Spitfire Mk.XVI High Back <u>eduard</u>

Scale Plastic Model Kit



ProfiPACK

The Spitfire is so iconic aircraft, that virtually everyone can recognize it. The service of this elegant fighter spanned 13 years with RAF and even more with foreign air forces. It started the service at the end of biplane era and stayed in the frontline use until the jet age.

By the early 30s the RAF was looking for replacement of its ageing Hawker Fury biplane fighters. The need of considerably faster aircraft was obvious, as the racing monoplane floatplanes of that time reached about twice the speed of the Fury. One of the most successful designers of the racing floatplanes was Reginald J. Mitchell. His Supermarine S.6B raised the world speed record to 407 mph (655 km/h) on 20 September 1931 and British Air Ministry, under influence of such achievement, issued the specification F.7/30 in October 1931. Although it called for modern pursuit airplane capable of at least 250 mph (400 km/h), seven out of eight entries were biplanes. The only monoplane proposal was Mitchel's Supermarine 224, but the design with a gull wing, fixed undercarriage and Rolls-Royce Goshawk engine was a disappointment because of the lack of speed and poor rate of climb. After that the RAF chose the Gloster Gladiator biplane as the winner.

Early work

The fiasco with Type 224 did not prevent Mitchell from further work. He persuaded the Supermarine company to fund the work on completely new design Type 300 using brand new Rolls-Royce PV12 engine, later known as the Merlin. The Air Ministry expressed interest and issued specification F.37/34 on 28 December 1934 to fund the prototype armed with four wing mounted guns. But by early April 1935 Mitchell received the detail of specification F10/35, calling for eight guns. The change was made on cost of bomb provision removal and reduction of the capacity of the fuel tanks to sixty-six gallons. The decision caused the so called "short legs" of the Spitfire, meaning a lack of range and endurance.

The Supermarine Type 300 made its maiden flight on 5 March 1936, initial contract to produce 310 Spitfires was signed in June 1936 and the first unit to receive the new fighter was No. 19 Sqn. at Duxford in August 1938.

Catching the progress

The development of Spitfire was ongoing process from very early stage of its service and incorporated many changes. From the early Mk. I and Mk. II the development was reaching the point, where a more substantial step was required. The Mk.V was a result, but it was in fact a Mk.I powered by the more powerful Merlin 45 series engine. The Mk.V entered the service from early 1941, helping the RAF to countermeasure development of the Bf 109. But in September 1941, a hitherto unknown German radial engine fighter emerged and started to rule the European skies. The new Fw 190 was superior to British fighters, most distressingly to the Spitfire Mk.V. The losses suffered by the RAF over western Europe rose rapidly and the crisis was serious enough that the RAF ceased most daytime operations during November 1941. The next attempt to resume this type of sorties was made in March 1942. But losses remained unacceptably high, and the RAF was forced to stop offensive operations once again. All this was due to the supremacy of the Focke-Wulf Fw 190A.

The first RAF response to the new situation was the Spitfire Mk.VIII, but the design changes were so complex that initiating timely production

was not possible. In June 1942, a German pilot landed on a British airfield by mistake delivering a completely intact Fw 190A fighter into RAF hands. Comparative trials between the Focke-Wulf and Spitfire Mk.V began almost immediately and verified the situation over the front - the chance of a Spitfire Mk.V to survive an encounter with the Fw 190s was rather poor. The only British fighter aircraft deemed suitable to oppose the German fighter were the Spitfires Mk.VII and Mk.VIII powered by the Merlin 61 engine. But these marks required some time to get into production, so another way of getting a powerful fighter as quickly as possible was sought. And it was found in mating the twostage supercharger Merlin 61 with the fuselage of the Spitfire Mk.Vc.

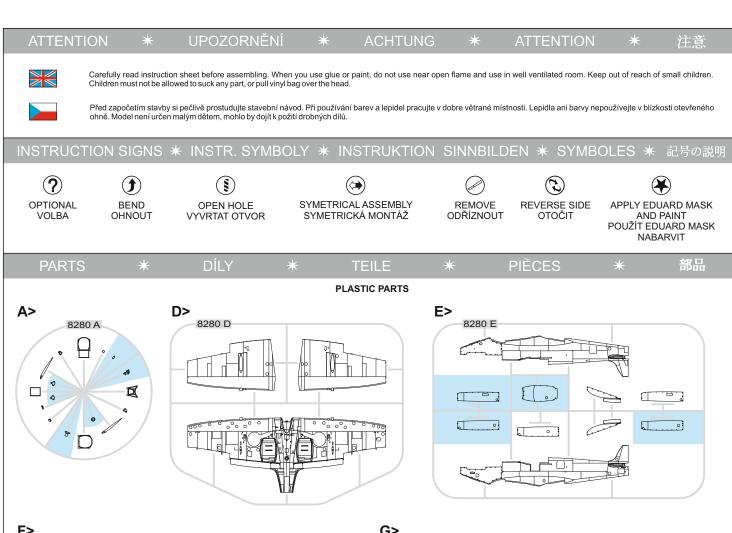
Flight trials of two modified Mk.Vs were successful and the order for series production was issued immediately. Series production began in June 1942 and the first Mk.IXs found their way to No. 64 Squadron in July. Performance improved significantly in comparison to the Mk.V. The top speed of 409 mph (658 km/h) at 28,000 feet (8530 m) was higher by 40 mph (64 km/h), and the service ceiling rose from 36,200 ft (11,033 m) to 43,000 ft (13,106 m). The Mk.IX began to replace the Mk.V from June

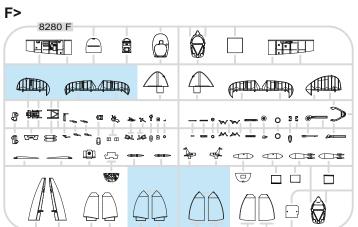
Three main variants of the Mk.IX were produced. The F Mk.IX was powered by the Merlin 61 and was the only version on the assembly line in early 1943. The next was the LF Mk.IX powered by the Merlin 66. This engine was designed to do its best at low-to-medium attitude. The third version, manufactured along with the LF, was the high-altitude HF Mk.IX with the Merlin 70.

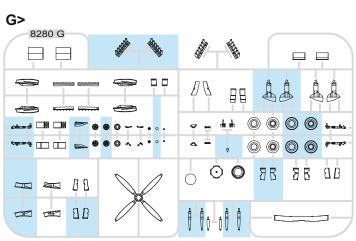
The Kit: Mk.IXc late production

Due to the high demand for Merlin engines, it was decided to use production capacities of the American Packard for the Mk.IX production. The US company produced these engines under license and the American version of the Merlin 66 was designated 266 with some differences from the original. These necessitated some changes, such as a wider engine top cover. Due to the need to use different tools for maintenance as well as for differences in design, the aircraft with Packard engine were designated Mk.XVI and were intended for low and medium altitude operations, which was reflected by the selection of the Packard 266 and also by shortened wing tips. The Mk.XVI was produced with both a conventional fuselage, as well as with lowered rear part and bubble canopy. These aircraft had a reduced rear fuselage tank, its volume dropped from 75 gal to 66 gal.

For ground attacks, for which they were primarily intended, Mk.XVIs were fitted with two underwing racks (for two bombs up to 250 lb) and one under fuselage (for one bomb up to 500 lb). Most of the Mk.XVI Spitfires produced had a wing with armament consisting of two 20mm Hispano II guns and two 12.7mm Browning machine guns (Type E wing). A total of 1,054 "Sixteens" were produced, all coming off the line at Castle Bromwich.









