

WINGNUT WINGS



Sopwith Pup "Gnome"

1/32 Scale

Sopwith's wonderful Pup was developed from a design that their test pilot, Harry Hawker, legendarily chalked out on the factory floor for his own personal runabout in the latter stages of 1915. Featuring wing warping technology this runabout formed the basis for the Sopwith Sparrow of which only 4 were made. In February 1916 Sopwith took it upon themselves to produce a single seat fighter prototype based on this design, slightly redesigned, strengthened and with ailerons replacing wing warping for lateral control. Given the serial number 3691, this prototype attracted the attention of the Royal Naval Air Service (RNAS) who were suitably impressed enough to order the type into production as the Admiralty 9901 Type. The Royal Flying Corps (RFC) were likewise taken by the prototype with Maj. Gen. H.M. Trenchard famously stating 'Let us get a squadron of these' which lead to them ordering it into production as the Sopwith Scout. Despite being officially known as the Admiralty 9901 Type or Sopwith Scout it was quickly given the eminently more appropriate, albeit strictly unofficial, nickname 'Pup' after a remark by a Brig. Gen. W Sefton Brancker upon comparing it to the larger Sopwith 1 & 1/2 Strutter.

The Sopwith Pup was universally liked by the young aviators of the RNAS and RFC charged with flying it. More than 2100 Pups were built by The Sopwith Aviation Co Ltd, William Beardmore & Co Ltd, The Standard Motor Co Ltd and Whitehead Aircraft Ltd. Most Sopwith Pups were powered by a 80hp LeRhône 9c engine although many others were fitted with 80hp & 100hp Gnome or Clerget engines. Ever adaptable, the Pup was modified for shipboard use by the RNAS as the 9901a Type, taking off from both aircraft carriers and platforms mounted on gun turrets. Despite having only one gun, its light weight and maneuverability ensured it was a good match for the twin gun armed Albatros D.II, Fokker D.II, Halberstadt fighters it faced in late 1916. At least 29 RFC and RNAS pilots achieved ace status in the Pup with victories claimed over the aforementioned fighters as well as the later Albatros D.IIIs and D.Vs, observation balloons, various two seaters, seaplanes and 5 Gotha bombers before being withdrawn from frontline service in the latter stages of 1917.

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. Upper surface linen areas were doped in Protective Covering number 10 (PC10) or PC12. PC10 was made from mixes of yellow ochre, iron oxide and lamp black pigments and could vary between dark 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. The undersides of the wings, tailplane and fuselage were left clear doped Irish linen, usually with a thin line along the leading edges finished with the same PC10 or PC12 as the upper surfaces. Metal cowling panels were often painted Battleship Grey on the exterior with the insides left unpainted, or left unpainted all together. Small metal fittings and brackets were usually black. All surfaces exhibited a shiny gloss appearance when new which would lose its shine and fade relatively quickly.

Richard Alexander 2019

Wingspan:	Length:	Max Weight:	Max Speed:
26' & 6" (8.07m)	19' & 3.75" (5.89m)	1297lb (588.3kg) 100hp Gnome	107mph (172kph) 100hp Gnome
No. manufactured:	Production:	Engine:	Ceiling:
Approx. 2100 (includes over 200 rebuilds)	Feb. 1916 to April 1917	80hp Gnome, 100hp Gnome Monocoopape, 80hp LeRhône 9c, 80hp Clerget 7c.	18500' (5754m) 100hp Gnome

Armament

.303 (7.7mm) Vickers gun, or .303 (7.7mm) Lewis gun or 8 Le Prieur rockets

References:

The Sopwith Pup, J.M Bruce, Gordon Page & Ray Sturtivant, Air Britain 2002. Windsock Datafile Special Sopwith Pup, J.M Bruce 1992. Windsock Datafile Sopwith Pup, J.M Bruce, 1986. Osprey Sopwith Pup Aces of World War 1, Norman Franks, 2005. 1914-18 Aviation Heritage Trust. Private Collections.

Sopwith Pup "Gnome"

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.
- 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.

