### 1/48 Scale Plastic Model Kit



# **ProfiPACK**

# The Bell P-39 was one of the best fighter aircraft of the USAAF when entering the war. Although overshadowed by the P-51 or P-47 later, it was remarkable fighter.

The P-39 Airacobra was developed by the Bell Aircraft Corporation in Buffalo, New York, in the late 30's as an answer to the 1937 specification for a new high-altitude and heavily armed pursuit aircraft. The turbocharged Allison engine was intended to power the aircraft, which was required to reach at least 360 mph (580 km/h) at altitude, climbing to the 20,000 ft (6,100 m) in six minutes. These demands were very challenging, and the Bell design team decided to take innovative approach with the engine mounted in the middle of the fuselage at the center of gravity. The propeller was driven through an outboard reduction gear by an extension shaft running under the cockpit floor. It also had unusual tricycle undercarriage and car-door entry to the cockpit on both sides.

### Blow to the concept

The first XP-39 prototype conducted its maiden flight on April 6, 1939, in Dayton and reached maximum speed of 390 mph (628 km/h) at 20,000 ft (6,100 m). It took only five minutes to reach that height and doing so, the new design surpassed the original demands, but stayed behind the proposal by Bell, stating 400 mph would be achieved. The prototype was powered by the Allison V-1710-17 fitted with turbocharger according to the original specifications, rated at 1,150 hp. The XP-39 proved also good maneuverability thanks its innovative concept of airframe, with its engine located in the center of gravity. The concept also allowed a long, slim nose well suited for installation of a powerful weaponry.

The USAAF ordered a test series of twelve YP-39s on April 27, but before the series was finished the project had been significantly changed. Because of troubles with proper turbocharger installation, the original engine was replaced by a less powerful Alison V-1710-37 using just one-stage, one-speed mechanical supercharger. The engine thus developed just 1090 hp and, more to it, it was losing its power gradually at the higher levels. This was a major blow to the promising fighter.

The YP-39 had a propeller-axis Oldsmobile T-9 cal. 37 mm cannon, two .50 caliber (12.7 mm) machine guns and two .30 caliber (7.62 mm) machine guns mounted in the nose. The pilot seat got armor and the weight of the aircraft rose to 3160 kg against 2820 kg of the XP-39 prototype. Due to it the maximum speed fell to 366 mph (590 km/h) and climbing to 6100 m took 7.5 min now.

Although the excellent prototype flight performances were decreased, the USAAF kept its interest and ordered 80 production P-39s marked as the C variant. The first 20 aircraft of the order were supplied as standard P-39C, while the remaining 60 were finished as P-39Ds, with the two .30 caliber (7.62 mm) guns moved to the wing and two more .30 caliber (7.62 mm) ones added to the same location. The USAAF received its first P-39Ds in February 1941, and the next order for 344 P-39Ds was placed subsequently.

### RAF disappointment

The RAF ordered 675 P-39s in April 1940. British Airacobras Mk.I were produced as the P-39D standard, but with the engine-axis

cannon replaced with a British Hispano M1 20 mm weapon, while the wing machine guns were replaced with 7.7 mm Brownings. The first Airacobra Mk.Is were delivered in July 1941, but the RAF was disappointed. They were not suitable for service in the European theatre due to their less than average performance at high altitude. In October 1941, four Mk.Is were tested by No. 601 Squadron in the ground attack role over France, but they did not perform well in this role. Airacobra was than withdrawn from service with RAF and 212 of them were sent to Soviet Union.

### **Evolution of the Airacobra**

The next production block after the P-39D were 229 aircraft of the P-39F series, followed by the P-39K series (210 aircraft), P-39L (250 aircraft), P-39M (240 aircraft) and P-39N (2095 aircraft). All these variants were very similar, although using various versions of the Allison engine and different propellers. The final version of the Bell's innovative design was designated P-39Q and was powered by the Allison V-1710-85 engine, rated at 1420 hp. The installation of two .50 caliber (12.7 mm) machine guns in underwing pods instead of the four .30 caliber (7.62 mm) wing mounted ones was the main difference to the previous versions.

### Eastern success

Most of the 4905 "Q" series aircraft were sent to Soviet Union. There they were used with great success, as the aerial combat took place at lower altitudes, so the absence of turbocharger was not so harmful to the aircraft's performance. In total, 4758 Airacobras were sent to USSR, where they became very popular, partly for their solid metal airframe and heavy armament, gaining it the nickname "Groznaya boyevaya mashina" (frightening combat machine). Production of P-39Q type was ceased in August 1944, when the last Airacobra No. 9558, had been finished.

The USAAF employed Airacobras extensively until August 1944, when they were withdrawn from frontline service. The USAAF was using the largest quantity of Airacobras (2105 of all types) during February 1944. They served in the Pacific theatre as well as in North Africa and Italy.

The French Air Force used 165 Airacobras, and P-39s served also with the Australian RAAF, with the Italian AF and, also with the Portuguese AF. After the war, several Airacobras were employed in civilian service and used for air races.

### The kit: P-400 Airacobra

When the USA entered the war, the USAAF confiscated 179 Airacobras from the British order from the production line. They were re-designated P-400 and sent to serve in the Pacific theatre. The P-400 designation was used to differentiate these aircraft, inspired by the fact the P-39 was designed with the promise it would be capable of reaching 400 mph of maximum speed. All P-400s had 12 exhaust pipes on each side of the engine, which was major difference from the P-39D series.