PE - PHOTO ETCHED DETAIL PARTS

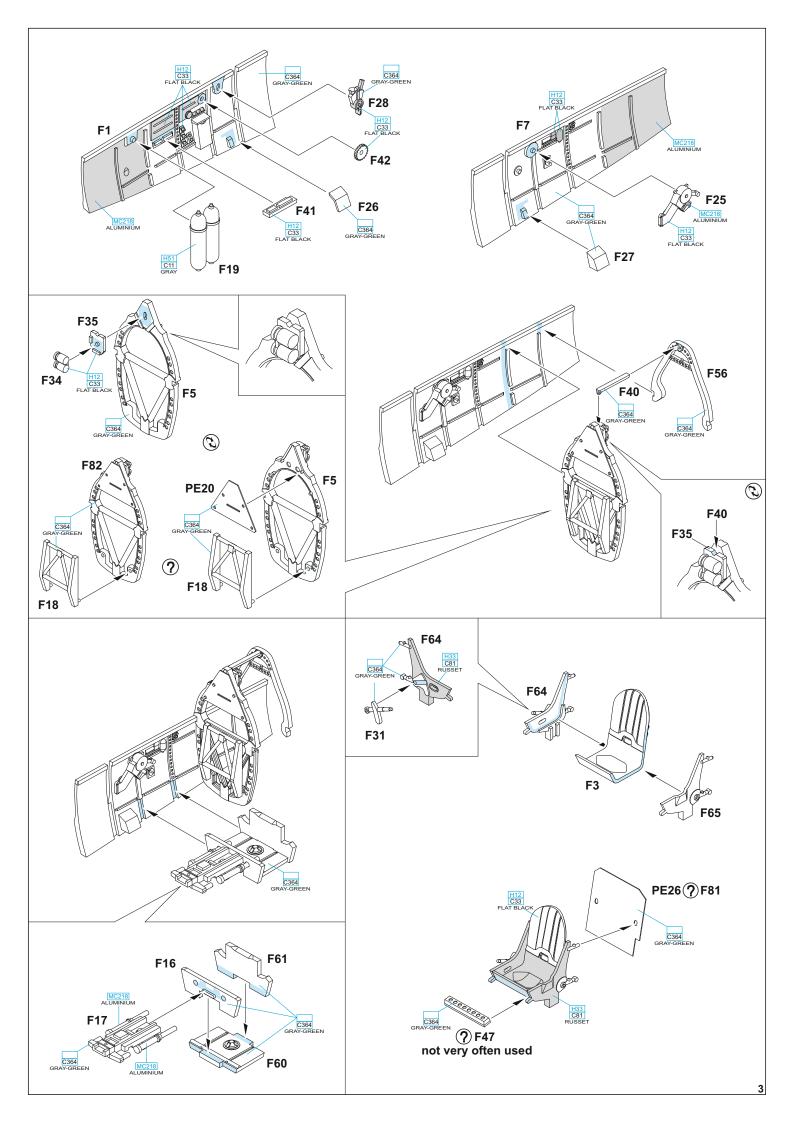


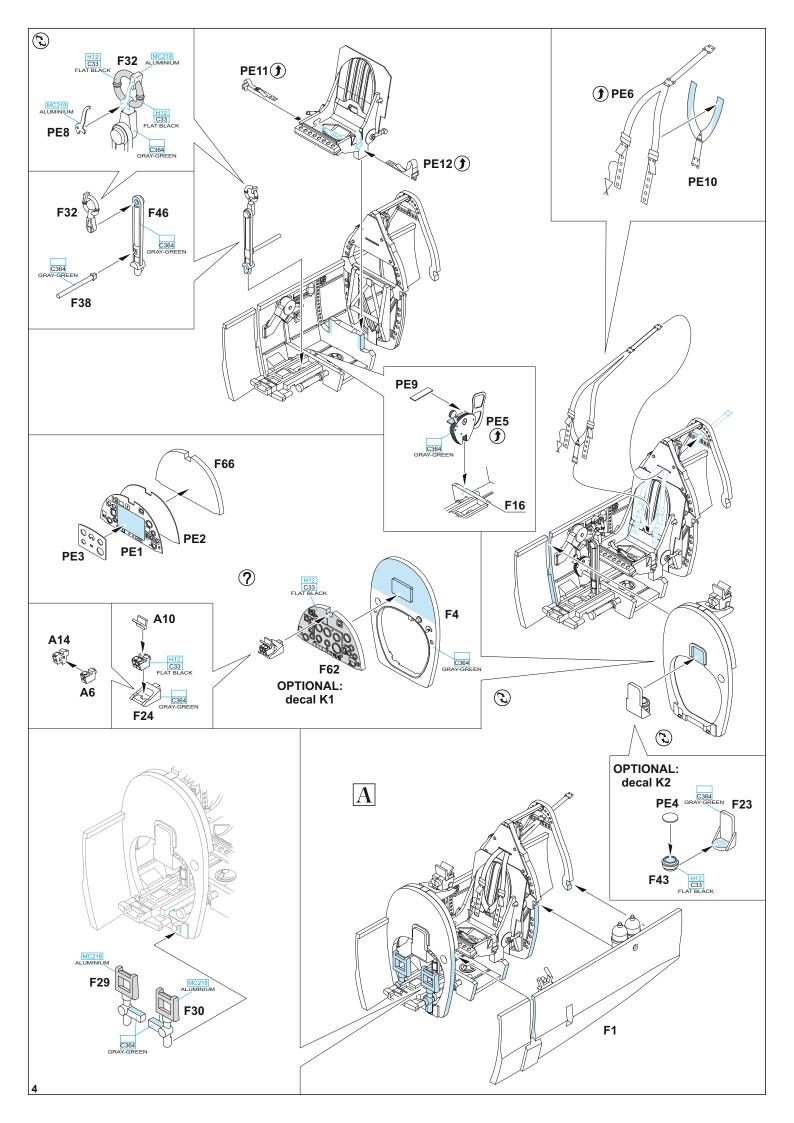
Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

