Section 1: Military Wings

A selection of military aircraft of the twentieth century

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English Electric Lightning
BAE Systems Hawk

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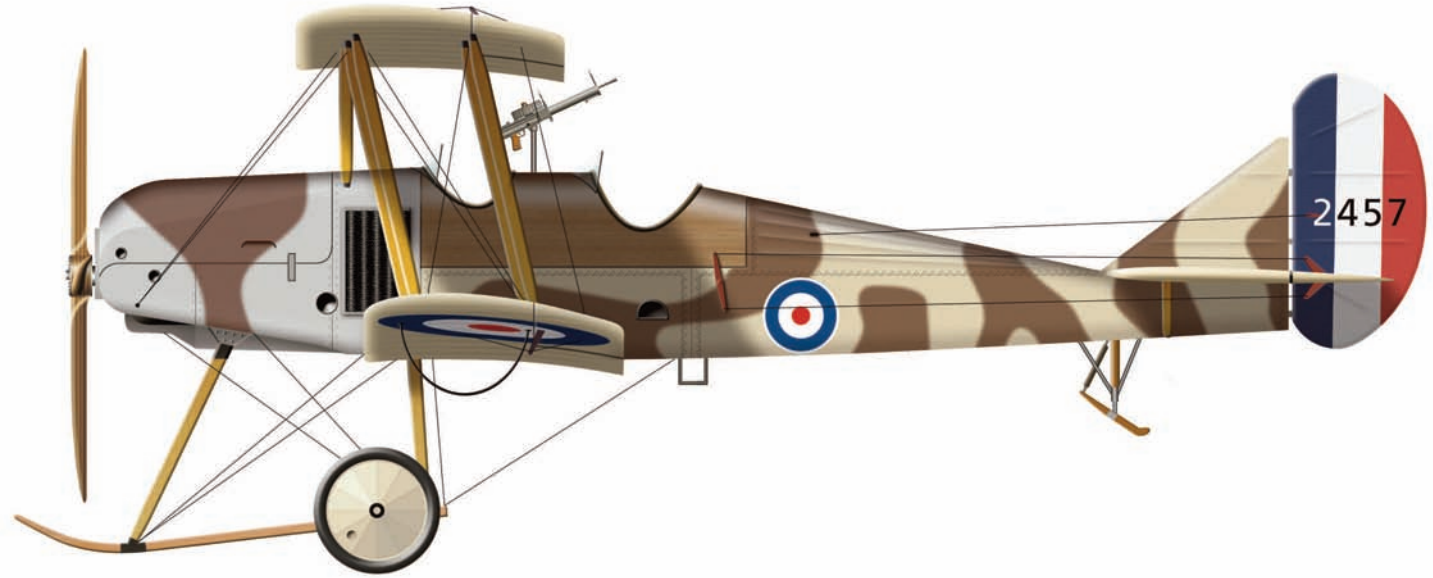


Royal Aircraft Factory R.E.5

In 1908 His Majesty's Balloon Factory had been set up at Farnborough, but in 1911 was renamed The The Royal Aircraft Factory and began to design and produce aircraft. In the early days a number of aircraft designs were generated, most being research aircraft, one such aircraft being the R.E.5 (Reconnaissance Experimental No. 5) which first flew in January 1914. During the early stages of the First World War several R.E.5s were sent to France with the British Expeditionary Force, where individual machines were attached to several squadrons, but they were soon withdrawn and then used as training aircraft.

SPECIFICATION:

WEIGHTS:

Empty (unknown)

Maximum take-off (unknown)

POWERPLANT:

One 120 hp Austro-Daimler inline engine

PERFORMANCE:

Maximum speed 78 mph,

Endurance (unknown)

Service ceiling (unknown)

ARMAMENT:

3 × 20 lb bombs when deployed as a bomber

DIMENSIONS:

Wingspan 44 ft 6 ins,

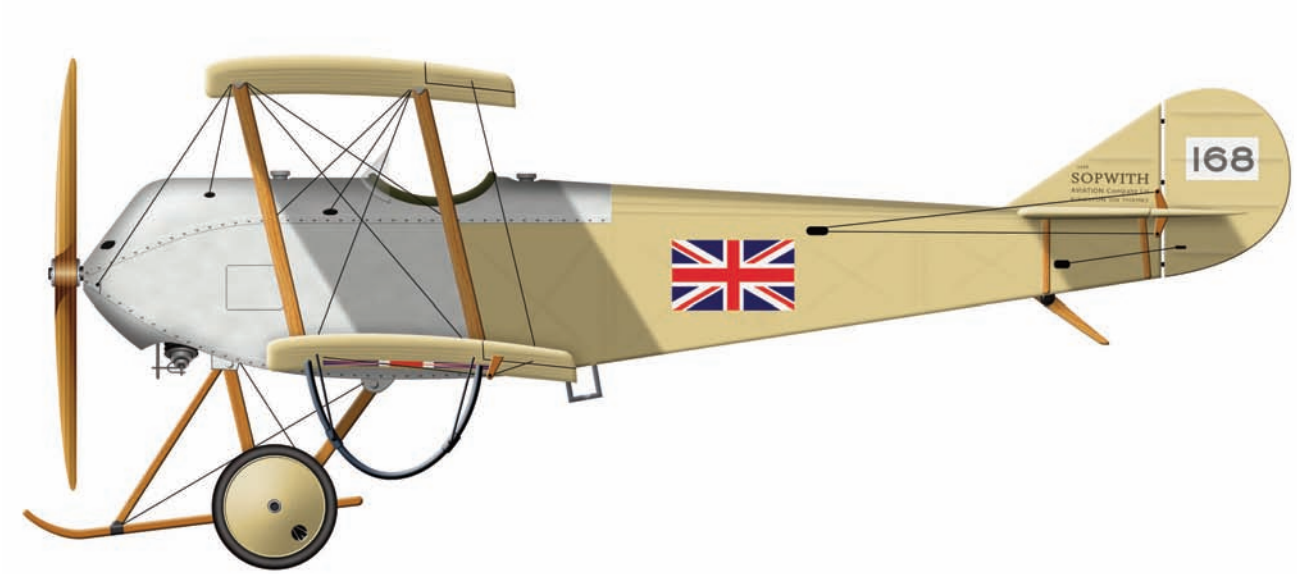
Length 26 ft 2 ins,

Height 9 ft 8 ins

CREW: 1

ENTERED SERVICE: 1914

NUMBER BUILT: (unknown)



Sopwith Tabloid

The Sopwith Tabloid was designed as a pure sports aeroplane and first flew in 1913. It was chosen to participate for the 1914 Schneider Trophy in Monaco, and a floatplane version was quickly prepared which comfortably won the time trials at an average speed of 86.83 mph. When war broke out in August 1914, they were one of the first aircraft types to be sent to France by the British, and the first to bomb German soil, but their most famous exploit was on the 8th October when two aircraft attacked the Zeppelin sheds at Düsseldorf, where one was hit by two 20 lb bombs that set the building on fire and destroyed Zeppelin Z IX.

SPECIFICATION:

WEIGHTS:
Empty 1,220 lbs,
Maximum take-off 1,700 lbs

POWERPLANT:
One 100 hp Gnôme
Monosoupape rotary engine

PERFORMANCE:
Maximum speed 92 mph,
Endurance 3½ hours,
Service ceiling 7,000 ft

ARMAMENT:
1 × 0.303 inch machine gun
Bombload 100 lbs

DIMENSIONS:
Wingspan 25 ft 8 ins,
Length 22 ft 10 ins,
Height 10 ft

CREW: 1

ENTERED SERVICE: 1914

NUMBER BUILT: 42

Sopwith Schneider

The Sopwith Schneider closely resembled the floatplane Tabloid that won the Schneider Trophy Race in April 1914. They were modified for naval use by having a detachable rear fuselage for shipboard stowage, an aperture in the top wing for a Lewis machine-gun, an extra diagonal strut bracing each float and a tail float. The Royal Naval Air Service (R.N.A.S.) planned to operate these aircraft from seaplane carriers in the North Sea on anti-Zeppelin patrols, but these were largely unsuccessful. Unlike the Tabloid, the Schneider was successively improved and remained in service until after the end of World War One.

SPECIFICATION:

WEIGHTS:

Empty 1,220 lbs,
Maximum take-off 1,700 lbs

POWERPLANT:

One 100 hp Gnôme
Monosoupape rotary engine

PERFORMANCE:

Maximum speed 87 mph,
Endurance 3½ hours,
Service ceiling 7,000 ft

ARMAMENT:

1 × 0.303 inch machine gun
Bombload 100 lbs

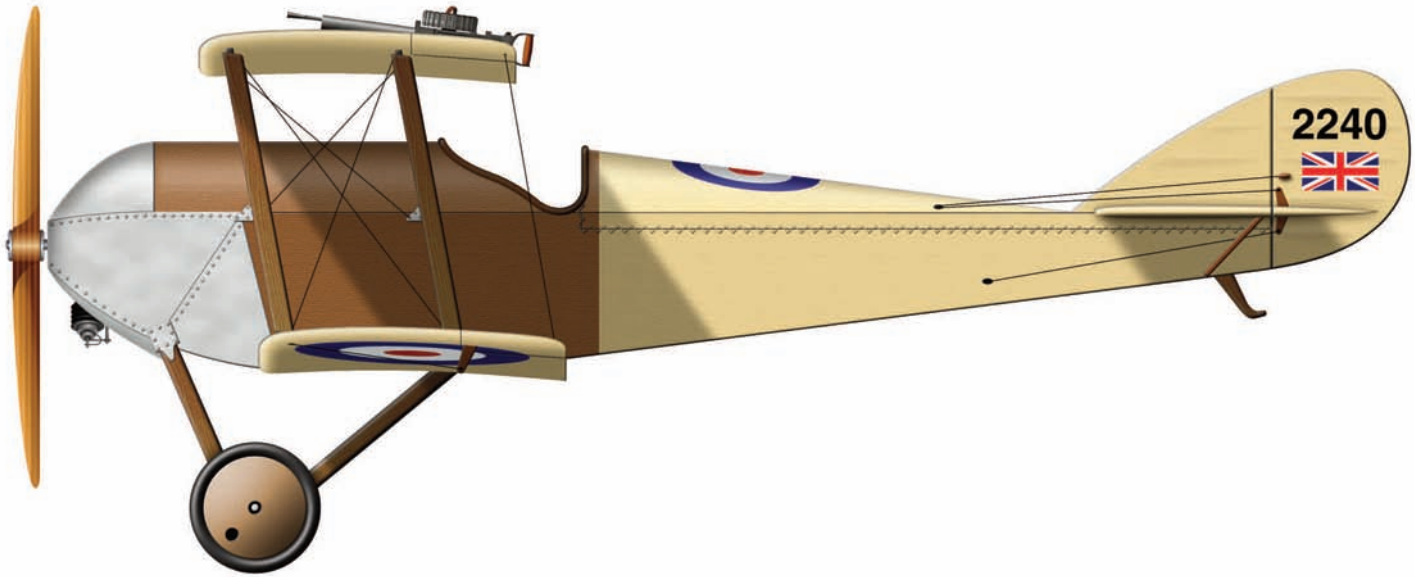
DIMENSIONS:

Wingspan 25 ft 8 ins,
Length 22 ft 10 ins,
Height 10 ft

CREW: 1

ENTERED SERVICE: 1915

NUMBER BUILT: 136



Martinsyde S.1

The Martinsyde S.1 was deigned as a sports aircraft in 1914, and a rival to the Sopwith Tabloid for military orders. By the end of 1914 eleven had been delivered to the Royal Flying Corps, but it is estimated that total production did not exceed sixty machines. Only four aircraft found their way to the Western Front in France, where individual machines were assigned to Number 1, 4, 5 and 6 Squadrons of the Royal Flying Corps in early 1915. In the U.K. several aircraft were used as Home Defence fighters, but their overall performance was inadequate, and by mid 1915 they were withdrawn from service and used as training aircraft.

SPECIFICATION:

WEIGHTS:

Empty (unknown),
Maximum take-off (unknown)

POWERPLANT:

One 80 hp Gnôme
Monosoupape rotary engine

PERFORMANCE:

Maximum speed 87 mph,
Endurance (unknown),
Service ceiling (unknown)

ARMAMENT:

1 × 0.303 inch machine gun
Bombload 100 lbs

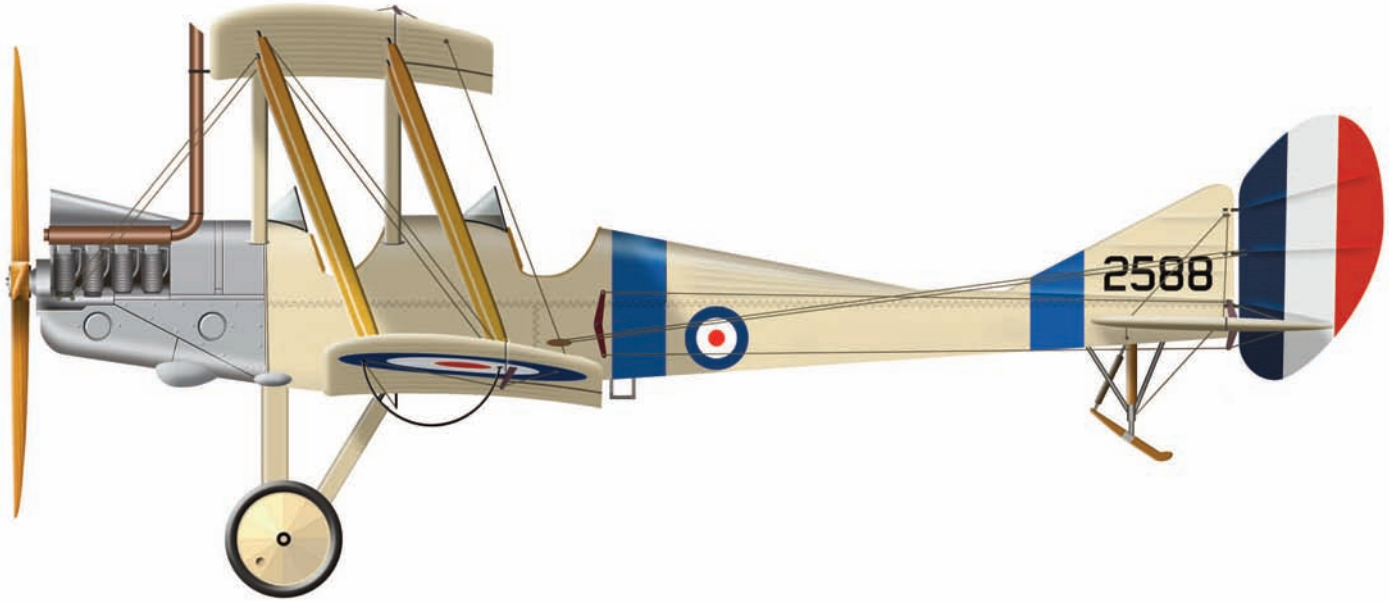
DIMENSIONS:

Wingspan 27 ft 8 ins,
Length 21 ft,
Height 8 ft 2 ins

CREW: 1

ENTERED SERVICE: 1914

NUMBER BUILT: 60



Royal Aircraft Factory B.E.2c

The B.E.2 (Bleriot Experimental No. 2) first flew in early 1912 and was soon placed in production as a reconnaissance aircraft for the newly formed Royal Flying Corps, and were the first type to be sent to France on the outbreak of war in September 1914. The B.E.2c appeared in 1915 and became the workhorse of the type, and as a reconnaissance aircraft and artillery spotter were ideal for the task, but when they were opposed by effective enemy fighters the vulnerability of the aircraft was plain to see and the type suffered serious losses. The B.E.2c remained in service over France well into 1917 when they were finally withdrawn.

SPECIFICATION:

WEIGHTS:

Empty 1,431 lbs

Maximum take-off 2,100 lbs

POWERPLANT:

One 90 hp RAF 1a inline engine

PERFORMANCE:

Maximum speed 90 mph,

Endurance 4 hours

Service ceiling 9,000 ft

ARMAMENT:

1 × 0.303 inch Lewis machine gun

DIMENSIONS:

Wingspan 40 ft 9 ins,

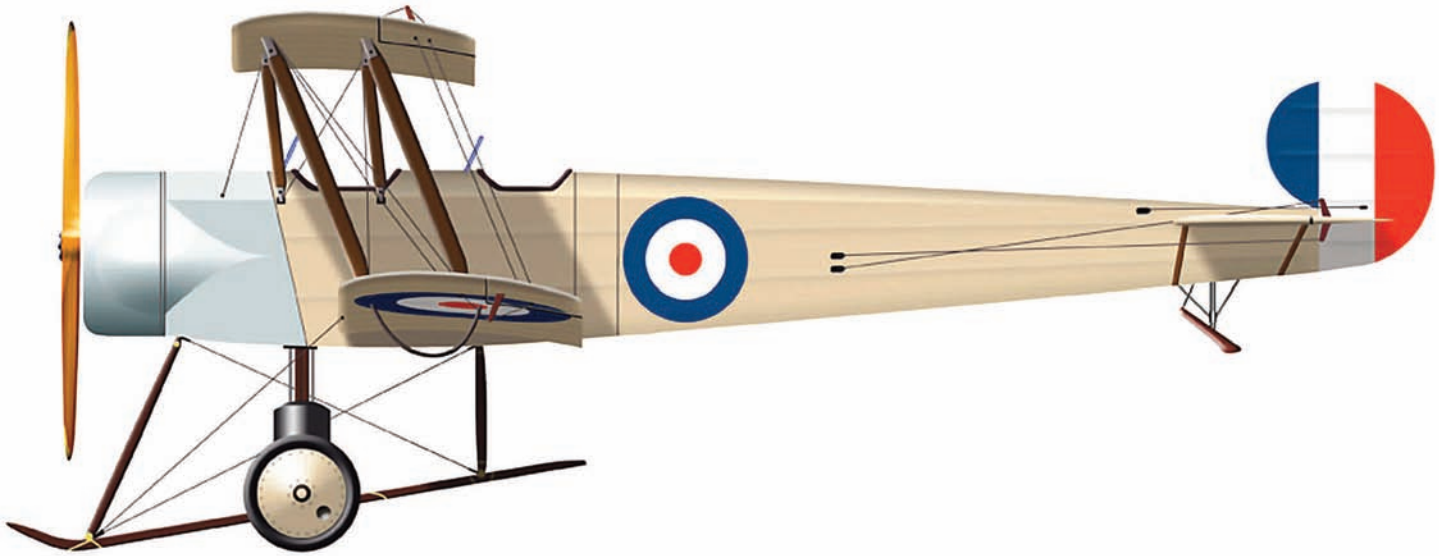
Length 27 ft 3 ins,

Height 12 ft

CREW: 2

ENTERED SERVICE: 1914

NUMBER BUILT: 3,500+



Avro 504

The Avro 504 first flew in September 1913, and was a development of the earlier Avro 500. The aircraft was designed for the private market, but on the outbreak of the First World War in August 1914, small numbers were purchased by the Royal Flying Corps and the Royal Naval Air Service and taken to France. Over the Western Front their unsuitability as a front line aircraft led to them being withdrawn by mid 1915 and they were then used as a trainer, in which role they excelled and remained the basic training aircraft well into the early 1930s. Production continued until 1932 with over 10,000 aircraft being built through many marks.

SPECIFICATION:

WEIGHTS:

Empty 1,231 lbs

Maximum take-off 1,829 lbs

POWERPLANT:

One 110 hp Le Rhône rotary engine

PERFORMANCE:

Maximum speed 90 mph,

Endurance 2½ hours

Service ceiling 16,000 ft

ARMAMENT:

None

DIMENSIONS:

Wingspan 36 ft,

Length 29 ft 5 ins,

Height 10 ft 5 ins

CREW: 1 + 1 pupil

ENTERED SERVICE: 1914

NUMBER BUILT: 10,000+

Vickers F.B.5 'Gunbus'

In March 1914, Vickers exhibited their E.F.B.3 prototype at the Olympia Aero Show, a two seater aircraft designed to carry a machine gun. To achieve this a 'pusher' layout was used to provide a clear field of fire for the observer who sat in the front seat. Minor changes led to the F.B.5, and although Vickers had yet to receive an order for the aircraft from the military, they took the unprecedented step of building fifty at their own financial risk. When war broke out they were purchased by the military and proved a threat in the air, even though they were slow. Over 200 were built, but by early 1916 had been replaced by more modern types.

SPECIFICATION:

WEIGHTS:

Empty 1,120 lbs

Maximum take-off 2,050 lbs

POWERPLANT:

One 100 hp Gnôme rotary engine

PERFORMANCE:

Maximum speed 70 mph,

Endurance 4½ hours

Service ceiling 9,000 ft

ARMAMENT:

1 × 0.303 inch Lewis machine gun

DIMENSIONS:

Wingspan 36 ft 6 ins,

Length 27 ft 2 ins,

Height 11 ft 6 ins

CREW: 2

ENTERED SERVICE: 1914

NUMBER BUILT: 224

Fokker E.I/III 'Eindecker'

In 1915 Germany developed a synchronised firing mechanism that allowed a machine gun to be mounted on the front deck of an aircraft in front of the pilot which would be capable of firing through the propeller arc without damaging the blades. Using this system the pilot gained an advantage as he only had to aim his aircraft at an enemy machine. Anthony Fokker had produced a monoplane aircraft for the Imperial German Flying Corps, and he modified the design to accommodate the mechanism. This resulted in the Fokker E.I Eindecker, the first true fighter aircraft with the sole purpose to intercept and shoot down enemy aircraft.

SPECIFICATION:

WEIGHTS:
Empty 800 lbs
Maximum take-off 1,345 lbs

POWERPLANT:
One 100 hp Obereusel rotary engine

PERFORMANCE:
Maximum speed 87 mph,
Endurance 1½ hours
Service ceiling 11,800 ft

ARMAMENT:
1 × 7.92 mm LMG machine gun

DIMENSIONS:
Wingspan 31 ft 3 ins,
Length 23 ft 7 ins,
Height 7 ft 10 ins

CREW: 1

ENTERED SERVICE: 1915

NUMBER BUILT: 416

Bristol Scout

The Bristol Scout was designed in the second half of 1913 as a sports racing aircraft, and was a modern, single seat biplane that was flown for the first time in early 1914. The military were impressed with the aircraft and placed orders for the aircraft on the outbreak of war, with the first to be built in significant numbers being the Scout C which entered service in early 1915, shortly followed by the Scout D. A variety of improvised weaponry were fitted to the aircraft by the pilots, but by the summer of 1916 the Bristol Scout had become outclassed by the new German scout fighters and withdrawn from front line service and used as a trainer.

SPECIFICATION:

WEIGHTS:

Empty 789 lbs

Maximum take-off 1,195 lbs

POWERPLANT:

One 80 hp Le Rhône 9C rotary engine

PERFORMANCE:

Maximum speed 94 mph,

Endurance 2½ hours

Service ceiling 16,000 ft

ARMAMENT:

1 × 0.303 inch Vickers or Lewis machine gun

DIMENSIONS:

Wingspan 24 ft 7 ins,

Length 20 ft 8 ins,

Height 8 ft 6 ins

CREW: 1

ENTERED SERVICE: 1915

NUMBER BUILT: 374

Sopwith Baby

The Sopwith Baby (also known as the Admiralty 8200 Type) was derived from the Sopwith Schneider floatplane, which itself was a development of the pre-war Sopwith Tabloid sporting aircraft. The Sopwith Baby began to enter service with the Royal Navy Air Service in the Autumn of 1915 as a shipborne reconnaissance and bombing aircraft, being mainly operated from larger warships such as seaplane carriers and cruisers. The Sopwith Baby remained in service throughout the First World War, during which time the aircraft was refined several times in response to the rapid advance in aircraft design.

SPECIFICATION:

WEIGHTS:

Empty 1,226 lbs

Maximum take-off 1,715 lbs

POWERPLANT:

One 110 hp Clerget rotary engine

PERFORMANCE:

Maximum speed 100 mph,

Endurance 2¼ hours

Service ceiling 10,000 ft

ARMAMENT:

1 × 0.303 inch Lewis gun

Bombload 130 lbs

DIMENSIONS:

Wingspan 35 ft 8 ins,

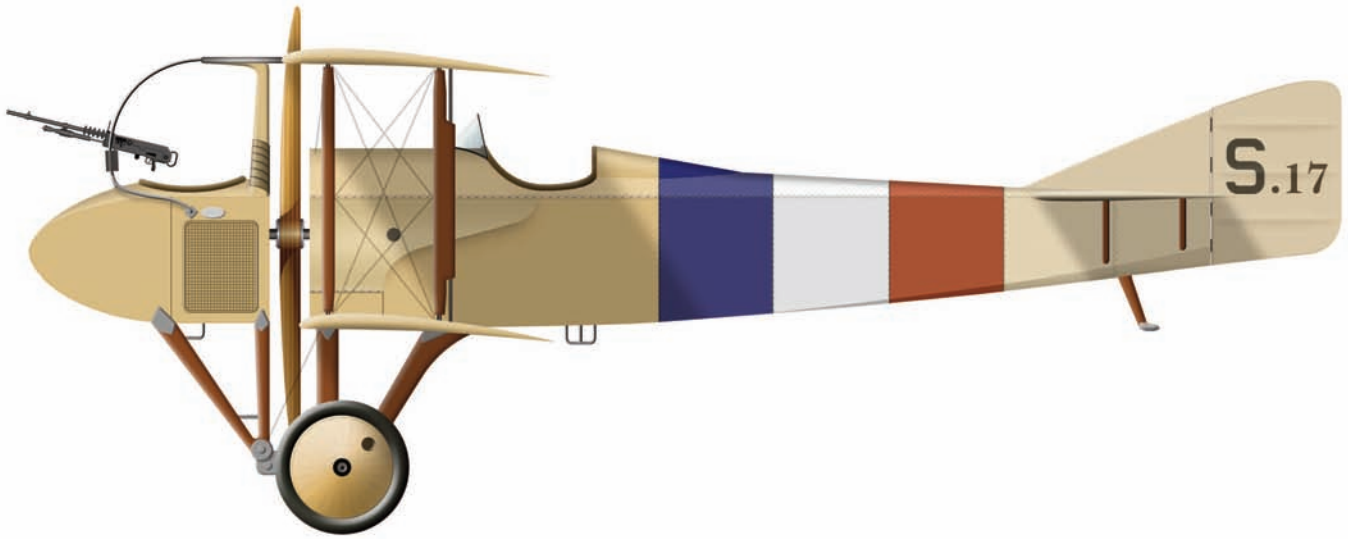
Length 23 ft,

Height 10 ft

CREW: 1

ENTERED SERVICE: 1915

NUMBER BUILT: 400+



S.P.A.D. SA.2

One of the more outlandish attempts to design an aircraft with a forward firing machine gun was produced by the French S.P.A.D. company in early 1915. This was achieved by fitting a gunner's nacelle in front of the propeller by struts which were attached to the upper and lower wings, communications between the gunner and the pilot being provided by a voice tube that passed through the propeller hub. They never proved successful, being more lethal to those who flew them than the enemy, and had a short life in the Aviation Militaire. Several were supplied to Russia where they lasted longer, but were disliked by their crews.

SPECIFICATION:

WEIGHTS:

Empty 950 lbs

Maximum take-off 1,620 lbs

POWERPLANT:

One110 hp Le Rhône 9J rotary engine

PERFORMANCE:

Maximum speed 93 mph,

Endurance 2½ hours

Service ceiling 15,000 ft

ARMAMENT:

1 × 7.7 mm Hotchkiss machine gun

DIMENSIONS:

Wingspan 29 ft 10 ins,

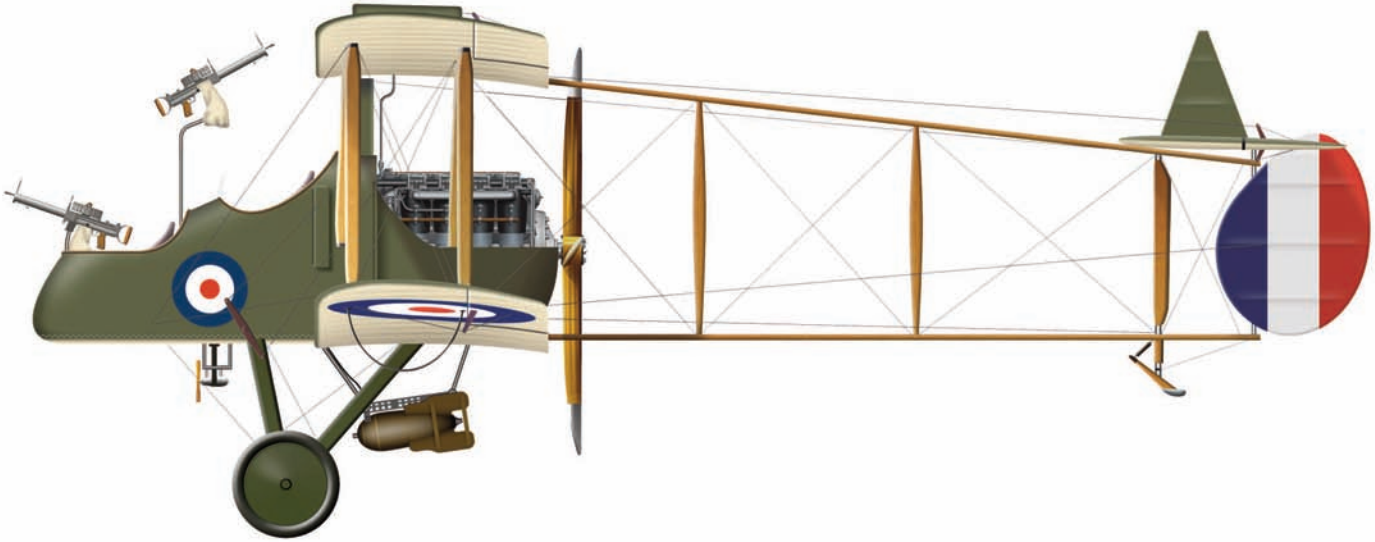
Length 23 ft 11½ ins,

Height 8 ft 6 ins

CREW: 2

ENTERED SERVICE: 1915

NUMBER BUILT: 107



Royal Aircraft Factory F.E.2b

In mid 1914 work commenced at Farnborough on an aircraft specifically intended as a fighter armed with a machine gun. Without any means of safely firing through the propellor arc at the time a pusher layout was adopted, similar to the Vickers FB.5 'Gunbus'. Designated the F.E.2 they entered service with the R.F.C. in mid 1915. The main production model was the F.E.2b which were used in many roles, those of No. 20 Squadron being particularily successful in the fighter role when they were first introduced. The FE.2b remained in service with No.100 Squadron until the end of World War One in the night-bombing role.

SPECIFICATION:

WEIGHTS:

Empty 2,061 lbs

Maximum take-off 3,037 lbs

POWERPLANT:

One 160 hp Beardmore inline engine

PERFORMANCE:

Maximum speed 91 mph,

Endurance 3 hours,

Service ceiling11,000 ft

ARMAMENT:

2 × 0.303 inch machine guns

Bombload 500 lbs

DIMENSIONS:

Wingspan 47 ft 9 ins,

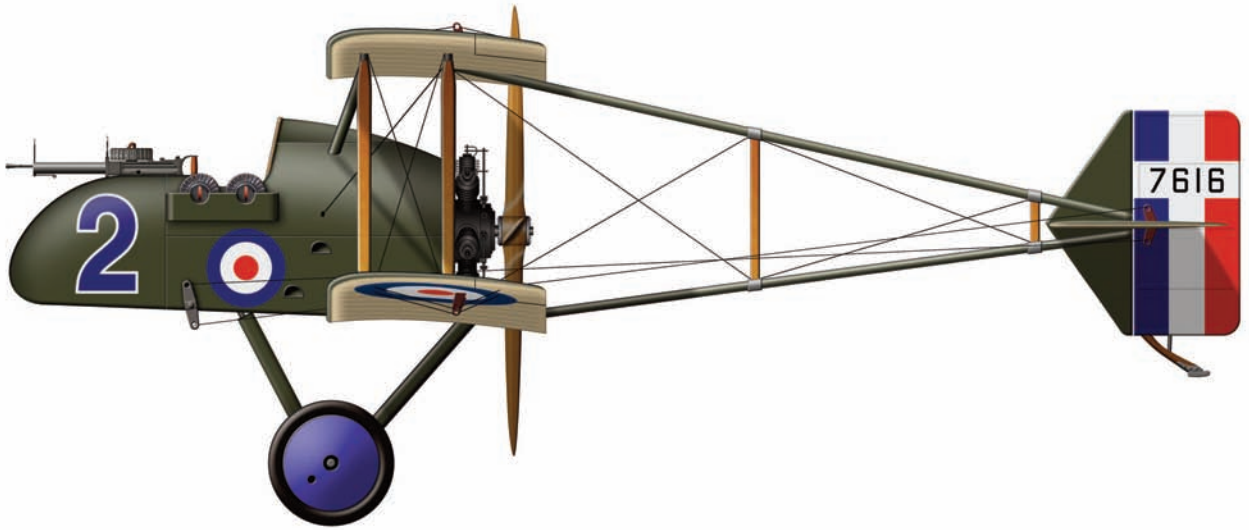
Length 32 ft 3 ins,

Height 12 ft 8 ins

CREW: 2

ENTERED SERVICE: 1915

NUMBER BUILT: 1,900+



Royal Aircraft Factory F.E.8

After the Fokker E.I appeared in the summer of 1915, the allies desperately needed a fighter that could take on the German aircraft with its forward firing machine guns. The British came up with the pusher aircraft, with the engine mounted behind the pilot, the best example being the Airco D.H. 2. The Royal Aircraft Factory designed the similar looking F.E.8 (Fighter Experimental No. 8), which appeared over the Western Front in the summer of 1916, but soon proved to be no match for the new German scout fighters appearing over the Western Front, and from the spring of 1917 were then used in the ground attack role.

