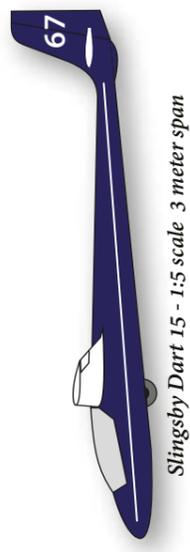
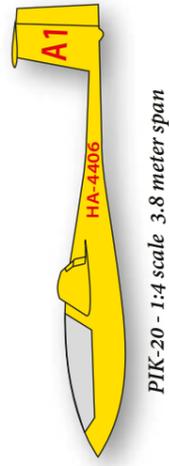
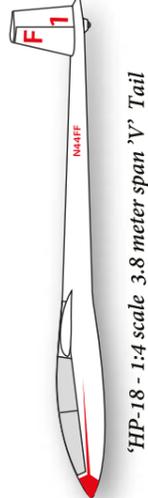
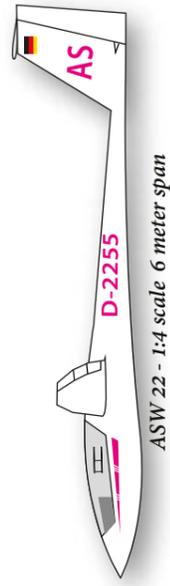
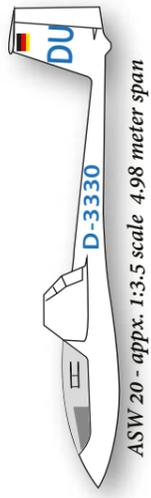
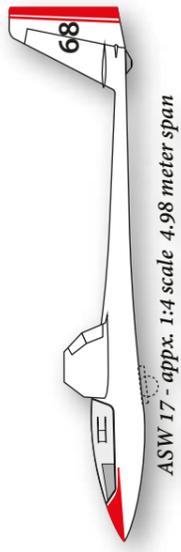


Other models in the Pat Teakle range



Pat Teakle

The ever popular moulded scale glider series

PRESENTS:

The 3.86 meter

Slingsby Vega

VEGA



Supplied by:

LCS lasercutsailplanes.co.uk
<http://www.patteaklegliders.co.uk>
 email: cliff@lasercutsailplanes.co.uk

15000
Metres
0 1 2 3

6720
6430
698
846
860
613
600
600
600
600
600
566
375
2500
550

Tip section
Wortmann
FX - 67 - K - 150

Root section
Wortmann
FX - 67 - K - 150

Tailplane section
Wortmann
FX 71 - L - 150/20

Fin section
Wortmann
FX - 71 - L - 150/30

Retracting tailwheel

Fuelage datum

Flap
8 deg -
Scale x 3
Air brake
open

Non retracting
main wheel
Brakes only.
No flap

Lifting handle

Non retracting tailwheel

Sport Vega

Slingsby T - 65
Vega

Drawn by Martin Simons 1994 ©

Manufacturer: Slingsby
 Designer: R. Sanders
 No. of Seats 1
 No. Built 70

Performance:
 L/DMax: 42.11 kph / 60 kt / 69 mph
 MinSink: 0.56 m/s / 1.85 fps / 1.10 kt

Specifications:	Area	Empty Weight	Payload	Gross Weight	Wing Load	Water Ballast			
	m ²	sq.m	sq.ft	kg	lb.	kg/sq.m	lb./sq.ft	kg	lb.
Span	15.492	10.05	108.2	236	520	272	600	508	1120
Aspect ratio:	22.4			50.5	103.5	160	352		

Airfoil: Wortmann FX 67-K-150
 Structure: carbon fiber main spar, Kevlar wing skin, fiberglass fuselage and tail.

The all composite T. 65 was the first sailplane designed from the outset with a carbon fiber mainspar. It first flew in 1977 and conformed to the then new 15 m. racing class rules. The flap and trailing edge airbrake system are operated by a single cockpit control. Trim setting is adjustable by flap setting for hands-off flight at most operating speeds.

Also automatic are the coupling of control and ballast-dumb plumbing on rigging. The Vega features retraction of both the main and tail wheels. The A model has glass wing skins and 100 kg / 220 lb of water ballast, while the D model has Kevlar skins for added strength and 160 kg / 352 lb. Of ballast. The T. 65 C model is a Sports Class variant with fixed gear and no flaps. At the time it was produced, the Slingsby company operated under the name Vickers-Slingsby, but the Vickers part was subsequently dropped. Specifications are given for the T. 65 D.

