F6F-5 Hellcat

eduard

1/72 Scale Plastic Model Kit



item No. **70**

ProfiPACK

There are a few aircraft of WW2 with such one-sided record in terms of kill-to-loss ratio as the Hellcat. The performance step compared to its predecessor was just 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, was inferior to the Mitsubishi Zero. The Zero offered better maneuverability, also the top speed and endurance were better. So the need for an aircraft superior to the A6M was obvious.

With an eye on experience

In fact, Grumman were working on a successor to F4F Wildcat since 1938 (i.e., three years after the Wildcat had been developed), so they did not have to start from scratch when designing the XF6F-1. The original plan to further develop the F4F with more powerful engine was scrapped in order to deliver what Navy and Marine Corps were calling for. To find their real needs, Leroy Grumman and his chief designers Jake Swirbul and Bill Schwendler worked closely with experienced F4F pilots and US Navy Bureau of Aeronautics (BuAer) to develop brand new fighter. 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 still not fully low-wing design.

The "Sto-Wing" folding mechanism allowed for both hydraulic or manual folding. Folded 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 was fitted out with robust wide-track 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 1,700 hp (1,300 kW) engine 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 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" of Grumman design. 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 quite heavy punishment.

The Hellcat was some 60 percent heavier compared to Wildcat, armed with 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. But it was a fighter first and foremost in every sense of the word, designed around the requirements of the pilots to fulfill the combat missions for which it was designed.

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 combat was emphasized 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! A further "turkey hunt" took place between October 12 and 14, 1944 over Formosa, now with some 300 of enemy aircraft destroyed for the loss of 27 Hellcats. Although the Hellcat was progressively replaced by its stablemate F4U Corsair, it served in the combat role until the end of the war. Under the designation F Mk.I and Mk.II, Hellcats served with the Royal Navy, notably in the Atlantic and also in the Far East. There were 12,275 Hellcats of all versions produced and for the loss of 270, their pilots claimed 5,156 kills. That accounts for over half of USN and USMC victories during the war!

The kit: F6F-5 Hellcat

The F6F-5 featured several improvements over the previous F6F-3. The more powerful R-2800-10W engine with waterinjection system was the main technical change. The engine cover was slightly reshaped, as it lacked bulges around exhausts below the cooling regulation flaps seen on F6F-3. Also, the windshield was different, as the F-6F3 had a rounded plexiglass with internally mounted armor glass, while the F6F-5 got the flat armor glass integrated in the windshield. The side windows behind the cabin were retained for early production aircraft, while late production batches had them deleted. Apart from several early production aircraft, most of the F6F-5s were painted in an overall gloss sea-blue color. All of the F6F-5s were capable of carrying one 20mm M2 cannon in each of the gun bays along with two pairs of standard .50 in (12,7 mm) Browning machine guns. But this configuration was used only on F6F-5N night fighters and some French aircraft.



Carefully read instruction sheet before assembling. When you use glue or paint, do not use near open flame and use in well ventilated room. Keep out of reach of small children. Children must not be allowed to suck any part, or pull vinyl bag over the head.



Před započetím stavby si pečlivě prostudujte stavební návod. Při používání barev a lepidel pracujte v dobre větrané místnosti. Lepidla ani barvy nepoužívejte v blízkosti otevřeného ohně. Model není určen malým dětem, mohlo by dojít k požití drobných dílů.

