

WINGNUT WINGS



Sopwith 7F.1 Snipe "William Barker"

Following on from their successful Pup, Triplane, Camel and Dolphin, Sopwith's next major contribution to British aviation was the 230hp Sopwith 7F.1 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). 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 been left unpainted and given a 'turned' metal finish. The interplane and center section struts and their metal fittings also appear to have been painted dark brown, grey or with a PC10 equivalent. 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 relatively quickly in service.

Richard Alexander 2019

Wingspan (Early):	Length (Early):	Max Weight:	Max Speed:
30ft (9.14m)	19.16ft (5.84m)	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 7F.1 Snipe "William Barker"

- 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.

1 Construction Step



Choose



Attention



Remove

A1 Part Number



Do Not Cement



Option



Drill

5 Decal



Cement For Metal



Other Side

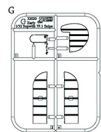
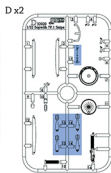
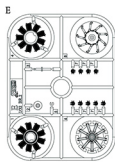
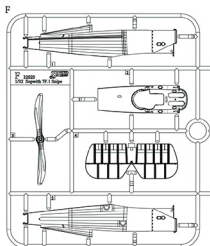
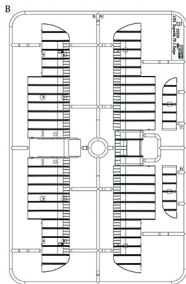
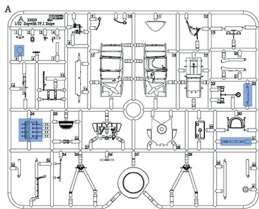


Paint Colour

P1 Photo Etch Part

	All colours	Tamiya	Humbrol	Federal Standard
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*	30340*
g	Dark Wood* - semi gloss	XF68	160*	30111*
h	Service grey - matt	XF82	145	35164
i	Leather - semi gloss	XF52	62	30219
j	Clear Doped Linen (CDL) - gloss	X2 (x10) + XF55 (x1)	41	17886
k	PC12 dope - semi gloss	X1 (x1) + XF10 (x5)	251	26120
l	PC10 dope - semi gloss	XF10 (x1) + XF62 (x2)	155	
m	Black - semi gloss	X18	21	
n	White - semi gloss	XF2	130	
o	Red - semi gloss	XF7	60	
p	Rubber - matt	XF69	66	
q	Brown - matt	XF10	98	36160
r	Khaki - matt	XF49	72	30277
s	Battleship grey (dark) - matt	XF24(x2) + XF74 (x1)	123	36081
t	PC10 enamel - gloss	XF62		14083

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



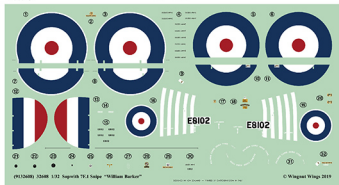
■ = Not Used



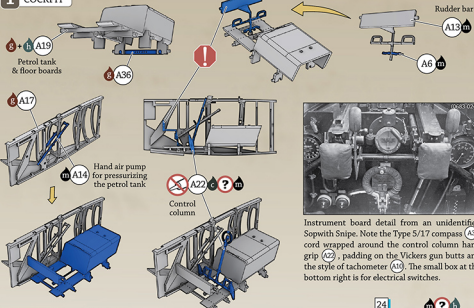
Photo Etch



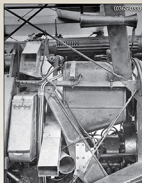
Decals



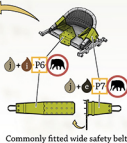
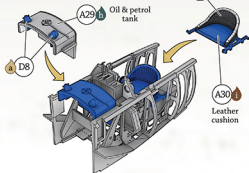
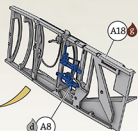
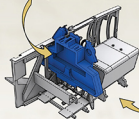
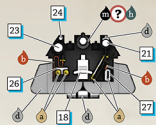
1 COCKPIT



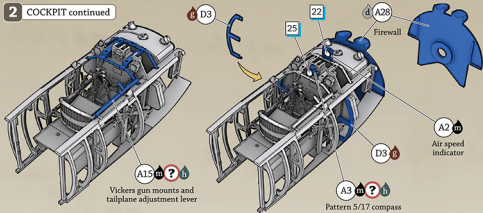
Instrument board detail from an unidentified Sopwith Snipe. Note the Type 5/17 compass (A3), cord wrapped around the control column hand grip (A22), padding around the Vickers gun butts and the style of tachometer (A15). The small box at the bottom right is for electrical switches.



