

1930s De Haviland Airliners and some rivals

Garry Law



Ford Trimotor 1926 199 built



Curtis Condor 1933 45 built



Boeing 247 1933 75 built

US Contenders of the 1930s



Vultee V1 1933 25 built



Stinson Model A 1934 31 built



DC-2 1934 198 built



Lockheed
Model 10
Electra 1934
149 built



DC-3 1935
thousands
built



Lockheed
Model 14
Super
Electra 1937
354 built
(Lodestar)



Fokker F.VII 1924 ~200 built



Armstrong Whitworth Argosy 1926 7 built



Junkers J52 1930
Thousands built



Handley Page 42/45 1930 8 built



Armstrong Whitworth Atalanta 1932 8 built

European
Contenders of
the early 1930s

Flying boats were the long range contenders of the 1930s – not considered here:



Boeing 314 Clipper, FF 1938, 12 built.



DH.83 Fox Moth

First Flight	1932
Passengers	3-4
Range	684 km
Cruise	171 km/hr
Max Altitude	12,700ft
Engine	de Havilland Gipsy III, 120 hp
Production	154
NZ Users	Air Travel (NZ) Ltd, National Airways Corporation, RNZAF



De Havilland DH.84 Dragon

First Flight	1932
Passengers	6-10
Range	740 km
Cruise	167 km/hr
Max Altitude	12,500 ft
Engines	de Havilland Gipsy Major 1 4-cylinder air-cooled inverted inline, 130 hp
Production	202
NZ Users	Air Travel (NZ) Ltd, East Coast Airways, Union Airways of N.Z., NAC, RNZAF



De Havilland DH.89 Dragon Rapide / Dominie

First Fight	1934
Passengers	8
Range	920 km
Max	253 km/hr
Max Altitude	16,700 ft
Engine	de Havilland Gipsy Six inline engine, 200 hp
Production	727 – mainly military
NZ Users	Air Travel (NZ) Ltd, Mount Cook Airline, National Airways Corporation, Cook Strait Airways Ltd, RNZAF



De Havilland DH.90 Dragonfly

First Fight	1935
Passengers	4 – as a luxury touring aircraft
Range	1000 km
Max	232 km/hr
Max Altitude	18,100 ft
Engine	de Havilland Gipsy Major II inverted inline piston engine, 142 hp
Production	67
NZ Users	Air Travel (NZ) Ltd

