Sopwith F.1 Camel (Bentley)

eduard

1/48 Scale Plastic Model Kit

item No. 8485

WEEKEND edition

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.

ATTENTION ✶ UPOZORNĚNÍ ✶ ACHTUNG ✶ ATTENTION ✶ 注意

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

BEND OHNOUT

SAND BROUSIT

OPEN HOLE VYVRTAT OTVOR

SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ

REMOVE ODŘÍZNOUT

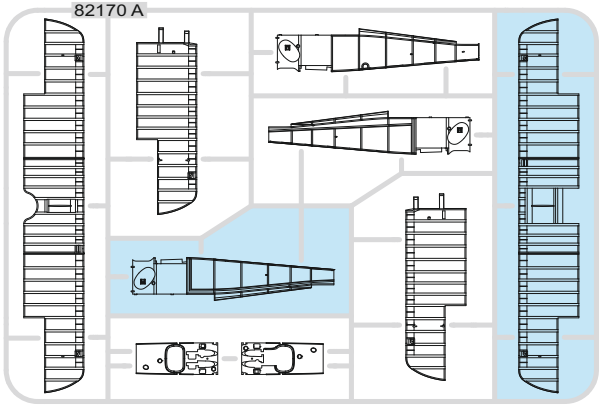
REVERSE SIDE OTOČIT

APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

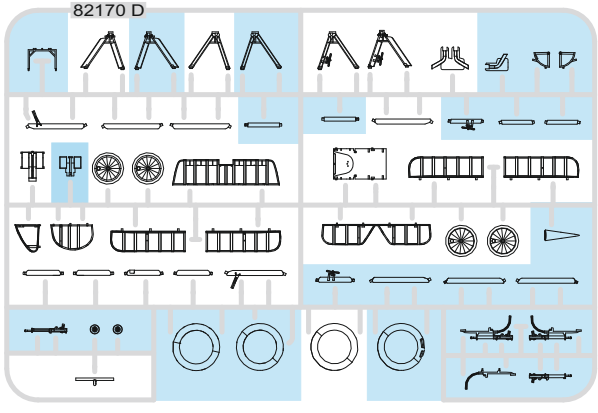
PARTS ✶ DÍLY ✶ TEILE ✶ PIÈCES ✶ 部品

PLASTIC PARTS

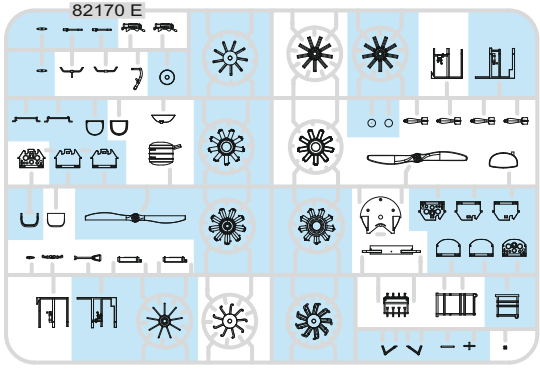
A>



D>



E>



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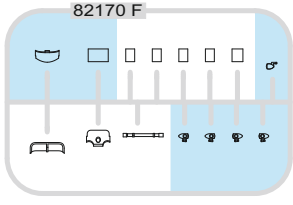
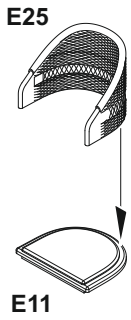


-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

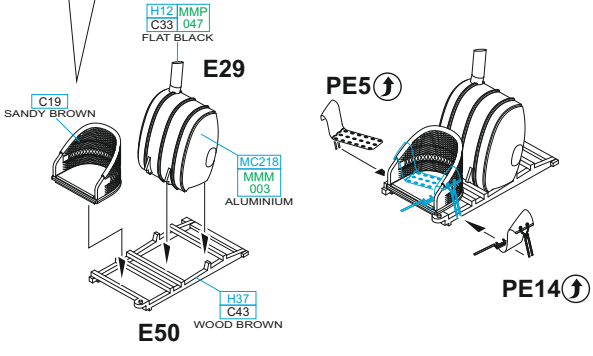
COLOURS ✶ BARVY ✶ FARBEN ✶ PEINTURE ✶ 色

GSi Creos (GUNZE)		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
H47	C41	MMP-012	RED BROWN
H51	C11	MMP-063	LIGHT GULL GRAY

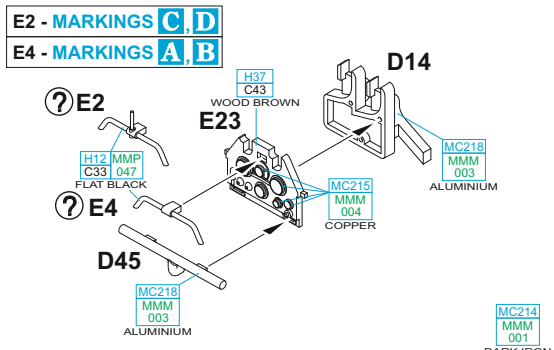
GSi Creos (GUNZE)		MISSION MODELS	
AQUEOUS	Mr.COLOR	PAINTS	
H53	C13		NEUTRAL GRAY
H78	C38		OLIVE GREEN
H85	C45		SAIL COLOR
H327	C327	MMP-101	RED
	C19		SANDY BROWN
Mr.METAL COLOR		METALLICS	
MC214		MMM-001	DARK IRON
MC215		MMM-004	COPPER
MC218		MMM-003	ALUMINIUM

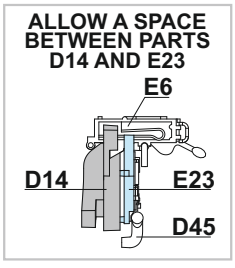

E25
E11

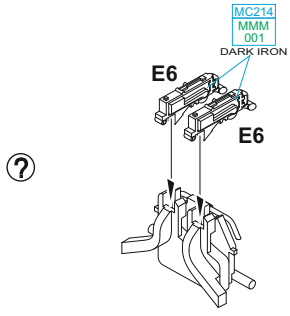
A

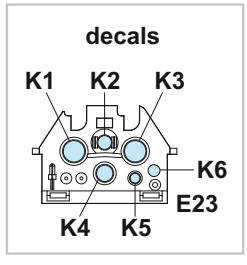

H12 MMP C33 047
FLAT BLACK
E29
C19
SANDY BROWN
MC218 MMM 003
ALUMINIUM
H37 C43
WOOD BROWN
E50
PE5
PE14

B

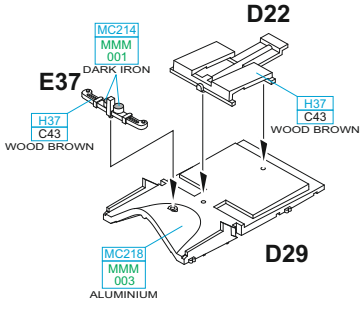

E2 - MARKINGS C, D
E4 - MARKINGS A, B
D14
H37 C43
WOOD BROWN
E2
E23
H12 MMP C33 047
FLAT BLACK
MC218 MMM 003
ALUMINIUM
MC215 MMM 004
COPPER
E4
D45
MC218 MMM 003
ALUMINIUM