SYMBOLS

1 Construction Step



Choose



Attention



Remove

A1 Part Number



Do Not Glue



Option



Drill

5 Decal

P1 Photo Etch Part



Cement For Metal



Other Side

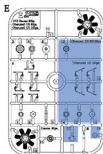
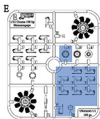
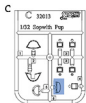
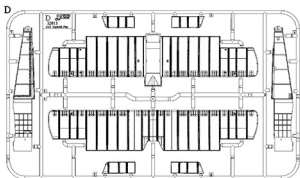
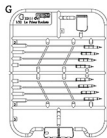
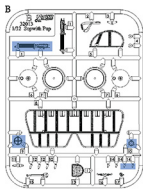
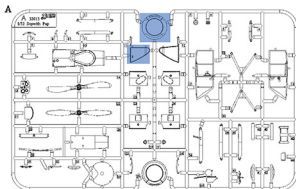


Paint Colour

PAINT COLOURS

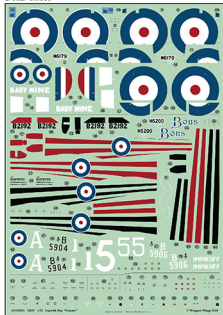
All colours	Tamiya	Humbrol	Federal Standard
a Clear Doped Linen (CDL) - semi gloss	X2 (x10) + XF55 (x1)	22 (x10) + 148 (x1)	17886
b Light Wood* - semi gloss	XF78*	93*	30340*
c Dark Wood* - gloss	XF68*	160*	30111*
d Leather - semi gloss	XF52	62	30219
e Black - semi gloss	X18	85	
f Aluminium - matt	XF16	27001	
g Brass	X31	54	
h PC12 - semi gloss	XF62 (x1) + XF10 (x1)	170	26120
i Gun Metal	X10	27004	
j Copper	XF6	12	
k Rubber - matt	XF69	66	35042
l Battleship Grey (BSG) - matt	XF82	106	35164
m White - semi gloss	XF2	34	
n Blue - semi gloss	XF8	25	25056
o Red - semi gloss	XF7	60	31350
p Steel	XF56	27003	
q PC10 dope - matt & semi gloss	XF62 (x2) + XF10 (x1)	155	26120
r PC10 paint - gloss	XF62	155	14083

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



■ = Not Used

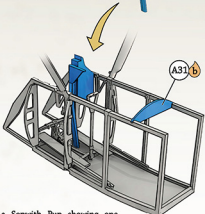
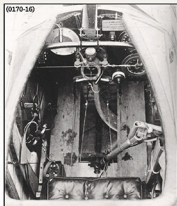
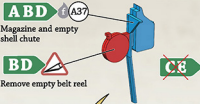
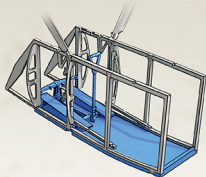
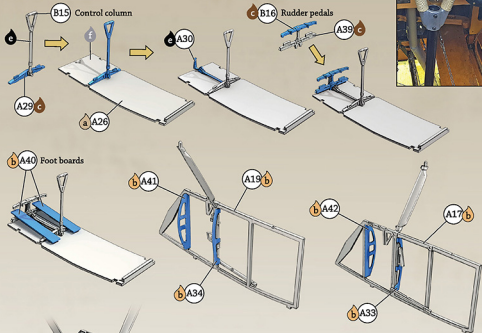
Decal Sheet



1 COCKPIT

Paint brackets and small fittings **e**

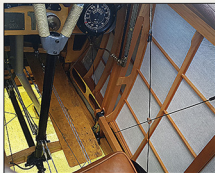
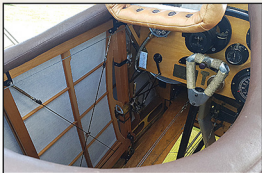
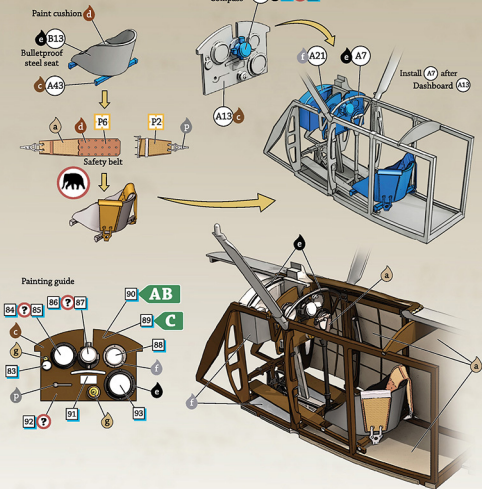
> Control column and hand grip from the beautiful 80hp LeRhone powered Sopwith Pup reproduction B2167 built by The Vintage Aviator LTD.



