A Guide to Sopwith Military and Naval Aircraft of the Great War

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Contents

(Colour-coded pages in the guide indicate first year of major service use or of trials.)

Introduction

In 1914 a mixture of Sopwith types appeared with the RFC and RNAS. From 1916 the company concentrated on the production of single-seat scout (fighter) aircraft powered by rotary engines but also experimented with other types. Many aspects of the period of swift development in aircraft design represented by the Great War can be followed through the products of the company.

This guide features all Sopwith aircraft which saw use either on squadron operations or on limited operational trials during the Great War.

The suggested reading list, at the end of this guide, will enable those who seek more information, particularly about the varied data associated with some of the types, and further analysis to find what they require.

Illustrations

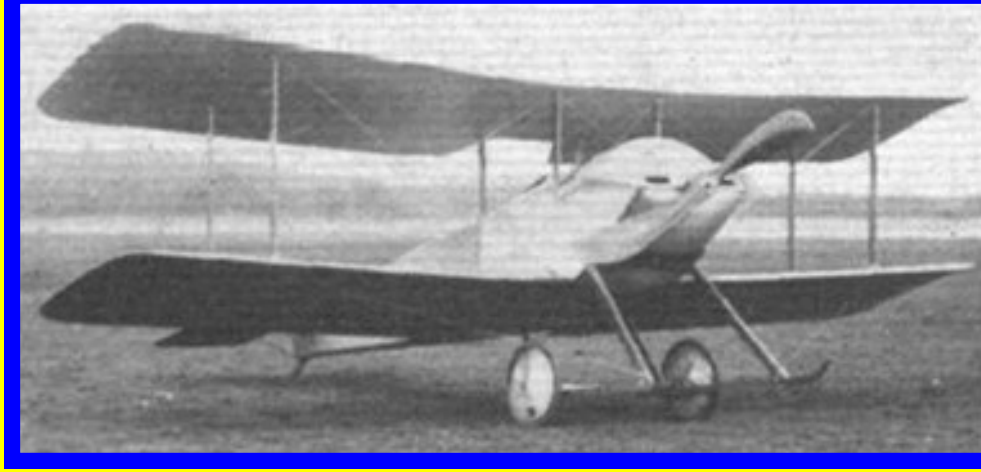
The black and white photographs used in this guide come from the FlightGlobal Archive (FGA) which is to be found at http://www.flightglobal.com/pdfarchive/ . The owners of this material have generously allowed its use as "an open-access resource for everyone interested in aviation". For details please see their website.

The colour photographs of the Baby, Pup, Triplane and Camel are from the author's collection.

OPERATIONAL SERVICE
May 1914 – May 1915
Served with RFC and RNAS
PRODUCTION
36
AIRFRAME
Wooden structure, fabric and ply covered.
ENGINE
One 80hp Gnome
ARMAMENT
One Lewis gun
Small (20lb.) bombs
DIMENSIONS
Wing span: 25ft. 6in.
Length: 20ft. 4in.
Height: 8ft. 5in.
Wing area: 241 sq. ft.
WEIGHTS
Empty: 730lb.
Loaded: 1,120lb.
PERFORMANCE
Max. speed: 92 mph at sea level
Endurance: 3½ hours
ILLUSTRATION
FGA

Sopwith Tabloid

First Flight: Nov 1913
Single seat fighting biplane



A few Tabloids had experimental mountings for Lewis guns including one with the gun firing through the propeller disc, deflector plates protecting the blades. On 8 October 1914, using 20lb. bombs, Flt Lt R L G Marix destroyed Zeppelin Z IX in a raid on Dusseldorf. Four went to the Dardanelles aboard HMS Ark Royal. Two variations, built for the 1914 Gordon Bennett air race, served with the Fast Flight at Hendon.

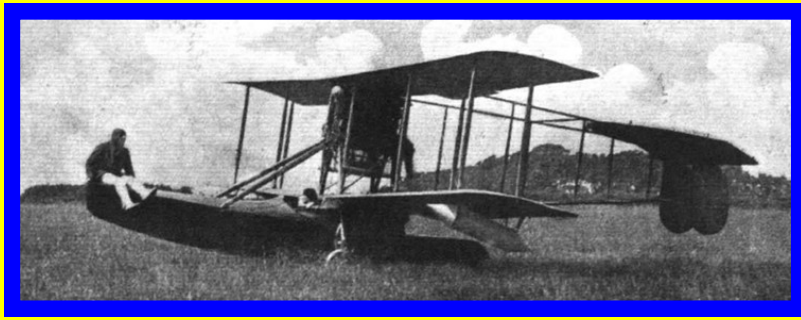
Other Pre-War designs in RNAS wartime use

Several other pre-war Sopwith types were taken up by the RNAS for limited war use.

One **Bat Boat**, the first flying boat to be built in Britain, was used on patrols from Scapa Flow until Nov 1914.
Six **Three-Seater Tractor Biplanes** served with the RNAS from Dunkirk and Gt. Yarmouth.
The sole **Sociable** saw RNAS service at home and briefly in Belgium.
At least one **Anzani Tractor Seaplane** saw service in the early days of the war.
Two **Pusher Seaplanes** (Nos 123 & 124) saw little service and were deleted in February 1915 as unsatisfactory.
Of five **Greek Seaplanes** two served at Killingholme, one was wrecked at Gt. Yarmouth and two were converted to land-planes.
The **Special Seaplane**, apparently with an 80ft wing span, proved difficult to take off with full load and was dismantled in April 1915
Two **Daily Mail Seaplanes**, for the round-Britain race, saw some service. The first on anti-Zeppelin patrols and the second, as a landplane, at Dunkirk and Eastchurch.
Two **Type 137** tractor seaplanes served experimentally (including torpedo-dropping) and on patrol work until Jan 1916.
Three **Type C** seaplanes were delivered in 1914 but did little work before loss or deletion by March 1915.

