

WINGNUT WINGS



Following on from their successful Pup, Triplane, Camel and (slightly less successful) Dolphin, Sopwith's next major contribution to British aviation was the 230hp Sopwith 7.F1 Snipe. The prototype Snipe appeared in September 1917 and was designed to be powered by a 110hp to 150hp rotary engine, featured single bay Pup like wings with a cut away center section (similar to the Dolphin) for improved visibility, a Camel style tailplane with unbalanced rudder and a flat sided fuselage. Interestingly 300 production aircraft were apparently erroneously ordered at about the same time as 6 further prototypes (numbers B9962-B9967) were requested in October 1917 (the production order was subsequently cancelled). The 6 prototypes featured many changes from the original design and B9965 (now with longer wingspan 2 bay wings with increased dihedral, a 230hp Bentley BR.2 engine, faired fuselage sides and a revised tailplane with a balanced rudder) was sent to France in March 1918 for further evaluation where additional changes were suggested, including increasing the size of the rudder further. Full scale production was ordered from numerous manufacturers in late March 1918 but it was not until late 1918 that sufficient aircraft were available to fully equip 43 Sqn RAF and 4 Sqn AFC (Australian Flying Corps) in France. Despite its operational use during the First World War being restricted to the final few weeks, the Snipe performed excellently in combat.

In an effort to improve maneuverability further, later production aircraft featured larger, balanced, upper ailerons and had the fin and rudder areas further increased. The Sopwith Snipe continued to serve the RAF post war, against the Bolsheviks in Russia, occupational duties in Germany, in home service and 'policing' duties in Egypt and Iraq. The Snipe was the last rotary engine powered fighter to serve in the RAF and was only completely replaced in 1927 by the radial engine powered Gloster Grebe, Hawker Woodcock and Armstrong Whitworth Siskin. The Snipe saw very limited foreign use with the Brazilian Navy, Canadian Air Force and Soviet Red Air Fleet.

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 Snipes were manufactured by over half a dozen companies it is quite likely that they were doped with both PC10 and PC12, although it is only the latter that has been noted on original examples of Snipe fabric we have examined; fabric from late production upper ailerons manufactured by Sopwith (closely matching FS30040) and Whitehead? (closely matching FS26120). There is considerable controversy as to what colour PC10 (Protective Covering number 10) actually was. Made from mixes of yellow ochre, iron oxide and lamp black pigments it varied between olive drab and chocolate brown, depending on the mix and, presumably, time spent exposed to the elements. It appears that fresh PC10 appeared more olive drab while later mixes and aircraft exposed to the elements for some time would appear more chocolate brown. 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 sometimes the fuselage were left CDL (Clear Doped Linen). A silver dope scheme was introduced post war which was worn by many Snipes. Cowlings, fuselage panels, undercarriage and, remarkably, RAF rigging wires were usually painted 'Service Grey' or with a PC10/12 equivalent. Some aluminium cowls appear to have received a turned metal finish. The interplane and center section struts and their metal fittings also appear to have been painted grey. Steel components, fittings and brackets were often black although many appear to have been finished in grey. All fabric surfaces exhibited a gloss appearance when new which would lose its shine and fade relatively quickly in service.

Richard Alexander 2012

Wingspan (Late):	Length (Late):	Max Weight:	Max Speed:
31.08ft (9.47m)	19.83ft (6.04m)	2020lb (916kg)	121mph (195kph)
No. Manufactured:	Production:	Engine:	Ceiling:
2400 (approx)	March 1918 to Sept. 1919	230hp Bentley BR.2	25,000ft (7620m)
Armament:			
2x .303 (7.7mm) Vickers machine guns & up to 112lb (50kg) of bombs.			
References:			
Windsock Datafile 46 Sopwith Snipe, J.M Bruce, 1994 - Osprey Dolphin and Snipe Aces of World War 1, Norman Franks, 2002 1914-18 Aviation Heritage Trust - The Vintage Aviator LTD - Colin Owers - Private Collections			

Sopwith Snipe Late

1/32 Scale

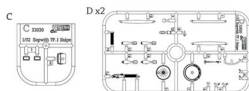
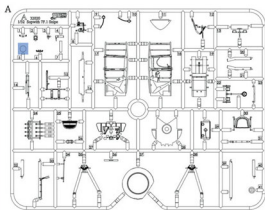
- Warning:** Choking hazard. Keep small parts and plastic bags away from children. Use glue and paint in a well ventilated area. Always wear protective eyewear when cutting and a protective mask when painting, gluing and sanding. Do not breathe dust from polyurethane resin parts (if included). Beware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