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





OHNOUT





OPEN HOLE VYVRTAT OTVOR



SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ



REMOVE ODŘÍZNOUT

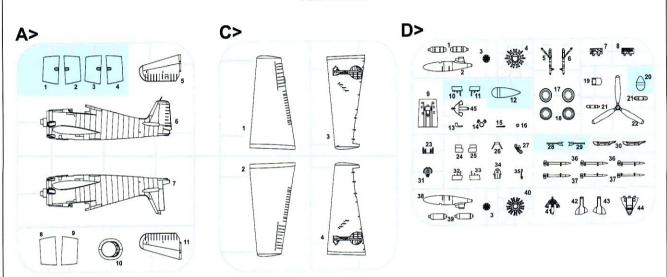


APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

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

PARTS * DÍLY * TEILE * PIÈCES * 部品

PLASTIC PARTS





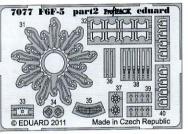
COLOURS



PE - PHOTO ETCHED DETAIL PARTS



FARBEN



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

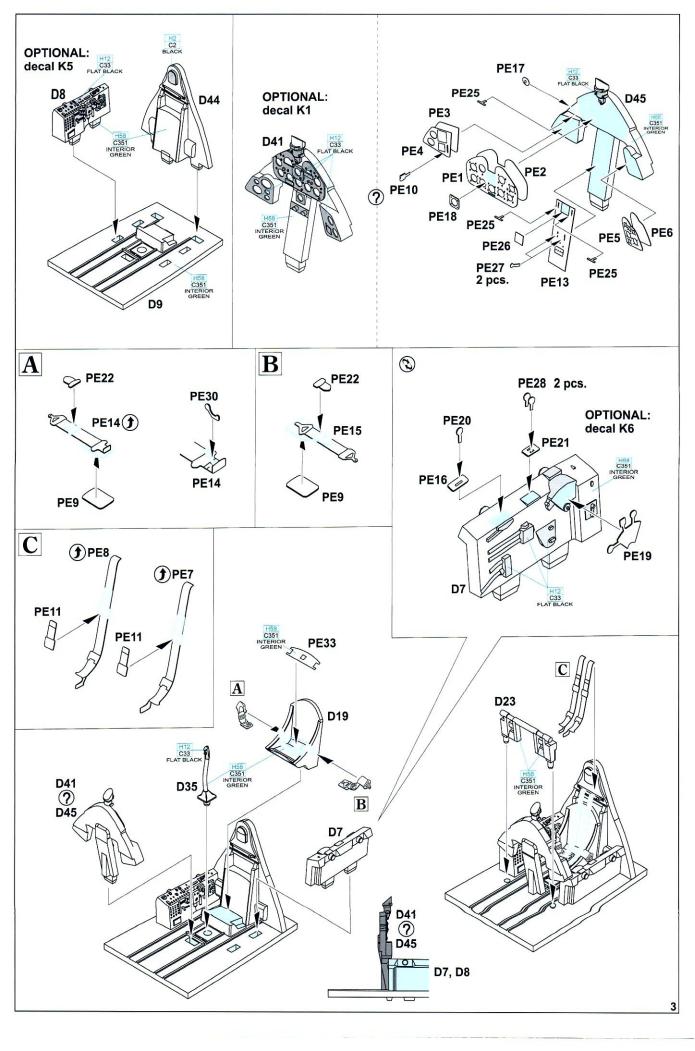
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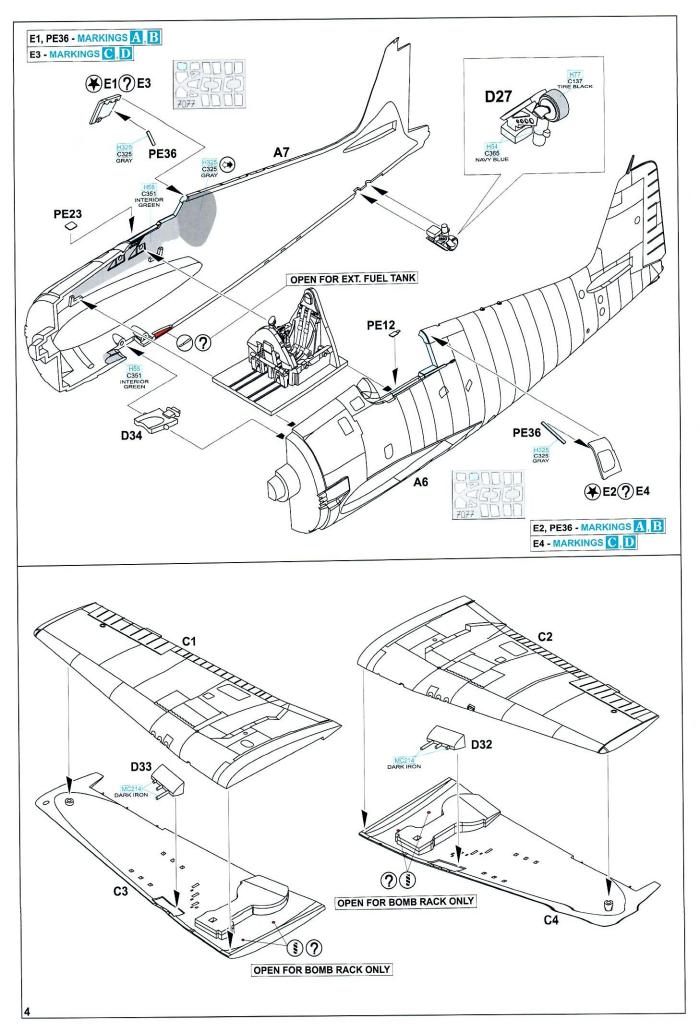
BARVY

