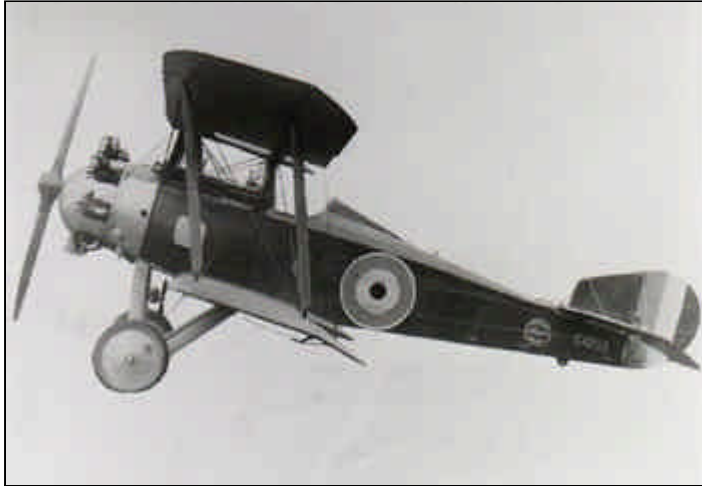


Westland Helicopters Ltd.



Aircraft Data Sheet: Wagtail (1918)



First flight: April 1918
Span: 7.06m/23ft 2ins
Length: 5.77m/18ft 11ins
Max weight: 603kg/1,330lb
Max level speed: 109knots/201kph
Power plant: One 170shp/127kW
ABC Wasp
Total built: 5

Offered against a War Office requirement for a single seat fighter in April 1918, the Wagtail and its competitors were not accepted for production, probably due to the impending armistice. Five prototypes were built.



Aircraft Data Sheet: **Wallace (1931)**



First flight:	30th October 1931 (PV-6)
Span:	14.15m/46ft 5ins
Length:	10.41m/34ft 2ins
Max weight:	2,608kg/5,750lb
Max level speed:	137knots/254kph
Power plant:	One 680shp/507kW Bristol Pegasus IV
Total built:	115, plus 60 conversions from Wapiti

As part of a programme to continue improvement of the successful Wapiti, Westland produced the PV-6, which was offered to the Royal Air Force as the Wallace. The improvement was such that production orders followed together with contracts to upgrade a number of Wapitis to Wallace standard.

Westland Helicopters Ltd.



Aircraft Data Sheet: Walrus (1920)



First flight:	February 1921
Span:	13.97m/45ft 10ins.
Length:	9.14m/30ft 0ins
Max weight:	2,265kg/4,994lb
Max level speed:	108knots/200kph
Power plant:	One 450shp/336kW Napier Lion II
Total built:	36

The Walrus was a three seat carrier-based spotter-reconnaissance aircraft for use with the Royal Navy's new aircraft carriers. The design was based upon an extensively modified DH-9A airframe. A total of 36 aircraft were produced, remaining in service until 1925.



Aircraft Data Sheet: Wapiti (1927)

Wapiti; A large North American Antelope



First flight:	7th March 1927
Span:	14.15m/46ft 5ins
Length:	9.65m/31ft 8ins
Max weight:	2,449kg/5,400lb
Max level speed:	122knots/225kph
Power plant:	One 480shp/358kW Bristol Jupiter VIII F.(Wapiti IIA) One 550shp/410kW Armstrong Siddeley Panther (Wapiti IB, South Africa) One 490shp/365kW Armstrong Siddeley Jaguar VI (Wapiti III, South Africa) Numerous other power plants were fitted experimentally
Total built:	558, plus 27 licence built in South Africa

The Wapiti holds a special place in Westland's history in that, not only did it achieve quantity production in significant numbers, but also because Wapiti sales and production took place at a time when most areas of British industry were suffering the effect of the recession. There can be little doubt that without the Wapiti production the company would probably been unable to continue functioning as an aircraft manufacturer.

The Wapiti was produced in response to Air Ministry Specification 26/27 calling for a DH-9A replacement, which also specified a great deal of commonality. Westland as a DH-9A design authority was well placed to respond to this. The Wapiti was selected against seven other contenders to become the mainstay of as a general-purpose aircraft for the RAF for the next ten years, there were even a few in use at the outset of World War 2.

The aircraft underwent continuous modification during its long service life, mostly incorporating a range of engines and more extensive use of metal components, there were eight distinctive versions of the aircraft flown before production ceased in 1932.