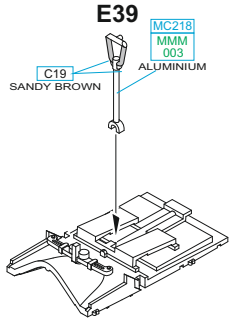

ALLOW A SPACE BETWEEN PARTS D14 AND E23
E6
D14
E23
D45

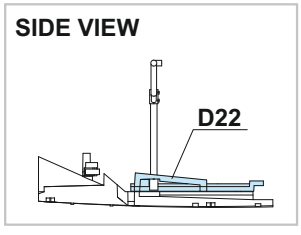

MC214 MMM 001
DARK IRON
E6
E6


decals
K1
K2
K3
K6
E23
K4
K5

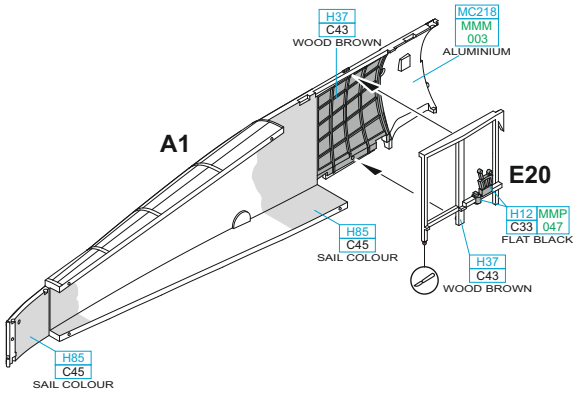
C


D22
MC214 MMM 001
DARK IRON
E37
H37 C43
WOOD BROWN
H37 C43
WOOD BROWN
D29
MC218 MMM 003
ALUMINIUM

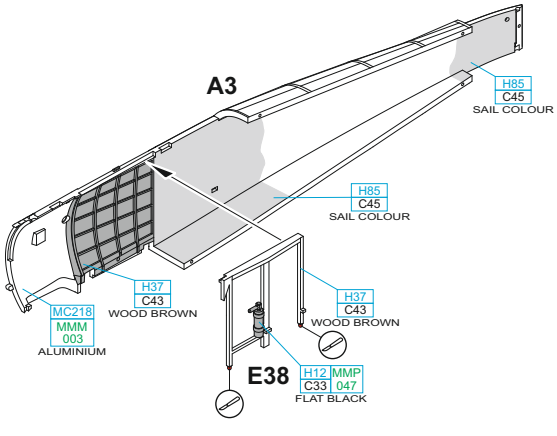

E39
MC218 MMM 003
ALUMINIUM
C19
SANDY BROWN

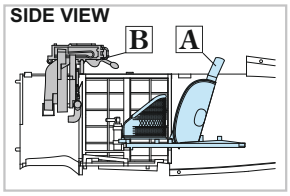

SIDE VIEW
D22

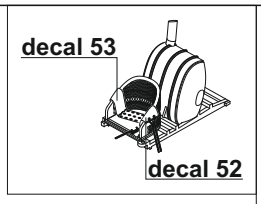
D

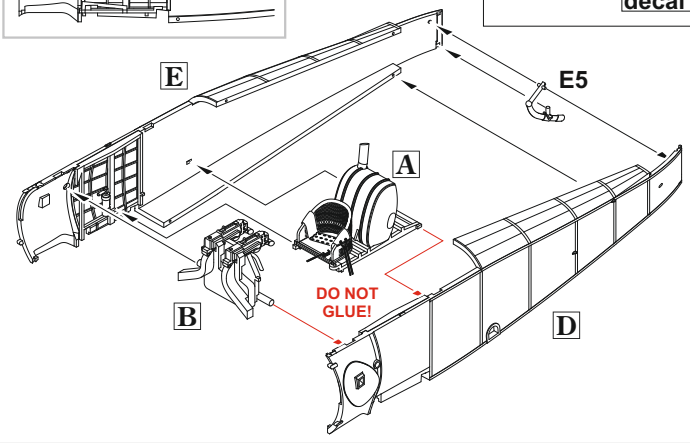

H37 C43
WOOD BROWN
MC218 MMM 003
ALUMINIUM
A1
E20
H12 MMP C33 047
FLAT BLACK
H85 C45
SAIL COLOUR
H37 C43
WOOD BROWN
H85 C45
SAIL COLOUR

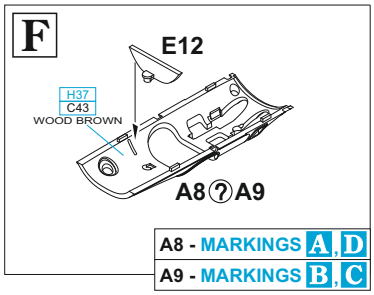
E

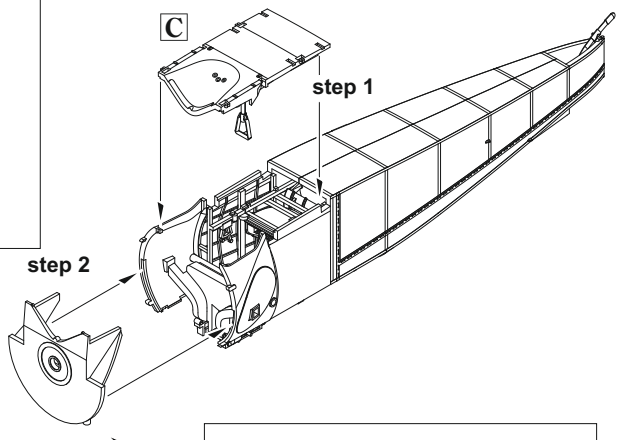

A3
H85 C45
SAIL COLOUR
H85 C45
SAIL COLOUR
H37 C43
WOOD BROWN
MC218 MMM 003
ALUMINIUM
H37 C43
WOOD BROWN
E38
H12 MMP C33 047
FLAT BLACK