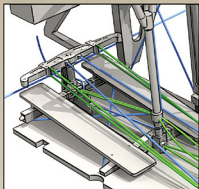
Cockpit from a Sopwith Pup showing one variation of instrument board arrangement. Note the installation of instrument board lights for night flying and wireless for air to ground communication. The Vickers Gun has been removed allowing us to see the top of the empty shell chute.

2 COCKPIT continued

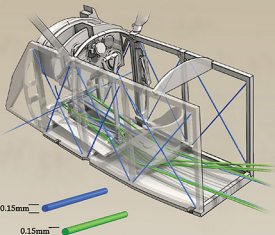
Pattern 5/17
Compass



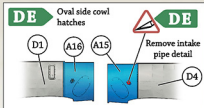
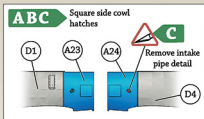
Cockpit interior detail from the beautiful 80hp LeRhone powered Sopwith Pup reproduction B2167 built by The Vintage Aviator LTD. Note the Irish linen fabric, bracing wires, wooden stringers, frames & foot boards. Also note the sunlight shining through the castor oil soaked Irish Linen on the bottom of the fuselage. The handle on the bottom left of the instrument panel was for winding in the empty cloth ammunition belt found on Sopwith Pup N6179 **A**. The other aircraft depicted in this model had disintegrating link ammunition belts or were unarmed.



Interior rigging guide
Rigging material not supplied. Colours shown for clarity only.



3 FUSELAGE



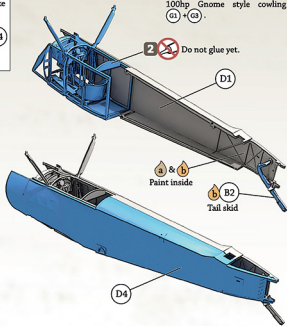
Square side cowling hatch detail from 100hp Gnome powered Sopwith Pup B2192 **C**.



Oval side cowling hatch detail from 100hp Gnome powered Sopwith Pup B7575. Note the additional stiffening ribs on the 100hp Gnome style cowling **G1 + G3**.



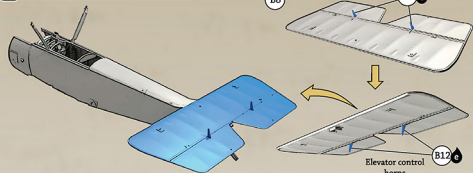
Tail skid detail of the beautiful 80hp LeRhone powered Sopwith Pup reproduction N6205 "Betty" built by The Vintage Aviator LTD.



4 FUSELAGE CONTINUED & TAILPLANE

Horizontal tailplane & elevators **B8**

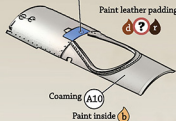
Elevator control horns **B12 e**



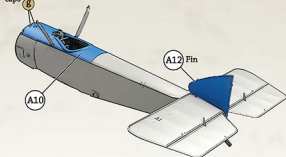
Tailplane detail from Whitehead built Sopwith Pup A6214 seen on page 7.

CE **A44 l**

Paint leather padding **d ? r**

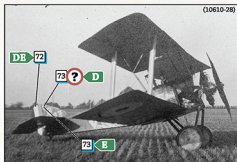
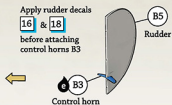


Paint fuel caps **g**



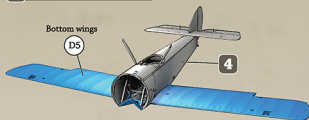
Apply rudder decals **16** & **18**

before attaching control horns **B3**



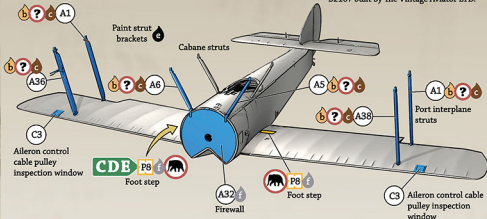
Two photos showing 100hp Gnome powered Standard Motor Co built Sopwith Pup B5903 following a forced landing. Note the lighter shade of the starboard aileron cockade.