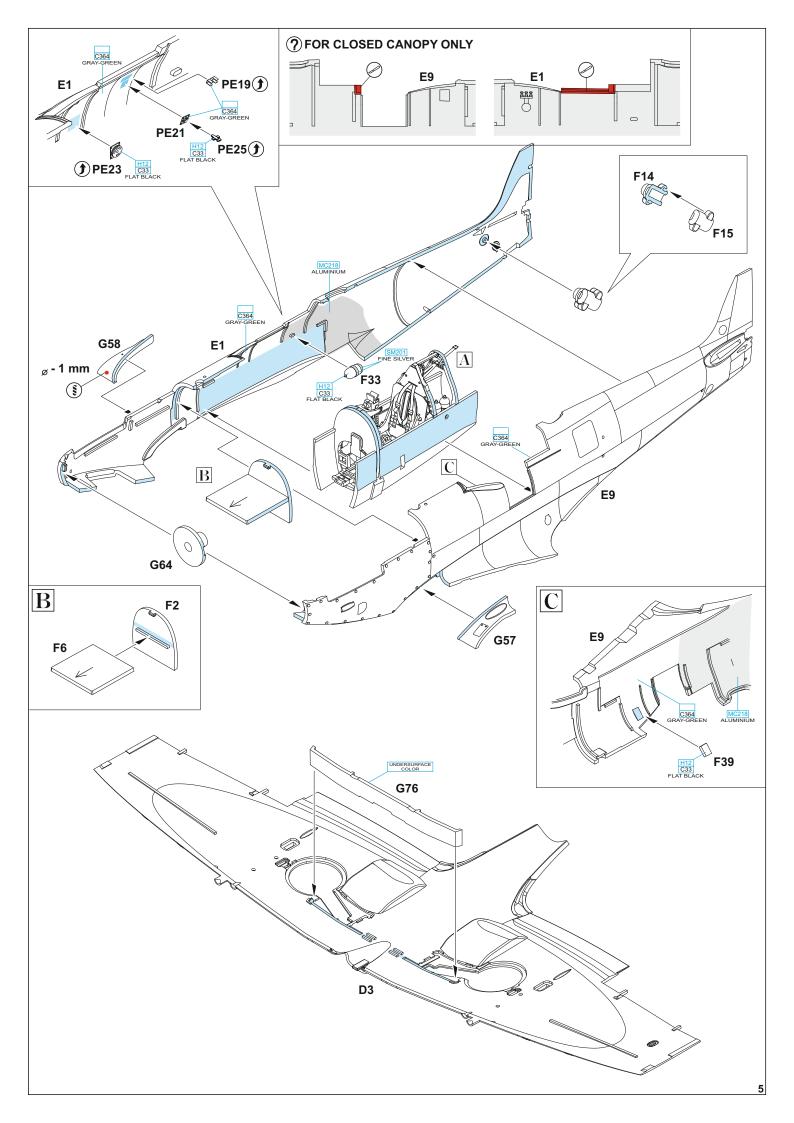
COLOURS * BARVY * FARBEN * PEINTURE * 色

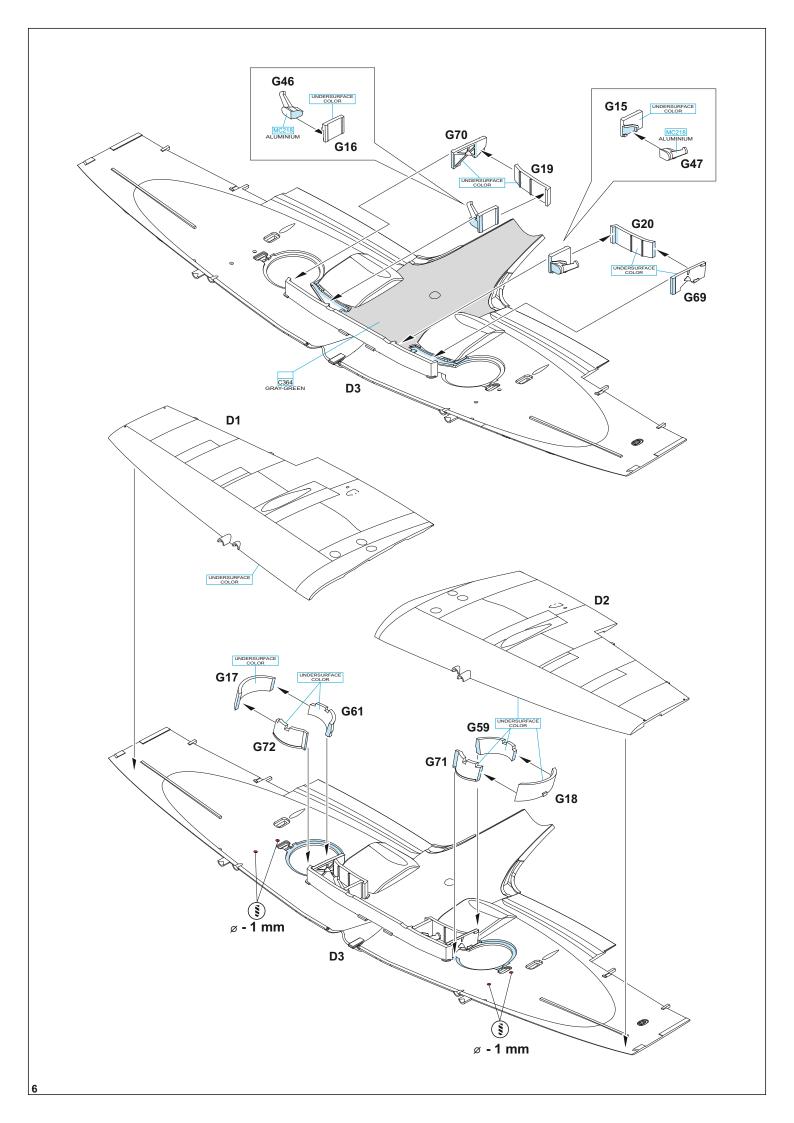
GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H4	C4	YELLOW
H11	C62	FLAT WHITE
H12	C33	FLAT BLACK
H33	C81	RUSSET
H51	C11	LIGHT GULL GRAY
H52	C12	OLIVE DRAB
H74	C368	SKY
H77	C137	TIRE BLACK
H84	C42	MAHOGANY
H90	C47	CLEAR RED

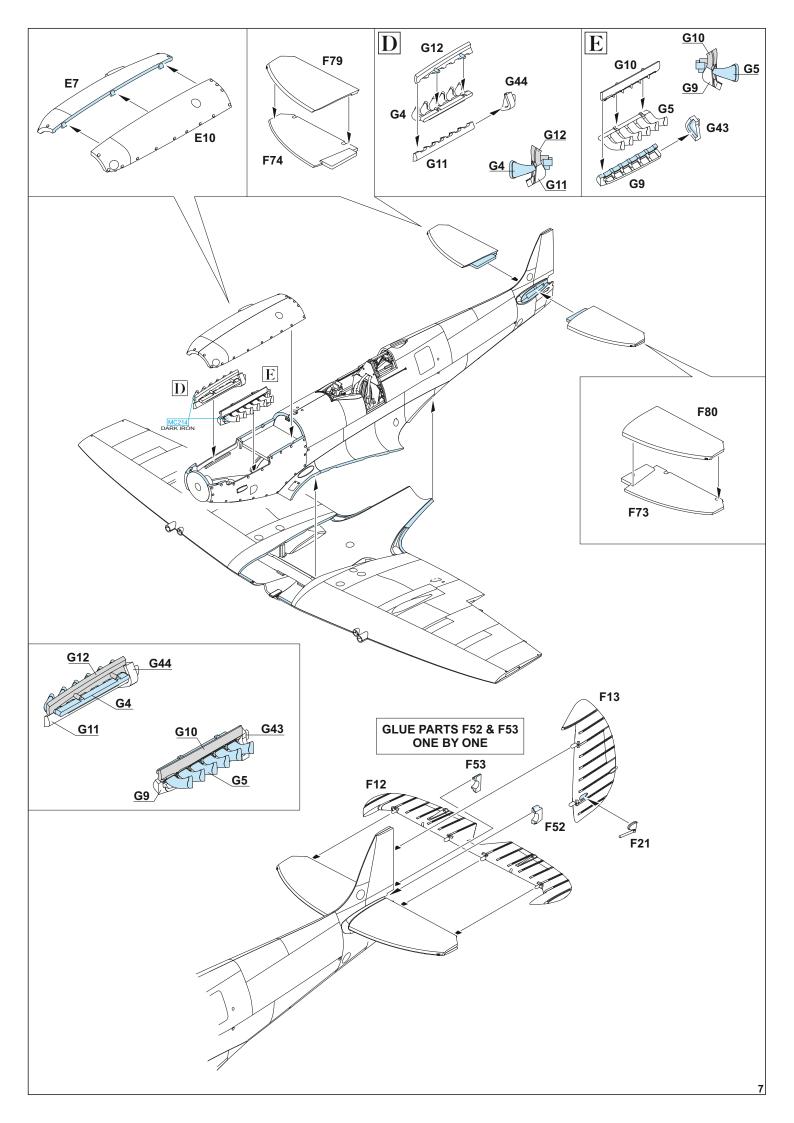
AQUEOUS	Mr.COLOR	
H94	C138	CLEAR GREEN
H330	C361	DARK GREEN
H335	C363	MEDIUM SEAGRAY
	C362	OCEAN GRAY
	C364	AIRCRAFT GRAY-GREEN
Mr.METAL COLOR		
MC214		DARK IRON
MC218		ALUMINIUM
Mr.COLOR SUPER METALLIC		
SM201		SUPER FINE SILVER