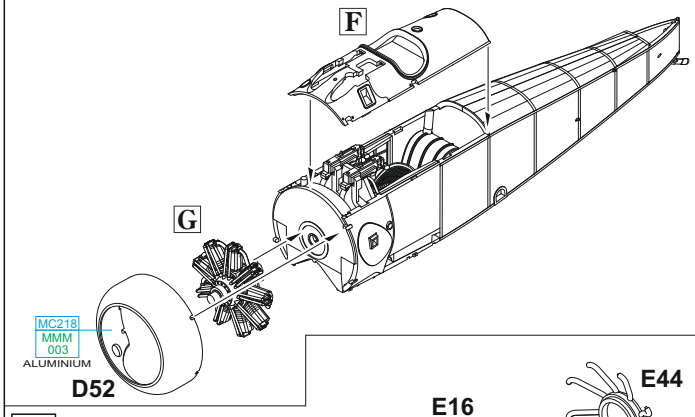

SIDE VIEW
B
A

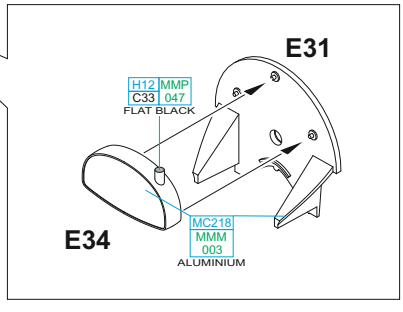

decal 53
decal 52

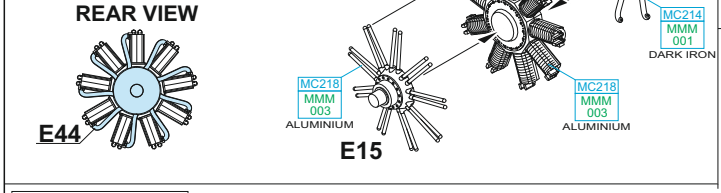

E
E5
A
B
DO NOT GLUE!
D

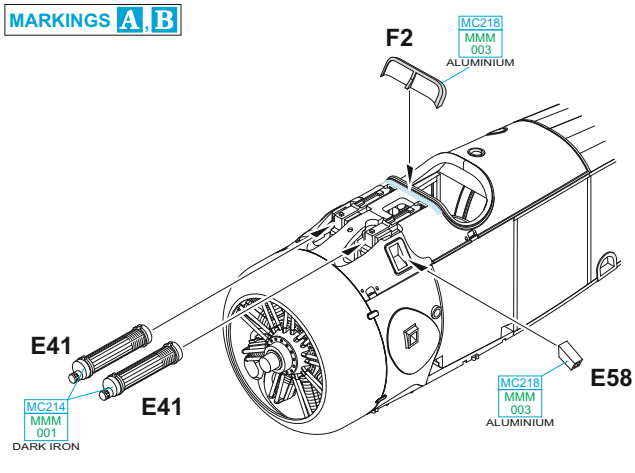

F
E12
H37
C43
WOOD BROWN
A8 ? A9
A8 - MARKINGS A, D
A9 - MARKINGS B, C

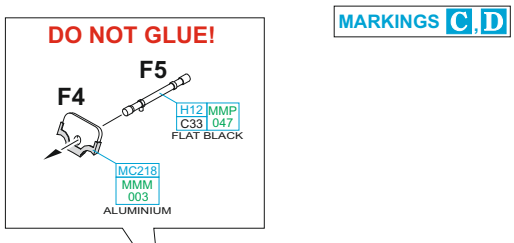

C
step 1
step 2

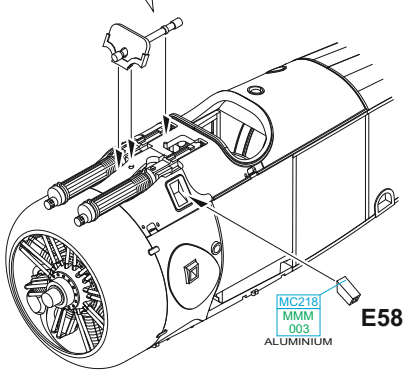

F
G
MC218
MMM
003
ALUMINIUM
D52


E31
H12
MMP
C33
047
FLAT BLACK
E34
MC218
MMM
003
ALUMINIUM


G
REAR VIEW
E44
E16
E44
MC214
MMM
001
DARK IRON
MC218
MMM
003
ALUMINIUM
MC218
MMM
003
ALUMINIUM
E15


MARKINGS A, B
F2
MC218
MMM
003
ALUMINIUM
E41
E41
MC214
MMM
001
DARK IRON
MC218
MMM
003
ALUMINIUM
E58


MARKINGS C, D
DO NOT GLUE!
F5
F4
H12
MMP
C33
047
FLAT BLACK
MC218
MMM
003
ALUMINIUM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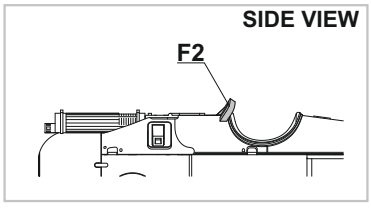
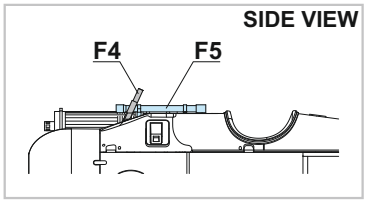
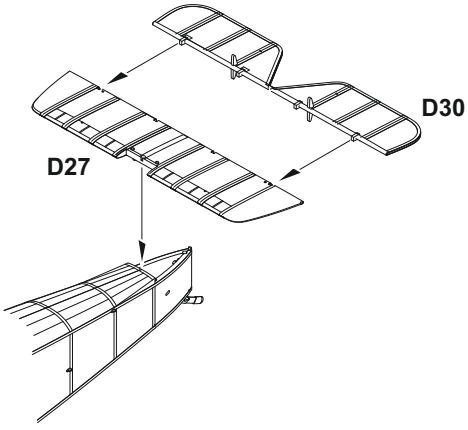
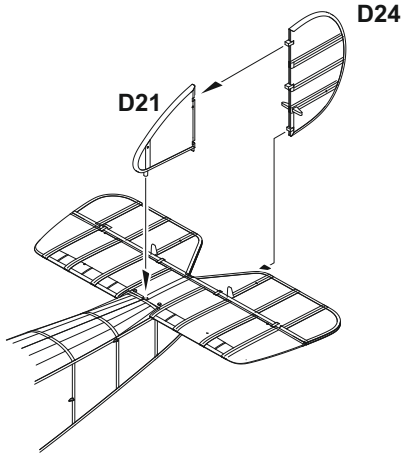
MMM
003
ALUMINIUM
E58

