

WINGNUT WINGS



Sopwith F.1 Camel "USAS"

1/32 Scale

The iconic Sopwith Camel, so named for the 'hump' over its guns, is possibly the most famous of all First World War aircraft, if not by sight, then by name. Sopwith developed the Camel in late 1916 in an effort to overcome the single gun handicap suffered by their successful 80hp Pup and improve performance with a more powerful engine. The initial Sopwith F.1 Camel prototype was unveiled in late December 1916 and featured a single piece top wing, 2 Vickers Mk.1* machine guns and a 110hp Clerget 9Z engine. Unlike their previous Pup and Triplane, the Camel featured a top wing with no dihedral coupled with a high 5° dihedral bottom wing which, combined with its concentrated centre of gravity, helped contribute to its high maneuverability and well deserved reputation as a difficult (and frequently dangerous) aircraft to fly. Additional prototypes were produced with various improvements including a 3 piece top wing with centre section cut-out and 130hp Clerget 9B engine. Testing by selected operational pilots in early 1917 brought mostly positive reports along with a few recommendations for additional improvements, some of which made their way on to early production aircraft.

The Sopwith F.1 Camel went into production in January 1917 and aircraft began equipping Royal Naval Air Service (RNAS) and Royal Flying Corps (RFC) Squadrons in May and June 1917. Initial problems with performance above 10000ft, mostly attributed to the poor quality of British manufactured 130hp Clerget 9B engines, were troubling and led to various other engines eventually being used. The RNAS preferred the 150hp AR.1 (Admiralty Rotary 1), later renamed the BR.1 (Bentley Rotary 1), while the RFC preferred the 110hp LeRhône 9J or the improved 140hp Clerget 9BF when they became available. Many 130hp Clerget 9B engines were upgraded in the field to 140hp 9BF specifications after a conversion kit was made available in April 1918. The Sopwith Kauper interrupter gear used by Clerget and Bentley powered aircraft proved troublesome but the Constantinesco CC synchronizing gear used by LeRhône powered Camels were relatively trouble free. Other changes included aileron control horn tie wires, re-routing the tailplane control cable exists on the side of the fuselage and a field modified enlarged top wing center section cutout which was incorporated on many late production aircraft. After its initial teething problems the Sopwith Camel proved to be a highly capable fighter and, along with the SE.5a and French SPADs, helped wrest air superiority back from the German Albatros fighters towards the end of 1917.

Around 5500 Camels were built by The Sopwith Aviation Company, Ruston Proctor & Co, Boulton & Paul, Clayton & Shuttleworth, Nieuport & General Aircraft, Hooper & Co, Portholme Aerodrome, Marsh Jones & Crib and British Caudron. A shipboard version with shorter wingspan and removable rear fuselage was produced for the RNAS as the Sopwith 2F.1 Camel from September 1917. A night fighter conversion with 2 Lewis guns mounted on the top wing and the pilot seated further rearwards was known as the Sopwith F.1/3 'Comick'. The USAS arranged to equip 5 squadrons with Camels, many of which were powered by the 160hp Gnome 9N Monosoupape engine. Other nations to use the Camel were Belgium, Estonia, Latvia and Canada. Although rendered obsolete by the arrival of the 230hp Sopwith 7F.1 Snipe in late 1918 the Camel continued to serve through to the Armistice and was not officially declared obsolete by the RAF until late 1919.

WW1 aircraft colours are contentious at the best of times and we have done our best to provide what we consider to be accurate painting information. Because Sopwith Camels were manufactured by 9 different companies and Sopwith's own factory drawings designate both Cellon Scheme A (PC10) and PC12 it is practically impossible to determine which colour a particular aircraft was finished in. PC10 was made from mixes of yellow ochre, iron oxide and lamp black pigments and could vary between olive drab and chocolate brown depending on the mix and time spent exposed to the elements. PC12 is slightly less controversial although previous reports of it being red brown are in error and it was actually a dark chocolate brown. Long serving aircraft were invariably re-doped and repaired with components salvaged from other aircraft resulting in them wearing various combinations of doped finish. Photographic evidence indicates that after trench strafing became commonplace for Camel equipped units in 1918 the upper surfaces of many aircraft were overpainted with a matt camouflage colour that appeared paler than the factory applied dope. Often the white, and sometimes red, of the top wing cockades were overpainted as well. The undersides of the wings, tailplane and often the fuselage were left CDL (Clear Doped Linen). Exterior wooden fuselage panels and cabane & interplane struts were usually given a dark brown varnish, although on some aircraft these were clearly painted. Metal cowlings could be left unpainted aluminium, with a 'turned' finish on Sopwith built aircraft, although most were painted. Metal brackets and fittings were black unless overpainted. The early aerofoil metal tube undercarriage struts were usually painted black while the later production fabric wrapped undercarriage struts were almost certainly finished in the same colour as the fuselage. All fabric surfaces exhibited a gloss appearance when new which would lose its shine relatively quickly in service. Unlike many British aircraft, the Camel frequently featured colourful personal and unit markings, although many of the more extreme examples were restricted to aircraft at training units and immediate post war service.

Richard Alexander 2016

Wingspan (F.1):	Length (F.1):	Max Weight (F.1):
28ft (8.53m)	Gnome 19ft (5.79m) - Clerget 18.75ft (5.71m)	Gnome 1423 lb (645.5kg) - Clerget 1422 lb (645kg)
No. Manufactured:	ceiling:	Max Speed:
(all types) 5500	Gnome 23000ft (7010m) - Clerget 24000ft (7315m)	Gnome 117.5mph (189kph) - Clerget 116mph (186kph)
Production:	Armament (F.1):	
January 1917 to late 1918	2x .303 (7.7mm) Vickers Mk.1* machine guns and up to 100 lb (45.3kg) of bombs	
Engine:		
130-140hp Clerget 9B & 9BF, 160hp Gnome 9N Monosoupape, 110hp Le Rhône 9J or 150hp Bentley BR.1 engine		
References:		