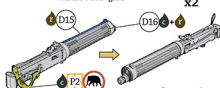
Oil & petrol tank, ammunition magazine, chutes for spent disintegrating link & empty shells and air intake detail. Note that many metal brackets and fittings appear to be painted grey and not black.



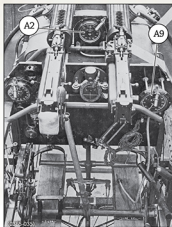
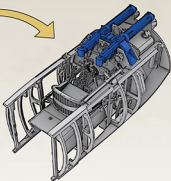
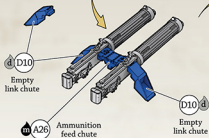
2 COCKPIT continued



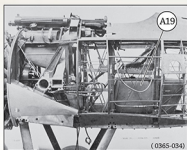
Vickers Mk.1* guns



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.

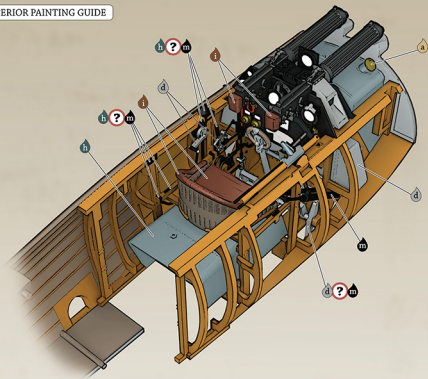


> Note the main petrol tank (A13), cockpit coaming (P2) and wicker pilot's seat (A25). Curiously, much of the internal bracing in the Sopwith Snipe is constructed from RAF wires where their aerodynamic properties are not necessary.



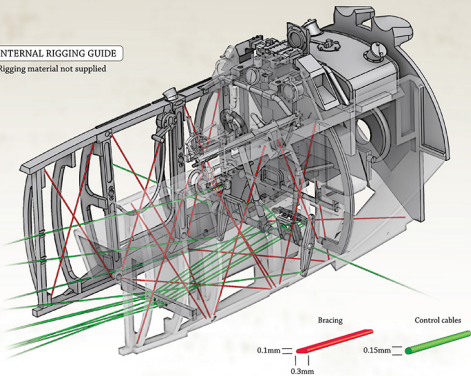
< Vickers Mk.1* guns mounted to an unidentified Sopwith Snipe during assembly. The right gun is missing its padding and Hyland Type 'B' loading handle (P2) and the right heel guard has not been attached to the control column cross shaft (A22). Note the air speed indicator (A2) tachometer (A9), leather foot straps on the rudder bar (A13) and the various wires and cables not yet connected to their various fittings.

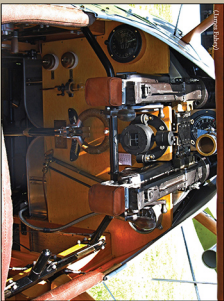
INTERIOR PAINTING GUIDE



INTERNAL RIGGING GUIDE

Rigging material not supplied





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

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

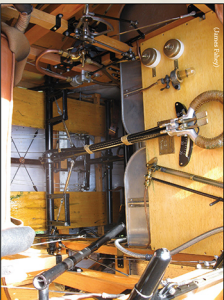
Cockpit interior photos of reproduction Sopwith built Snipe E8102 beautifully built by 'The Vanage Aviator' Ltd. All following colour images are of this remarkable aircraft which is now part of Kermit Weeks Fantasy of Flight collection in Florida USA.