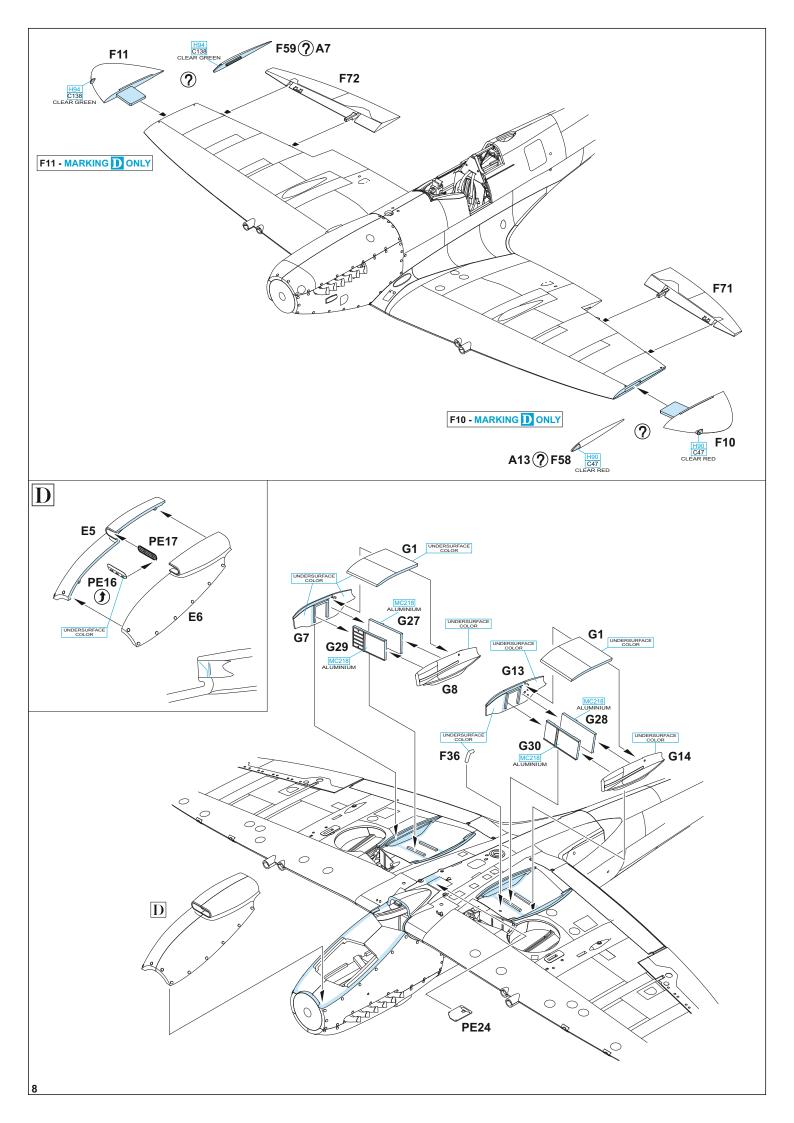


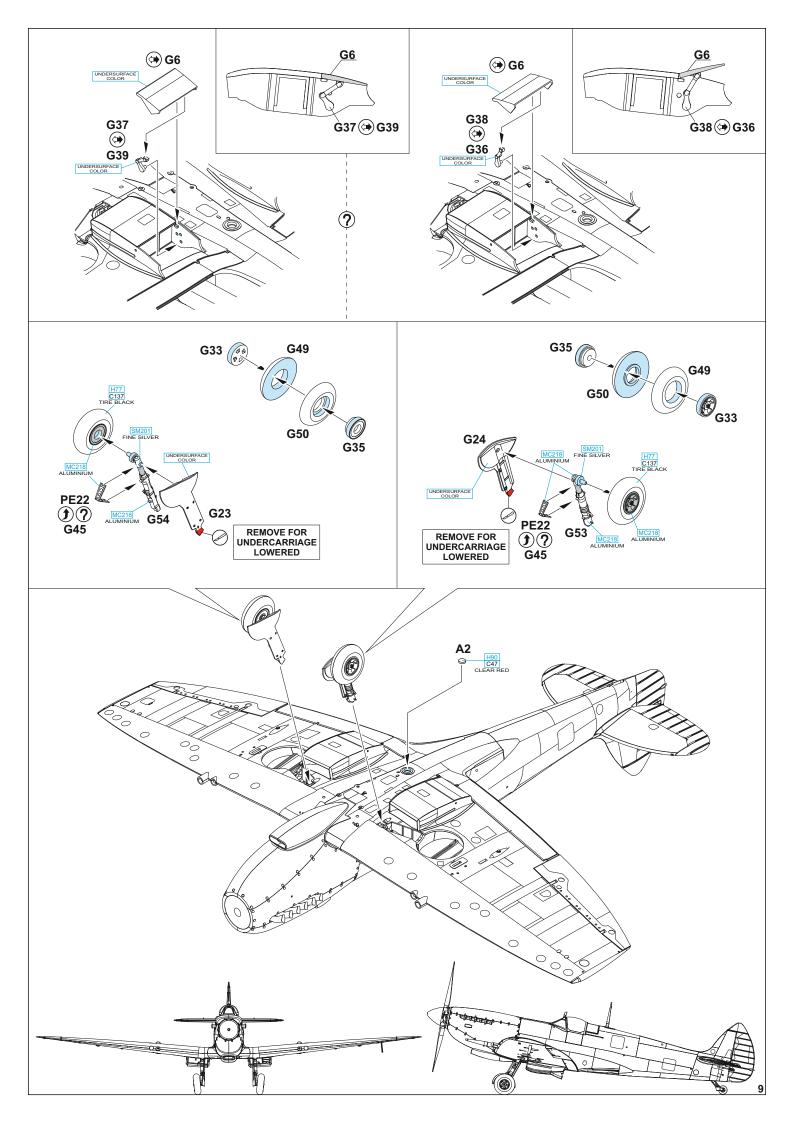


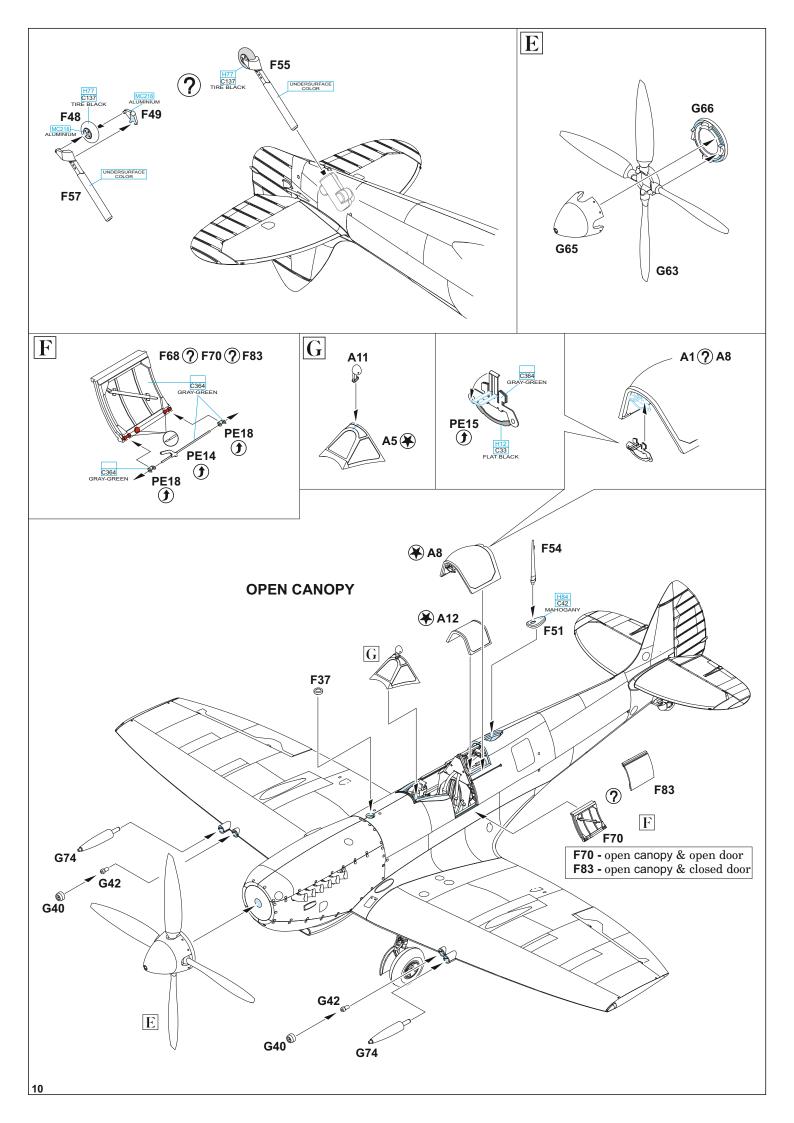


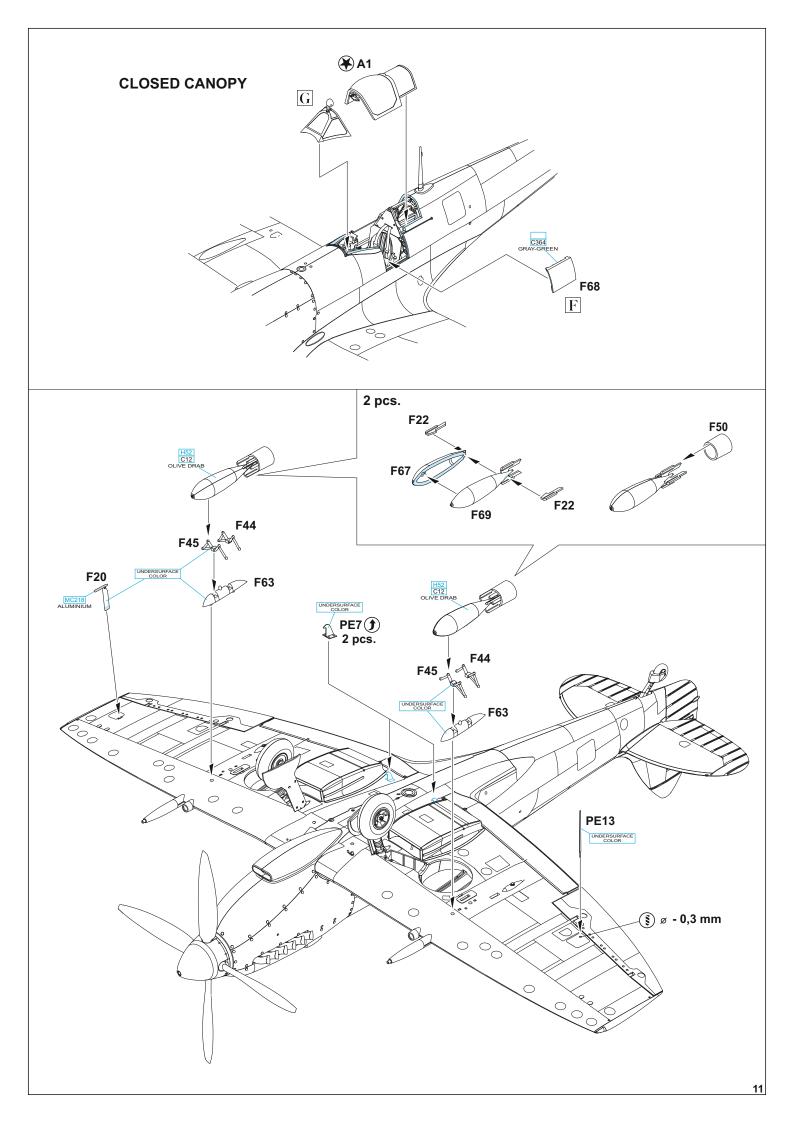




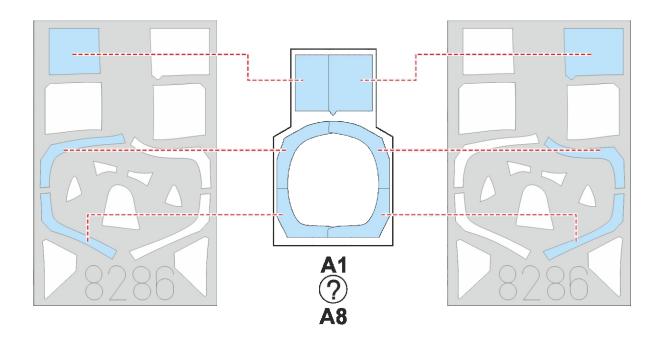


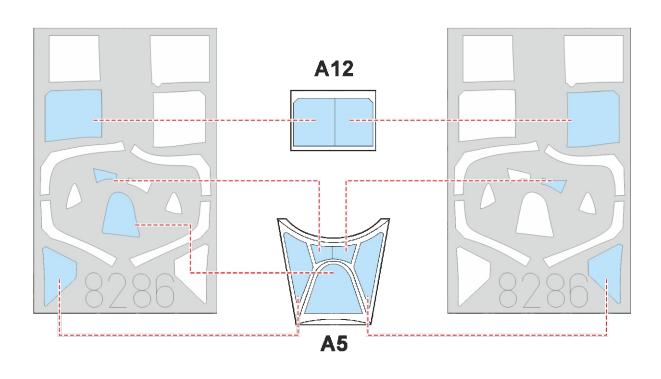






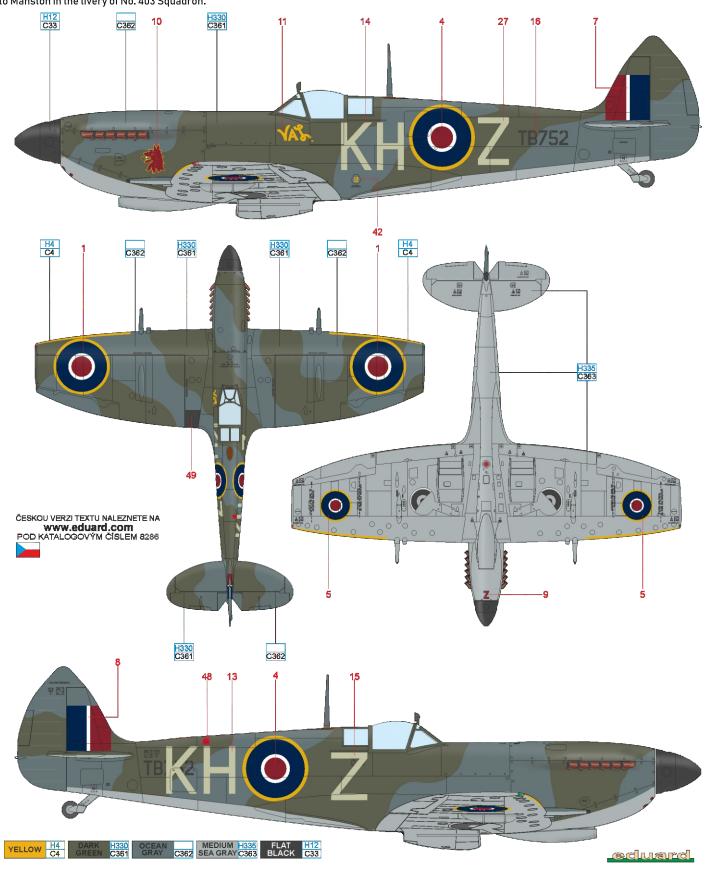






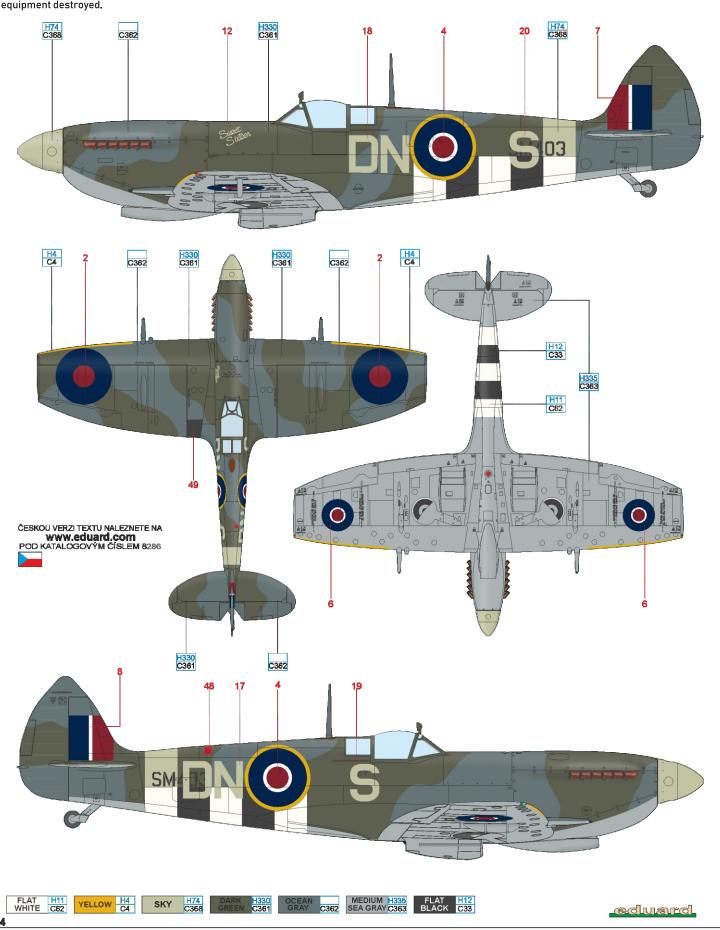
A TB752, S/Ldr Henry Zary, CO of No. 403 Squadron, B.114 Diepholz, Germany, April–May 1945

The Spitfire serial number TB752 was built by Vickers-Armstrong at the Castle Bromwich factory with elliptical wingtips and was handed over to No. 33 Maintenance Unit RAF Lyneham on February 21, 1945. The first combat unit with which TB752 served was No. 66 Squadron in March 1945, where it received the fuselage code