ILLUSTRATIONS: FGA

Other Pre-war designs



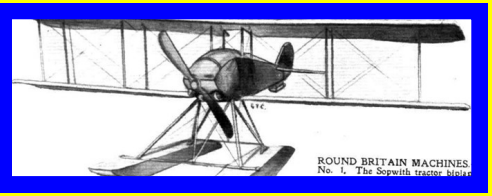
Bat Boat

Three-seater

Sociable

Greek seaplane

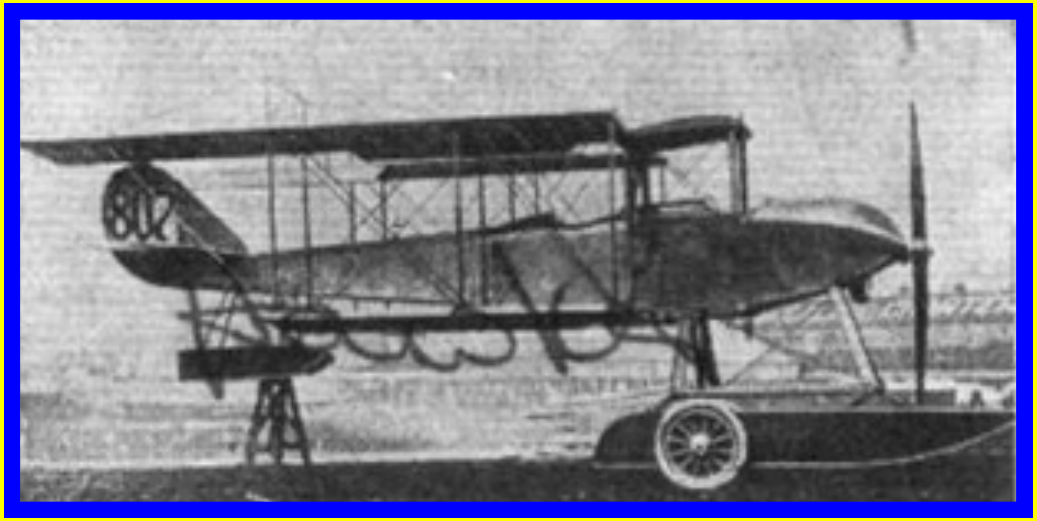
Daily Mail



OPERATIONAL SERVICE:
1914 – 1915
PRODUCTION
12
AIRFRAME
Wooden structure, fabric and ply covered
ENGINE
One 100hp Gnome Monosoupape
ARMAMENT
Small bombs
DIMENSIONS
N/A
WEIGHTS
N/A
PERFORMANCE
Max Speed: 80 mph
ILLUSTRATION
FGA

Sopwith Folder (Admiralty Type 807)

Two-seat twin-float seaplane

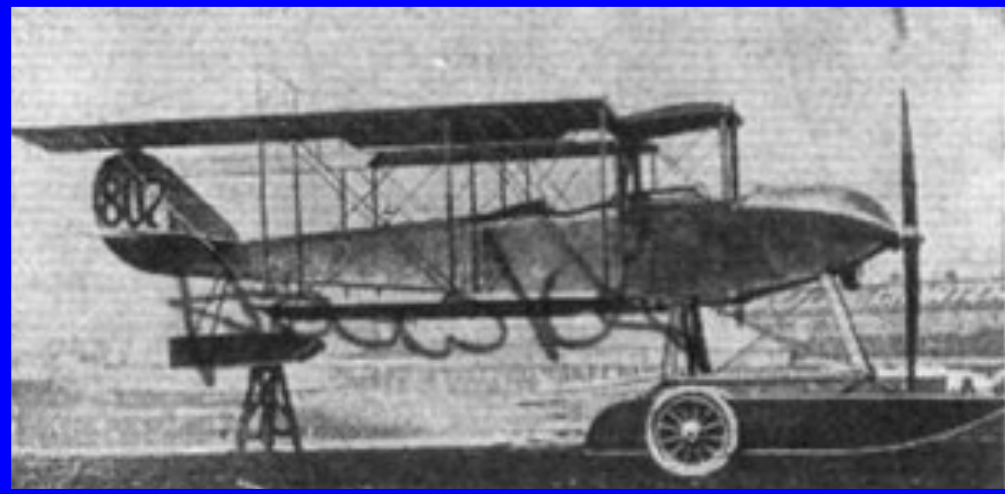


This type was supplied to the RNAS from July 1914. It used folding wings, a system for which Horace Short had taken out a patent. Sopwith paid Short a royalty of £15 to use the system. 807s served on patrol duties at Calshot and Gt Yarmouth, in the Dardanelles and East Africa, and on the seaplane carrier HMS Ark Royal. These aircraft were underpowered and some had trouble with flooding floats.

