu Santo, they moved to Guadalcanal on March 3, starting their tour on March 7 from Piva Yoke airfield on Bougainville. Enemy attacks forced the Squadron to move to Vella Lavella Island and, finally, to Green Island (now Nissan Island), which became their permanent base. They flew bomber escort or ground attack missions but did not engage any enemy aircraft during 55 days of the tour. The pilots flew a total of 1,165 sorties from Green Island and 177 from Bougainville. The Squadron was disbanded immediately after return and the designation VF-34 was used again as VF-53 was renamed so. Hellcats of "first" VF-34 had upper side of horizontal tail surfaces and rear fuselage ridge painted white for recognition reasons. Some pilots took advantage of distant "big brass" eyes and decorated their aircraft. This one got the painting made after the Antonio Vargas' Esquire calendar girl (May 1944) on the port side of the nose, while the starboard sported the girl from August 1944. This one was most probably simple cutout glued to the aircraft. It is not known to which of the pilots was this aircraft assigned.



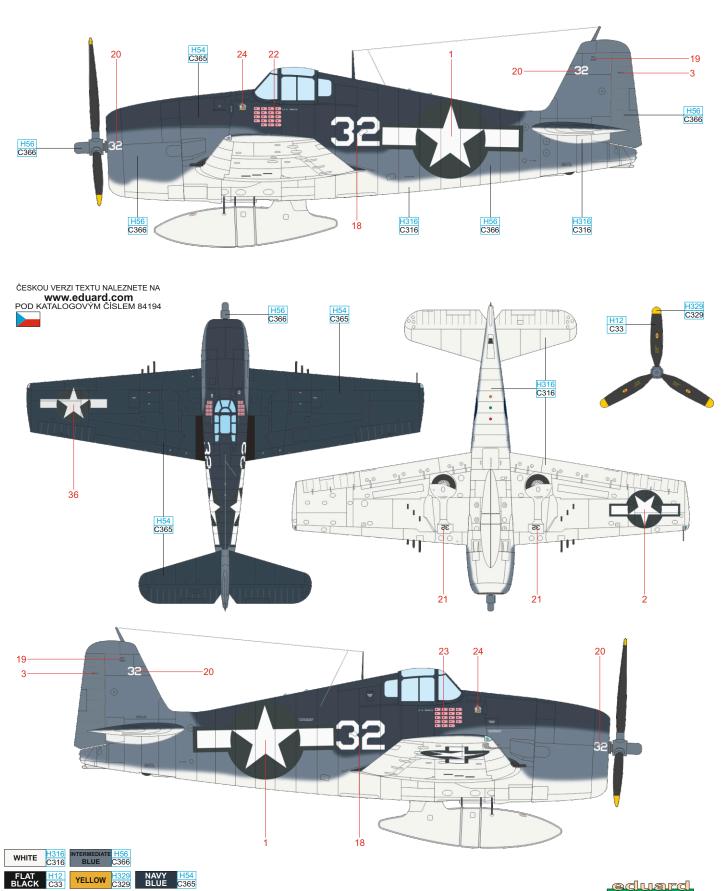
#### B VF-27, USS Princeton (CVL-23), October 1944

Among the most recognizable markings carried by US Navy aircraft were those of the Hellcats of VF-27 operating from the board of USS Princeton. Their shark mouths and bloodshot, menacing eyes seared themselves into the memories of many Japanese pilots. The uncommon and unofficial markings were painted on to the front of all of VF-27's aircraft by one of its pilots, Robert Burnell. These birds, adorned in this way, wreaked havoc everywhere they engaged in combat over the Pacific from May to October 1944. During this span, some 200 enemy aircraft were destroyed. The string of success was snapped on October 24, 1944, when the Princeton was hit by a Japanese bomb from alone Japanese Judy. The dive bomber dropped a single bomb, which punched through the wooden flight deck and hangar before exploding. Structural damage was only minor, but a fire broke out and quickly spread because of burning gasoline. Cruisers and destroyers came to help and USS Birmingham as a largest ship there took the lead role in firefighting. In the frantic activity Princeton collided with some of the assisting ships and damaged them. Worse to it, the fire caused multiple explosions and the biggest of them damaged Birmingham extensively with considerable casualties. USS Irwin rescued 646 men from Princeton before she was sunk by torpedoes. CO of the VF-27, LtCdr. Frederick A. Bardshar reformed his unit in time to return to the Western Pacific aboard USS Independence (CVL-22). But during the tour from June 10 to October 31, only one more victory was scored by entire Squadron, which was disbanded on November 26, 1945.