Sopwith Snipe E8102

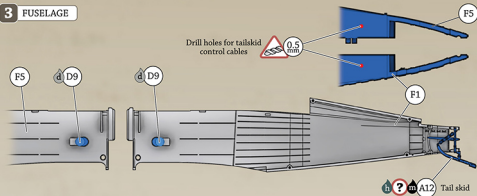


< Left side of the cockpit showing the pilot's wicker seat, petrol pump, throttle and petrol tap (A6).

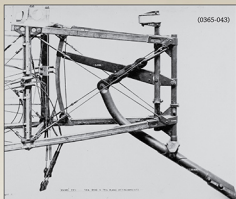
> Right side of the cockpit showing the lever for adjusting the angle of incidence of the tailplane. Although uncommon during the First World War, the 4 point Sutton safety harness (visible here) was widely used post war.



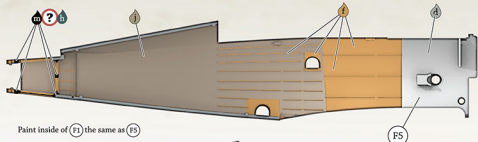
3 FUSELAGE



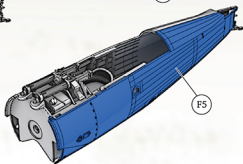
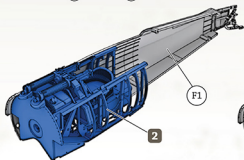
Tailplane and tail skid detail from reproduction Sopwith Snipe E8102.



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).



Paint inside of (F1) the same as (F5)



4 BOTTOM WINGS

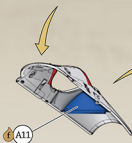
Detail from Barker's E8102 showing the top shields trimmed to expose more of the twin Vickers guns.



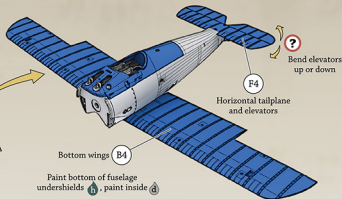
Cut down to create Barker's unique shields.



Decking and shields, paint inside **d** & **f**



f A11



Bend elevators up or down

Horizontal tailplane and elevators

Bottom wings **B4**

Paint bottom of fuselage undershields **h**, paint inside **d**



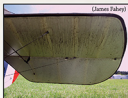
(036-105)

Horizontal tailplane and elevator detail from Sopwith built Snipe E8044 as shown on page 13. Note the gap between the top of the horizontal tailplane and bottom of the fin **(C1)** to allow for the movement of the adjustable tailplane.



(0365-105)

Common style of cockpit decking with asymmetric metal top shields **(F2)** from Sopwith built Snipe E8006. Note the chute for the Vickers gun empty link, padding and hand hold.



(James Fabry)

^ Port horizontal tailplane detail from reproduction E8102 showing rigging detail and castor oil exhaust staining.

> Cockpit detail from reproduction E8102 showing the wooden decking and one interpretation of Barker's cut down metal top shields.

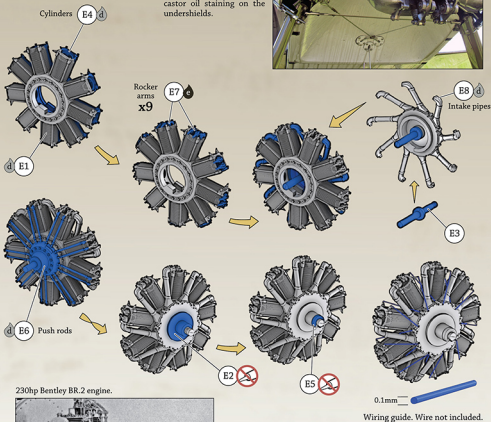


(James Fabry)

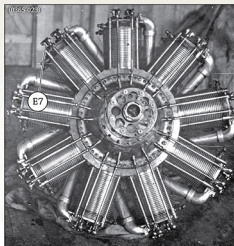
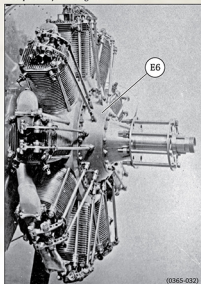
5 230hp BENTLEY BR.2 ENGINE

