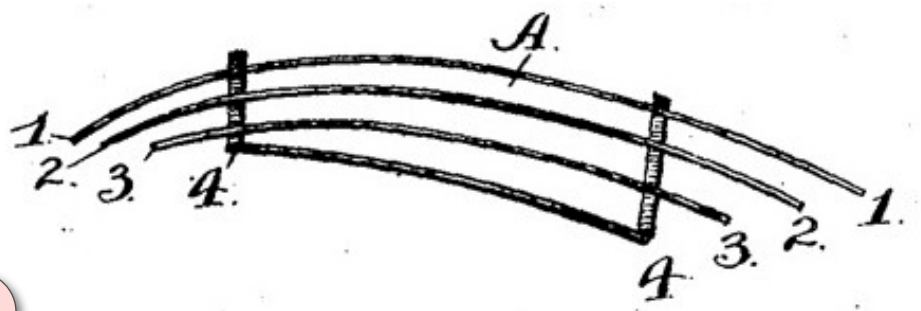
John J. Montgomery's 1906 Wing Shape

1906 Patent No. 831,173 Wing Sections:
(1- center to 4-edge)

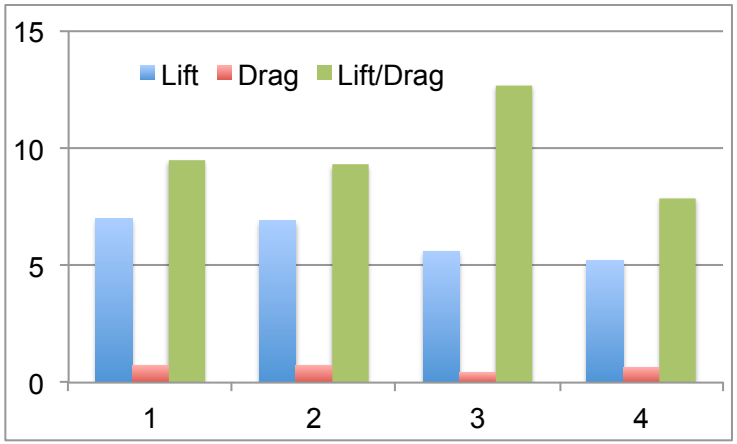


Montgomery's L/D Ratios are in the range of those of a Herring gull to Common tern

Some representative L/D Ratios

Flight article	Scenario	L/D ratio
Virgin Atlantic GlobalFlyer	Cruise	37
Lockheed U-2	Cruise	~28
Rutan Voyager	Cruise	27
Albatross		20
Boeing 747	Cruise	17
Common tern		**12**
Herring gull		**10**
Concorde	M2 Cruise	7.14
Cessna 150	Cruise	7
Concorde	Approach	4.35
House sparrow		4

http://en.wikipedia.org/wiki/Lift-to-drag_ratio



Wing Section	Lift	Drag	L/D Ratio
1	7.00	0.74	9.50
2	6.90	0.74	9.30
3	5.60	0.44	12.70
4	5.20	0.66	7.90
Avg.	**6.18**	**0.65**	**9.85**

Computed with iPhone "Wind Tunnel Pro" App by Guillaume Rizk that simulates fluid dynamics assuming incompressible and homogeneous fluid with the Navier Stokes equations.