LZ-F. On March 25, 1945, it suffered damage to its wing and propeller during an emergency landing, which was repaired by No. 409 RSU. On April 19, 1945, the repaired TB752, this time with clipped wingtips, was transferred to a new operational combat unit, No. 403 Squadron. There it received the codes KH-Z and became the favorite aircraft of No. 403 Squadron commander S/Ldr Henry Zary. On his very first flight with TB752, Zary shot down one Bf 109 on April 21, scoring five confirmed victories and becoming an ace. On April 25, he destroyed one Me 262 and one Ju 88 during strafing attack on German airfield with TB752. Other No. 403 Squadron pilots achieved notable successes in the cockpit of TB752 in the last days of the war. For example, on April 25, P/O D. Leslie shot down one Fw 189, on May 1 F/O R. Young shot down an Fw 190 and on May 3 F/O Fred Town sent down a He 111. Shortly after the war, the TB752 spinner received a red, white and blue paint job and the code letters KH-Z were given black outlines. In 1955 TB752 was moved to Manston where it stood for many years on a pedestal at the airport entrance gate. In 1978 the Medway branch of the Royal Aeronautical Society offered to refurbish it and on July 7 was TB752 transferred to Rochester Airport. On September 15, 1979, following a successful refurbishment, TB752 returned to Manston in the livery of No. 403 Squadron.



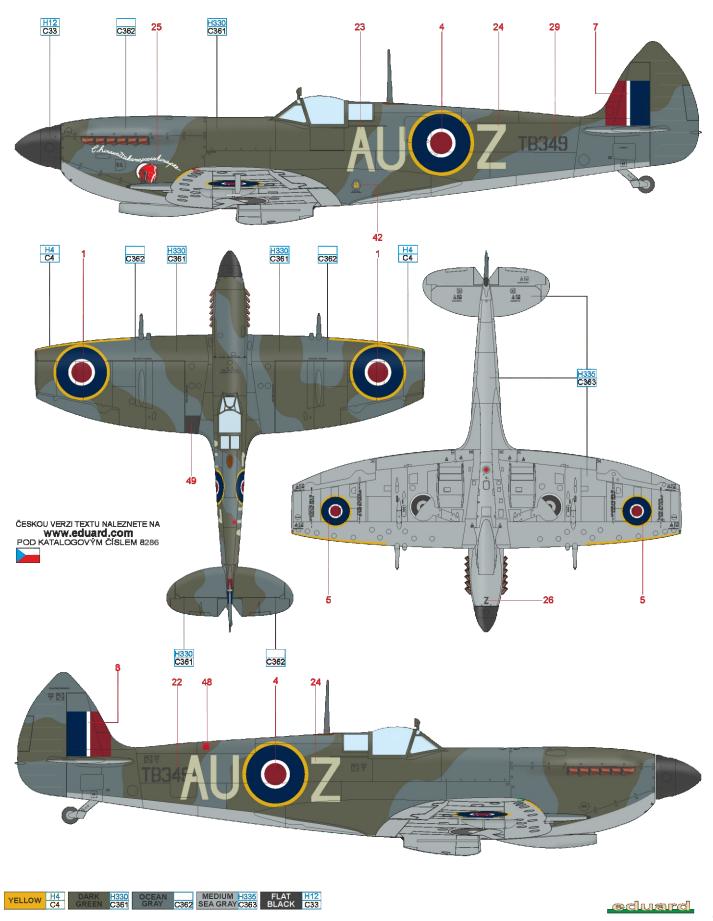
SM403, F/O Gordon M. Hill, No. 416 Squadron, B.56 Evere, Belgium, December 1944