	Construction Step		Choose		Attention		Remove
	Part Number		Do Not Cement		Option		Drill
	Decal		Cement For Metal		Other Side		Paint Colour
	Photo Etch Part						

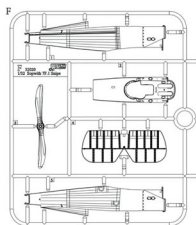
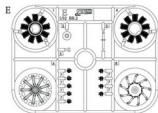
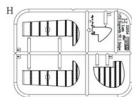
	All colours	Tamiya	Humbrol	Misterkit
a	Brass	X31	54	
b	Copper	XF6	12	
c	Gun Metal	X10	27004	
d	Aluminium	XF16	27001	
e	Steel	XF56	27003	
f	Light Wood* - semi gloss	XF78	93	
g	Dark Wood* - semi gloss	XF68	98	
h	Service Grey - matt	XF82	145	BC01
i	Leather - semi gloss	XF52	62	
j	Clear Doped Linen (CDL) - semi gloss	XF55	121	BC05
k	PC12 - semi gloss	XF10	98	BC02
l	Aluminium dope - gloss	XF16(x2) + XF19(x1)	11(x1) + 34(x1)	
m	Black - semi gloss	X18	85	
n	White - semi gloss	XF2	34	BC08
o	Red - semi gloss	XF7	60	
p	Rubber - matt	XF69	66	
q	Red oxide primer (bled through linen)	XF9(x1) + XF55(x2)	-	
r	Mustard Yellow - semi gloss	XF4	81	AM004
s	Dark Green - semi gloss	XF70	88	
t	Blue - semi gloss	X4	25	
u				
v				
w				
x				
y				
z				

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



■ = Not Used

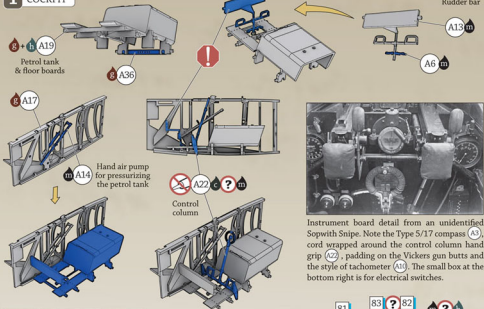
Photo Etch



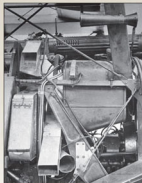
Decals



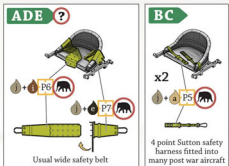
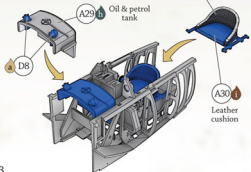
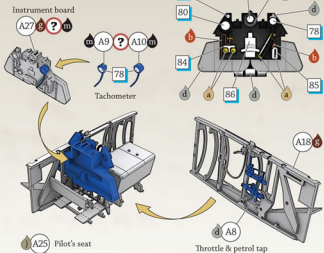
1 COCKPIT



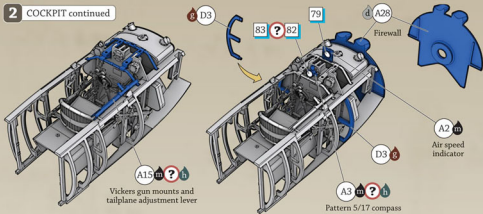
Instrument board detail from an unidentified Sopwith Snipe. Note the Type 5/17 compass (A1), cord wrapped around the control column hand grip (A22), padding around the Vickers gun butts and the style of tachometer (A10). The small box at the bottom right is for electrical switches.



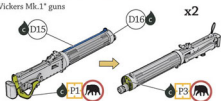
Oil & petrol tank, ammunition magazine, chutes for spent disintegrating link & empty shells and air intake detail. Note that many metal brackets and fittings appear to be painted grey and not black.