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

(James Fahey)

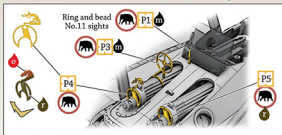
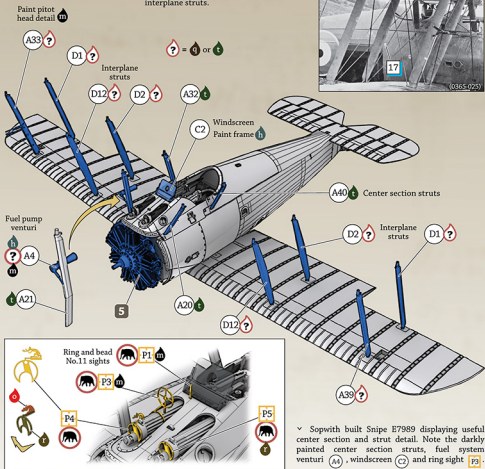


230hp Bentley BR.2 engine.

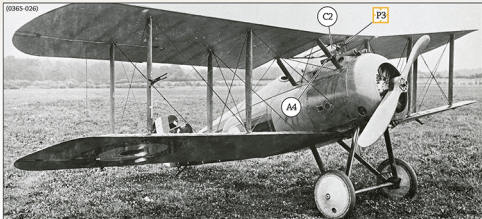


6 STRUTS

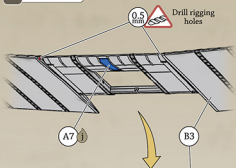
> Strut detail from Sopwith built Snipe E7989. The interplane struts and their metal brackets have been overpainted with the same matt grey colour. Note that Sopwith factory decals are not seen on Barker's E8102 interplane struts.



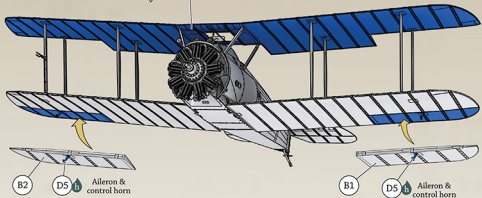
▼ Sopwith built Snipe E7989 displaying useful center section and strut detail. Note the darkly painted center section struts, fuel system venturi (A4), windscreen (C2) and ring sight (P3).



7 TOP WINGS



Top wing center section of Snipe reproduction E8102 showing padding and cabane strut detail. The Aldis sight seen here does not appear to have been fitted to Barker's E8102. The padding on Barker's E8102 in the Canadian War Museum is dark green, not the leather as seen here.



Sopwith built Snipe E8132 "D" of 208 Sqn is from the same production order as Barker's E8102 and conveniently displays much of its numerous stenciling and inspection marks, although it too is missing the Sopwith factory decals commonly applied to the struts and side of the fuselage. The unpainted aluminium cowls and shields have a turned finish unlike Barker's E8102 which have been overpainted in a PC10 equivalent enamel paint. E8132 was delivered to 208 Sqn at Maretz on 3 November and marked with the 'angled bar' squadron markings and individual identification letter D of A flight as shown here and was written off following a crash which injured the pilot, CR Davidson (possibly 6 victory ace Charles Robert Davidson who had previously served with 14 and 111 Sqn).

8 UNDERCARRIAGE



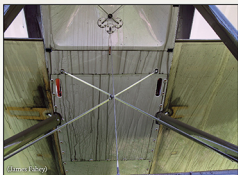
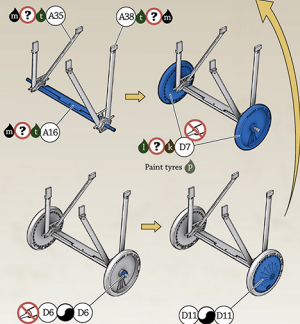
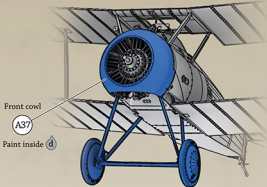
Gun timing warning and Sopwith factory decal **28** applied to the cowling of late production Sopwith built Snipe E8263 of 4 Sqn AFC.



