# Sopwith F.1 Camel (BR.1) <u>eduard</u>

1/72 Scale Plastic Model Kit



# **ProfiPACK**

Highly maneuverable, but tricky to fly. This is short description of Sopwith Camel, one of the most popular WWI fighters. It was effective in hands of skilled pilots, but dangerous to unexperienced ones.

The Sopwith Camel was a solution to the requirements for a faster and more maneuverable fighter than what was available to Royal Flying Corps and Royal Navy Air Services during 1916. The Sopwith company had already several successful designs added to its reputation and the new "Fighter 1", abbreviated as F.1 was designed under the leadership of Sopwith's chief designer Herbert Smith who was working with the concept conceived by T. Sopwith, F. Sigrist and H. Hawker. Their main idea was to concentrate most of the mass of the aircraft within a relatively small area to create extremely maneuverable aircraft. The design job was fast thanks to the fact the Sopwith's design office was very simple. The basic design drawings were made by chalk directly on the workshop floor in 1:1 scale.

#### Conventional but different

The first of three prototypes undertook ground acceptance tests towards the end of the year and was deemed airworthy on December 22, 1916. It is believed the prototype flew for the first time the same day with Harry Hawker behind the controls (some sources state December 26), powered by the Clerget 9Z 110hp engine. Hawker was very positive about flying characteristics, although it was obvious the new design had very sensitive controls and was rather unstable. More to it, a strong gyroscopic effect of rotary engine and propeller was making the control of the aircraft even trickier. Many less experienced and novice pilots fell victim to its flying characteristics later. On the other hand, when mastered, the Camel was very effective in combat

The new fighter assembly was more conventional than the design approach. The fuselage was made of wooden box-girder, wire-braced assembly. The sides of the cockpit were covered in plywood, while the forward engine bay was covered in sheet aluminium panels. The rest of the fuselage was fabric-covered, as were the wings and tailplanes. To make the mass production easier, the upper wing lacked dihedral and lower wing was given increased 5° dihedral. Armament consisted of two synchronized Vickers 0.303 inch machine guns mounted in the "hump" in front of the cockpit. The original gun cover did not allow access to the cocking handle of feed-block pawls, as both weapons had right-hand feed. This made in-flight fix of the jammed starboard gun impossible. To overcome the problem, the opening was cut in forward decking above the breech mechanism of the starboard gun. This modification was standardized on July 28, 1917, by No. 2 Aircraft Depot. The change necessitated addition of a windshield (these were of various design).

#### Engine and production troubles

The Admiralty placed its first order for 50 aircraft even before the prototypes had flown, while the War Office was waiting until late May. Thanks to that Naval Camels began to reach the units by mid-May, while the No. 70 squadron of RFC obtained their Camels in late June as first to put them in combat with RFC. And while the Naval Camels were powered by the 150-hp Admiralty Rotary No.1 engine (later renamed as Bentley Rotary No. 1), RFC used their Camels with license-built Clerget 9B engines, which not only lacked some performance to their French original, but also lost power after just about

10 hours of running time. The solution was to install less powerful but more reliable Le Rhône 9J 110 hp. Later, the Clerget 9Bf 140 hp were also used and the Camels supplied to United States Air Service units were fitted with the Gnome Monosoupape 150 hp engine.

Despite of some shortcomings of the design and troubles with engines and guns, the aircraft, which got the name Camel due to the hump on the front section of the fuselage was ordered in huge amounts by both RFC and RNAS. Sopwith company was unable to fulfill the orders, so other companies were tasked with production. These were Ruston, Proctor & Co., Clayton & Shuttleworth, William Beardmore, Boulton & Paul, British Caudron, Hooper & Co., March, Jones & Cribb, Nieuport & General Aircraft and Portholme Aerodrome. There were minor technical differences between aircraft from these factories and bigger in terms of built-in quality. Namely Ruston, Proctor-built aircraft were markedly inferior in performance in comparison to other manufacturers.

#### Wide use

Altogether 5597 Camels in 48 series were built until the end of the war. Twelve RFC day fighter squadrons (Nos. 3, 28, 43, 45, 46, 54, 65, 66, 70, 71, 73 and 80) operated Camels on Western front with three of them having also spell in Italy (28, 45 and 66). There were also two night squadrons operating in France (Nos. 151 and 152) with Camels. The RNAS had eight Camel squadrons (Nos. 1, 3, 4, 8, 9, 10, 12 and 13). Home Defence used Camels with seven squadrons equipped with them (Nos. 37, 44, 50, 61, 87, 112 and 143). These were used to fight night flying German heavy bombers and airships attacking British islands in 1917 and 1918. Some of these night fighters were converted to the "Comic" version. Another special version of the Camel was 2F.1, used as shipborne fighter. These Camels had folding fuselage for easier storage on the decks. Two USAS squadrons were equipped with Camels, Nos. 17 and 148, also Belgians received them during the war and some other Air Forces were flying them after the armistice. Although the Camel was a fighter, squadrons used their aircraft also as fighter-bombers using bomb rack for four 20lb (11kg) Mk.I Cooper bombs. These low-level strafing and bombing sorties, although quite effective, were very dangerous for pilots. All in all, Camel pilots shot down some 1543 enemy aircraft and 120 balloons during the WWI. Another 1086 enemy aircraft were reported as OOC (Out-of-Control).