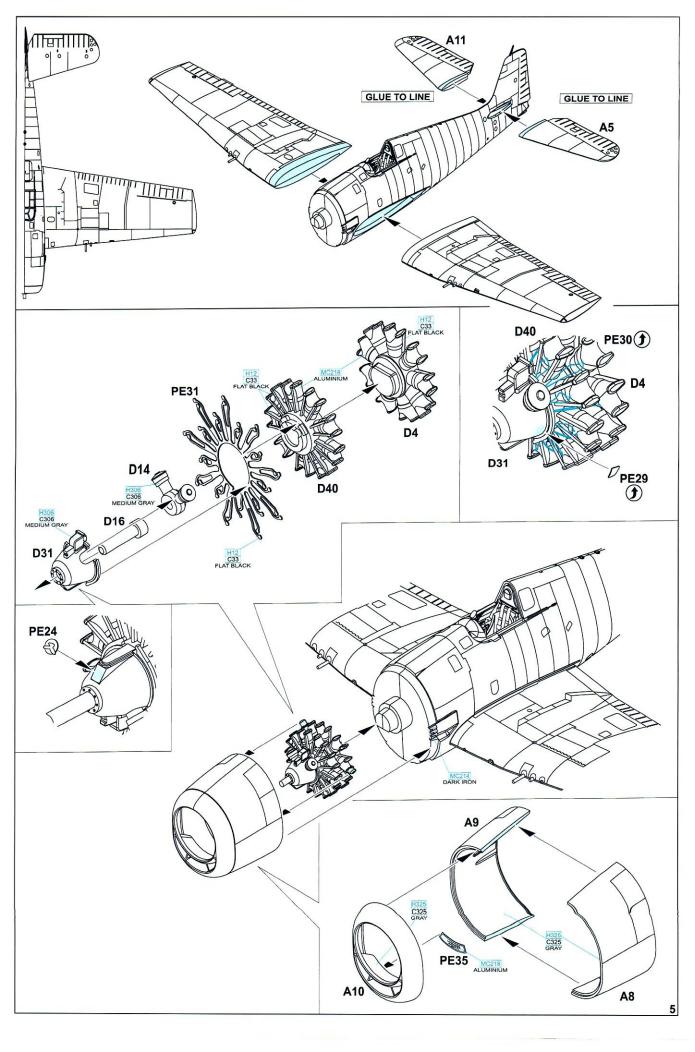
GSi Creos (GUNZE)			
AQUEOUS	Mr.COLOR		
H2	C2	BLACK	
H12	C33	FLAT BLACK	
H51	C11	LIGHT GULL GRAY	
H54	C365	NAVY BLUE	
H58	C351	INTERIOR GREEN	
H77	C137	TIRE BLACK	
H80	C54	KHAKI GREEN	
H306	C306	MEDIUM GRAY	
H316	C316	WHITE	