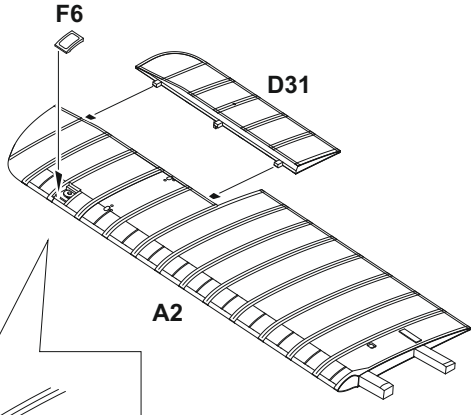

SIDE VIEW
F2

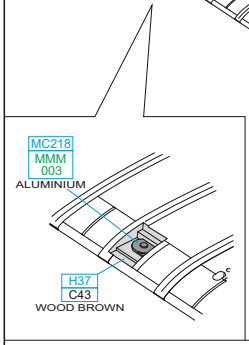

SIDE VIEW
F4
F5


D30
D27

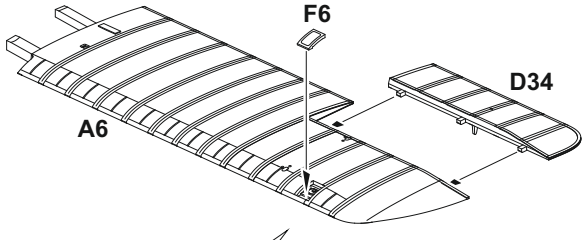

D24
D21

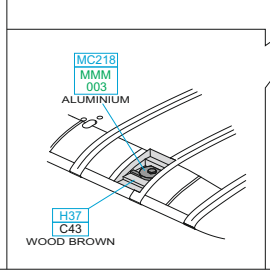
K

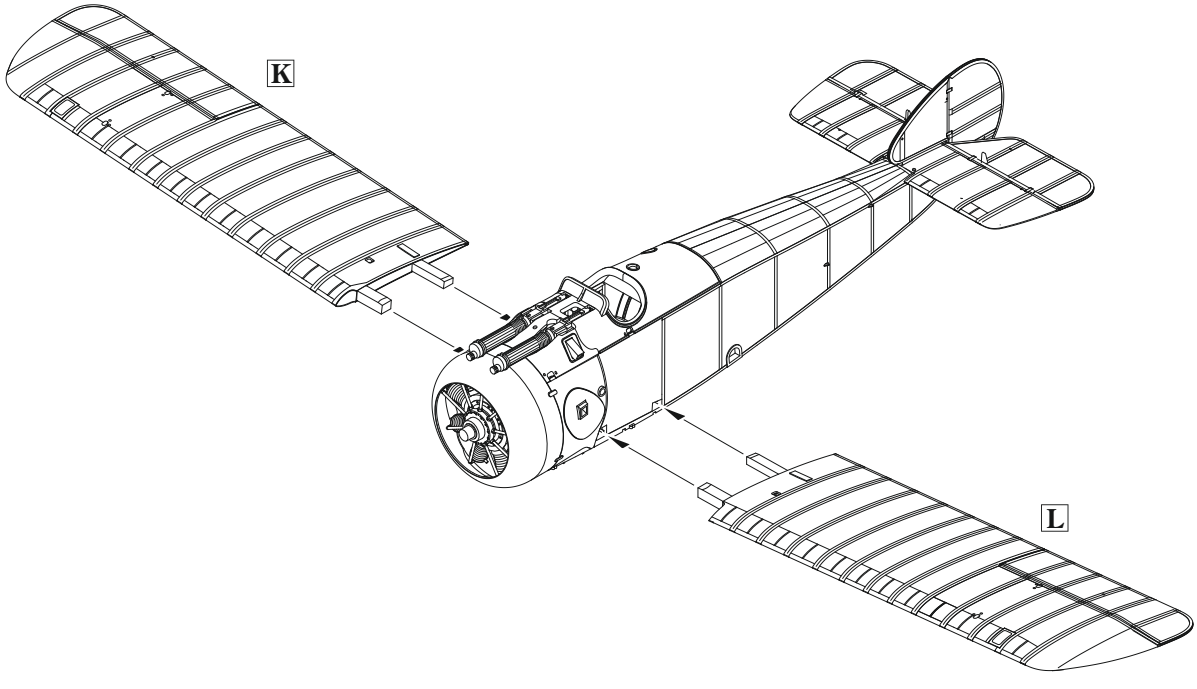

F6
D31
A2

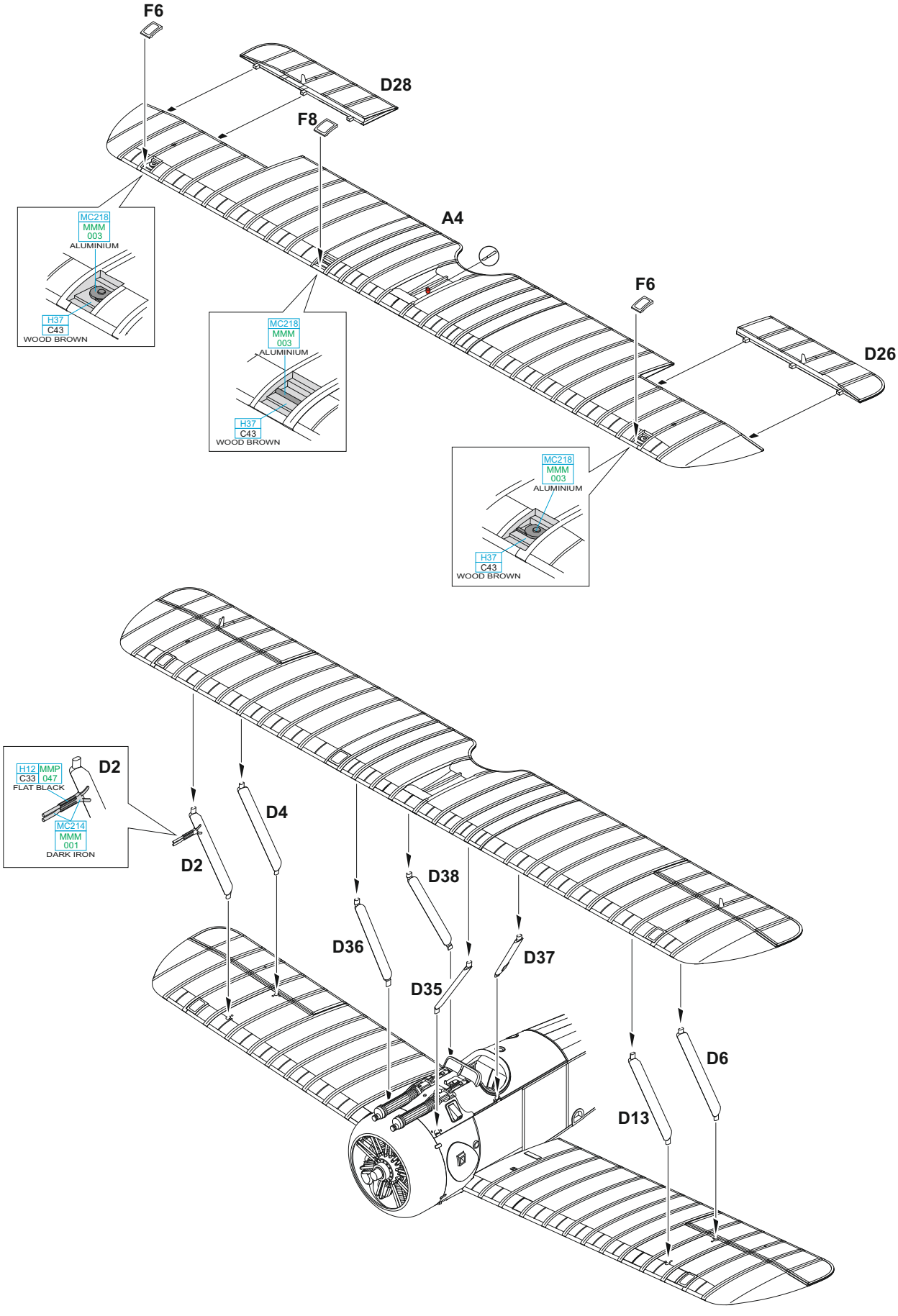

MC218
MMM
003
ALUMINIUM
H37
C43
WOOD BROWN

L


F6
D34
A6


MC218
MMM
003
ALUMINIUM
H37
C43
WOOD BROWN


K
L


F6
D28
F8
A4
F6
D26
MC218
MMM
003
ALUMINIUM
H37
C43
WOOD BROWN
MC218
MMM
003
ALUMINIUM
H37
C43
WOOD BROWN