### This kit: Sopwith F.1 Camel (BR.1)

The BR.1 engine powered Camels were most popular amongst the pilots and highly sought for. Bentley's design, although based on the Clerget 9B engine, had light alloy cylinders and was not only more powerful, but also more reliable than original thanks to the dual ignition. More to it, the BR.1 was less expensive to the Admiralty or War Office, as the license payments for Clergets made these units quite pricey. The higher output was result of increased stroke, which enlarged engine diameter. Although the BR.1 still fitted into the Clerget engine cover, specific one for the BR.1 was also prepared, but used quite rarely. The BR.1 was standard engine for RNAS squadrons, but as these units were not produced in required quantity, most of the RFC pilots had to use Clergets.



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

**(?**) OPTIONAL VOLBA

**(t)** BEND OHNOUT

SAND **BROUSIT** 

**OPEN HOLE** VYVRTAT OTVOR SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ

REMOVE REVERSE SIDE **ODŘÍZNOUT** OTOČIT

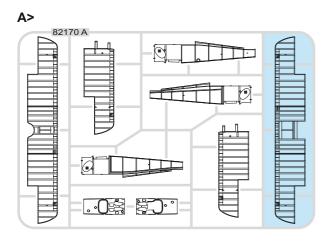
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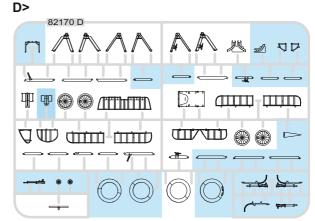
APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