5 BOTTOM WINGS & STRUTS



Aileron control cable pulley inspection window (C) from the beautiful 80hp LeRhone powered Sopwith Pup reproduction B2167 built by The Vintage Aviator LTD.

Starboard interplane struts.



Aileron control cable pulley inspection window

CDB P8

Foot step

A32
Firewall

P8
Foot step

C3
Aileron control cable pulley inspection window



(0364-014)

< Whitehead built 80hp LeRhone powered Sopwith Pup A6214 was unarmed when photographed here. It went on to serve in 56 Reserve Squadron London Colney and 56 Training Squadron.

Vickers Mk.1*

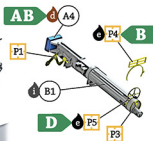
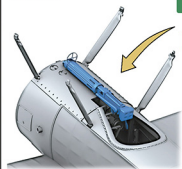


Vickers Mk.1* showing the brass breech block, muzzle details and air vents cut into the cooling jacket. Note that this gun features a Hyland type B loading handle of a different design to the Hyland type E commonly fitted to the Pup and featured in our model.

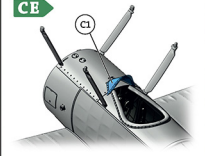


6 ARMAMENT

ABD



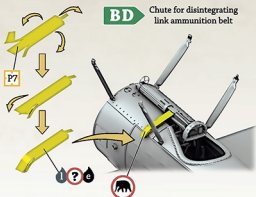
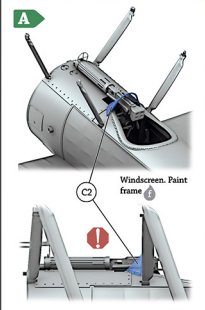
CE



> Sopwith style padded windscreen (C5) from the beautiful 80hp LeRhone powered Sopwith Pup reproduction B2167 built by The Vintage Aviator LTD.



A



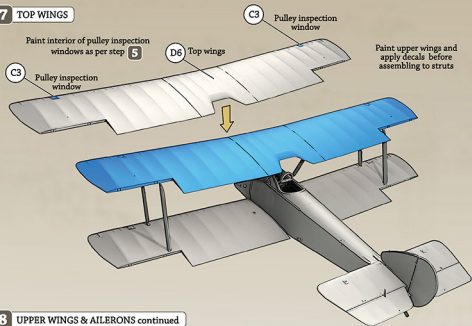
BD Chute for disintegrating link ammunition belt



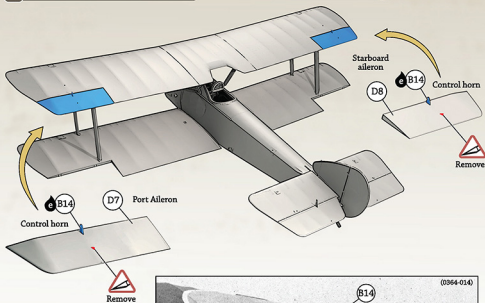
(B171-092)

Vickers Mk.1* detail from an unidentified 100hp Gnome powered Sopwith Pup.

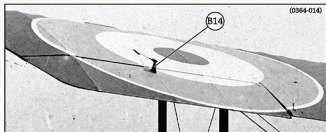
7 TOP WINGS



8 UPPER WINGS & AILERONS continued



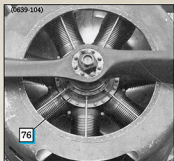
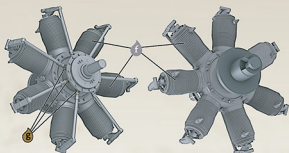
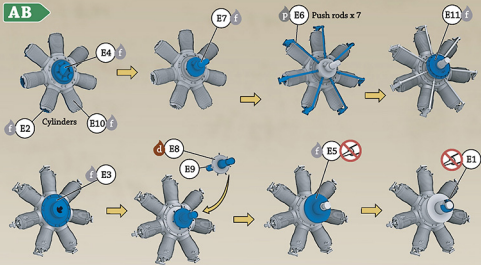
Paint ailerons and apply cockade decals before attaching control horns (B14)



Port upper aileron and control horn detail from Whitehead built Sopwith Pup A6214 seen on page 7.

