Tempest Mk.V Series 1

eduard

1/48 Scale Plastic Model Kit



WEEKEND edition

The piston engine aircraft development peaked at the end of the Second World War, bringing some remarkable designs. The Hawker Tempest was one of them. This high performing beast excelled as the mid and low level fighter and attack aircraft.

The story of the Tempest is in fact nothing more than an attempt to sort out the shortcomings of Hawker Typhoon, which prevented the type from being a successful fighter. The main problem of the Typhoon was the thick wing with NACA 22 profile, offering lot of inner space for fuel and armament, but building drag rapidly with rising speed. Not surprisingly was the wing at the core of the changes on the way to the new fighter. The design was originally supposed to retain the Typhoon name marked as the Mark II but as it became obvious, the final result would be a new plane, so the name was changed. The Tempest name followed the path of Hawker to use the "wind" names for its fighters.

Series of changes

The new wing was 5 in (12,7 cm) thinner at the root and the planform changed in comparison with Typhoon wing to more elliptical shape. As the new wing did not offer enough space for fuel, additional fuel tank of 76 gallon (288 l) volume had to be installed in the fuselage. The space for it was found between the firewall and the oil tank, but, consequently, it was necessary to move the engine forward by 21 in (53,4 cm). Due to that, the tail surfaces, both the stabilizer as well as elevator, had to be enlarged, also the undercarriage was rebuilt. All in all, the Tempest really was a new aircraft, although keeping the Typhoon engine, which was a very complex issue by itself. With quite ambitious goals regarding the performance of Tempest, new units were considered instead of troubled Napier Sabre II, but the things went different way ...

Back to the roots

Early contract was placed for two prototypes based on the Typhoon airframes powered by Sabre IV engine, but, due to delays with supply, only the HM599 was fitted with it, while HM595 used old Sabre II. The two prototypes also differed in radiator layout as the HM595 retained the distinctive chin radiator of Typhoon, while HM599 undergo radical change as Sydney Camm, Hawker chief designer, attempted to streamline the design. The radiator moved to the leading edge of the inner wing sections on both sides and the sleek nose got some resemblance to the Spitfire. The wing-mounted radiators layout worked well aerodynamically, but the Sabre IV evinced multiple problems, while the complexity of the wing assembly with integrated radiators was of some concern.

There were only two other units powerful enough for use with the Tempest instead of Sabre IV: The R&R Griffon and radial Bristol Centaurus IV. As the new name Tempest was chosen, different marks were assigned to each engine variant and four more prototypes were ordered. The Mk.I was to be powered by the Sabre IV (HM599), the Mk.II by the Centaurus IV (LA602 and LA607), the Mk.III by the R&R Griffon IIB (LA610) and the Mk.IV by the Griffon 61 (LA614). Finally, the Mk.V (HM595) used slightly improved version of the Sabre II (IIb) engine producing 2,400 hp (1,790 kW), thus 200 hp (147 kW) more than previous one. Although it was meant as a stopgap solution until Sabre

IV engines would be available, it finally emerged as the main mark of the Tempest, because Centaurus engine supply was too late, Sabre IV was still troubled by glitches and integration of the Griffon into the Typhoon airframe proved to be more demanding than expected, so Mk.III ended with first and only prototype, while Mk.IV was never built.

Legend is born

The HM595 prototype with Sabre II flew for the first time on September 2, 1942, fitted with car door canopy, as the bubble canopy was in development at the time. Streamlined HM599 with Sabre IV performed its maiden flight on February 24, 1943. It was quite faster than HM595, but the solution of its problems would take too much time. The easiest way to get the Tempest into the service was to proceed with the Mk.V. The first production Tempest Mk.V made its maiden flight on June 21, 1943, already fitted with bubble canopy. Armed with four 20mm Hispano Mk.II cannon (200 rounds per barrel) it achieved a top speed of 432 mph (695 km/h) at 18,400 feet (5,600 m), 45 mph (72 km/h) more than Bf 109 od Fw 190 (depending on mark). After the first production batch, the Hispano Mk. V cannons were installed, differentiating the Tempest from the first batch by barrels fully covered by the wing. The first squadron to receive Tempests was No. 486 in January 1944. Together with No. 3 Squadron it became operational in April 1944. With addition of No. 56 Squadron the first Tempest Wing was formed at Newchurch, Kent, under the command of W/C Roland Prosper "Bee"

Fighting everything

Reamont

After the period of operations over the France following the D-Day, the Tempest Wing was tasked to fight the V-1 Flying Bombs travelling low at speed of some 400 mph (640 km/h). The Tempest Mk.V was never effective high-level fighter due to the nature of its engine, but at the middle and low levels it was superior to virtually everything. And some 640 destroyed V-1s during the short period between June and August 1944 speak by themselves, as the rest of RAF scored some 160 of them during the period.

After the V-1 bombing campaign ceased, the Tempest Squadrons returned to the common tasks. At the time, seven Tempest squadrons flew air-to-air combats, claiming 240 kills (20 of them being Me 262 jets). Most successful Tempest ace, D. C. Fairbanks (US) recorded 11 kills flying Mk. V "Terror of Rheine". Second with nine kills came W. E. Schrader (NZ) with nine and J. J. Payton with six kills emerged as third overall. The most famous Tempest Pilot, the Free French Pierre Clostermann, added four kills to his tally of 11 (some sources state 18 kills, the precise number is unknown) flying the Tempest.

The Tempest was formidable fighter, fast, tough and with powerful weapons. Thanks to the excellent low altitude performance, the strafing attacks were quite common, usually during the "search and destroy" rides. Apart of cannons, the provision of two 1,000lb (450kg) bombs or eight 60lb (27kg) rockets added to its destructive capabilities.



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



JBEND

OHNOUT

SAND

BROUSIT

OPEN HOLE VYVRTAT OTVOR

SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ

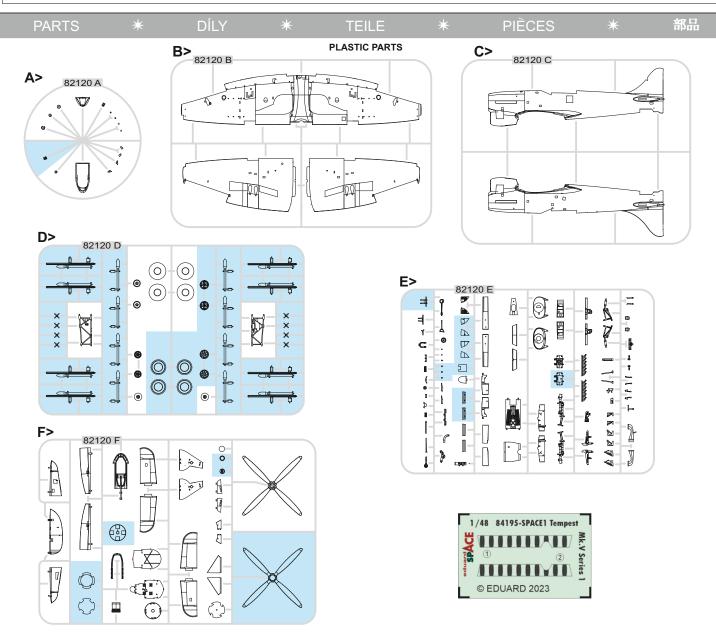
Y REMOVE

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 dily nepoužívejte při stavbě. - 使用しない部品