SPECIFICATION:

WEIGHTS:

Empty 895 lbs

Maximum take-off 1,346 lbs

POWERPLANT:

One 100 hp Gnôme rotary engine

PERFORMANCE:

Maximum speed 97 mph,

Endurance 2½ hours

Service ceiling 14,500 ft

ARMAMENT:

1 × 0.303 inch Lewis gun

Bombload 80 lbs

DIMENSIONS:

Wingspan 38 ft,

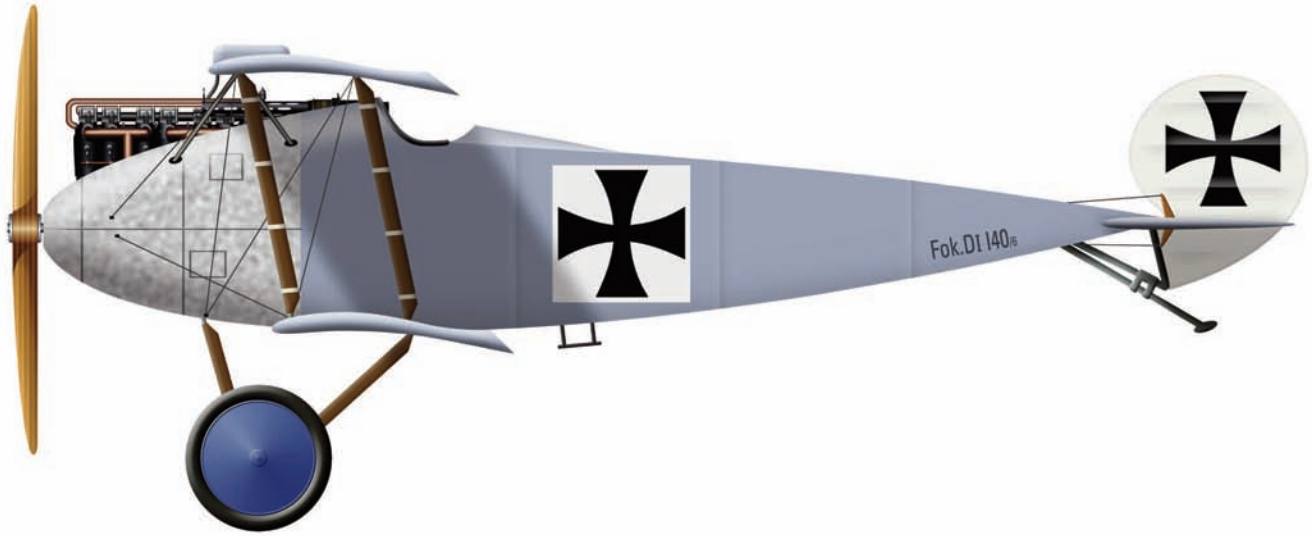
Length 26 ft 6 ins,

Height 9 ft 8 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 295



Fokker D.I

The Fokker D.I was designed by Martin Kreutzer before he died in a flying accident, but confusingly entered service after the D.II, which was a development of the D.I. The type was accepted for production with deliveries beginning in July 1916, 90 being supplied to the German Fliegertruppen and 16 to the Austro-Hungarian Luftfahrttruppen (as the B III). Compared with other scout aircraft in service at that time, such as the Albatros D.II and the French Nieuport 11, the performance of the Fokker D.I was unimpressive, and the type was soon relegated to being a home defence fighter or training aircraft.

SPECIFICATION:

WEIGHTS:

Empty 1,020 lbs

Maximum take-off 1,477 lbs

POWERPLANT:

One 120 hp Mercedes D.II inline engine

PERFORMANCE:

Maximum speed 93 mph,

Endurance 1½ hours

Service ceiling 13,000 ft

ARMAMENT:

1 × 7.92 mm LMG 08/15 machine gun

DIMENSIONS:

Wingspan 29 ft 8 ins,

Length 20 ft 8 ins,

Height 8 ft 4 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 144

Fokker D.II

The Fokker D.II was accepted for service before the D.I, and began to be issued in mid 1916 as a replacement for the Fokker E.II and E.III monoplanes, which by then had been eclipsed by the latest Allied aircraft. The D.II was only built in small numbers and did not form the exclusive equipment of any single unit, as this was before the establishment of the Jagdstaffeln. In service the performance of the D.II was disappointing and they could not compete against the new allied aircraft ,and were soon removed from front line service and were returned to Germany and used as home defence fighters or training aircraft.

SPECIFICATION:

WEIGHTS:

Empty 844 lbs

Maximum take-off 1,286 lbs

POWERPLANT:

One 100 hp Oberursel rotary engine

PERFORMANCE:

Maximum speed 93 mph,

Endurance 1½ hours

Service ceiling 13,125 ft

ARMAMENT:

1 × 7.92 mm LMG 08/15 machine gun

DIMENSIONS:

Wingspan 29 ft 8 ins,

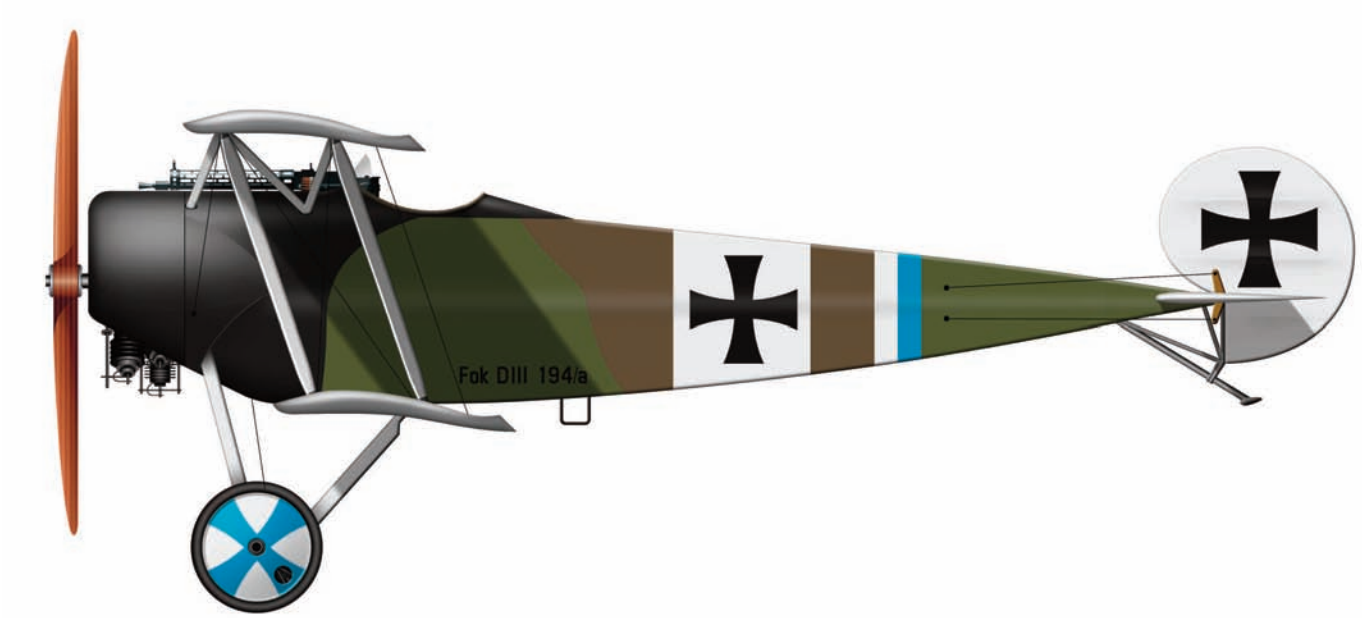
Length 20 ft 8 ins,

Height 8 ft 4 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 81



Fokker D.III

The performance of the D.II had proved disappointing, and as a result one aircraft was fitted with a 160 hp Oberursel U.III rotary engine after the fuselage and undercarriage had been strengthened. There were also minor differences to the engine cowling, with the modified aircraft being designated the D.III, but even with the more powerful engine there was little difference in performance. From September 1916 to April 1917 159 D.IIIs were delivered to the Army Flying Corps, but by the end of May 1917 there were only seven aircraft listed as being operational over the Western Front.

SPECIFICATION:

WEIGHTS:

Empty 948 lbs

Maximum take-off 1,565 lbs

POWERPLANT:

One 160 hp Oberursel III rotary engine

PERFORMANCE:

Maximum speed 100 mph,

Endurance 1½ hours

Service ceiling 15,400 ft

ARMAMENT:

1 × 7.92 mm LMG 08/15 machine gun

DIMENSIONS:

Wingspan 29 ft 8 ins,

Length 20 ft 8 ins,

Height 8 ft 4 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 210

Armstrong Whitworth FK.3

The Armstrong Whitworth F.K.3 was designed by Frederick Koolhoven as a replacement for the B.E.2 reconnaissance and artillery spotting aircraft. Trials with the aircraft were carried out in May 1916 which proved the F.K.3 had a better performance than the BE.2c, and resulted in Armstrong Whitworth being given a contract for 500 aircraft, 350 of which were built by Hewlett & Blondeau in Luton. The majority of the aircraft were retained in the U.K. where they were mainly used in the training role, No. 47 Squadron being the only operational unit to be equipped with the type on the Salonika Front in Greece.

SPECIFICATION:

WEIGHTS:

Empty 1,386 lbs

Maximum take-off 2,056 lbs

POWERPLANT:

One 90 hp RAF 1a inline engine

PERFORMANCE:

Maximum speed 89 mph,

Endurance 3 hours

Service ceiling 12,000 ft

ARMAMENT:

1 × 0.303 inch Lewis gun,

Bombload 112 lbs

DIMENSIONS:

Wingspan 40 ft ½ ins,

Length 29 ft,

Height 11 ft 10½ ins

CREW: 2

ENTERED SERVICE: 1916

NUMBER BUILT: 500

Royal Aircraft Factory R.E.7

The two-seat R.E.7 was developed from the disappointing R.E.5, and initially powered by a 120 hp Beardmore, and later by the more powerful 150 hp RAF 4A inline engine driving a four-bladed propeller. The R.E.7 could carry a heavier payload, and were thought to be suitable for reconnaissance and escort duties, but in service they proved difficult to fly, and with a top speed of only 84 mph (60 mph when carrying a full payload) they were easy targets for the enemy. No 21 Squadron was the only unit to be fully equipped with the type, but such were the losses that after only 3 months service in France they were withdrawn.

SPECIFICATION:

WEIGHTS:
Empty 2,285 lbs
Maximum take-off 3,450 lbs

POWERPLANT:
One 150 hp RAF 4a inline engine

PERFORMANCE:
Maximum speed 84 mph,
Endurance 6 hours
Service ceiling 6,500 ft

ARMAMENT:
2 × 0.303 inch machine guns,
Bombload 336 lbs

DIMENSIONS:
Wingspan 57 ft,
Length 31 ft 11½ ins,
Height 12 ft 7 ins

CREW: 2/3

ENTERED SERVICE: 1916

NUMBER BUILT: 250

Sopwith 1½ Strutter

In 1915 Sopwith designed a two seat biplane that was destined for a successful career, and would have the distinction of being the first British tractor aircraft with a synchronised machine gun firing through the propeller arc. They began to enter service in early 1916 and soon proved their worth. The aircraft's long range and good armament enabled effective offensive patrols to be carried out, but by October the new Halberstadt and Albatros scouts began to appear and the type was outclassed as a fighter. However it was still a useful long range reconnaissance aircraft, and remained in service until the end of World War One.

SPECIFICATION:

WEIGHTS:

Empty 1,259 lbs

Maximum take-off 2,149 lbs

POWERPLANT:

One 110 hp Clerget rotary engine

PERFORMANCE:

Maximum speed 102 mph,

Endurance 3½ hours

Service ceiling 13,000 ft

ARMAMENT:

2 × 0.303 inch machine guns,

Bombload 224 lbs

DIMENSIONS:

Wingspan 33 ft 6 ins,

Length 25 ft 3 ins,

Height 10 ft 3 ins

CREW: 2

ENTERED SERVICE: 1916

NUMBER BUILT: 6,000+

Sopwith 1½ Strutter Home Defence Fighter

The success of the Sopwith 1½ Strutter meant that they would remain in production for the rest of World War One, the largest user of the type being France who licenced built over 4,200 aircraft. In the U.K. the type's long range and stability were good qualities for a home defence fighter which served with No. 37, No. 44 and No. 78 squadrons. Most of these aircraft had been built as two-seaters but converted locally to single-seaters to improve performance. The cockpit was moved back and the armament changed to one or two Lewis guns, either mounted on Foster mountings or fixed to fire upwards.

SPECIFICATION:

WEIGHTS:

Empty 1,259 lbs

Maximum take-off 2,149 lbs

POWERPLANT:

One 110 hp Clerget rotary engine

PERFORMANCE:

Maximum speed 102 mph,

Endurance 3½ hours

Service ceiling 13,000 ft

ARMAMENT:

2 × 0.303 inch machine guns,

Bombload none

DIMENSIONS:

Wingspan 33 ft 6 ins,

Length 25 ft 3 ins,

Height 10 ft 3 ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER CONVERTED: 200+

L.F.G. Roland C.II

One of the first military aircraft to be produced by L.F.G. Roland was the C.II, a two-seat reconnaissance aircraft. The prototype first flew in October I915, and soon accepted for production, and when they first enter service in March 1916 they were highly respected by allied pilots. One serious problem with the design was the restricted downwards view for the pilot. This was soon exploited by pilots such as Albert Ball who would position his aircraft below the C.II without fear of retaliation. Most surviving C.IIs had been retired from the front line by mid 1917, although a small number could still be seen scattered behind the lines.

SPECIFICATION:

WEIGHTS:

Empty 1,681 lbs

Maximum take-off 2,825 lbs

POWERPLANT:

One 160 hp Mercedes DIII inline engine

PERFORMANCE:

Maximum speed 103 mph,

Endurance 4 hours

Service ceiling 13,100 ft

ARMAMENT:

2 × 7.92 mm machine guns,

Bombload 100 lbs

DIMENSIONS:

Wingspan 33 ft 9 ins,

Length 25 ft 3 ins,

Height 9 ft 6 ins

CREW: 2

ENTERED SERVICE: 1916

NUMBER BUILT: 400

Royal Aircraft Factory R.E.8

The R.E.8 flew for the first time in June 1916, and was designed to replace the B.E.2. The aircraft had an improved performance and was better armed, having a synchronised forward firing machine gun being fitted for the pilot and one or two Lewis guns for the observer. They entered service in late 1916, but during 'Bloody April' in 1917 were shot down in large numbers during the worst period of the war for the Royal Flying Corps. The R.E.8 was never an outstanding aircraft, but served as the standard British reconnaissance and artillery spotting aircraft from mid-1917 until the end of World War One.

SPECIFICATION:

WEIGHTS:

Empty 1,577 lbs

Maximum take-off 2,862 lbs

POWERPLANT:

One 150 hp RAF 4a inline engine

PERFORMANCE:

Maximum speed 102 mph,

Endurance 4½ hours

Service ceiling 13,500 ft

ARMAMENT:

2 × 0.303 inch machine guns,

Bombload 224 lbs

DIMENSIONS:

Wingspan 42 ft 7 ins,

Length 27 ft 10 ins,

Height 11 ft 4 ins

CREW: 2

ENTERED SERVICE: 1916

NUMBER BUILT: 4,077

A.E.G. C.VI

The A.E.G. C.IV was similar in configuration to its predecessor the C.II but a little larger. A more poerful 160 hp Mercedes DIII inline engine powered the aircraft, while a fixed forward firing machine gun was provided for the pilot, along with other refinements. The A.E.G. C.IV saw service on most fronts from during the First World War on its introduction in 1916, with 40 still being recorded in active service during August 1918. They were usually supplied in small numbers to individual units and were popular with their pilots due to its reliability and handling in the air, although it could be tricky to land.

SPECIFICATION:

WEIGHTS:
Empty 1,764 lbs,
Maximum take-off 2,469 lbs

POWERPLANT:
One 160 hp Mercedes DIII inline engine

PERFORMANCE:
Maximum speed 98 mph,
Endurance 4 hours,
Service ceiling 16,400 ft

ARMAMENT:
2 × 7.92 mm machine guns
Bombload 220 lbs

DIMENSIONS:
Wingspan 44 ft 1½ ins,
Length 23 ft 5½ ins,
Height 10 ft 1¼ ins

CREW: 2

ENTERED SERVICE: 1916

NUMBER BUILT: 400+

A.E.G. G.IV

At the end of 1916 the A.E.G. G.IV entered service with the Imperial German Flying Corps. They were powered by two 260 hp Mercedes D.IVa inline engines that allowed a crew of four to be carried, although they normally only carried three. The G.IV had the best performance of any of the company's 'G' series of aircraft, but was hampered by a limited range when carrying its maximum bombload, and because of this they were not used on bombing raids over England. Instead they were deployed on short range operations behind Allied lines on the Western Front, or occassionally as a long range reconnaissance aircraft.

SPECIFICATION:

WEIGHTS:
Empty 5,291 lbs,
Maximum take-off 8,003 lbs

POWERPLANT:
Two 260 hp Mercedes D.IVa inline engines

PERFORMANCE:
Maximum speed 103 mph,
Endurance 5 hours,
Service ceiling 15,000 ft

ARMAMENT:
2 × 7.92 mm machine guns
Bombload 882 lbs

DIMENSIONS:
Wingspan 60 ft 4½ ins,
Length 31 ft 9¾ ins,
Height 12 ft 9½ ins

CREW: 3/4

ENTERED SERVICE: 1916

NUMBER BUILT: 320

Bristol M.1C 'Bullet'

The Bristol M.1A was designed as a private venture, and during trials in early 1916 the aircraft proved to have a sparkling performance, achieving a top speed of 132 mph from a modest 110 hp Le Rhône rotary engine. It was also very manoeuvrable, and in many ways superior in performance to much later types such as the S.E.5 and Sopwith Snipe. At a time when the allies badly needed a new fighter, prejudice against the monoplane kept it away from the Western Front, and as a result were only built in small numbers. 35 M.1Cs were sent to Macedonia and the Middle East in 1917 where they were successfully used in action.

SPECIFICATION:

WEIGHTS:

Empty 900 lbs

Maximum take-off 1,350 lbs

POWERPLANT:

One 150 hp Bentley rotary engine

PERFORMANCE:

Maximum speed 130 mph,

Endurance 1¾ hours

Service ceiling 20,000 ft

ARMAMENT:

1 × 0.303 inch machine gun,

Bombload none

DIMENSIONS:

Wingspan 30 ft 9 ins,

Length 20 ft 5 ins,

Height 7 ft 10 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 130

Royal Aircraft Factory B.E.12

The B.E.12 was designed in late 1915 as a fighter, and was essentially a single seat B.E.2c with the front cockpit replaced by a large fuel tank and power provided by the new 150 hp R.A.F. 4a engine. In May 1916 the prototype was fitted with a synchronised Vickers machine gun, with the first unit to be issued with the aircraft being No.19 squadron. Over the Western Front the B.E.12c proved quite useless as a fighter and were soon withdrawn, many aircraft then serving with several Home Defence Squadrons in the U.K. until the end of the war, Zeppelin L.48 being shot down by a B.E.12 on the night of the 17th June 1917.

SPECIFICATION:

WEIGHTS:

Empty 1,635 lbs

Maximum take-off 2,350 lbs

POWERPLANT:

One 150 hp RAF 4a inline engine

PERFORMANCE:

Maximum speed 102 mph,

Endurance 3 hours

Service ceiling 12,500 ft

ARMAMENT:

1 × 0.303 inch machine gun,

Bombload none

DIMENSIONS:

Wingspan 40 ft 9 ins,

Length 27 ft 3 ins,

Height 11 ft 1½ ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 601

Martinsyde G.100 'Elephant'

The Martinsyde G.100 first flew in the autumn of 1915 and was intended to be a long-range fighter and escort aircraft and was unusually large for the role by the standards of the day. Deliveries to the R.F.C. commenced in mid 1916, and due to its size was nicknamed the 'Elephant' although it was also called the 'tinsyde'. G.100's were first deployed over the Western Front, but were totally outclassed by the new German scouts then entering service. They were then redeployed as long range ground attack aircraft, but in 1917 surviving aircraft were transferred to other fronts where the opposition was less intense.

SPECIFICATION:

WEIGHTS:

Empty 1,795 lbs

Maximum take-off 2,424 lbs

POWERPLANT:

One 120 hp Beardmore inline engine

PERFORMANCE:

Maximum speed 96 mph,

Endurance 5 hours

Service ceiling 14,000 ft

ARMAMENT:

1 × 0.303 inch machine gun,

Bombload 260 lbs

DIMENSIONS:

Wingspan 38 ft 6 ins,

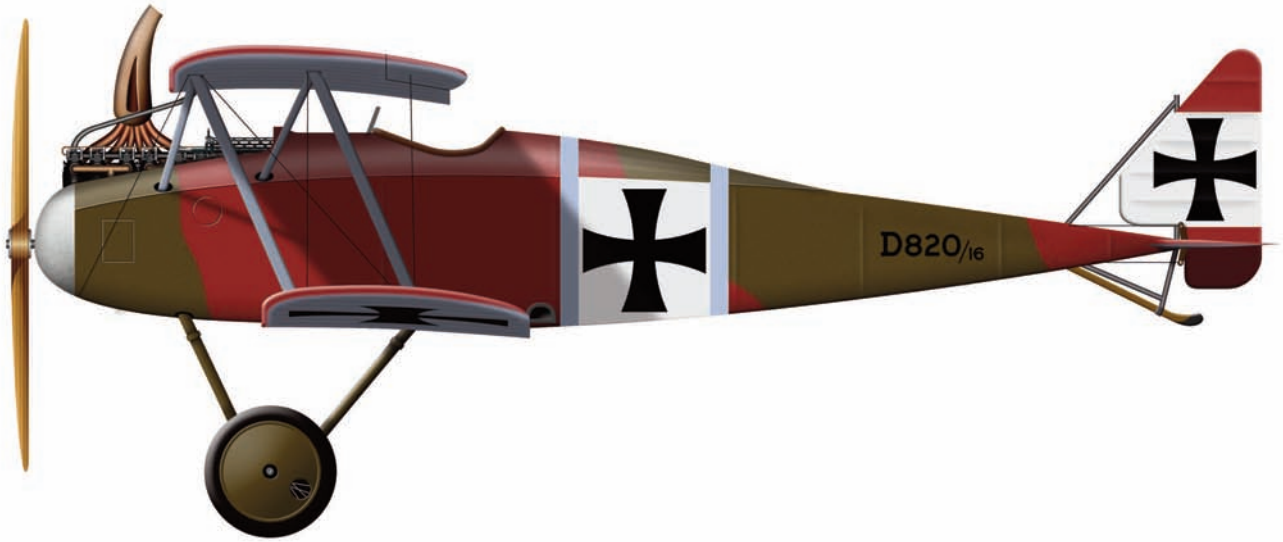
Length 26 ft 6 ins,

Height 9 ft 8 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 272



Halberstadt D.II

The Halberstadt D.II entered service over the Western Front in June 1916 alongside the early Fokker D type fighters, and were mainly used to escort reconnaissance and bomber aircraft. In service they proved to be more popular than the Fokker D.II and D.III, but by the autumn superior allied fighters began to appear over the Western Front, and as a consequence the Halberstadt D.II was replaced by the Albatros D.II/III then entering service. The Halberstadt D.II was then used for training or transferred to other fronts, many aircraft being sent to Macedonia or Palestine where they were able to give a good account of themselves.

SPECIFICATION:

WEIGHTS:
Empty 1,144 lbs,
Maximum take-off 1,606 lbs

POWERPLANT:
One 120 hp Mercedes inline engine

PERFORMANCE:
Maximum speed 93 mph,
Endurance 2½ hours,
Service ceiling 13,100 ft

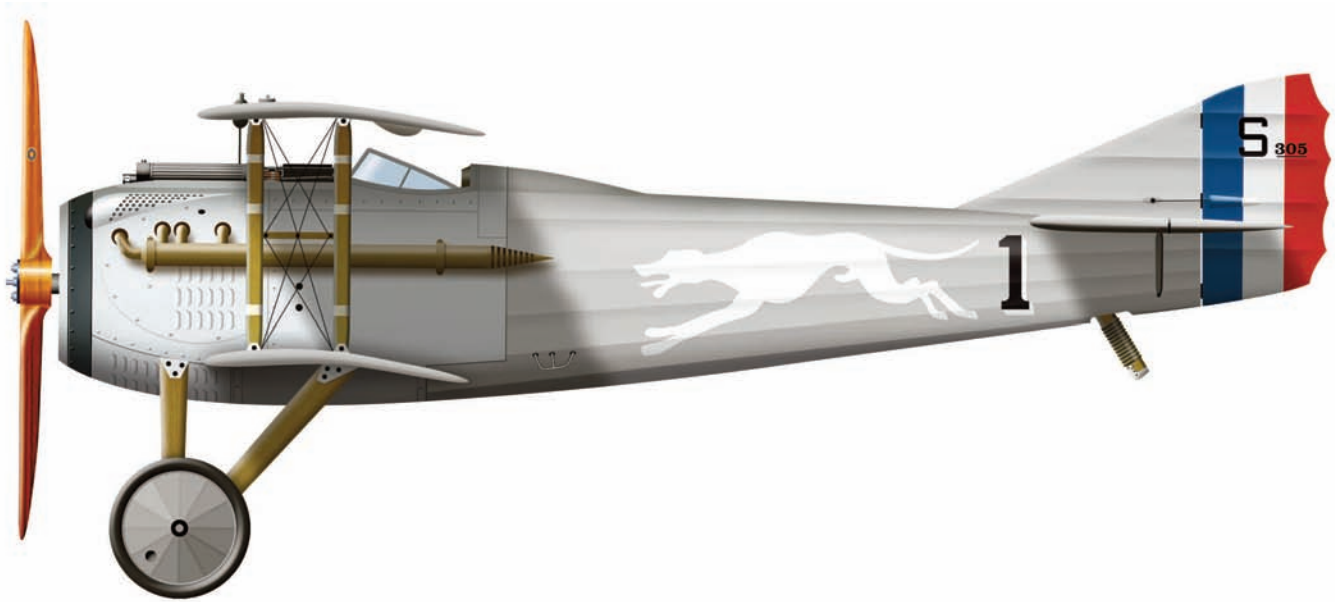
ARMAMENT:
1 × 7.92 mm machine gun
Bombload none

DIMENSIONS:
Wingspan 28 ft 10 ins,
Length 23 ft 11 ins,
Height 8 ft 9 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 210



S.P.A.D. VII

In 1916 the prototype S.P.A.D. S.VII appeared which retained several features of the company's earlier A.2, notably the one bay wing with intermediate struts. The aircraft was powered by a 150 hp Hispano-Suiza engine and first flew in May. French officials were so impressed with its performance that the aircraft was immediately placed in production, and in August 1916 The S.P.A.D. VII began to reach French front line units where it replaced the Nieuport 17 as the primary French scout aircraft. The S.P.A.D. VII soon gained a reputation as being fast, reliable, and capable of sustaining considerable damage and survive.

SPECIFICATION:

WEIGHTS:
Empty 1,102 lbs,
Maximum take-off 1,554 lbs

POWERPLANT:
One 150 hp Hispano-Suiza 8A inline engine

PERFORMANCE:
Maximum speed 120 mph,
Endurance 2½ hours,
Service ceiling 18,000 ft

ARMAMENT:
1 × 0.303 inch machine gun
Bombload none

DIMENSIONS:
Wingspan 25 ft 8 ins,
Length 19 ft 11 ins,
Height 7 ft 3 ins

CREW: 1

ENTERED SERVICE: 1916

NUMBER BUILT: 6,000

S.P.A.D. XIII

Further development of the S.P.A.D. VII led to the S.P.A.D. XIII which flew for the first time in April 1917, and for the first time a French fighter was armed with twin machine guns. The S.P.A.D. XIII was powered by a 220 hp Hispano-Suiza engine which gave the aircraft a speed of 139 mph and a good endurance and climb rate. The S.P.A.D. XIII began to enter service in May 1917 and quickly replaced the S.P.A.D. VII, and by the Armistice the S.P.A.D. XIII had been issued to 74 Escadrilles in French service, with many historians attributing the Allied dominance of the air over the Western Front by late 1918 to this aircraft.

SPECIFICATION:

WEIGHTS:
Empty 1,245 lbs,
Maximum take-off 1,863 lbs

POWERPLANT:
One 220 hp Hispano-Suiza inline engine

PERFORMANCE:
Maximum speed 139 mph,
Endurance 2 hours,
Service ceiling 32,850 ft

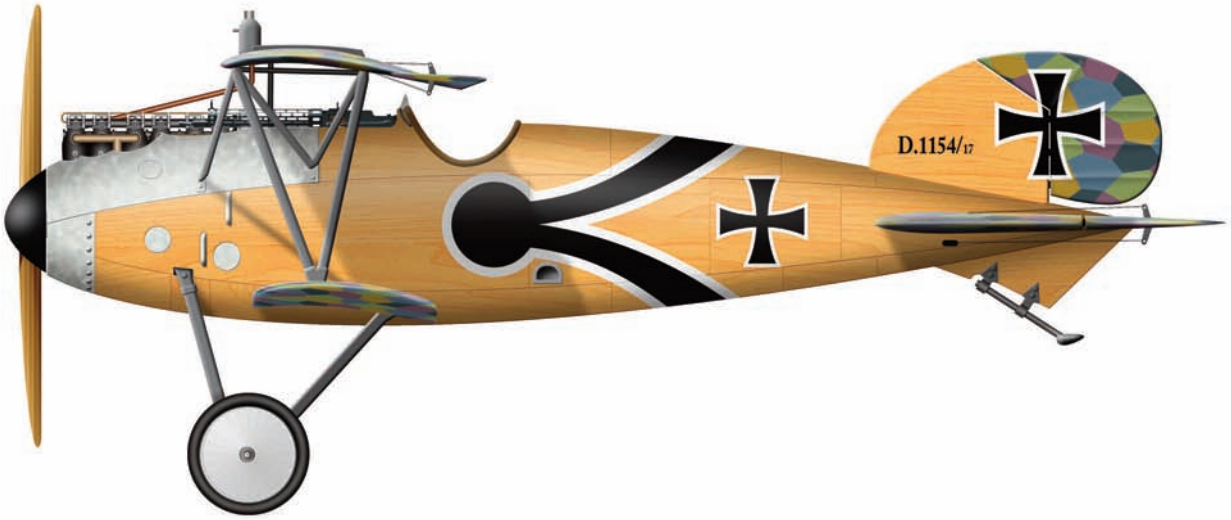
ARMAMENT:
2 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 26 ft 6½ ins,
Length 20 ft 8 ins,
Height 7 ft 8½ ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER BUILT: 8,472



Albatros D.III

In October 1916 an order for 400 Albatros D.III aircraft was placed, the largest contract issued to date in Germany. They began to enter service in early 1917 and had an immediate impact on the air war as the allies had no aircraft to match the new German fighter at the time, and in April they devastated the R.F.C. over the Western Front, which would later be known as 'Bloody April'. D.III's were used by a number of German aces, including Ernst Udet, Werner Voss and Manfred von Richtofen, and remained in service, although in dwindling numbers, until the end of World War One, along with the improved D.V.

SPECIFICATION:

WEIGHTS:
Empty 1,532 lbs,
Maximum take-off 1,949 lbs

POWERPLANT:
One 160 hp Mercedes inline engine

PERFORMANCE:
Maximum speed 110 mph,
Endurance 2 hours,
Service ceiling 18,000 ft

ARMAMENT:
2 × 7.92 mm machine guns
Bombload none

DIMENSIONS:
Wingspan 29 ft 6 ins,
Length 24 ft,
Height 9 ft 6 ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER BUILT: 2,400+

Armstrong-Whitworth F.K.8

The Armstrong Whitworth F.K.8 was designed as a replacement for the outdated B.E.2. The prototype first flew in May 1916 with 50 aircraft being ordered as the as a safeguard against the Royal Aircraft Factory R.E.8, which at the time was still under development. The FK.8 provided excellent service with the Royal Flying Corps, particularly in the roles of artillery spotting and as a light bomber. Just as important, they were able to hold their own against contemporary enemy fighters, and often got away from seemingly impossible combat situations. Because of these virtues they proved more popular than the better known R.E.8.