9 80HP GNOME ENGINE

AB



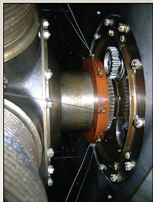
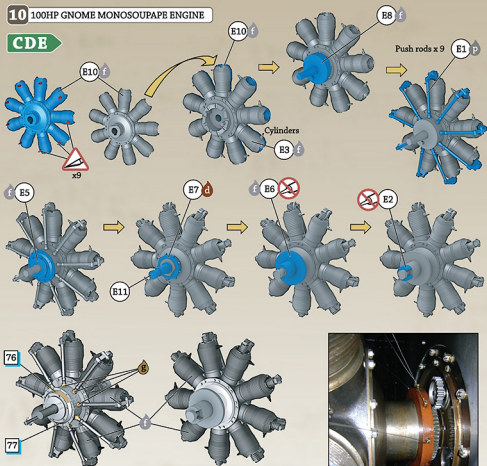
Engine detail from the 80hp Gnome powered Sopwith Pup seen on page 21.



An unidentified Sopwith built Pup.

10 100HP GNOME MONOSOUPE ENGINE

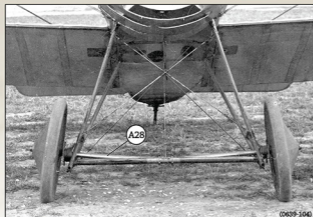
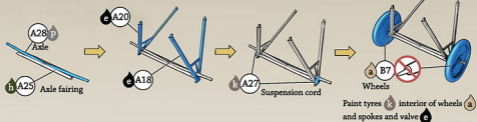
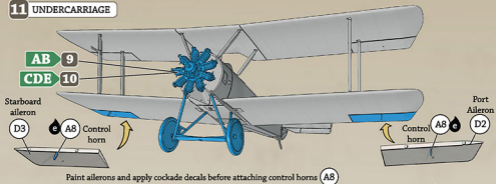
CDE



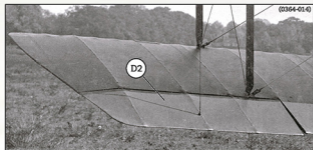
A working 100hp Gnome Monosoupe as fitted to The Vintage Aviator LTD's Avro 504. Note the castor oil staining, rocker arm and plug lead details.



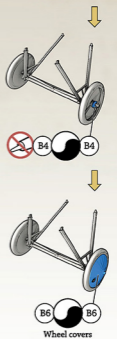
11 UNDERCARRIAGE



Undercarriage detail from the unidentified 80hp Gnome powered Sopwith Pup shown on page 21.



< Port bottom aileron detail from Whitehead built Sopwith Pup A6214 seen on page 7.



12 FINAL ASSEMBLY

AB



A35
Paint inside f

Cowling for 80hp engine

CDE



G3
Paint inside f

Cowling for 100hp engine

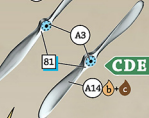
CDE



A9
Paint inside f

AB

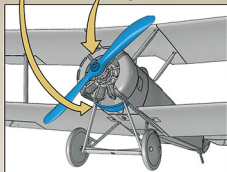
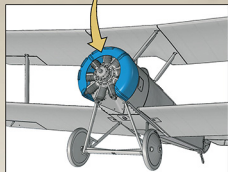
b+c



A22
A3
B1

A14
b+c

CDE



13 ? LE PRIEUR ROCKETS

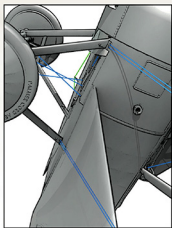
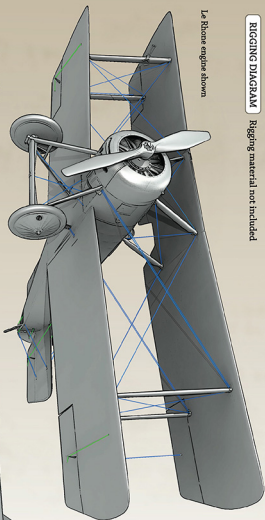


80hp LeRhone powered Sopwith built Pup N5186 is shown here with Le Prieur rockets at Eastchurch in October 1916. Le Prieur rockets were trialed for use against balloons and airships but it is reasonably unlikely that any of the aircraft depicted in this model were fitted with them.