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 dobře větrané místnosti. Lepidla ani barvy nepoužívejte v blízkosti otevřeného ohně. Model není určen malým dětem, mohlo by dojít k požití drobných dílů.



**VOLBA** 









SYMETRICAL ASSEMBLY







APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK

**OHNOUT** 

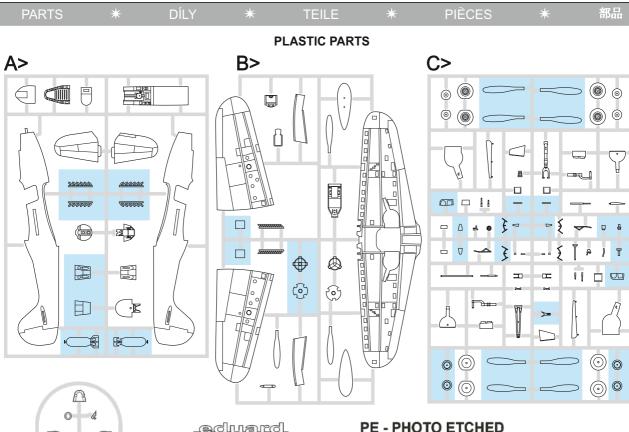
SAND **BROUSIT** 

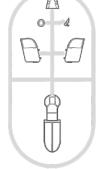
OPEN HOLE VYVRTAT OTVOR

SYMETRICKÁ MONTÁŽ

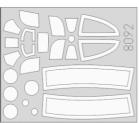
REMOVE **ODŘÍZNOUT**  REVERSE SIDE OTOČIT