Windsock Datafile 26 Sopwith Camel, JM Bruce, 1991 - Schedule for Sopwith Camel Biplane, 130 Horse-Power Clerget Engine Type E.1., RAF 1918
 The Camel File, Ray Strivant & Gordon Page, Air Britain 1993 - Sopwith Camel King of Combat, Chas Royer, Glasney Press 1978 - Sopwith Camel Aces of World War 1, Norman Franks, Osprey 2003 - Windsock Sopwith Camel Squadrons, LA Rogers, 2001 - 1914-18 Aviation Heritage Trust - The Vintage Aviator LTD - Colin Owers - Private Collections

Sopwith F.1 Camel "USAS"

1/32 Scale

Warning: Choking hazard. Keep small parts and plastic bags away from children. Use glue and paint in a well ventilated area. Always wear protective eyewear when cutting and a protective mask when painting, gluing and sanding. Do not breathe dust from polyurethane resin parts (if included). Beware of sharp edges on metal parts.

Assembly: **Read all the instructions carefully before starting assembly.** Use glue intended for plastic models. Assemble metal and resin parts (if included) using Cyanoacrylate (CA) or epoxy glue. Before assembly select a marking option and note optional parts required in instructions.

Rigging: If installing rigging please drill out all location holes with a 0.5mm drill bit to a depth of at least 1mm. To make rigging as simple as possible we recommend using stretchy elastic type material like 'EZ Line' etc and not trying to replicate any turnbuckles.

Painting: Only use paints **designed and suitable** for plastic model kitsets.

Decals: Cut out each decal as required. Soak in warm water for 15 seconds. Slide off backing paper onto **gloss painted surface of model (not just clear coated plastic)**. For large decals it is helpful to apply a drop of water to the area they are being applied to. This will make it easier to maneuver them into the correct position.

Hints & Tips: Please visit our website for additional photos, hints and tips to assist you in getting the best result from your Wingnut Wings model.

1 Construction Step



Choose



Attention



Remove

A1 Part Number



Do Not Cement



Option



Drill

5 Decal

P1 Photo Etch Part



Cement For Metal



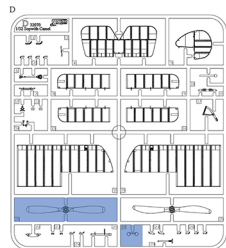
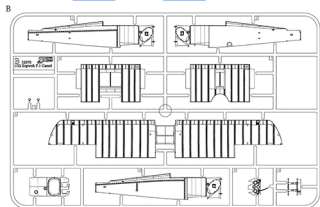
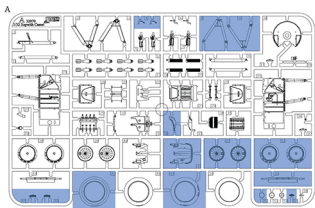
Other Side



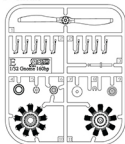
Paint Colour

	All colours	Tamiya	Humbrol	Federal Standard
a	Brass	X31	54	
b	Copper	XF6	12	
c	Gun Metal	X10	27004	
d	Aluminium - matt	XF16	27001	
e	Steel	XF56	27003	
f	Light Wood* - semi gloss	XF78*	93*	30340*
g	Dark Wood* - gloss	XF68*	160*	30111*
h	Rubber - matt	XF69	66	35042
i	Leather - semi gloss	XF52	62	30219
j	Clear Doped Linen (CDL) - gloss	XF55	121	26405
k	PC12 dope - matt & semi gloss	XF10	98	30059
l	PC10 dope - matt & semi gloss	XF62 (x1) + XF10 (x1)	170	26120
m	PC10 paint - gloss	XF62 (x2) + XF10 (x1)	170	16120
n	Black - semi gloss	X18	85	
o	Dark Mustard Yellow - semi gloss	XF4 (x1) + XF59 (x1)	94	
p	Aluminium - bright	X11	27002	
q	Battleship Grey (BSG) - matt or semi gloss	XF82	106	35164
r	White - semi gloss	XF2	34	
s	Red - semi gloss	XF7	60	31350
t	Blue - semi gloss	XF8	25	25056
u	PC10 light - matt & semi gloss	XF62(x3) + XF52 (x1)	155	33070

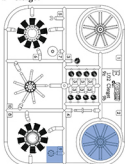
Note: Apply clear varnish to achieve the desired gloss or semi-gloss finish. *See our website hints and tips for painting wood.



E - Gnome



E - Clerget



Decals



Photo Etch

■ = Not Used



1 COCKPIT

Pattern 5/17
Compass & inclinometer

AB Cut out for
Sopwith-Kauper
interrupter gear

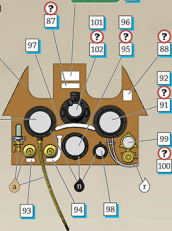
AB 5
CDEF 64



Magazines and
back engine plate



Dashboard

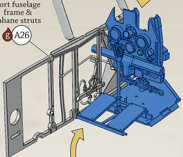


0.5 mm
Drill end for
improved detail

AB A18
Clerget air
induction pipes

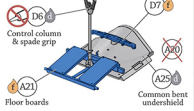
CDEF
Gnome air
induction pipe

Port fuselage
frame &
cabane struts



Interior fuselage detail from Sopwith F.1 Camel B5663 nearing completion of its restoration to flying status at The Vintage Aviator Ltd (TVAL) in late 2014. Note the 4 point safety harness which is almost never seen on WW1 era Camels.

AB

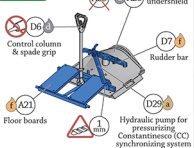


Control column
& spade grip

Rudder bar

Common bent
undershield

CDEF

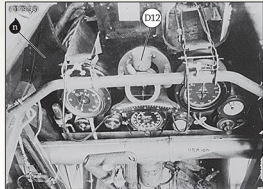


Control column
& spade grip

Gnome bent
undershield

Rudder bar

Hydraulic pump for
pressurizing
Constantinesco (CC)
synchronizing system



Dashboard detail from an unidentified Sopwith F.1 Camel. Note the Type 5/17 compass, control column hand grip, empty Vickers Mk.1" gun mounts and empty shell chutes. There were several different instrument arrangements possible and we have chosen to model the most commonly seen version.