(0170-18)

La Rhone engine shown



Control Cables

0.15mm



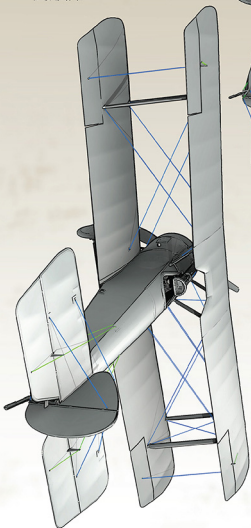
RAF Aerodynamic
Wires

0.1mm

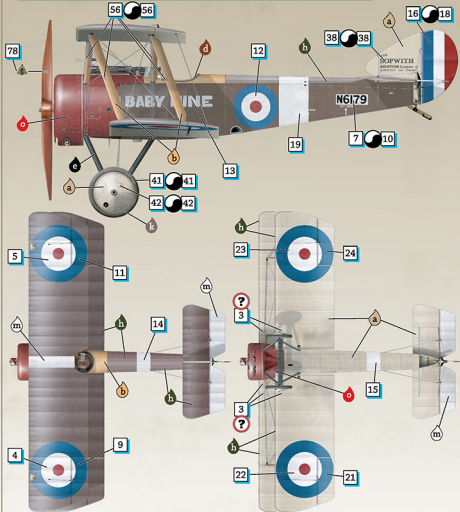
0.3mm



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 turnbuckles (which are not really applicable to the Sopwith Pup anyway).



A Sopwith Pup N6179 "Baby Mine", TC Vernon (17 victory) & AW Carter (17 victories)
B Flight 3(N) Sqn RNAS, March to April 1917

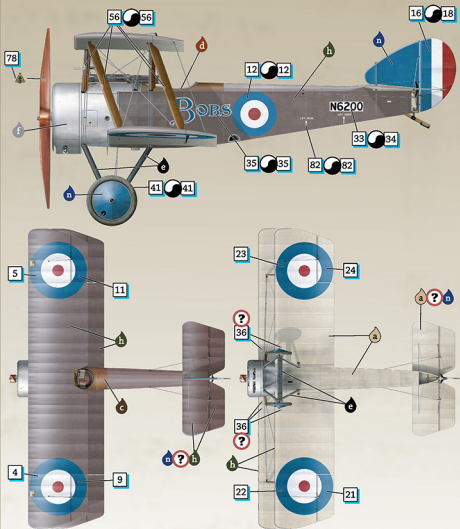


80hp Gnome powered Sopwith built Pup N6179 "Baby Mine" was from a production order placed with The Sopwith Aviation Co Ltd in January 1917 for 50 aircraft (number N6160 to N6209). N6179 was one of at least 9 aircraft from this order that were fitted with a 80hp Gnome engine instead of the more common 80hp LeRhône and was delivered to 3 (Naval) Squadron in February 1917. It was being flown by TC Vernon on 4 March 1917 when he was credited with a victory and by 17 victory ace AW Carter when he was credited with his 2nd, 3rd and 4th victories on 23 & 29 April 1917. It was returned to Dover for repairs via the Air Depot at Dunkirk in May 1917. Then N6179 went on to serve in Seaplane Defense Flight where 7 victory ace LH Slatter was credited with a victory over a Gotha on 29 July 1917.