OPERATIONAL SERVICE:
March 1915 and withdrawn by the end of 1915
Served with RNAS
PRODUCTION
24
AIRFRAME
Wooden structure, fabric and ply covered
ENGINE
One 100hp Gnome Monosoupape
ARMAMENT
Grenades, pistols, rifles.
Small bombs
DIMENSIONS
Wing span: 36ft.
WEIGHTS
N/A
PERFORMANCE
Speed: 80 mph
Service ceiling: 3,000ft.
ILLUSTRATION
FGA: Type 807 seaplane from which the Two-seater Scout was developed.

Sopwith Two-seater Scout

Two-seat patrol aircraft



Known to officialdom as the Two-seater Scout this type was, to a great extent, a landplane version of the Type 807 seaplane. It was used for anti-Zeppelin patrols from Chingford, Gt. Yarmouth, Hendon, and Killingholme but with such a low service ceiling there was little prospect of success.

OPERATIONAL SERVICE:
1915 - one aircraft to France
PRODUCTION
23 assembled machines and 13 sets of spares
AIRFRAME
Wooden structure, fabric and ply covered
ENGINE
One 100hp Gnome Monosoupape/One 110hp or 150hp Sunbeam (authorities vary)
ARMAMENT
One Lewis gun
Underwing bomb carriers fitted (Robey)
DIMENSIONS (Robey)
Wing span: 50ft.
Length: 32ft. 6in.
Wing area: 474 sq. ft.
WEIGHTS
N/A
PERFORMANCE
Max Speed: 80 mph
ILLUSTRATION
FGA

Type 806 Gun Bus

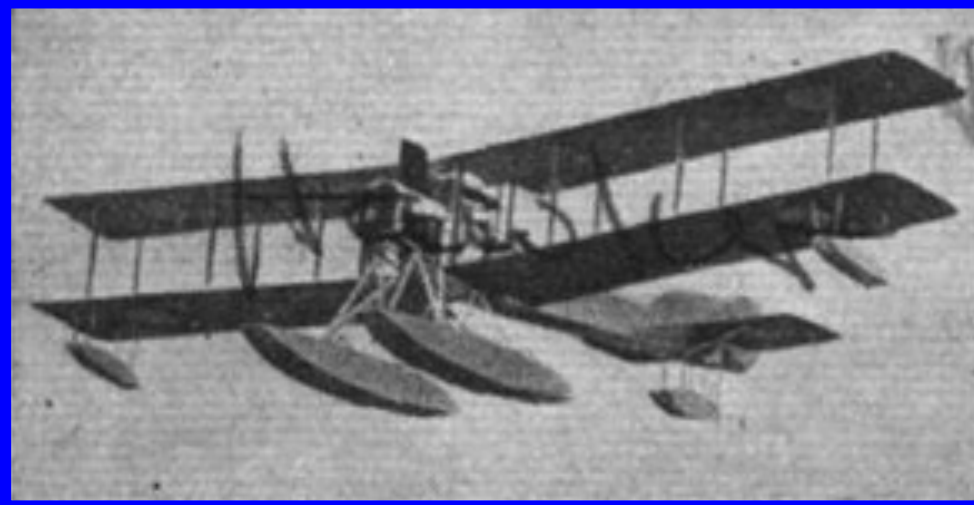
Two-seat pusher gun carrier

One example of this type saw brief service in France. The rest were delivered to Detling, Eastchurch and Hendon. The 806 was a pusher type which mounted a free-firing Lewis gun in the front of the nacelle. Thirty more were ordered, and sub-contracted to Robey of Lincoln. Seventeen complete machines were delivered by Robey. The rest of the order was made up in spares. Slow production, completed late in 1915, meant that by the time they were ready two-seat pushers were obsolete. Remaining 806s were withdrawn in the summer of 1916.

OPERATIONAL SERVICE:
1915 -1916
Served with RNAS
PRODUCTION
22 (18 known to have been delivered)
AIRFRAME
Wooden structure, fabric and ply covered
ENGINE
One 225hp Sunbeam Mohawk
ARMAMENT
One Lewis gun
One 14” 810lb torpedo
DIMENSIONS
N/A
WEIGHTS
N/A
PERFORMANCE
N/A
ILLUSTRATION
FGA

Sopwith Admiralty Type 860

Two-seat torpedo-carrying twin-float seaplane



Lifting an 810lb torpedo demanded a powerful engine. Sopwith finally managed the task with the 860 powered by a 225hp Sunbeam engine. An 860 first lifted a torpedo on 27 Jan 1915, at Calshot. The 860 saw limited RNAS service: three at RNAS Isle of Grain, at least one at each of RNAS Calshot, Dover, Dundee, Felixstowe, Great Yarmouth, and Killingholme. Four were sent to HMS Engadine and Ben-my-Chree but were not much used. Two were sent to the Aegean for service with HMS Ark Royal. The 860 never launched a torpedo in action. Official reports described the 860 as unsatisfactory and the Admiralty decided to use Short Bros., which had more seaplane experience than Sopwith, as its main seaplane supplier.