NABARVIT









PE - PHOTO ETCHED **DETAIL PARTS** 





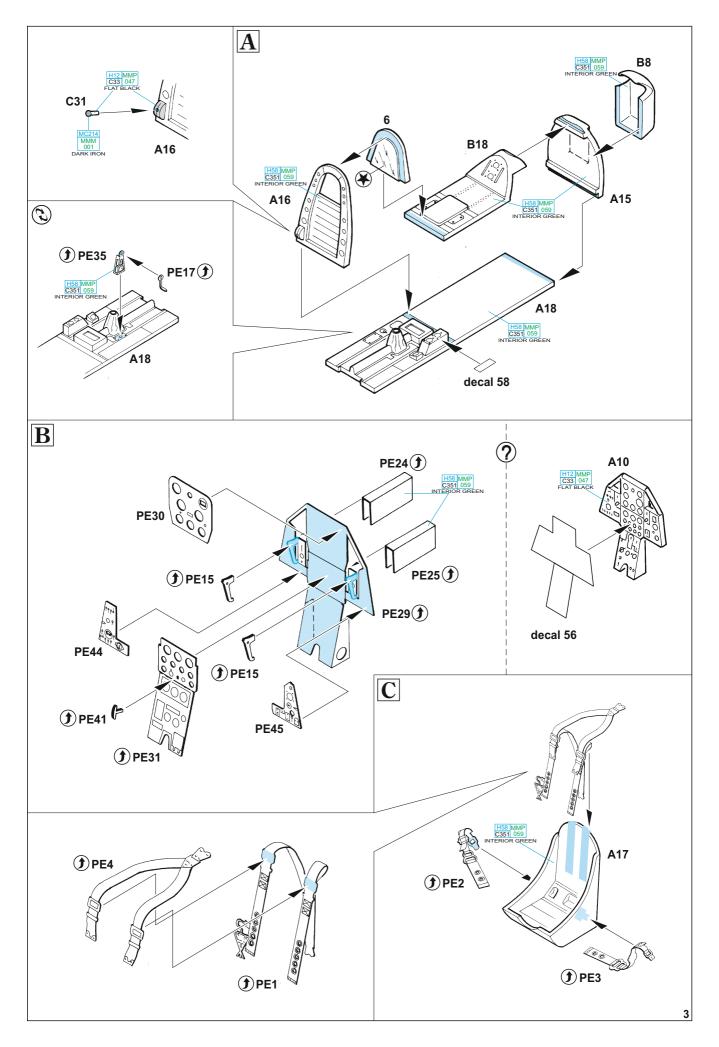
8092 P-400

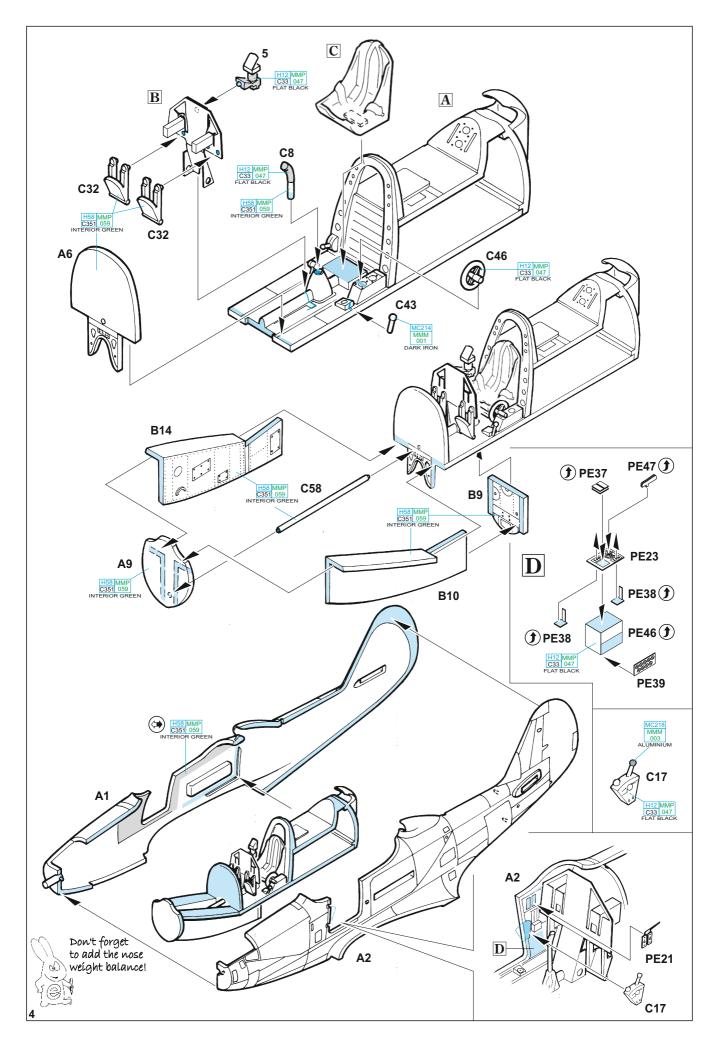
使用しない部品

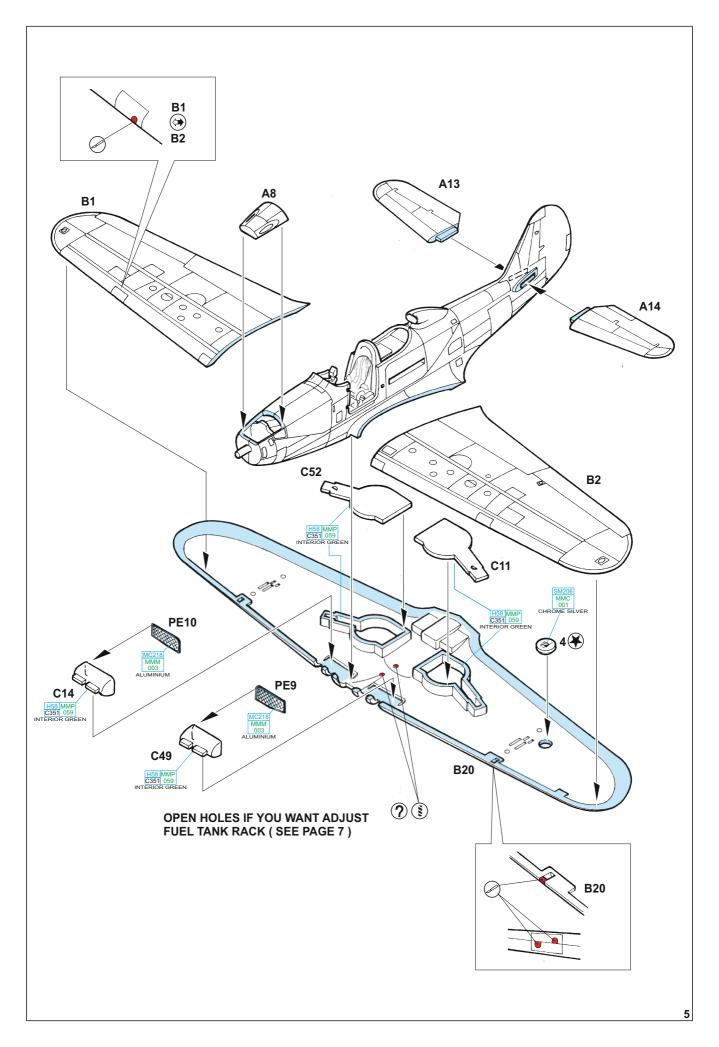
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GSi Creos	(GUNZE)	MISSION MODELS						
AQUEOUS	Mr.COLOR	PAINTS			GSi Creos	(GUNZE)	MISSION MODELS	
H1	C1	MMP-001	WHITE		AQUEOUS	Mr.COLOR	PAINTS	