In mid-December 1944, No. 416 Squadron was rearmed from Mk.IX Spitfires to the all-new Mk.XVIe ones. One of the first of the newly delivered Spitfires was an aircraft with serial number SM403 with a shortened wingspan, which subsequently received the code letters DN-S. When SM403 was taken by F/O Gordon Hill for a flight test to see how the new Spitfire performed, the name "Sweet Sixteen" stuck with him upon landing and he had it painted on the tank cover of his new Spitfire by ground staff. According to his personal recollections, the "Sweet Sixteen" was his favorite Spitfire. Hill's first combat mission with the new SM403 was a patrol of twelve "Sixteen's" on Christmas Day 1944 over the Malmedy-Houffalize area. By December 31, 1944, No. 416 Squadron had flown 73 combat sorties on patrols and sweeps and claimed a kill on an Fw 190. By the end of World War II, No. 416 Squadron had then flown 2,040 combat sorties with its "sixteens" as part of No. 127 Wing, adding to its wartime total of 75 confirmed kills the amount of enemy ground equipment destroyed.



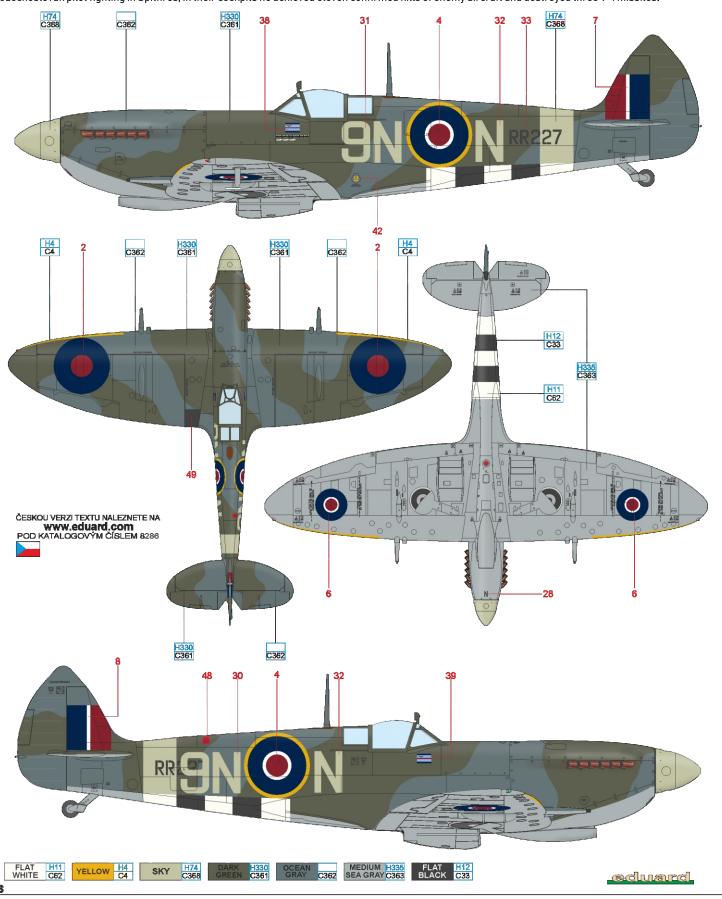
C TB349, F/Lt Malcom J. Gordon, No. 421 Squadron, B.90 Petit Brogel, Belgium, February-April 1945

Malcolm "Mac" Gordon was very proud of his Spitfire which bore a long unintelligible inscription "Chinawattakamapoosekinapee" on the left side of the engine cowling. The story of this strange inscription took place one evening over a few beers when Mac and Bill Marshall decided to come up with a name for Mac's Spitfire. As the night wore on and the beer consumption increased, the name got longer and longer. The red Indian emblem on the left side of the engine cowling depicts the logo of the McColl Frontenac Oil Company, which sponsored No. 421 Squadron. "Mac" Gordon achieved a total of five kills during his wartime career in the cockpit of several Spitfires with Nos. 403 and 421 Squadron and received the DFC.



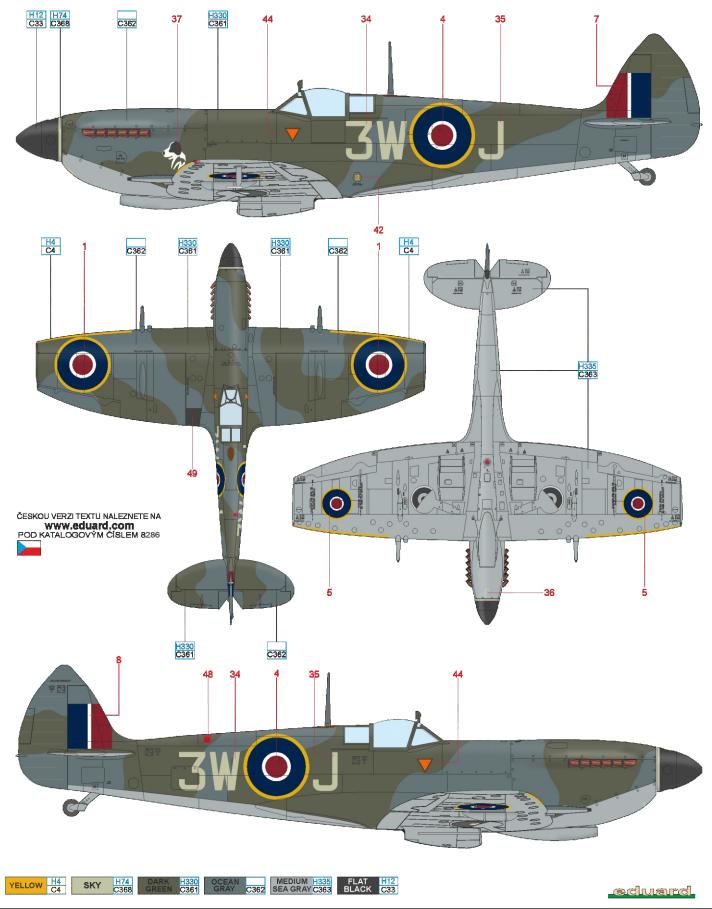
RR227, S/Ldr Otto Smik, No. 127 Squadron, B.60 Grimbergen, Belgium, November 1944

When No. 127 Squadron was rearmed with Spitfires Mk.XVI in early November 1944, Otto Smik DFC became its new commander on November 13. He had the honor of becoming one of only three Czechoslovaks to command a British squadron. Unfortunately, Smik's command was short-lived. He was shot down by anti-aircraft artillery during an attack on Zwolle station on November 28, 1944 and did not survive an emergency landing with his difficult-to-control aircraft. Smik chose the serial number RR227 as his personal Spitfire for No. 127 Squadron. Unfortunately, the appearance of his aircraft is not documented photographically. Earlier sources state that the fuselage designation may have been 9N-B or 9N-R, but new research confirms that both the fuselage letters B and R were worn by Spitfires of a different serial number at the time. Among the first newly delivered Spitfires to No. 127 Squadron after Smik's death was an aircraft that received the letter N. It is thus very likely that Smik also took his favorite letter N for No. 127 Squadron as he did during his time in the ranks of Czechoslovak No. 310 and No. 312 Squadrons. Smik also painted the symbols of kills on his planes in various forms, the flag of the Squadron commander cannot be completely ruled out, nor can the presence of the Czechoslovak cockade. S/Ldr Otto Smik was the most successful Czechoslovak pilot fighting in Spitfires, in their cockpits he achieved eleven confirmed kills of enemy aircraft and destroyed three V-1 missiles.