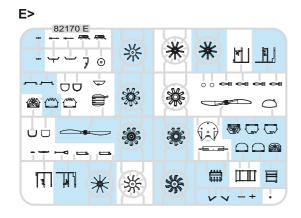
 $(\mathbf{X})$ 

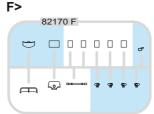
**PIÈCES** 部品 DÍLY **TEILE** 

### PLASTIC PARTS









**FARBEN** 



PE - PHOTO ETCHED DETAIL PARTS



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

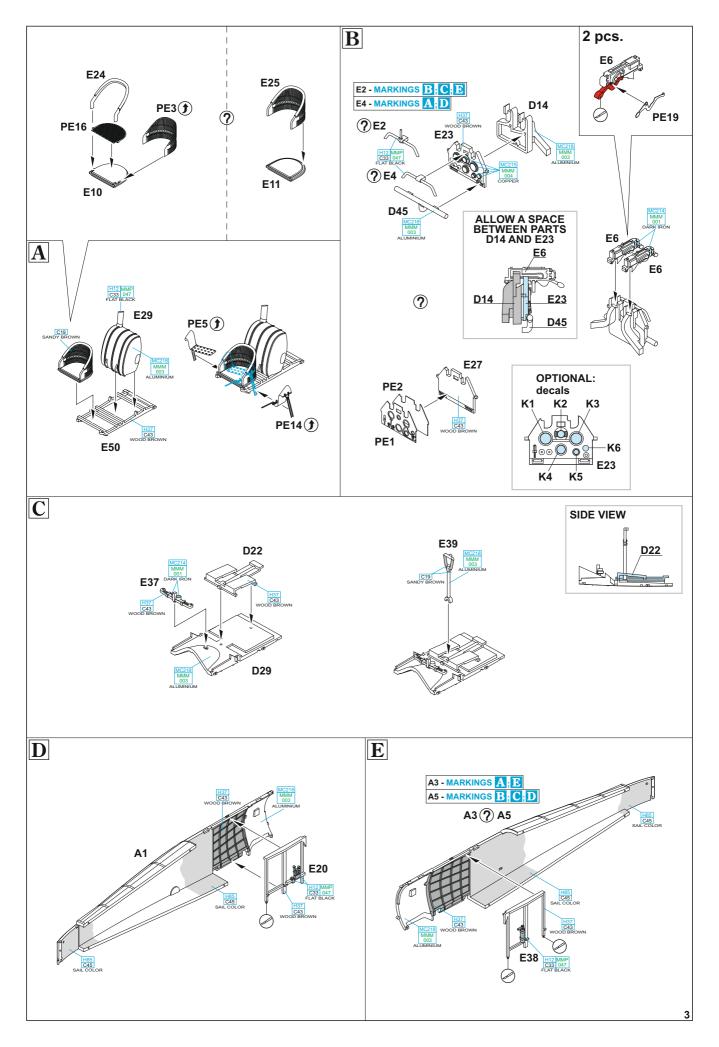
BARVY

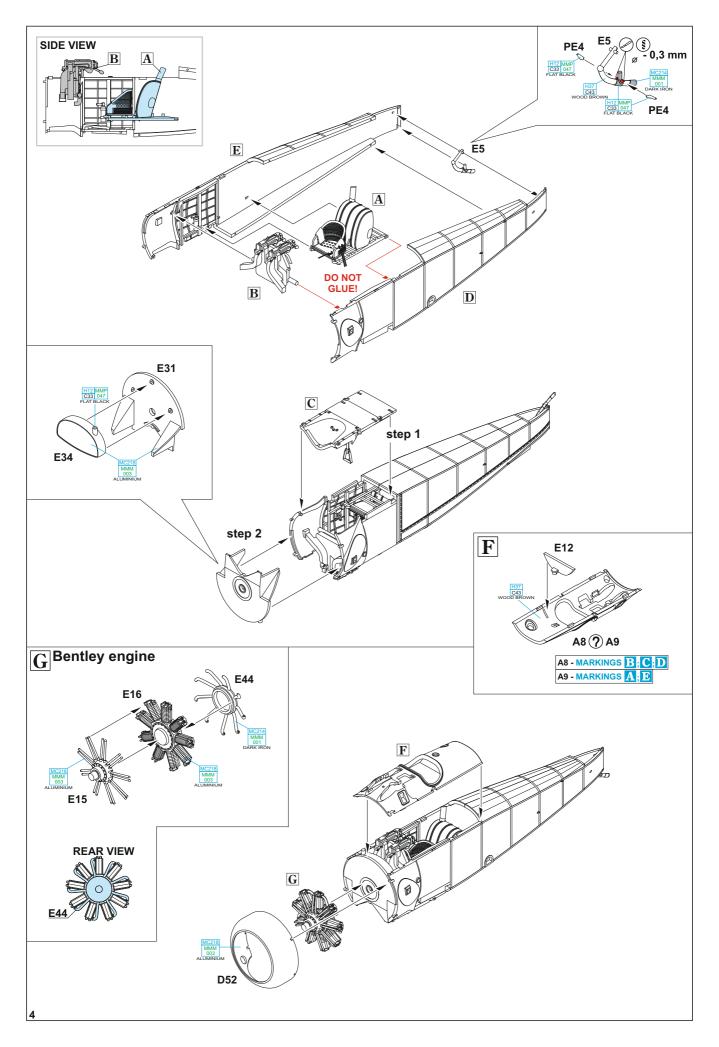
GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H4	C4	MMP-007	YELLOW
H8	C8		SILVER
H11	C62	MMP-001	FLAT WHITE
H12	C33	MMP-047	FLAT BLACK
H15	C65		BRIGHT BLUE
H25	C34		SKY BLUE
H37	C43		WOOD BROWN
H51	C11	MMP-063	LIGHT GULL GRAY
H78	C38		OLIVE GREEN

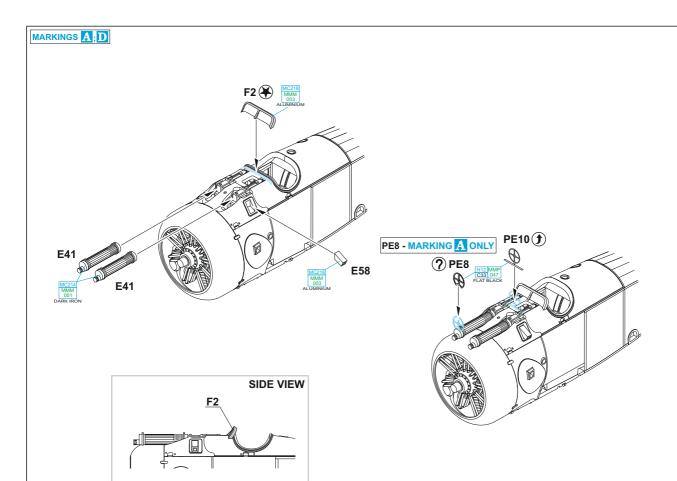
GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H84	C42		MAHOGANY
H85	C45		SAIL COLOR
H327	C327	MMP-101	RED
H338	C338	MMP-116	LIGHT GRAY
	C19		SANDY BROWN
Mr.METAL COLOR		METALLICS	
MC214		MMM-001	DARK IRON
MC215		MMM-004	COPPER
MC218		MMM-003	ALUMINIUM