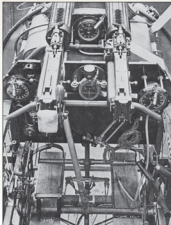
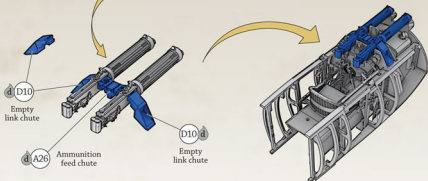
2 COCKPIT continued



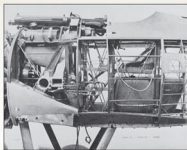
Vickers Mk.1* guns



Vickers Mk.1* gun fixed to the port mount. The curved bar between the starboard mounts is a temporary 'fixing jig' used during construction. Note the Constantinesco Timing Gear Type C detail fixed to the top of the Vickers receiver.

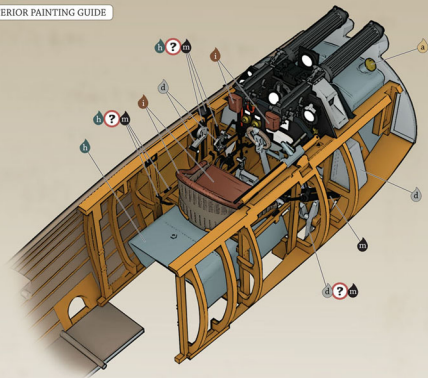


> Note the main petrol tank (A13), cockpit coaming (F2) and wicker pilot's seat (A25). Curiously, much of the internal bracing in the Sopwith Snipe is constructed from RAF wires where their aerodynamic properties are not necessary.



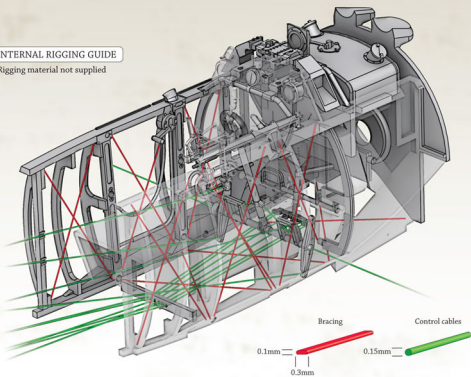
< Vickers Mk.1* guns mounted to an unidentified Sopwith Snipe during assembly. The right gun is missing its padding and Hyland Type 'B' loading handle (P1) and the right heel guard has not been attached to the control column cross shaft (A22). Note the air speed indicator (A2) tachometer (A9), leather foot straps on the rudder bar (A13) and the various wires and cables not yet connected to their various fittings.

INTERIOR PAINTING GUIDE



INTERNAL RIGGING GUIDE

Rigging material not supplied



Sopwith Snipe E8102

Cockpit interior photos of reproduction Sopwith built Snipe E8102 beautifully built by The Vanage Aviator Ltd. All following colour images are of this remarkable aircraft which is now part of Kermit Weeks Fantasy of Flight collection in Florida USA.

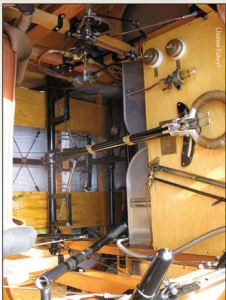
< Note the various instruments and Vickers Mk.1" butt padding detail. Compare this image with the photo on page 4.

> Cockpit floor showing unpainted aluminium underfields, ammunition magazine and various rigging and bracing cable details.

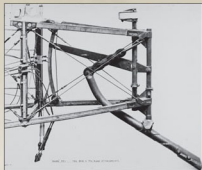
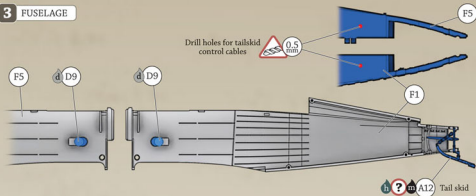


< Left side of the cockpit showing the pilot's wicker seat, petrol pump, throttle and petrol tap (A).

> Right side of the cockpit showing the lever for adjusting the angle of incidence of the tailplane. Although uncommon during the First World War, the 4 point Sutton safety harness (visible here) was widely used post war.