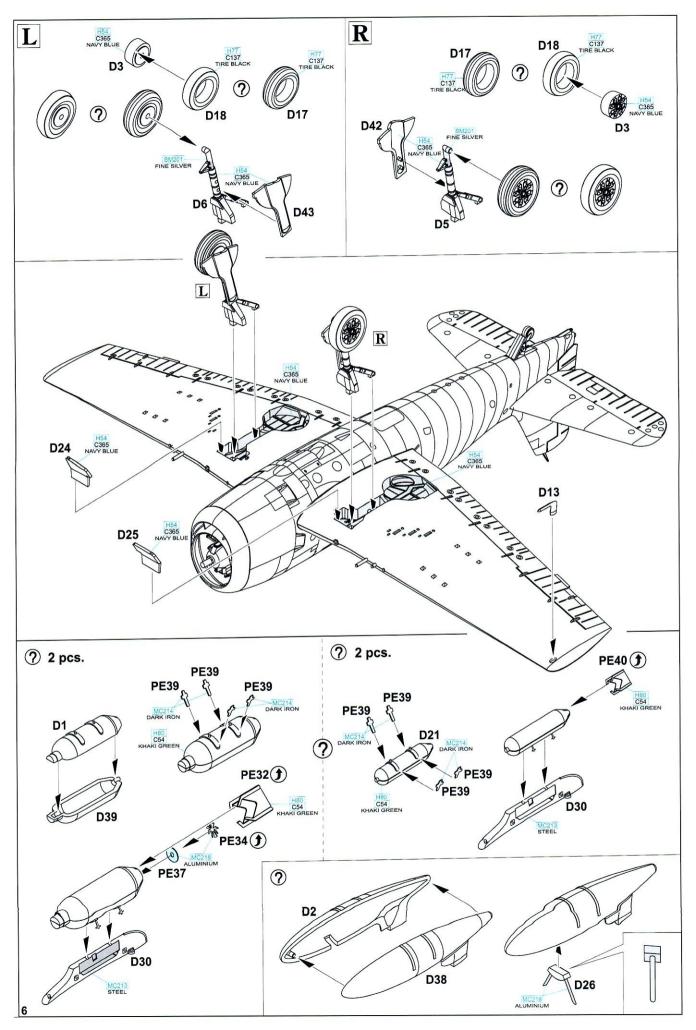
AQUEOUS	Mr.COLOR		
H325	C325	GRAY	
H327	C327	RED	
H329	C329	YELLOW	
Mr.META	L COLOR		
MC213		STAINLESS	
MC214		DARK IRON	
MC218		ALUMINIUM	
Mr.COLOR SU	PER METALLIC		
SM201		SUPER FINE SILVER 2	

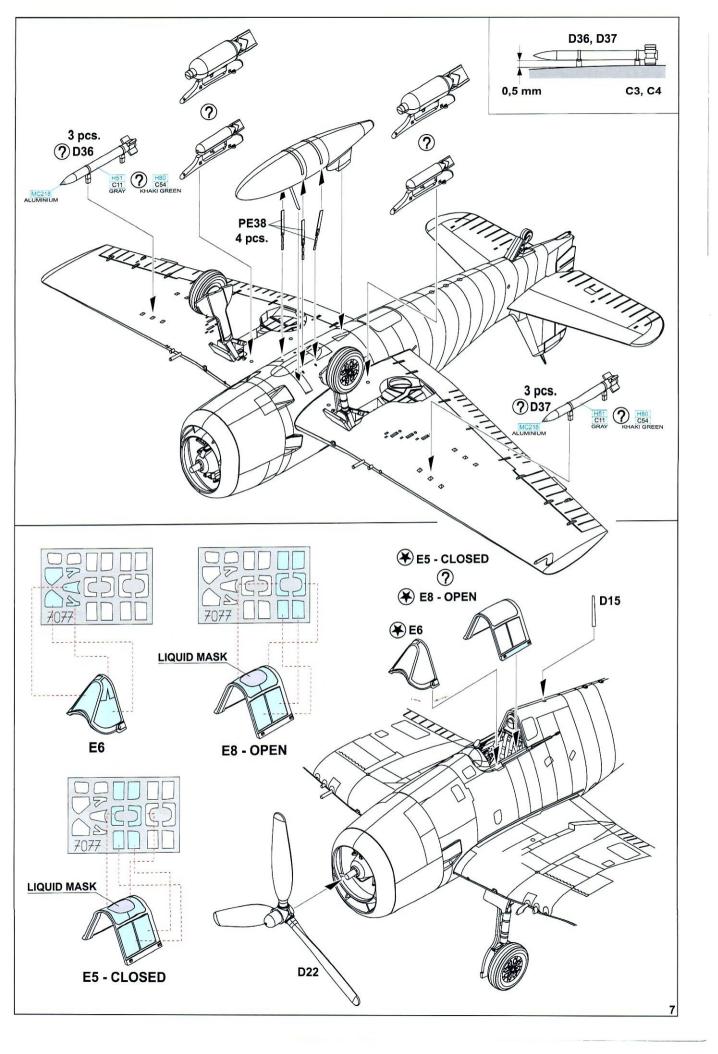
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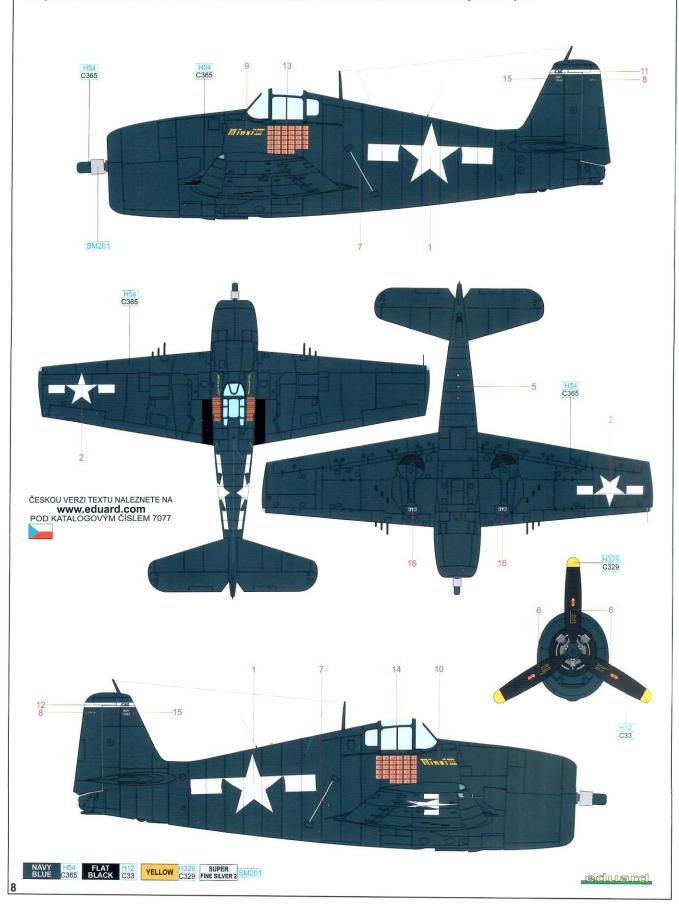