MC218
MMM
003
ALUMINIUM
H37
C43
WOOD BROWN
H12
MMP
C33
047
FLAT BLACK
MC214
MMM
001
DARK IRON
D2
D2
D4
D38
D36
D37
D35
D6
D13

D25 - MARKINGS B, C
D32 - MARKINGS A, D

D25 ? D32

D3 - MARKINGS A
D7 - MARKINGS B, C, D

D7

D3

?

E47

D11 - MARKINGS B, C, D
D12 - MARKINGS A

D11

?

D12

D25 ? D32

D25 - MARKINGS B, C
D32 - MARKINGS A, D

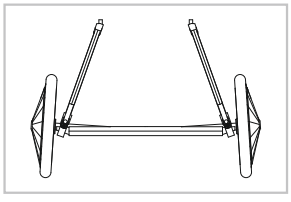
MC215 MMM 004 COPPER

H37 C43 WOOD BROWN

MC214 MMM 001 DARK IRON

MC215 MMM 004 COPPER

D11 ? D12

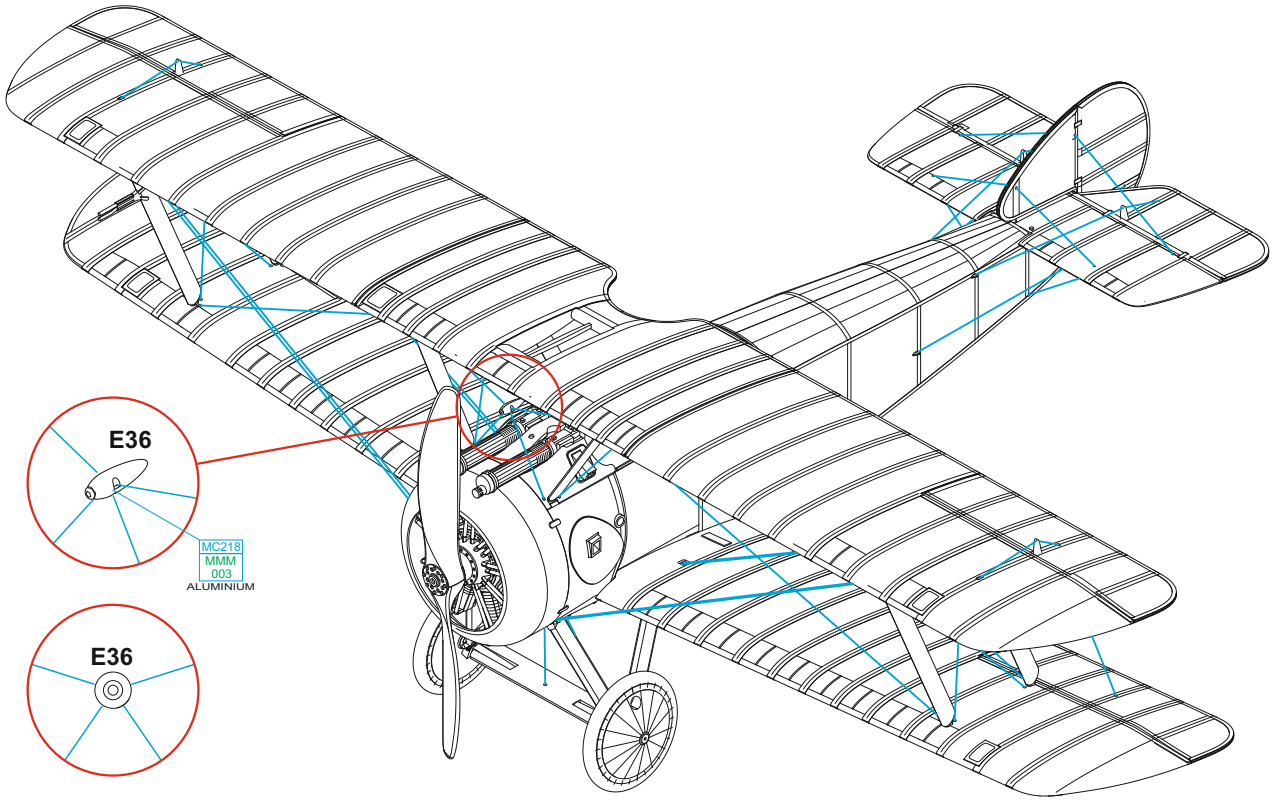


E21 4 pcs.