Undercarriage detail from a Sopwith Snipe thought to be Sopwith built E7989. Note the dark bungee suspension 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 32607 & 32055). Almost all Sopwith Snipe propeller blades were wrapped in linen and painted grey.



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

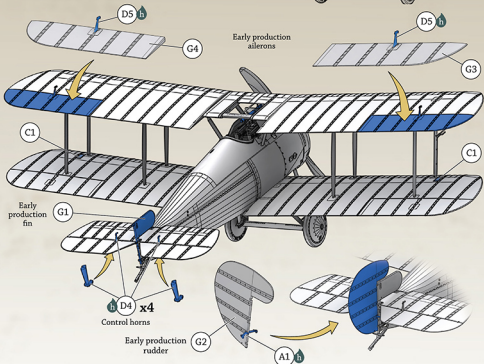
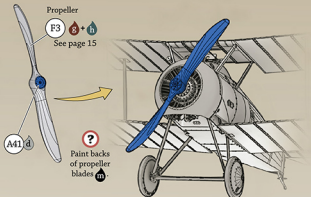


Fuselage detail from Snipe reproduction E8102 showing aluminum undershield panels (usually painted service grey), elevator control horn clearance slots and, once again, extensive castor oil staining.

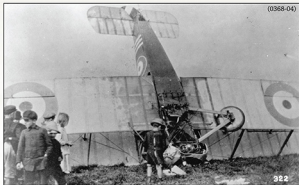
9 FINAL ASSEMBLY

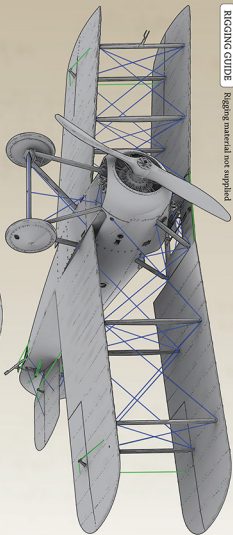


Control horn detail from Sopwith built Snipe E8044



This post war crash of an unidentified 70 Sqn Sopwith Snipe allows us to see the highly castor oil stained fuselage and wings. Much of what we see as castor oil weathering is actually soaked through from the inside of the fabric staining it darker or making it more transparent depending on the original finish. The number of children present, no doubt in their brightly coloured clothing, make a scene like this an interesting diorama subject for the adventurous modeller. Barker's E8102 ended up in a very similar position after he crash landed on 27 October 1918.





Control cables

0.15mm



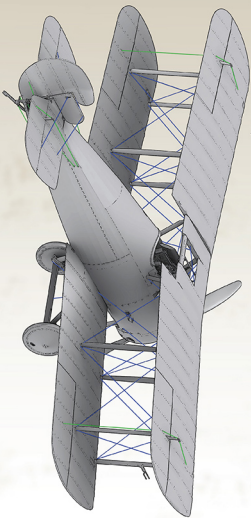
RAF Aerodynamic wires

0.1mm

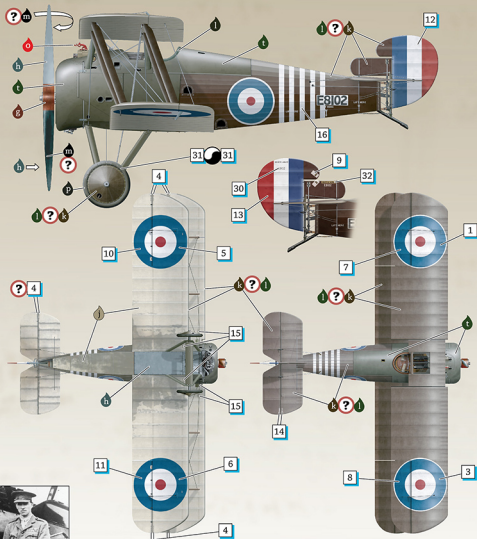
0.3mm



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 any turnbuckles (which are not applicable to the Sopwith Snipe anyway).