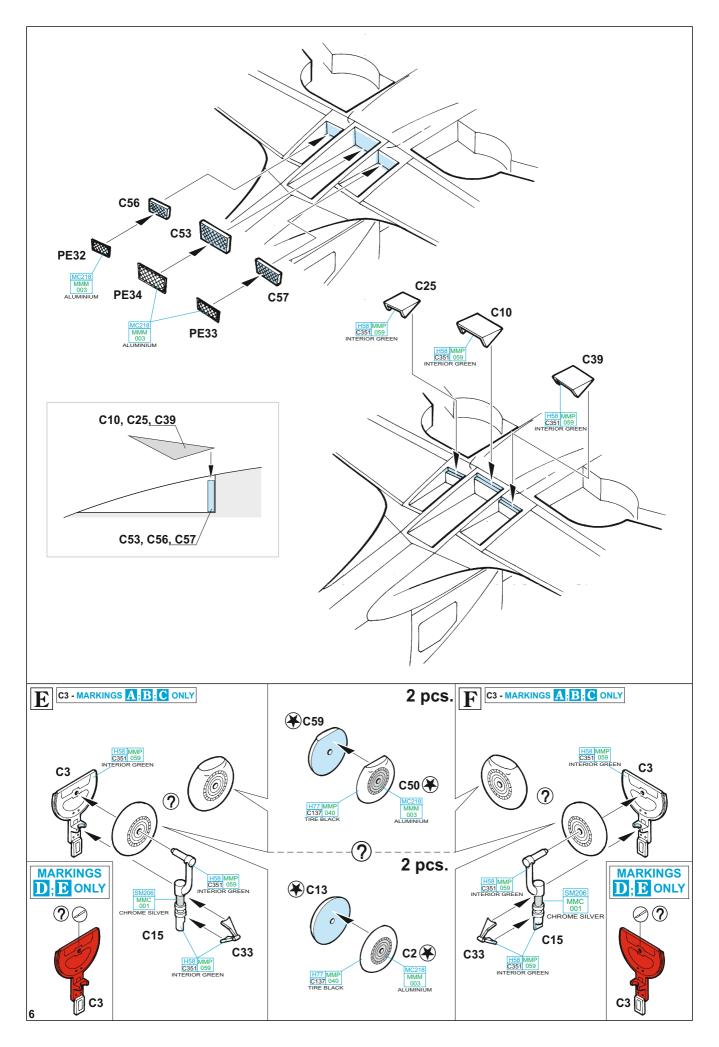
GSi Creos	s (GUNZE)	MISSION MODELS	
AQUEOUS	AQUEOUS Mr.COLOR		
H1	C1	MMP-001	WHITE
H2	C2	MMP-003	BLACK
H8	C8		SILVER
H11	C62	MMP-001	FLAT WHITE
H12	C33	MMP-047	FLAT BLACK
H52	C12	MMP-091	OLIVE DRAB
H53	C13		NEUTRAL GRAY
H58	C351	MMP-059	INTERIOR GREEN
H72	C369	MMP-078	DARK EARTH
H74	C368	MMP-080	SKY
H77	C137	MMP-040	TIRE BLACK

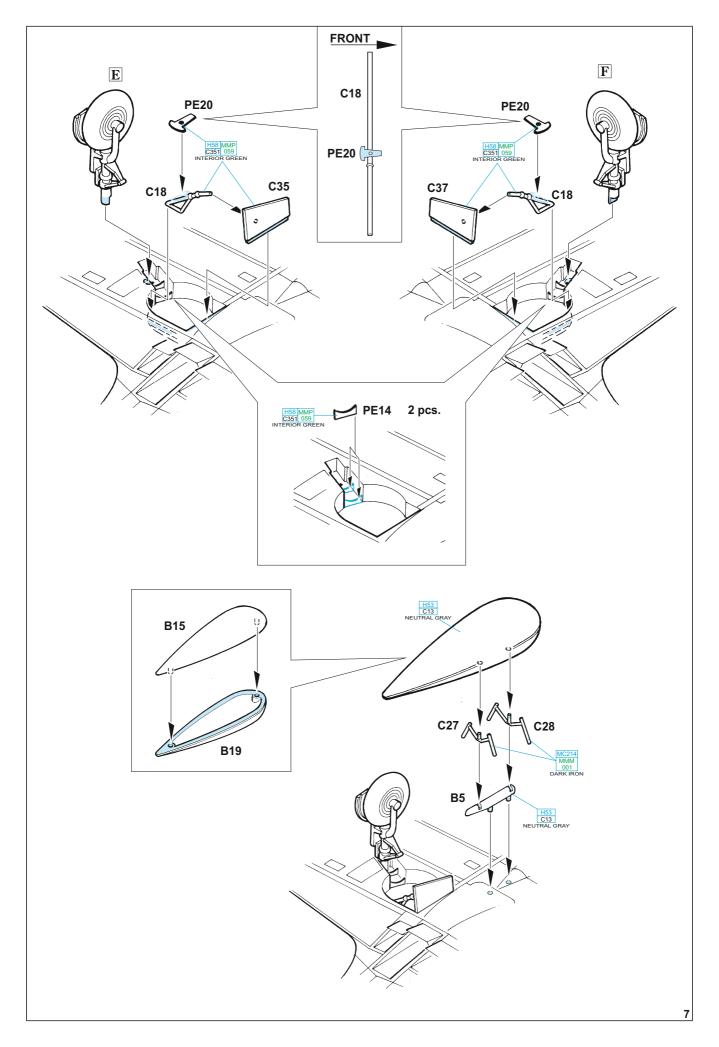
GSi Creos	(GUNZE)	MISSION MODELS	
AQUEOUS	AQUEOUS Mr.COLOR		
H305	H305 C305		GRAY
H323	H323 C323		LIGHT BLUE
H327	H327 C327		RED
H329	C329		YELLOW
H330	H330 C361		DARK GREEN
Mr.META	L COLOR	METALLICS	
MC	214	MMM-001	DARK IRON
MC	218	MMM-003	ALUMINIUM
Mr.COLOR SUI	PER METALLIC	METALLICS	
SM	206	MMC-001	SUPER CHROME SILVER