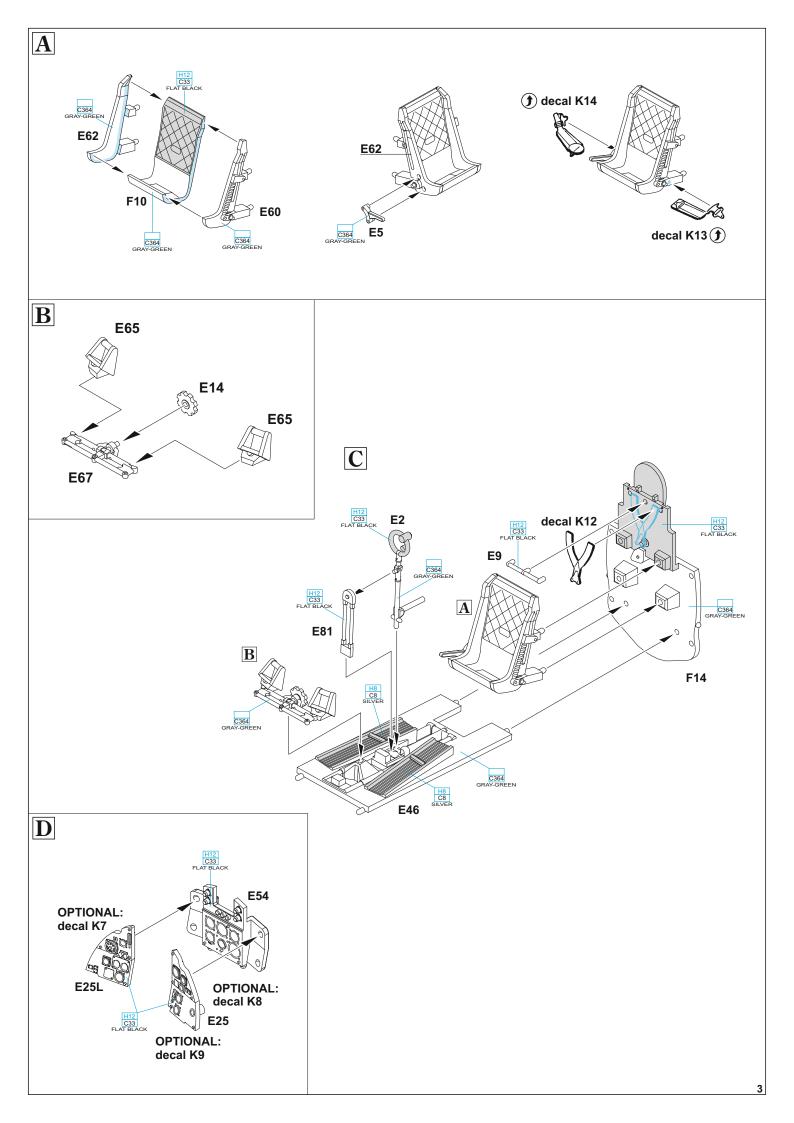
BARVY

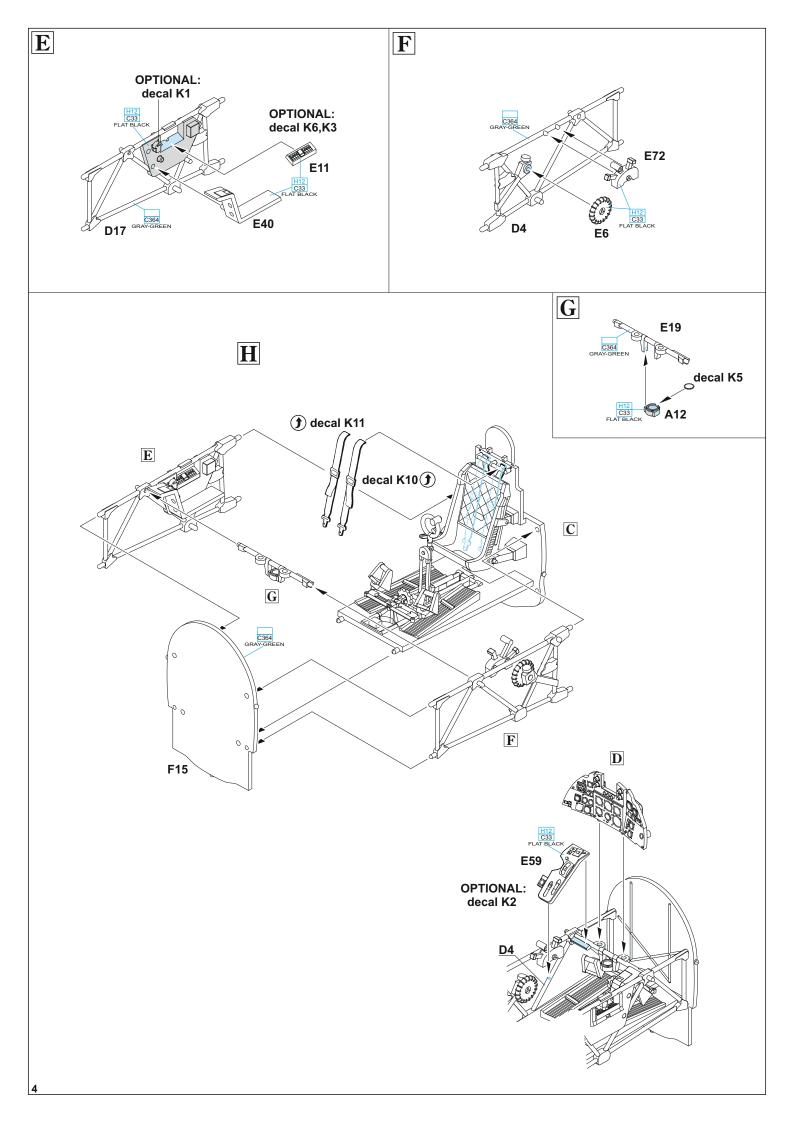
GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H4	C4	YELLOW
H8	C8	SILVER
H11	C62	FLAT WHITE
H12	C33	FLAT BLACK
H74	C368	SKY
H77	C137	TIRE BLACK
H90	C47	CLEAR RED
H94	C138	CLEAR GREEN