OPERATIONAL SERVICE
Early 1915 - (at least) Nov 1916
Served with RNAS
PRODUCTION
136
AIRFRAME
Wooden structure, fabric and ply covered
ENGINE
One 100hp Gnome Monosoupape
ARMAMENT
One Lewis gun
Various bomb loads - e.g. 1-65lb./4-16lb.
DIMENSIONS
Wing span: 25ft. 8in.
Length: 22ft. 10in.
Height: 10ft.
Wing area: 236 sq. ft.
WEIGHTS
Empty: 1,226lb.
Loaded: 1,715lb.
PERFORMANCE
Max. speed: 87 mph
Service ceiling: 8,000ft.
ILLUSTRATION
FGA

Sopwith Schneider

Production began: November 1914
Single seat fighting seaplane

This type was similar to the floatplane Tabloid which had won the Schneider Trophy in April 1914. Most Schneiders had a Lewis gun on the centre section fitted to fire above the propeller disc. Flight Sub-Lieutenant A F Brandon achieved a late success on this type on 21 Nov 1916 by shooting down an enemy aircraft at Mudros. Flt Lt. Welsh launched successfully from a deck ramp aboard the sea-plane carrier HMS Campania on 6 Aug 1915. It had been found that the Schneider's floats were insufficiently robust for taking off from water on operations.

OPERATIONAL SERVICE:
Sept 1915 - Nov 1918
Served with RNAS
PRODUCTION
286
AIRFRAME
Wooden structure, fabric and ply covered
ENGINE
One 110 hp or 130 hp Clerget
ARMAMENT
One Lewis gun and a 65lb. Bomb or 2-65lb. bombs
DIMENSIONS
Wing span: 25ft. 8in.
Length: 23ft.
Height: 10ft.
Wing area: 236 sq. ft.
WEIGHTS (130 hp Clerget)
Empty: 1,226lb.
Loaded: 1,715lb.
PERFORMANCE (130 hp Clerget)
Max. speed: 100 mph
Endurance: 2¼ hours
ILLUSTRATION
Sopwith Baby reconstruction, Fleet Air Arm Museum, (author's collection)

Sopwith Baby

Single seat fighting seaplane

The chief difference from the Schneider was the Baby's Clerget engine and the new horseshoe-shaped cowling made the Baby's appearance noticeably different from that of the Schneider. Used for anti-submarine and anti-airship work, the Baby was delivered to the RNAS from September 1915. Some had centre-section Lewis guns but later models had a Lewis synchronised to fire through the propeller disc. Babies served until the end of the war.

OPERATIONAL SERVICE
April 1916 - July 1918
Served with RFC, RNAS, French, Belgian and American air forces and some went to Russia. Also Romania, Latvia and Japan

PRODUCTION
1,534 (and c. 4,500 under licence in France)

AIRFRAME
Wooden structure, fabric and ply covered

ENGINE
One 110 hp or 130 hp Clerget. (Other power plants also used)

ARMAMENT
One fixed forward-firing synchronised Vickers gun and one free Lewis gun in rear cockpit.
4 - 65lb Bombs or more lighter bombs (single seat bomber)

DIMENSIONS
Wing span: 33ft. 6in.
Length: 25ft. 3in.
Height: 10ft. 3in.
Wing area: 346 sq. ft.

WEIGHTS
Empty: 1,305lb.
Loaded: 2,150lb.

PERFORMANCE 130hp Clerget
Max. speed: 107 mph at sea level
Service ceiling: 15,500ft.

ILLUSTRATION: FGA

Sopwith 1½ Strutter

First Flight: Dec 1915

Two-seat scout/single and two-seat light bomber

The 1½ Strutter introduced the RFC and RNAS to the forward-firing synchronised machine gun. Pilots liked the Strutter and its forward-firing gun was, to start with, a surprise for the Germans. As the Germans introduced more manœuvrable aircraft, from the Albatros D.I onwards, the Strutter began to struggle. July 1917 saw the start of its replacement on the Western Front by improved aircraft. In Home Defence squadrons they were largely replaced by the end of 1917 with only 78 squadron keeping them until July 1918. The bomber version carried out strategic raids on German industry as well as attacking Zeppelin sheds.

OPERATIONAL SERVICE
Sept 1916 - May 1919
Served with RFC and RNAS
PRODUCTION
1,770
AIRFRAME
Wooden structure, fabric covered. Steel tube wingtips and tail unit with fabric covering
ENGINE
One 80 hp Le Rhone/Gnome or Clerget, or 100 hp Gnome monosoupape
ARMAMENT
One fixed forward-firing synchronised Vickers gun or an upward-firing Lewis gun. Some armed with Le Prieur rockets.
DIMENSIONS
Wing span: 26ft. 6in.
Length: 19ft. 3¾in.
Height: 9ft. 5in.
Wing area: 254 sq. ft.
WEIGHTS Le Rhone
Empty: 787lb.
Loaded: 1,225lb.
PERFORMANCE Le Rhone
Max. speed: 111½ mph at sea level
Service ceiling:17,500
Endurance: 3 hours
ILLUSTRATION
The Shuttleworth Collection Pup (author's collection)

Sopwith Pup

First Flight: Feb 1916
Single-seat scout

The success of Pups in the early spring of 1917 caused German pilots to seek to avoid combat. Von Richthofen: "We saw immediately that the enemy aircraft was superior to ours." McCudden: "[The Pup] could turn twice to an Albatros' once." The Pup's first victory claim was by F/ Sub-Lt. S.J. Goble on 24 September 1916, against an L.V.G. two-seater. Many Pups saw service on aircraft carriers and warships with flying-off platforms. Such was the speed of development in fighting aeroplanes that by the summer of 1917 the Pup began to find itself in need of replacement in France. It was still, however, of use in Home Defence, and at sea. Beardmore produced a modified version for naval use.