E48

MC218 MMM 003 ALUMINIUM

E30


E36
MC218
MMM
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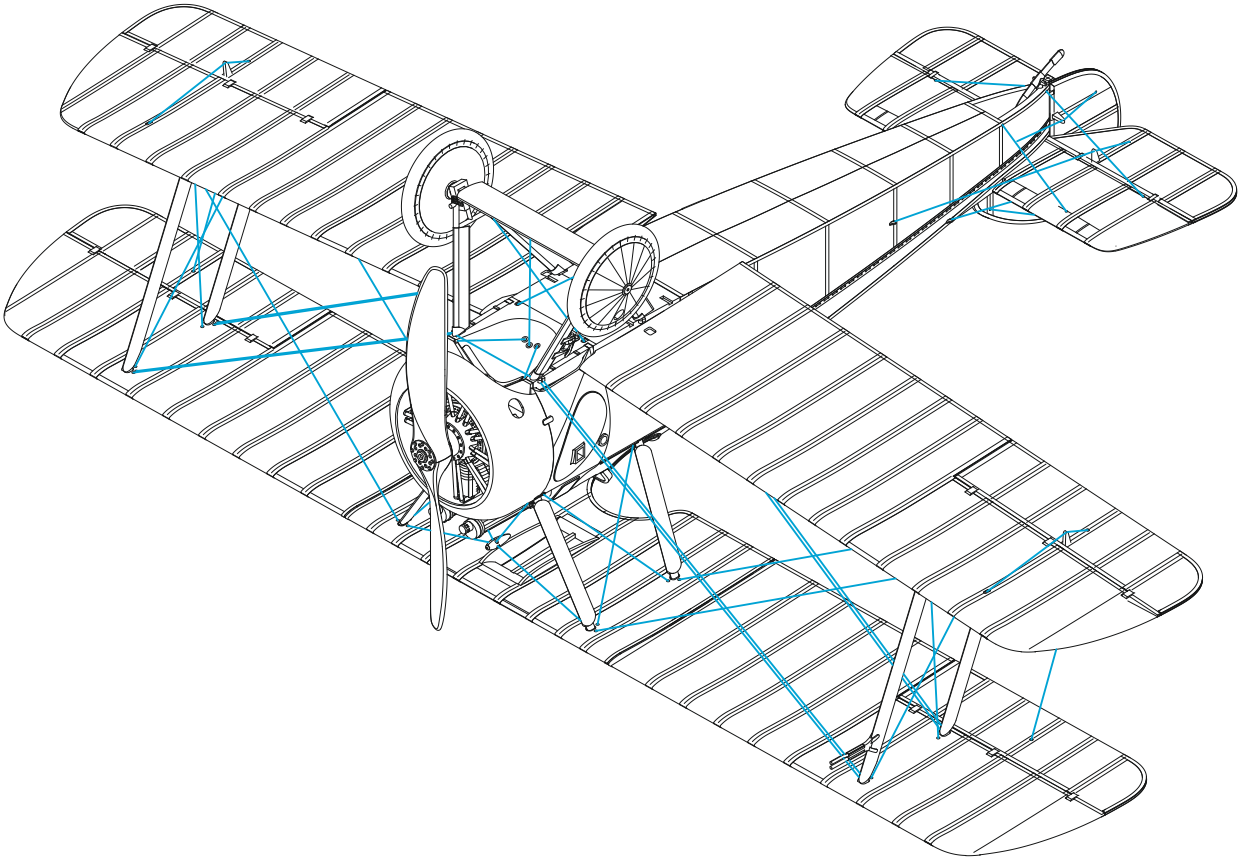
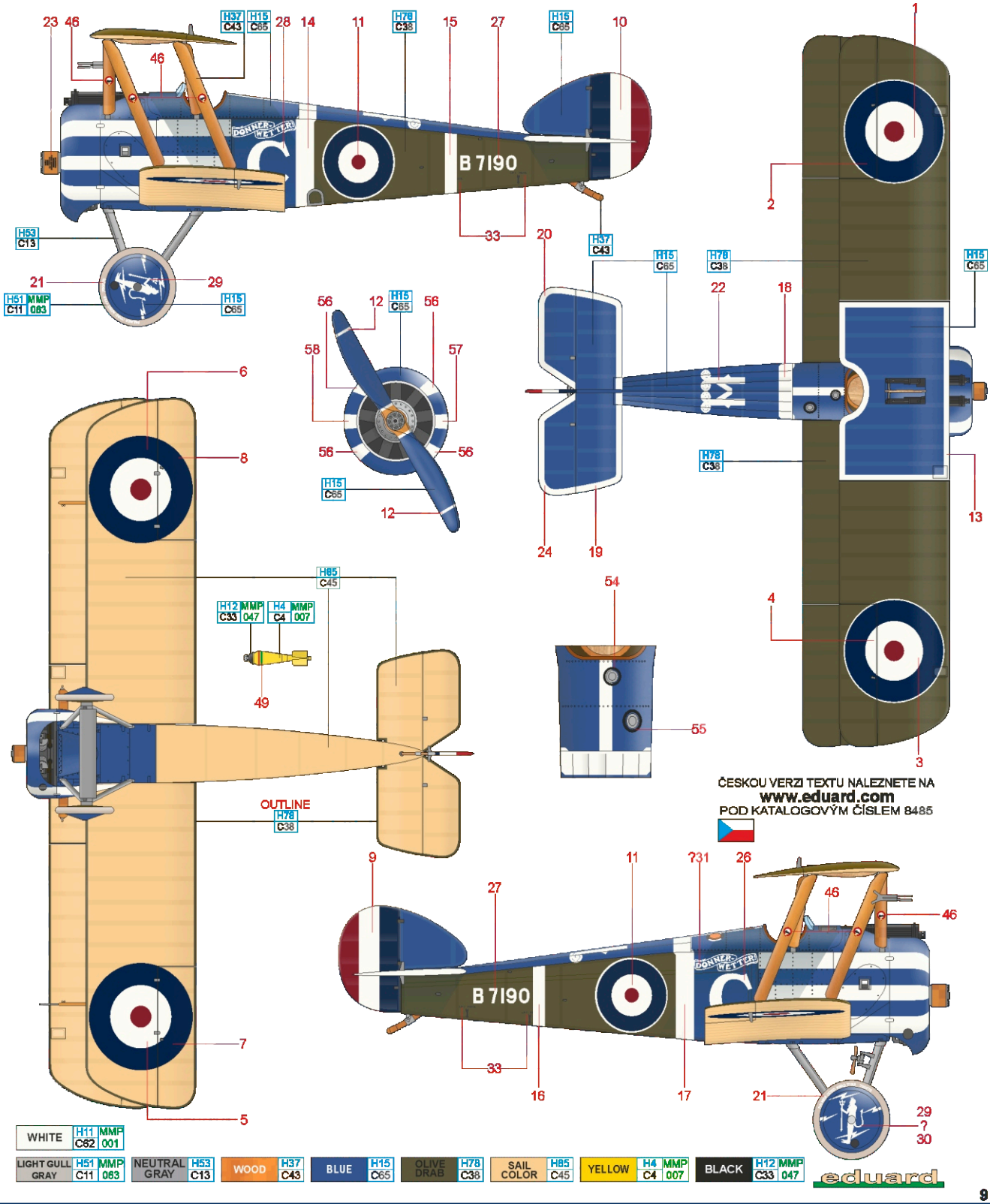
ALUMINIUM
E36