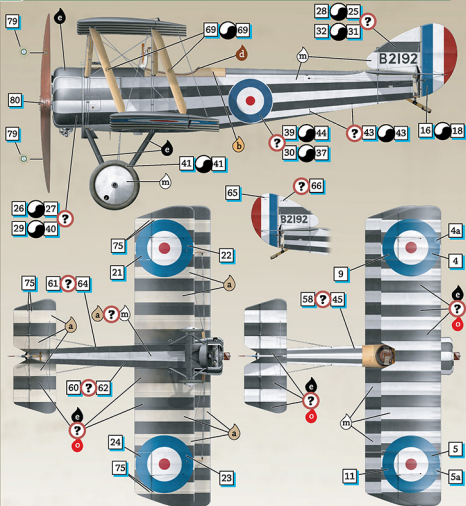
(O1905-4)

B Sopwith Pup N6200 "Bobs", AM Shook, B Flight 4(N) Sqn RNAS, April to May 1917 (12 victories)



Sopwith built Pup N6200 "Bobs" was another 80hp Gnome powered aircraft from the same production order as **A** and was delivered to 4 (Naval) Squadron in April 1917. It was being flown by AM Shook when he was credited with his first 3 victories on 24 April, 9 May and 12 May 1917. On 19 May 1917 Shook's engine failed and he was forced to land in the sea with N6200 being towed to Dunkirk where it was repaired before going on to serve elsewhere.

C Sopwith Pup B2192, HH Balfour & EL Foot, School of Special Flying Gosport, August to September 1917



100hp Gnome Monosoupape powered Sopwith Pup B2192 was from a production order placed with Whitehead Aircraft Ltd in April 1917 for 100 aircraft (numbers B2151 to B2250). It was serving at the School of Special Flying at Gosport by August 1917 where it received the striped finish seen here and was flown by HH Balfour and EL Foot. It was with 62 Squadron by 6 October 1917 and then 43 Training Squadron being crashed on 15 March 1918.

(0170-32)

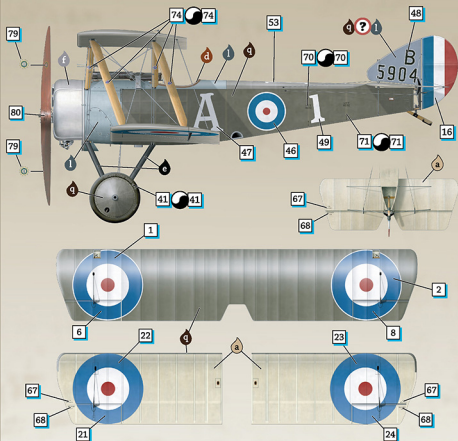
> Sopwith Pup B2192 at the School of Special Flying. The striped colour scheme has been described as black and white, which is entirely believable, but we have included additional red stripes as an option. 100hp Gnome Monosoupape powered rebuilt Sopwith Pup B804 is in the foreground.



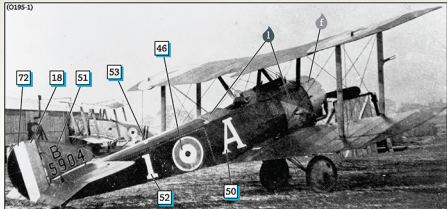


100hp Gnome Monosoupape powered Sopwith Pup B2192 was unarmed when it was photographed here at the School of Special Flying. Note the style of engine cowlings and partial stencils visible on the clear doped Irish Linen underside of the top wing. Boulton & Paul built Sopwith Camel B5157 is partially visible in the background.

D Sopwith Pup B5904 "A 1", 61(HD) Sqn RFC, September 1917

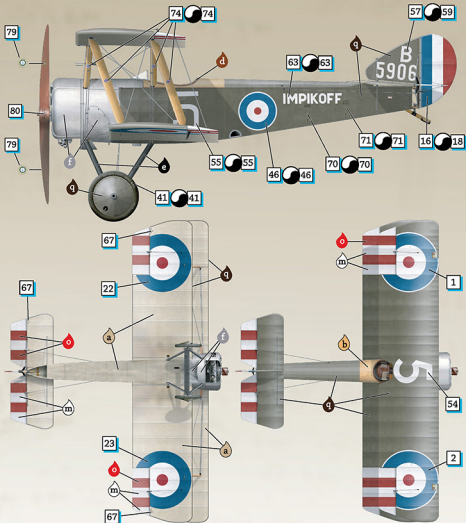


(O195-1)