Sopwith 7F.1 Snipe E8102, William Barker, 201 Squadron RAF, 27 October 1918 (50 victories)



William George Barker, seen here standing in front of his Sopwith F.1 Camel B6313 in July 1918, was from Manitoba, Canada and joined the Canadian Mounted Rifles in December 1914. Barker served in the trenches as a machine gunner until March 1916 when he transferred to the RFC and served as an observer in 9, 4, and then 15 Sqn before being posted for pilot training in November 1916. He was with 15 Sqn again in February 1917 until he was wounded in early August 1917 and posted to the UK as an instructor. He was not particularly happy as an instructor and was eventually posted to 28 Sqn as a Flight Commander and was back in France in time to be credited with his first 3 victories in October 1917. The following month 28 Sqn were sent to Italy and he was credited with 43 more victories with 28, 66 and 139 Sqn before he returned to the UK in September 1918 to command the School of Air Fighting at Hounslow. Again he found this unfulfilling and in October 1918 was back in France with his brand new Sopwith 7F.1 Snipe E8102 on a "refresher course" with 201 Squadron. Having flown several patrols with 201 Squadron but seen no action, he received orders on 26 October 1918 to return E8102 to the depot at St Omar and report back to London. The next morning, instead of flying to St Omar, Barker took E8102 up for one last solo patrol in which he shot down a two-seater before being jumped by at least 15 Fokker D.VII. In the ensuing battle Barker was wounded, fainted, regained consciousness, wounded again and managed to shoot down at least 3 of the Fokkers before crash landing behind allied lines. His wounds were so severe that he was hospitalized for over 4 months. For this action, carried out in full sight of many witnesses, Barker was awarded the VC which he was able to receive from King George V on 1 March 1919 at Buckingham Palace. He left the RAF in 1919 and returned to Canada where he was involved in commercial aviation and tobacco businesses before being killed in a flying accident in March 1930. For more information on William Barker we recommend reading "Barker VC", by Wayne Ralph, Grub Street, 1997.

(0365-067)



Sopwith 7F.1 Snipe E8102 is from the 2nd production batch of 300 aircraft ordered from Sopwith in March 1918 (numbers E7987 to E8286) and is seen here after being salvaged following his combat on 27 October 1918. William Barker collected Sopwith 7F.1 Snipe E8102 from the St Omer Aircraft Supply Depot in mid October 1918 and took it with him to 201 Squadron RAF, who were still equipped with Camels. Sometime between being collected and extensively damaged, E8102 was painted similarly to Barker's previous 139 Squadron Sopwith F.1 Camel B6313 (see Wingnut Wings model 32074). It appears to have had its engine & side cowlings, decking and wheel covers overpainted in a PC10 equivalent enamel paint and 5 white (but no black) bands painted around the rear of the fuselage. The "red devil" hood ornament **M** is not visible in any photos of E8102 but it is presumed to have been salvaged from Camel B6313 and installed on the starboard Vickers gun of E8102. Note the empty Cooper bomb carrier brackets under the fuselage.

(019-065)



Starboard side view of Sopwith 7F.1 Snipe E8102 showing Sopwith factory stencils on the fin, rudder and fuselage fabric covering, but not cowlings or struts. Despite the wounds Barker received during his epic combat, he managed to crash land his Snipe in friendly territory. The aircraft nosed over, destroying its undercarriage & propeller and damaging the top wing, fin and rudder before coming to rest on its nose and leading edge of the top wing. Sopwith 7F.1 Snipe E8102 was gifted to the Canadian government and the fuselage is on display in the Canadian War Museum, Ottawa. It is unconfirmed how original the finish of E8102 is because the spacing of the white dark bands around the fuselage do not match those seen on WW1 images, but the partially covered fuselage is finished in overall dark green PC10 dope & equivalent paint (including the cabane struts and external RAF rigging wires).

Major William Barker figure (27 October 1918)



Because figure painters prefer a wide variety of types of paint (enamel, acrylic, oil etc) and many of the colour choices are subjective we will let these larger than life images of the figure painted by John Belcher serve as our painting guide.