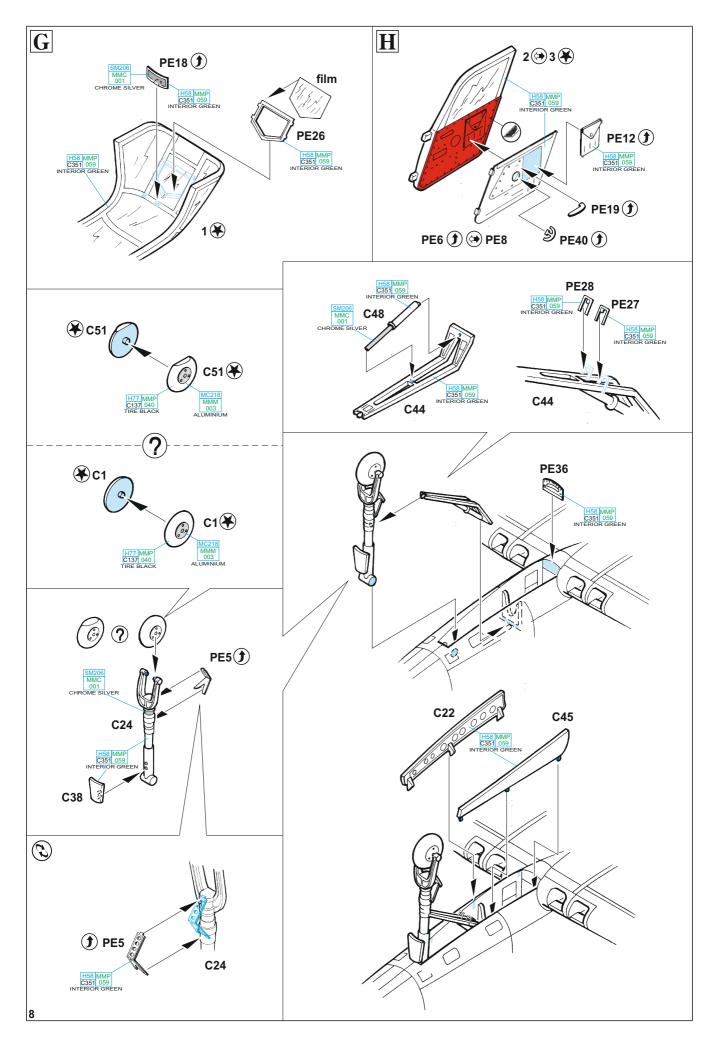


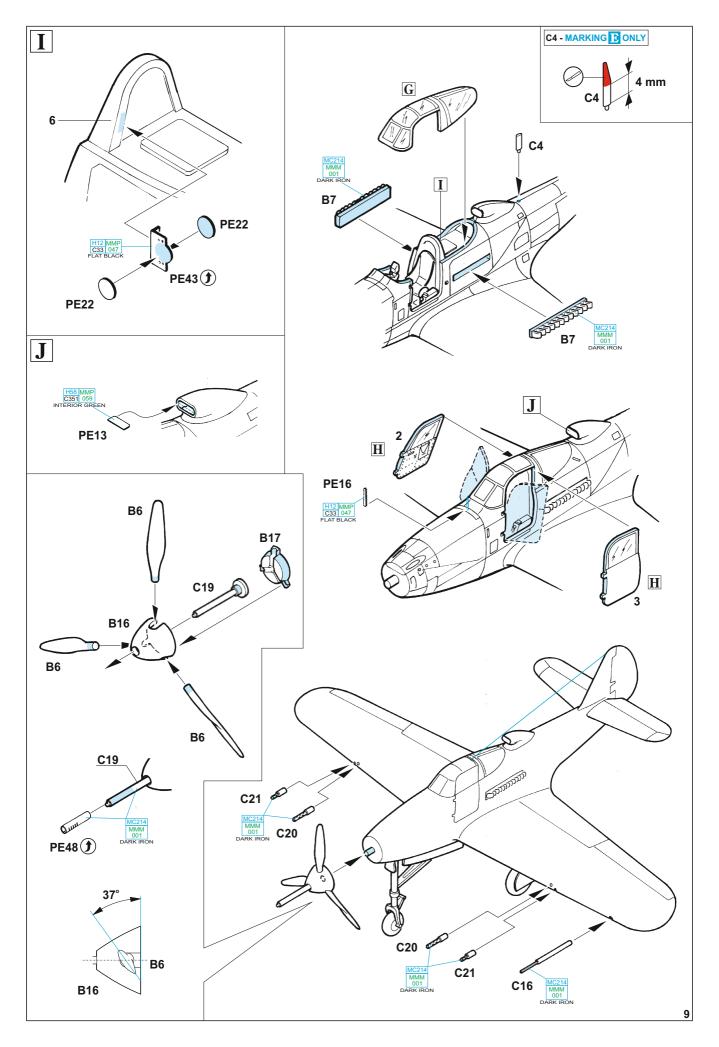


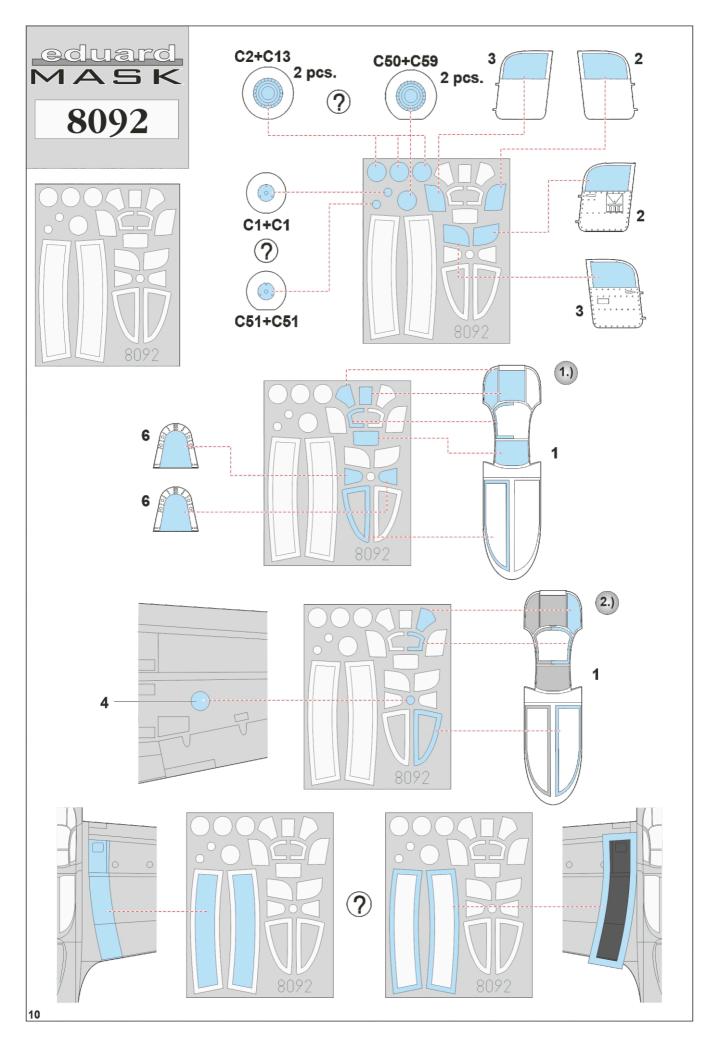






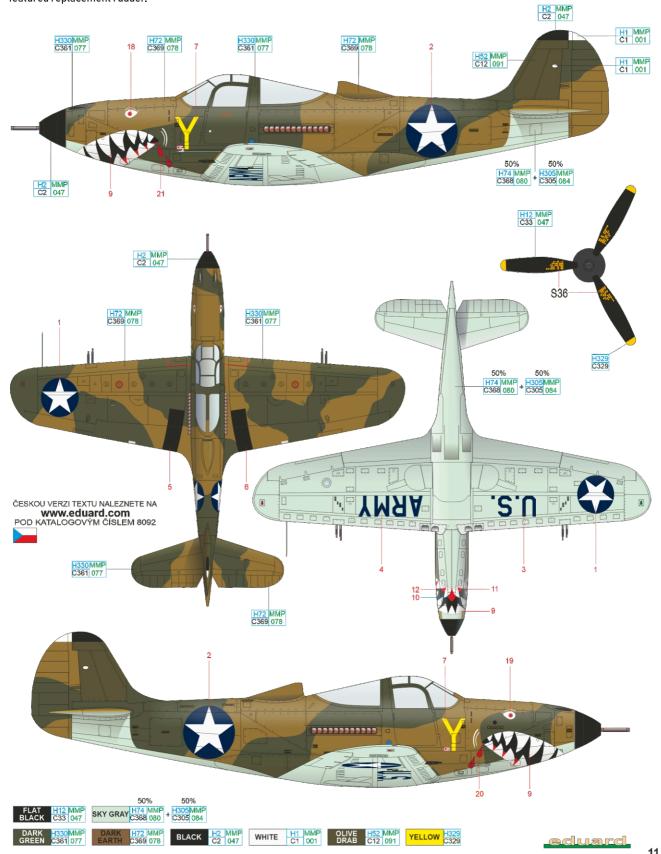






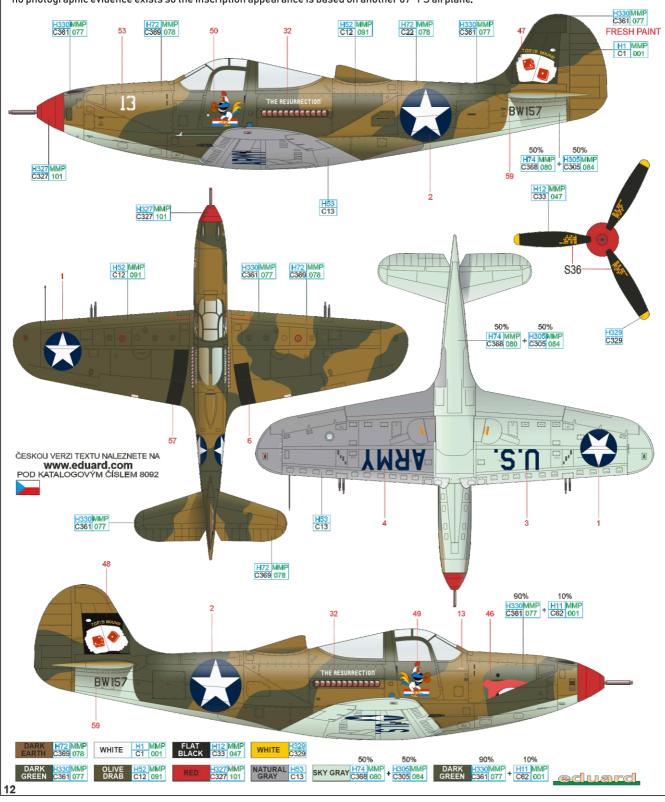
### 80th FS, 8th FG, Port Moresby, New Guinea, Autumn 1942

On August 26, 1942, the formation of Airacobras of 80th FS managed to ambush Japanese Zeros taking off from the Buna airbase and shoot down six of them during two attacks with two more claimed as damaged. The interesting fact is, that it all happened due to the "lucky" navigational error. Owing to the minimal activity of the Japanese air forces over New Guinea during the second half of 1942, these were the only kills credited to 80th FS in the course of 1942. George T. Helveston and Gerald T. Rogers claimed one Zero each, so it is therefore highly probable that Airacobra carrying Y letter code and kill marking belonged to one of these airmen. Black painted propeller spinner and vertical tail surface are very unusual and not documented on any other Airacobra operating over New Guinea. The aircraft also featured replacement rudder.