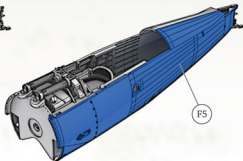
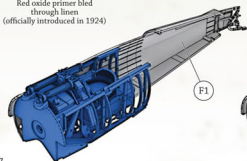
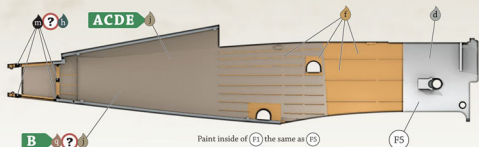
3 FUSELAGE



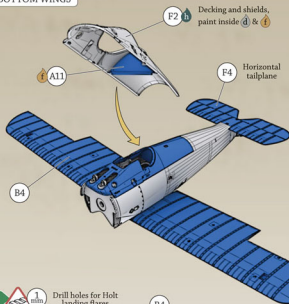
Rear of fuselage frame showing the tube steel tail skid, tightly bundled bungee suspension cord and tailplane adjustment bar (A12). All metal fittings appear to have been painted black (m)



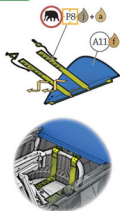
Tailplane and tail skid detail from reproduction early Sopwith Snipe E8102.



4 BOTTOM WINGS

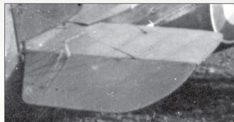
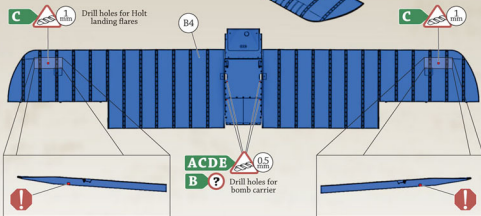


BC



4 point Sutton safety harness shoulder straps

C 1 mm Drill holes for Holt landing flares



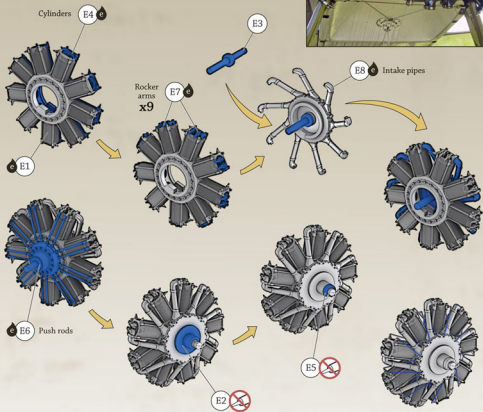
Horizontal tailplane and elevator detail from Boulton & Paul built Sopwith Snipe E6151. Note the gap between the top of the horizontal tailplane and bottom of the fin (H1) to allow for the movement of the adjustable tailplane.



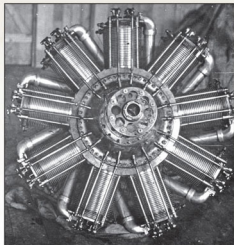
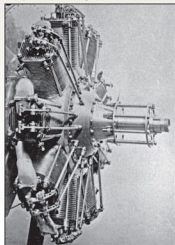
Cockpit decking (F2) from Boulton & Paul built Sopwith Snipe E6188. Note the chute for the Vickers gun empty link, padding, hand hold and asymmetric nature of the top shields.

5 230hp BENTLEY BR.2 ENGINE

Kermit Week's genuine Bentley BR.2 engine fitted into E8102. Note the extensive castor oil staining on the undershields.



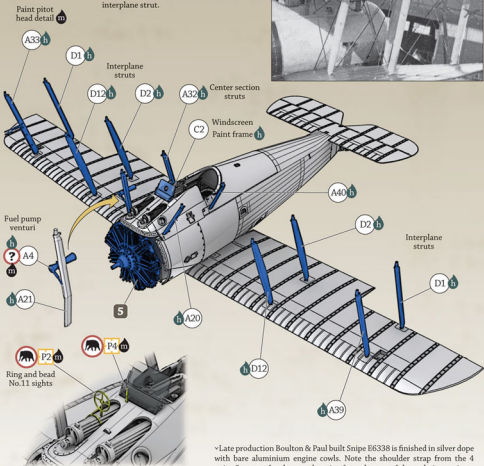
230hp Bentley BR.2 engine.



Wiring guide. Wire not included.