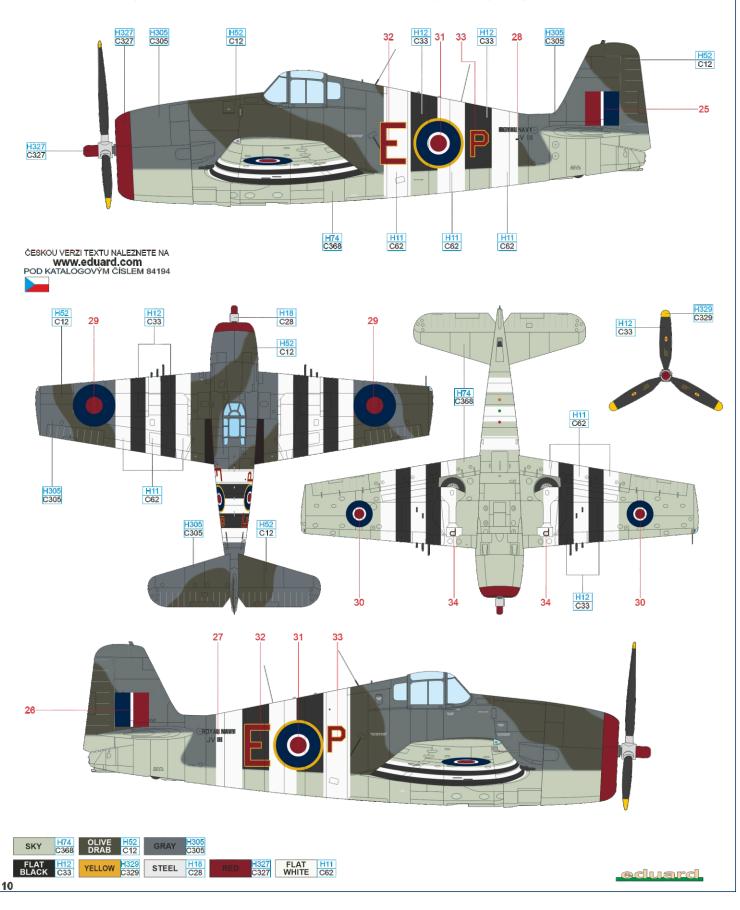
### Bu.No. 40994, Lt. Alexander Vraciu, VF-16, USS Lexington (CV-16), June 1944

Vraciu had enrolled in the Civilian Pilot Training program and earned his private rating in the summer of 1940. Immediately after graduation in June 1941 he enlisted in the Navy as an aviation cadet, beginning instruction in October. Ensign Vraciu received his Wings in August 1942 and joined VF-3 in March 1943. It was the unit led by LtCmdr. Edward H. O'Hare, one of the significant heroes in the first year of the war. Due to a realignment of Navy squadrons, VF-3 was redesignated VF-6 in July 1943 and Vraciu shot down his first victim on October 5, 1943. He added eight more with VF-6 and having finished his tour of duty with VF-6, he declined to return to the USA and on his own request, he was assigned to VF-16 aboard USS Lexington (CV-16) from February 27. During his service with this unit, he was credited with further 10 victories. His best day came on June 19, 1944, when during the Battle of the Philippine Sea (thanks to the enormous number of victories over the Japanese airplanes also known as The Great Marianas Turkey Shoot) he claimed six Japanese D4Y Judy dive bombers shot down in the mere eight minutes. Vraciu's plane with number 32 sported standard camouflage of the Navy aircraft of that time, but there was a noticeable overpainting of the previous marking, including the stencils, right under the fuselage number.