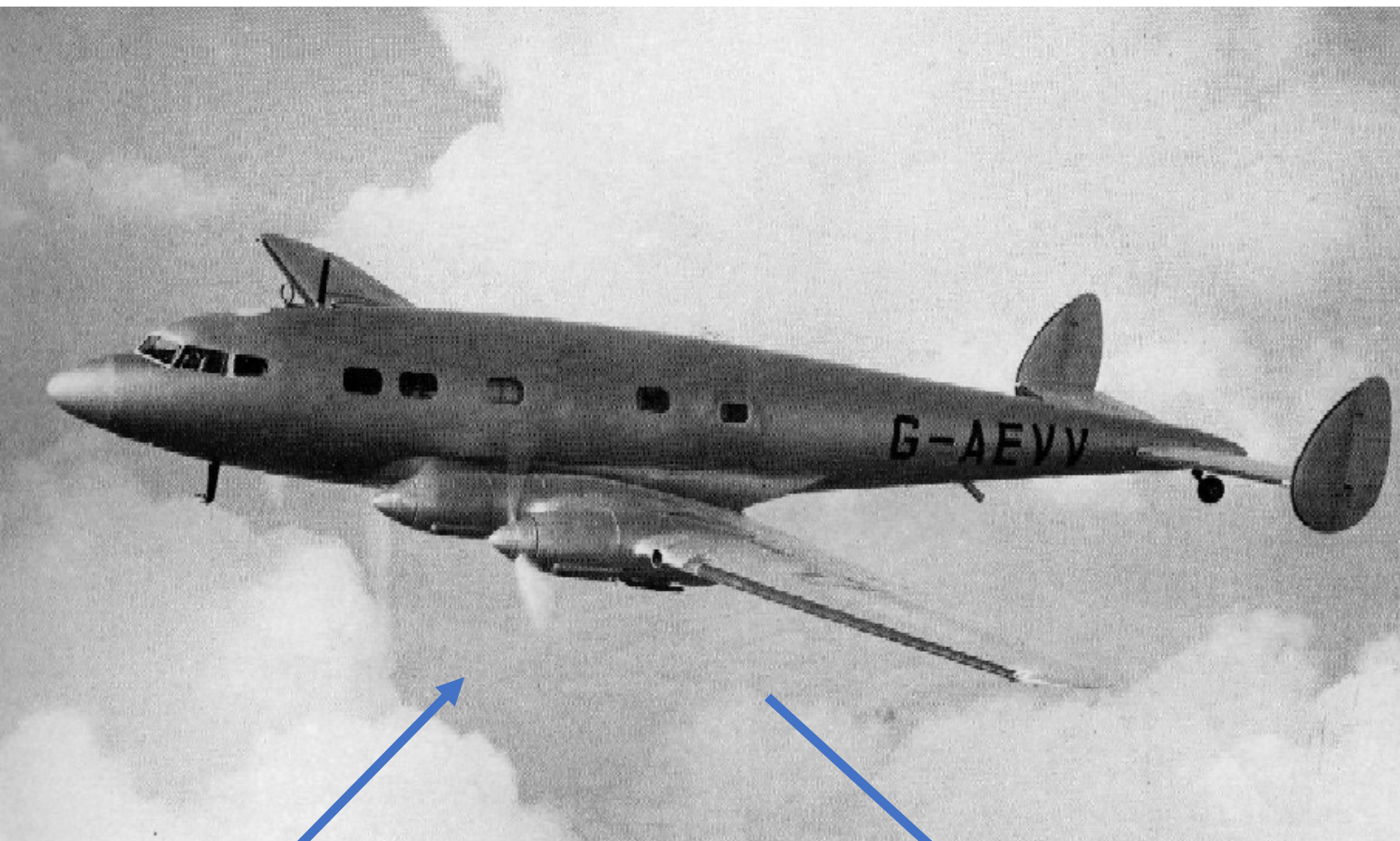


De Havilland D.H.86 Express

Built for the Empire Air Mail Scheme – first customer was Qantas – Connected to Imperial Airways at Singapore from 1934, flying to Brisbane but did not carry mail under the EAMS until 1938.

Rivals were the all metal DC2 / DC3s and Lockheed Electra / Super Electra all of which easily outsold it.

First Flight	1934
Passengers	10-12
Range	1223 km
Cruise	229 km/hr
Maximum	267 km/hr
Max Altitude	17,400 ft
Engines	de Havilland Gipsy Six inline engine, 200 hp
Production	62
NZ Users	Union Airways of N.Z. Ltd, National Airways Corporation, RNZAF



First Flight	1937
Passengers	22
Range	1675 km
Cruise	338 km/hr
Maximum	362 km/hr
Max Altitude	17,900 ft (but unpressurised*)
Engines	de Havilland Gipsy Twelve 12-cylinder inverted V piston engine, 525 hp (392 kW)
Production	7

De Havilland DH 91 Albatross



DH 88 Comet

The wooden stressed skin evolution



DH 98 Mosquito

All wood. Conceived as a mail plane but developed for passenger use. Designed for pressurisation but never commissioned.



De Havilland DH 91 Albatross



Lockheed Constellation 049 FF 1943



De Havilland DH 95 Flamingo

First Flight	1938
Passengers	17
Range	1947 km
Cruise	296 km/hr
Maximum	385 km/hr
Max Altitude	20,900 ft (but unpressurised)
Engines	Bristol Perseus XVI radial piston engines, 905 hp
Production	16



Douglas DC 5 FF 1939

First DH all metal stressed skin aircraft



Airspeed Envoy

First Flight	1934
Passengers	6
Range	1046 km
Cruise	309 km/hr
Maximum	338 km/hr
Max Altitude	22,500 unpressurised
Engines	Armstrong Siddeley Cheetah IX radial engine, 257 kW
Production	52 (Oxford 8751, RNZAF 299)



Armstrong Whitworth Ensign

First Flight	1938
Passengers	27 / 40
Range	2205 km
Cruise	290 km/hr
Maximum	338 km/hr
Max Altitude	24,000 ft unpressurised
Engines	Wright GR-1820-G102A geared radial engines, 820 kW
Production	14



Bloch MB.160

Built for colonial routes. Developments included the Bloch MB.162 bomber and the Sud-Est SE.161 Languedoc, one hundred of which were built post-war.

First Flight	1937
Passengers	24
Range	1700 km
Cruise	310 km/hr
Maximum	355 km/hr
Max Altitude	19,000 ft (but unpressurised)
Engines	Hispano-Suiza 12Xirs.1 liquid-cooled upright V-12, 540 kW (720 hp)
Production	3



FW 200 Condor

First Flight	1937
Passengers	26
Range	3000 km
Cruise	335 km/hr
Maximum	375 km/hr
Max Altitude	9800 ft (Unpressurised – passenger limit)
Engines	875 hp Pratt & Whitney Hornet then 720 hp BMW 132G-1 radials
Production	? Civil small

Further developed as a maritime patrol aircraft, initially for Japan then Germany



First Flight	1938
Passengers	38
Range	2816 km
Cruise	346 km/hr
Maximum	388 km/hr
Max Altitude	23,300 ft (pressurised)
Engines	Wright GR-1820-G102A radial engines, 1,100 hp
Production	10

Boeing 307 Stratoliner

Developed from the B-17 Fortress
c.f. B 377 Stratocruiser developed from the B-29 Superfortress
via the C-97 Stratofreighter



De Havilland DH104 Dove

First Flight	1945
Passengers	8
Range	1415 km
Cruise	301 km/hr
Max Altitude	12,700 ft
Engines	de Havilland Gipsy Queen 70 Mk 3 6-cylinder in-line inverted air-cooled engine, 400 bhp
Production	542 (many military)
NZ Users	RNZAF



De Havilland DH.114 Heron

First Flight	1950
Passengers	14
Range	1473 km
Cruise	295 km/hr
Max Altitude	18500 ft
Engines	de Havilland Gipsy Queen 30 Mk.2 6-cylinder inverted inline air-cooled piston engine, 250 hp
Production	150
NZ Users	NAC



**Croydon Aviation
Heritage Centre
Mandeville
Southland**

Dragonfly, Tiger moth,
Fox moth, Dragon
Rapide



End