Please visit our website for some figure painting hints and tips.



Barker was wearing a Sidcot flying suit over his uniform on 27 October 1918.

Flying helmet - semi-gloss red-brown leather

Sidcot suit - matt beige or khaki with fur/wool lining & semi-gloss brown buttons

Gauntlets - matt fur/wool

Fug boots - semi-gloss red-brown leather or beige or khaki cotton with leather reinforcing and fur/wool lining



(2582-002)

^ Red-brown leather Fug boots with wool lining.



(4361-01)



(4361-02)

< Sidcot suit. Note the buttons and worn fur lining and oil staining.

v Beige cotton Fug boots with leather reinforcing and wool lining.



(7246-002)



Snipe EB8044 was from the same order as Barker's EB102 placed in March 1918 for 300 aircraft (numbers E7987 to E8286). Note the various tonal differences between the painted wooden struts, cockpit coaming and side panel compared with the cowlings and doped fabric. While the rib tapes may appear to be a darker or lighter than the underlying fabric this is not true. In this case the effect is caused by their frayed edges reflecting light differently.



Product Design 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 Wingnut 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.



32605 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 '60s. 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@wingnutwings.com



Figure Painting by John Belcher

John's passion for painting figures started in his early teens with an interest in history, military and otherwise, and he's now been at it for over 40 years. As well as assembling and painting commercially available figures John sculpts his own figures from scratch.

Over the years John has received many awards for his work, these include multiple "best in show" awards at national level in New Zealand and Australia, gold medals nationally and internationally in the USA and in England at the prestigious Euro Militaire.



Figure Sculpting by Mike Good

Mike Good built his first model at 6 years old and never really stopped. This led to a lifelong career in the model business which began Testors in 1979. Models and dioramas lead him to figure modelling and he quit his job at Testors in 1987 to become a full time figure sculptor. He has sculpted figures for numerous companies including Poste Militaire, Pegasus, Revell/Monogram, Dragon, The Model Cellar and various toy companies.

He has received numerous accolades over the years including Best of Shows at MPCA and Euro Militaire, Grand Master (MPCA - Model Figure Collectors of America), Chicago Medallist (MMSI - Military Miniature Society of Illinois) and was voted a charter Master of the World Model Soldier Federation. His interests over the years have been many and varied including stints in music, painting, poetry, photography, hiking, karaoke and UFOlogy and was a regular columnist for UFO Magazine (U.S.) for several years! You can find many other figures sculpted by Mike at modelcellar.com



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 Messerschmitts first... Camels and Fokkers later.

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 Datalife, Cross & Cockade and Over the Front.

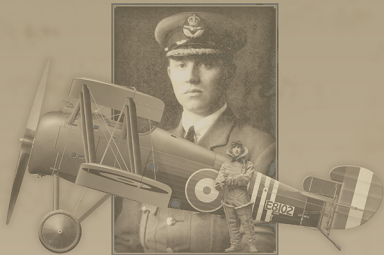
Visit Ronny's Facebook page - www.facebook.com/RONNY-BAR-Aircraft-Profiles-166538664131/



Decal Art by Malcolm Laird

Malcolm has been in the scale model industry since 1981 and still produces his line of Ventura decals and a range of soft cover aviation books, mainly with an RNZAF and RAAF World War II flavour. Outside work he spends time restoring old Kawasaki motorcycles and trying to paint impressionist landscapes, with 'mixed' results so far.

Visit Malcolm's web site at www.venturapublications.com.



32608	Sopwith 7F.1 Snipe "William Barker"	Qty
0132020A	A parts	1
0132020B	B parts	1
0132020C	C parts	1
0132020D	D parts	2
0132020F	F parts	1
0132020G	G Parts	1
0132608P	Photo-etched metal parts	1
132E0017	E parts Bentley BR.2 Engine	1
7132608	Instructions	1
9132608	Decals	1
54608	William Barker Figure	1

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



32055 Sopwith Pup "Gnome"



32067 Fokker D.VII (Fok) "Early"



32074 Sopwith F.1 Camel "Clerget"

Also available from
www.wingnutwings.com

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