2 COCKPIT continued

30 gallon main petrol tank

Paint straps

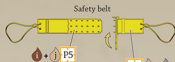


Seat

A34

Paint pegamoid cushion & padding

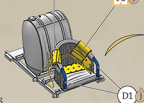
A23



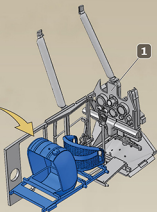
Safety belt

P5

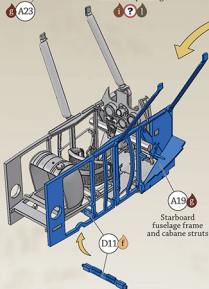
P3



D1



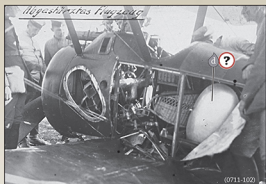
1



Starboard fuselage frame and cabane struts

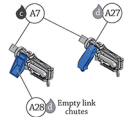
A19

D11



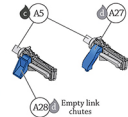
The crash and capture of this unidentified Clerget powered Sopwith F1 Camel allows us a rare view inside an operational aircraft showing the style of wicker seat, 30 gallon main petrol tank and carburettor induction pipes. Note how the dark paint applied to the engine cowlings has run under the access panels.

AB Vickers Mk.1* receiver with Sopwith-Kauper interrupter gear

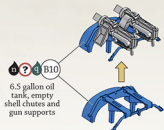


A28 Empty link chutes

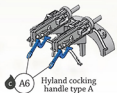
CDEF Vickers Mk.1* receiver with Constantinesco (CC) synchronizing system



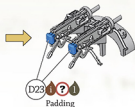
A28 Empty link chutes



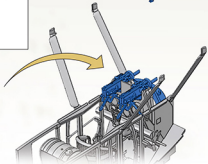
B10 6.5 gallon oil tank, empty shell chutes and gun supports



A6 Hyland cocking handle type A

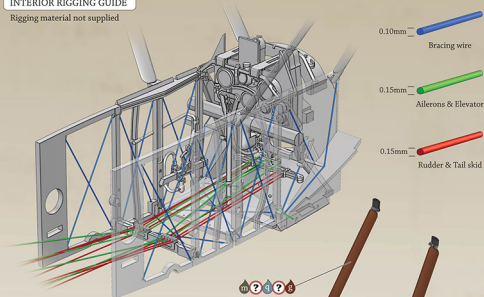


D23 Padding

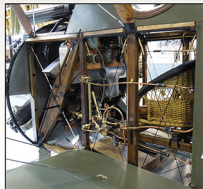
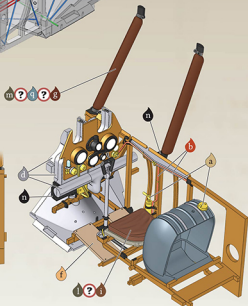
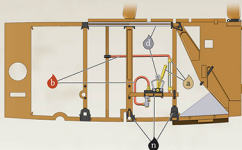


INTERIOR RIGGING GUIDE

Rigging material not supplied



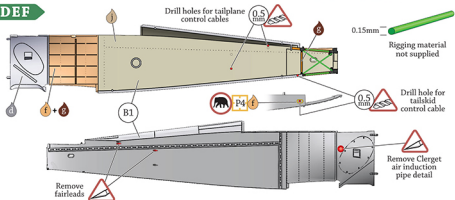
INTERIOR PAINTING GUIDE



Interior fuselage detail from Sopwith F.1 Camel B5663 nearing completion of its restoration to flying status at The Vintage Aviator Ltd (TVAL) in late 2014. The front engine plate, bent & rear undercows, magazines and Clerget engine induction pipes are bare aluminium while most metal brackets and fittings are painted black except for the petrol lines, sight gauge and engine control levers which remain copper and brass.

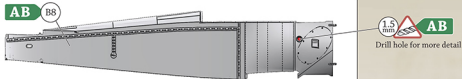
3 FUSELAGE

CDEF



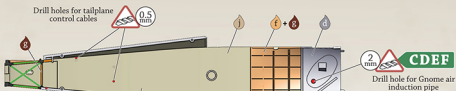
AB

B8



Drill holes for tailplane control cables

0.5 mm



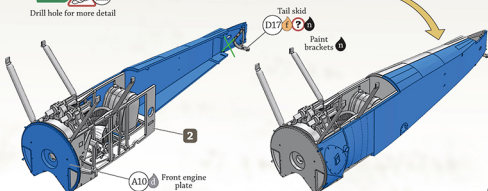
CDEF

Remove Clerget air induction pipe detail

Remove fairleads

AB

Drill hole for more detail 1.5 mm



4 BOTTOM WINGS & TAILPLANE

ABE

0.5 mm



Drill holes for bomb carrier

AB D2

Control horns

x4

x4

D28

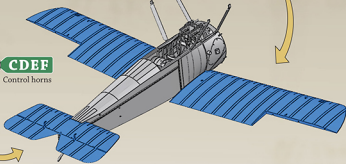
CDEF

Control horns

B6 Bottom wings

D4 Horizontal tailplane & elevators

Horizontal tailplane & elevators



> Tailplane detail from the unidentified Boulton & Paul built USAS Sopwith F.1 Camel shown on page 19.