SPECIFICATION:

WEIGHTS:
Empty 1,916 lbs,
Maximum take-off 2,811 lbs

POWERPLANT:
One 160 hp Beardmore inline engine

PERFORMANCE:
Maximum speed 95 mph,
Endurance 3 hours,
Service ceiling 13,000 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 260 lbs

DIMENSIONS:
Wingspan 43 ft 6 ins,
Length 31 ft 5 ins,
Height 10 ft 10 ins

CREW: 2

ENTERED SERVICE: 1917

NUMBER BUILT: 1,701

Sopwith Triplane

Early in 1916 Sopwith began to design a triplane scout fighter as a private venture. It was a neat design powered by a 110 h.p. Clerget engine, the fuselage closely following that of the earlier Pup. Production began in late 1916 and they first entered service in December with No. 1 Naval Squadron at Bailleul, France. Pilots nicknamed the aircraft the 'Tripehound' or 'Tripe', and was most famously flown by No 10 Naval Squadron's B Flight, better known as 'Black Flight', who claimed 87 German aircraft in three months while flying the type. The Germans were so impressed with the aircraft that it inspired Fokker to produce his triplane.

SPECIFICATION:

WEIGHTS:
Empty 1,101 lbs,
Maximum take-off 1,541 lbs

POWERPLANT:
One 130 hp Clerget
rotary engine

PERFORMANCE:
Maximum speed 117 mph,
Endurance 2¾ hours,
Service ceiling 20,500 ft

ARMAMENT:
1 × 0.303 inch machine gun
Bombload none

DIMENSIONS:
Wingspan 26 ft 6 ins,
Length 18 ft 10 ins,
Height 10 ft 6 ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER BUILT: 147

A.E.G. J.II

The A.E.G. J.II was a ground attack aircraft for use by the newly created infantry support units of the German air service in 1916. These aircraft had two machine guns mounted in the floor of the observer's cockpit at a forward angle of 45° in order to strafe ground targets at low level, and in order to protect the crew and engine from grounfire carried 860 lbs of 5 mm armour plate. Along with ither similar types, they were deployed en masse during the German spring offensive of 1918. After World War One a few aircraft were briefly used for the first daily passenger aircraft service in the world, between Berlin and Weimar.

SPECIFICATION:

WEIGHTS:
Empty 3,208 lbs,
Maximum take-off 3,883 lbs

POWERPLANT:
One 200 hp Benz Bz IV inline engine

PERFORMANCE:
Maximum speed 93 mph,
Endurance 2½ hours,
Service ceiling 14,800 ft

ARMAMENT:
3 × 7.92 mm machine guns
Bombload none

DIMENSIONS:
Wingspan 44 ft 2 ins,
Length 23 ft 7 ins,
Height 11 ft

CREW: 2

ENTERED SERVICE: 1917

NUMBER BUILT: 600+

Roland D.II

Roland's first major success was the C.II reconnaissance aircraft of 1916, but they also designed and built scout fighters in limited numbers. Their first scout was the D.I which appeared in July 1916 and resembled a scaled down C.II, being powered by the same 160 hp Mercedes D.III inline engine which gave the aircraft a speed of 112 mph. This was quickly followed by the D.II which was virtually identical, but appeared at the same time as the superior Albatros fighter. In total only 20 D.Is and 300 D.IIs were built which mainly served as a home defence fighters, although at least one Jasta served on the Macedonian Front in 1917.

SPECIFICATION:

WEIGHTS:
Empty 1,573 lbs,
Maximum take-off 2,099 lbs

POWERPLANT:
One 160 hp Mercedes D.III inline engine

PERFORMANCE:
Maximum speed 112 mph,
Endurance 2 hours,
Service ceiling 16,400 ft

ARMAMENT:
2 × 7.92 mm machine guns
Bombload none

DIMENSIONS:
Wingspan 29 ft 4 ins,
Length 22 ft 8 ins,
Height 10 ft 2½ ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER BUILT: 300

Roland D.VI

The last aircraft Roland placed in production was the D.VIa scout fighter. Designed in 1917, the D.VIa featured a streamlined fuselage constructed of overlapping plywood planks, similar to clinker built boats. They were powered by a 185 hp Daimler-Mercedes D.IIIa engine, with the first aircraft reaching the frontline in May 1918, and it is believed that they were used by Jastas 23, 32, 33, 35, as well as naval aviation squadrons. By the end of June, fifty-five aircraft were in service with a further seventy being on strength in August. They performed well as a fighter but were were no match for the Fokker D.VII.

SPECIFICATION:

WEIGHTS:
Empty 1,446 lbs,
Maximum take-off 1,865 lbs

POWERPLANT:
One 185 hp Mercedes D.IIIa inline engine

PERFORMANCE:
Maximum speed 124 mph,
Endurance 2 hours,
Service ceiling 19,000 ft

ARMAMENT:
2 × 7.92 mm machine guns
Bombload none

DIMENSIONS:
Wingspan 29 ft 4 ins,
Length 22 ft 8 ins,
Height 10 ft 2½ ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER BUILT: 300

Anatra Anasal

Anatra was a Russian aircraft manufacturer that was founded in Odessa during 1909. Their first successful design was the Anatra D Anade which was built in small numbers, soon being followed by the Anatra DS or Anasal, a two seat development of the aircraft, the main difference being the replacement of a 100 hp rotary engine for a 150 hp radial engine. The Anasal first flew in August 1916 with orders being placed in early 1917, and by the time of the revolution in November about 65 had been built, while many more were at different stages of construction, the type being used by both sides during the struggle.

SPECIFICATION:

WEIGHTS:
Empty 1,795 lbs,
Maximum take-off 2,566 lbs

POWERPLANT:
One 150 hp Salmson radial engine

PERFORMANCE:
Maximum speed 90 mph,
Endurance 3½ hours,
Service ceiling 14,300 ft

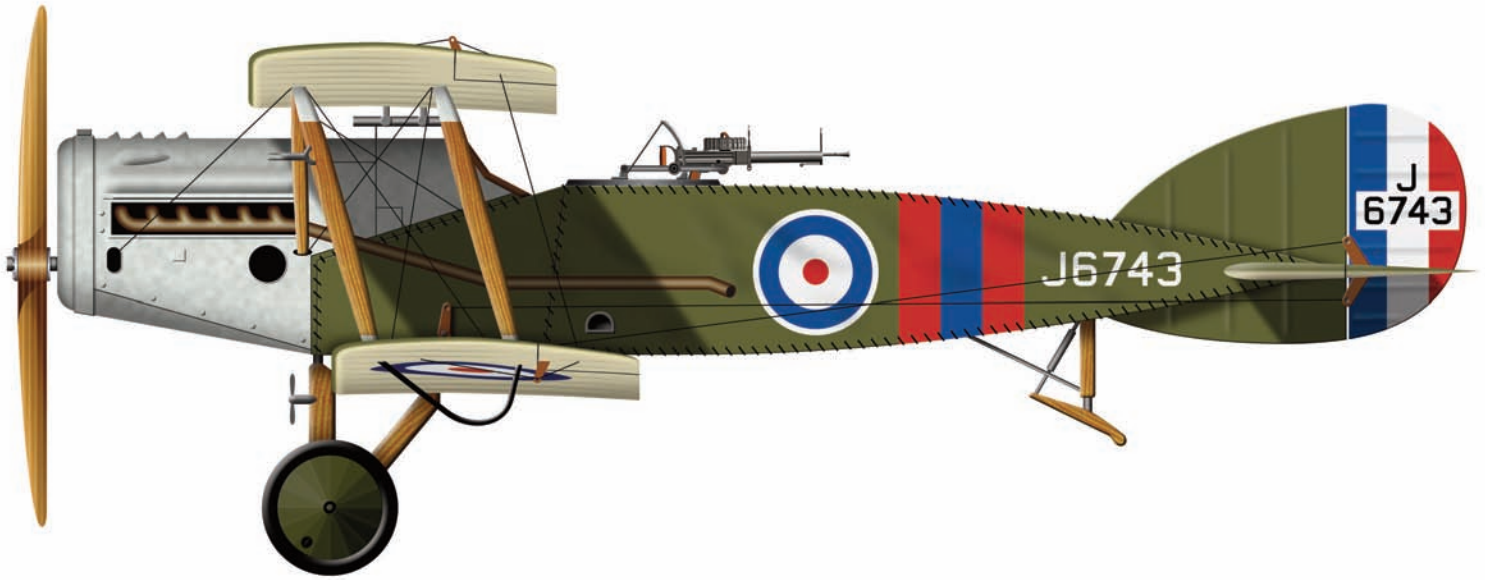
ARMAMENT:
2 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 37 ft 6 ins,
Length 26 ft 7 ins,
Height 10 ft 6 ins

CREW: 2

ENTERED SERVICE: 1917

NUMBER BUILT: 180+



Bristol F.2B Fighter

In the spring of 1916 The Bristol Aeroplane Company began on a design to replace the ageing B.E.2c. The new aircraft was designed around the 190 hp Rolls-Royce Falcon inline engine and was armed with a fixed forward firing 0.303 inch machine gun for the pilot and a 0.303 inch Lewis machine gun for the observer. The prototype first flew in September 1916, and proved to be fast, agile and robust, and was immediately placed in production. At first the type had an inauspicious start, but when pilots realised they could fly the aircraft like a fighter they became a formidable opponent, and went on to have an illustrious career.

SPECIFICATION:

WEIGHTS:

Empty 2,145 lbs,
Maximum take-off 3,243 lbs

POWERPLANT:

One 275 hp Rolls-Royce Falcon III inline engine

PERFORMANCE:

Maximum speed 123 mph,
Endurance 3 hours,
Service ceiling 18,000 ft

ARMAMENT:

2 × 0.303 inch machine guns
Bombload 250 lbs

DIMENSIONS:

Wingspan 39 ft 3 ins,
Length 25 ft 10 ins,
Height 9 ft 9 ins

CREW: 2

ENTERED SERVICE: 1917

NUMBER BUILT: 5,329

Caproni Ca.3

The Caproni Ca.3 was a three engined Italian bomber development of the Caproni Ca.1 that had first flew in 1914. The prototype Ca.3 first took to the air in late 1916 and was soon put into production, with the first aircraft entering service in early 1917. Between 250 and 300 were built, with a further 83 being constructed in France where they equipped several of their escadrilles, as well as a small number being supplied to U.S. forces when they entered the war. The Ca.3 remained in service for the rest of World War One, and with the Italians performed well against Austrian forces, particularly over the Alpine battlefields.

SPECIFICATION:

WEIGHTS:
Empty 5,071 lbs,
Maximum take-off 8,378 lbs

POWERPLANT:
Three 150 hp Isotta-Fraschini V.4B inline engines

PERFORMANCE:
Maximum speed 85 mph,
Range 350 miles,
Service ceiling 15,900 ft

ARMAMENT:
2 × 6.5 mm machine guns,
Bombload 1,764 lbs

DIMENSIONS:
Wingspan 74 ft 7 ins,
Length 36 ft 3 ins,
Height 12 ft 2 ins

CREW: 4

ENTERED SERVICE: 1917

NUMBER BUILT: 350+

Sopwith Dolphin

In early 1917 Sopwith began to design a fighter powered by the new 200 hp Hispano-Suiza 8B engine, the first Sopwith design to use an inline engine. To provide a good view for the pilot his head protruded through the upper wing which was attached to an open frame above the cockpit. The Dolphin was designed to carry four machine guns, two Vickers firing forward through the propeller arc and two Lewis guns inclined at 45 degrees, while four 25 lb Cooper bombs could be carried for the ground attack role. They entered service in late 1917 and equipped four squadrons, while other squadrons used them in small numbers.

SPECIFICATION:

WEIGHTS:

Empty 1,410 lbs,
Maximum take-off 1,959 lbs

POWERPLANT:

One 200 hp Hispano Suiza inline engine

PERFORMANCE:

Maximum speed 128 mph,
Endurance 2 hours,
Service ceiling 21,000 ft

ARMAMENT:

4 × 0.303 inch machine guns,
Bombload 100 lbs

DIMENSIONS:

Wingspan 32 ft 6 ins,
Length 22 ft 3 ins,
Height 8 ft 6 ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER BUILT: 1,778

Albatros J.I

The Albatros J.I was a dedicated ground attack aircraft whose primary armament was two fixed 7.7 mm LMG machine guns that were aligned to fire obliquely forward and downwards at an angle of 45°. They began to be issued to German units in early 1918, and were first used during the Battle of Lys in the opening stages of the German Spring Offensive, where they were deployed in large numbers flying at low level strafing allied trenches. The aircraft was popular with its crews, and proved a success operationally when used with the storm-trooper tactics deployed during the opening stages of the offensive.

SPECIFICATION:

WEIGHTS:
Empty 3,280 lbs,
Maximum take-off 3,986 lbs

POWERPLANT:
One 200 hp Benz Bz.IV inline engine

PERFORMANCE:
Maximum speed 87 mph,
Endurance 2½ hours,
Service ceiling 14,800 ft

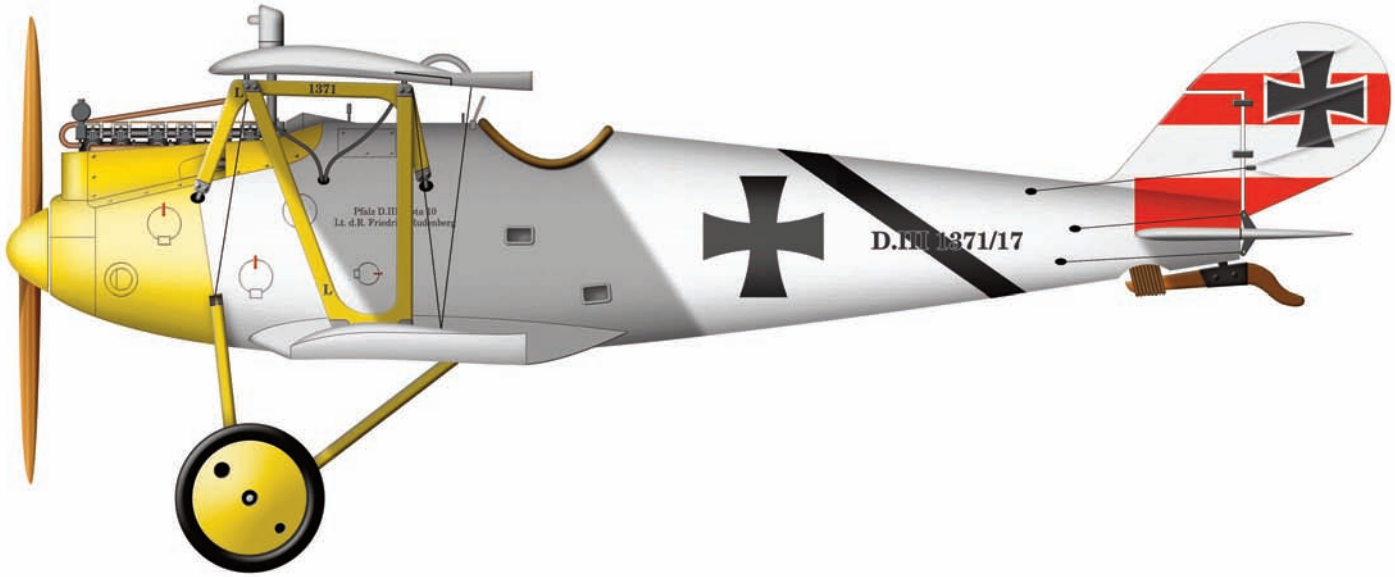
ARMAMENT:
3 × 7.92 mm machine guns
Bombload none

DIMENSIONS:
Wingspan 46 ft 4¾ ins,
Length 28 ft 11¾ ins,
Height 11 ft ½ ins

CREW: 2

ENTERED SERVICE: 1918

NUMBER BUILT: 240+



Pfalz D.III

The Pfalz D.III was designed as a fighter aircraft for the German German Air Service during the First World War and began to enter service with operational units in August 1917, Jasta 10 being the first unit to receive the type, quickly followed by Jasta 4. The D.III was felt by many pilots as being inferior to the Albatros D.III and D.V, criticising the aircraft as having heavy controls, low speed and a lack of power, the Pfalz's D.IIIs advantage however was its strength and sturdiness compared to the Albatros, and was widely used by the Jagdstaffeln from late 1917 to mid-1918 before serving as a training aircraft until the end of the war.

SPECIFICATION:

WEIGHTS:
Empty 1,532 lbs,
Maximum take-off 2,056 lbs

POWERPLANT:
One 180 hp Mercedes D.IIIa inline engine

PERFORMANCE:
Maximum speed 103 mph,
Endurance 2½ hours,
Service ceiling 17,000 ft

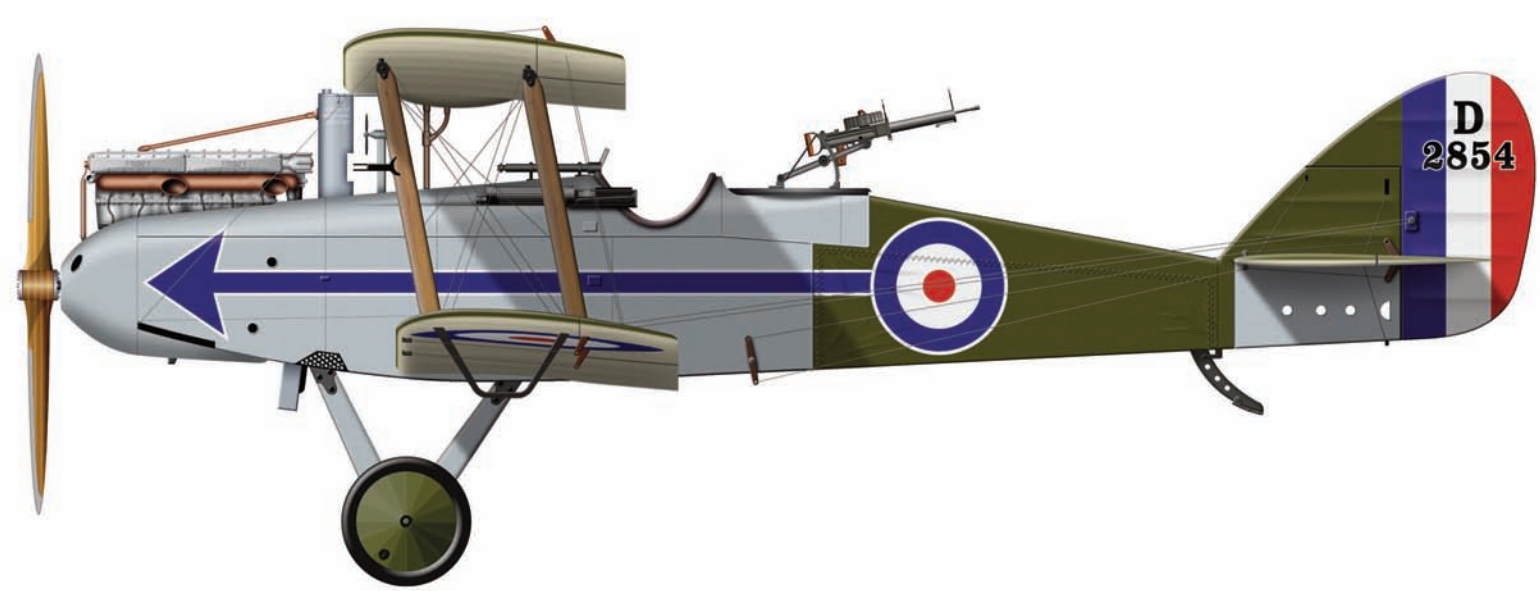
ARMAMENT:
2 × 7.92 mm LMG 08/15 machine guns

DIMENSIONS:
Wingspan 30 ft 10 ins,
Length 22 ft 10 ins,
Height 18 ft 9 ins

CREW: 1

ENTERED SERVICE: 1917

NUMBER BUILT: 950+



Airco DH.9

The Airco DH.9 was designed by Geoffrey de Havilland and based on the company's earlier DH.4. The new aircraft used the same wings and tail unit, but had a redesigned fuselage to accommodate a new 230 hp B.H.P. inline engine that promised an increase in performance. The DH.9 was ordered in large numbers, but on entering service the aircraft's performance was found to be poorer than the aircraft it was designed to replace. The DH.9 suffered heavy losses over the Western Front, but the the aircraft were transformed when the engine was replaced with an American 400 hp Liberty L-12 engine which became the DH.9a model.

SPECIFICATION:

WEIGHTS:
Empty 2,360 lbs,
Maximum take-off 3,790 lbs

POWERPLANT:
One 1 239 hp Siddeley Puma inline engine

PERFORMANCE:
Maximum speed 113 mph,
Endurance 4½ hours,
Service ceiling 15,500 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 460 lbs

DIMENSIONS:
Wingspan 42 ft 4¾ ins,
Length 30 ft 5 ins,
Height 11 ft ½ ins

CREW: 2

ENTERED SERVICE: 1917

NUMBER BUILT: 4,091

Fokker D.VII

The Fokker D.VII was arguably the best scout fighter of World War One. The first D.VIIs to enter service were given to the best pilots in early 1918, and when they appeared over the Western Front in April 1918 they took the allies totally by surprise and quickly proved to be a formidable aircraft. At the time of the Armistice in November 1918 there were 775 D.VIIs in service, with total production being around 3,300 aircraft. Under the terms of the Armistice Germany was required to surrender all their D.VIIs aircraft to the Allies, with many of the type then being supplied to number countries.

SPECIFICATION:

WEIGHTS:
Empty 1,477 lbs,
Maximum take-off 1,997 lbs

POWERPLANT:
One 180 hp Mercedes D.IIIa inline engine

PERFORMANCE:
Maximum speed 117 mph,
Endurance 2 hours,
Service ceiling 20,000 ft

ARMAMENT:
2 × 7.92 mm machine guns
Bombload 100 lbs

DIMENSIONS:
Wingspan 29 ft 2 ins,
Length 22 ft 10 ins,
Height 9 ft

CREW: 1

ENTERED SERVICE: 1918

NUMBER BUILT: 3,300+

Sopwith Snipe

Even before the Camel entered widespread service in 1917 Sopwith had began to design its successor. The Snipe was basically a larger version of the Camel but without the distinctive hump which provided better visibility from the cockpit. Construction was stronger than earlier Sopwith types, and was easier to fly compared to the Camel, and although not particularly fast for 1918, it possessed a good climb rate and was highly manoeuvrable. They were first used operationally in September 1918, and remained the standard single seat fighter in the R.A.F. after World War One, the last aircraft not being retired until 1927.

SPECIFICATION:

WEIGHTS:
Empty 1,312 lbs,
Maximum take-off 2,020 lbs

POWERPLANT:
One 230 hp Bentley
rotary engine

PERFORMANCE:
Maximum speed 121 mph,
Endurance 3 hours,
Service ceiling 19,500 ft

ARMAMENT:
2 × 7.92 mm machine guns
Bombload 100 lbs

DIMENSIONS:
Wingspan 31 ft 1 ins,
Length 19 ft 10 ins,
Height 9 ft 6 ins

CREW: 1

ENTERED SERVICE: 1918

NUMBER BUILT: 1,560

Sopwith Snipe

Even before the Camel entered widespread service in 1917 Sopwith had began to design its successor. The Snipe was basically a larger version of the Camel but without the distinctive hump which provided better visibility from the cockpit. Construction was stronger than earlier Sopwith types, and was easier to fly compared to the Camel, and although not particularly fast for 1918, it possessed a good climb rate and was highly manoeuvrable. They were first used operationally in September 1918, and remained the standard single seat fighter in the R.A.F. after World War One, the last aircraft not being retired until 1927.

SPECIFICATION:

WEIGHTS:
Empty 1,312 lbs,
Maximum take-off 2,020 lbs

POWERPLANT:
One 230 hp Bentley
rotary engine

PERFORMANCE:
Maximum speed 121 mph,
Endurance 3 hours,
Service ceiling 19,500 ft

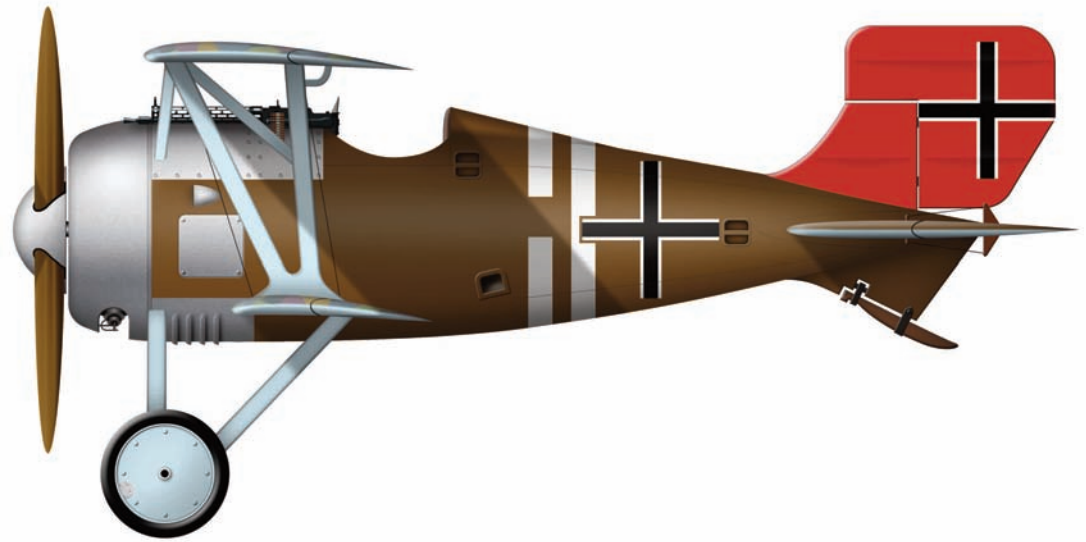
ARMAMENT:
2 × 7.92 mm machine guns
Bombload 100 lbs

DIMENSIONS:
Wingspan 31 ft 1 ins,
Length 19 ft 10 ins,
Height 9 ft 6 ins

CREW: 1

ENTERED SERVICE: 1918

NUMBER BUILT: 1,560



Siemens Schuckert D.III

The Siemens-Schuckert D.III was a development of the earlier D.II powered by a 160 hp Siemens-Halske Sh.III bi-rotary engine. Around 40 were delivered between April and May 1918, with most being supplied to Jagdgeschwader II, whose pilots were enthusiastic about the new aircraft's performance. However, after only 7-10 hours of operational flying, the engines started to develop serious problems, and in late May the aircraft were withdrawn from service and returned to the factory. After major modifications the Siemens-Schuckert D.IIIs were returned to service in July 1918 and used by home defence squadrons.

SPECIFICATION:

WEIGHTS:
Empty 1,175 lbs,
Maximum take-off 1,595 lbs

POWERPLANT:
One 160 hp Siemens-Halske Sh.III bi-rotary engine

PERFORMANCE:
Maximum speed 112 mph,
Endurance 2 hours,
Service ceiling 26,240 ft

ARMAMENT:
2 × 7.92 mm LMG 08/15 Spandau machine guns

DIMENSIONS:
Wingspan 27 ft 7 ins,
Length 18 ft 8½ ins,
Height 9 ft 2¼ ins

CREW: 1

ENTERED SERVICE: 1918

NUMBER BUILT: 80

Martinsyde F.4 Buzzard

In 1917 George Handasyde designed a single seat fighter powered by a 275 hp Rolls-Royce Falcon engine. During trials the prototype demonstrated an impressive performance which resulted in an order for 150 aircraft from the ministry, but at the time the Falcon engine was required for the Bristol Fighter. The aircraft was redesigned to take a 300 hp Hispano-Suiza 8 engine which became the F.4 Buzzard. Over 1,400 were ordered, but by the time of the armistice only about 50 had been delivered before the order was cancelled, and despite its superior performance the F.4 Buzzard was not adopted by the post war R.A.F.

SPECIFICATION:

WEIGHTS:
Empty 1,811 lbs,
Maximum take-off 2,398 lbs

POWERPLANT:
One 300 hp Hispano-Suiza 8 inline engine

PERFORMANCE:
Maximum speed 145 mph,
Endurance 2½ hours,
Service ceiling 24,000 ft

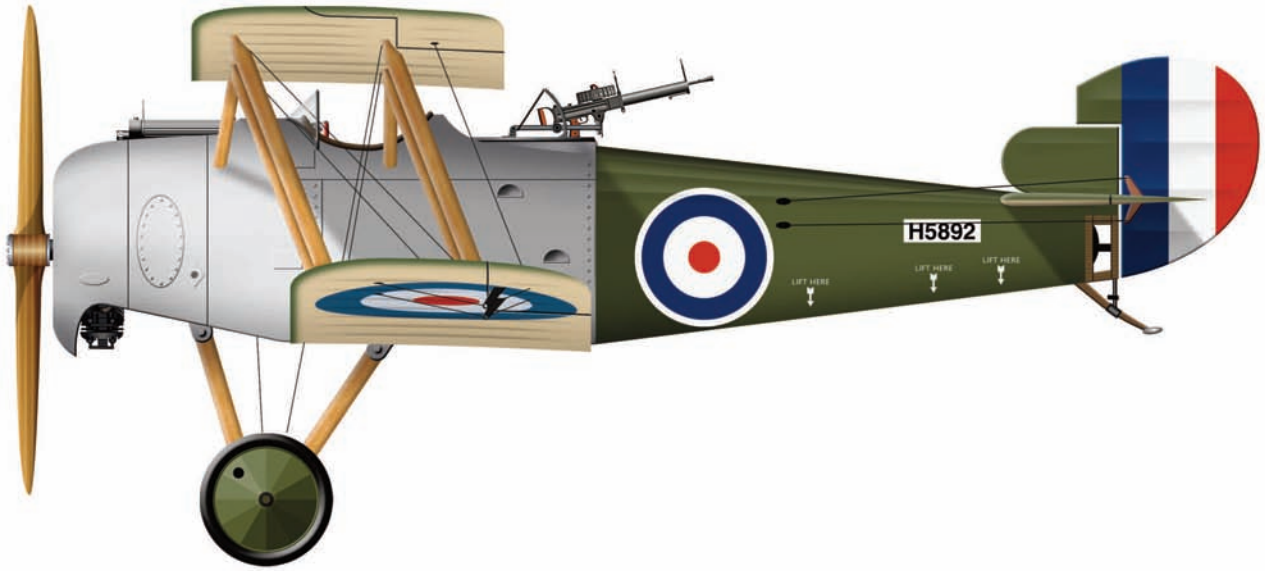
ARMAMENT:
2 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 32 ft 9½ ins,
Length 25 ft 5½ ins,
Height 8 ft 10 ins

CREW: 1

ENTERED SERVICE: 1918

NUMBER BUILT: 370+



Sopwith Buffalo

In July 1918, the British Air Ministry requested Sopwith to design an armoured two-seat aircraft to carry out dangerous contact patrol missions which involved flying at low altitude over the battlefield. Sopwith came up with the 3F.2 Buffalo which had an armoured box that reached back to the observer's cockpit, protecting the crew, fuel tanks, and major parts of the engine. Two prototypes were built which first flew in September 1918 and showed good promise, but the end of the war ended plans for any production. The two prototypes were sent to Germany as part of the occupation force, but both were damaged in crashes.

SPECIFICATION:

WEIGHTS:

Empty 2,178 lbs,
Maximum take-off 3,071 lbs

POWERPLANT:

One 230 hp Bentley
rotary engine

PERFORMANCE:

Maximum speed 114 mph,
Range 275 miles,
Service ceiling 9,000 ft

ARMAMENT:

2 × 0.303 inch machine guns
Bombload none

DIMENSIONS:

Wingspan 36 ft 6 ins,
Length 23 ft 3½ ins,
Height 9 ft 6 ins

CREW: 2

PROTOTYPE: 1918

NUMBER BUILT: 2

Bristol Bulldog

The Bristol Bulldog was designed as a pure interceptor fighter aircraft, with the speed and rate of climb to reach any enemy aircraft then in service. This differed from previous thinking where the scout fighters of World War One were expected to escort bombers and take part in standing patrols over the Western Front. The Bulldog entered service with the R.A.F. in 1929 and eventually equipped ten squadrons, but the rate of aircraft development in the 1930s soon made them obsolescent, and they were replaced by the Gloster Gauntlet in 1936 after they proved to be slower than the new Hawker Hart light bomber.