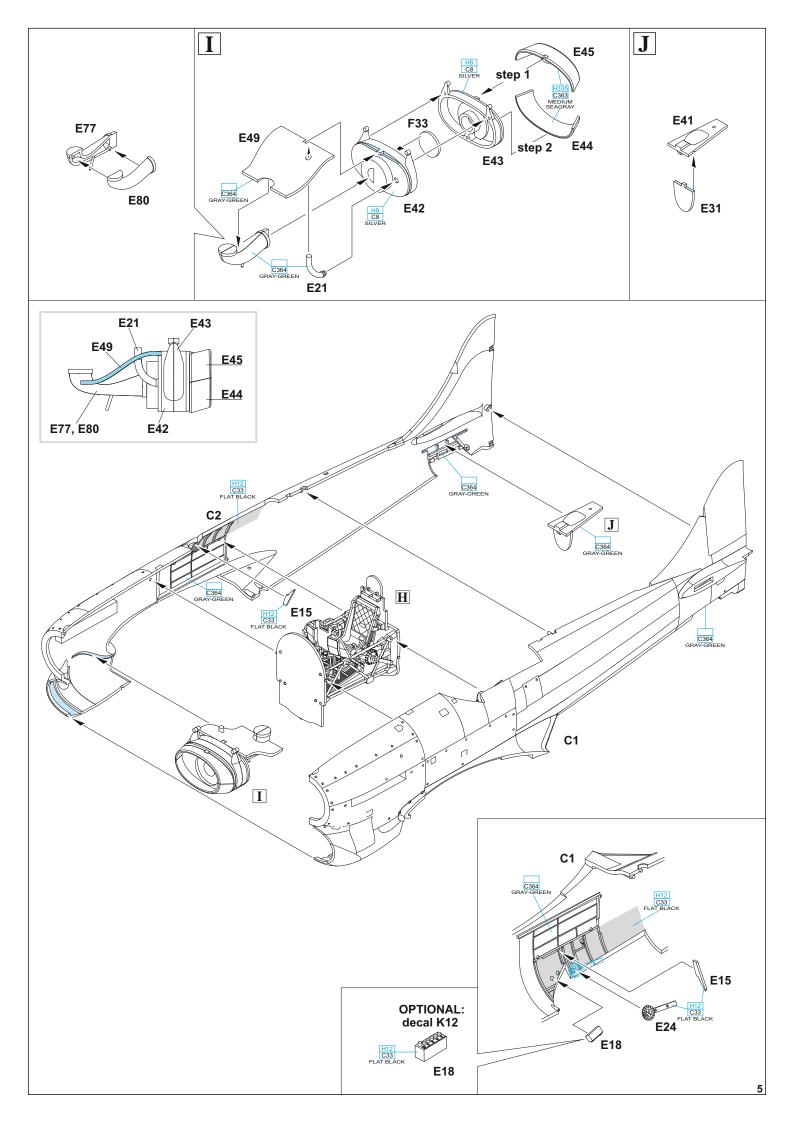
GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H330	C361	DARK GREEN
H335	C363	MEDIUM SEAGRAY
	C362	OCEAN GRAY
	C364	AIRCRAFT GRAY-GREEN
Mr.METAL COLOR		
MC214		DARK IRON
Mr.COLOR SUPER METALLIC		
SM201		SUPER FINE SILVER 2