5 COCKPIT DECKING

CDEF

Cut down cockpit decking

Paint rexine padding



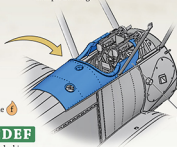
Top cowling A40 Paint inside



Paint inside

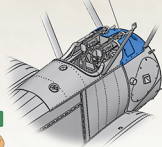
B7 **ABCDEF**

Cockpit decking



A33 **CDEF**

Paint inside

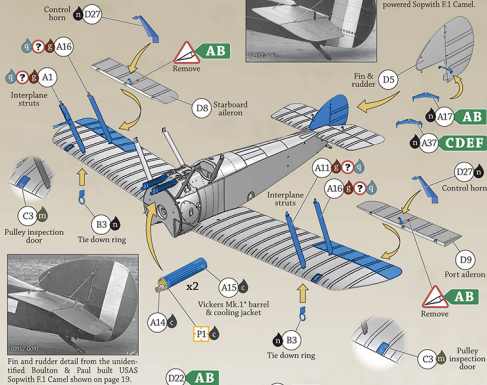


An unidentified 160hp Gnome 9N Monosoupape powered Sopwith F.1 Camel "7" with Lavasseur propeller

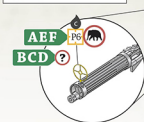
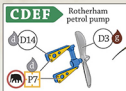
6 INTERPLANE STRUTS & DECKING DETAILS



Fin and rudder detail from an unidentified Ruston & Proctor built Clerget or Bentley powered Sopwith F.1 Camel.



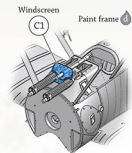
Fin and rudder detail from the unidentified Boulton & Paul built USAS Sopwith F.1 Camel shown on page 19.



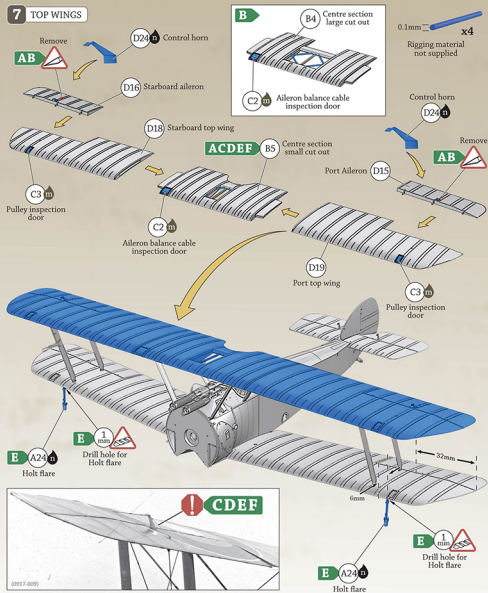
Cockpit decking detail from the unidentified Ruston & Proctor built Sopwith F.1 Camel shown above. Note the cut down decking, Rotherham petrol pump and lack of windscreen & Aldis sight. Difficulty in clearing starboard gun stoppages lead to many aircraft having the cockpit decking cut away in the area.



Aileron control cable pulley inspection door from the starboard bottom wing of B5663. This was usually overpainted in late serving aircraft.



7 TOP WINGS



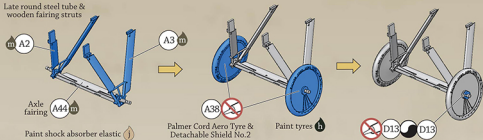
Aileron detail from the unidentified Boulton & Paul built USAS Sopwith F.1 Camel shown on page 19. Note the control horn tie wire which can be seen on many aircraft produced after February 1918.

> An unidentified 185th Aero Sqn 160hp Gnome 9N Monosoupape powered Sopwith F.1 Camel "8" (or "18") with darkly overpainted fuselage and tailplane. Note the orange and black 185th Aero Sqn unit insignia which was only applied to aircraft after the Armistice.

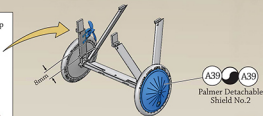
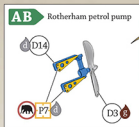


8 UNDERCARRIAGE

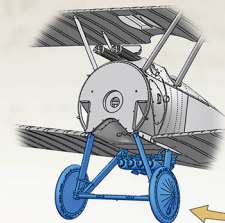
Late round steel tube & wooden fairing struts



AB Rotherham petrol pump

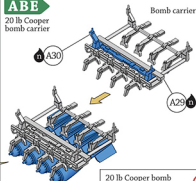


> Fabric wrapped tube steel & wooden fairing undercarriage from the unidentified Boulton & Paul built USAS Sopwith F.1 Camel "4" shown on page 22. Sopwith Camel undercarriage struts, especially the port side, were perennially soaked in castor oil which seeped out from the engine. Remarkably, a problem with the port wheel unscrewing itself and falling off(!) was not fixed until May 1918 when opposite thread bolts and axles became available. Note the Palmer Detachable Shield No.2.



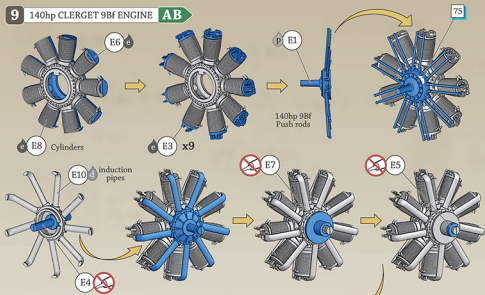
ABE Bomb carrier

20 lb Cooper bomb carrier



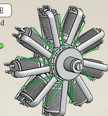
20lb Cooper bombs as carried by 148th Aero Sqn Camels on ground attack duties.

9 140hp CLERGET 9Bf ENGINE AB



WIRING GUIDE

Wire not supplied

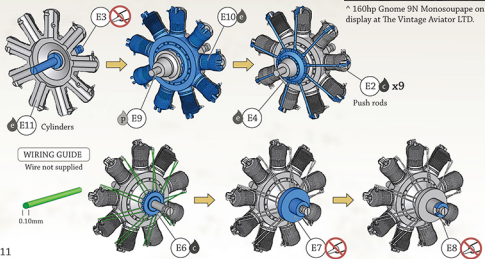


< 130hp Clerget 9B engine as fitted to Sopwith F.1 Camel B5663. The 140hp 9Bf engine required for **AB** is externally identical except for the front plate (E1).