SPECIFICATION:

WEIGHTS:
Empty 2,205 lbs,
Maximum take-off 3,490 lbs

POWERPLANT:
One 440 hp Bristol Jupiter radial engine

PERFORMANCE:
Maximum speed 178 mph,
Endurance 3 hours,
Service ceiling 29,300 ft

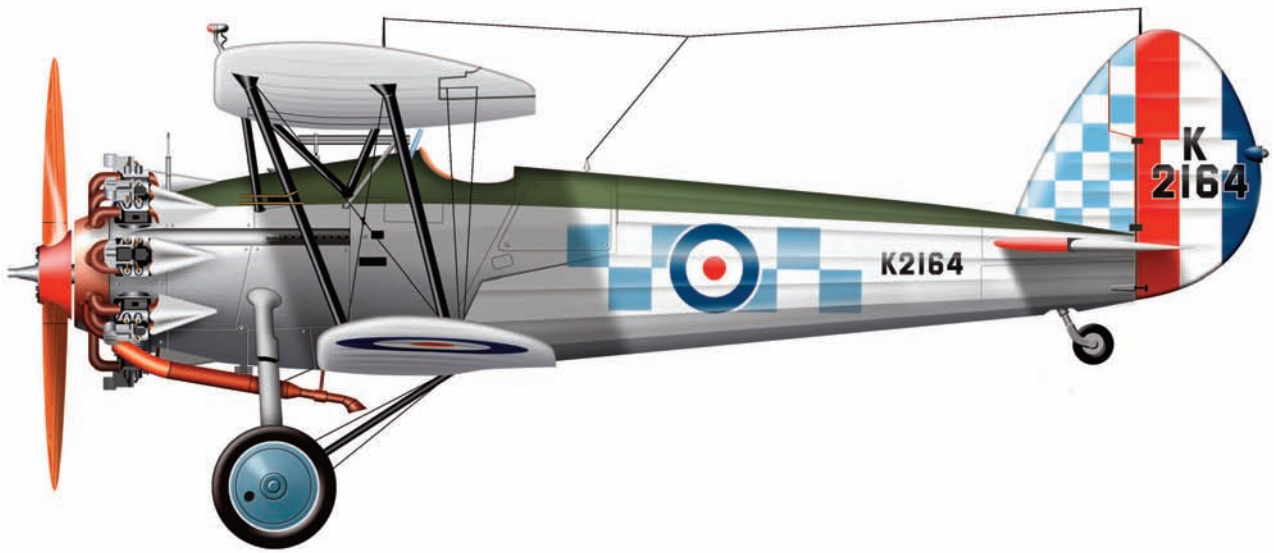
ARMAMENT:
2 × 0.303 inch Vickers machine guns

DIMENSIONS:
Wingspan 33 ft 10 ins,
Length 25 ft 2 ins,
Height 8 ft 9 ins

CREW: 1

ENTERED SERVICE: 1929

NUMBER BUILT: 443



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WEIGHTS:
Empty 2,205 lbs,
Maximum take-off 3,490 lbs

POWERPLANT:
One 440 hp Bristol Jupiter radial engine

PERFORMANCE:
Maximum speed 178 mph,
Endurance 3 hours,
Service ceiling 29,300 ft

ARMAMENT:
2 × 0.303 inch Vickers machine guns

DIMENSIONS:
Wingspan 33 ft 10 ins,
Length 25 ft 2 ins,
Height 8 ft 9 ins

CREW: 1

ENTERED SERVICE: 1929

NUMBER BUILT: 443

Boeing F4B-4

The Boeing F4B served as the primary fighter of the U.S. Navy in the early 1930s, while the denavalised version served with the U.S. Army Air Corps where it was known as the P-12. The aircraft made its maiden flight in June 1928 and began to enter service in 1930 and was used operationally in numerous roles with the U.S. Navy and Army, finally ending its days as a training aircraft in the early 1940s. The total production of the F4B/P-12 series reached 586 which established Boeing as a major aircraft manufacturer, the U.S.N. receiving 182 and the U.S.A.A.F. 366 aircraft, the remainder being demonstrators or exported.

SPECIFICATION:

WEIGHTS:
Empty 2,354 lbs,
Maximum take-off 3,611 lbs

POWERPLANT:
One 550 hp Pratt & Whitney R-1340 -16 radial engine

PERFORMANCE:
Maximum speed 188 mph,
Range 370 miles,
Service ceiling 26,900 ft

ARMAMENT:
2 × 0.3 inch machine guns
Bombload 332 lbs

DIMENSIONS:
Wingspan 30 ft,
Length 20 ft 1 in,
Height 9 ft 4 ins

CREW: 1

ENTERED SERVICE: 1930

NUMBER BUILT: 586

Hawker Hart

The Hawker Hart was designed in the late 1920's to meet the Air Ministry Specification 12.26 for a light day bomber capable of a speed of 160 mph. Under the leadership of Sydney Camm, Hawker's design was a single-bay biplane powered by the new Rolls-Royce Kesrel water-cooled V12 inline engine, which allowed the designers to tightly fair the engine into the airframe which resulted in a sleek streamlined aircraft. The aircraft was faster than the fighters of the day and was immediately accepted for production, with the design being adapted for a variety of other roles throughout the 1930s.

SPECIFICATION:

WEIGHTS:

Empty 3,195 lbs,
Maximum take-off 4,657 lbs

POWERPLANT:

One 640 hp Rolls-Royce Kestrel V inline engine

PERFORMANCE:

Maximum speed 185 mph,
Range 430 miles,
Service ceiling 26,400 ft

ARMAMENT:

2 × 0.303 inch machine guns
Bombload 520 lbs

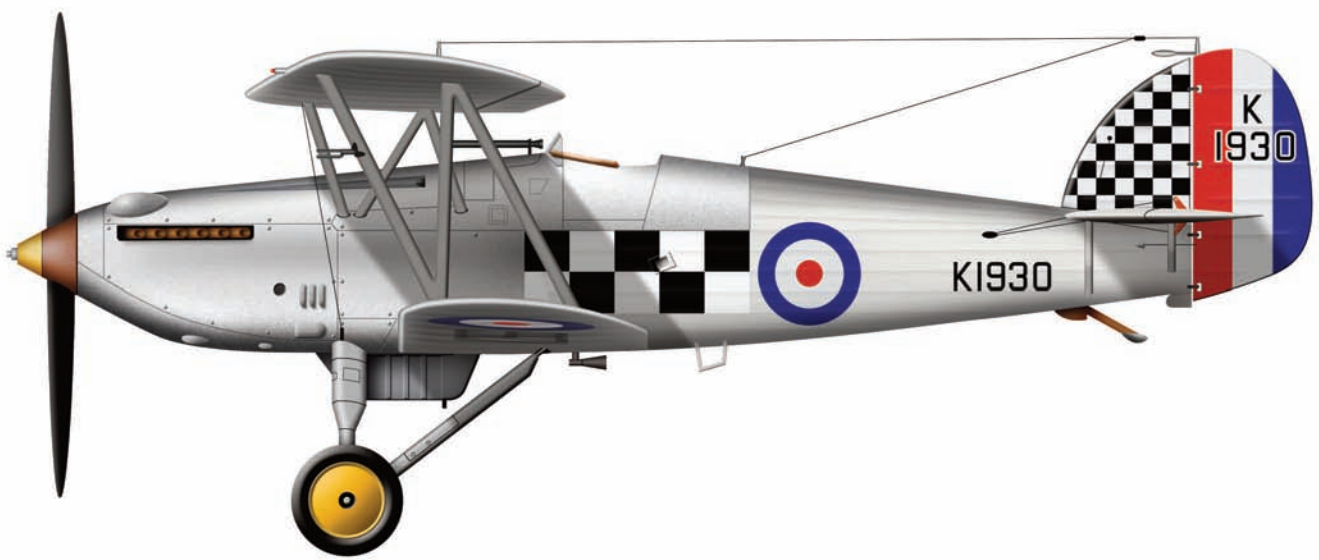
DIMENSIONS:

Wingspan 37 ft 3 ins,
Length 29 ft 3 ins,
Height 10 ft 7 ins

CREW: 2

ENTERED SERVICE: 1930

NUMBER BUILT: 1,000+



Hawker Fury

The Hawker Fury was designed to meet Air Ministry Specification F.20/27 for a new fighter aircraft for the R.A.F. The initial design was fitted with a radial engine and named Hornet, but was later revised to use the Rolls-Royce Kestrel inline engine, allowing the nose to be streamlined and increased the aircraft's speed to 200 mph. Renamed Fury the aircraft was accepted for production and entered service with No. 43 Squadron at Tangmere in May 1931. Furys remained in front line service until January 1939 when the last aircraft were replaced by more modern types, many aircraft then being deployed in the training role.

SPECIFICATION:

WEIGHTS:
Empty 2,734 lbs,
Maximum take-off 3,609 lbs

POWERPLANT:
One 640 hp Rolls-Royce Kestrel V inline engine

PERFORMANCE:
Maximum speed 223 mph,
Range 270 miles,
Service ceiling 29,500 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 30 ft,
Length 26 ft 9 ins,
Height 10 ft 2 ins

CREW: 1

ENTERED SERVICE: 1931

NUMBER BUILT: 275

Hawker Fury

The Hawker Fury was designed to meet Air Ministry Specification F.20/27 for a new fighter aircraft for the R.A.F. The initial design was fitted with a radial engine and named Hornet, but was later revised to use the Rolls-Royce Kestrel inline engine, allowing the nose to be streamlined and increased the aircraft's speed to 200 mph. Renamed Fury the aircraft was accepted for production and entered service with No. 43 Squadron at Tangmere in May 1931. Furys remained in front line service until January 1939 when the last aircraft were replaced by more modern types, many aircraft then being deployed in the training role.

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WEIGHTS:
Empty 2,734 lbs,
Maximum take-off 3,609 lbs

POWERPLANT:
One 640 hp Rolls-Royce Kestrel V inline engine

PERFORMANCE:
Maximum speed 223 mph,
Range 270 miles,
Service ceiling 29,500 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 30 ft,
Length 26 ft 9 ins,
Height 10 ft 2 ins

CREW: 1

ENTERED SERVICE: 1931

NUMBER BUILT: 275

Hawker Nimrod

In 1931 Hawker turned their attention to designing a naval version of the Fury for the Fleet Air Arm. A prototype was built and handed over for sea trials which proved successful, and with all the modifications needed to operate from an aircraft carrier the Nimrod, as it was named, still achieved a speed of 193 mph, which was only marginally slower than its land based counterpart. They began to enter service in 1932, the first aircraft joining 408 flight aboard HMS Glorious. Further development led to the Mk II, which became the principal naval fighter for the Royal Navy until they were retired in 1939.

SPECIFICATION:

WEIGHTS:
Empty 3,110 lbs,
Maximum take-off 4,050 lbs

POWERPLANT:
One 525 hp Rolls-Royce Kestrel II inline engine

PERFORMANCE:
Maximum speed 194 mph,
Range 300 miles,
Service ceiling 28,000 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 33 ft 7 ins,
Length 26 ft 6 ins,
Height 9 ft 10 ins

CREW: 1

ENTERED SERVICE: 1932

NUMBER BUILT: 92

Hawker Audax

The Hawker Audax was based on the Hawker Hart and was designed for army co-operation duties. The Audax was fitted with a hook to pick up messages and powered by a modified Kestrel engine which gave the aircraft a speed of 170 mph. The Audax first flew in 1931 and entered service the following year, and by the time production ceased over 700 had been built with the type seeing service across the British Empire, as well as serving with the Air Forces of Canada, India, South Africa and Rhodesia, to name a few. In the R.A.F. the Audax began to be withdrawn from 1937 and were replaced by the Westland Lysander.

SPECIFICATION:

WEIGHTS:

Empty 2,938 lbs,
Maximum take-off 4,386 lbs

POWERPLANT:

One 525 hp Rolls-Royce Kestrel IB inline engine

PERFORMANCE:

Maximum speed 170 mph,
Range 500 miles,
Service ceiling 21,500 ft

ARMAMENT:

2 × 0.303 inch machine guns
2 × 112 lbs supply containers

DIMENSIONS:

Wingspan 37 ft 3 ins,
Length 29 ft 3 ins,
Height 10 ft 5 ins

CREW: 2

ENTERED SERVICE: 1932

NUMBER BUILT: 700+

Hawker Audax

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PERFORMANCE:

Maximum speed 170 mph,
Range 500 miles,
Service ceiling 21,500 ft

ARMAMENT:

2 × 0.303 inch machine guns
2 × 112 lbs supply containers

DIMENSIONS:

Wingspan 37 ft 3 ins,
Length 29 ft 3 ins,
Height 10 ft 5 ins

CREW: 2

ENTERED SERVICE: 1932

NUMBER BUILT: 700+

Hawker Osprey

The Hawker Osprey was a development of the Hart for the Royal Navy, which were intended for use aboard large warships and aircraft carriers. They were the most heavily modified member of the Hart family, requiring the fuselage to be strengthened to absorb the strain of catapult launches and fitted with folding wings. The undercarriage was modified so they could easily swap between wheels or floats, while the more powerful 630 hp Rolls-Royce Kestrel II engine was used. The Osprey entered service in 1932, but began to be replaced in 1938 and then used as training aircraft until 1944 when they were finally withdrawn.

SPECIFICATION:

WEIGHTS:
Empty 3,406 lbs,
Maximum take-off 4,949 lbs

POWERPLANT:
One 630 hp Rolls-Royce Kestrel II inline engine

PERFORMANCE:
Maximum speed 168 mph,
Range 400 miles,
Service ceiling 25,000 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 520 lbs

DIMENSIONS:
Wingspan 37 ft 3 ins,
Length 29 ft 3 ins,
Height 10 ft 7 ins

CREW: 2

ENTERED SERVICE: 1932

NUMBER BUILT: 92

Hawker Osprey

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PERFORMANCE:
Maximum speed 168 mph,
Range 400 miles,
Service ceiling 25,000 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 520 lbs

DIMENSIONS:
Wingspan 37 ft 3 ins,
Length 29 ft 3 ins,
Height 10 ft 7 ins

CREW: 2

ENTERED SERVICE: 1932

NUMBER BUILT: 92

Hawker Demon

When the Hawker Hart light bomber entered service with the R.A.F. in 1930, the aircraft outperformed all the single seat fighters then in service. As a consequence a two seat fighter version of the aircraft was prepared, with the added bonus of having a rear gunner. They entered service in 1933, but the rear gunner had great difficulty in manoeuvring his gun against the slipstream. In response to this problem the last fifty aircraft were fitted with a hydraulically powered Frazer-Nash turret that included a protective shield for the operator. From 1938 the type began to be withdrawn from front line service in the R.A.F.

SPECIFICATION:

WEIGHTS:
Empty 2,938 lbs,
Maximum take-off 4,386 lbs

POWERPLANT:
One 485 hp Rolls-Royce Kestrel IIS inline engine

PERFORMANCE:
Maximum speed 182 mph,
Range 450 miles,
Service ceiling 27,500 ft

ARMAMENT:
3 × 0.303 inch machine guns
Bombload 4 × 20 lbs

DIMENSIONS:
Wingspan 37 ft 3 ins,
Length 29 ft 7 ins,
Height 10 ft 5 ins

CREW: 2

ENTERED SERVICE: 1933

NUMBER BUILT: 305

Hawker Turreted Demon

When the Hawker Hart light bomber entered service with the R.A.F. in 1930, the aircraft outperformed all the single seat fighters then in service. As a consequence a two seat fighter version of the aircraft was prepared, with the added bonus of having a rear gunner. They entered service in 1933, but the rear gunner had great difficulty in manoeuvring his gun against the slipstream. In response to this problem the last fifty aircraft were fitted with a hydraulically powered Frazer-Nash turret that included a protective shield for the operator. From 1938 the type began to be withdrawn from front line service in the R.A.F.

SPECIFICATION:

WEIGHTS:
Empty 2,938 lbs,
Maximum take-off 4,386 lbs

POWERPLANT:
One 485 hp Rolls-Royce Kestrel IIS inline engine

PERFORMANCE:
Maximum speed 182 mph,
Range 450 miles,
Service ceiling 27,500 ft

ARMAMENT:
3 × 0.303 inch machine guns
Bombload 4 × 20 lbs

DIMENSIONS:
Wingspan 37 ft 3 ins,
Length 29 ft 7 ins,
Height 10 ft 5 ins

CREW: 2

ENTERED SERVICE: 1933

NUMBER BUILT: 305

Hawker Hardy

The Hawker Hardy was a development of the Hawker Audax which was specifically designed for service to meet Air Ministry Specification G.23/33 for a Westland Wapiti replacement for service in Iraq and the Middle East. The prototype first flew in September 1934, with the first production aircraft entering service with No 30 Squadron in Iraq during January 1935. They were never produced in large numbers, while the last operational sortie by a Hardy was made on the 9th May 1941 in East Africa, after which they were withdrawn from operational service and briefly used as communications aircraft or training aircraft.

SPECIFICATION:

WEIGHTS:

Empty 2,938 lbs,
Maximum take-off 4,386 lbs

POWERPLANT:

One 525 hp Rolls-Royce Kestrel IB inline engine

PERFORMANCE:

Maximum speed 170 mph,
Range 500 miles,
Service ceiling 21,500 ft

ARMAMENT:

2 × 0.303 inch machine guns
2 × 112 lbs supply containers

DIMENSIONS:

Wingspan 37 ft 3 ins,
Length 29 ft 3 ins,
Height 10 ft 5 ins

CREW: 2

ENTERED SERVICE: 1935

NUMBER BUILT: 47

Hawker Hind

The Hawker Hind was produced in the mid 1930s as a stop-gap aircraft after the British government authorised the expansion of the Royal Air Force. This was a time of transition from the biplane to monoplane, and while a new generation of aircraft were being developed, it was clear that it would take several years for any of these designs to become operational. Hawker quickly produced the Hind, which was literally an improved Hart, with the type beginning to enter service in early 1936. They equipped 20 squadrons, but its time as a front line aircraft was short and they began to be replaced from mid 1937 onwards.

SPECIFICATION:

WEIGHTS:
Empty 3,195 lbs,
Maximum take-off 4,675 lbs

POWERPLANT:
One 640 hp Rolls-Royce Kestrel V inline engine

PERFORMANCE:
Maximum speed 185 mph,
Range 430 miles,
Service ceiling 25,400 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 520 lbs

DIMENSIONS:
Wingspan 37 ft 3 ins,
Length 29 ft 3 ins,
Height 10 ft 7 ins

CREW: 2

ENTERED SERVICE: 1936

NUMBER BUILT: 1,000+

Hawker Hector

The Hawker Hector was designed in the mid 1930s as a replacement for the Hawker Audax and Hawker Hardy army co-operation aircraft. The Hector was the seventh and last member of the Hawker Hart family, the most significant change being the replacement of the Rolls-Royce Kestrel with a 805 hp Napier Dagger III engine. The Hector entered service in early 1937, but by late 1938 they had all been transferred to the Auxiliary Air Force. During operations around Calais in May 1940 the Hector was found unsuitability in a modern war and were soon withdrawn from service and used as glider and target tug aircraft.

SPECIFICATION:

WEIGHTS:

Empty 3,389 lbs,
Maximum take-off 4,910 bs

POWERPLANT:

One 805 hp Napier Dagger III inline engine

PERFORMANCE:

Maximum speed 187 mph,
Range 300 miles,
Service ceiling 24,000 ft

ARMAMENT:

2 × 0.303 inch machine guns
2 × 112 lbs supply containers

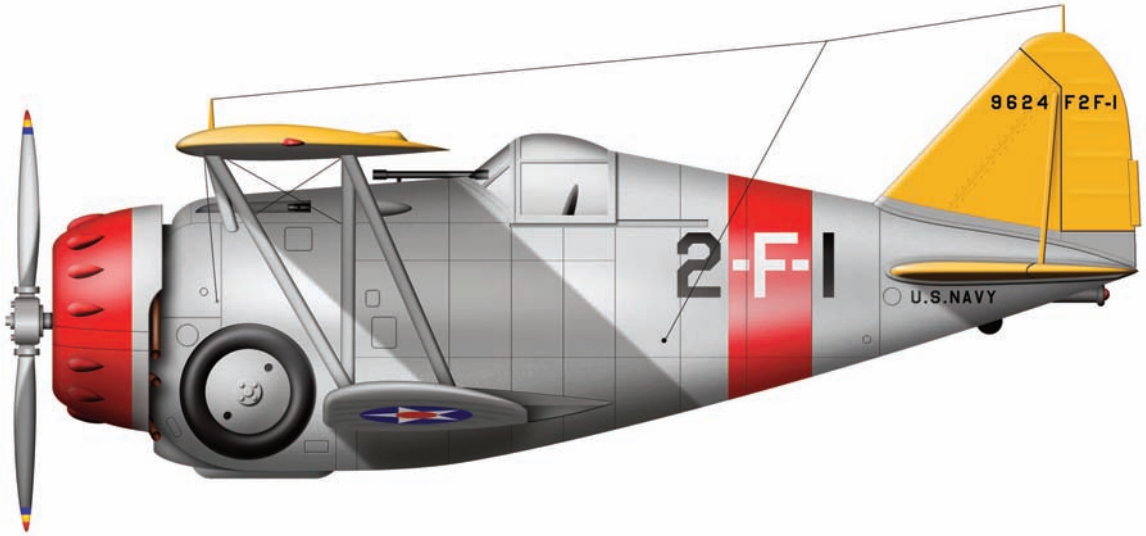
DIMENSIONS:

Wingspan 36 ft 11½ ins,
Length 29 ft 9 ins,
Height 10 ft 5 ins

CREW: 2

ENTERED SERVICE: 1937

NUMBER BUILT: 179



Grumman F2F

The Grumman F2F was a biplane fighter aircraft with retractable undercarriage that was the standard fighter for the United States Navy between 1936 and 1940, and was designed for both carrier and land based operations. The Navy ordered 54 in May 1934, with the first aircraft being delivered in January 1935. One additional aircraft was ordered to replace one that crashed in March 1935, the final aircraft being delivered in August 1935. The F2F served in front-line squadrons from 1935 to late 1939, when the Grumman F3F began to enter service. By September 1940 the F2F had been replaced and relegated to training duties.

SPECIFICATION:

WEIGHTS:

Empty 2,691 lbs,
Maximum take-off 3,847 bs

POWERPLANT:

One 700 hp Pratt & Whitney Twin Wasp radial engine

PERFORMANCE:

Maximum speed 238 mph,
Range 985 miles,
Service ceiling 27,500 ft

ARMAMENT:

2 × 0.3 inch machine guns
Bombload 232 lbs

DIMENSIONS:

Wingspan 28 ft 6 ins,
Length 21 ft 5 ins,
Height 9 ft 1 ins

CREW: 1

ENTERED SERVICE: 1935

NUMBER BUILT: 55

IMAM Ro 43

The IMAM Ro.43 was designed to meet a 1933 specification for a catapult-launched reconnaissance aircraft for the Regia Marina (Italian Navy). they began to enter service in 1935, and when Italy entered the War in June 1940 there were 105 in service which played an important role for the Regia Marina during the early months of the war at sea in the Mediterranean. In total between 200-240 were built by the time production stopped in 1941, with the Ro.43 continuing to take part in shipborne operations as late as June 1942, with 48 still being listed as being in service in late 1943.

SPECIFICATION:

WEIGHTS:
Empty 3,175 lbs,
Maximum take-off 5,300 lbs

POWERPLANT:
One 700 hp Piaggio PX R radial engine

PERFORMANCE:
Maximum speed 186 mph,
Range 680 miles,
Service ceiling 21,600 ft

ARMAMENT:
2 × 7.62 mm machine guns
Bombload none

DIMENSIONS:
Wingspan 37 ft 11 ins,
Length 31 ft 10 ins,
Height 11 ft 6 ins

CREW: 2

ENTERED SERVICE: 1935

NUMBER BUILT: 193

Gloster Gauntlet

The Gloster Gauntlet was the last open cockpit fighter to be operated by the R.A.F., and had its origins in an Air Ministry specification issued in 1926. The prototype was handed over to the R.A.F. for evaluation in 1933, and made an immediate impression on those who flew it. The Gauntlet had a maximum speed of 163 mph at sea level, rising to 210 mph at 14,000 feet, 60 mph faster than the Bristol Bulldog, the principal R.A.F. fighter at the time. They entered service in May 1935, but had a short career with the R.A.F., being withdrawn from late 1936 when more advanced types became available.

SPECIFICATION:

WEIGHTS:
Empty 2,770 lbs,
Maximum take-off 3,970 lbs

POWERPLANT:
One 645 hp Bristol Mercury VI S29 radial engine

PERFORMANCE:
Maximum speed 230 mph,
Range 460 miles,
Service ceiling 33,500 ft

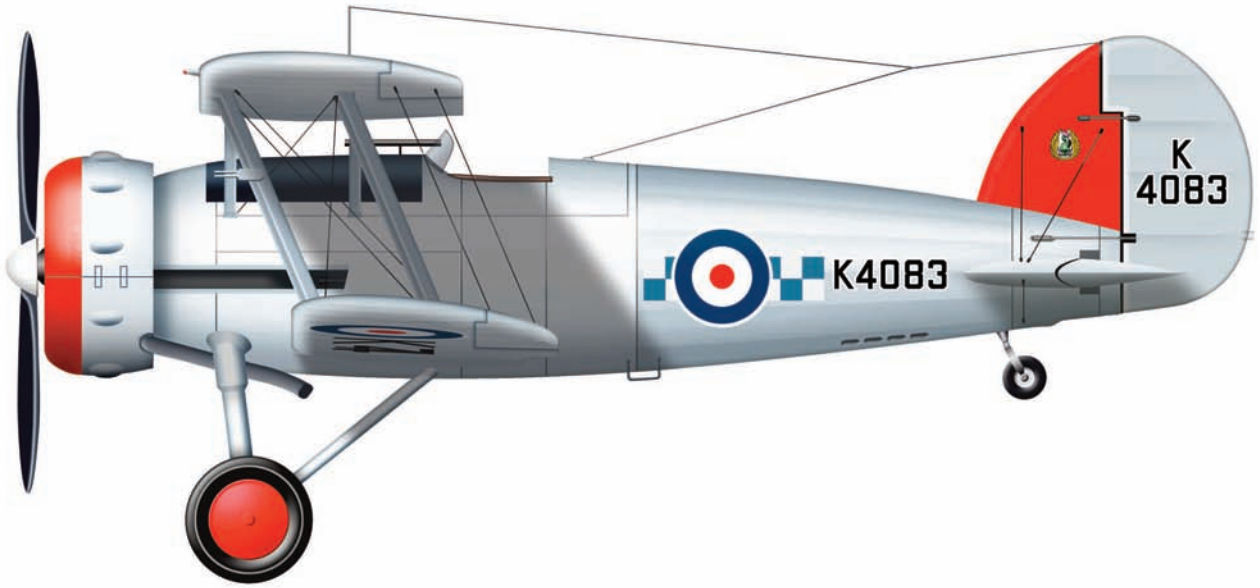
ARMAMENT:
2 × 0.303 inch machine guns
Bombload 100 lbs

DIMENSIONS:
Wingspan 32 ft 9½ ins,
Length 26 ft 5 ins,
Height 10 ft 3 ins

CREW: 1

ENTERED SERVICE: 1935

NUMBER BUILT: 246



Gloster Gauntlet

The Gloster Gauntlet was the last open cockpit fighter to be operated by the R.A.F., and had its origins in an Air Ministry specification issued in 1926. The prototype was handed over to the R.A.F. for evaluation in 1933, and made an immediate impression on those who flew it. The Gauntlet had a maximum speed of 163 mph at sea level, rising to 210 mph at 14,000 feet, 60 mph faster than the Bristol Bulldog, the principal R.A.F. fighter at the time. They entered service in May 1935, but had a short career with the R.A.F., being withdrawn from late 1936 when more advanced types became available.

SPECIFICATION:

WEIGHTS:
Empty 2,770 lbs,
Maximum take-off 3,970 lbs

POWERPLANT:
One 645 hp Bristol Mercury VI S29 radial engine

PERFORMANCE:
Maximum speed 230 mph,
Range 460 miles,
Service ceiling 33,500 ft

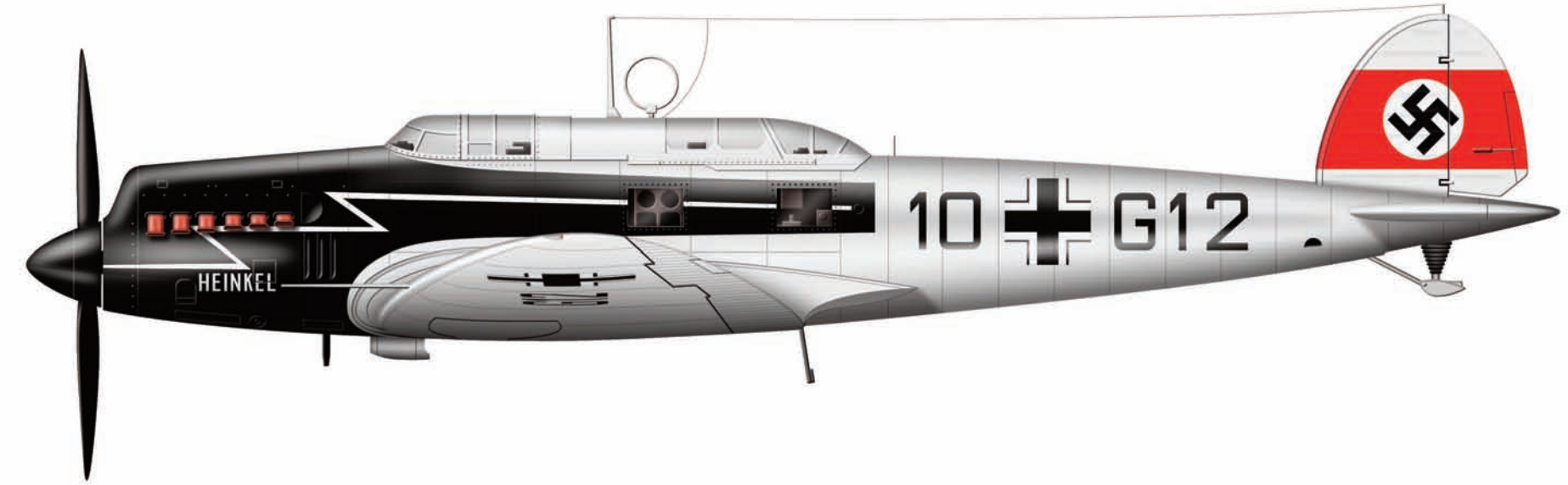
ARMAMENT:
2 × 0.303 inch machine guns
Bombload 100 lbs

DIMENSIONS:
Wingspan 32 ft 9½ ins,
Length 26 ft 5 ins,
Height 10 ft 3 ins

CREW: 1

ENTERED SERVICE: 1935

NUMBER BUILT: 246



Heinkel He.70

The Heinkel He 70 has its origins in the early 1930s for a fast mailplane for Lufthansa airlines. The prototype flew in December 1932 and had an excellent performance for the period, setting eight speed world records. The He 70 became a natural choice for the newly formed Luftwaffe in 1935, and during the Spanish civil war were used as a high speed reconnaissance aircraft or light bomber. Many of the aircraft's structural components however were highly combustible and the He 70 was considered to be too much of a fire risk under combat conditions and were soon removed from front line service with the Luftwaffe.

SPECIFICATION:

WEIGHTS:
Empty 5,203 lbs,
Maximum take-off 7,700 lbs

POWERPLANT:
One 750 hp BMW VI
inline engine

PERFORMANCE:
Maximum speed 224 mph,
Range 1,305 miles,
Service ceiling 17,390 ft

ARMAMENT:
None
Bombload none

DIMENSIONS:
Wingspan 48 ft 6 ins,
Length 38 ft 4 ins,
Height 10 ft 2 ins

CREW: 2 + 4 passengers

ENTERED SERVICE: 1935

NUMBER BUILT: 350+

Heinkel He.70

The Heinkel He 70 has its origins in the early 1930s for a fast mailplane for Lufthansa airlines. The prototype flew in December 1932 and had an excellent performance for the period, setting eight speed world records. The He 70 became a natural choice for the newly formed Luftwaffe in 1935, and during the Spanish civil war were used as a high speed reconnaissance aircraft or light bomber. Many of the aircraft's structural components however were highly combustible and the He 70 was considered to be too much of a fire risk under combat conditions and were soon removed from front line service with the Luftwaffe.