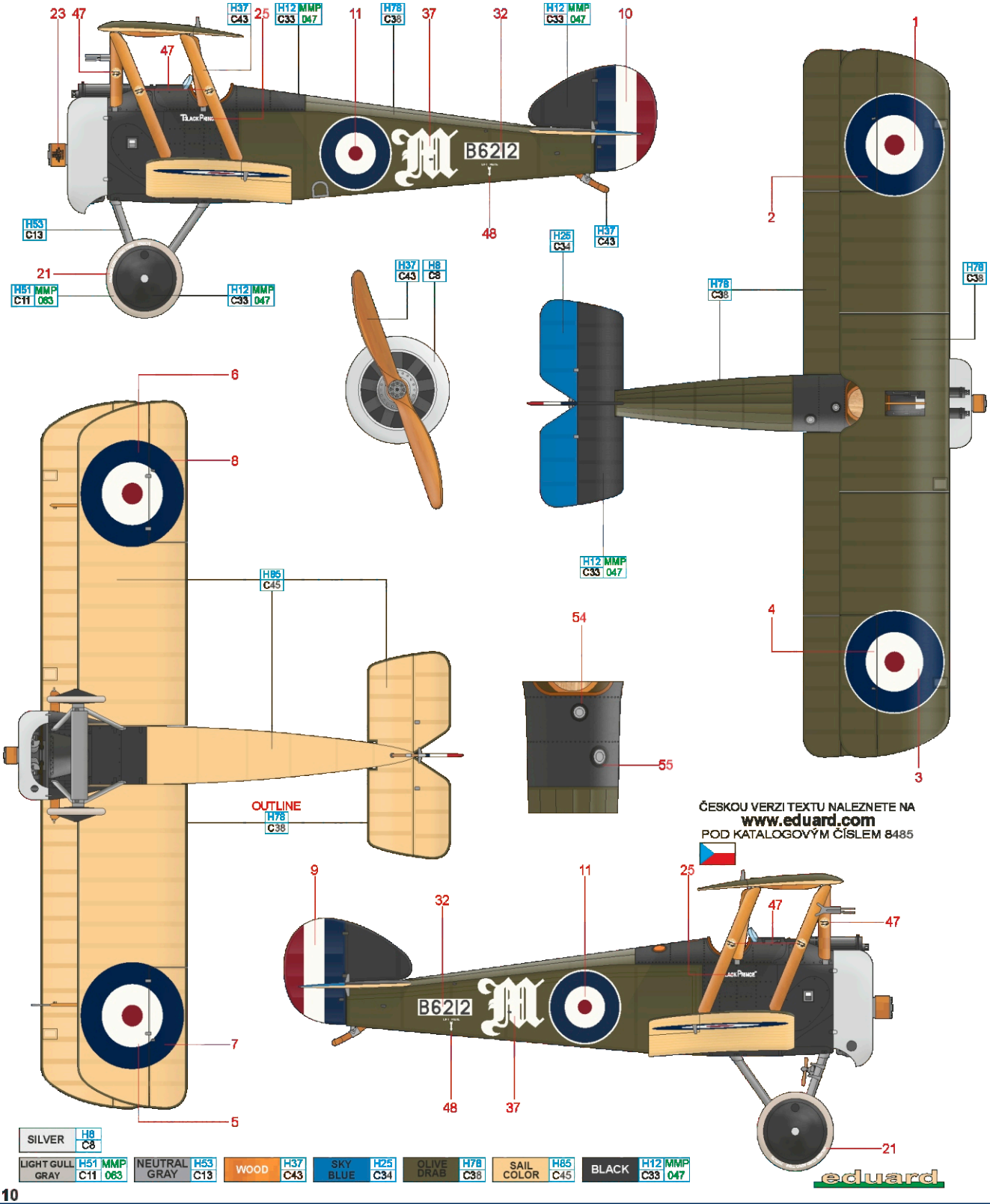
A B7190, Capt. Walter G. R. Hinchliffe, C Flight, No. 10(N) Sqn RNAS, Téteghem, France, March 1918

"Hinch", as Walter Hinchliffe was called, scored six kills during World War I, all when at controls of a Camel. He shot down his second and third victims on the one of serial number B7190. Hinchliffe served with the artillery at the start of the Great War, only joining the ranks of the RNAS (Royal Navy Air Service) in 1916. He completed his pilot training and served as an instructor at the RNAS base at Cranwell afterwards. There he clocked an incredible 1,250 flight hours in thirteen months. It was not until January 1918 that he joined No. 10 Sqn RNAS. He scored his first kill on February 3 when he shot down an Albatros D.V, his last one occurred on May 19. On June 3 he suffered serious head and facial injuries after a crash and lost his left eye. After the War he flew as an airline pilot. In 1928 he attempted to fly across the Atlantic. He took off from Cranwell Airport on March 13 with co-pilot Elsie Mackay. They have not been seen since... "Hinch's" Camel bore a striking livery with blue and white stripes on the nose and a blue fuselage spine. There was a drawing of a devil on the wheel discs, the German word DONNERWETTER behind the cockpit, possibly on both sides, and a symbol, which was, according to the only known photo of this part of the aircraft, probably stylized combination of the letters W and H on the ridge of the aft fuselage. Upper and sides were probably in PC10 color. Camel B7190 was built by the Clayton & Shuttleworth company and was powered by a Bentley B.R.1 engine.