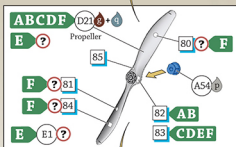
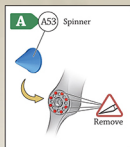
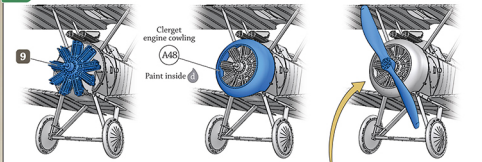
^ 160hp Gnome 9N Monosoupape on display at The Vintage Aviator LTD.

10 160hp GNOME 9N MONOSOUPE ENGINE CDEF

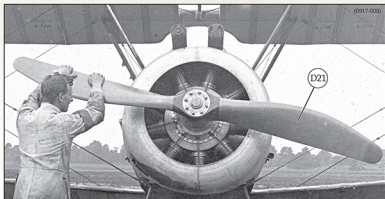
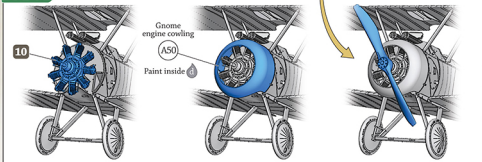


11 FINAL ASSEMBLY

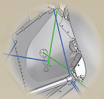
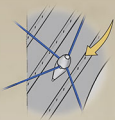
AB



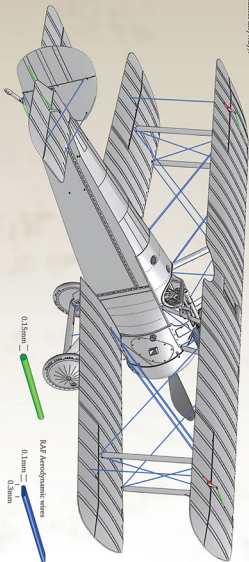
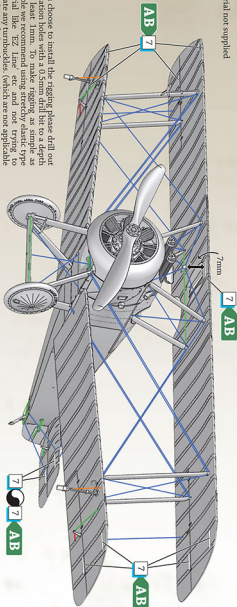
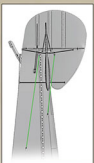
CDEF



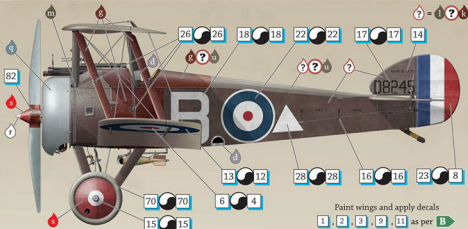
160hp Gnome 9N Monosoupape powered Sopwith F1 Camel with common type of propeller as seen on page 19.



If you choose to install the rigging please drill out all location holes with a 0.5mm drill bit to a depth of at least 1mm. To make rigging as simple as possible we recommend using stretchy elastic type material like 'EZ Line' etc and not trying to replicate any turnbuckles (which are not applicable to the Sopwith Camel anyway).



RAF Aerodynamic wires

A Sopwith F.1 Camel D8245 "B", FE Kindley, "A" Flight 148th Aero Sqn USAS, August 1918 (12 victories)

140hp Clerget 9Bf powered Sopwith F.1 Camel D8245 is from a production order for 150 aircraft placed with Ruston, Proctor & Co Ltd in December 1917 (numbers B8101 to D8250) and was delivered to 148th Aero Sqn USAS in July 1918 which was, along with 17th Aero, one of 2 USAS pursuit squadrons placed under 10 Group RAF command. As such, these aircraft carried RAF style unit markings which took the form of a white triangle on a dark red background. Confusingly this symbol was previously worn by Camels of 43 Sqn RFC from August 1917 to March 1918 & by 204 Sqn RAF after the end of October 1918. At the end of October the squadron was detached from RAF command and returned their Sopwith Camels in preparation of being re-equipped with SPAD XIII but the armistice was signed before they could see action again.

Field Eugene Kindley was from Arkansas and helped run a movie theatre before joining the Kansas National Guard in May 1917. After transferring to aviation and undergoing pilot training he was assigned to 65 Sqn RAF where he was credited with his 1st victory in June 1918. Field was one of the many American personnel who, having gained experience with the RAF, were transferred to the new USAS Aero Squadrons being formed in 1918. Kindley was flying Sopwith F.1 Camel D8245 when he was credited with his 2nd, 3rd & 4th victories in July and August 1918 and again on 2 September when he claimed his 5th, an action that resulted in D8245 being badly shot up and sent away for salvage where it was subsequently rebuilt as F6296. Kindley remained with 148th Aero until after the Armistice and continued to serve in the Army until he was killed in a flying accident in Texas on 2 February 1920.

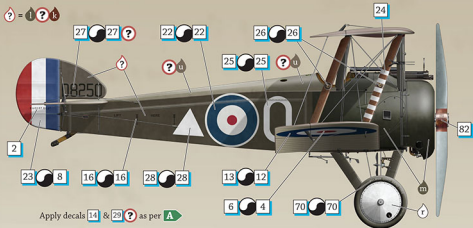


< FE Kindley photographed in September 1918 beside a Ruston, Proctor & Co built 148th Aero Sqn Sopwith F.1 Camel "B" which is believed to be his replacement aircraft, E1539. The "A" flight colour red is applied to the wheels and spinner (not visible in this print) while the cowling appears to be BSG. Note the position of the Rotherham petrol pump and letter "B" partially visible on the fuselage and under the starboard bottom wing, which may or may not have been applied to B8245.