SPECIFICATION:

WEIGHTS:

Empty 5,203 lbs,

Maximum take-off 7,700 lbs

POWERPLANT:

One 750 hp BMW VI

inline engine

PERFORMANCE:

Maximum speed 224 mph,

Range 1,305 miles,

Service ceiling 17,390 ft

ARMAMENT:

1 × 7.92 mm machine gun

Bombload 660 lbs

POWERPLANT:

One 750 hp BMW VI

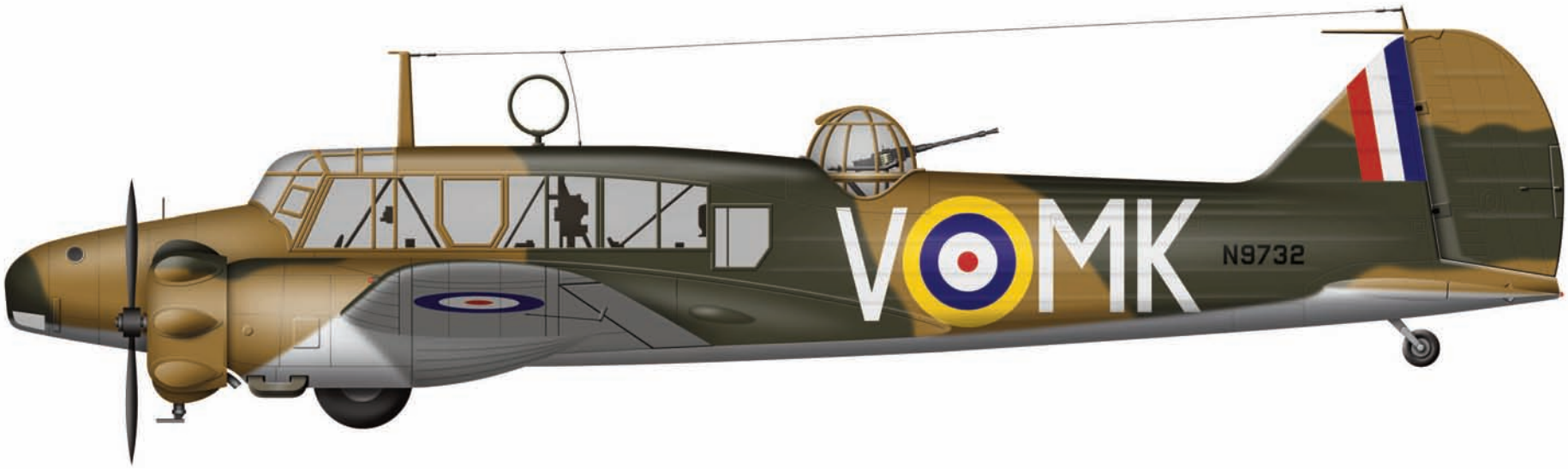
inline engine

CREW: 3

ENTERED SERVICE: 1935

RETIRED: 1939

NUMBER BUILT: 350+



Avro Anson

The Avro Anson was based on an earlier design for Imperial Airways to meet a requirement from the Air Ministry for a maritime reconnaissance aircraft. An initial order for 174 aircraft was placed in July 1935, with the type entering service with the Royal Air Force in 1936. Shortly after the outbreak of World War Two the Anson was soon found to be obsolete in front line service, but soon found its true role as a multi-engined aircrew trainer, and became the mainstay of the British Commonwealth Air Training Plan throughout the war. Later marks of the Anson remained in service with the R.A.F. until 1968.

SPECIFICATION:

WEIGHTS:
Empty 5,512 lbs,
Maximum take-off 8,500 lbs

POWERPLANT:
Two 350 hp Armstrong Siddeley Cheetah IX radial engines

PERFORMANCE:
Maximum speed 188 mph,
Range 790 miles,
Service ceiling 19,000 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 360 lbs

DIMENSIONS:
Wingspan 56 ft 6 ins,
Length 42 ft 3 ins,
Height 13 ft 1 in

CREW: 3/4

ENTERED SERVICE: 1936

NUMBER BUILT: 10,245

Avro Anson

The Avro Anson was based on an earlier design for Imperial Airways to meet a requirement from the Air Ministry for a maritime reconnaissance aircraft. An initial order for 174 aircraft was placed in July 1935, with the type entering service with the Royal Air Force in 1936. Shortly after the outbreak of World War Two the Anson was soon found to be obsolete in front line service, but soon found its true role as a multi-engined aircrew trainer, and became the mainstay of the British Commonwealth Air Training Plan throughout the war. Later marks of the Anson remained in service with the R.A.F. until 1968.

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Maximum take-off 8,500 lbs

POWERPLANT:
Two 350 hp Armstrong Siddeley Cheetah IX radial engines

PERFORMANCE:
Maximum speed 188 mph,
Range 790 miles,
Service ceiling 19,000 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 360 lbs

DIMENSIONS:
Wingspan 56 ft 6 ins,
Length 42 ft 3 ins,
Height 13 ft 1 in

CREW: 3/4

ENTERED SERVICE: 1936

NUMBER BUILT: 10,245

Avro C.19

After the end of Second World War, Avro continued to develop the Anson, and in December 1945 the Mk XIX took to the air for the first time. Aimed at both the civilian and military market they were simply known as the Avro Nineteen. The Nineteen was adopted by the R.A.F. as the C.19 transport and communications aircraft, but were fitted with metal wings in place of the original wooden ones. Other marks for the R.A.F. were the T.Mk 20, T.Mk 21 and T.Mk 22 which was used navigation, radio and communications trainers. The aircraft remained in service with the R.A.F. until 1968.

SPECIFICATION:

WEIGHTS:
Empty 5,512 lbs,
Maximum take-off 8,500 lbs

POWERPLANT:
Two 420 hp Armstrong Siddeley Cheetah IX radial engines

PERFORMANCE:
Maximum speed 188 mph,
Range 790 miles,
Service ceiling 19,000 ft

ARMAMENT:
None
Bombload none

DIMENSIONS:
Wingspan 56 ft 6 ins,
Length 42 ft 3 ins,
Height 13 ft 1 in

CREW: 2 + 6 passengers

ENTERED SERVICE: 1946

NUMBER BUILT: 628

Avro Nineteen

After the end of Second World War, Avro continued to develop the Anson, and in December 1945 the Mk XIX took to the air for the first time. Aimed at both the civilian and military market they were simply known as the Avro Nineteen, and were quite successful in the civil market during the immediate post war period, being used as a light transport aircraft by a range of small charter airlines, while many were used as an executive aircraft for the large corporations. Countries which saw civilian operations with the Nineteen included the United Kingdom, Canada, Australia, South Africa and Denmark.

SPECIFICATION:

WEIGHTS:
Empty 6,512 lbs,
Maximum take-off 10,500 lbs

POWERPLANT:
Two 420 hp Armstrong Siddeley Cheetah IX radial engines

PERFORMANCE:
Maximum speed 190 mph,
Range 660 miles,
Service ceiling 19,000 ft

CREW: 2

PAYLOAD: 6 passengers

DIMENSIONS:
Wingspan 56 ft 6 ins,
Length 42 ft 3 ins,
Height 13 ft 1 in

ENTERED SERVICE: 1946

NUMBER BUILT: 56

Supermarine Walrus

The Supermarine Walrus was a British single engined amphibious biplane aircraft designed by R. J. Mitchell which first flew in 1933. The aircraft was based on the earlier Supermarine Seagull, and entered service in 1936 with the Royal Navy where they were mainly deployed as a fleet spotter and reconnaissance aircraft, most being catapault launched from cruisers or battleships. The aircraft remained in service throughout World War Two, and was most notably used by the Royal Air Force as an air/sea rescue aircraft, in which role they saved over 1,000 downed airmen from the sea.

SPECIFICATION:

WEIGHTS:
Empty 4,900 lbs,
Maximum take-off 8,050 lbs

POWERPLANT:
One 680 hp Bristol
Pegasus VI radial engine

PERFORMANCE:
Maximum speed: 135 mph,
Range 600 miles,
Service ceiling 18,500 ft

ARMAMENT:
2 × 0.303 inch machine guns
Bombload 600 lbs

DIMENSIONS:
Wingspan 45 ft 10 ins,
Length 37 ft 7 ins,
Height 15 ft 3 ins

CREW: 3/4

ENTERED SERVICE: 1936

NUMBER BUILT: 746

Fairey Swordfish

The Fairey Swordfish was designed to meet Air Ministry Specification S.9/30 for a two seat carrier borne torpedo bomber and three seat spotter/reconnaissance aircraft. After extensive trials an order for 86 machines was placed in May 1935, with the aircraft first entering service with No. 825 squadron of the Fleet Air Arm in July 1936. In September 1939 the Swordfish equipped thirteen squadrons of the Fleet Air Arm, eleven serving on the five fleet carriers of the Royal Navy. The Swordfish remained in service throughout World War Two, and even outlived its intended replacement, the Fairey Albacore.

SPECIFICATION:

WEIGHTS:
Empty 4,195 lbs,
Maximum take-off 7,680 lbs

POWERPLANT:
One 690 hp Bristol
Pegasus IIIM radial engine

PERFORMANCE:
Maximum speed: 143 mph,
Range 522 miles,
Service ceiling 16,500 ft

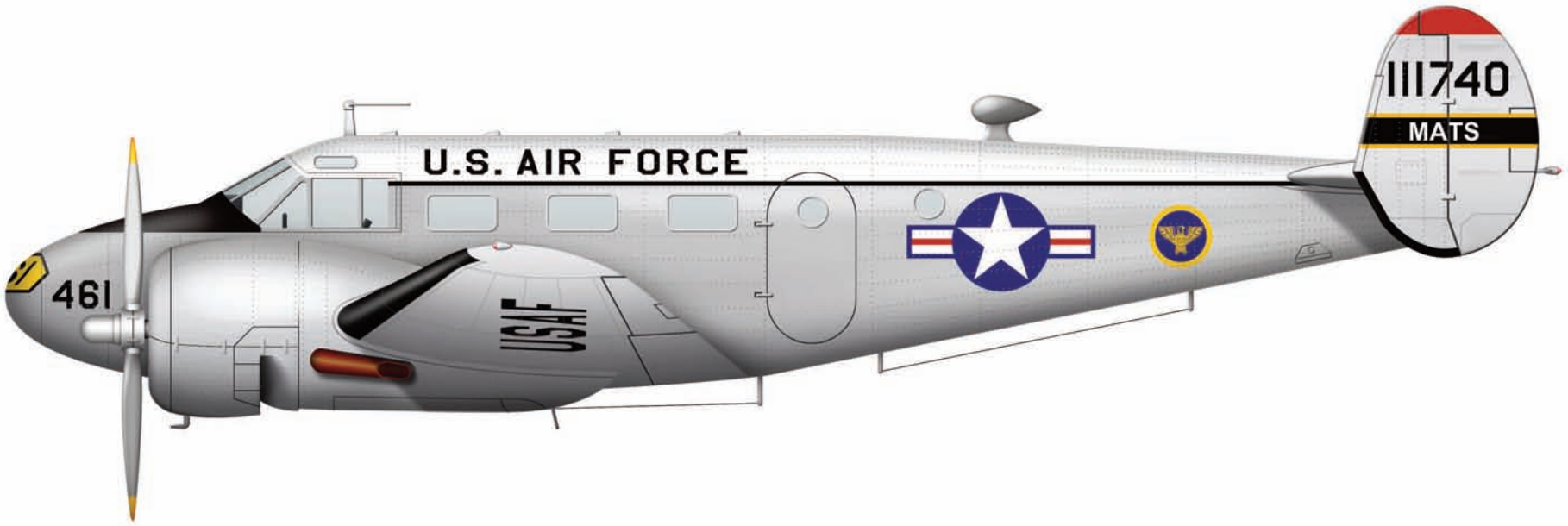
ARMAMENT:
2 × 0.303 inch machine guns
Ordnance load up to 1,670 lbs

DIMENSIONS:
Wingspan 45 ft 10 ins,
Length 37 ft 7 ins,
Height 15 ft 3 ins

CREW: 3/4

ENTERED SERVICE: 1936

NUMBER BUILT: 2,396



Beech C-45 Expediter

The C-45 Expediter utility transport was the U.S. military version of the popular Beechcraft Model 18 light commercial aircraft which first flew in 1937. 4,526 of these aircraft were built for the Army Air Forces between 1939 and 1945 in four versions, and apart from the C-45 Expediter there was the AT-7 Navigator navigation trainer, the AT-11 Kansan bombing-gunnery trainer, and the F-2 for aerial photography and mapping. During the early 1950s, Beech completely rebuilt 900 C-45s for the Air Force. They received new serial numbers and were designated C-45G or C-45H, and remained in service until 1963.

SPECIFICATION:

WEIGHTS:

Empty 6,175 lbs,
Maximum take-off 8,727 lbs

POWERPLANT:

Two 450 hp Wasp Junior radial engines

PERFORMANCE:

Maximum speed 225 mph,
Range 1,200 miles,
Service ceiling 26,000 ft

CREW: 2

PAYLOAD: 6 passengers

DIMENSIONS:

Wingspan 47 ft 8 ins,
Length 34 ft 2 ins,
Height 9 ft 8 ins

ENTERED SERVICE: 1939

NUMBER BUILT: 4,526

Beechcraft Model 18

The Beechcraft Model 18 is a 6 to 11 seat, twin-engined light aircraft which first flew in 1937. The aircraft proved popular with with the up and coming feeder airlines and military alike, and was to remain in production through various marks until November 1969 with over 9,000 being built, making it one of the world's most widely used light aircraft. Sold worldwide as a civilian executive, utility, cargo aircraft, and passenger airliner on tailwheels, nosewheels, skis, or floats, it was also used as a military aircraft, where it was produced in four versions, the C-45 Expediter transport, the AT-7 and AT-11 aircraft trainers, and the F-2 mapping aircraft.

SPECIFICATION:

WEIGHTS:
Empty 5,910 lbs,
Maximum take-off 9,700 lbs

POWERPLANT:
Two 450 hp Wasp Junior radial engines

PERFORMANCE:
Maximum speed 225 mph,
Range 1,200 miles,
Service ceiling 26,000 ft

CREW: 2

PAYLOAD: 6 passengers

DIMENSIONS:
Wingspan 47 ft 8 ins,
Length 34 ft 2 ins,
Height 9 ft 8 ins

ENTERED SERVICE: 1937

NUMBER BUILT: 9,000+

Hawker Hurricane Mk I

The Hawker Hurricane was the first monoplane fighter to enter service with the R.A.F., although it was not the first monoplane fighter in British service, this honour going to the Bristol M.1C in 1916. The first production Hurricane Mk Is were issued to No. 111 Squadron in November 1937, and by the time of the Battle of Britain in the late summer of 1940 they were the most numerous aircraft in Fighter Command. The aircraft was continually developed from its introduction, but by 1941 they were used primarily in the ground attack role, in particular in the North African desert and the Burma campaign in the Far East.

SPECIFICATION:

WEIGHTS:
Empty 4,670 lbs,
Maximum take-off 6,660 lbs

POWERPLANT:
One 1,030 hp Rolls-Royce Merlin II engine

PERFORMANCE:
Maximum speed 327 mph,
Range 600 miles,
Service ceiling 34,000 ft

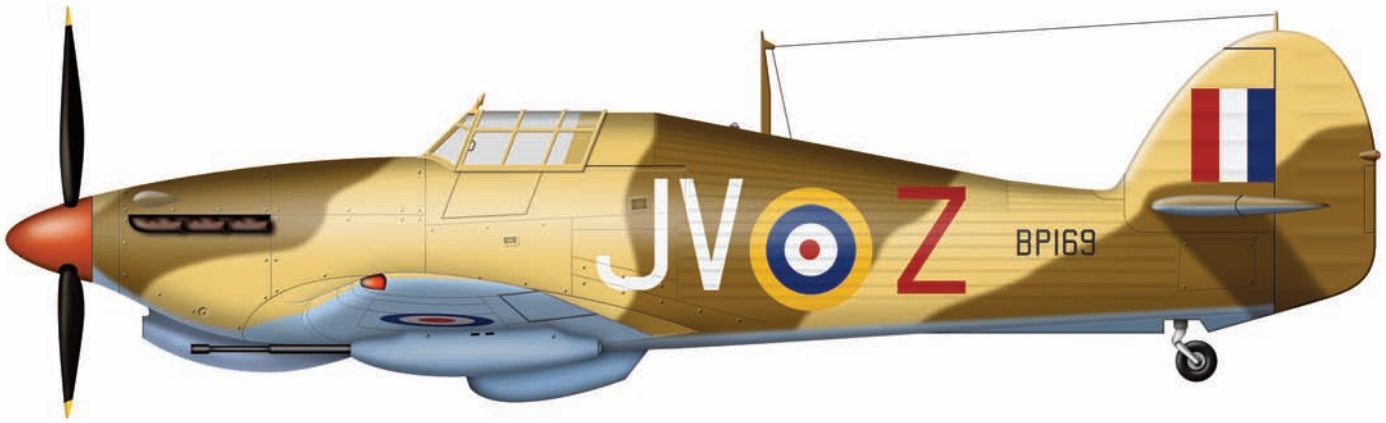
ARMAMENT:
8 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 40 ft,
Length 31 ft 5 ins,
Height 13 ft 11½ ins,

CREW: 1

ENTERED SERVICE: 1937

NUMBER BUILT: 14,583 (all mks)



Hawker Hurricane Mk IIc

The Hawker Hurricane was the first monoplane fighter to enter service with the R.A.F., although it was not the first monoplane fighter in British service, this honour going to the Bristol M.1C in 1916. The first production Hurricane Mk Is were issued to No. 111 Squadron in November 1937, and by the time of the Battle of Britain in the late summer of 1940 they were the most numerous aircraft in Fighter Command. The aircraft was continually developed from its introduction, but by 1941 they were used primarily in the ground attack role, in particular in the North African desert and the Burma campaign in the Far East.

SPECIFICATION:

WEIGHTS:
Empty 5,745 lbs,
Maximum take-off 7,670 lbs

POWERPLANT:
One 1,185 hp Rolls-Royce Merlin XX engine

PERFORMANCE:
Maximum speed 340 mph,
Range 600 miles,
Service ceiling 36,000 ft

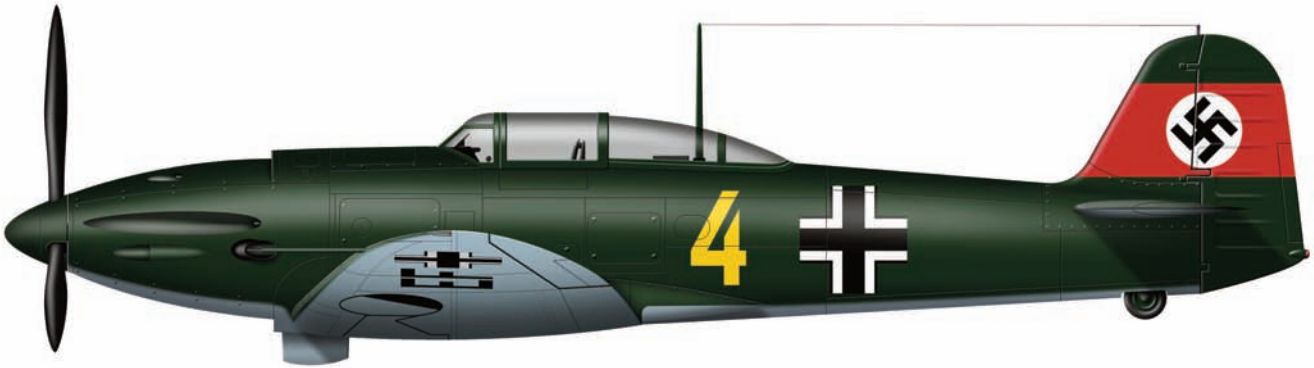
ARMAMENT:
4 x 20 mm cannons,
Bombload 500 lbs

DIMENSIONS:
Wingspan 40 ft,
Length 32 ft 3 ins,
Height 13 ft 1½ ins

CREW: 1

ENTERED SERVICE: 1937

NUMBER BUILT: 14,583 (all mks)



Heinkel He.112

The main rival to the Messerschmitt Bf 109 during comparison trials in early 1936 for a fighter to equip the newly formed Luftwaffe was the Heinkel He 112. The Heinkel design showed potential from the start, but needed further development and lost out to the Bf 109. Heinkel continued to develop the aircraft which emerged as the He 112B series, and during 1937 the aircraft was demonstrated all over the world. From these efforts a number of orders were received, but in the end the only operators of the aircraft was briefly Japan (12), Romania (24), Spain (17), and Hungary (4) who used them as home defence fighters.

SPECIFICATION:

WEIGHTS:
Empty 3,704 lbs,
Maximum take-off 4,957 lbs

POWERPLANT:
One 680 hp Junkers Jumo 210E inline engine

PERFORMANCE:
Maximum speed 317 mph,
Range 680 miles,
Service ceiling 27,900 ft

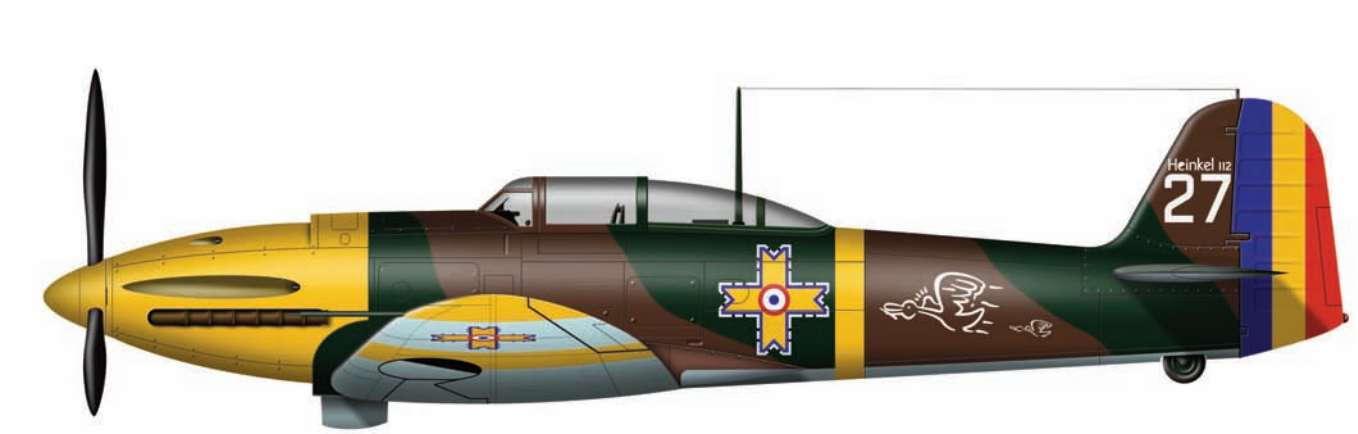
ARMAMENT:
2 × 20 mm cannons
2 × 7.92 mm machine guns

DIMENSIONS:
Wingspan 29 ft 10 ins,
Length 30 ft 6 ins,
Height 12 ft 7 ins

CREW: 1

ENTERED SERVICE: 1939 (Romania)

NUMBER BUILT: 100+



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Maximum take-off 4,957 lbs

POWERPLANT:
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PERFORMANCE:
Maximum speed 317 mph,
Range 680 miles,
Service ceiling 27,900 ft

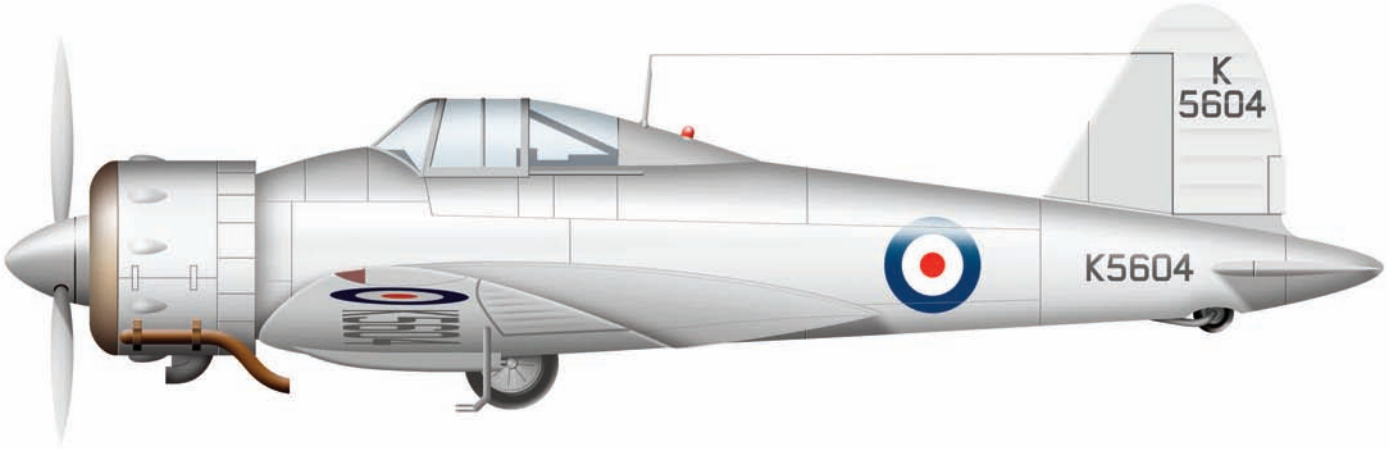
ARMAMENT:
2 × 20 mm cannons
2 × 7.92 mm machine guns

DIMENSIONS:
Wingspan 29 ft 10 ins,
Length 30 ft 6 ins,
Height 12 ft 7 ins

CREW: 1

ENTERED SERVICE: 1939 (Romania)

NUMBER BUILT: 100+



Gloster G.38

In 1934 the British Air Ministry issued specification F5/34 for a high performance single seat fighter armed with eight machine guns. Gloster began on a design to meet the specification which was designated the G.38, and was the first monoplane fighter built by Gloster. The design and development of the aircraft was slow, and it would be the Hawker Hurricane and Supermarine Spitfire that would be placed in production. The G.38 made its maiden flight in 1938, and during further trials attained a speed of 315 mph in level flight, while the aircraft displayed good handling and the visibility from the cockpit was considered excellent.

SPECIFICATION:

WEIGHTS:
Empty 4,190 lbs,
Maximum take-off 5,400 lbs

POWERPLANT:
One 840 hp Bristol
Mercury IX radial engine

PERFORMANCE:
Maximum speed 315 mph,
Range unknown,
Service ceiling 32,500 ft

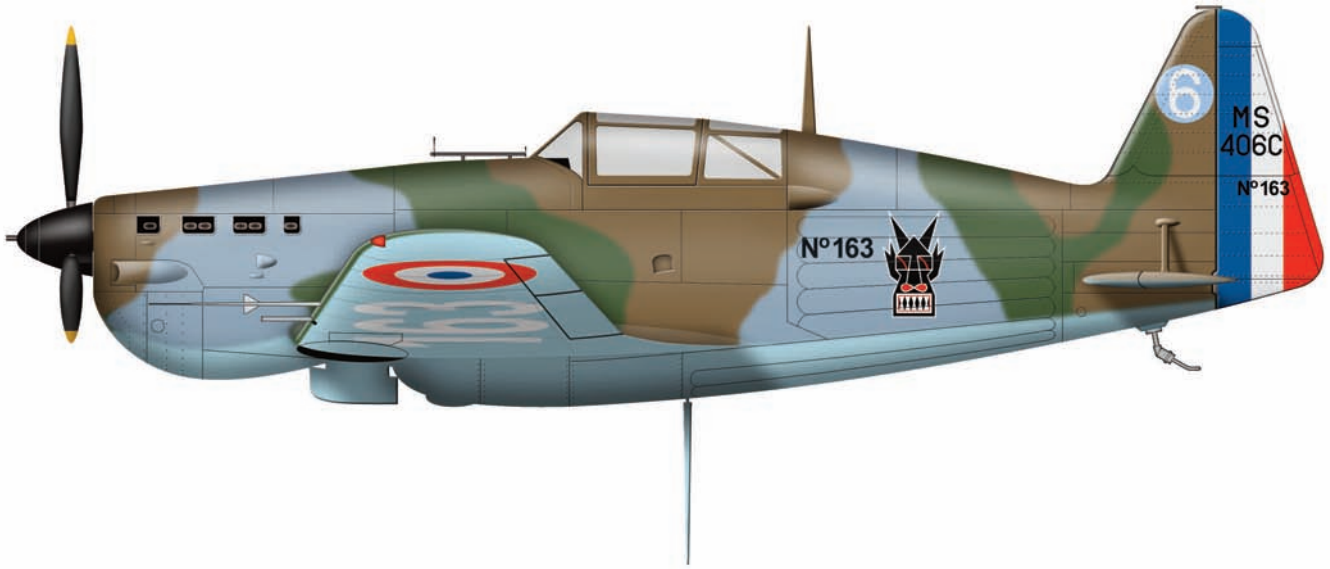
ARMAMENT:
8 × 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 38 ft 2 ins,
Length 32 ft 2 ins,
Height 10 ft 2 ins

CREW: 1

ENTERED TRIALS: 1938

NUMBER BUILT: 2



Morane-Saulnier M.S.406

The Morane-Saulnier MS.405 was the first French fighter with a retractable undercarriage and enclosed cockpit and first flew in August 1935. The aircraft was placed into production in May 1938, and by September 1939 was numerically the most important fighter in French service, with 225 aircraft operational and a further 1,000 on order. The aircraft was quite manoeuvrable and could withstand a tremendous amount of damage, but against the Messerschmitt Bf 109 it was outclassed, and during the battle for France 150 were lost in action with a further 250-300 through accidents or were destroyed on the ground.

SPECIFICATION:

WEIGHTS:

Empty 4,173 lbs,
Maximum take-off 5,348 lbs

POWERPLANT:

One 860 hp Hispano-Suiza inline engine

PERFORMANCE:

Maximum speed 304 mph,
Range 932 miles,
Service ceiling 30,850 ft

ARMAMENT:

1 × 20 mm cannon
2 × 7.5 mm machine guns

DIMENSIONS:

Wingspan 34 ft 10 ins,
Length 26 ft 9 ins,
Height 10 ft 8 ins

CREW: 1

ENTERED SERVICE: 1938

NUMBER BUILT: 1,176

Supermarine Spitfire Mk Ia

In the early 1930s, Supermarine began on a design for a fighter based on the knowledge gained through their S series of floatplanes that had won the Schneider Trophy outright. The aircraft was designed around a new Rolls-Royce engine (later named Merlin), and had a stressed aluminium skin with thin elliptical wings. The prototype first flew in March 1935, and was so superior to other competing designs that a separate specification was issued to cover its production. Named Spitfire, an initial order for 310 aircraft was placed in June 1936, the first aircraft being issued to No. 19 Squadron at R.A.F. Duxford in June 1938.

SPECIFICATION:

WEIGHTS:
Empty 4,517 lbs,
Maximum take-off 5,844 lbs

POWERPLANT:
One 1,030 hp Rolls-Royce Merlin II inline engine

PERFORMANCE:
Maximum speed 346 mph,
Range 415 miles,
Service ceiling 30,500 ft

ARMAMENT:
8 x 0.303 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 36 ft 10 ins,
Length 29 ft 11 ins,
Height 9 ft 10 ins

CREW: 1

ENTERED SERVICE: 1938

NUMBER BUILT: 20,351 (all mks)

Supermarine Spitfire Mk Ib

In an attempt to to give the Spitfire Mk I a heavier punch it was decided to arm a number of aircraft with two 20 mm cannons at the expense of the 0.303 Browning machine guns. To distinguish the different armament, Spitfires withonly machine guns were designated Ia, and those armed with cannons Ib. In service the cannons of the IB proved to be unreliable and prone to jam leaving the aircraft defenceless, a problem that would take a while to resolve. In total 1,536 examples of the Spitfire Mk Ia were built and 30 Spitfire Mk Ib before production was switched to the Spitfire Mk II in June 1940.