PEINTURE

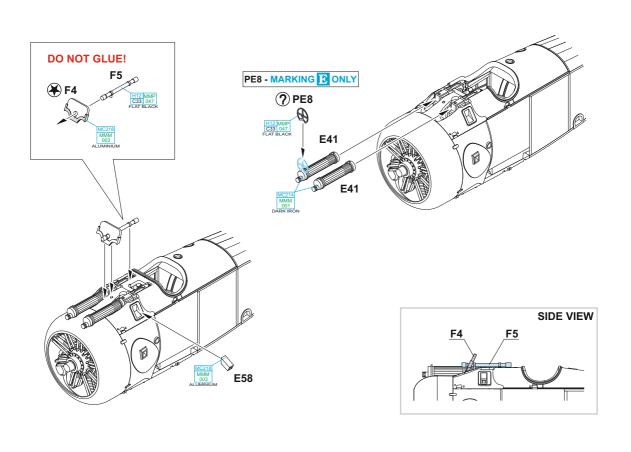
**COLOURS** 

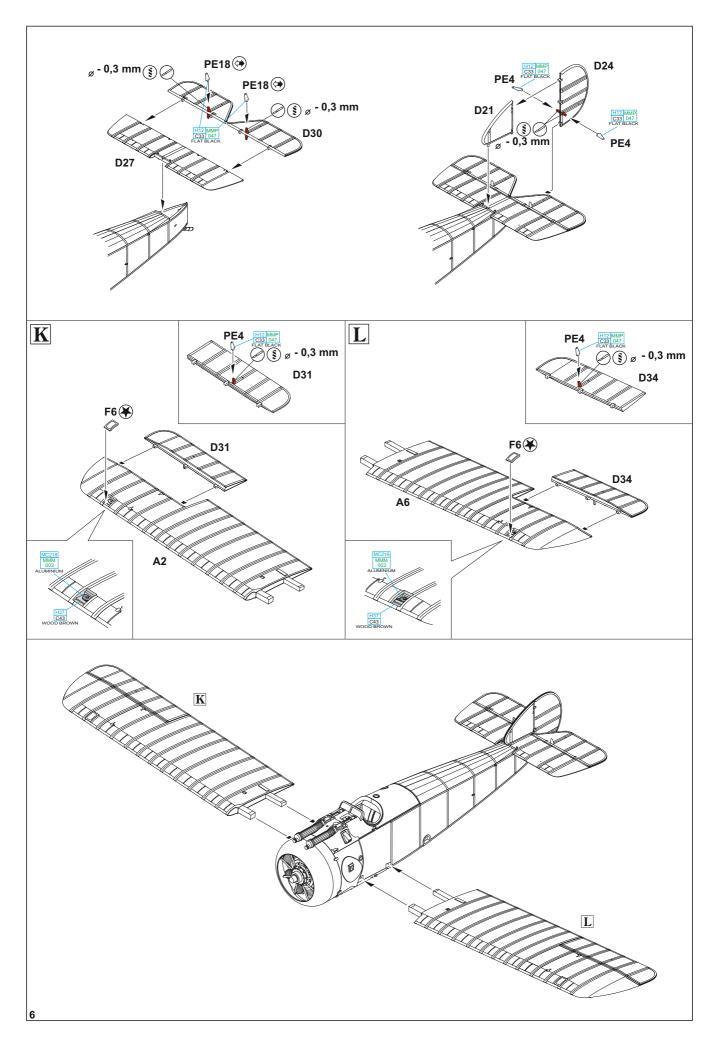


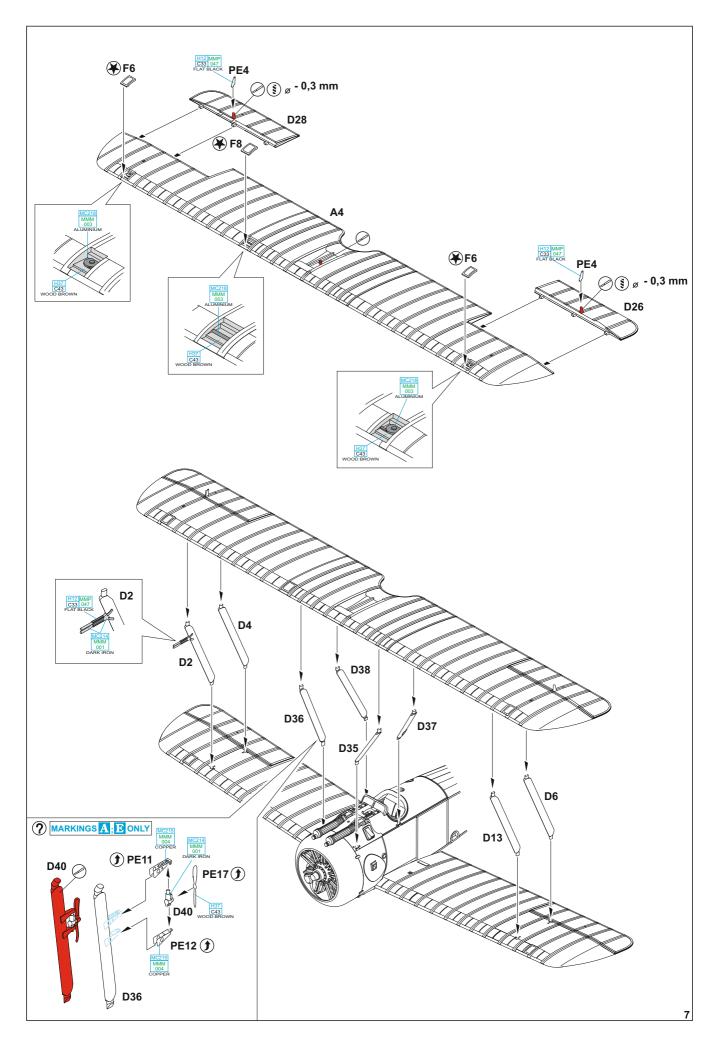


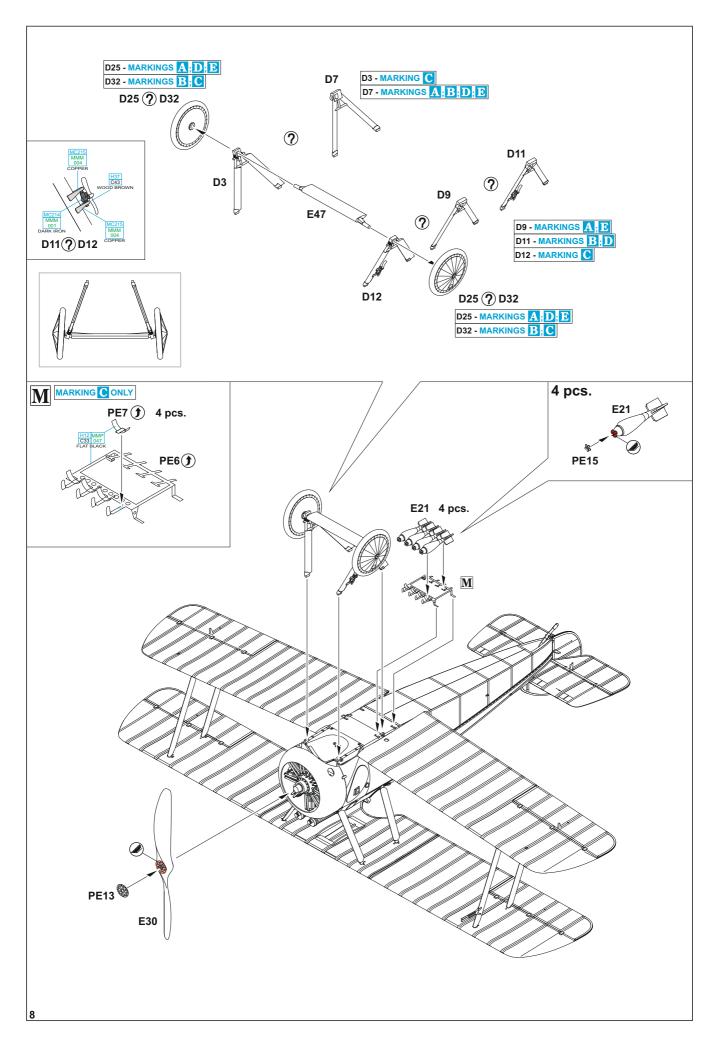


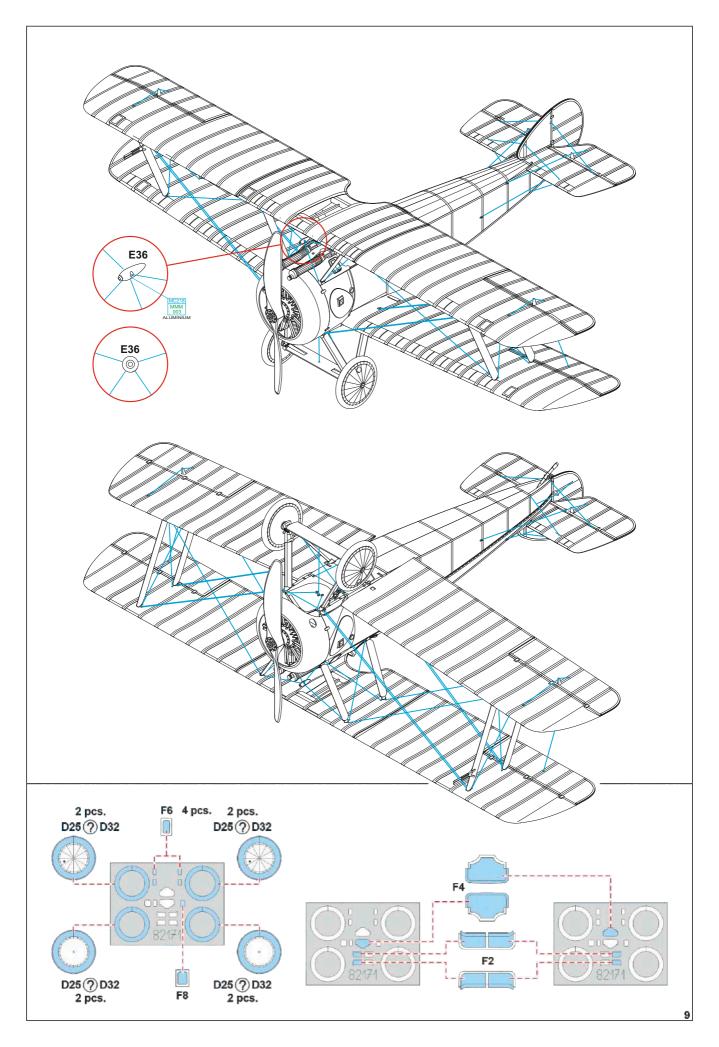




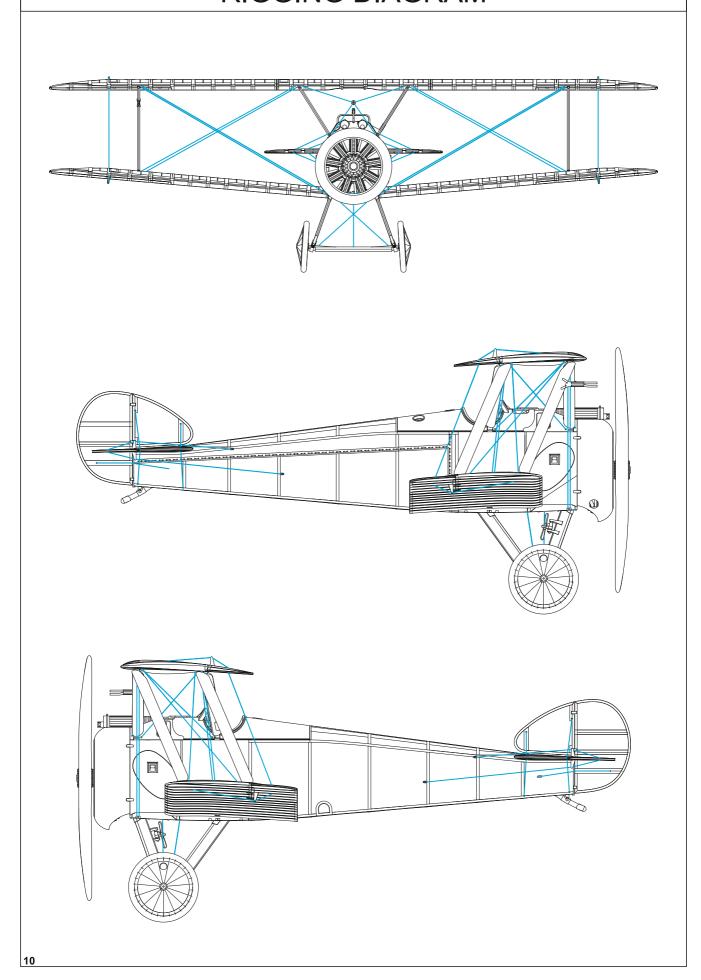






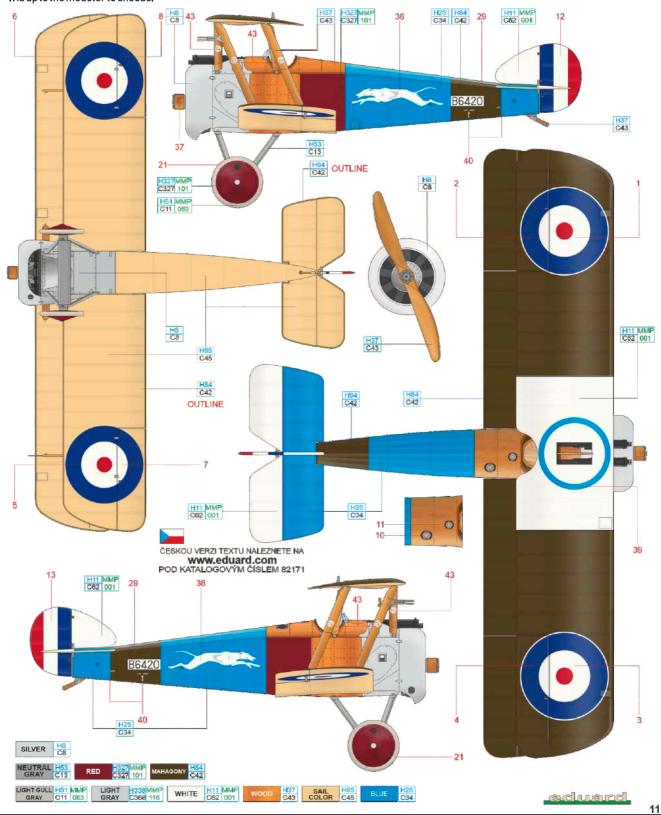


# **RIGGING DIAGRAM**



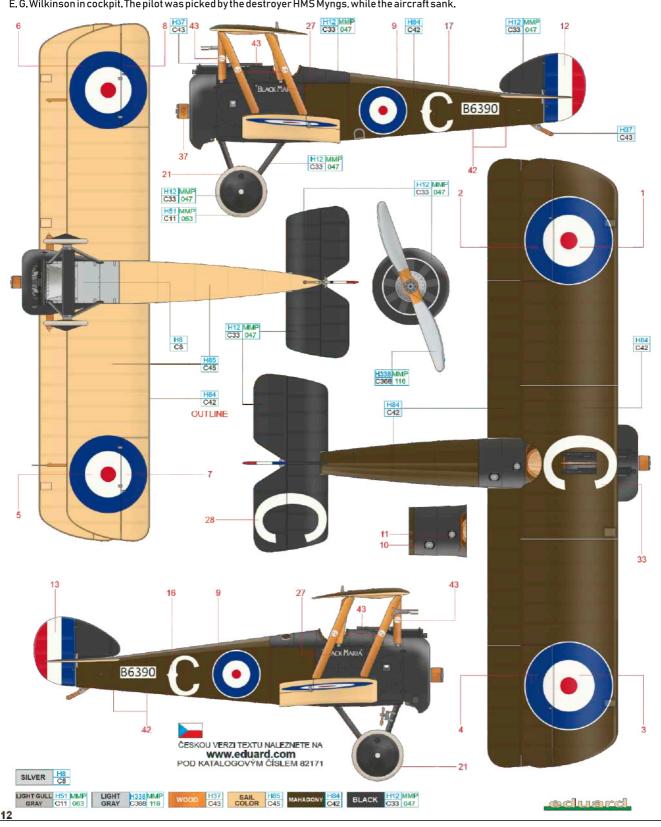
# A B6420, F/Cdr Richard Pearman Minifie, No. 1(N) Squadron RNAS, Téteghem, France, March 1918

Melbourne-born R. P. Minifie was the sixth most successful Australian ace of World War I, as he scored 21 victories, most of them flying Sopwith Triplane. Only last four ones he achieved flying this Camel. Minifie joined the ranks of the RNAS (Royal Naval Air Service) on June 11, 1916, and after his pilot training he became a member of No. 1(N) Sqn in December. He achieved his first victory on April 29, 1917, when he shot down an Albatros D.III near Epinoy. On March 17, 1918, Minifie led an offensive patrol flying this Camel. He did not return, as he had to make emergency landing behind enemy lines, being taken a POW subsequently. His machine was burned on the ground, according to some sources it was set on fire by Minifie himself. It is not clear whether he landed due to the engine malfunction or was shot down in combat with Pfalzs of Jasta 47w. Camel B6420 was manufactured by Sopwith factory and was accepted into No. 1(N) Sqn RNAS on November 9, 1917. Unlike the then current marking of the unit, the B6420 received an unusually colorful livery. According to the only known B&W photo, several conclusions can be drawn. We are leaning towards mid-blue mid and rear fuselage area with white greyhound and a red field behind the cockpit. However, it is possible that the wooden parts around the cockpit area were also painted red. It is up to the modeler to choose.