6 STRUTS

> Strut detail from Boulton & Paul built Sopwith Snipe E6184. The interplane struts and their metal brackets have been overpainted with the same matt grey colour. Boulton & Paul factory decals are faintly visible on each interplane strut.

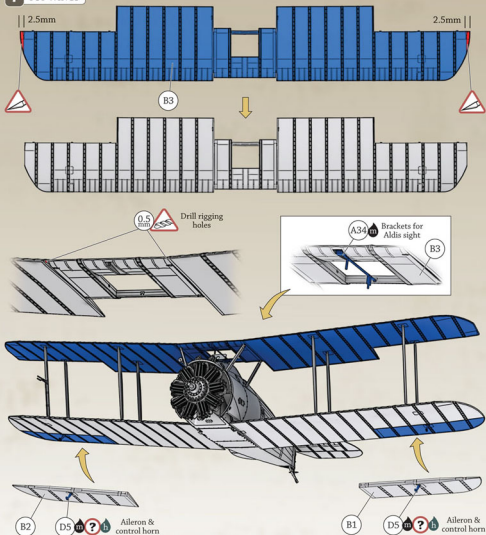


▼ Late production Boulton & Paul built Snipe E6338 is finished in silver dope with bare aluminium engine cowls. Note the shoulder strap from the 4 point Sutton safety harness hanging from the rear of the cockpit opening.



7 TOP WINGS

Cut wing tips to fit late production ailerons

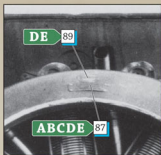


Top wing center section of E8102 showing padding and Aldis sight details.



Center section and strut detail from an unidentified late production Sopwith Snipe. Note the painted center section struts, fuel system venturi (A8), Brackets For Aldis sight (A34) (without the Aldis sight (A33)), windscreen (C) and ring & bead sight (P2 & P4). The Vickers Mk.1* cooling jackets appear to have also been painted grey.

8 UNDERCARRIAGE



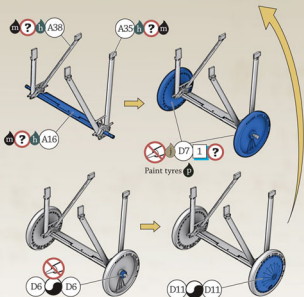
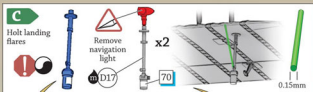
Gun timing warning [87] and Sopwith factory decal [89] applied to the cowling of late production Sopwith built Snipe E8263 of 4 Sqn AFC.



Undercarriage detail from an unidentified late production Sopwith Snipe. Note the dark suspension bungee cord and how subtle the traditional Sopwith split axle angle is on the Snipe compared to earlier designs like the Triplane and Pup (see Wingnut Wings models 32008, 32013 and 32016). Almost all Sopwith Snipe propellers had their blades wrapped in linen and painted grey and display no manufacturer decals, although we have included optional Lang decals [88] for you to use if you wish.

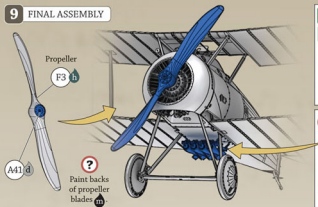


Undercarriage detail from E8102 showing the split axle, bungee suspension cord and extensive caster oil staining.



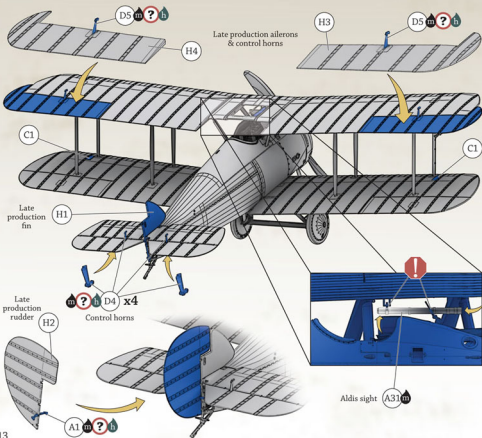
Fuselage detail from E8102 showing aluminium undershield panels (usually painted service grey), elevator control horn clearance slots and, once again, extensive caster oil staining.