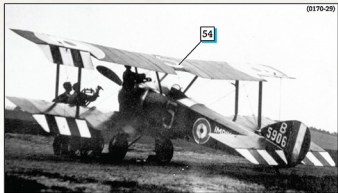
100hp Gnome Monosoupape powered Sopwith Pup B5904 "A 1" was from a production order placed with the Standard Motor Co Ltd in July 1917 for 250 aircraft (numbers B5901 to B6150) and was delivered to 61 Home Defense Squadron by September 1917. Note the overpainted cockpit coaming & side cowlings and unpainted engine cowling. The 100hp Gnome Monosoupape engine was initially experimentally installed on Sopwith Pup A653 in May 1917. Trials showed that it was 2 minutes quicker to climb to 10,000 feet compared to the usual 80hp Pups, which proved to be a considerable advantage for Home Defense aircraft trying to intercept German raiders.

E Sopwith Pup B5906 "Impikoff 5, 44(HD) Sqn RFC/RAF 1918



100hp Gnome Monosoupape powered Sopwith Pup B5906 "Impikoff" is from the same production order as **D** and served with 44 Home Defense Squadron in 1918. Later it saw service with 36 (HD) Squadron until at least late December 1918 by which time its engine had been replaced with a LeRhone.

> Sopwith Pup B5906 being refueled at 44 (HD) Squadron. Note the striped control surfaces and lack of armament.

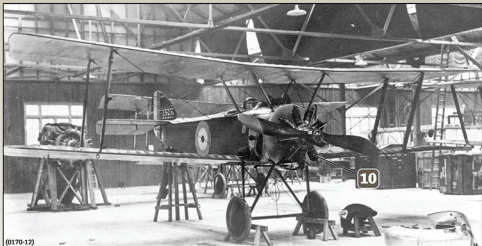


(0170-29)



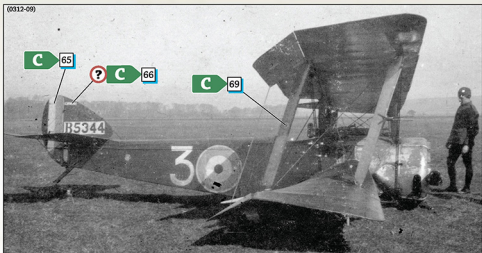
(0638-104)

An unidentified 80hp Gnome powered Sopwith Pup. Note the non-standard slot cut in the upper face of the engine cowling.



(0170-12)

100hp Gnome Monosoupape powered Whitehead built Sopwith Pup B5292 undergoing final assembly. Note the engine cowling in the right foreground.



100hp Gnome Monosoupape powered Whitehead built Sopwith Pup B5344 "3" which has suffered a heavy landing at 3 Training Squadron. Note the heavily chipped engine and side cowlings.



Seen here after an incident that resulted in severe engine damage, B5905 was a 100hp Gnome Monosoupape powered Sopwith Pup, from the same Standard Motor Co Ltd production order as **D** and **E**.



3-D Modelling by Mark Miller

A background in technical illustration and long term passion for modelling and early aircraft has enabled Mark to produce some of the most stunning 3D renderings of aircraft that anyone is likely to see. His artwork has appeared in numerous publications from Cross & Cockade, Over the Front, Schiffer and Windsock amongst others. Mark worked for Wingsut Wings from 2007 to 2009.

Over the Front, Schiffer and Windsock amongst others. Mark worked for Wingsut Wings from 2007 to 2009.

To view examples of Mark's work please visit <http://www.wwi-models.org/Images/Miller/render/index.html>



Box Art by Steve Anderson

Steve Anderson is an avid historian of military aviation, with a special interest in the many beautiful biplanes 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.



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 Facebook page - www.facebook.com/RONNY-BAR-Aircraft-Profiles-166538664131/



32055 Product Manager, 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. 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@wingsutwings.com



32055	Sopwith Pup "Gnome"	Qty
0132013A	A parts	1
0132013B	B parts	1
0132013C	C parts	1
0132013D	D parts	1
132E0011	E parts 100hp Gnome Engine	1
132E0014	E parts 80hp Gnome Engine	1
0132055G	G parts	1
0132055P	Photo-etched metal parts	1
7132055	Instructions	1
9132055	Decals	1



32071 Sopwith F.1 Camel "LeRhone"



32042 AEG G.IV Late



32073 Sopwith 5F.1 Dolphin

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