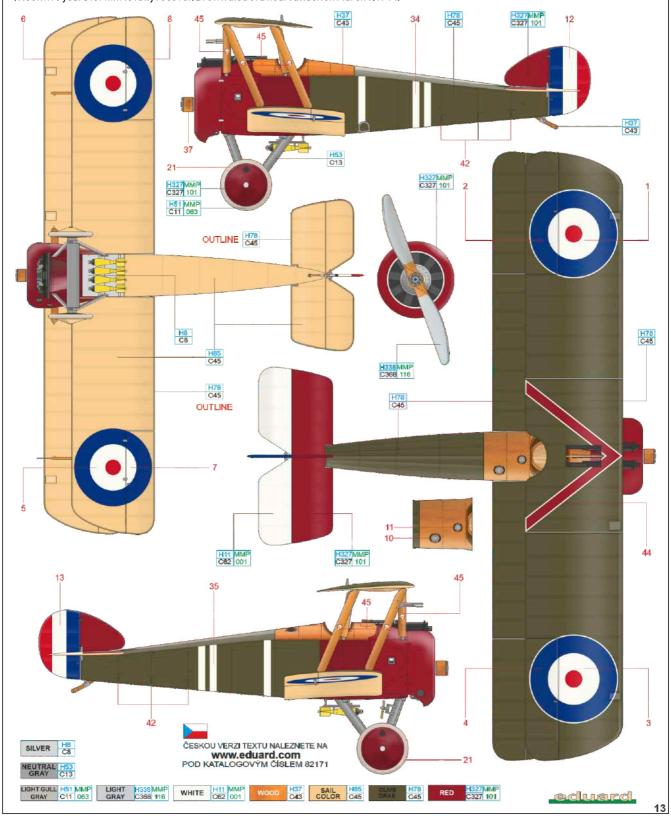
# B6390, F/Cdr Raymond Collishaw, Seaplane Defence Squadron RNAS, December 1917

Canadian Raymond Collishaw was the most successful RNAS ace with his 60 kills. His aerial combat career began in January 1916 when he was posted to the Naval Wing No. 3, flying the Sopwith 1½ Strutters. Here he achieved his first two victories. In February 1917 he was transferred to No. 3(N) Sqn where he achieved two more kills flying Pup, but by April 1 he reported to No. 10(N) Sqn to take command of B Flight. Here he switched to the Sopwith Triplane and established the legendary "Black Flight" with fellow Canadians. Their aircraft had their noses painted in black and were given "black" names as well. Collishaw chose the name "Black Maria". After a holiday in Canada, already an ace with 38 kills, he took command of Seaplane Defence Squadron in November 1917, where he also achieved his first victory with Camel using this B6390. On January 23, 1918, Collishaw assumed command of No. 3(N) Sqn, where he remained until October 21, when he was withdrawn from combat duty. After the war he increased his score as commander of No. 47 Sqn by another kill in fighting against the Bolsheviks in Russia. He died on September 28, 1976, in Canada. The Camel B6390, like most of Collishaw's aircraft, had black nose and bore the name "Black Maria". It was taken over by FSL J. A. Moyle, and on January 15 it was shot down over the Channel with FSL E. G. Wilkinson in cockpit. The pilot was picked by the destroyer HMS Myngs, while the aircraft sank.



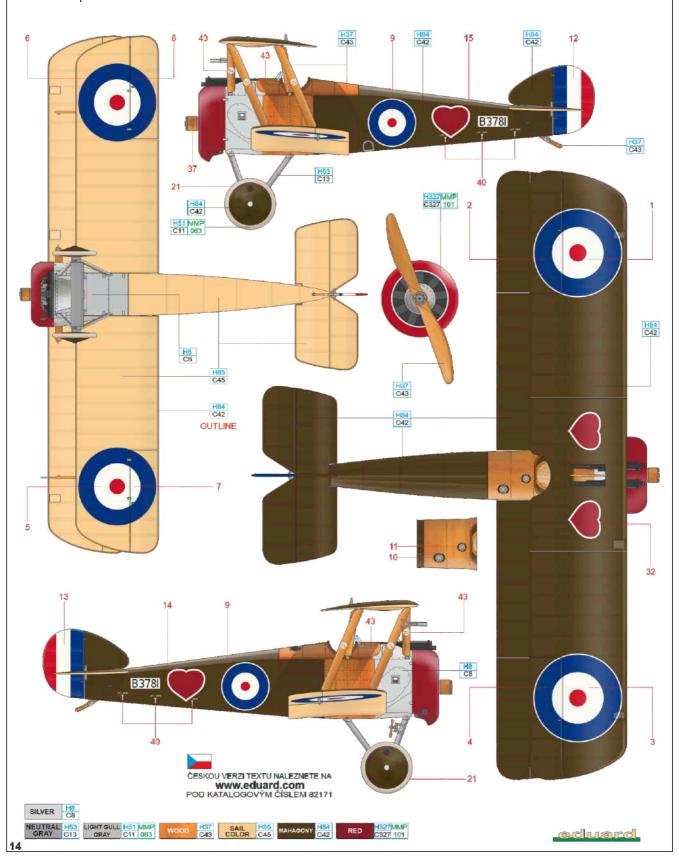
# C B7270, Capt. Arthur R. Brown, No. 9(N) Sqn RNAS, Bertangles, France, April 1918

Canadian Brown was made famous by his victory over Manfred von Richthofen. Although it is now known that the Red Baron was probably hit by a bullet fired by Australian ground machine gunners, Brown was the one who chased the most famous German fighter down at the time and fired on him as well. Brown became an RNAS pilot in November 1915, but several health problems prevented him from combat activity until April 1917, when he was assigned to No. 9(N) Sqn RNAS. He did not stay long with this unit, however, and changed in quick succession No. 11, No. 4, and No. 11 Sqn again, where he scored his first kill with Sopwith Pup on July 17. In September he returned to No. 9(N) Sqn. By the end of October, he had managed five kills and after taking a rest, he returned to the unit in February 1918. He was appointed a flight commander at the time he took over this Camel, built by the Clayton & Shuttleworth factory. With it he scored three more victories during March and April, before on April 21 he swooped down on Richthofen, who was chasing Lt. May with his Fokker Dr.I. Nine days after his tenth and most famous kill, Brown was hospitalized with the flu and nerve problems. He went on to serve as an instructor and never returned to combat. On July 15, he fainted in flight, crashed, and suffered serious head injuries. It took five years for him to fully recover. Brown died of a heart attack on March 9, 1944.