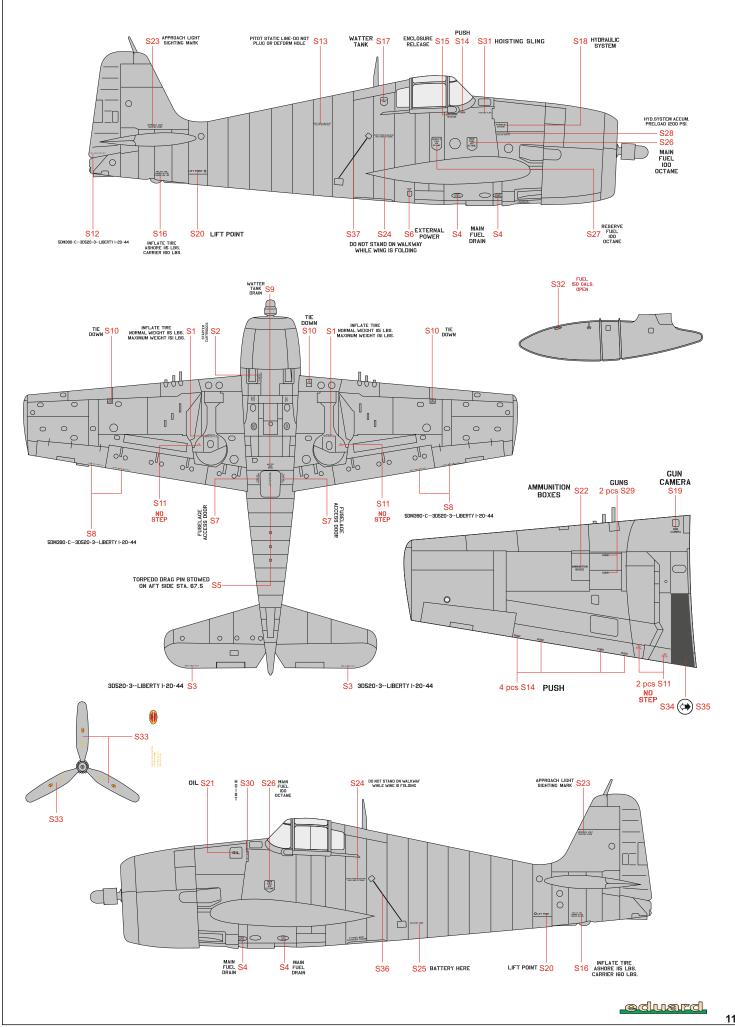
#### JV 111, Sgt. (AROV) Charles A. M. Poublon, No. 800 Squadron FAA, HMS Emperor, August 1944

August 15, 1944, was the start of the Operation Dragoon, the landing operation of the Allied invasion of Southern France. One of the units taking part was No. 800 Sqn FAA, operating Hellcats together with No. 804 Sqn. from the board of HMS Emperor. As the ship was involved in aerial cover over western approaches to the Channel during the Overlord operation, her Hellcats sported invasion stripes. Concurrently they were given the red paint on front cowling, identifying marking for Operation Dragoon. The JV111 was lost on third day of operations. With Dutch pilot Charles Alphonse Marie Poublon in cockpit, it received Flak hits and damaged was ditched off the Spanish coast. Pilot was rescued and continued his service with unit and later also with No. 60 Sqn. RAF in Burma. After the war he served with the Royal Netherlands Navy until transferring to the Royal Netherlands Air Force in 1954. As a member of the 314 Squadron, he set up the demo team called "Red Noses" in 1956, the same year he was named CO of 2e Tactische Jachtgroep (2nd Tactical Fighter Group). He retired as Lieutnant Colonel and passed away on December 4, 1992, in Laren at the age of 71. Poublon was not the only Dutch in the ranks of No. 800 Sqn. as five more joined the unit before the operation Dragoon (transferred from No. 1840 Sqn.). The wreck of JV111 was recovered in 1984 and revealed missing black stripes on the bottom of the fuselage. Whether the these were never painted, or partially removed is not known.



### F6F-3 Hellcat

### STENCILING POSITIONS



## **Eduard goodies for**

# F6F-3 Hellcat