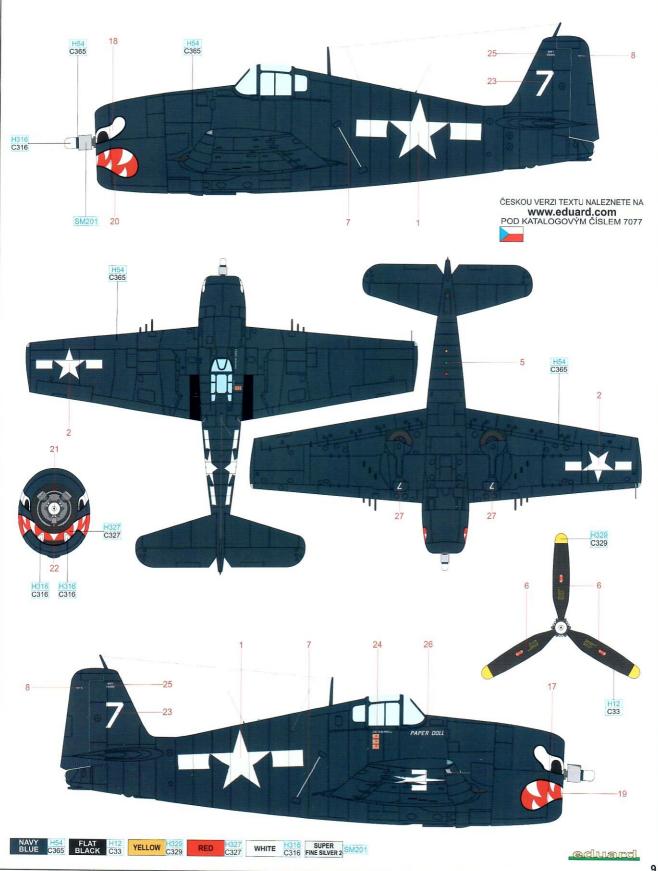
BuNo 70143, Cdr. David McCampbell, CO of CAG-15 USS Essex (CV-9), October 1944

David McCampbell, commander of the Carrier Air Group 15, was the most successful fighter pilot within the US Navy. He achieved at least 20 of his 34 victories flying this Hellcat. During the Great Marianas Turkey Shoot on June 19, 1944, he shot down seven Japanese aircraft and a few days later, on October 24, another nine during fight against a large Japanese numerical advantage. He was twice awarded the Congressional Medal of Honor. "Minsi III" was lost in December 1944 in an accident when flown by another pilot.