9 FINAL ASSEMBLY

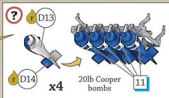


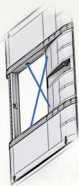
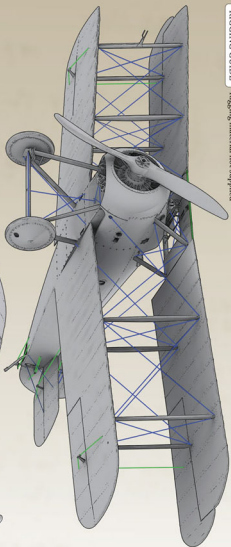
< Late production aileron detail from the Boulton & Paul built Sopwith Snipe E6184 seen on page 21.

> Late production fin and rudder detail from Boulton & Paul built Sopwith Snipe E6151. The elevator control horns are painted grey.



ACDE B ?





Control cables

0.15mm

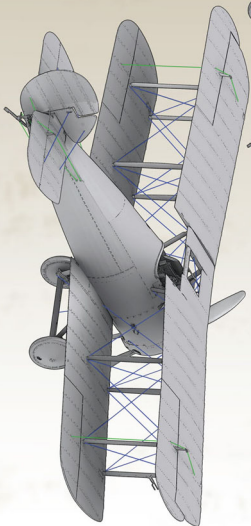


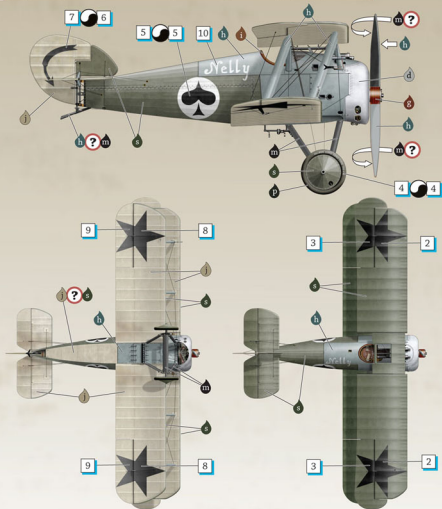
RAF Aerodynamic wires

0.1mm



0.3mm



A Sopwith Snipe E6351? GS Sapozhnikov, 1st Soviet Fighter Aviaotryad, 1920 (5 victories)


This late production Sopwith Snipe is thought to be Boulton & Paul built E6351 captured in Poland by the Soviets and appears to have had its fabric replaced and then doped with a locally sourced camouflage colour. Note the unpainted aluminium front cowl, grey decking & side shields and the CDL rudder with the black arrow unit marking of the 1st Soviet Fighter Aviaotryad. 5 victory ace Grigoriy Stepanovich Sapozhnikov was killed in this aircraft when his engine cut out on take off on 8 September 1920. Sapozhnikov was a well known and respected airman and a contemporary report of his death stated that 'On the fuselage one could see the black ace of spades on white background, on the rudder the black arrow. The stars on the wings were also black, and all the inhabitants of villages near the front knew the black-starred ace of spades'. Sapozhnikov learned to fly in 1916 and flew against the Germans until the October Revolution in 1917, he joined the Red Army in May 1918 and at the time of his death in September 1920 he was 26.



A

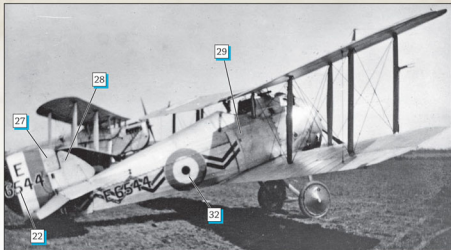
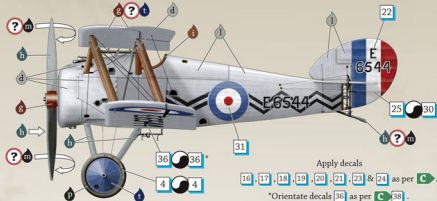


Grigoriy Stepanovich Sapozhnikov poses beside his Sopwith Snipe 'Nelly' following a rough landing which destroyed his port undercarriage axle.