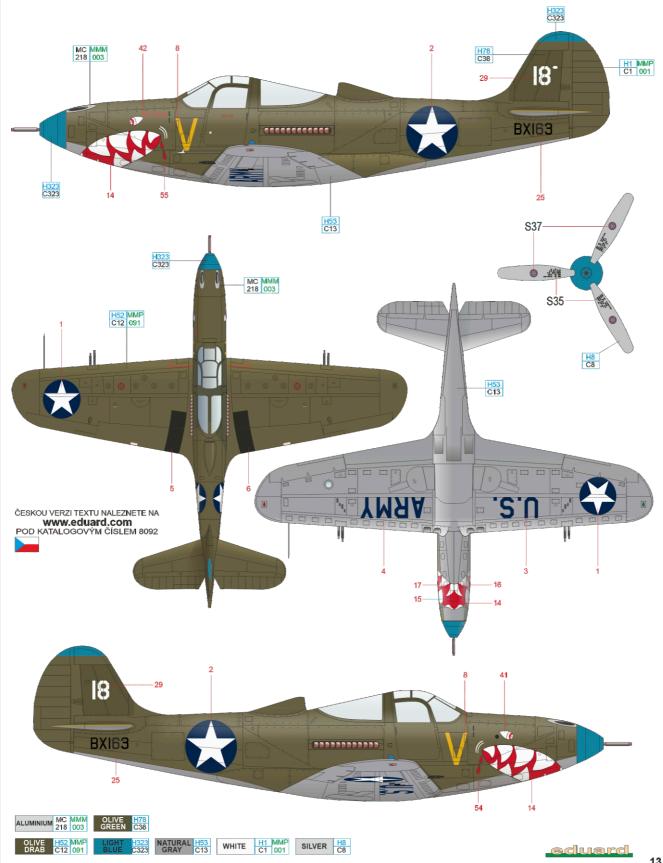
# **B** 67<sup>th</sup> FS, Guadalcanal, Solomon Islands, November 1942

P-400 listed in the squadron records as "Old 13" was one of few original Airacobras delivered to 67th FS in the spring of 1942 and still serving on Guadalcanal in the beginning of 1943. Rudimentary conditions of the remote Pacific airbases and lack of the spare parts forced the ground personnel into many improvisations. Textbook example is the story of the "Old 13" Airacobra which already crash-landed during her service on New Caledonia and her wreck was cannibalized for the spare parts. 67th FS heavy losses after its transfer to Guadalcanal and the critical lack of the aircraft on the island caused the abandoned Airacobra wreck to be restored to the airworthy condition after a complex repair. The aircraft received a new wing and also a number of many fuselage panels and hatches had to be replaced. According to the surviving repair record the replacement parts were painted in Olive Drab/Neutral Grey colors and therefore the Airacobra sported the unique display of the British and American camouflage shades. Furthermore, the more powerful engine was installed, and the damaged propeller blade was replaced by another one balanced by pouring the melted plumb into its tip. The instrument panel was furnished with the essential gauges only, there were only holes after the rest of the instruments. This repaired Airacobra was christened "The Resurrection" and this inscription was painted on both sides of the fuselage. Unfortunately, no photographic evidence exists so the inscription appearance is based on another 67th FS airplane.



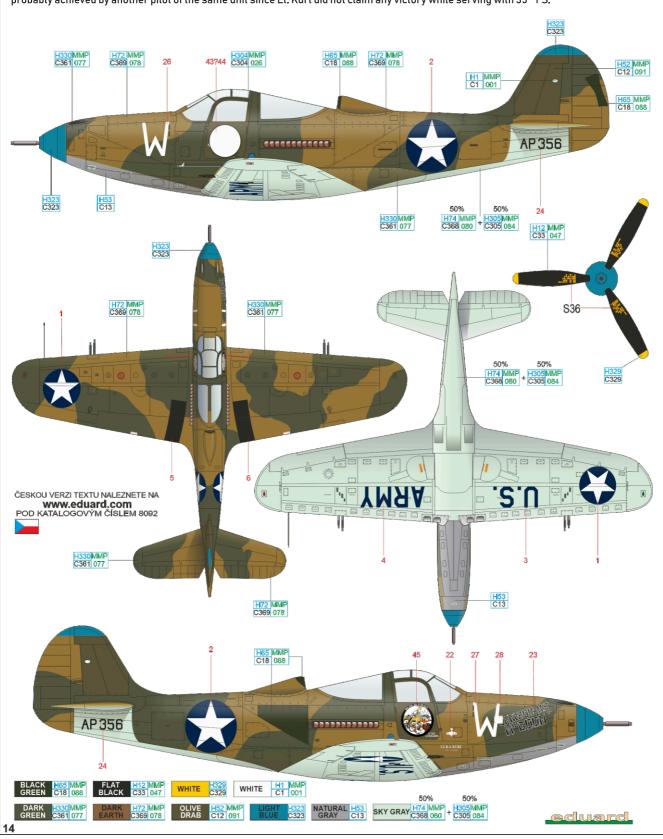
# C BX163, 80th FS, 8th FG, Port Moresby, New Guinea, December 1942