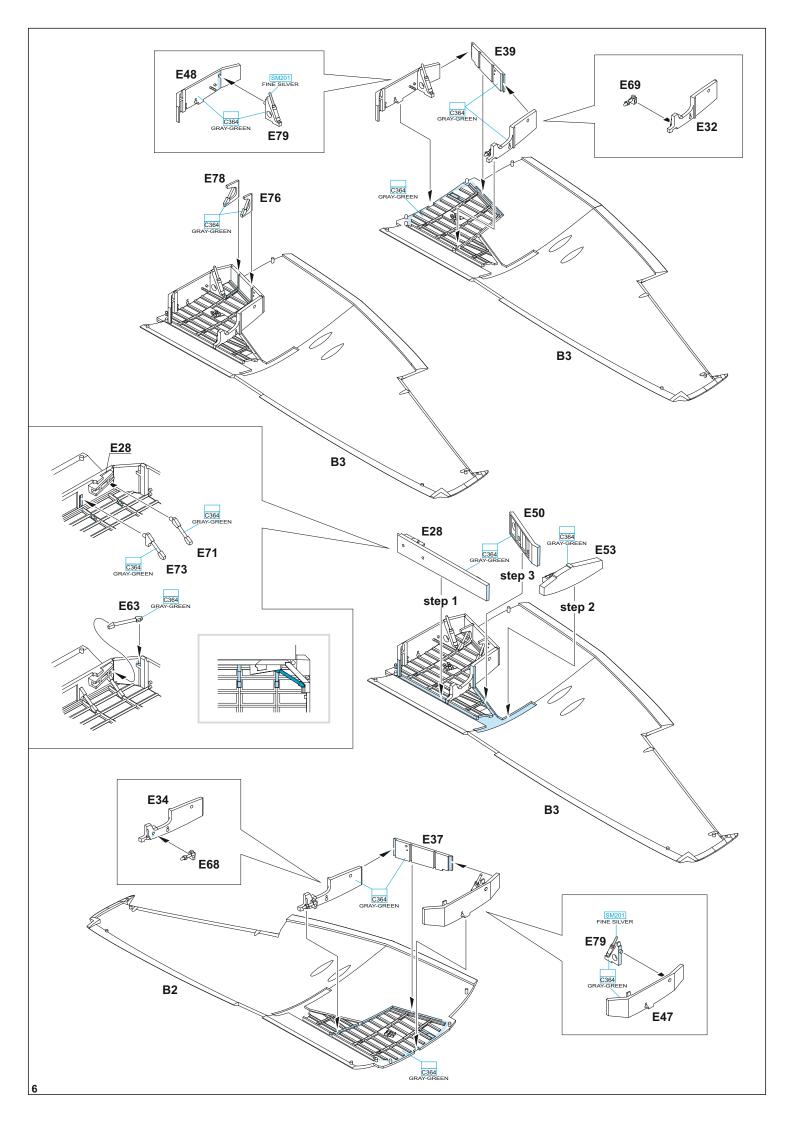
PEINTURE

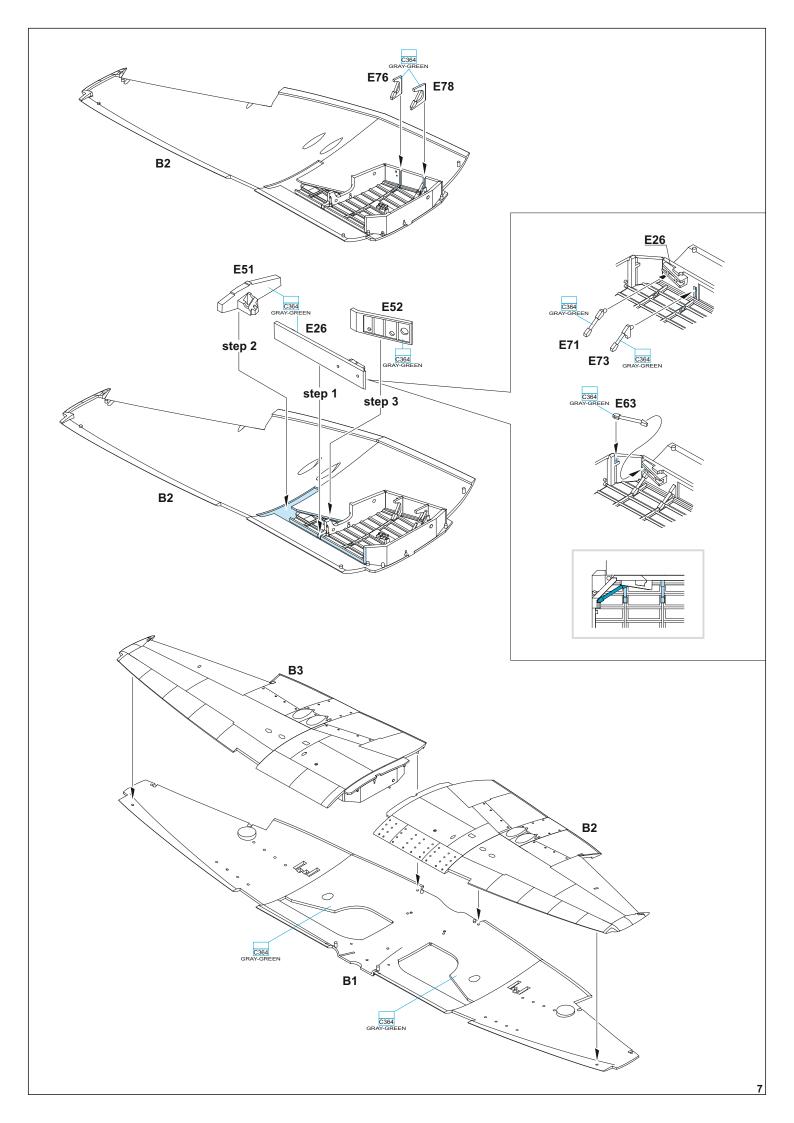
COLOURS

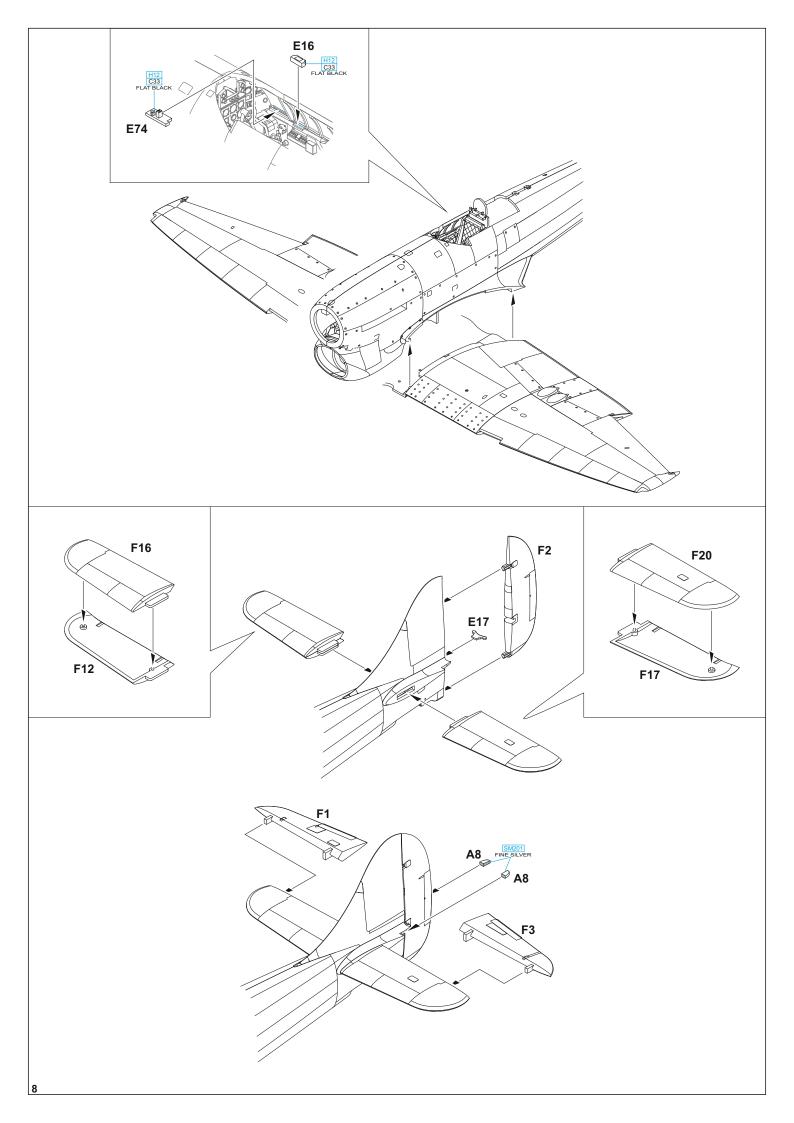


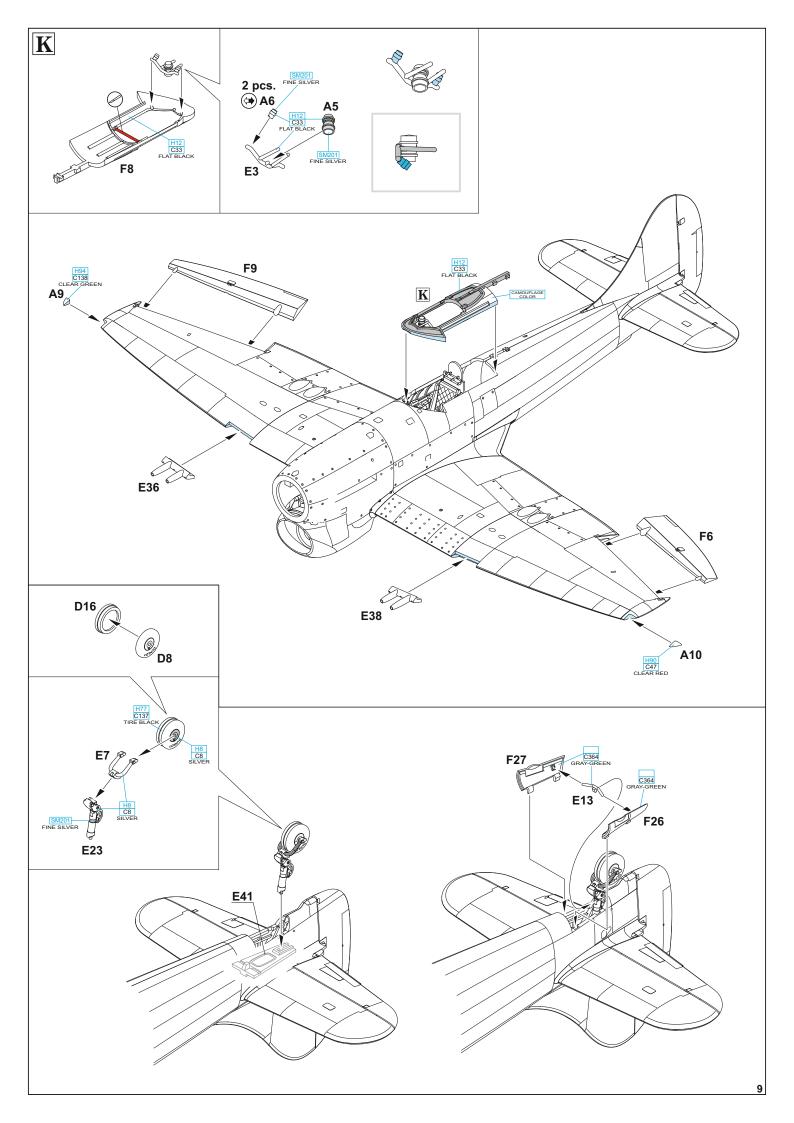


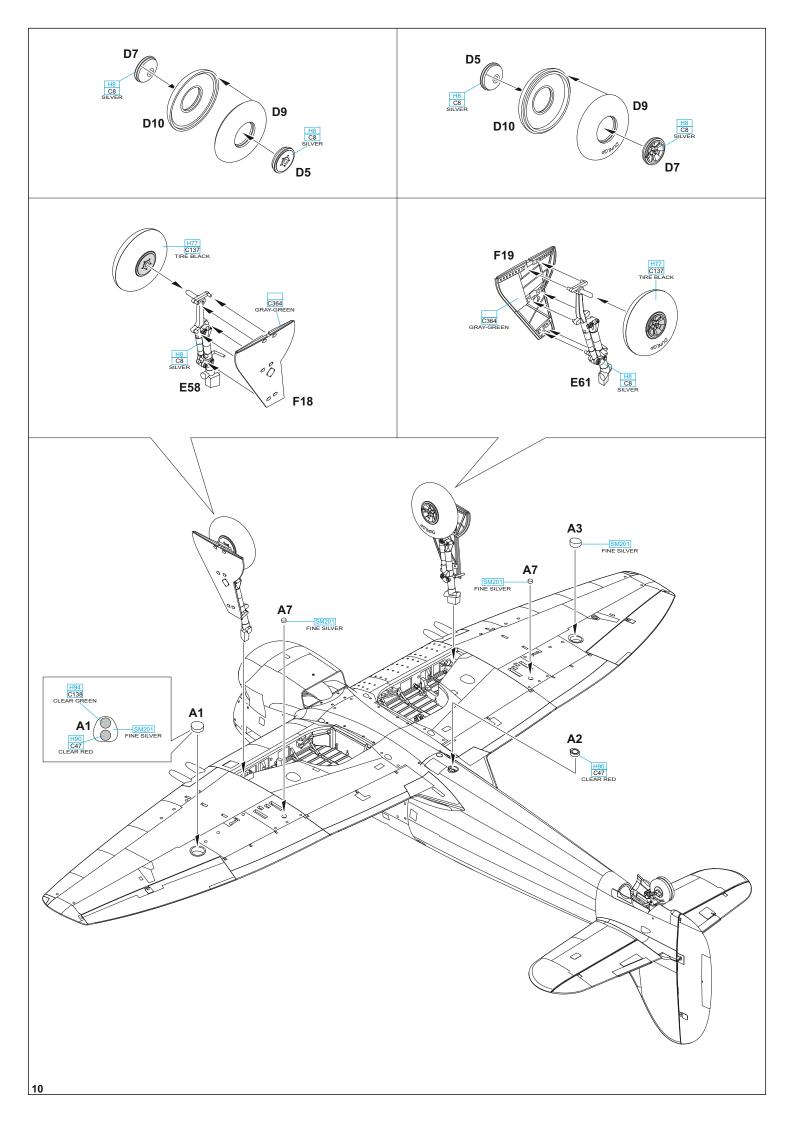


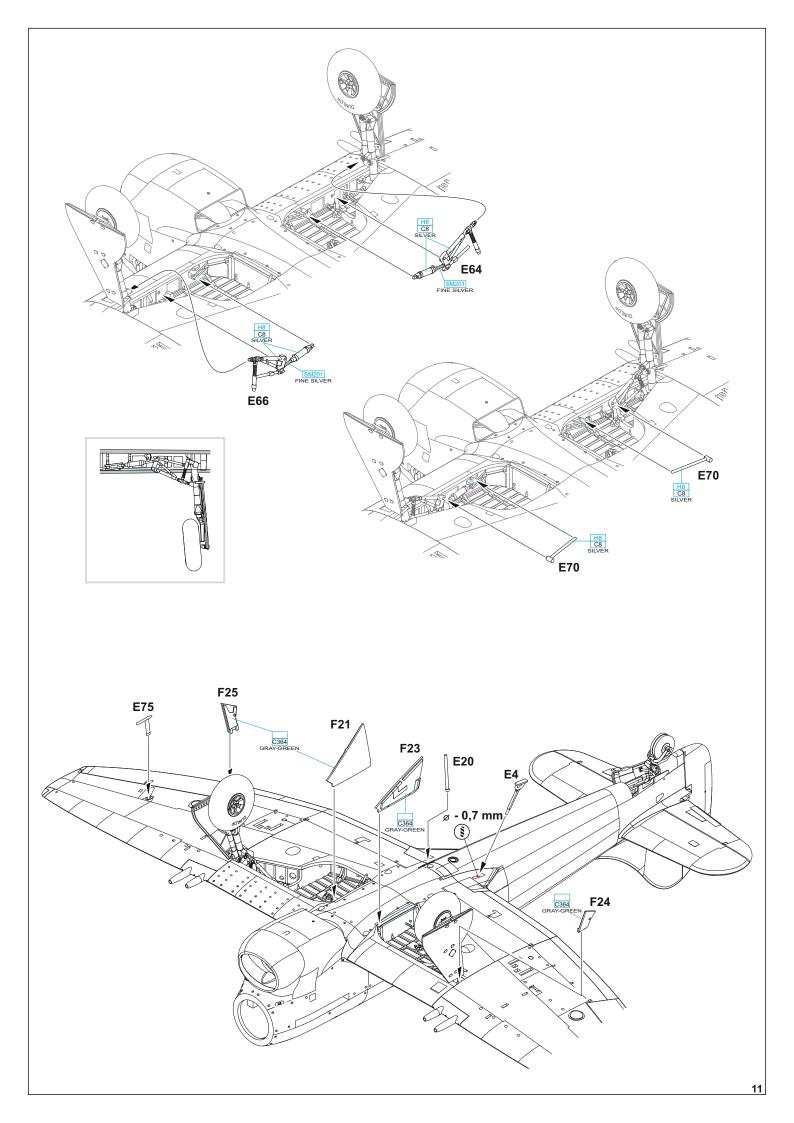


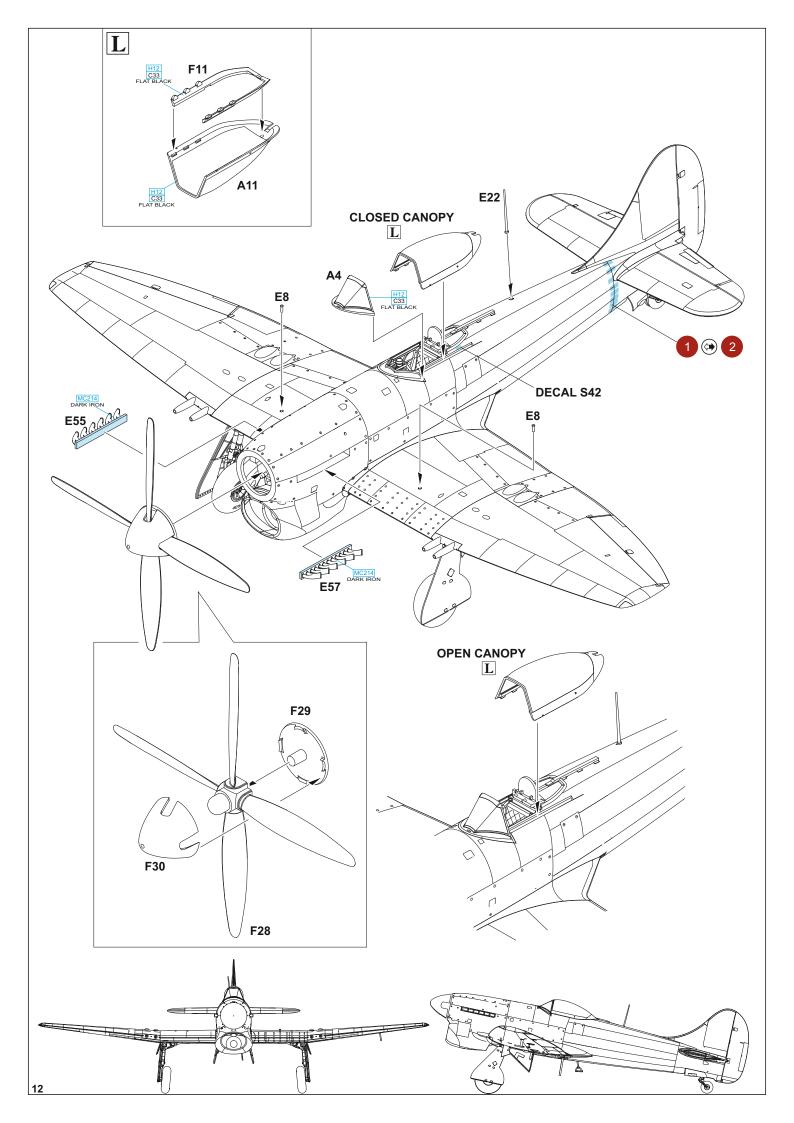








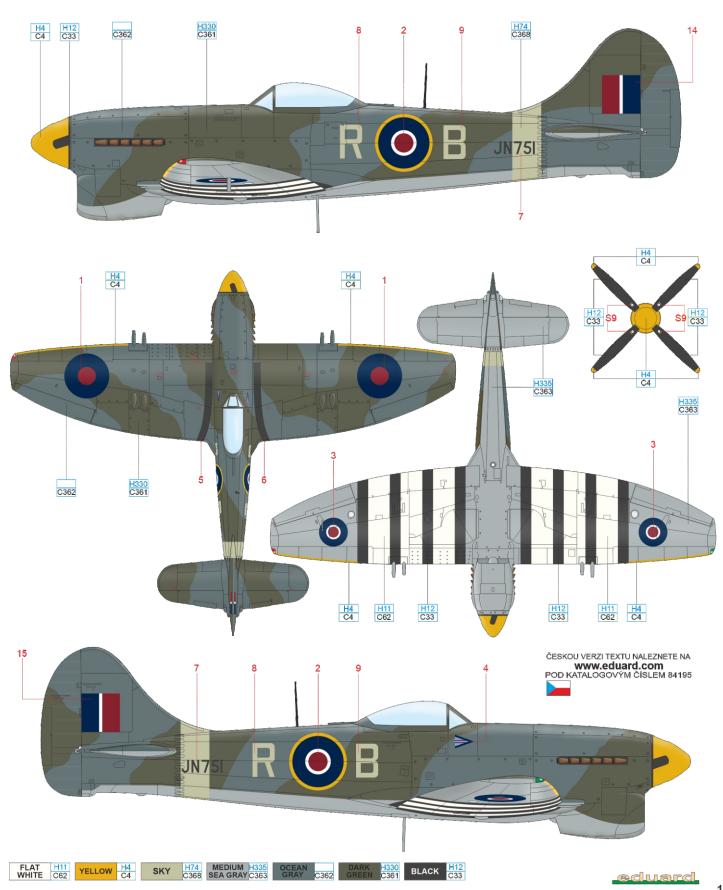




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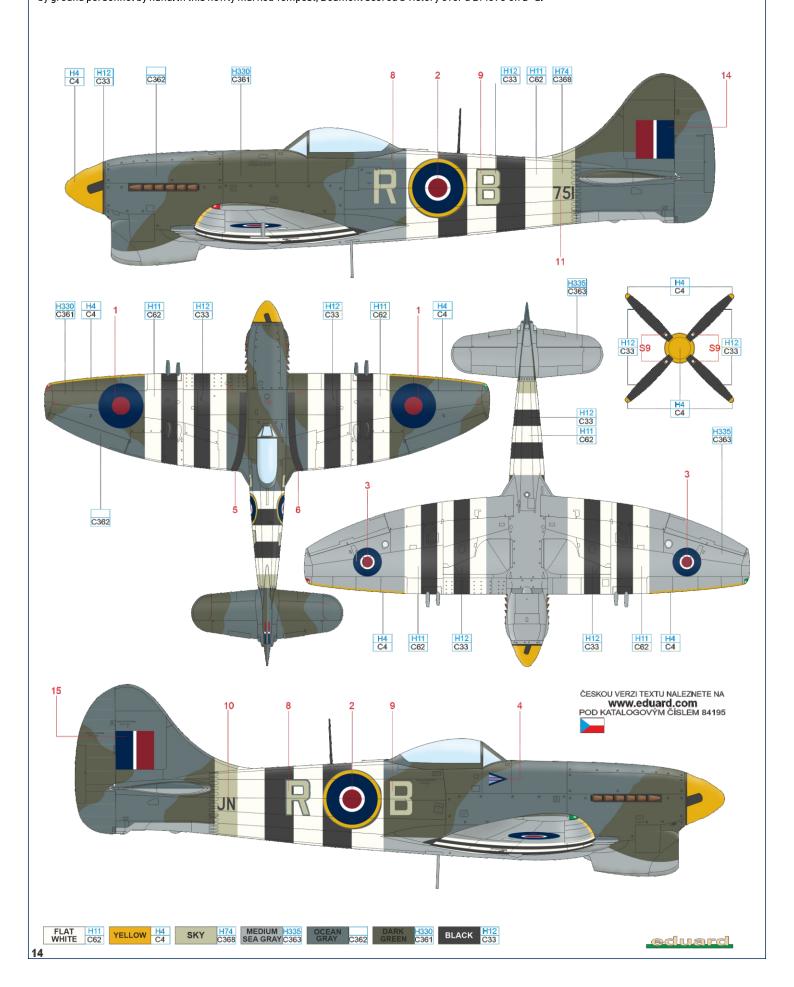
JN751, W/Cdr Roland P. Beamont, CO of No. 150 Wing, Bradwell Bay, Great Britain, April 1944

Roland Prosper Beamont was born on August 10, 1920, in Enfield, Middlesex County, and had been fascinated by airplanes since childhood. In 1939, he underwent pilot training and was assigned to No. 87 Squadron, flying Hurricanes. From May 1942, he served with No. 79 Squadron, and in December of the same year, after completing his tour of duty, he joined the Hawker factory as a test pilot. In June 1942, he joined the 56th Squadron, flying Typhoons, and later he was transferred to No. 609 Squadron, which flew the same type of aircraft. In January 1943, he assumed command of the unit. In mid-May 1943, he returned to Hawker, where he participated in testing Typhoon and Tempest aircraft. In February 1944, he was appointed as the commander of the newly established No. 150 Wing, consisting of No. 3, No. 56, and No. 486 Squadrons, which exclusively operated the new Hawker Tempest aircraft. One of the privileges of being the wing commander was the ability to mark the aircraft with one's initials. W/Cdr Beamont took advantage of this opportunity, and his personal Tempest was painted with the letters R B. Beneath the front emblem, on the right side of the fuselage, Beamont's aircraft carried the designation of Wing Commander.