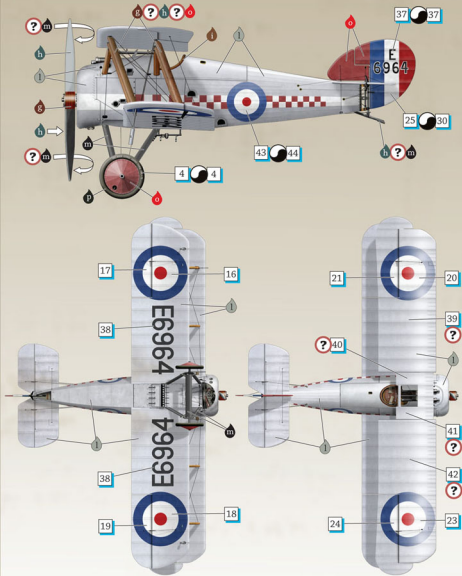
1st Soviet Fighter Aviaotryad Sopwith Snipe 'Nelly' displays its damaged undercarriage.

B Sopwith Snipe E6544, 17 Sqn, Hawkinge, 1924



Conventry Ordnance built Sopwith Snipe E6544 is shown here in 17 Sqn markings at Hawkinge in 1924. E6544 features all over silver Cellon aluminium dope scheme with bare aluminium front cowl, top, side and undershields. The wheels appear to be painted blue and the struts varnished wood, although they could also be blue. 17 Squadron was equipped with the Sopwith Snipe when they reformed in 1924 after having been disbanded in November 1919, at which time they introduced the unit marking of black 'zig zag' lines on the side of the fuselage. We have included optional 'zig zag' decals 33, 34 & 35 for the top wing but it is far from certain that E6544 ever wore them, although they were carried by 17 Sqn's 425hp Hawker Woodcocks, which replaced their Snipes in March 1926.

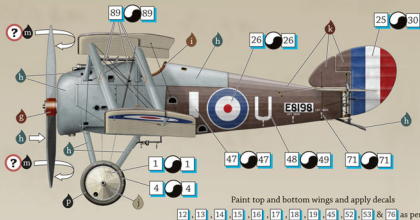
C Sopwith Snipe E6964, 56 Sqn, Hawkinge, 1923



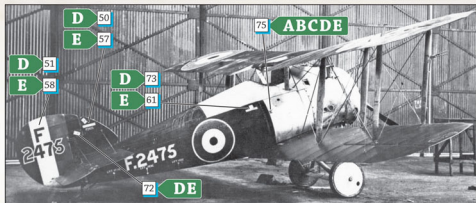
Apply decal [29] as per **B**.

Nieuport & General built Sopwith Snipe E6964 was photographed at Hawkinge in 1923 in overall Cellon aluminium dope and the 56 Sqn red and white checker unit markings of the time. At the time E6964 was photographed in 1923 (see *On Silver Wings* by Alec Lumsden & Owen Thetford or *Wingsock Datafile 46*) it was fitted with Holt landing flares, a 20lb Cooper bomb carrier, 4 point Sutton safety harness and had a couple of generators/pumps strapped to its undercarriage legs. The fin, rudder and wheel colour is not confirmed but red is very likely. The interplane and center section struts appear very dark and could be darkly finished wood as illustrated here or perhaps they were grey or even red? We have provided optional checker markings [39], [40], [41] & [42] for the top wing but it is far from certain that E6964 ever wore these as they were reportedly introduced when 56 Sqn were reequipped with 400hp Gloster Grebes in September 1924.

D Sopwith Snipe E8198 "U", C Flight 4 Sqn AFC, Bickendorf, January-February 1919

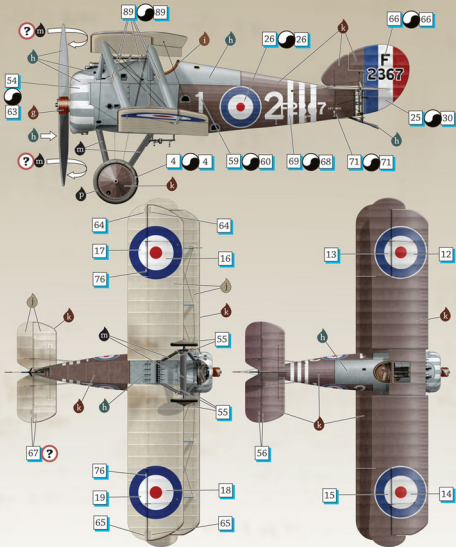


Sopwith built Snipe E8198 "U" of C Flight 4 Sqn AFC photographed at Bickendorf in early 1919. Note the darkly doped PC12 fabric surfaces, grey decking, top & side shields and cowls. There is a coloured streamer fixed to the rudder. The Australians performed their occupation force duties until February 1919 at which time they were replaced by 70 Sqn who inherited their Sopwith Snipes.