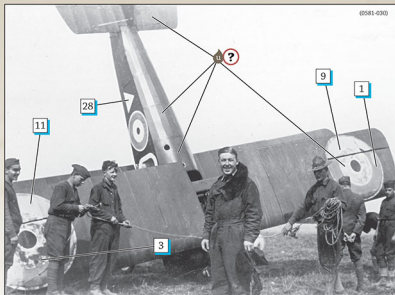
> 140hp Clerget 9Bf powered Sopwith F.1 Camels of 148th Aero photographed at Petite-Synthe in early August 1918. The first 3 aircraft visible are Boulton & Paul built D9516 then Ruston & Proctor built D8166 "D" and then D8245 "B" **A**.



B Sopwith F.1 Camel D8250 "O", EW Springs, "B" Flight 148th Aero Sqn USAS, August 1918 (16 victories)

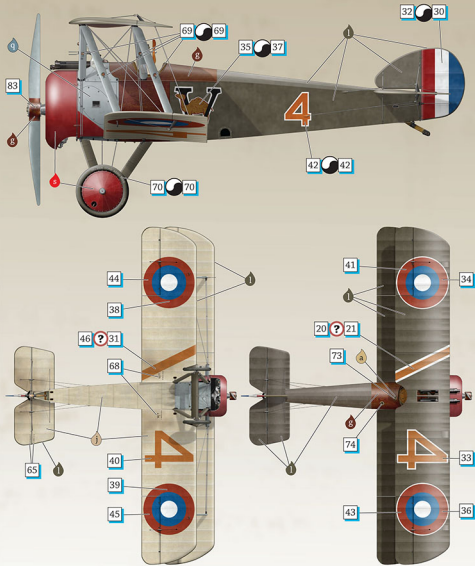


Apply decals 14 & 29 as per A



140hp Clerget 9Bf powered Sopwith F.1 Camel D8250 is from the same Ruston & Proctor production order as **A** and was similarly delivered to 148th Aero Sqn in July 1918. Upon arrival it received the squadron letter "O" and was flown by EW Springs when he was credited with his 5th through 9th victories in August 1918 and 13th, 14th & 15th victories in September. D8250 was considered worn out by October and sent to 2 Aeroplane Supply Depot and subsequently returned to the UK where it was used as an unpowered dummy test aircraft being dropped from 5000ft from the Airship R23 in early November 1918. Film footage showing the recovery of this 148th Aero Squadron Sopwith F.1 Camel "O" following a slight landing mishap shows what appears to be 6 'victory' markings on the starboard front interplane strut. This is reasonably strong evidence that this is indeed Elliot White Springs' D8250 "O" sometime between 13 & 22 August 1918. The large opening in the top wing centre section would not have been present on D8250 when it was initially delivered in July but this modification was frequently retrofitted. Note the overpainted white of the top wing cockades and different tone of the upper surface compared to the fuselage side. Subduing the top wing cockades and overpainting the upper surfaces in a matt camouflage colour appears to have been common after Camels were increasingly tasked with low altitude and trench strafing duties during 1918. The white of the wheel covers was the "B" flight colour ("C" flight used blue).

Sixteen victory ace Elliott White Springs learned to fly as an aviation cadet in late 1917 and was one of many American pilots sent to the UK for operational experience. He initially flew SE.5a with 85 Sqn RAF where he was credited with his first 4 victories in June 1918 before being posted to the newly formed Sopwith F.1 Camel equipped 148th Aero Sqn as "B" flight commander and eventually as their Commanding Officer. After the war Elliot became a published author, a successful businessman and served in the USAAC during the 2nd World War before dying of pancreatic cancer in October 1959.



Although unidentified, this Sopwith F.1 Camel was, like (almost) all of the 160hp Gnome 9N Monosoupape powered Camels supplied to the USAS, from either of two production orders placed with Boulton & Paul Ltd on 23 and 28 March 1918 (numbers F1301 to F1550 and C3281 to C3380 respectively). Deliveries of aircraft began in August 1918 but apparently less than 80 had been delivered before the Armistice. HR Clay's Gnome 9N Monosoupape powered Boulton & Paul built Sopwith F.1 Camel "4" is shown here as it was when photographed fitted with its twin Vickers guns which were later removed during occupation duties. Note the USAS cockades and 41st Aero Sqn markings of a tan coloured camel superimposed on a black "V" representing the 5th Pursuit Group. The engine cowling (and wheel covers) appear to be painted in "A" Flight red which is markedly darker than the 'orangey' red colour used for the aircraft number and wing stripes.

Eight victory ace Henry Robinson Clay Jr was another American sent to the UK to gain experience and initially flew Sopwith F.1 Camels with 43 Sqn RAF in May 1918 before going on to serve with 148th Aero Sqn where he was credited with all 8 of his victories in August and September 1918. He was made commander of 41st Aero Sqn but the Armistice was signed before they were fully operational. He continued to serve on occupational duties until he was struck down by the H1N1 influenza epidemic and died at Coblenz in February 1918 aged just 23.

D1 Sopwith F.1 Camel "18", JB Hickman, "C?" Flight 41st Aero Sqn USAS, early 1919



Paint wings and apply decals

20 ? 21 31 ? 46 34 36 41 43 46 50 51 65 & 68

as per **C**

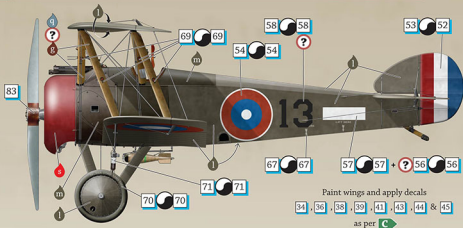


< James Burr Hickman photographed in early to mid 1919 in front of an unarmed and unidentified 41st Aero Sqn 160hp Gnome 9N Monosoupape powered Boulton & Paul built Sopwith F.1 Camel, thought to be aircraft "18". The 41st Aero Sqn was formed at Kelly Field in San Antonio Texas in June 1917 and arrived in the UK in March 1918. After sufficient training in Scotland they arrived in France in mid August 1918 but it was not until just after the Armistice that they began receiving their 160hp Gnome 9N Monosoupape powered Boulton & Paul built Sopwith F.1 Camels. Although this and other photos show aircraft "18" long after the armistice and unarmed, a couple of other photos showing Hickman sitting in the cockpit appear to show it armed and this is how we have chosen to illustrate his aircraft. James Burr Hickman was from Cooperton, Illinois and appears to have arrived at 41st Aero sometime after the end of November 1918. He was still serving with the squadron on occupation duties at Coblenz when he was killed in an aircraft accident in May 1919. Read more about the 41st Aero Squadron in Cross & Cockade Journal volume 12 #1 1971.