SPECIFICATION:

WEIGHTS:
Empty 4,517 lbs,
Maximum take-off 5,844 lbs

POWERPLANT:
One 1,030 hp Rolls-Royce Merlin II inline engine

PERFORMANCE:
Maximum speed 346 mph,
Range 415 miles,
Service ceiling 30,500 ft

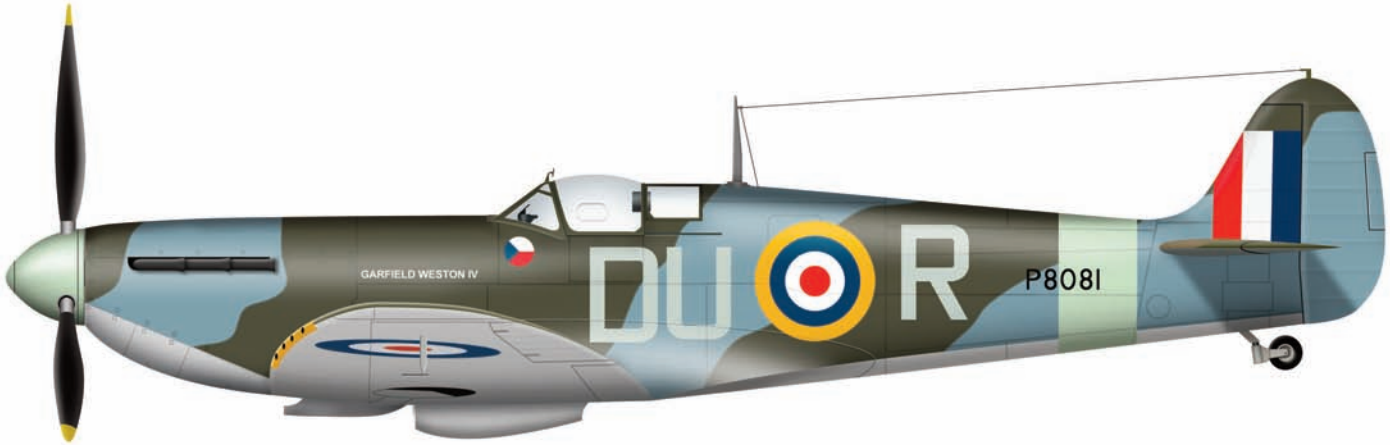
ARMAMENT:
2 × 20 mm cannons
Bombload none

DIMENSIONS:
Wingspan 36 ft 10 ins,
Length 29 ft 11 ins,
Height 9 ft 10 ins

CREW: 1

ENTERED SERVICE: 1939

NUMBER BUILT: 20,351 (all mks)



Supermarine Spitfire Mk IIa

The Spitfire Mk II differed from late production Mk Is by having the 1,150 hp Merlin XII engine, and were the first type to be produced at Supermarine's new factory at Castle Bromwich. The first Mk II flew in September 1939, with production commencing in June 1940. The Mk II was produced in two types, the majority being the Mk IIa armed with eight 0.303 Browning machine guns, while the Mk IIb was armed with two 20mm cannon and four 0.303 inch machine guns after reliability issues with the cannons had been resolved. 920 Mk IIs were built, and along with the Mk Is were phased out in 1941 in favour of the Mk V.

SPECIFICATION:

WEIGHTS:
Empty 4,541 lbs,
Maximum take-off 6,172 lbs

POWERPLANT:
One 1,150 hp Rolls-Royce Merlin XII inline engine

PERFORMANCE:
Maximum speed 357 mph,
Range 500 miles,
Service ceiling 32,000 ft

ARMAMENT:
2 × 20 mm cannons
Bombload none

DIMENSIONS:
Wingspan 36 ft 10 ins,
Length 29 ft 11 ins,
Height 9 ft 10 ins

CREW: 1

ENTERED SERVICE: 1939

NUMBER BUILT: 20,351 (all mks)

Supermarine Spitfire Mk IX

After the FW190 appeared in September 1941 the Spitfire Mk V was totally outclassed. In response the Spitfire Mk VIII was designed using a Merlin 60/70 engine, but this required a major redesign and would take time. As an interim solution the engine was fitted into a modified Mk V fuselage, and tests were so successful that it was ordered into production as the Mk IX in June 1942. They entered service in July, and after nearly a year the R.A.F. had an aircraft that could take on the FW190. So successful was the Mk IX that it remained in service until the end of the war, and was produced in greater numbers than any other mark.

SPECIFICATION:

WEIGHTS:
Empty 5,634 lbs,
Maximum take-off 9,500 lbs

POWERPLANT:
One 1,576 hp Rolls-Royce Merlin 66 inline engine

PERFORMANCE:
Maximum speed 408 mph,
Range 430 miles,
Service ceiling 43,000 ft

ARMAMENT:
2 × 20 mm cannons
2 × 0.5 inch machine guns

DIMENSIONS:
Wingspan 36 ft 10 ins,
Length 31 ft 1 ins,
Height 9 ft 10 ins

CREW: 1

ENTERED SERVICE: 1942

NUMBER BUILT: 20,351 (all mks)

Supermarine Spitfire Mk 24

Work on a new wing for the Spitfire started in February 1942, and resulted in the wing used in the Mk 21 which was built in small numbers and did not enter service until April 1945. This was followed by the Mk 22 with a cut-down fuselage and teardrop canopy, production of which began in March 1945. 260 Mk 22s were produced before the Mk 24 appeared in 1946. The main changes to this version was the ability to carry rocket projectiles, and in total eighty one Mk 24s were produced, many of which would see service during the early years of the Malayan Insurgency, the Spitfire Mk 24 finally being retired from R.A.F. service in 1952.

SPECIFICATION:

WEIGHTS:
Empty 6,160 lbs,
Maximum take-off 9,900 lbs

POWERPLANT:
One 2,120 hp Rolls-Royce Griffon 85

PERFORMANCE:
Maximum speed 454 mph,
Range 390 miles,
Service ceiling 43,000 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 1,000 lbs

DIMENSIONS:
Wingspan 36 ft 11 ins,
Length 32 ft 11 ins,
Height 13 ft 6 ins

CREW: 1

ENTERED SERVICE: 1946

NUMBER BUILT: 20,351 (all mks)

Blackburn Skua

The Blackburn Skua was designed in the mid 1930's a carrier based two seat dive bomber and fighter aircraft for the Royal Navy's Fleet Air Arm. They first entered service with No. 800 and 803 Squadrons in late 1938 and were used operationally during the first two years of World War Two. Their most notable use was on the 10th April 1940, when 16 Skuas from 800 and 803 Squadron from R.N.A.S. Hatston in the Orkney Islands flew to Norway and sank the German cruiser Königsberg in Bergan harbour. The Skua however soon proved to be obsolete and was withdrawn from operational service in early 1941.

SPECIFICATION:

WEIGHTS:
Empty 5,496 lbs,
Maximum take-off 8,228 lbs

POWERPLANT:
One 890 hp Bristol
Perseus XII radial engine

PERFORMANCE:
Maximum speed 223 mph,
Range 435 miles,
Service ceiling 20,200 ft

ARMAMENT:
5 × 0.303 inch machine guns
Bombload 500 lbs

DIMENSIONS:
Wingspan 46 ft 2 ins
Length 35 ft 7 ins,
Height 12 ft 6 ins

CREW: 2

ENTERED SERVICE: 1938

NUMBER BUILT: 192

Blackburn Skua

The Blackburn Skua was designed in the mid 1930's a carrier based two seat dive bomber and fighter aircraft for the Royal Navy's Fleet Air Arm. They first entered service with No. 800 and 803 Squadrons in late 1938 and were used operationally during the first two years of World War Two. Their most notable use was on the 10th April 1940, when 16 Skuas from 800 and 803 Squadron from R.N.A.S. Hatston in the Orkney Islands flew to Norway and sank the German cruiser Königsberg in Bergan harbour. The Skua however soon proved to be obsolete and was withdrawn from operational service in early 1941.

SPECIFICATION:

WEIGHTS:
Empty 5,496 lbs,
Maximum take-off 8,228 lbs

POWERPLANT:
One 890 hp Bristol
Perseus XII radial engine

PERFORMANCE:
Maximum speed 223 mph,
Range 435 miles,
Service ceiling 20,200 ft

ARMAMENT:
5 × 0.303 inch machine guns
Bombload 500 lbs

DIMENSIONS:
Wingspan 46 ft 2 ins
Length 35 ft 7 ins,
Height 12 ft 6 ins

CREW: 2

ENTERED SERVICE: 1938

NUMBER BUILT: 192

Miles Master Mk I

The Miles Master was one of the principal two-seat advanced trainers for the Royal Air Force and Fleet Air Arm during World War Two. The production Master I made its first flight in March 1939, and was one of the fastest and manoeuvrable trainers of its day, and entered service just before the start of World War Two in 1939. 900 Mk. I and Mk. IA Masters were built, which included 26 aircraft built as the M.24 Master Fighter, which were modified to a single-seat configuration and armed with six 0.303 inch machine guns for use as an emergency fighter during the dark days of 1940, but never saw combat.

SPECIFICATION:

WEIGHTS:
Empty 4,293 lbs,
Maximum take-off 5,573 lbs

POWERPLANT:
One 715 hp Rolls-Royce Kestrel XXX inline engine

PERFORMANCE:
Maximum speed 242 mph,
Range 3393 miles,
Service ceiling 25,000 ft

ARMAMENT:
1 × 0.303 inch machine gun
Bombload none

DIMENSIONS:
Wingspan 39 ft,
Length 29 ft 6 ins,
Height 9 ft 3 ins

CREW: 1 + 1 pupil

ENTERED SERVICE: 1939

NUMBER BUILT: 900

Miles Master Mk II/III

When production of the Kestrel engine ceased, a new version of the Miles Master was designed which used an 870 hp air cooled Bristol Mercury XX radial engine. The M.19 Master II prototype flew for the first time in October 1939 and soon placed in production, with 1,748 eventually being built. When the Lend-Lease programme began to supply engines from the United States, a third version of the Master was designed. The M.27 Master III was powered by an 825 hp Pratt & Whitney Twin Wasp Junior radial engine, of which 602 were built, the total production of all three marks being 3,250 aircraft.

SPECIFICATION:

WEIGHTS:
Empty 4,293 lbs,
Maximum take-off 5,573 lbs

POWERPLANT:
One 870 hp Bristol Mercury XX radial engine

PERFORMANCE:
Maximum speed 250 mph,
Range 393 miles,
Service ceiling 25,000 ft

ARMAMENT:
1 × 0.303 inch machine gun
Bombload none

DIMENSIONS:
Wingspan 39 ft,
Length 29 ft 6 ins,
Height 9 ft 3 ins

CREW: 1 + 1 pupil

ENTERED SERVICE: 1939

NUMBER BUILT: 2,350

Boulton Paul Defiant

The Boulton Paul Defiant was designed in the mid 1930's to meet Air Ministry specification F.9/35, which was for a single engined two seat fighter with the main armament fitted in a powered operated turret located behind the pilot. Accepted for production they entered service in early 1940, and at first proved effective with their unique armament. However the Luftwaffe soon found the Defiant's weaknesses, being slow and without any forward firing armament, and as a result they suffered unacceptable losses which caused them to be withdrawn from daylight operations with Fighter Command in the summer of 1940.

SPECIFICATION:

WEIGHTS:
Empty 6,078 lbs,
Maximum take-off 8,318 lbs

POWERPLANT:
One 1,030 hp Rolls-Royce Merlin III inline engine

PERFORMANCE:
Maximum speed 304 mph,
Range 465 miles,
Service ceiling 31,000 ft

ARMAMENT:
4 × 0.303 inch machine guns in dorsal turret

DIMENSIONS:
Wingspan 39 ft 4 ins
Length 35 ft 4 ins,
Height 11 ft 4 ins,

CREW: 2

ENTERED SERVICE: 1940

NUMBER BUILT: 1,065

Boulton Paul Defiant

The Boulton Paul Defiant entered service in early 1940, and was a single engined two seat fighter with the main armament fitted in a powered operated turret located behind the pilot. They were withdrawn from day operations with Fighter Command in the summer of 1940 after suffering unacceptable losses during the Battle for France. In the Autumn of 1940 the Defiant had a new lease of life when many were converted into night fighters, and at their peak equipped thirteen squadrons before they were gradually replaced in this role by more suitable aircraft from mid 1941.

SPECIFICATION:

WEIGHTS:
Empty 6,078 lbs,
Maximum take-off 8,318 lbs

POWERPLANT:
One 1,030 hp Rolls-Royce Merlin III inline engine

PERFORMANCE:
Maximum speed 304 mph,
Range 465 miles,
Service ceiling 31,000 ft

ARMAMENT:
4 × 0.303 inch machine guns in dorsal turret

DIMENSIONS:
Wingspan 39 ft 4 ins
Length 35 ft 4 ins,
Height 11 ft 4 ins,

CREW: 2

ENTERED SERVICE: 1940

NUMBER BUILT: 1,065

Blackburn Roc

The Blackburn Roc was a further design of the turreted fighter, this time for the Royal Navy. The Roc was developed alongside the Skua, but the concept of the aircraft from the start was flawed, as it was underpowered and could only achieve a maximum level speed of just over 220 mph, and it is doubtful if they could have ever caught an enemy bomber, yet alone shoot it down. The first aircraft entered service in February 1940, but during operations over the English Channel in the summer of 1940 the Roc was seen as unsuitable for combat and relegated to air sea rescue or target towing duties.

SPECIFICATION:

WEIGHTS:
Empty 6,121 lbs,
Maximum take-off 7,950 lbs

POWERPLANT:
One 890 hp Bristol Perseus XII radial engine

PERFORMANCE:
Maximum speed 223 mph,
Range 810 miles,
Service ceiling 18,000 ft

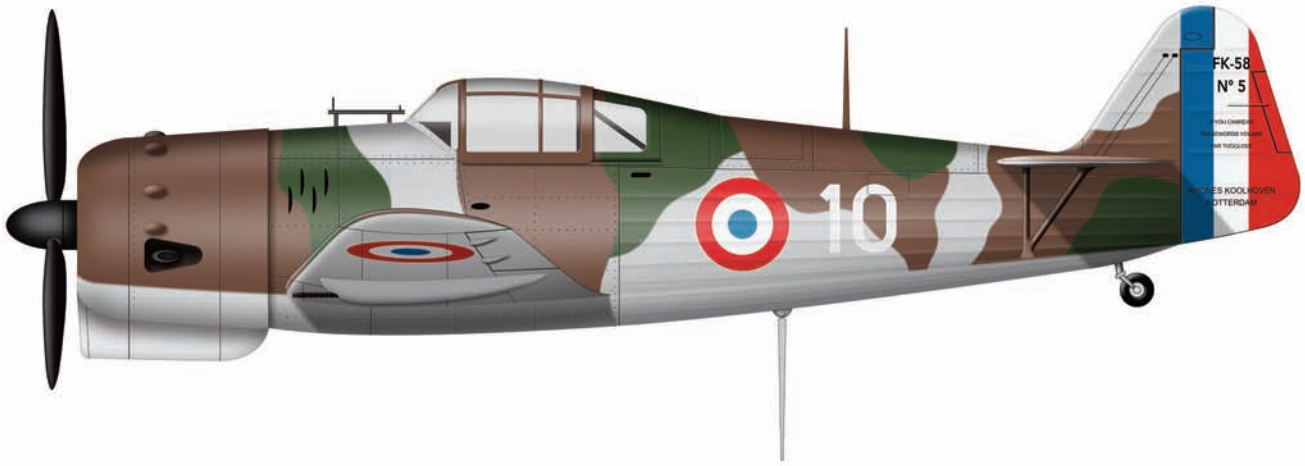
ARMAMENT:
4 × 0.303 inch machine guns
Bombload 240 lbs

DIMENSIONS:
Wingspan 46 ft,
Length 35 ft 7 ins,
Height 12 ft 1 in

CREW: 2

ENTERED SERVICE: 1940

NUMBER BUILT: 136



Koolhoven FK.58

The Koolhoven FK.58 was outwardly a modern aircraft, with a retractable undercarriage, enclosed cockpit, and an armament of four 0.30 inch machine guns mounted in two blisters beneath the wings. In January 1939 the Armée de l'Air placed an order for 50 aircraft from the Dutch company, and by May 1940 thirteen were operational and manned by expatriate Polish pilots. They patrolled the Avignon to Marseille area, then around Clermont-Ferrand, but made no contact with the enemy. Their service life was short lived, as only around 50 operational sorties were recorded before they were grounded through lack of spares.

SPECIFICATION:

WEIGHTS:
Empty 4,255 lbs,
Maximum take-off 6,063 lbs

POWERPLANT:
One 1,038 hp Gnome-Rhône radial engine

PERFORMANCE:
Maximum speed 314 mph,
Range 470 miles,
Service ceiling 32,800 ft

ARMAMENT:
4 × 0.30 inch machine guns
Bombload none

DIMENSIONS:
Wingspan 36 ft 1¼ ins,
Length 28 ft 6¾ ins,
Height 9 ft 10 ins

CREW: 1

ENTERED SERVICE: 1940

NUMBER BUILT: 20

Bloch MB.174

Work on the MB.170 series began in 1936, and was designed as a twin engined aircraft that could serve in several different roles and fill the gap between medium bombers and twin engined fighters and light attack aircraft. The MB.174 was the first of the series that was put into production in early 1939, the first production aircraft taking to the air in November 1939. They were first used operationally in early 1940, but by the time of the Battle of France in May only 52 had been delivered, although these played an important role during those chaotic days when they carried out strategic reconnaissance missions.

SPECIFICATION:

WEIGHTS:
Empty 14,122 lbs,
Maximum take-off 17,750 lbs

POWERPLANT:
Two 1,035 hp Gnome-Rhône 14N-20/21 radial engines

PERFORMANCE:
Maximum speed 329 mph,
Range 1,025 miles,
Service ceiling 36,000 ft

ARMAMENT:
5 × 7.5 mm machine guns
Bombload 880 lbs

DIMENSIONS:
Wingspan 58 ft 9½ ins,
Length 40 ft 1½ ins,
Height 11 ft 7¾ ins

CREW: 3

ENTERED SERVICE: 1940

NUMBER BUILT: 230+

Blackburn Botha

The Blackburn Botha was designed to meet specification M.15/35, for a three man, twin engined, land based torpedo bomber/reconnaissance aircraft. The aircraft was designed to use the 850 hp Bristol Perseus radial engine, but in 1936 the Air Ministry altered the specification to include a fourth crew member. The weight increase was sufficient to make the Perseus engine inadequate, but more suitable engines were required elsewhere. Despite its problem the aircraft was placed in production and entered service in 1940. They gained a bad reputation over their high accident rate and were withdrawn in 1943.

SPECIFICATION:

WEIGHTS:
Empty 11,830 lbs,
Maximum take-off 18,450 lbs

POWERPLANT:
Two 930 hp Bristol Perseus radial engines

PERFORMANCE:
Maximum speed 249 mph,
Range 1,100 miles,
Service ceiling 17,500 ft

ARMAMENT:
3 × 0.303 inch machine guns
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 59 ft,
Length 51 ft 1½ ins,
Height 14 ft 7½ ins

CREW: 4

ENTERED SERVICE: 1940

NUMBER BUILT: 580

Westland Whirlwind

The Westland Whirlwind was designed as a high performance fighter armed with four 20 mm cannons and first flew in October 1938. They entered R.A.F. service with No. 263 Squadron during the autumn of 1940, and from the summer of 1941 were deployed in offensive sweeps and interdiction raids across the English Channel. The Peregrine engines however proved to be a nightmare, while the aircraft needed considerable maintenance to keep them airworthy, and as a result they began to be withdrawn in the summer of 1943. The only other unit to operate the Whirlwind was No. 137 Squadron.

SPECIFICATION:

WEIGHTS:
Empty 8, 310 lbs,
Maximum take-off 11,445 lbs

POWERPLANT:
Two 885 hp Rolls-Royce Peregrine I inline engines

PERFORMANCE:
Maximum speed 360 mph,
Range 800 miles,
Service ceiling 30,300 ft

ARMAMENT:
4 × 20 mm Hispano cannons,
Bombload 1,000 lbs

DIMENSIONS:
Wingspan 45 ft,
Length 32 ft 3 ins,
Height 11 ft

CREW: 1

ENTERED SERVICE: 1940

NUMBER BUILT: 116

Mikoyan-Gurevich MiG 3

The prototype MiG-1 first flew in early April 1940 and immediately placed in production. The aircraft was very fast with a speed of 400 mph, but suffered from poor handling and was taxing to fly. It also had an unacceptably short endurance which led to design changes which were soon introduced. The revised aircraft being designated the MiG-3, and when the Germans invaded Russian in June 1941 there were over 1,000 on strength near the border, but were outclassed by the Bf 109 in all respects, and as a result they were soon deployed as a high level escort before being used as ground attack aircraft.

SPECIFICATION:

WEIGHTS:

Empty 5,965 lbs,
Maximum take-off 7,415 lbs

POWERPLANT:

One 1,350 hp Mikulin AM-35A inline engine

PERFORMANCE:

Maximum speed 398 mph,
Range 510 miles,
Service ceiling 39,400 ft

ARMAMENT:

2 × 7.62 mm machine guns
1 × 12.7 mm machine gun

DIMENSIONS:

Wingspan 33 ft 5 ins,
Length 27 ft 1 ins,
Height 10 ft 9¾ ins

CREW: 1

ENTERED SERVICE: 1941

NUMBER BUILT: 3,322

Vultee P-66 Vanguard

The Vultee Vanguard single seat fighter made its maiden flight in September 1939 and acquired an order from the Swedish government for 146 aircraft in 1940. In September 1941 the first deliveries were about to be despatched when an embargo was placed on their export by the U.S. government. After Japan entered the war the aircraft was given the designation P-66, 50 being retained by the U.S.A.A.F. and used as advanced trainers. 100 were passed on to the British under Lend-Lease who named the aircraft Vanguard I, these being supplied to U.S. volunteer forces in China where they had an undistinguished career.

SPECIFICATION:

WEIGHTS:
Empty 5,237 lbs,
Maximum take-off 7,384 lbs

POWERPLANT:
One 1,200 hp Pratt & Whitney R1830 radial engine

PERFORMANCE:
Maximum speed 340 mph,
Range 950 miles,
Service ceiling 28,200 ft

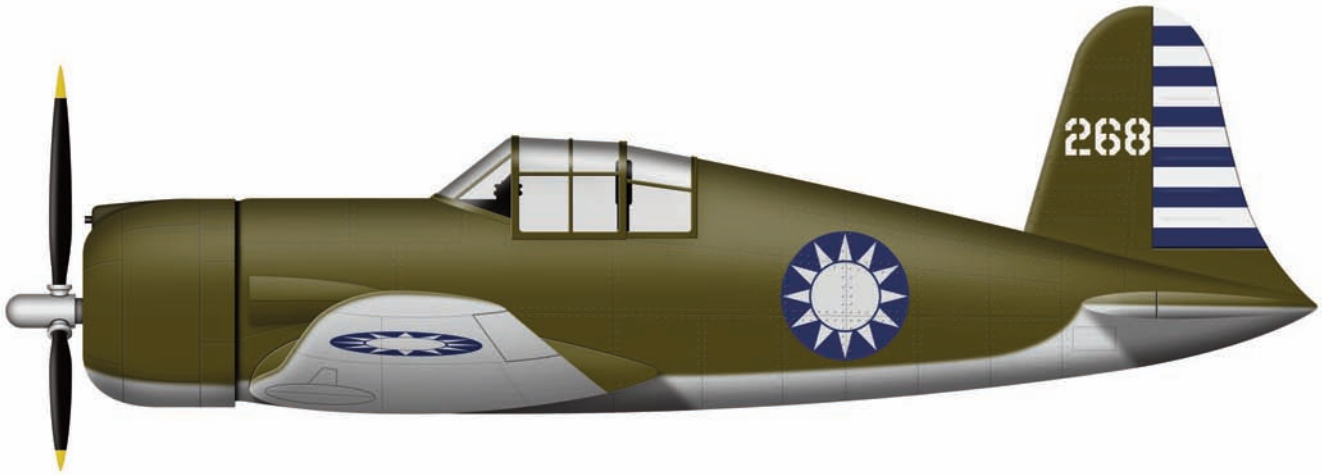
ARMAMENT:
2 × 0.5 inch machine guns
2 × 0.3 inch machine guns

DIMENSIONS:
Wingspan 35 ft 10 ins,
Length 28 ft 5 ins,
Height 9 ft 5 ins

CREW: 1

ENTERED SERVICE: 1941

NUMBER BUILT: 146



Vultee P-66 Vanguard

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SPECIFICATION:

WEIGHTS:

Empty 5,237 lbs,
Maximum take-off 7,384 lbs

POWERPLANT:

One 1,200 hp Pratt & Whitney R1830 radial engine

PERFORMANCE:

Maximum speed 340 mph,
Range 950 miles,
Service ceiling 28,200 ft

ARMAMENT:

2 × 0.5 inch machine guns
2 × 0.3 inch machine guns

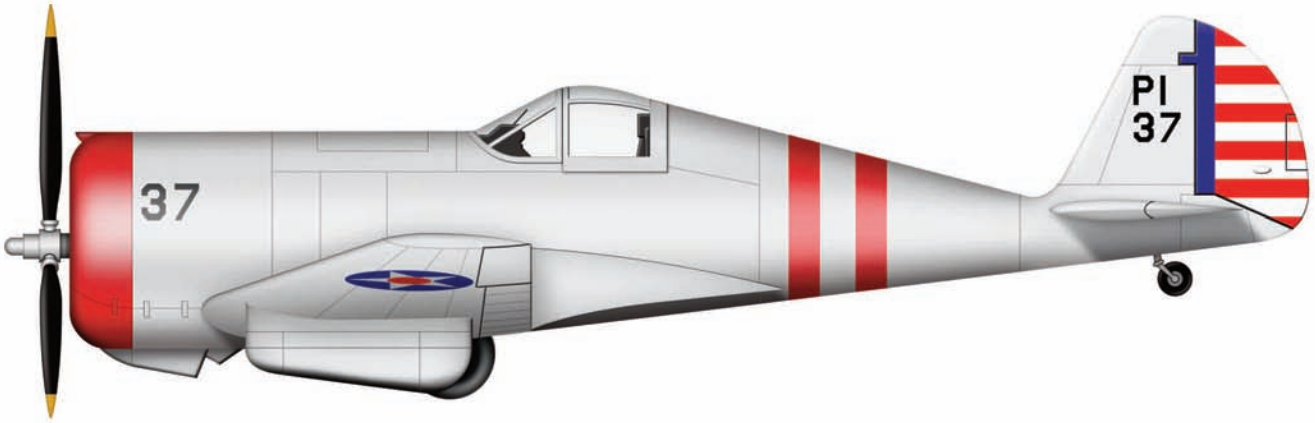
DIMENSIONS:

Wingspan 35 ft 10 ins,
Length 28 ft 5 ins,
Height 9 ft 5 ins

CREW: 1

ENTERED SERVICE: 1941

NUMBER BUILT: 146



Curtiss-Wright CW-21B Demon

In early 1938 Curtiss-Wright began to develop Carl Scott's two seater Model 19 aircraft into a lightweight fighter for export with a high rate of climb in order to attack bomber formations with minimal warning. The new fighter aircraft was designated the CW-21 and first flew in September 1938, but was immediately dismissed for service with the U.S.A.A.F., but orders for the aircraft did follow. The first came from the Chinese for 35 aircraft, followed by an order for 24 of the improved CW-21B from the Netherlands for service in the Far East. With the Dutch they were easily outclassed by the Japanese Zero and sustained heavy losses.

SPECIFICATION:

WEIGHTS:

Empty 5,237 lbs,

Maximum take-off 7,384 lbs

POWERPLANT:

One 1,200 hp Pratt & Whitney R1830 radial engine

PERFORMANCE:

Maximum speed 340 mph,

Range 950 miles,

Service ceiling 28,200 ft

ARMAMENT:

2 × 0.5 inch machine guns

4 × 0.3 inch machine guns

DIMENSIONS:

Wingspan 35 ft 10 ins,

Length 28 ft 5 ins,

Height 9 ft 5 ins

CREW: 1

ENTERED SERVICE: 1940

NUMBER BUILT: 62

Curtiss-Wright CW-21B Demon

In early 1938 Curtiss-Wright began to develop Carl Scott's two seater Model 19 aircraft into a lightweight fighter for export with a high rate of climb in order to attack bomber formations with minimal warning. The new fighter aircraft was designated the CW-21 and first flew in September 1938, but was immediately dismissed for service with the U.S.A.A.F., but orders for the aircraft did follow. The first came from the Chinese for 35 aircraft, followed by an order for 24 of the improved CW-21B from the Netherlands for service in the Far East. With the Dutch they were easily outclassed by the Japanese Zero and sustained heavy losses.

SPECIFICATION:

WEIGHTS:
Empty 5,237 lbs,
Maximum take-off 7,384 lbs

POWERPLANT:
One 1,200 hp Pratt & Whitney R1830 radial engine

PERFORMANCE:
Maximum speed 340 mph,
Range 950 miles,
Service ceiling 28,200 ft

ARMAMENT:
2 × 0.5 inch machine guns
4 × 0.3 inch machine guns

DIMENSIONS:
Wingspan 35 ft 10 ins,
Length 28 ft 5 ins,
Height 9 ft 5 ins

CREW: 1

ENTERED SERVICE: 1940

NUMBER BUILT: 62

Focke-Wulf Fw 190

The Fw 190 was certainly the best piston engined fighter to see service with the Luftwaffe during World War Two, and possibly the most advanced fighter operated by any nation on its introduction into service in the autumn of 1941. They were used in every theatre of war engaged in by German forces, and in trained hands would cause great damage on the enemy, taking a heavy toll of American bombers and Russian aircraft during the defence of Germany. There are no accurate production figures for the aircraft, but it is estimated that at least 19,500 of over 30 marks were built by a number of manufacturers.

SPECIFICATION:

WEIGHTS:
Empty 7,060 lbs,
Maximum take-off 10,800 lbs

POWERPLANT:
1,700 hp BMW 801 D-2
radial engine

PERFORMANCE:
Maximum speed 408 mph,
Range 500 miles,
Service ceiling 37,400 ft

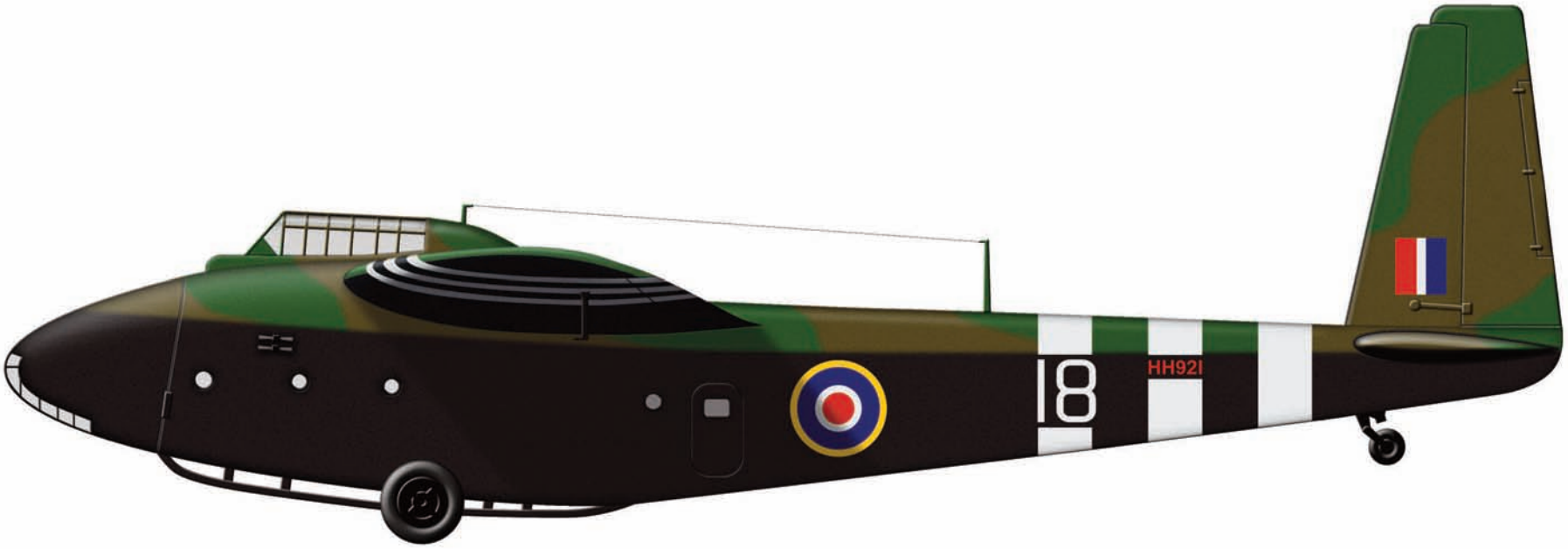
ARMAMENT:
4 × 20 mm cannons
4 × 13 mm machine guns

DIMENSIONS:
Wingspan 34 ft 5 ins,
Length 29 ft 5 ins,
Height 12 ft 1 in

CREW: 1

ENTERED SERVICE: 1941

NUMBER BUILT: 19,500+



G.A.L. Hamilcar Mk I

After British airborne units were formed in 1940, a glider was required that could transport carry a heavy cargo, such as the Tetrarch or M22 Locust light tank, in support of the airborne forces. General Aircraft Limited developed the GAL 49 Hamilcar for this purpose which could carry a light tank or two Universal Carriers. They were first used during the D-Day landings on the 6th June 1944, when thirty transported heavy equipment in support of British forces. In September they were used during Operation Market Garden, and again during the crossing of the Rhine in March 1945.