Westland Helicopters Ltd.



Aircraft Data Sheet: Weasel (1918)



First flight:	Late 1918
Span:	10.82m/35ft 6ins
Length:	7.57m/24ft 10ins
Max weight:	1,393kg/3,071lb
Max level speed:	103knots/209kph
Power plant:	One 320shp/239kW ABC Dragonfly
Total built:	4

Designed by Robert Bruce and Arthur Davenport, it carried electrical heating and oxygen equipment. The Weasel was offered as a two-seat fighter reconnaissance aircraft, it was not selected for service, but the four prototypes were used for engine test work.



Aircraft Data Sheet: Welkin (1942)



First flight:	1st November 1942
Span:	21.34m/70ft 0ins.
Length:	12.67m/41ft 7ins
Max weight:	4,658kg/10,270lb
Max level speed:	336knots/663kph
Power plant:	Two 1,250shp/932kW Rolls-Royce Merlin 72/73 or 76/77
Total built:	77

As the war progressed, attacks from high altitude bombers became a major problem. To combat this Specification F 4/40 was drawn up calling for a suitable fighter, capable of operating above 40,000ft. In order to achieve this it was necessary to introduce cabin pressurisation and to design a large twin engined aircraft with the fuel and handling qualities for prolonged operation at high altitude. In the event the threat never developed and the Welkin only achieved limited production.

However, the work did result in Westland becoming a design authority on cabin systems and led directly to the foundation of Normalair as a subsidiary company wholly concerned with cabin conditioning.



Aircraft Data Sheet: **Wessex (1930)**



First flight:	May 1930
Span:	17.53m/57ft 6ins
Length:	11.58m/38ft 0ins
Max weight:	2,858kg/6,300lb
Max level speed:	106knots/196kph
Power plant:	Three 140shp/104kW Armstrong Siddeley Genet Major IA
Total built:	8

Success with the Westland IV led to the construction of the Wessex, which incorporated a number of structural improvements and was capable of carrying up to six passengers, with more powerful engines increasing performance and reliability. A limited number were sold before production ceased.



Aircraft Data Sheet: Westbury (1927)



First flight:	1927
Span:	20.73m/68ft 0ins
Length:	13.23m/43ft 5ins
Max weight:	3,573kg/7,877lb
Max level speed:	109knots/201kph
Power plant:	Two 450shp/336kW Bristol Jupiter VI
Total built:	2

The Westbury was built in response to Air Ministry requirement, 4/24 which called for a large heavily armed twin engined fighter. An important part of the requirement was the need to carry two 37mm cannon, for which considerable structural strength was necessary. Other contenders for the contract failed to meet this requirement, but the whole concept was eventually discarded and the Westbury did not proceed beyond the prototype stage.



Aircraft Data Sheet: Westland IV (1929)



First flight:	22nd February 1929
Span:	17.53m/57ft 6ins
Length:	11.43m/37ft 6ins
Max weight:	2,495kg/5,500lb
Max level speed:	94knots/174kph
Power plant:	Three 105shp/78kW ADC Cirrus Hermes I
Total built:	2

The Westland IV was the company's first attempt to produce a light passenger transport for the civil market, the three engine configuration was adopted to provide for safety. Trials with the prototype were successful and there was interest from the light aviation fraternity. A number of improvements were proposed leading to the similarly configured Wessex.



Aircraft Data Sheet: Westland F 7/30 (1934)



First flight:	27th March 1934
Span:	11.73m/38ft 6ins
Length:	8.99m/29ft 6ins
Max weight:	2,359kg/5,200lb
Max level speed:	161knots/298kph
Power plant:	One 600shp/447kW Rolls-Royce Goshawk VIII
Total built:	One

Air Ministry Specification F 7/30 was drawn up to spur innovation in the development of high speed fighters. The Westland response incorporated some interesting features, which would be of great advantage for aerial combat. The engine was mounted behind the pilot and on the centre of gravity, resulting in excellent all-round visibility and the potential of good handling. The grouping of four machine guns in the nose was good practice for gun harmonisation. Trials at Martlesham Heath showed that the handling qualities were indeed good, but the aircraft performance was poor probably due to the biplane configuration.