> This unidentified and unarmed 41st Aero Sqn 160hp Gnome 9N Monosoupape powered Boulton & Paul built Sopwith F.1 Camel appears to have been painted overall in a very dark colour. Note the "hoop" headrest visible behind the cockpit which appear on many 41st Aero Sqn Camels photographed after the armistice.



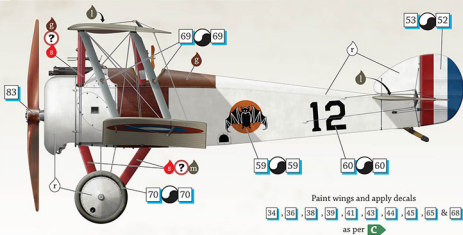
E Sopwith F.1 Camel F1430 "13", EM Kelton, "A" Flight 185th Aero Sqn USAS, October 1918 (1? victory)



160hp Gnome 9N Monosoupape powered Sopwith F.1 Camel F1430 "13" is from a production order for 250 aircraft placed with Boulton & Paul Ltd in March 1918 (numbers F1301 to F1550) and was delivered to 185th Aero Sqn USAS in October 1918 at which time it was equipped with lights and flares for night flying. The 185th Aero Sqn were the only dedicated night fighting unit in the USAS and were tasked with intercepting night bombers and strafing targets of opportunity. Photographs of operational 185th Aero Sqn Camels are pretty scarce but what records do exist confirm that they wore standard USAS cockades in 6 positions and did not feature the unit bat markings. It is not certain if serial numbers were applied at the factory, but if they were, they may have been overpainted when (if) the aircraft number "13" was applied. The undersides of the wings & fuselage have been painted a dark colour, possibly simply PC10. Note the bomb carrier frequently carried to attack targets of opportunity and the engine cowling painted "A" Flight red.

Elihu H Kelton was flying Sopwith F.1 Camel F1430 "13" when he departed on a balloon strafing mission to Viller-devant-Dun in the early evening of 30 October 1918. Before he could reach the balloon he got into a dogfight with several Fokker D.VII of Jasta 10, one of which, flown by Justus Grassman, disabled Kelton's Camel forcing him to crash land in enemy territory where he was captured. Grassman's Fokker D.VII was reportedly similarly disabled in this action and landed safely a short distance away. Kelton managed to escape from captivity shortly after the Armistice.

F Sopwith F.1 Camel F1471? "12", 185th Aero Sqn USAS, March 1919



Although unidentified it is believed that Boulton & Paul built 160hp Gnome 9N Monosoupape powered Sopwith F.1 Camel "12" was probably F1471 (from the same production order as **E**) which was delivered to 185th Aero Sqn 2 days after the Armistice. It was the only Camel retained by the 185th Aero Sqn USAS after they exchanged their Camels for SPAD XIII in February 1919. The black bat & orange moon unit marking was applied to 185th Aero Squadron aircraft only after the Armistice. In early to mid March 1919 Camel "12" was repainted white as shown here, by which time the 185th Aero Squadron were deemed to have done their bit and were beginning to be shipped home. Camel "12" was reportedly reassigned to 41st Aero Sqn in April 1919.

Boulton & Paul built 160hp Gnome 9N Monosoupape powered Sopwith F.1 Camel in USAS markings as delivered to 41st, 138th* & 185th Aero Squadrons.



Although unidentified, this Sopwith F.1 Camel was, like (almost) all of the 160hp Gnome Monosoupape powered Camels supplied to the USAS, from either of two production orders placed with Boulton & Paul Ltd on 23 and 28 March 1918 (numbers F1301 to F1550 and C3281 to C3380 respectively). Deliveries of aircraft began in August 1918 but apparently less than 80 had been delivered before the Armistice. Note the empty Rotherham petrol pump brackets on the starboard rear cabane strut and blanked off empty link chute. Boulton & Paul factory decals are faintly visible on each interplane strut.

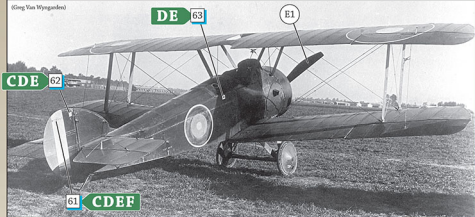


Note the petrol filler cap access holes on the decking and the small Gnome 9N Monosoupape air induction pipe visible under the empty shell chute on the port side cowling. The 'dark lines' on either side of each rib tape are an optical illusion caused by the matt frayed edges of the rib tapes not reflecting light as well as the rest of the gloss wing surface. We recommend using matt varnish painted in thin lines to replicate this on your model.



Note the stenciling applied to each component of the top wing and the distinctive Sopwith split axle undercarriage.

(Greg Van Wyngarden)



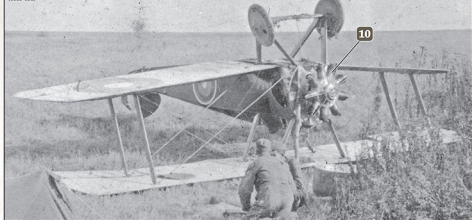
An unidentified and unarmed Boulton & Paul built 160hp Gnome 9N Monosoupape powered Sopwith E.1 Camel. Note the opaque windscreen and Lavoisier propeller **E1**.