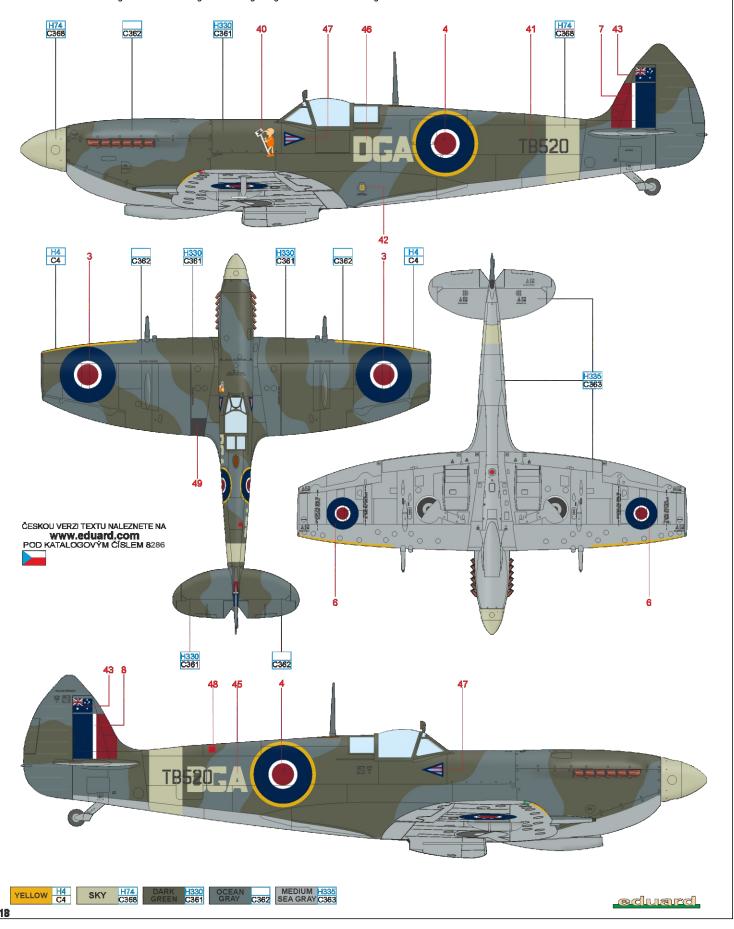
F/Lt Gordon M. Braidwood, No. 322 Squadron, B.106 Twente, the Netherlands, April 1945

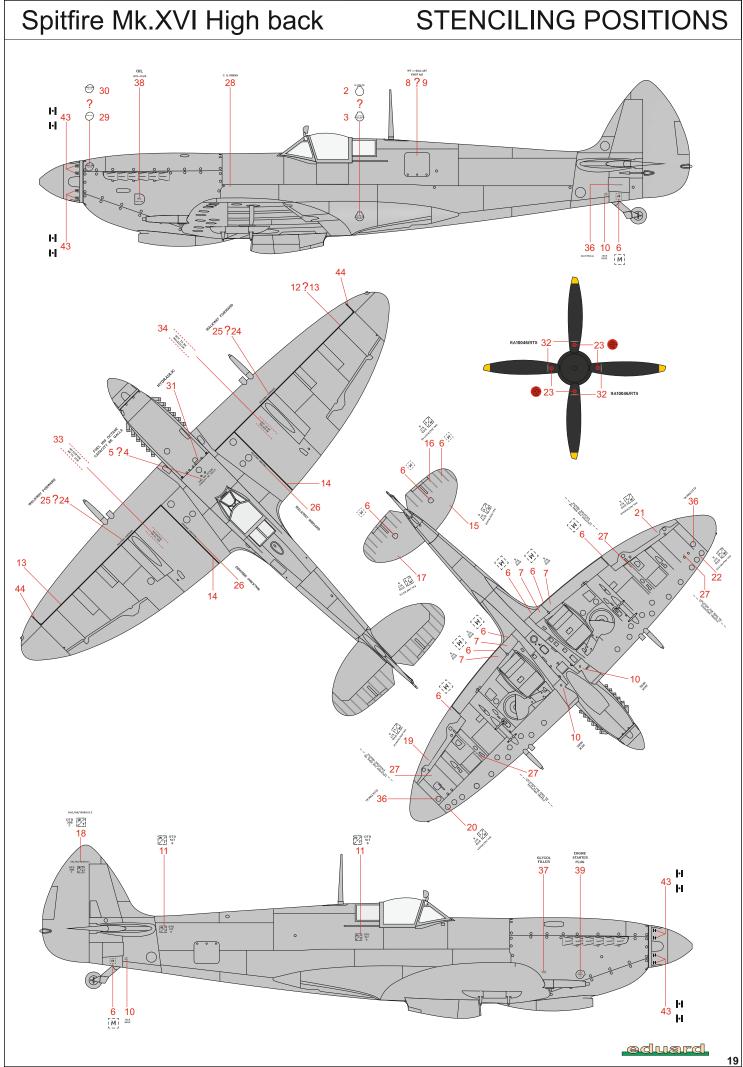
No. 322 Squadron was formed at Woodvale in June 1943 by renumbering No. 167 squadron, which had in its staffing a high proportion of Dutch pilots. In December 1943 it moved south to Hawkinge with its Spitfires Mk.V. In March it moved to Acklington where it was rearmed with the all-new and powerful Spitfires Mk.XIV with Griffon engines. As part of the West Malling Wing, the unit was deployed during the V-1 missile offensive against southern England in early June, and by the end of August the pilots of No. 322 Squadron had succeeded in destroying 108.5 V-1 missiles. When the threat ended in August, the unit was rearmed to Spitfires LF Mk.IX. Rearmament to Spitfires Mk.XVIe followed in November, and in early 1945 the unit moved to Belgium to join the Norwegian No. 132 Wing. Here, as part of the 2nd TAF, it mostly carried out support attacks on German ground and air equipment until the end of the war. One of the most successful pilots was British A Flight Commander, F/Lt G. M. Braidwood, who was credited with five aircraft destroyed and seven damaged while strafing German airfields.



TB520, W/Cdr Donald G. Andrews, CO of Coltishall Wing, RAF Matlaske, United Kingdom, March-May 1945

Australian "Don" Andrews, a native of Queensland, joined the RAAF in November 1940. He trained in Canada and sailed to the UK. In November 1941 he was posted to No. 615 (County of Surrey) Squadron and six weeks later to No. 245 (Northern Rhodesia) Squadron, with which he remained until July 1942 when he joined No. 175 Squadron as Squadron Leader. He was then transferred to No. 453 (RAAF) Squadron where he initially commanded A Flight and in September took over the whole Squadron and received a DFC. He remained in command of No. 453 (RAAF) Squadron until the end of his tour in May 1944. After retirement he took over the Coltishall Wing in February 1945 as supernumerary, supervising two Australian Spitfire Squadrons (Nos. 451 and 453 Squadron). In April he was given command of the Biggin Hill Wing. He left the wing in June, was repatriated in September and retired from RAF service in April 1946. During his wartime career he achieved one confirmed kill, one probable kill and damaged three enemy aircraft. All his personal aircraft were decorated with a drawing of a "Gremlin" figure holding a sign on the nose reading "You Have Been Warned".





Eduard goodies for

Spitfire Mk.XVI High Back 1/48