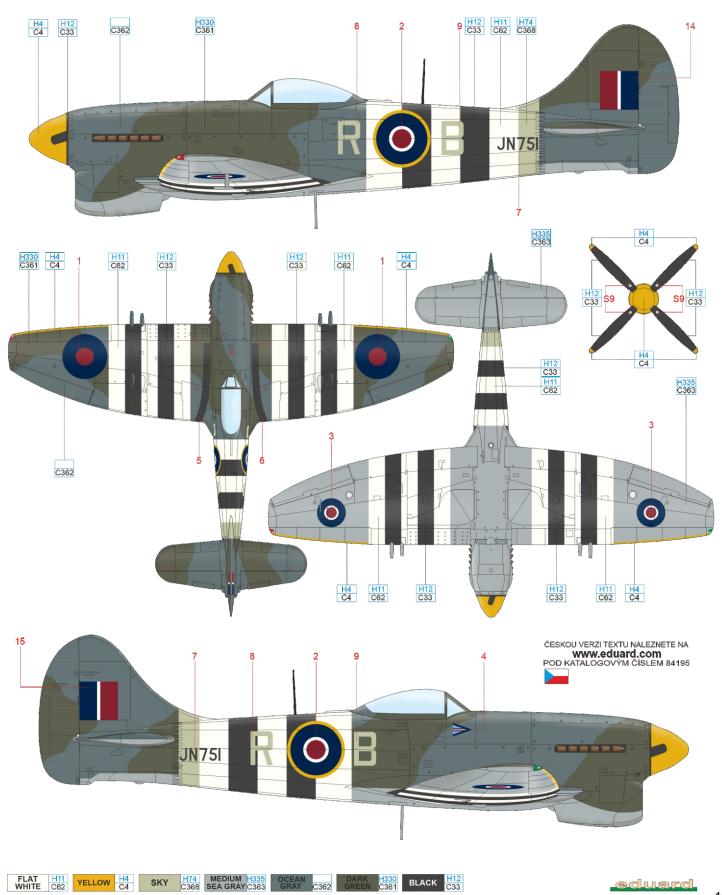
B JN751, W/Cdr Roland P. Beamont, CO of No. 150 Wing, Newchurch, Great Britain, June 1944

In May 1944, No. 150 Wing was declared operational, although only No. 3 and No. 486 Squadrons were equipped with Tempests, while No. 56 Squadron had to wait until June 1944 and temporarily used Spitfire Mk. IX aircraft. During the invasion, the Tempests of No. 150 Wing were tasked with ground attacks against enemy forces, and from mid-June, they also provided protection for southern England against V-1 flying bombs. Beamont's aircraft had its camouflage enhanced on the eve of the European invasion with distinctive markings in the form of white and black stripes on the rear fuselage, applied by ground personnel by hand. In this newly marked Tempest, Beamont scored a victory over a Bf 109G on D+2.



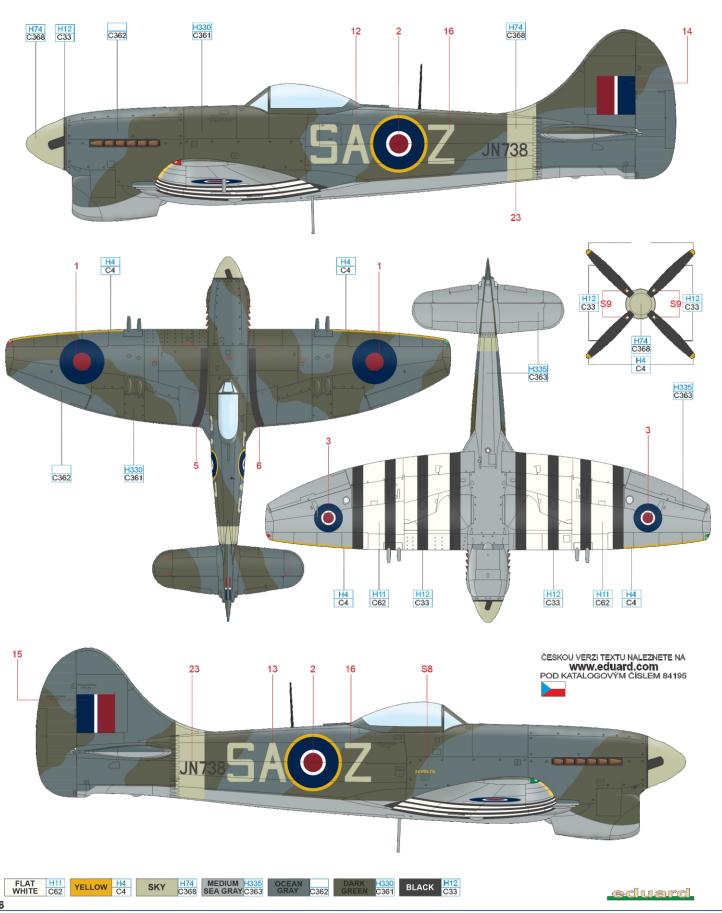
C JN751, W/Cdr Roland P. Beamont, CO of No. 150 Wing, Newchurch, Great Britain, June – July 1944

During June, the field-applied invasion stripes on JN751 were replaced with factory-applied paint at Hawker. This type of paint application had a positive impact on performance, which was crucial for achieving maximum speed while in combat with V-1 flying bombs. Most of Beamont's 31 V-1 victories were achieved in this aircraft. JN751 was replaced as his personal aircraft in September 1944 with a new Series 2 Tempest Mk.V sporting the code RPB (EJ706). At the end of September 1944, the entire unit, under Beamont's command, moved to liberated European territory. On October 12, Beamont's aircraft was hit by flak in the radiator, forcing him to make an emergency landing in enemy territory, where he spent the rest of the war. During World War II, he achieved nine enemy aircraft kills and was awarded the DFC & Bar and DSO & Bar. After the war, Beamont worked as a test pilot and flew aircraft such as the Meteor, Vampire, Canberra, Lightning, and the impressive TSR-2. He retired in August 1979 and passed away on November 19, 2001.



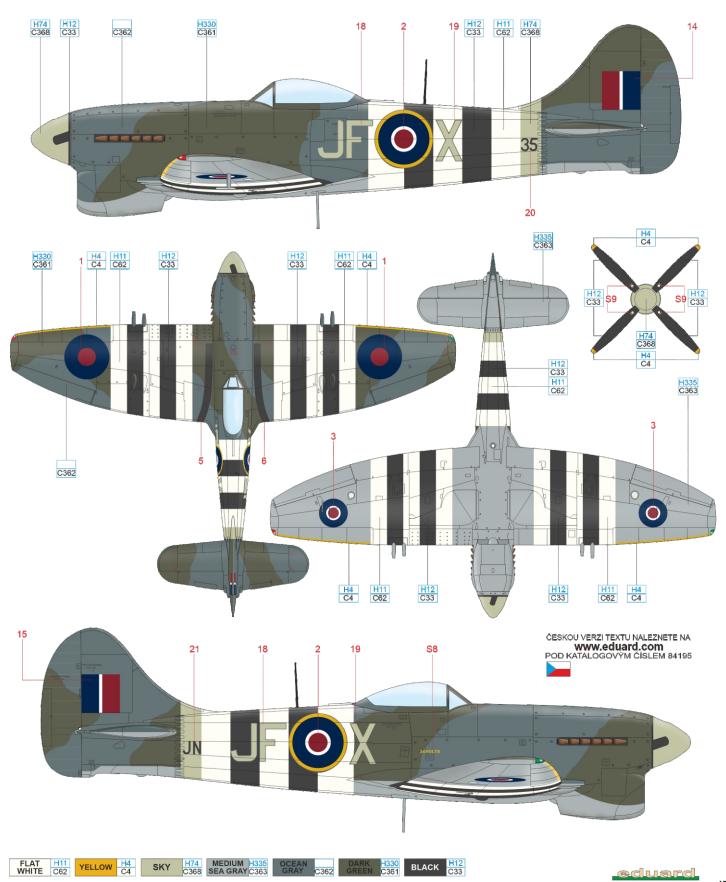
JN738, No. 486 (RNZAF) Squadron, RAF Station Castle Camp, Great Britain, April 1944

No. 486 Squadron was established on March 7, 1942, at Kirton in Lindsey base, and its personnel were predominantly New Zealanders. Initially, it was equipped with Hawker Hurricane aircraft, but from July 1942, it used Hawker Typhoons. Due to its excellent performance, it was selected as the first unit to transition to Tempests Mk.V. The new aircraft were received in January and February 1944, and it became part of the newly formed No. 150 Wing, also equipped with Tempests. It was declared fully operational in April 1944. The camouflage of the new Tempests consisted of the Day Fighter Scheme colors, with the upper and side surfaces painted Dark Green and Ocean Grey, and the lower surfaces in Medium Sea Grey. During this period, black and white stripes were added to the lower wing surfaces of Typhoons and Tempests for better identification of friendly aircraft.