(via Greg Van Wyngarden)



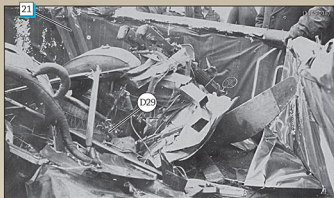
148th Aero Sqn Sopwith E.1 Camels "A", "J" and possibly E1539 "D" (but probably not D8245 **A**) prepare to take off. Note the dark underside of the top wing centre section and engine cowlings of "A".

(0815-031)



An unidentified 160hp Gnome 9N Monosoupape powered Sopwith E.1 Camel, reportedly crashed by Lt. Johnson at Toul, awaits recovery and salvage.

The sad remains of an unidentified 160hp Gnome 9N Monosoupape powered Sopwith F.1 Camel "8"



< Despite being fitted with Vickers guns it is almost certain that these photos were taken after the Armistice. Note the unusual 'hoop headrest' seen on some post war USAS Camels, wicker seat and wide safety belt.

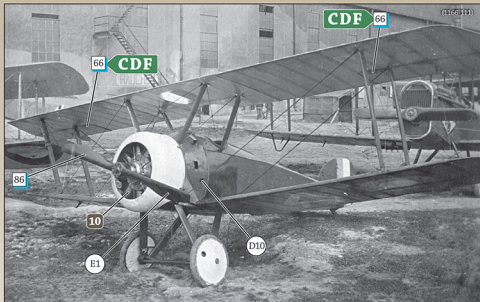
> Note the very pale "painted" appearance of the bottom wing and underside of the top wing. Another view of this crash reveals that the word "GLADE" ..? was painted on the port side of the fuselage under the cockpit opening.



< The unidentified squadron stripes (possibly mimicking the colours of the US "Victory Medal" ribbon) are clearly visible on the top wing, as is the number 8 on the side of the fuselage.

> The underside of the tailplane also appears to be painted a very pale colour but the bottom of the fuselage is not. Note the 30 gallon petrol tank.





An unarmed and unidentified 160hp Gnome 9N Monosoupape powered Sopwith F1 Camel "14" parked in a bomb crater outside the Zeppelin hanger at Trier after the Armistice. Note the Lavasseur propeller (E1) seen on some Gnome powered aircraft. A 166th Aero Sqn DH.4 can be seen in the background.



3-D Modelling by Darren Mildenhall

Born and raised in Wellington, New Zealand, Darren harnessed his creativity by attending the School of Design, graduating with a major in Industrial design. During the degree he developed a passion for form and the aesthetic appeal of a product and how to utilise CAD software to realise and develop a concept. Joining Wingsnut Wings as a 3D modeller has furthered his skill in these areas through the creation and manipulation of complex 3D forms.

When not designing WW1 model aircraft, Darren enjoys graphic based art and t-shirt design, a lot of which is influenced by his interest in pop culture, typography and the retro 1950s. Outside all that, Darren is a self confessed movie buff and sports fan.



Profile Art by Ronny Bar

Ronny Bar developed a keen interest in airplanes from an early age, living close to the El Palomar Air Force Base in Buenos Aires. He first flew in the back seat of a T-34 Mentor trainer at the age of ten, and was soon drawing airplanes and building models: Spitfires and Messerschmitt first... Camels and Fokkers later. He became a successful bass player with a career lasting over 35 years in several Rock bands, recording ten albums (one of them being a National hit selling more than 100,000 copies) and performing countless concerts, TV shows and tours all over Argentina.

Now retired from the R'n'R scene, his interest returned to his early passion: Aviation Artwork. Visiting the WW1 aircraft collection at Hendon focused his already growing interest for that historic period. His artwork is regularly appearing in journals and publications like Windsock Worldwide, Windsock Datafiles, Cross & Cockade and Over the Front.

Visit Ronny's website at: www.ronnybarprofiles.com



Box Art by Steve Anderson

Steve Anderson is an avid historian of military aviation, with a special interest in the many beautiful fighters and triplanes of World War I. The aircraft and battles of famous World War I aces such as Baron Manfred von Richthofen (better known as the "Red Baron"), James McCudden, Raoul Lufbery, Ernst Udet, Werner Voss, and other pioneers of dogfighting are among Steve's favorite subjects.

An Artist Fellow of the American Society of Aviation Artists, Steve creates works that reflect scrupulous attention to historically accurate detail, from the colorful markings on the fuselages to the time of day of an actual battle.

Visit Steve's website at: www.anderson-art.com.



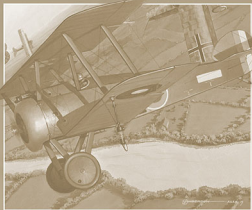
Project Co-ordinator, Richard Alexander

A native of Wellington New Zealand, Richard Alexander has a long term interest in military history, race cars & local drivers from motor sports golden era of the '60's. Other interests include mountain biking, scotch and cigars.

An accomplished modeller Richard's models have twice been awarded Best Overall in Show at IPMS(NZ) National Conventions and earned him the inaugural TamiyaCon(NZ) Master Modeller award (along with the associated trip to Japan) in 2001. Many of his works are in private collections around the world, though he no longer accepts commissions.

Richard has been in the model and hobby industry since 1991 and brings with him a keen eye for detail and a passion for ensuring our models are enjoyable to build. So if there is anything you don't like about this model, you can blame him.

If you do have comments, requests or suggestions, Richard is contactable at richard@wingsnutwings.com



32072	1/32 Sopwith F.1 Camel "USAS"	Qty
0132070A	A parts	1
0132070B	B parts	1
0132070C	C parts	1
0132070D	D parts	1
132E0012	E parts 140hp Clerget 9Bf Engine	1
132E0026	E Parts 160hp Gnome 9N Engine	1
0132070P	Photo-etched metal parts	1
7132072	Instructions	1
9132072	Decals	1

If you have any damaged or missing parts please contact help@wingnutwings.com for assistance.



32007 - 1/32 DH.9a "Ninak"



32019 - 1/32 Pfalz D.XII



32059 - 1/32 Salmson 2-A2 "USAS"

Also available from
www.wingnutwings.com

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