OPERATIONAL SERVICE
Feb - Dec 1917
Served with RNAS, French Navy, & Russia (one machine)
PRODUCTION
145
AIRFRAME
Wooden structure, fabric covered
ENGINE
One 110 hp or 130 hp Clerget. (Latter on most aircraft)
ARMAMENT
One fixed forward-firing synchronised Vickers gun. (Two on some aircraft)
DIMENSIONS
Wing span: 26ft. 6in.
Length: 18ft. 10in.
Height: 10ft. 6in.
Wing area: 231 sq. ft.
WEIGHTS (130hp Clerget)
Empty: 1,101lb.
Loaded: 1,541lb.
PERFORMANCE (130hp Clerget)
Max. speed: 117 mph at 5,000ft.
Service ceiling: 22,00ft.
Endurance: 2 hours
ILLUSTRATION
The Shuttleworth Collection Triplane (author's collection)

Sopwith Triplane

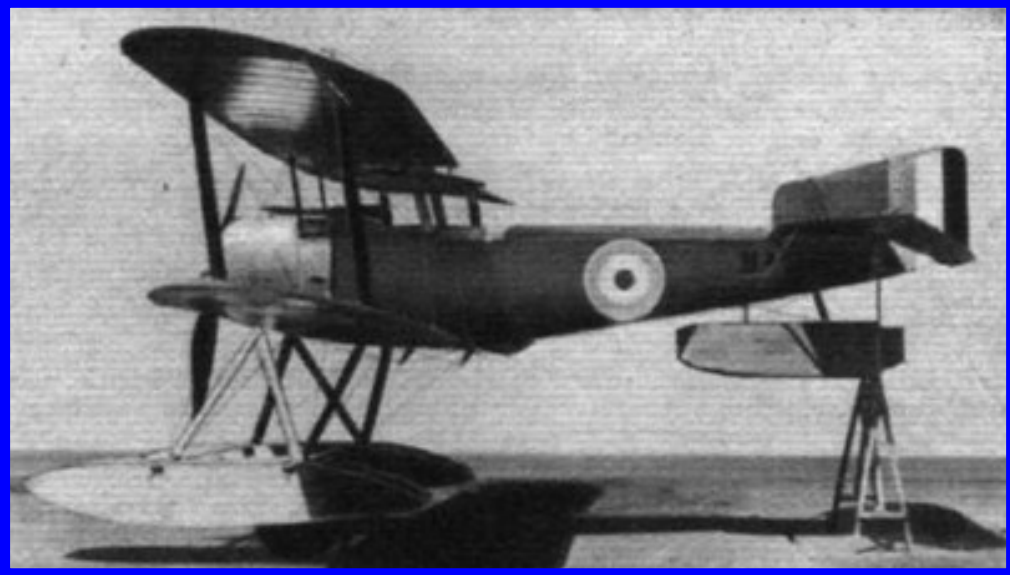
First Flight: June 1916
Single-seat scout

The Triplane's narrow chord wings were designed, as was the second wing's eye level location, to improve pilot visibility. Ailerons on all six wings gave it remarkable manœuvrability and with that linked to its impressive climb rate it proved much better than its main opponent, the Albatros D.III. Responding to German pilots' stories of the Triplane's superiority Fokker developed his own version, the Dr1. The Sopwith Triplane was phased out in favour of the Camel from July 1917. The first Triplane (N500) did service trials in June 1916 and was very well received. Squadron equipment began in Dec 1916 but the Triplane units really began their careers on the Western Front in Feb 1917.

OPERATIONAL SERVICE
1917 - 1918
Served with RNAS/RAF
PRODUCTION
180
AIRFRAME
Wooden structure, fabric covered
ENGINE
One 110 hp or 130 hp Clerget.
ARMAMENT
One fixed forward-firing synchronised Lewis gun.
2 - 65lb bombs
DIMENSIONS
Wing span: 27ft. 9¼in.
Length: 23ft. 4in.
Height: 9ft. 6in.
Wing area: 246 sq. ft.
WEIGHTS (110hp Clerget)
Empty: 1,386lb.
Loaded: 1,946lb.
PERFORMANCE
Max. speed: 92 mph at sea level
Service ceiling: 7,500ft.
Endurance: 2 hours
ILLUSTRATION
FGA