SPECIFICATION:

WEIGHTS:
Empty 18,400 lbs,
Maximum take-off 36,000 lbs

TOWING TUG:
Usually a four engined Short Stirling bomber

TOWING SPEED:
Optimum 150 mph, but not too exceed 187 mph,

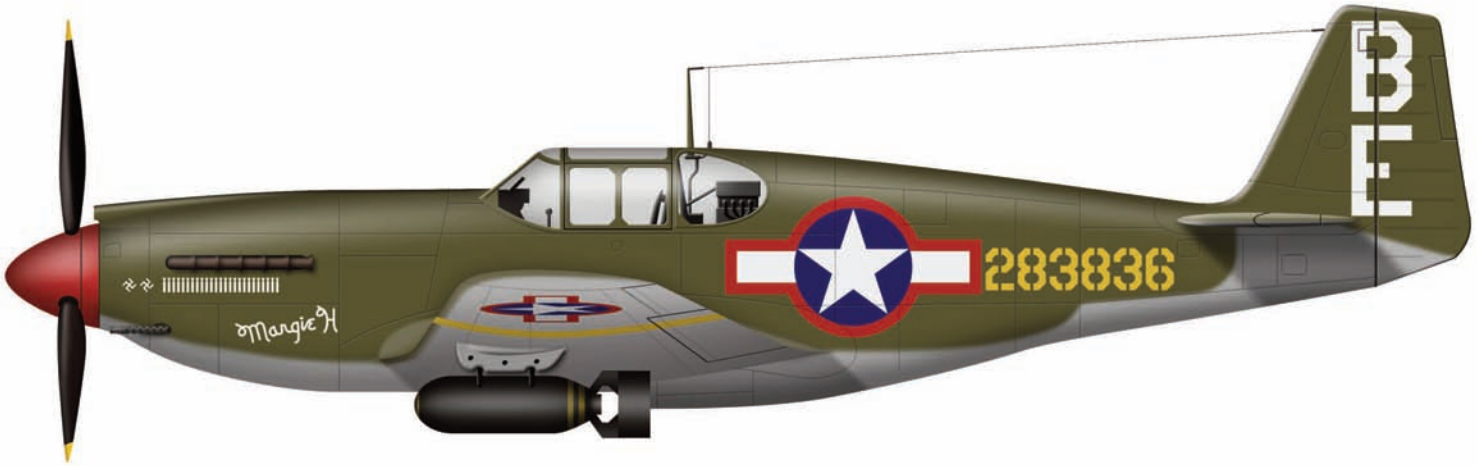
MAXIMUM LOAD:
7 tons, typically one Tetrarch or M22 light tank or two universal carriers

DIMENSIONS:
Wingspan 110 ft,
Length 68 ft,
Height 20 ft 3 ins

CREW: 2

ENTERED SERVICE: 1942

NUMBER BUILT: 344



North American A-36 Apache

The A-36 Apache was a ground attack aircraft for the U.S. Army Air Force, and based on the Allison engined Mustang I. The aircraft was barely indistinguishable from the P-51, except machine guns was rearranged, four being fitted in the wings and two in the nose. 1,000 lbs of bombs could be carried on underwing hardpoints, while dive brakes were fitted to limit the dive speed to 390 mph which improved bombing accuracy. They entered service in April 1943, and by the end of May about 300 were deployed to the Mediterranean where they were later heavily involved in operations during the Sicily and Italian campaigns.

SPECIFICATION:

WEIGHTS:
Empty 6,609 lbs,
Maximum take-off 10,000 lbs

POWERPLANT:
One 1,325 hp Allison
V-1710-87 inline engine

PERFORMANCE:
Maximum speed 365 mph,
Range 500 miles,
Service ceiling 25,100 ft

ARMAMENT:
6 × 0.5 inch machine guns
Bombload 1,000 lbs

DIMENSIONS:
Wingspan 37 ft ins,
Length 32 ft 2 ins,
Height 12 ft 2 ins

CREW: 1

ENTERED SERVICE: 1943

NUMBER BUILT: 500

North American P-51C Mustang

In 1940 the British approached the North American Aviation Company to produce the Curtiss P-40 fighter aircraft under licence. They soon proposed they could produce a better aircraft, and by April the first design was approved. They used the same Allison engine as the P-40 but incorporated the latest technology. The prototype took to the air in just over six months and entered service with the British in early 1942, but in service the Allison engine lost power at high altitude, and it was not until the British replaced the Allison engine with a Rolls-Royce Merlin that the Mustang, as the British had named it, turned into a war winner.

SPECIFICATION:

WEIGHTS:
Empty 6,985 lbs,
Maximum take-off 9,200 lbs

POWERPLANT:
One 1,380 hp Packard Merlin V-1650-3 inline engine

PERFORMANCE:
Maximum speed 430 mph,
Range 1,450 miles,
Service ceiling 41,800 ft

ARMAMENT:
6 × 0.5 inch machine guns
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 37 ft,
Length 32 ft 3 ins,
Height 12 ft 2 ins

CREW: 1

ENTERED SERVICE: 1943

NUMBER BUILT: 1,750

North American P-51C Mustang

The Mustang was clearly an excellent aircraft, and in the R.A.F. the Merlin powered aircraft was designated the P-51B which was built at the companies Inglewood plant in California, while the P-51C at Dallas in Texas. The R.A.F. however still had problems with visibility to the rear from the cockpit, which they solved by the replacement of the existing canopy with the Malcolm Hood. The real answer was carried out by North American who cut down the rear fuselage and fitted a one piece sliding canopy, and in this form the aircraft became the definitive P-51D which entered service in the spring of 1944.

SPECIFICATION:

WEIGHTS:
Empty 6,985 lbs,
Maximum take-off 9,200 lbs

POWERPLANT:
One 1,380 hp Packard Merlin V-1650-3 inline engine

PERFORMANCE:
Maximum speed 430 mph,
Range 1,450 miles,
Service ceiling 41,800 ft

ARMAMENT:
6 × 0.5 inch machine guns
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 37 ft,
Length 32 ft 3 ins,
Height 12 ft 2 ins

CREW: 1

ENTERED SERVICE: 1943

NUMBER BUILT: 1,750

North American P-51D Mustang

In service the P-51C was criticised for its poor view from the cockpit, especially to the rear, and in response North American addressed the problem by cutting down the rear fuselage and fitting a one piece sliding canopy. At the same time they also modified the wings, and in this form the aircraft entered service in the spring of 1944 as the P-51D. This was the most widely produced variant of the Mustang with 8,102 being built, 6,502 at Inglewood and 1,600 at Dallas. The final production Mustang was the P-51H, by which time over 15,000 of all marks were built. The last P-51 was retired from military service by Dominica in 1984.

SPECIFICATION:

WEIGHTS:
Empty 7,125 lbs,
Maximum take-off 11,600 lbs

POWERPLANT:
One 1,490 hp Packard Merlin V-1650-12 inline engine

PERFORMANCE:
Maximum speed 437 mph,
Range 1,650 miles,
Service ceiling 41,900 ft

ARMAMENT:
6 × 0.5 inch machine guns
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 37 ft,
Length 32 ft 3 ins,
Height 12 ft 2 ins

CREW: 1

ENTERED SERVICE: 1944

NUMBER BUILT: 8,102

Bristol Buckingham

In mid 1940 the British Air Ministry issued specification B7/40 for a medium bomber to replace the Bristol Blenheim. Bristol had proposed a bomber version of the Beaufighter in early 1939 which had been rejected, but resurrected their proposal which was known as the Beaumont. In 1941 the Air Ministry changed the requirements, and after being redesigned was renamed Buckingham. 400 were ordered, but during trials the prototype suffered from stability problems, and by the time this was resolved the de Havilland Mosquito had entered service which met the needs of the R.A.F., resulting in the order being cut back in 1944.

SPECIFICATION:

WEIGHTS:
Empty 24,042 lbs,
Maximum take-off 36,900 lbs

POWERPLANT:
Two 2,585 hp Bristol
Centaurus VII radial engines

PERFORMANCE:
Maximum speed 335 mph,
Range 3,000 miles,
Service ceiling 30,000 ft

ARMAMENT:
8 × 0.5 inch machine guns
Bombload 4,000 lbs

DIMENSIONS:
Wingspan 71 ft,
Length 46 ft 5 ins,
Height 17 ft 6 ins

CREW: 5

ENTERED SERVICE: 1944

NUMBER BUILT: 54

Bristol Buckmaster

With the cancellation of the Buckingham, it was decided in to keep the Bristol workforce together before production of the Bristol Brigand and Hawker Tempest commenced, so it was decided to produce a limited batch of the Buckingham. The first 54 were completed as bombers, but were soon converted into high speed courier aircraft and named Buckingham C.1. A further 65 were converted into high performance trainers for the Bristol Brigand which were named Buckmaster. The aircraft was equipped with dual controls and became the most powerful training aircraft to see R.A.F. service during the Second World War.

SPECIFICATION:

WEIGHTS:
Empty 24,042 lbs,
Maximum take-off 33,700 lbs

POWERPLANT:
Two 2,585 hp Bristol
Centaurus VII radial engines

PERFORMANCE:
Maximum speed 352 mph,
Range 2,000 miles,
Service ceiling 30,000 ft

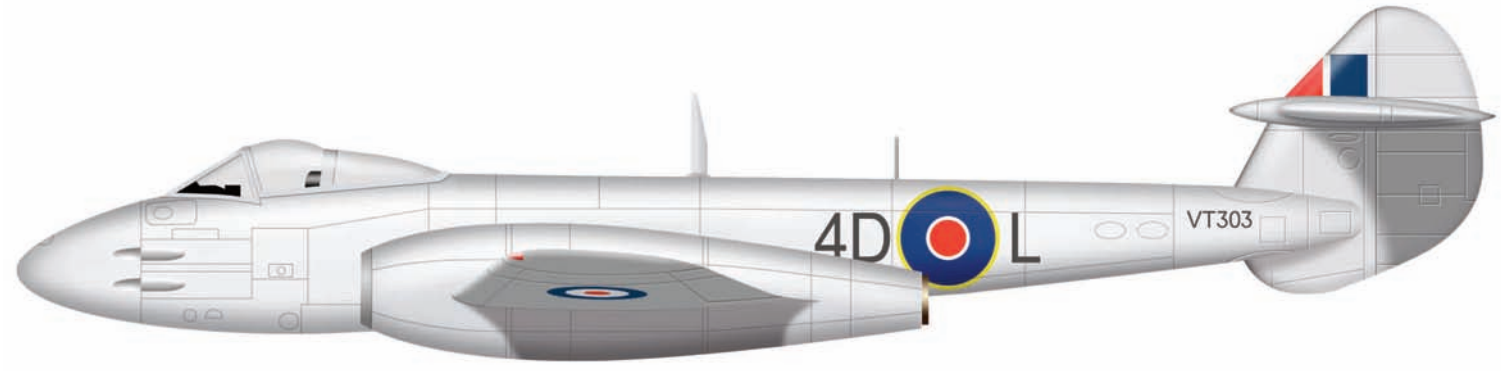
ARMAMENT:
None

DIMENSIONS:
Wingspan 71 ft,
Length 46 ft 5 ins,
Height 17 ft 6 ins

CREW: 2 + 1 pupil

ENTERED SERVICE: 1944

NUMBER BUILT: 65



Gloster Meteor F.Mk 4

The Meteor F.1 was the first operational jet aircraft in the R.A.F. when it entered service with No. 616 Squadron in the summer of 1944. The F.1 had a short operational life, 616 Squadron exchanging them for the Meteor F.3 in December. The next major version of the aircraft was the F.4 which first flew in May 1945. Several areas of the aircraft were redesigned, but the major difference was the installation of Rolls-Royce Derwent 5 engines which gave the aircraft a speed of 585 mph at sea level, 170 mph faster than the F.1. The F.4 was placed in production in 1946 and would serve with twenty-seven R.A.F. squadrons.

SPECIFICATION:

WEIGHTS:
Empty 10,590 lbs,
Maximum take-off 13,900 lbs

POWERPLANT:
Two 3,500 lbf Rolls-Royce Derwent 5 turbojets

PERFORMANCE:
Maximum speed 583 mph,
Range 700 miles,
Service ceiling 44,500 ft

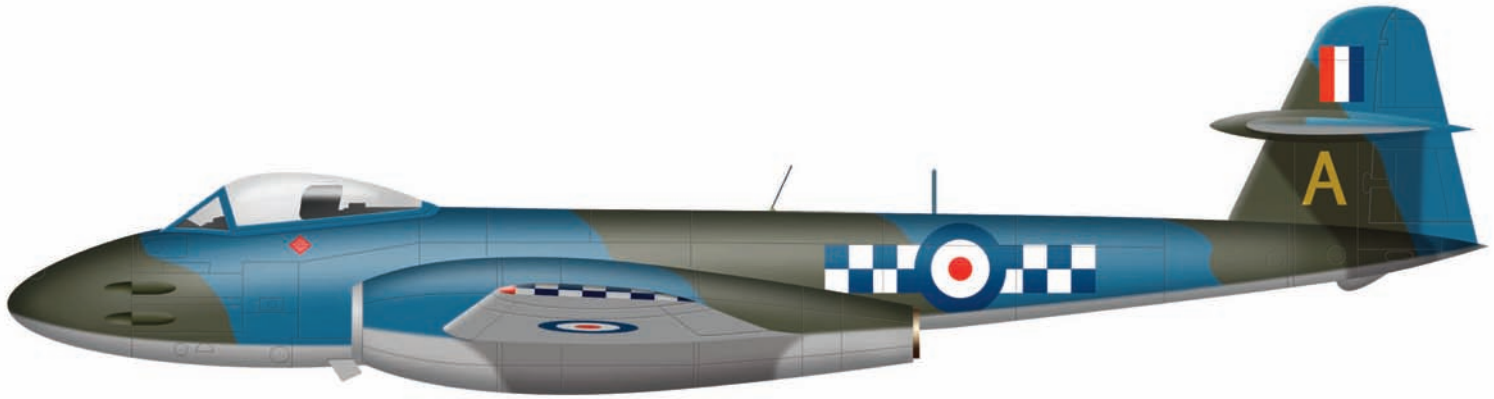
ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 43 ft,
Length 41 ft,
Height 13 ft

CREW: 1

ENTERED SERVICE: 1947

NUMBER BUILT: 658



Gloster Meteor F.Mk 8

The next major development of the Gloster Meteor after the F.4 was the F.8 when it entered service in August 1949. The F.8 was an attempt to keep the Meteor competitive with the new swept winged fighter designs which were emerging, such as the North American Sabre, and had a longer fuselage, greater fuel capacity, standard ejection seat and a modified tail. The F.8 was the last and best day fighter version of the Meteor, and equipped the majority of the R.A.F. fighter squadrons in the U.K. between 1950 and 1954. The Meteor was built through eighteen marks, including two seat nightfighters, and in total nearly 4,000 were produced.

SPECIFICATION:

WEIGHTS:
Empty 10,864 lbs,
Maximum take-off 15,700 lbs

POWERPLANT:
Two 3,600 lbf Rolls-Royce Derwent 8 turbojets

PERFORMANCE:
Maximum speed 600 mph,
Range 600 miles,
Service ceiling 43,000 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 37 ft 2 ins,
Length 44 ft 7 ins,
Height 13 ft

CREW: 1

ENTERED SERVICE: 1950

NUMBER BUILT: 1,183

Messerschmitt Me.262

The prototype Me 262 first flew under jet power in July 1942, but delays were encountered after it was decided the aircraft should be used as a bomber. Two versions were developed alongside each other, the Me 262A-2a bomber and the Me 262A-la fighter, with the first Me 262A-2as entering service with the Luftwaffe in mid 1944. Too late to make a dramatic impact on the war, the Me 262 took a heavy toll of allied aircraft during the last few months of World War Two. Only around 200 were ever operational at any one time, and according to sources destroyed between 300 to 450 enemy planes for the loss of about 100.

SPECIFICATION:

WEIGHTS:
Empty 3,795 lbs,
Maximum take-off 7,130 lbs

POWERPLANT:
Two 1,980 lbf Junkers Jumo 004 B-1 turbojets

PERFORMANCE:
Maximum speed 559 mph,
Range 650 miles,
Service ceiling 37,500 ft

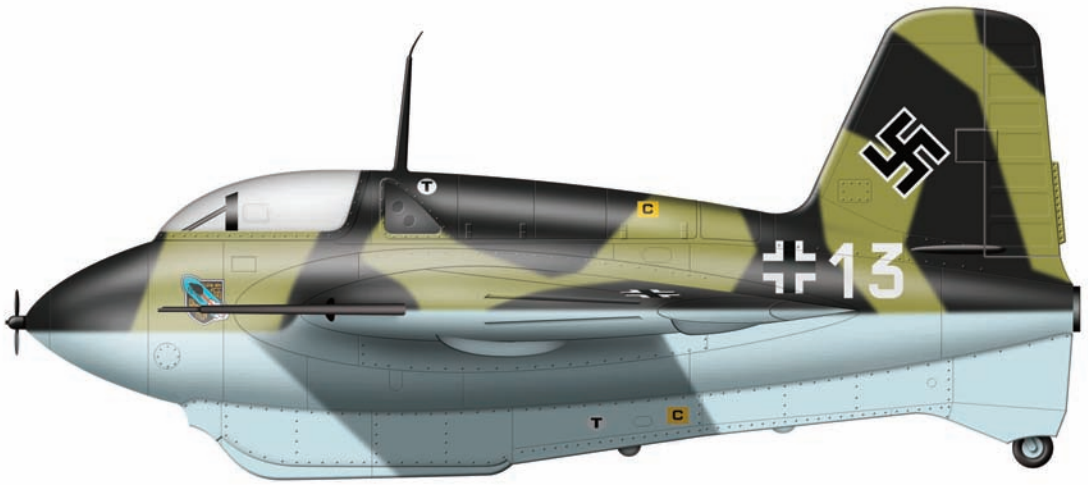
ARMAMENT:
4 × 30 mm MK 108 cannons
Bombload 1,100 lbs

DIMENSIONS:
Wingspan 41 ft 6 ins,
Length 34 ft 9 ins,
Height 11 ft 6 ins

CREW: 1

ENTERED SERVICE: 1944

NUMBER BUILT: 1,430



Messerschmitt Me163 Komet

The Messerschmitt Me163 Komet has the distinction of being the only tailless rocket powered interceptor to ever see operational service. The aircraft's introduction into service during 1944 was a hazardous process, owing to the highly volatile fuels, resulting in several fatal accidents. The Komet was fast, reaching its service ceiling of 40,000 ft in 3½ minutes, but only carried enough fuel for eight minutes of powered flight. This left time for one or two passes at the enemy before the pilot had to glide back to base, the aircraft then being defenceless. By the end of 1944 only nine confirmed kills had been achieved by their pilots.

SPECIFICATION:

WEIGHTS:
Empty 4,200 lbs,
Maximum take-off 9,500 lbs

POWERPLANT:
One Walter 3,748 lbf
109-S09A-2 rocket motor

PERFORMANCE:
Maximum speed 596 mph,
Range 50 miles,
Service ceiling 40,000 ft

ARMAMENT:
2 × 30 mm MK 108 cannons
Bombload none

DIMENSIONS:
Wingspan 30 ft 7¼ ins,
Length 18 ft 8 ins,
Height 9 ft ½ ins

CREW: 1

ENTERED SERVICE: 1944

NUMBER BUILT: 300+

Lockheed P-80 Shooting Star

The prototype P-80 took to the air in June 1944 with service trials commencing in October, but were too late to see operational service during the World War Two. The performance of the aircraft during the trials ensured that the P-80 became America's first operational jet aircraft. Named the P-80 Shooting Star (F-80 on the formation of the United States Air Force in 1947), they were to see action during the Korean War. When the Mig-15 began to be deployed by North Korea the F-80 was totally outclassed as a fighter, being replaced by the North American F-86 Sabre, the F-80 then being used in the ground attack role.

SPECIFICATION:

WEIGHTS:
Empty 8,420 lbs,
Maximum take-off 16,856 lbs

POWERPLANT:
One 4,600 lbf Allison
J33-A-35 turbojet

PERFORMANCE:
Maximum speed 600 mph,
Range 1,200 miles,
Service ceiling 46,000 ft

ARMAMENT:
6 × 0.50 inch machine guns
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 38 ft 9 ins,
Length 34 ft 5 ins,
Height 11 ft 3 ins

CREW: 1

ENTERED SERVICE: 1945

NUMBER BUILT: 1,700+

Blackburn Firebrand

The Blackburn Firebrand was designed during World War Two as a fleet fighter for the Royal Navy and made its maiden flight in February 1942. The performance of the aircraft proved to be disappointing for its intended role which led to the aircraft being redesigned as a strike fighter to take advantage of its load-carrying capability. The first production aircraft were delivered to the Royal Navy in late 1945, but were only ever issued to two squadrons, Nos 813 and 827, and in most pilots opinion they poor aircraft that lacked performance and manoeuvrability. The Firebrand was withdrawn from service in 1953.

SPECIFICATION:

WEIGHTS:

Empty 11, 457 lbs,
Maximum take-off 16,700 lbs

POWERPLANT:

One 2,520 hp Bristol
Centaurus IX radial engine

PERFORMANCE:

Maximum speed 342 mph,
Range 745 miles,
Service ceiling 28,500 ft

ARMAMENT:

4 × 20 mm cannons,
Ordnance load 2,000 lbs

DIMENSIONS:

Wingspan 51 ft, 3½ ins
Length 38 ft 9 ins,
Height 13 ft 3 ins

CREW: 1

ENTERED SERVICE: 1945

NUMBER BUILT: 200

Supermarine Seafire Mk.47

The Seafire F Mk.47 incorporated a number of refinements over earlier variants including the use of Rotol contra-rotating propellers and being powered by a Roll-Royce Griffon 87 or 88 engine. The Mk.47 entered service in early 1948 with No. 800 and 804 Squadrons, but in May 1949 804 Squadron converted to the Sea Fury, leaving 800 Squadron the only operator of the type. 800 Squadron Seafires were used operationally in 1949 during the Malayan Insurgency before being deployed during the early days of the Korean War. In November 1950 800 Squadron was disbanded which ended the career of the Seafire.

SPECIFICATION:

WEIGHTS:
Empty 7,625 lbs,
Maximum take-off 12,750 lbs

POWERPLANT:
One 2,350 hp Rolls-Royce Griffon 88 inline engine

PERFORMANCE:
Maximum speed 451 mph,
Range 500 miles,
Service ceiling 43,100 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 1,000 lbs

DIMENSIONS:
Wingspan 36 ft 11 ins,
Length 34 ft 4 ins,
Height 12 ft 9 ins

CREW: 1

ENTERED SERVICE: 1948

NUMBER BUILT: 90

de Havilland Hornet F.19

In 1943 de Havilland began to design a high performance twin engined fighter as a private venture, using the constructional techniques pioneered in the Mosquito. The D.H.103 resembled a scaled down Mosquito, and was designed for long range missions against the Japanese in the Pacific. A production order was received towards the end of 1944, with the Hornet F.1 entering service with No. 64 Squadron in mid 1946. Hornets served with seven squadrons, and in 1951 a considerable number were redeployed from the U.K. to the Far East during the Malayan Emergency, the last sortie by a Hornet being flown in 1955.

SPECIFICATION:

WEIGHTS:
Empty 12,505 lbs,
Maximum take-off 20,900 lbs

POWERPLANT:
Two 2,070 hp Rolls-Royce 130/131 inline engines

PERFORMANCE:
Maximum speed 472 mph,
Range 1,500 miles,
Service ceiling 37,500 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 45 ft,
Length 36 ft 8 ins,
Height 16 ft 2 ins

CREW: 1

ENTERED SERVICE: 1946

NUMBER BUILT: 174

de Havilland Hornet F.19

In 1943 de Havilland began to design a high performance twin engined fighter as a private venture, using the constructional techniques pioneered in the Mosquito. The D.H.103 resembled a scaled down Mosquito, and was designed for long range missions against the Japanese in the Pacific. A production order was received towards the end of 1944, with the Hornet F.1 entering service with No. 64 Squadron in mid 1946. Hornets served with seven squadrons, and in 1951 a considerable number were redeployed from the U.K. to the Far East during the Malayan Emergency, the last sortie by a Hornet being flown in 1955.

SPECIFICATION:

WEIGHTS:
Empty 12,505 lbs,
Maximum take-off 20,900 lbs

POWERPLANT:
Two 2,070 hp Rolls-Royce 130/131 inline engines

PERFORMANCE:
Maximum speed 472 mph,
Range 1,500 miles,
Service ceiling 37,500 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 45 ft,
Length 36 ft 8 ins,
Height 16 ft 2 ins

CREW: 1

ENTERED SERVICE: 1946

NUMBER BUILT: 174

de Havilland Sea Hornet F.20

De Havilland always had in mind the Hornet's possible use by the Royal Navy, and shortly after the prototype first flew, the Air Ministry issued Specification N.5/44 which covered the modifications of the aircraft for naval service. The modifications included folding wings, slotted flaps, and a reinforced fuselage and undercarriage, all of which only reduced the top speed of the aircraft by 11 mph compared to its land based counterpart. On the completion of successful trials the aircraft was ordered into production as the Sea Hornet F.20, with No. 801 Squadron being the first unit to operate the type.

SPECIFICATION:

WEIGHTS:
Empty 13,300 lbs,
Maximum take-off 19,500 lbs

POWERPLANT:
Two 2,030 hp Rolls-Royce 134/135 inline engines

PERFORMANCE:
Maximum speed 461 mph,
Range 1,500 miles,
Service ceiling 37,500 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 45 ft,
Length 36 ft 8 ins,
Height 16 ft 2 ins

CREW: 1

ENTERED SERVICE: 1948

NUMBER BUILT: 79

de Havilland Sea Hornet NF.21

The Sea Hornet NF.21 was designed as a naval night fighter, and was fitted with a second cockpit in the rear fuselage for the radar operator/navigator and an elongated radome fitted to the nose which housed a small radar dish. No 809 Squadron was the only unit to be fully equipped with the type, although individual machines served with several squadron. In service the NF.21 was primarily used as a scouting flight leader for formations of strike aircraft, and remained in service aboard the aircraft carriers H.M.S. Illustrious and Vengeance until 1954 when they were replaced by the De Havilland Sea Venom.

SPECIFICATION:

WEIGHTS:
Empty 13,193 lbs,
Maximum take-off 20,200 lbs

POWERPLANT:
Two 2,030 hp Rolls-Royce 134/135 inline engines

PERFORMANCE:
Maximum speed 460 mph,
Range 1,500 miles,
Service ceiling 36,500 ft

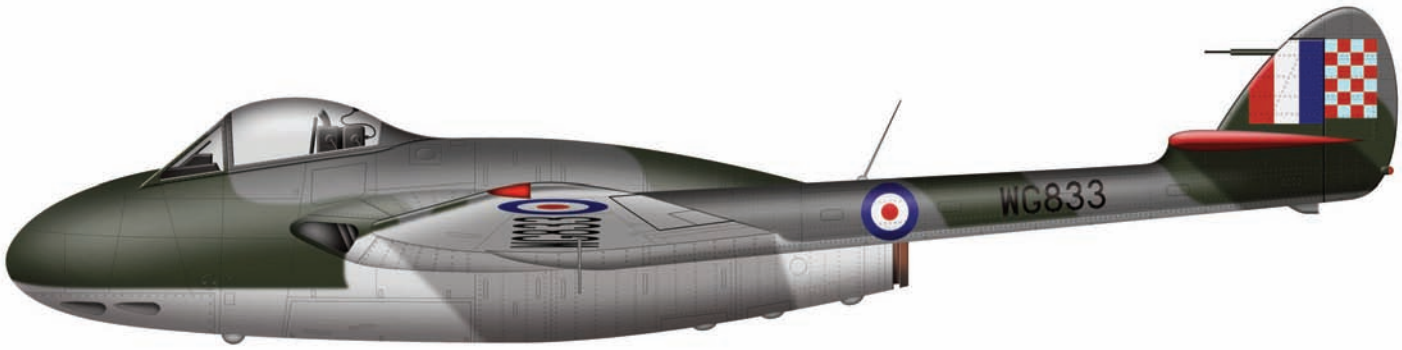
ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 45 ft,
Length 38 ft,
Height 16 ft 2 ins

CREW: 2

ENTERED SERVICE: 1949

NUMBER BUILT: 79



de Havilland Vampire

Design of the de Havilland Vampire began in 1941 and initially intended as an experimental jet aircraft that may be suitable for combat. The design configuration was of a Halford H.1 turbojet and twin booms to carry the tail surfaces, and apart from these it was a relatively conventional aircraft. The prototype first flew in September 1943 and the decision was made to place the aircraft in production, with the Vampire Mk I entering service with the R.A.F. in 1946. Over thirty marks of the Vampire were built over the next ten years, and by the time production ended in the mid 1950s over 3,250 had been built

SPECIFICATION: FB.5

WEIGHTS:
Empty 7,283 lbs,
Maximum take-off 12,390 lbs

POWERPLANT:
One 3,350 lbf de Havilland Goblin 3 turbojet

PERFORMANCE:
Maximum speed 548 mph,
Range 1,220 miles,
Service ceiling 42,800 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 1,000 lbs

DIMENSIONS:
Wingspan 38 ft,
Length 30 ft 9 ins,
Height 8 ft 10 ins

CREW: 1

ENTERED SERVICE: 1946

NUMBER BUILT: 3,268 (all mks)

Republic F-84 Thunderjet

The prototype XP-84 flew for the first time in February 1946 and entered service the following year as the F-84 Thunderjet. The type was plagued with so many problems that the U.S.A.F. considered cancelling the entire programme, but eventually these were overcome with the F-84D model which appeared in 1949. During the Korean War the F-84 flew a total of 86,408 missions for the loss of 335 aircraft, and remained in front line service until the late 1950's when they were then turned over for use by the Air National Guard. 7,524 Thunderjets were built, with over half this number being supplied to N.A.T.O. countries.

SPECIFICATION:

WEIGHTS:
Empty 11,470 lbs,
Maximum take-off 23,340 lbs

POWERPLANT:
One 5,560 lbf Allison
J35-A-29 turbojet

PERFORMANCE:
Maximum speed 622 mph,
Range 1,000 miles,
Service ceiling 40,500 ft

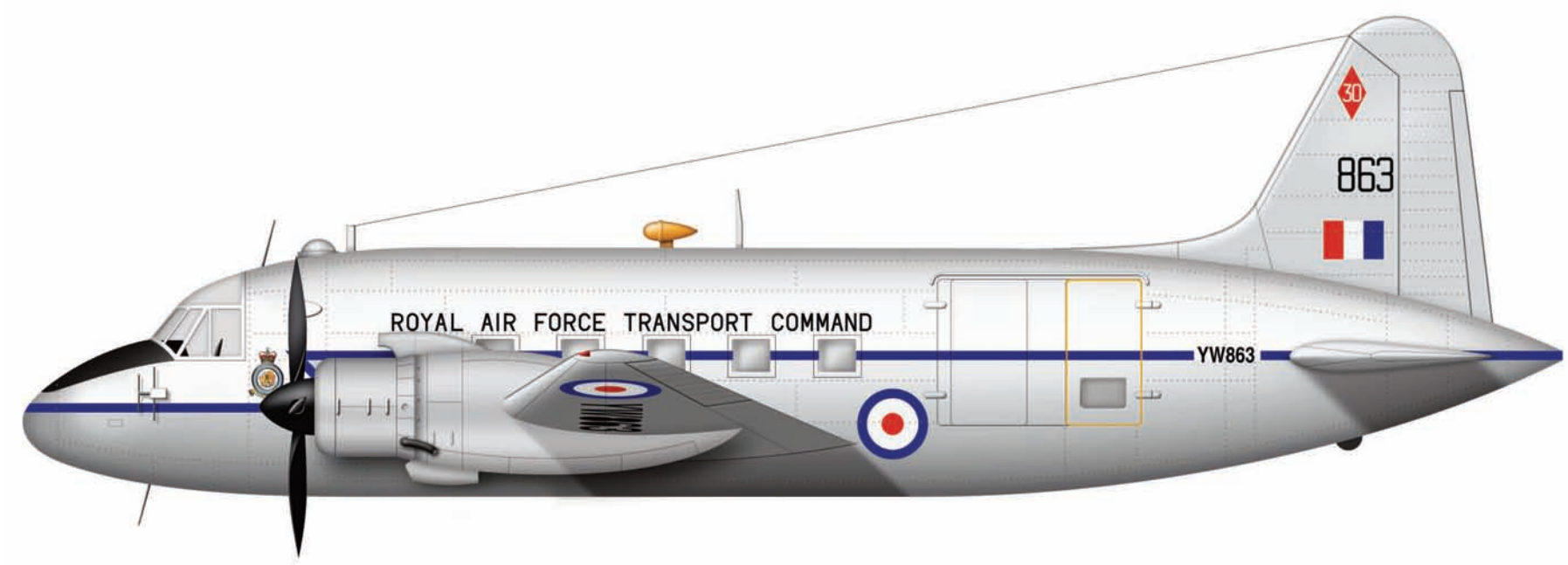
ARMAMENT:
6 × 0.5 inch machine guns
Maximum Bombload 4,450 lbs

DIMENSIONS:
Wingspan 26 ft 5 ins,
Length 38 ft 1 in,
Height 12 ft 7 ins

CREW: 1

ENTERED SERVICE: 1947

NUMBER BUILT: 7,524



Vickers Valletta

The Vickers Valetta was a military transport development of the Vickers Viking civil airliner, and differed in having more powerful engines, a strengthened floor and large loading doors. The Valetta began to enter service in 1948 where it replaced the Douglas Dakota in R.A.F. Transport Command. During its career the Valetta was used to carry out parachute drops for the Suez Crisis in 1956 and used as a general transport for a number of other British Military operations in the 1950s and 1960s. The main transport version was the Valetta C.1, while the C.2 was a VIP transport, and the T.3 and T.4 were training aircraft.