Aircraft Data Sheet: Westland-Houston PV-3 (1933)



First flight:	21st January 1933
Span:	14.17m/46ft 6ins
Length:	10.41m/34ft 2ins
Max weight:	2,540kg/5,600lb
Max level speed:	142knots/262kph
Power plant:	One 575shp/429kW Bristol Jupiter XFA
Total built:	One

Originally designed as a Torpedo Bomber for the Royal Navy for which no orders developed, the PV-3, which was based on the Wapiti, was acquired by the Royal Geographical Society and modified for an expedition to fly over the summit of Everest (8,848m/29,030ft). The flight was financed by Lady Houston and successfully completed on 3rd April 1933, to much acclaim in the press. The PV-3 was accompanied by the Westland PV-6 which was subsequently developed to become the Wallace.



Aircraft Data Sheet: Westland N.1B (1917)



First flight:	Autumn 1917
Span:	9.54m/31ft 4ins
Length:	7.76m/25ft 5ins
Max weight:	897kg/1,978lb
Max level speed:	94knots/174kph
Power plant:	One 150shp/112kW Bentley BR 1 rotary
Total built:	Two prototypes only

This was the first aircraft to be designed by Westland, in response to an Admiralty requirement for a light seaplane scout. Only two prototypes were built.



Aircraft Data Sheet: Westland PV-7 (1933)



First flight:	3rd October 1933
Span:	18.36m/60ft 3ins
Length:	11.79m/38ft 8ins
Max weight:	2,048kg/4,515lb
Max level speed:	150knots/278kph
Power plant:	One 722shp/538kW Bristol Pegasus III M3
Total built:	One

Intended as a two seat general purpose aircraft in response to Specification G 4/31, the PV-7 incorporated military requirements to produce an aircraft capable of a diverse range of roles such as; Bombing, reconnaissance, army co-operation, casualty evacuation and even torpedo attack. No fewer than nine companies submitted designs, none of which were eventually accepted. The Westland prototype suffered a wing failure in flight and was destroyed, the pilot, Harald Penrose, escaped by parachute (the first ever from an enclosed cockpit), but the PV-7 was discontinued.



Aircraft Data Sheet: Whirlwind (1938)



First flight:	11th October 1938
Span:	13.72m/45ft 0ins.
Length:	9.98m/32ft 9ins
Max weight:	4,697kg/10,356lb
Max level speed:	313knots/579kph
Power plant:	Tow 885shp/660kW Rolls-Royce Peregrine
Total built:	116

With the approach of war the Air Ministry identified a need for a long-range twin engined fighter against the possibility that the main air battle would be fought in Europe. Westland responded with the Whirlwind a small very fast twin engined fighter with formidable armament, four 20mm cannon mounted in a close group of four in the nose.

The resultant aircraft proved to be very fast and manoeuvrable, matching and in some areas exceeding that of the Spitfire. As events transpired, the fall of France meant that the air battle was to be fought over Britain, and the need for an aircraft such as the Whirlwind, not only receded but would be a drain on engine resources. Further to this the Peregrine engine was at an early stage of development, and the introduction of the larger Merlin would not have been practical. The programme continued with lower priority and the Whirlwind achieved limited production as a fighter-bomber.



Aircraft Data Sheet: Witch (1928)



First flight:	30th January 1928
Span:	18.59m/61ft 0ins
Length:	11.48m/37ft 8ins
Max weight:	2,744kg/6,050lb
Max level speed:	122knots/225kph
Power plant:	Two 480shp/358kW Bristol Jupiter VIII F
Total built:	1

Air ministry Specification 23/25 called for a two-seat day bomber. Four companies responded with designs including the Westland entry, the Witch. The requirement was eventually dropped and only a single prototype was built.



Aircraft Data Sheet: Widgeon I & II (1924)



First flight:	24th September 1924
Span:	9.35m/30ft 8ins
Length:	6.4m/21ft 0ins
Max weight:	522kg/1150lb
Max level speed:	95.5knots/177kph
Power plant:	One 35shp/26kW Blackburn Thrush (Widgeon I) One Armstrong Siddeley Genet. (Widgeon II)
Total built:	2 prototypes

The Widgeon was the second Westland entry in the 1924 competition, built to provide a monoplane response. The trials aircraft was unfortunately damaged in the course of the competition and as a consequence did not proceed in this form.