Fairey Hamble Baby

Single-seat anti-submarine patrol seaplane

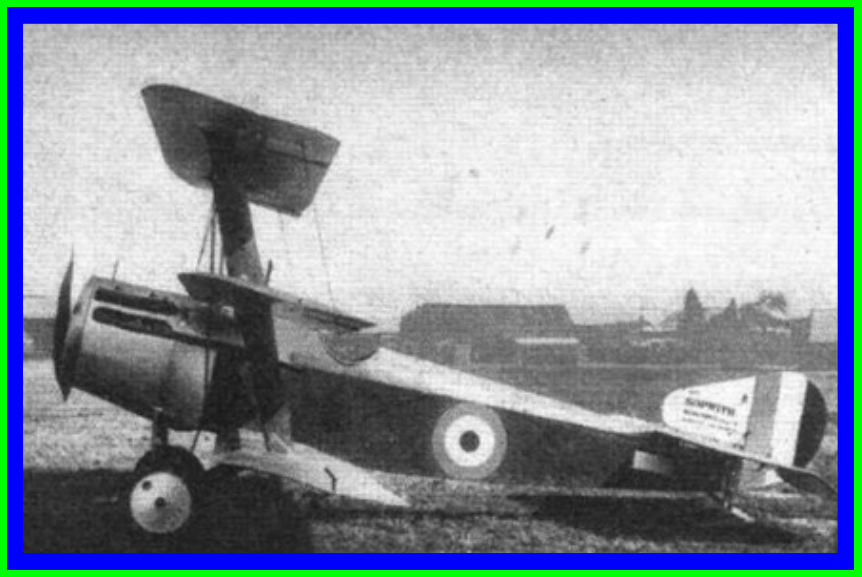


The Hamble Baby retained the Sopwith Baby fuselage but otherwise was re-designed by Fairey with new wings, floats and tail. Fairey's patent camber changing gear enabled the introduction of flaps which could also be used as ailerons. The camber increase provided by the flaps increased lift for the heavier Hamble Baby. 74 Babies built by Parnall were converted to landplanes and were known as Converts. Hamble Babies served from coastal stations at home and abroad and from seaplane carriers.

OPERATIONAL SERVICE
1917 - Trial work - only one aircraft
AIRFRAME
Wooden structure, fabric covered
ENGINE: One 150hp Hispano-Suiza (N509)
ARMAMENT
One forward-firing synchronised Vickers machine gun
DIMENSIONS
Wing span: 28ft. 6in.
Length: 23ft. 2in.
Height: 10ft. 6in.
Wing area: 340sq.ft.
WEIGHTS
N/A
PERFORMANCE
Max speed: 120 mph at sea level
ILLUSTRATION
FGA

Hispano-Suiza Triplane

First Flight: October 1916
Single-seat scout



Two Hispano-Suiza engined Triplanes were built. One (N510) was lost early because tail flutter caused the tail assembly to break off. The second of this type (N509) was briefly tested at Dunkirk and later flew four sorties from Manston against German bombers in the period May to July 1917. It was damaged in a collision in August and deleted in October 1917.

OPERATIONAL SERVICE
1917 - Trial work - only one aircraft
AIRFRAME
Wooden structure, fabric covered
ENGINE:
One 200hp Hispano-Suiza
ARMAMENT
20 - 25lb bombs
One fixed forward-firing synchronised Lewis gun during service trials only
DIMENSIONS
Wing span: 38ft. 6in.
Length: 27ft.
Height: 9ft. 6in.
WEIGHTS
Empty: 1,700lb.
Loaded: 3,055lb.
PERFORMANCE
Max speed: 118½ mph at 10,000ft.
Service ceiling: 19,000ft.
Endurance: 3¾ hours
ILLUSTRATION
FGA

B.1 Bomber

First Flight: April 1917
Single-seat bomber

Two examples of this type were built. The first spent two weeks in May 1917 with 5 Naval squadron at Dunkirk. It flew on operations beside 5N's D.H.4s but did not warrant a production order.

OPERATIONAL SERVICE
June 1917 - Nov 1919
Served with RFC, RNAS, RAF, Australian Flying Corps, U.S. Air Service
PRODUCTION
5,825
AIRFRAME
Wooden structure, fabric covered
ENGINE
One 110 hp or 130 hp or 140hp Clerget. 110hp or 180hp Le Rhone, 100hp or 150hp Gnome monosoupape. 150hp B.R.1
ARMAMENT
F.1: 2 fixed forward-firing synchronised Vickers gun.
2F.1: Usually 1 forward-firing Vickers and 1 Lewis on upper wing. **Home defence versions**: 2 Lewis on upper wing.
Ground attack: 4 - 25lb bombs
DIMENSIONS (F.1)
Wing span: 28ft.
Length: 18ft. 9in.
Height: 8ft. 6in.
Wing area: 231 sq. ft.
WEIGHTS 130hp Clerget
Empty: 929lb.
Loaded: 1,453lb.
PERFORMANCE 130hp Clerget (150hp B.R.1)
Max. speed: 117 mph at sea level (125mph)
113 m.p.h. at 10,000ft. (121mph)
Service ceiling: 19,000ft. (22,000ft.)
Endurance: 2½ hours (2½ hours)
ILLUSTRATION
Sopwith 2F.1 Camel, Imperial War Museum. (author's collection)

Sopwith F.1 and 2F.1 Camel

First Flight: Dec 1916
Single-seat scout

The Camel was designed to be a better armed fighter than the Pup and Triplane but to retain their manœuvrability. For the novice, or those used to the pleasant flying characteristics of the Pup and Triplane, the Camel was difficult to master but once mastered its striking manœuvrability proved a winning attribute. The Camel became a dominant player in the air war. Upper wing Lewis guns eliminated glare for night-fighting pilots. 2F.1s replaced Pups at sea. 2F.1 N6812 flown by Lt Culley, and launched from a lighter towed by HMS Re-doubt, shot down Zeppelin L53 on 10 August 1918.