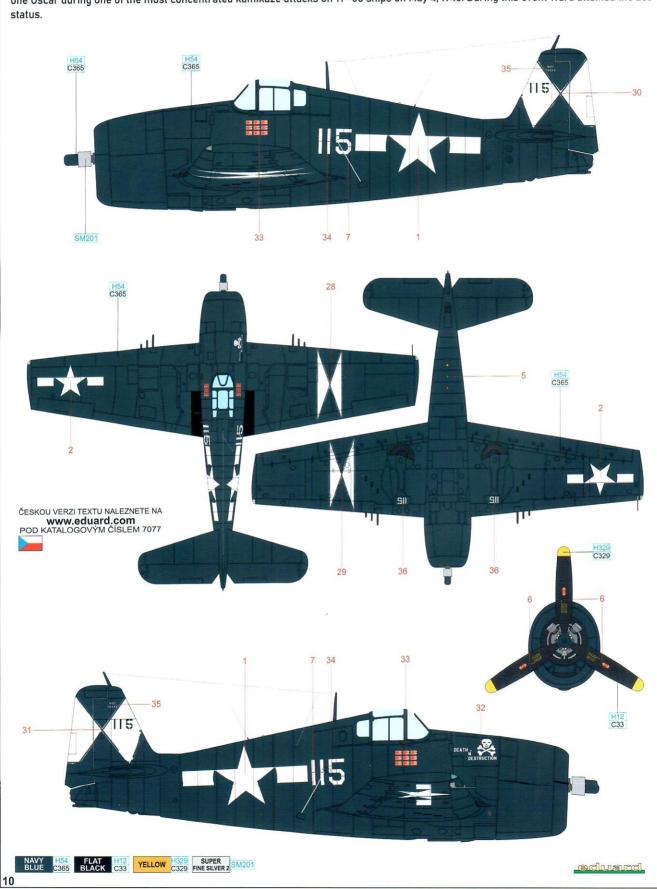
Lt. Carl A. Brown Jr., VF-27, USS Princeton (CVL-23), October 1944

"Paper Doll" was the personal mount of Lt. (jg) Robert Burnell. The distinctive shark mouth painting was used on the earlier aircraft by the squadron, and it appears here in a simpler form. On October 24, 1944, during the Battle of Leyte Gulf, Lt. Carl A. Brown intercepted a large formation of enemy aircraft at a time when the USS Princeton had suffered serious damage. During the intercept, Lt. Brown was able to down five of the Japanese aircraft but was hit and injured himself. He landed on the USS Essex (CV-9), as the Princeton was out of action. "Paper Doll" was pushed overboard to make room for other landing aircraft.



BuNo 72534, Ens. Donald McPherson, Bill Kingston, Jr., Lyttleton Ward, VF-83, USS Essex (CV-9), May 1945

Starting from the end of January 1945, US Navy aircraft in the Pacific carried striking geometric symbols. Two white triangles belonged to aircraft of the USS Essex. White 115 also sported an emblem consisting of a skull and crossbones and the inscription "Death and Destruction". The victory marks painted on the cockpit sides possibly included all the success achieved by the pilots who flew the plane. White 115 was mostly flown by Ensigns Donald McPherson, Bill Kingston, Jr., and Lyttleton Ward. The last mentioned downed three Alfs and one Oscar during one of the most concentrated kamikaze attacks on TF-58 ships on May 4, 1945. During this event Ward attained the ace



Lt. Leo Bob McCuddin, VF-20, USS Enterprise (CV-6), October 1944

Famous Navy pilot Leo Bob McCuddin flew this aircraft on many of his combat sorties. He flew F6F Hellcats as a pilot with VF-20 from the USS Enterprise from April 1944. All five of his victories were gained during his combat tour with VF-20. He participated in the attack on the "Fuso" Class battleship and in the sinking of an escort destroyer during the Battle of the Philippine Sea on October 24 and 25, 1944.



STENCILING POSITIONS