Aircraft Data Sheet: Widgeon III (1927)



First flight:	March 1927
Span:	11.09m/36ft 4½ins
Length:	7.14m/23ft 5ins
Max weight:	424kg/935lb
Max level speed:	75knots/138kph
Power plant:	One 75shp/75kW Armstrong Siddeley Genet II or One 85shp/63kW ABC Hornet or One 85shp/63kW ADC Cirrus II or One 90shp/67kW ADC Cirrus III or One 100shp/75kW DeHavilland Gypsy 1 or One 105shp/78kW Cirrus Hermes I or One 120shp/89kW Cirrus Hermes II
Total built:	24

The Widgeon III was developed to provide a light aircraft for quantity production for the private owner market. It was based on experience gained with the Widgeon II and incorporated many of the best features of the earlier design. Widgeons were sold to South Africa, Canada and Australia and also achieved success on the sporting scene. The type appeared with a number of different engines and proved to be very popular among the more affluent private owners.



Aircraft Data Sheet: Wizard I & II (1926)



First flight:	November 1926
Span:	12.04m/39ft 6ins
Length:	8.18m/26ft 10ins
Max weight:	1,486kg/3,2750lb
Max level speed:	163knots/303kph
Power plant:	One 490shp/365kW Rolls-Royce F XI. (Wizard I) One 500shp/373kW Rolls-Royce F XIS. (Wizard II)
Total built:	One

Built as a private venture, the Wizard was intended as a fast monoplane fighter. The results achieved with the first aircraft attracted Air Ministry interest and an invitation to submit the design for Specification F 20/27, for which the original prototype Wizard I was extensively modified. The design included cockpit heating and oxygen but was eventually rejected through service prejudice against the monoplane configuration.



Aircraft Data Sheet: Woodpidgeon I & II (1924)



First flight:	17th September 1924
Span:	8.23m/27ft 0ins
Length:	6.32m/20ft 9ins
Max weight:	401kg/885lb
Max level speed:	61 knots/113kph
Power plant:	One 32shp/24kW Bristol Cherub III (Woodpidgeon I) One 60shp/45kW anzani radial (Woodpidgeon II)
Total built:	2

The little Woodpidgeon was built as a response to the Air Ministry's Light Aeroplane Competition of 1924. Westland also produced a monoplane entry, the Widgeon which proved superior and as a consequence only two prototypes were built, the second of which was larger in an attempt to improve the performance.



Aircraft Data Sheet: Wyvern TF MK 1 (1946)



First flight:	12th December 1946
Span:	13.41m/44ft 0ins.
Length:	11.96m/39ft 3ins
Max weight:	11,113kg/24,500lb
Max level speed:	333knots/616kph
Power plant:	One 2690shp/2,006kW Rolls-Royce Eagle 22
Total built:	6 prototypes, plus 7 production.

The requirement for the Wyvern was placed in 1944 as Admiralty Specification N 11/44 calling for a high performance long range fighter, it was to use the large and powerful Rolls-Royce Eagle piston engine, with contra-rotating propellers. The development was protracted and included several accidents, largely due to the complex engine/propeller combination. Production did proceed somewhat prematurely, but the piston engined variant never actually entered service.



Aircraft Data Sheet: Wyvern TF MK 2, T MK 3 & S MK 4



First flight:	22nd March 1949. (Armstrong Siddeley Python)
Span:	13.41m/44ft 0ins.
Length:	12.88m/42ft 3ins
Max weight:	11,113kg/24,500lb
Max level speed:	333knots/616kph
Power plant:	One 4,110shp/3,065kW Armstrong-Siddeley Python
Total built:	111 including prototypes

In view of the problems with the Eagle engine it was decided to install one of the new turboprop engines. Two were available: The 4,030shp/3,005kW Rolls-Royce Clyde and the 4,110shp/3,065kW Armstrong-Siddeley Python, both units were tested and the Python selected. The programme continued to be bedevilled with problems and it was not until 1953 that the first Wyverns entered service, The type saw action at Suez in 1956 but was eventually withdrawn from service in 1958.



Aircraft Data Sheet: Yeovil (1925)



First flight:	June 1925
Span:	18.14m/59ft 6ins
Length:	11.23m/36ft 0ins
Max weight:	3,425kg/7,550lb
Max level speed:	104knots/193kph
Power plant:	One 650shp/485kW Rolls-Royce Condor III
Total built:	3

Air Ministry Specification 26/23 called for a two-seat long range day bomber for the Royal Air Force. Three prototypes were built but the Hawker Horsley won the selection.