OPERATIONAL SERVICE
Dec 1917 - July 1919
Served with RFC/RAF
PRODUCTION
2,074 (not including first prototypes)
AIRFRAME
Wooden structure, fabric and ply covered. Back staggered wings. Centre section of steel tubing.
ENGINE
One 200hp Hispano-Suiza
ARMAMENT
Two forward-firing synchronised Vickers guns on nose and one/two fixed Lewis gun(s) mounted on front centre-section wing spar. Some pilots removed the Lewis guns.
DIMENSIONS
Wing span: 32ft. 6in.
Length: 22ft. 3in.
Height: 8ft. 6in.
Wing area: 263¼ sq. ft.
WEIGHTS
Empty: 1,410lb.
Loaded: 1,959lb.
PERFORMANCE
Max. speed: 136 mph at sea level
114 mph at 15,000ft.
Service ceiling: 20,000ft.
ILLUSTRATION
FGA

Sopwith 5F.1 Dolphin

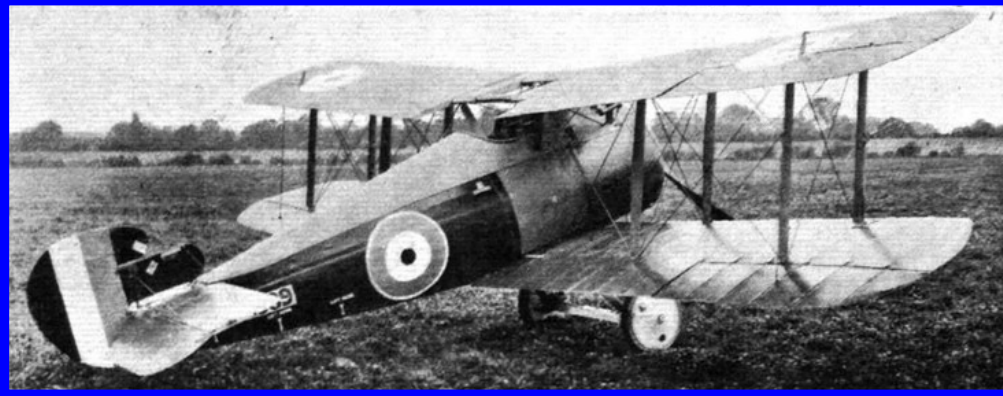
First Flight: June 1917
Single-seat scout

Inspired by the need for pilots to have a good view above and around whilst in air combat the Dolphin's designer, Herbert Smith, was obliged by the aerodynamic and centre-of-gravity considerations caused by the positions he chose for the pilot and the top wing to put the bottom wing in a back-staggered location. On trials in France both Capt Bishop and Lt Lewis commented favourably on its manœuvrability. Engine troubles and other teething problems led to delays before production aircraft began to appear in October 1917. In France 19 Squadron became fully-equipped in early January 1918. The intended four-gun arrangement did not always win favour in the field, with pilots opting to dispose of one or both of the Lewis guns. Over three-quarters of the production was in storage at the war's end - awaiting engines.

OPERATIONAL SERVICE
Aug 1918 - Nov 1926
Served with RAF & Australian Flying Corps
PRODUCTION
2,172 (not including prototypes)
AIRFRAME
Wooden structure, fabric, ply and sheet metal covered
ENGINE
One 150hp B.R.2
ARMAMENT
Two forward-firing synchronised Vickers guns on nose.
DIMENSIONS
Wing span: 31ft. 1in.
Length: 19ft. 9in.
Height: 8ft. 9in.
Wing area: 271 sq. ft.
WEIGHTS
Empty: 1,312lb.
Loaded: 2,020lb.
PERFORMANCE
Max. speed: 125 m.p.h. at sea level
121 m.p.h. at 10,000ft.
Service ceiling: 20,000.
Endurance: 3 hours
ILLUSTRATION
FGA