SPECIFICATION:

WEIGHTS:
Empty 24,980 lbs,
Maximum take-off 36,500 lbs

POWERPLANT:
Two1,975 hp Bristol Hercules
230 radial engine

PERFORMANCE:
Maximum speed 258 mph,
Range 1,460 miles,
Service ceiling 21,500 ft

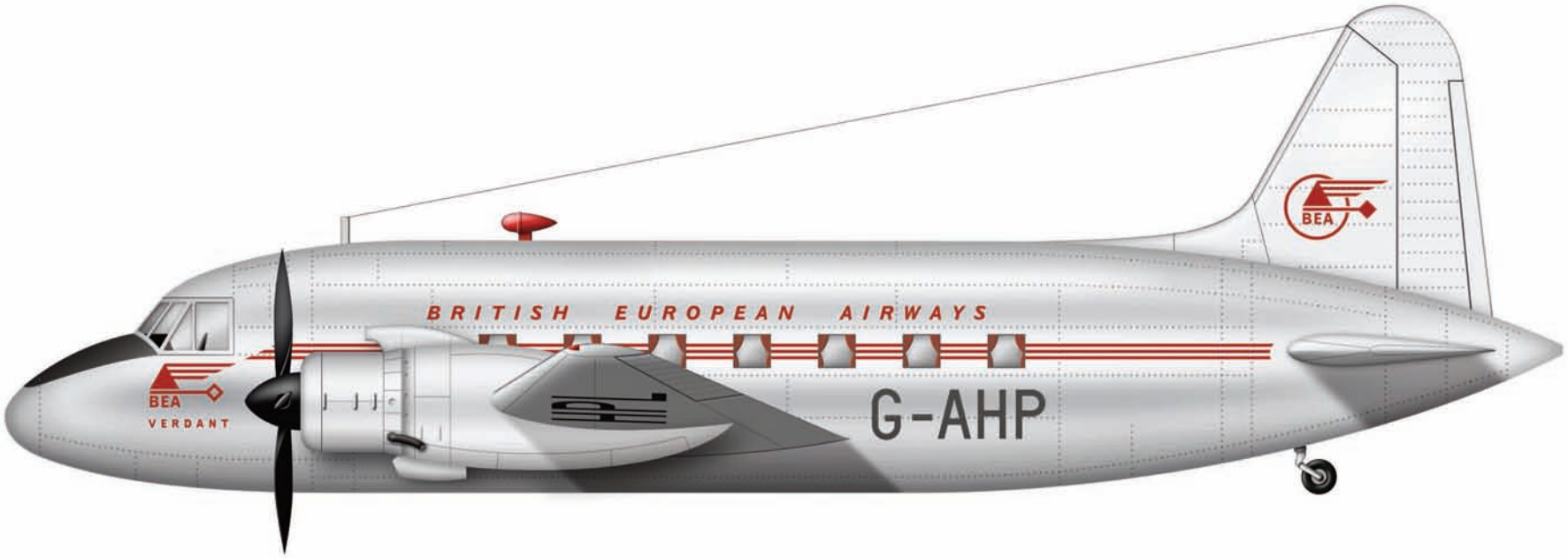
PAYLOAD: 34 troops
or 20 paratroopers
with equipment

DIMENSIONS:
Wingspan 89 ft 3 ins,
Length 62 ft 11 ins,
Height 19 ft 7 ins

CREW: 4

ENTERED SERVICE: 1948

NUMBER BUILT: 262



Vickers Viking

The Vickers Viking was designed during World War Two as an interim civil airliner to meet the needs of British post-war commercial aviation. Many components were based on those used by the Wellington bomber with a new fuselage that could carry up to twenty-seven passengers. Both B.O.A.C. and B.E.A. ordered the aircraft, and the type was the first purpose built post World War Two airliner to fly anywhere in the world when they began revenue eaning service in 1946 with B.O.A.C. From the early 1950s they were withdrawn and sold to minor airlines, where many aircraft remaining operational until the mid to late 1960s.

SPECIFICATION:

WEIGHTS:

Empty 23,000 lbs,
Maximum take-off 34,000 lbs

POWERPLANT:

Two1,690 hp Bristol Hercules 634 radial engine

PERFORMANCE:

Maximum speed 263 mph,
Range 1,700 miles,
Service ceiling 25,000 ft

PAYLOAD:

24-38 passengers

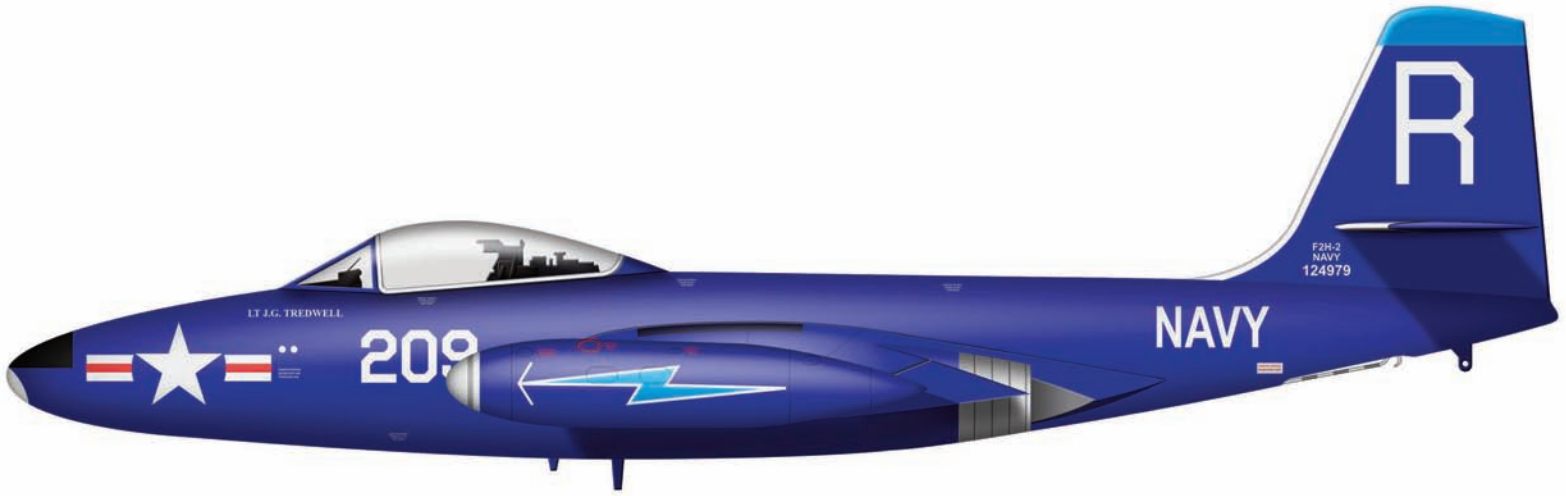
DIMENSIONS:

Wingspan 89 ft 3 ins,
Length 65 ft 2 ins,
Height 19 ft 7 ins

CREW: 3

ENTERED SERVICE: 1946

NUMBER BUILT: 161



McDonnell F2H Banshee

The Banshee was designed to meet a United States Navy specification for a carrier strike aircraft. The aircraft was a development of McDonnell's earlier FH Phantom which first flew in early 1945, but with many improvements to make it a more potent aircraft. The Banshee was of basic jet design for the time, with low mounted straight wings, with the pilots cockpit fitted just forward of the wing. The Banshee was one of the primary American fighters used during the Korean War, and remained in service with the U.S. Navy until the mid 1950s. From then onwards they continued to be used by reserve units until the early 1960s.

SPECIFICATION:

WEIGHTS:

Empty 13,183 lbs,
Maximum take-off 25,214 lbs

POWERPLANT:

Two 3,250 lbf Westinghouse J34-WE-34 turbojets

PERFORMANCE:

Maximum speed 580 mph,
Range 1,716 miles,
Service ceiling 46,000 ft

ARMAMENT:

4 × 20 mm cannons
Bombload 3,000 lbs

DIMENSIONS:

Wingspan 41 ft 9 ins,
Length 48 ft 2 ins,
Height 14 ft 6 ins

CREW: 1

ENTERED SERVICE: 1948

NUMBER BUILT: 895

Yakovlev Yak-23

In 1946 Alexander Yakovlev began on the development of a single-seat, straight-winged jet fighter which would have a speed of at least 600 mph at sea level and a good climb rate. The engine chosen was the Klimov RD-500 turbojet rated at 3,500 lbf, which was an unlicensed copy of the Rolls-Royce Derwent V. The prototype was first flown in July 1947, and after successful trials was placed in production with the first aircraft entering service in late 1949 with the Soviet air force. They were quickly replaced when the MiG-15 became available in numbers, a few of the aircraft then being supplied to members of the Soviet Bloc.

SPECIFICATION:

WEIGHTS:
Empty 4,356 lbs,
Maximum take-off 7,445 lbs

POWERPLANT:
One 3,500 lbf Klimov RD-500 turbojet

PERFORMANCE:
Maximum speed 575 mph,
Range 650 miles,
Service ceiling 48,500 ft

ARMAMENT:
4 × 23 mm NR-23 cannons
Bombload none

DIMENSIONS:
Wingspan 78 ft 7¾ ins,
Length 26 ft 8 ins,
Height 10 ft 10¼ ins

CREW: 1

ENTERED SERVICE: 1949

NUMBER BUILT: 316

Boulton-Paul Balliol T2

The Boulton-Paul Balliol was designed as a conventional two seat advanced trainer which made its maiden flight in July 1948. In early 1950 an order was issued for the large scale production of the Merlin powered T.2, but after only a few aircraft had been delivered the Air Ministry changed its mind over its training policy and the order was severely cut back. Only the R.A.F. College at Cranwell and No 7 Flying Training School received the type, while the Sea Balliol T21 with folding wings and arrestor hook was produced for the Royal Navy, and saw service with 781 squadron at Lee-on-Solent and 1843 Squadron R.N.V.R. at Abbotsinch.

SPECIFICATION:

WEIGHTS:
Empty 6,730 lbs,
Maximum take-off 8,410 lbs

POWERPLANT:
One 1,245 hp Rolls-Royce Merlin 35 inline engine

PERFORMANCE:
Maximum speed 288 mph,
Range 660 miles,
Service ceiling 32,500 ft

ARMAMENT:
Provisions for four unguided 60 lb rockets

DIMENSIONS:
Wingspan 39 ft 4 ins,
Length 35 ft 1½ ins,
Height 12 ft 6 ins

CREW: 2

ENTERED SERVICE: 1951

NUMBER BUILT: 199

Boulton-Paul Sea Balliol T21

The Boulton-Paul Balliol was designed as a conventinal two seat advanced trainer which made its maiden flight in July 1948. In early 1950 an order was issued for the large scale production of the Merlin powered T.2, but after only a few aircraft had been delivered the Air Ministry changed its mind over its training policy and the order was severely cut back. Only the R.A.F. College at Cranwell and No 7 Flying Training School received the type, while the Sea Balliol T21 with folding wings and arrestor hook was produced for the Royal Navy, and saw service with 781 squadron at Lee-on-Solent and 1843 Squadron R.N.V.R. at Abbotsinch.

SPECIFICATION:

WEIGHTS:
Empty 6,730 lbs,
Maximum take-off 8,410 lbs

POWERPLANT:
One 1,245 hp Rolls-Royce Merlin 35 inline engine

PERFORMANCE:
Maximum speed 288 mph,
Range 660 miles,
Service ceiling 32,500 ft

ARMAMENT:
Provision for four unguided 60 lb rockets

DIMENSIONS:
Wingspan 39 ft 4 ins,
Length 35 ft 1½ ins,
Height 12 ft 6 ins

CREW: 2

ENTERED SERVICE: 1952

NUMBER BUILT: 30

Supermarine Attacker F.1

The Supermarine Attacker has its origins in a 1944 Air Ministry specification for a jet fighter fpowered by the newly developed Rolls-Royce Nene turbojet. Supermarine's design used the laminar flow wings and landing gear of the Supermarine Spiteful, which was unusual as it was of tail wheel configuration. The aircraft was trialled by the R.A.F. in 1946 but rejected for service. A navalised version was then prepared which first flew in 1947, and after trials was accepted for production. The Attacker F.1 entered service with No. 800 Squadron in August 1951, and was the first operational jet for the Royal Navy.

SPECIFICATION:

WEIGHTS:

Empty 8,434 lbs,

Maximum take-off 12,221 lbs

POWERPLANT:

One 5,000 lbf Rolls-Royce Nene turbojet

PERFORMANCE:

Maximum speed 590 mph,

Range 600 miles,

Service ceiling 45,000 ft

ARMAMENT:

4 × 20 mm cannons

Bombload 2,000 lbs

DIMENSIONS:

Wingspan 36 ft 11 ins,

Length 37 ft 6 ins,

Height 9 ft 11 ins

CREW: 1

ENTERED SERVICE: 1951

NUMBER BUILT: 185

Supermarine Attacker F.1

The Supermarine Attacker has its origins in a 1944 Air Ministry specification for a jet fighter fpowered by the newly developed Rolls-Royce Nene turbojet. Supermarine's design used the laminar flow wings and landing gear of the Supermarine Spiteful, which was unusual as it was of tail wheel configuration. The aircraft was trialled by the R.A.F. in 1946 but rejected for service. A navalised version was then prepared which first flew in 1947, and after trials was accepted for production. The Attacker F.1 entered service with No. 800 Squadron in August 1951, and was the first operational jet for the Royal Navy.

SPECIFICATION:

WEIGHTS:
Empty 8,434 lbs,
Maximum take-off 12,221 lbs

POWERPLANT:
One 5,000 lbf Rolls-Royce Nene turbojet

PERFORMANCE:
Maximum speed 590 mph,
Range 600 miles,
Service ceiling 45,000 ft

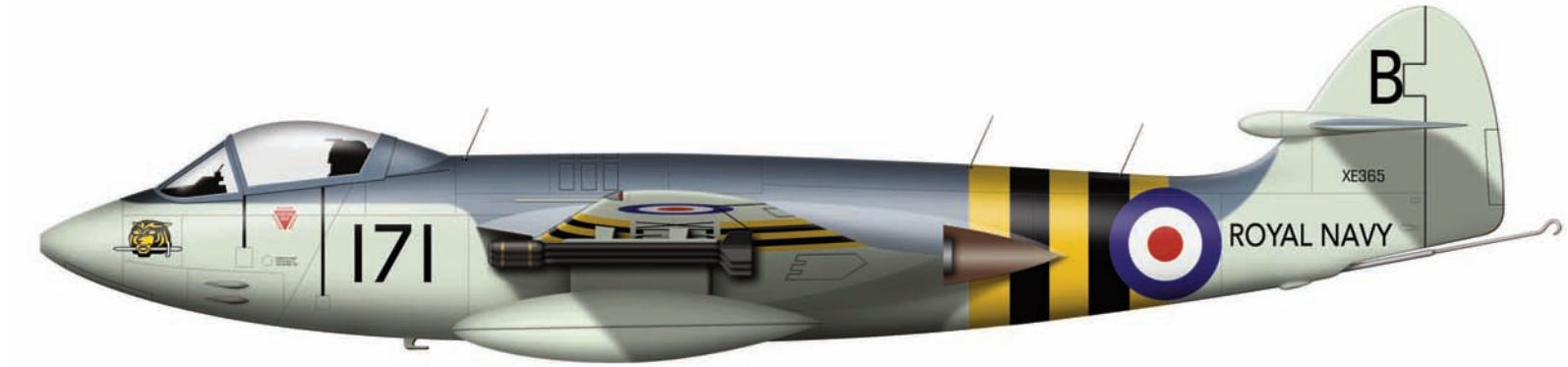
ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 36 ft 11 ins,
Length 37 ft 6 ins,
Height 9 ft 11 ins

CREW: 1

ENTERED SERVICE: 1951

NUMBER BUILT: 185



Hawker Sea Hawk

The Hawker P.1040 was designed as an interceptor for the R.A.F., but when they showed little interest it was offered to the Admiralty. After evaluation it was found suitable for their needs, and a fully navalised prototype flew for the first time in late August 1948. Following successful carrier trials a production order was placed in late 1949, with the first production Sea Hawk F.1 taking to the air in 1951. The Sea Hawk entered service with the Royal Navy in 1953 and was built through nine Mks, many aircraft being sold to N.A.T.O. while the last Royal Navy Sea Hawk was retired in 1960.

SPECIFICATION:

WEIGHTS:
Empty 9,278 lbs,
Maximum take-off 16,150 lbs

POWERPLANT:
One 5,200 lbf Rolls-Royce Nene turbojet

PERFORMANCE:
Maximum speed 599 mph,
Range 480 miles,
Service ceiling 44,500 ft

ARMAMENT:
4 × 20 mm cannons
Bombload 2,000 lbs

DIMENSIONS:
Wingspan 39 ft,
Length 39 ft 8 ins,
Height 8 ft 8 ins

CREW: 1

ENTERED SERVICE: 1953

NUMBER BUILT: 500+

Convair XFY 'Pogo'

In May 1951 Convair was awarded a contract to design and build an experimental V.T.O.L. aircraft, which became the Convair XFY, nicknamed 'Pogo'. The XFY was a tail-sitter, and designed around the 5,500 hp Allison YT40-A-14 engine, which powered 16 ft diameter contra-rotating propellers that would provide the lift to get the aircraft airborne. The pilot's seat was mounted on gimbals that allowed movement from 45° to 90° for the transition from vertical to horizontal flight. The first transitional flight took place in November 1954, but the aircraft always proved difficult to fly and the project was cancelled in 1955.

SPECIFICATION:

WEIGHTS:
Empty 11,139 lbs,
Maximum take-off 16,250 lbs

POWERPLANT:
One 5,500 hp Allison
YT40-A-14 turboprop

PERFORMANCE:
Maximum speed 474 mph,
Range 500 miles,
Service ceiling 37,500 ft

ARMAMENT:
4 × 20 mm cannons
Bombload none

DIMENSIONS:
Wingspan 25 ft 8 ins,
Length 34 ft 11 ins,
Height 23 ft 11 ins

CREW: 1

ENTERED TRIAL: 1954

NUMBER BUILT: 3

Hawker Hunter

The swept wing Hawker Hunter entered service with the R.A.F. in 1954 and quickly replaced the first-generation jet fighters such as the Gloster Meteor and the de Havilland Venom. The Hunter remained the main interceptor aircraft with the R.A.F. until the introduction of the English Electric Lightning in the early 1960s, then having a second career as a successful ground attack aircraft, while two-seat training trainers remained in service until the early 1990s. The Hunter was also widely exported and would serve with twenty-one national air forces, those of the Lebanese Air Force lasting until 2014 when they were finally retired.

SPECIFICATION: (HUNTER F.6)

WEIGHTS:

Empty 14,122 lbs,
Maximum take-off 17,750 lbs

POWERPLANT:

One 10,145 lbf Rolls-Royce Avon 207 turbojet

PERFORMANCE:

Maximum speed 715 mph,
Range 445 miles,
Service ceiling 50,000 ft

ARMAMENT:

4 × 30 mm Aden cannons
4 × Matra rocket pods

DIMENSIONS:

Wingspan 33 ft 8 ins,
Length 45 ft 11 ins,
Height 23 ft 2 ins

CREW: 1

ENTERED SERVICE: 1954

NUMBER BUILT: 1,972 (all mks)

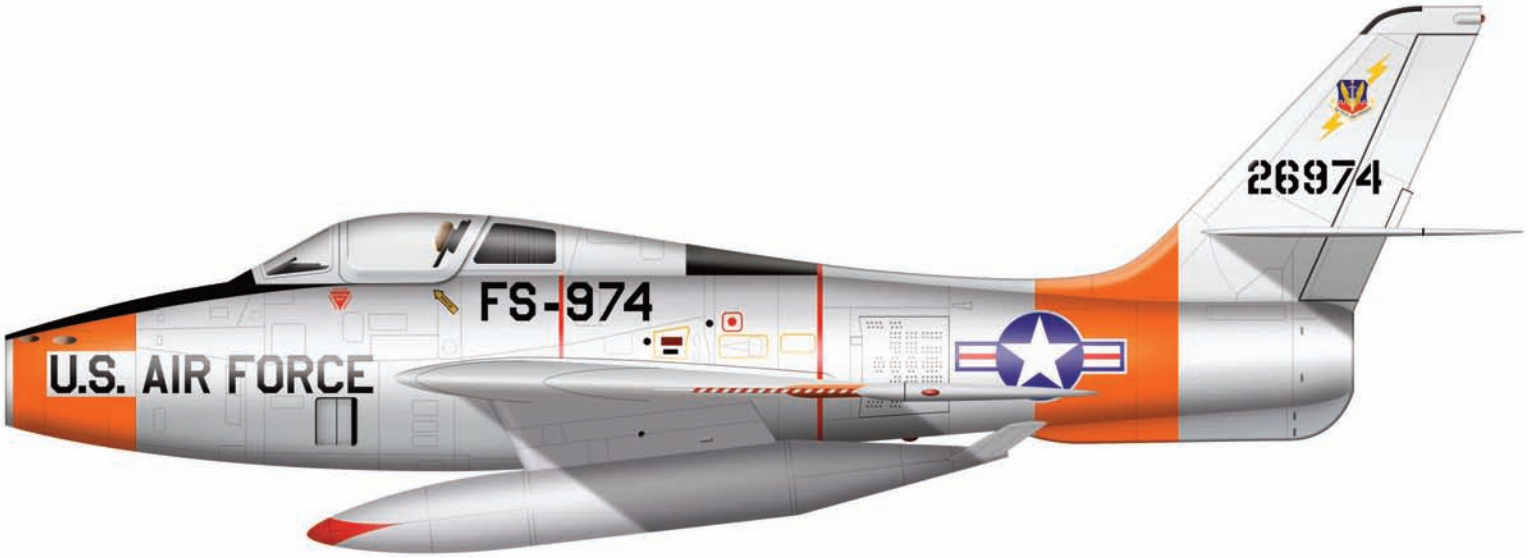
Grumman F9F Cougar

The Grumman F9F Cougar was based on the earlier F9F Panther, but had swept instead of straight wings and a more powerful engine. The prototype first flew in September 1951, with the first production aircraft being assigned to VF-32 at the end of 1952. The only version of the Cougar to see combat was the TF-9J trainer during the Vietnam War, where small detachments were used in the forward air control and airborne command roles in South Vietnam between 1966 and 1968. The TF-9J two seat trainer version remained in service with the U.S. Navy until 1974 when the last aircraft was withdrawn.

SPECIFICATION: (COUGAR F9F-8)
WEIGHTS:
Empty 18,866 lbs,
Maximum take-off 24,763 lbs
POWERPLANT:
One 8,500 lbf Pratt & Whitney J48 turbojet

PERFORMANCE:
Maximum speed 647 mph,
Range 1,050 miles,
Service ceiling 42,000 ft
ARMAMENT:
4 × 20 mm cannons
6 × 5 inch rockets

DIMENSIONS:
Wingspan 34 ft 6 ins,
Length 32 ft 1½ ins,
Height 12 ft 3 ins
CREW: 1
ENTERED SERVICE: 1954
NUMBER BUILT: 1,988 (all mks)



Republic F-84 Thunderstreak

In 1949 Republic Aviation proposed to the U.S. military a swept wing version of their F-84 Thunderjet in an attempt to bring the performance of the aircraft up to that of the North American F-86 Sabre. Design problems delayed the aircraft's entry into service until May 1954, but soon further problems were encountered with the aircraft. It was then decided to phase them out of service and mothball the fleet, which was completed by 1958. Tensions between the superpowers in 1961 resulted in the F-84F fleet being reactivated, but the following year they were again grounded after further problems and withdrawn in 1964.

SPECIFICATION:

WEIGHTS:
Empty 13,830 lbs,
Maximum take-off 28,000 lbs

POWERPLANT:
One 7,220 lbf Wright J65-W-3 turbojet

PERFORMANCE:
Maximum speed 695 mph,
Range 810 miles,
Service ceiling 46,000 ft

ARMAMENT:
6 × 0.5 inch machine guns
Maximum Bombload 6,000 lbs

DIMENSIONS:
Wingspan 37 ft 6 ins,
Length 43 ft 4¾ ins,
Height 10 ft 6 ins

CREW: 1

ENTERED SERVICE: 1954

NUMBER BUILT: 3,428

North American FJ-2/3 Fury

At the time of the Korean War the U.S. Navy did not possess any similar aircraft to the North American F-86 Sabre of the U.S.A.F. then entering service. When Mig 15s began to be encountered in action the Navy urgently required a competitive aircraft, so a navalised version of the Sabre was requested. This became the FJ-2 Fury which entered service in 1954, just too late to participate in the war. The FJ-2 was soon superceded by the superior FJ-3 which first entered service in May 1955, the Navy being more than satisfied with the aircraft which remained in service until 1962.

SPECIFICATION:

WEIGHTS:

Empty 11,802 lbs,
Maximum take-off 18,790 lbs

POWERPLANT:

One 6,000 lbf General Electric J47-GE-2 turbojet

PERFORMANCE:

Maximum speed 675 mph,
Range 1,000 miles
Service ceiling 46,800 ft

ARMAMENT:

4 × 20 mm cannons
Bombload none

DIMENSIONS:

Wingspan 35 ft 1½ ins,
Length 37 ft 7 ins,
Height 13 ft 7 ins

CREW: 1

ENTERED SERVICE: 1954

NUMBER BUILT: 538

North American FJ-4 Fury

The FJ-4 Fury was a major redesign that resolved many of the problems of the FJ-2/3. The wings and tail surfaces were redesigned for better performance when operating from a carrier or at high altitude, while a deeper fuselage allowed fuel capacity to be increased, and along with many other modifications there was little in common with the earlier models although the aircraft looked familiar. The first FJ-4 flew in October 1954 with deliveries commencing in early 1955, and in total 374 were built, 222 being the FJ-4B fighter-attack version. Many aircraft remained in service with reserve units until the late 1960s.

SPECIFICATION:

WEIGHTS:
Empty 13,210 lbs,
Maximum take-off 23,700 lbs

POWERPLANT:
One 7,700 lbf Wright J65-W-16A turbojet

PERFORMANCE:
Maximum speed 680 mph,
Range 2,000 miles
Service ceiling 46,800 ft

ARMAMENT:
4 × 20 mm cannons
Maximum Bombload 3,000 lbs

DIMENSIONS:
Wingspan 39 ft 1 ins,
Length 36 ft 4 ins,
Height 13 ft 11 ins

CREW: 1

ENTERED SERVICE: 1955

NUMBER BUILT: 374

English Electric Lightning F.1

The English Electric Lightning was designed to meet the Air Ministry specification F23/49 for a supersonic jet fighter aircraft, and flew for the first time in August 1954. The Lightning was powered by two Rolls-Royce Avon jet engines which gave the aircraft a speed of Mach 2 (1,300 mph), the engines being arranged one above the other instead of the normal side by side positions. The main achilles heel of the aircraft was its short range, and from 1974 the Lightning was gradually phased out of the R.A.F. and were replaced by the slower, but more capable, Panavia Tornado F3. The last Lightning was retired from the R.A.F. in 1988.

SPECIFICATION: (LIGHTNING F6)

WEIGHTS:
Empty 31,068 lbs,
Maximum take-off 45,750 lbs

POWERPLANT:
Two 16,000 lbf Rolls-Royce Avon 301R turbojets

PERFORMANCE:
Maximum speed 1,300 mph,
Range 850 miles
Service ceiling 60,000+ ft

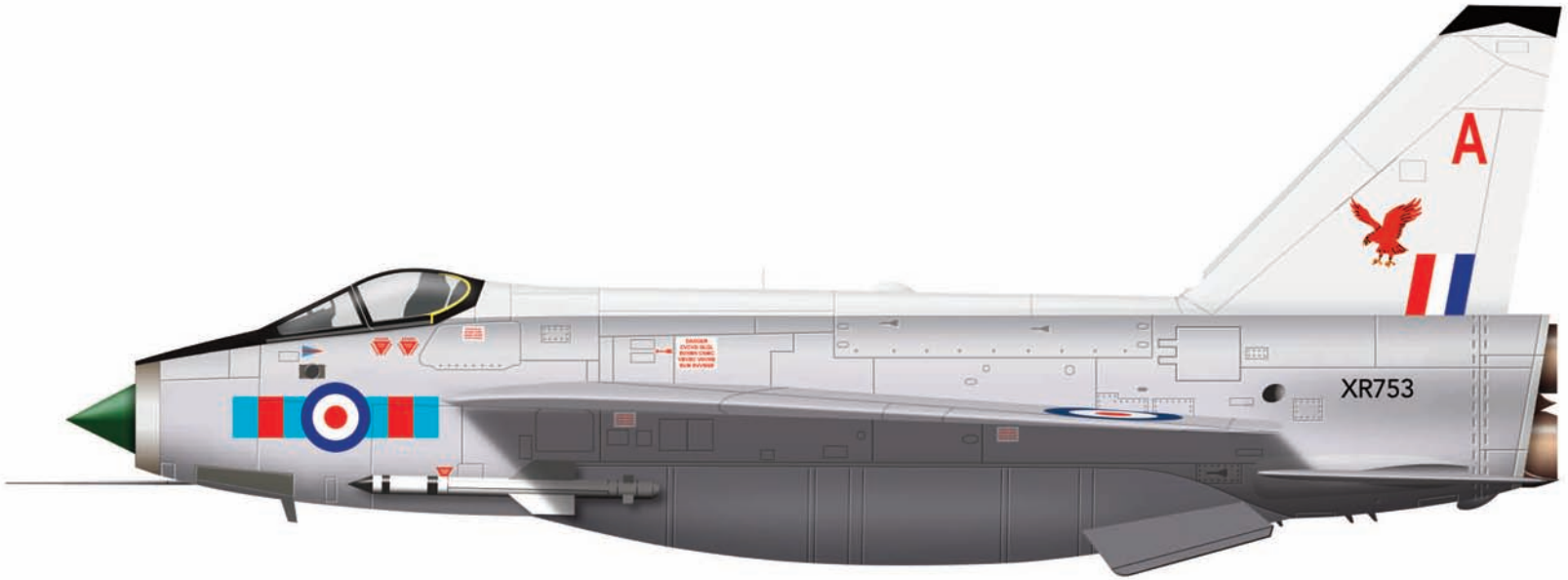
ARMAMENT:
2 × 30 mm Aden cannons
2 × Firestreak air-to-air missiles

DIMENSIONS:
Wingspan 39 ft 1 ins,
Length 36 ft 4 ins,
Height 13 ft 11 ins

CREW: 1

ENTERED SERVICE: 1960

NUMBER BUILT: 337



English Electric Lightning F.6

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SPECIFICATION: (LIGHTNING F6)

WEIGHTS:
Empty 31,068 lbs,
Maximum take-off 45,750 lbs

POWERPLANT:
Two 16,000 lbf Rolls-Royce Avon 301R turbojets

PERFORMANCE:
Maximum speed 1,300 mph,
Range 850 miles
Service ceiling 60,000+ ft

ARMAMENT:
2 × 30 mm Aden cannons
2 × Firestreak air-to-air missiles

DIMENSIONS:
Wingspan 39 ft 1 ins,
Length 36 ft 4 ins,
Height 13 ft 11 ins

CREW: 1

ENTERED SERVICE: 1960

NUMBER BUILT: 337

BAE Systems Hawk

The Hawk first flew in 1974 as the Hawker Siddeley Hawk, and has subsequently been produced by its successor companies, British Aerospace and then BAE Systems. In the Royal Air Force it replaced the Folland Gnat as an advanced jet trainer from the mid 1970s as well as being used as a low-cost combat aircraft. Operators of the Hawk include the Royal Air Force Red Arrows display team, and has been sold in considerable numbers abroad, with over 1,000 being sold and operated by eighteen countries worldwide. The Hawk is still in production in the UK and under licence in India by Hindustan Aeronautics Limited (HAL).

SPECIFICATION:

WEIGHTS:
Empty 9,880 lbs,
Maximum take-off 20,000 lbs

POWERPLANT:
One 6,500 lbf Rolls-Royce Turbomeca Adour turbojet

PERFORMANCE:
Maximum speed 638 mph,
Range 1,565 miles
Service ceiling 44,500 ft

ARMAMENT:
1 × 30 mm Aden cannon
Bombload 6,800 lbs

DIMENSIONS:
Wingspan 32 ft 7 ins,
Length 40 ft 9 ins,
Height 13 ft 1 ins

CREW: 1 + 1 pupil

ENTERED SERVICE: 1976

NUMBER BUILT: 1,000+