Airacobra BX163 served originally with 39th FS where she received the marking in the form of the numeral 18 and blue painted propeller spinner as well as the top of the vertical tail surface. The inscription "Helen" painted on the port side of the aircraft nose originated from the service with 39th FS as well. At 80th FS the typical shark mouth and yellow letter V were added. The camouflage in Olive Drab and Neutral Gray colors was applied before the plane's dispatch to the combat unit, same as with many other P-400s delivered to the Southwest Pacific area in the spring of 1942. On December 24, 1942, the Airacobra BX163 was damaged during the emergency landing at Kila Drome, one of many aerodromes built in the vicinity of Port Moresby for its protection.



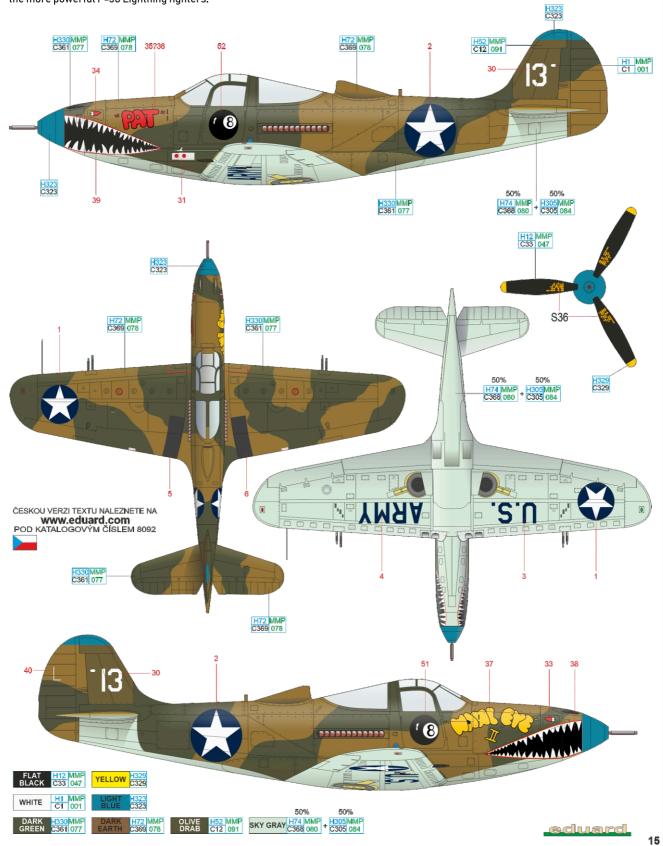
# AP356, Lt. Edward J. Kurt, 35th FS, 8th FG, Milne Bay, New Guinea, 1942–1943

Airacobra named "Earthquake McGoon" was personal aircraft of Lt. Edward J. Kurt and flew with 35<sup>th</sup> FS from Gurney Field built on the Eastern peninsula of New Guinea island during 1942/43. Lt. Kurt joined the squadron in August 1942 after he received his transfer orders at 15<sup>th</sup> FG based on Hawaiian Islands. His Airacobra sports the standard British camouflage scheme, however with many repair patches on the surface. There is a color touch up with darker grey paint on the aircraft nose lower part and patches in distinctly darker green color are visible on the fuselage. Another curiosity is the cockpit door salvaged from the Airacobra belonging to the sister 36<sup>th</sup> FS commander, Maj. McNay, who left the position in October 1942. The artwork adorning the left door was painted over during the aircraft service life and in the pictures taken on Gurney Field it only the white circle is apparent. Blue painted propeller spinner and top of the vertical tail surface indicate that this Airacobra originated from 39<sup>th</sup> FS inventory. A single bomber kill marking on the starboard side of the fuselage was probably achieved by another pilot of the same unit since Lt. Kurt did not claim any victory while serving with 35<sup>th</sup> FS.



# Lt. Eugene A. Wahl, 39th FS, 35th FG, Port Moresby New Guinea, Summer 1942

One of the best known Airacobras was named "Wahl's Eye/Pat" and participated in the fiercest air combats during the defense of Port Moresby. Its teethed mouth reminded more of the jaws of the deep-sea living fish than usual shark mouth. The blue propeller spinner and top of the vertical tail surface as well as the white number on it were a standard 39th FS marking. The airplane was flown by Lt. Eugene Wahl who was, together with several other 35th FG pilots, assigned for traineeship with 8th FG on New Guinea during the middle of May. On May 26 he claimed a victory over a Zero. Luck did not abandon him on June 9 when, after combat with Zeros from the famous Tainan Kōkūtai, he had to perform the emergency landing. However, after several days of hiking through the jungle he was able to rejoin his unit. Here he flew sorties until the end of June when the 39th FS was withdrawn to Australia to reorganize and re-equip with the more powerful P-38 Lightning fighters.



# STENCILING POSITIONS