Sopwith 7F.1 Snipe

First Flight: Nov 1917
Single-seat scout

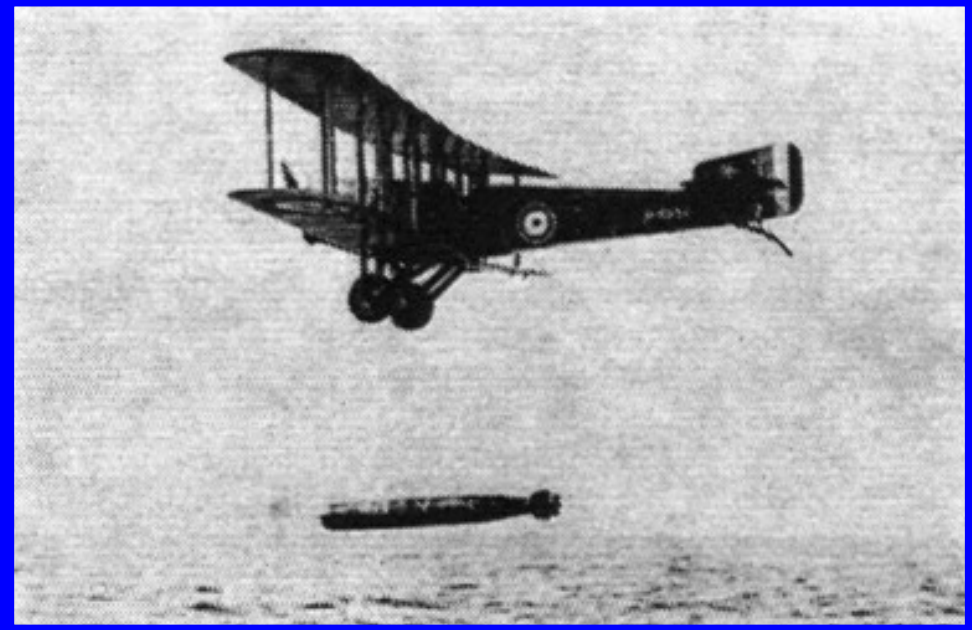


The Snipe turned tightly like other rotary-engine types but was easier to control than the Camel. The Snipe was first flown as a single-bay machine with flat sides. As it was developed it acquired two-bay wings, a curved fuselage and a new tail. 43 Sqn began to equip with Snipes as replacements for its Camels in August 1918, 4 Sqn AFC re-equipped in early October, and 78 Sqn had one on charge in October. 201 Sqn hosted Maj Barker's ten-day instructor's front line refresher during which (27 Oct) he won a VC in an epic dog-fight with at least fifteen Fokker DVIIs – shooting down three and forcing down two others. The action developed after he had forced down a Rumpler C type.

OPERATIONAL SERVICE
Oct 1918 - April 1923
Served with RAF
PRODUCTION
232
AIRFRAME
Wooden structure, fabric covered
ENGINE
One 200hp Sunbeam Arab
ARMAMENT
One 18" torpedo.
DIMENSIONS
Wing span: 46ft. 9in.
Length: 28ft. 6in.
Height: 10ft. 8in.
Wing area: 566 sq. ft.
WEIGHTS
Empty: 2,199lb.
Loaded: 3,883lb.
PERFORMANCE
Max. speed: 103½ m.p.h. 2,000ft
Service ceiling: 12,100ft
Endurance: 4 hours
ILLUSTRATION
FGA - Cuckoo test dropping a torpedo in the Firth of Forth, 1918.

Sopwith T.1 (Cuckoo)

First Flight: June 1917
Single-seat torpedo carrier



The Admiralty asked Sopwith, in late 1916, to produce designs for aircraft capable of carrying one or two 18" torpedoes. However, no sense of urgency surrounded the provision of a torpedo bomber for the Fleet at a time when the pressing need was for fighters for the Front. Cuckoo, as it was later named, production was initially entrusted to two companies with no experience of aeroplane construction: Fairfield and Pegler. Blackburn, whose production of Babies was coming to an end, had to be brought in to rescue the programme. The preferred Hispano-Suiza engines were allocated to the SE5As and the heavier Sunbeam Arabs were substituted. Beatty's October 1917 scheme to attack the German fleet in harbour thus came to nothing as the T.1s were not ready in time.

OPERATIONAL SERVICE
1918 - Trial work - only two aircraft to France
PRODUCTION
210 completed from an order of 1,100
AIRFRAME
Wooden structure, fabric, ply and sheet metal covered with armour plate.
ENGINE
One 230hp B.R.2
ARMAMENT
Two forward-firing synchronised Vickers guns on nose.
DIMENSIONS
Wing span: 31ft. 2⅝in.
Length: 19ft. 6in.
Height: 9ft. 4in.
Wing area: 272 sq. ft.
WEIGHTS
Empty: 1,844lb.
Loaded: 2,512lb.
PERFORMANCE
Max. speed: 125 m.p.h. at sea level
Service ceiling: 13,000
Endurance: 1½ hours
ILLUSTRATION
FGA

Sopwith T.F.2 Salamander

First Flight: Apr 1918
Single-seat ground attack fighter

As the two examples of the T.F. 1 Camel interim trench fighter flew to France for trials on 7 March 1918 the specially designed successor was already taking shape and made its first flight on 27 April and flew to France on 9 May for operational trials. The front fuselage was made of 650lbs of armour plate. The Vickers guns had 1,000 rounds per gun instead of the usual 750. At least one Salamander was flown, experimentally, with a battery of eight downward firing Lewis guns. In mid-August Captain J W Pinder test flew an example and reported that it had manœuvrability in the Bristol Fighter class and might cope with an Albatros below 10,000ft. Production was increasing swiftly in the autumn of 1918 but only two aircraft were in France on 11 November 1918.

OPERATIONAL SERVICE
1918 - Trial work - only one aircraft to France
PRODUCTION
Two prototypes
AIRFRAME
Wooden structure, fabric, ply and sheet metal covered with armour plate.
ENGINE
One 230hp B.R.2
ARMAMENT
One forward-firing synchronised Vickers gun on nose and one Lewis gun in rear cockpit..
DIMENSIONS
Wing span: 34ft. 6in.
Length: 23ft. 3½in.
Height: 9ft. 6in.
Wing area: 326 sq. ft.
WEIGHTS
Empty: 2,178lb.
Loaded: 3,071lb.
PERFORMANCE
Max. speed: 114 m.p.h. at 1,000ft
Service ceiling: 9,000ft
ILLUSTRATION
FGA - second prototype with armour extended to rear of second cockpit.

Sopwith Buffalo

Two-seat contact patrol fighter

The first prototype Buffalo went to France for trials and arrived at Marquise on 20 October 1918. It was quite well received but its trials were incomplete when the Armistice came into force. No production resulted.

Suggested reading

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M Davis, *Sopwith Aircraft*, Marlborough, 1999

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J W R Taylor, *Combat Aircraft of the World*, London, 1969

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