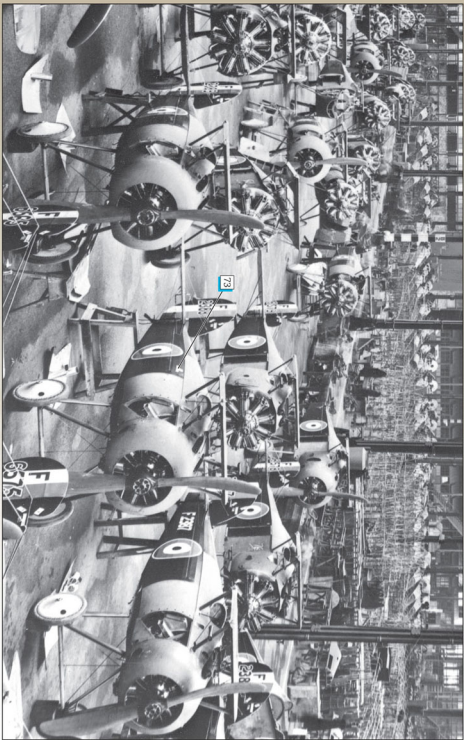
Late production Sopwith built Snipe F2475 was from a production order for 200 aircraft placed in April 1918, the bulk of which were completed in 1919. Note the stenciling and inspection marks.

E Sopwith Snipe F2367 "1 - 2", B flight 70 Sqn, Bickendorf, March-April 1919



Sopwith built Snipe F2367 "1 - 2" of B flight 70 Sqn photographed during occupation duties. F2367 "1 - 2" features the 3 white fuselage bands worn by 70 Sqn aircraft since 22 March 1918 and a white striped engine cowling which was seen on numerous 70 Sqn Snipes during occupation duties. 70 squadron operated Sopwith Camels up until the Armistice and inherited their Snipes when they replaced 4 Sqn AFC on occupation duties in February 1919. The decking, shields and front cowl appear to be grey and all fuselage stenciling is evident indicating F2367 still wears its original Sopwith factory finish.



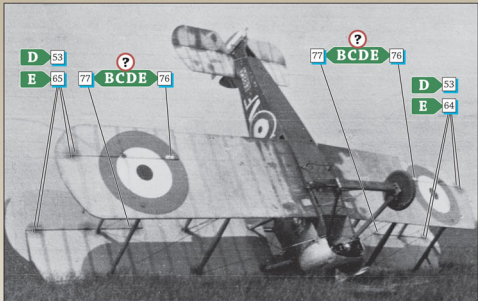


Late production Sopwith Snipes, F2386, F2388 & F2387, near completion at Sopwith Aviation in December 1918. In the background are several ground attack Sopwith TF2 Salamanders, a Dolphin and more Snipes.

Boulton & Paul built late production Sopwith Snipe E6184 walk around

No guns are fitted to late production Boulton & Paul built Sopwith Snipe E6184. Note how different the 'colours' appear in the various photos shown here depending on the lighting, shadows, print reproduction quality and a myriad of other variables.





This post war crash of late production 43 Sqn Sopwith built Snipe "F", probably E8254, allows us to see the highly caster oil stained wings. Much of what we see as caster oil weathering has actually soaked through from the inside of the fabric staining it darker or making it more transparent depending on the original finish. Note the inspection patches [76] & [77] on the bottom ailerons and that the bottom of the fuselage fabric is the same colour as the upper surfaces.



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 at 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 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.



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



32054	1/32 Sopwith Snipe Late	Qty
0132020A	A parts	1
0132020B	B parts	1
0132020C	C parts	1
0132020D	D parts	2
0132020F	F parts	1
0132054H	H Parts	1
0132020P	Photo-etched metal parts	1
132E0017	BR.2 Engine	1
7132054	Instructions	1
9132054	Decals	1

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



32004 - 1/32 Bristol F.2b Fighter



32020 - 1/32 Sopwith Snipe Early



32007 - 1/32 DH.9a 'NINAK'

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