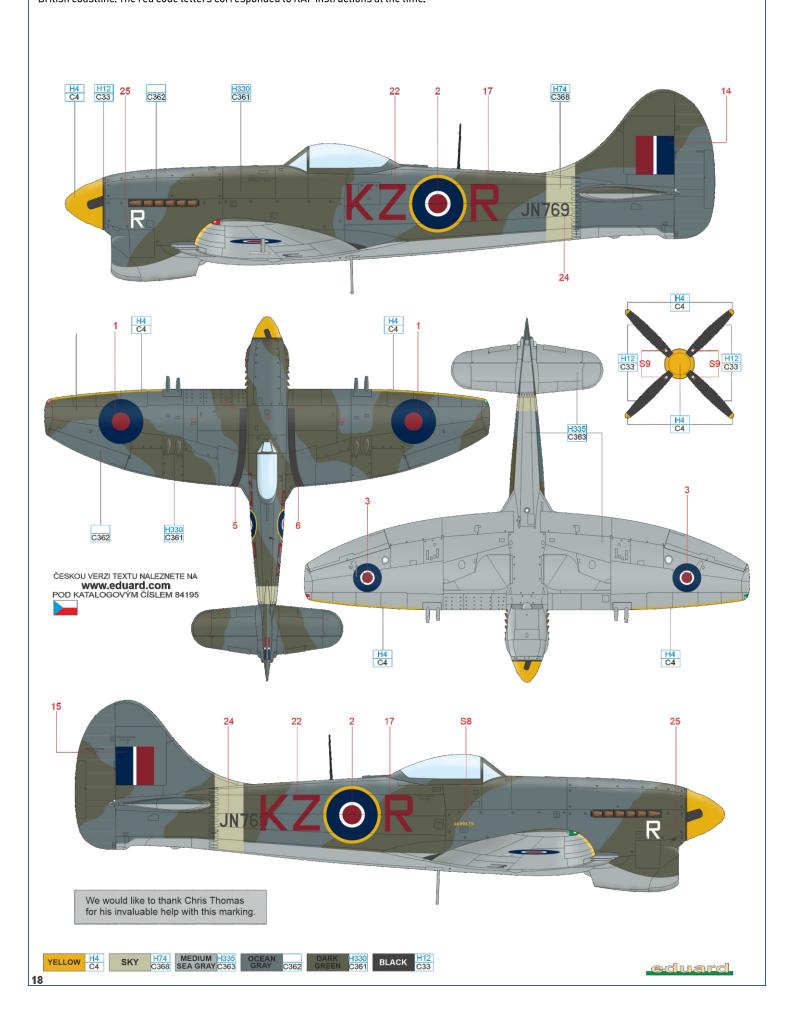
JN735, No. 3 Squadron, Newchurch, Great Britain, June 1944

No. 3 Squadron, founded in 1912, was initially equipped with Hawker Hurricanes at the outbreak of World War II, and it fought over Belgium and France as a part of the British Expeditionary Force. After returning to Great Britain, it flew patrols over the Royal Navy naval base in Scapa Flow and, from April 1941, served as a night fighter squadron in southern England. In June 1943, it converted to Hawker Typhoon aircraft, and in February 1944, it was equipped with Hawker Tempests. With these aircraft, it participated in preparations for the invasion of Europe, the defense of southern England against V-1 flying bombs, and the subsequent deployment to Europe, where it supported advancing Allied units until the end of the war. The Tempests of No. 3 Squadron did not carry the standard invasion stripes on the lower wing surface after April 20, 1944. They used the code letters Q0 until May 1944 when they changed to the letters JF.



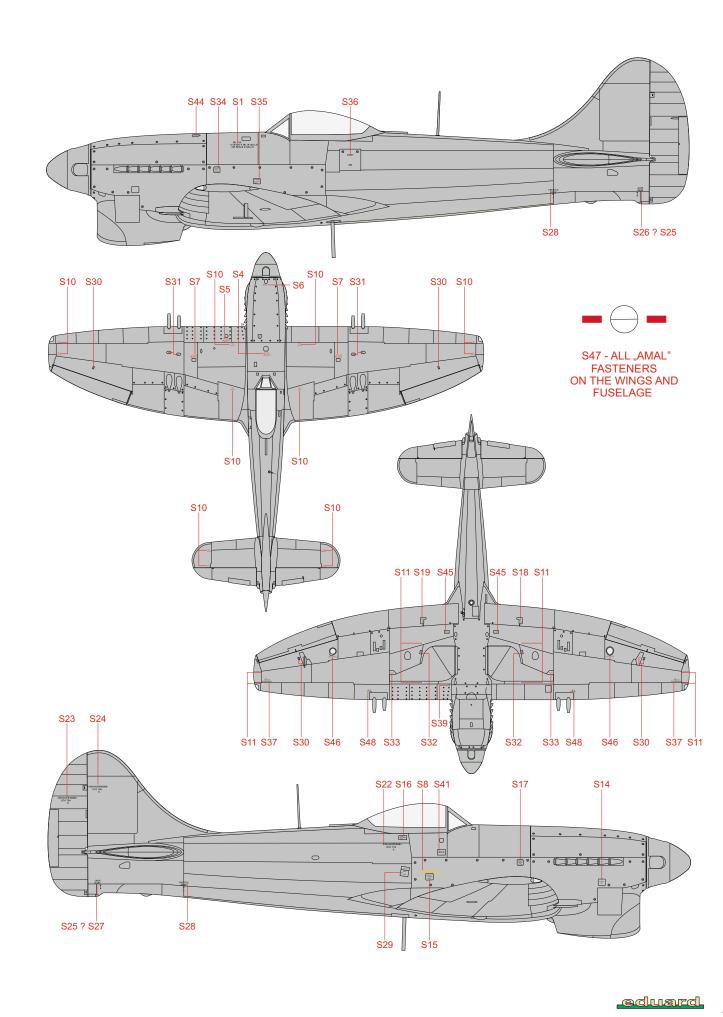
JN769, No. 287 Squadron, Gatwick, Great Britain, December 1944 – January 1945

After the Tempest squadrons were fully equipped with Series 2 aircraft, surviving Series 1 Tempests were refurbished by Hawker and assigned to No. 287 Squadron around the turn of 1944 and 1945. This squadron played a secondary role, participating in calibration flights for anti-aircraft units along the British coastline. The red code letters corresponded to RAF instructions at the time.



Tempest Mk.V Series 1

STENCILING POSITIONS



Eduard goodies for Tempest Mk.V Series 1