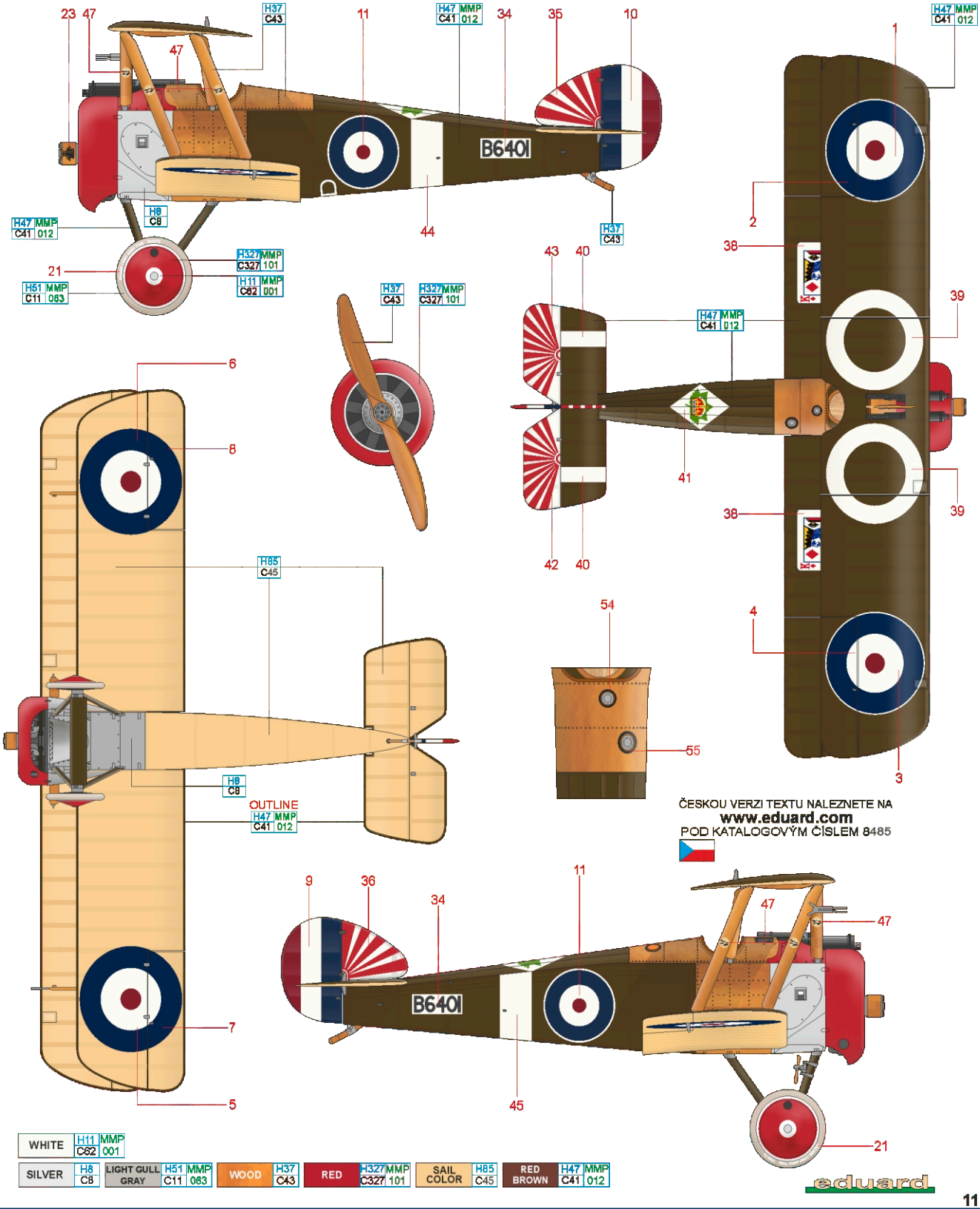
B B6212, FSL William John MacKenzie, No. 13(N) Sqn RNAS, Dunkerque, France, February 1918

Camel B6212 was manufactured at the Sopwith parent factory and delivered to No. 11(N) Sqn RNAS on August 22, 1917. However, as early as September 2, it was sent to the Dunkerque Air Park, from where it went to the Seaplane Defence Squadron (SDS) on October 22, where it was given the code designation M in very ornate lettering. The aircraft was assigned to Flight Sub-Lieutenant W. J. MacKenzie, who named it "Black Prince" and crashed it at Bergues on February 19, 1918. At that time the unit was already designated No. 13(N) Squadron. The damaged aircraft went for repairs and was eventually assigned to No. 203 Sqn RAF (formerly No. 3(N) Sqn RNAS). William J. Mackenzie, a native of Memphis, USA, joined the ranks of the Royal Naval Air Service in Canada in April 1917 and, after moving to Britain and training, he was transferred to the SDS on November 30. From there he went to No. 9(N) Sqn on March 1 and was one of the pilots who took part in the fateful dogfight in which Manfred von Richthofen was shot down on April 21, 1918. MacKenzie was wounded in this combat and, after recovering, returned to his original unit, now being No. 213 Sqn RAF, on October 8. He flew a total of 250 operational hours during the war and achieved eight aerial victories.



C B6401 F/Cdr. Leonard H. Rochford, No. 3(N) Sqn RNAS, Dunkerque, France, January 1918

Camel B6401 was built at the Sopwith factory and was sent to No. 3(N) Sqn on November 20, 1917. Here it was decorated with the symbols of the rising sun on the elevator and vertical fin, also playing cards (King of Spades) were painted on the upper side of the bottom wing and a royal crown in a maple leaf on the back ridge of the fuselage. Leonard W. Rochford attempted to join the RNAS ranks at the start of the war, but as he was not yet 18 years old, he was rejected. So, he learned to fly at the Royal Aero Club and began his university studies. However, by May 14, 1916, he was already confirmed at the rank of Flight Sub-Lieutenant as an RNAS pilot and assigned to No. 3(N) Sqn. Here he scored his first three victories flying the Sopwith Pup, and by the end of the war he had added 26 more in fifteen different Camels. He flew this aircraft during January and February 1918, scoring two kills, which were his sixth and seventh. Later this aircraft was also flown at the No. 213 Sqn by its most successful pilot, Canadian Lt. George C. Mackay, who shot down one of his eighteen victims with it on August 12.



D D3328, 2Lt Wilfried Reid May, No. 209 Sqn RAF, Bertangles, France, April 21, 1918

Camel D3328 was built at the Clayton Shuttelworth factory and served with No. 9(N) Sqn RNAS from March 12, 1918. The unit was redesignated No. 209 Sqn RAF from April 1. On April 21, 1918, "Wop" May was flying this Camel during the epic dogfight, which ended with the death of Manfred von Richthofen. May was to be the pilot the Red Baron attacked before he himself was hit by fire from Capt. Brown, ground machine gunners, or both... The coloring of the aircraft is a reconstruction, there is no photo of the whole aircraft, but one close-up photo shows May in the cockpit of the aircraft with the LUCY inscription. The photo was taken in the second half of April, it is therefore possible that D3328 was so named. In another photograph, the first in the line of the No. 209 Sqn Camels is an aircraft with a combination of white fuselage stripes and a fuselage cockade. Some Camels of the Squadron only had stripes on the fuselage, we opted for a more attractive version for the D3328... The serial numbers of the aircraft which had them painted on the fin disappeared under the red color paint, which along with the red nose was the squadron´s distinctive coloring.