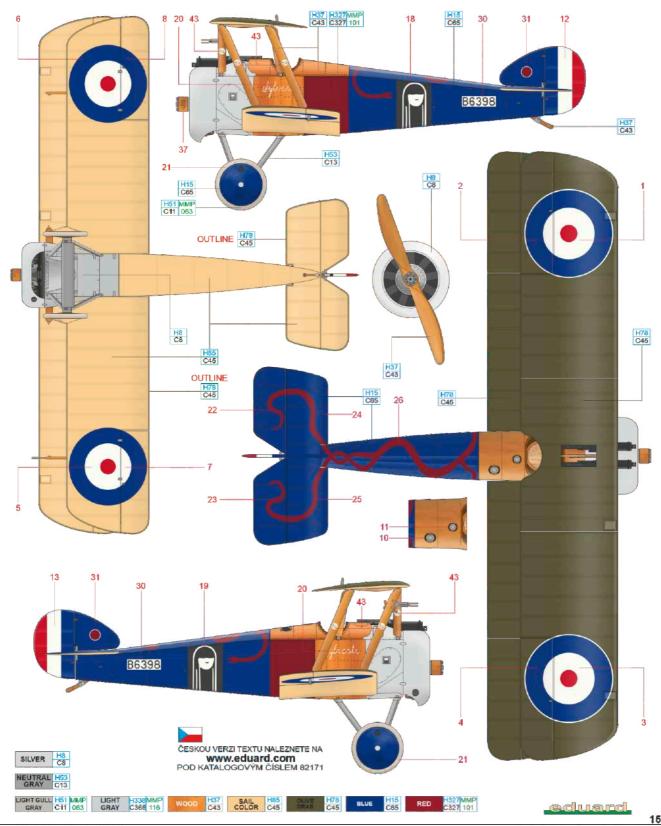
# B3781, FSL Aubrey B. Ellwood, No. 3(N) Squadron RNAS, Saint-Pol, France, July 1917

A.B. Ellwood, son of Reverend C. E. Ellwood, joined the Royal Navy in June 1916. In April 1917 he was posted to No. 3(N) Sqn and served with this unit until May 1918 (by which time it had been redesignated No. 203 Sqn). Ellwood achieved a total of ten kills, the first of them when flying this Camel B3781 on June 27, 1917. His victim was an unspecified German floatplane. On his second victory (January 30, 1918) he was already flying another Camel (B6408), as B3781 had been seriously damaged in a crash by J. W.P. Ambrose on August 27, 1917. However, the aircraft was repaired, assigned to No. 9(N) Sqn at the end of October, and in February 1918 was assigned to No. 10(N) Sqn. Here it was shot down with FSL G.T. Steeves behind controls on March 18. Steeves was taken POW, the aircraft was destroyed. Camel B3781 was of Sopwith factory production with red hearts painted on the wings and fuselage during service with No. 3(N) Sqn. The upper wing hearts are clearly visible on the photo of crashed aircraft.



### B6398, Maj. Ernest L. Foot, No. 1 School of Special Flying, RAF Gosport, October 1918

As colourful as the B6398 Camel was, so too was its combat career. It was manufactured by Sopwith as part of a batch of 250 aircraft. In October 1917 it was assigned to No.1(N) Sqn. Here it had a few unlucky moments, such as a ground collision with another aircraft (March 11, 1918) or a collision with a cow on edge of airfield during a training flight (April 7, 1918). Pilots scored twelve kills flying B9368, six of which were credited to S. M. Kinkead, with W. R. May scoring his first two kills and R. C. B. Brading scoring four, all during September 1918. At the end of the war the aircraft was assigned to No. 1 School of Special Flying, where it was taken over as a personal machine by E. L. Foot (5 kills). He had it decorated with Egyptian motifs. A stylized head of Cleopatra in a black field and a snake winding along the back of the machine were added. According to the photographs taken from both sides, it seems there was a two-headed and two-tailed red snake painted. The area of the fuselage around the cockpit is usually depicted as red, but according to photographs it is possible the wooden parts were left in their natural color and only the canvas behind cockpit was red. It is up to modeler to choose.



# Eduard goodies for Sopwith F.1 Camel (BR.1) 1/48

FE1215	Sopwith Camel seatbelts STEEL (PE-Set)
644116	Sopwith Camel LööK (Brassin)
648657	Sopwith Camel wheels type 1 (Brassin)
648658	Sopwith Camel wheels type 2 (Brassin)
648659	Sopwith Camel seat (Brassin)
648660	Sopwith Camel Vickers Mk.I gun (Brassin)
648674	Sopwith Camel Rotherham air pumps (Brassin)
648662	Sopwith Camel 20lb bomb carrier (Brassin)
648677	Sopwith Camel Bentley engine (Brassin)
648661	Sopwith Camel US Colt Vickers gun (Brassin)
301 48038	Sonwith Camel SPACE (3D Decal Set)