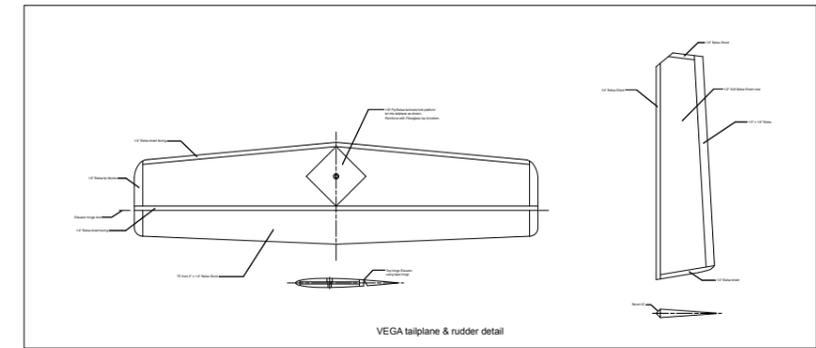
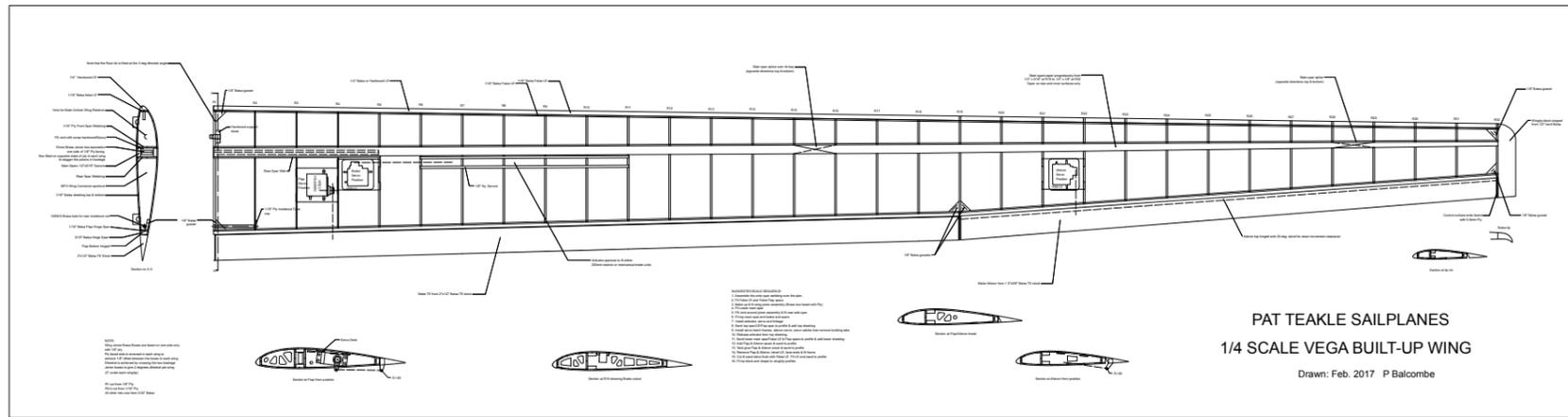
Flying the VEGA is a pleasure with very well balanced and light controls. Coupled with the flaps makes the VEGA very versatile and easy to fly across the complete flight envelope. VNE is 135/125 knots in 15m/17m configurations.

In flight full positive flaps should be used below 48 knots and for landing. Flaps should be gradually reduced to about zero at 52 knots and slightly negative thereafter. At about 65 knots full -ve flaps are desirable. When speeding up and pulling up use the flap lever to build speed or progressively as the speed drops. Do not force the flaps into the airstream, if the flaps are resisting you are still too fast and you are introducing drag. The movement becomes very easy and instinctive very quickly.

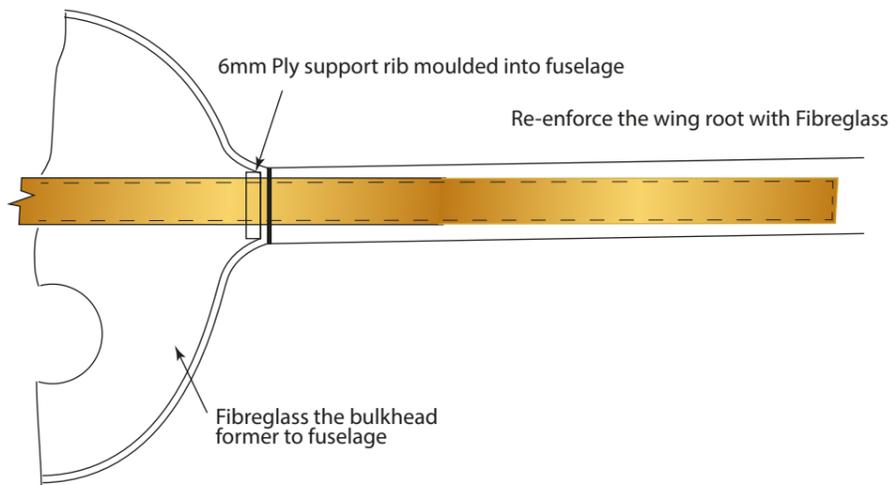
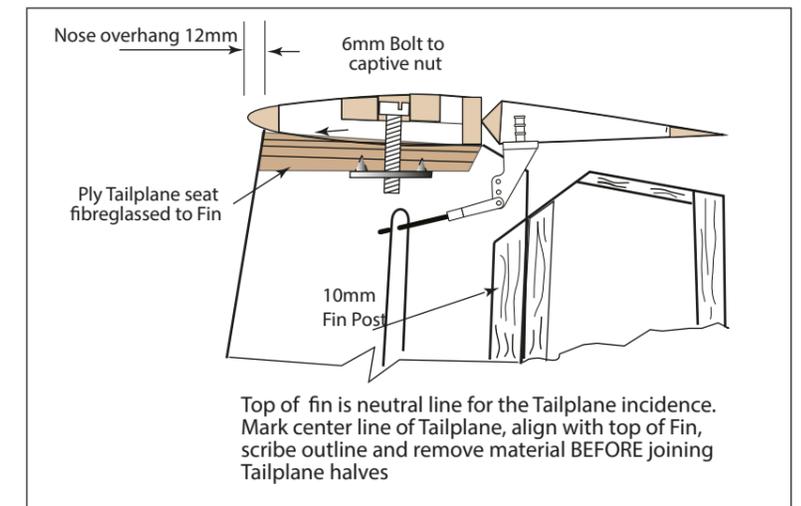
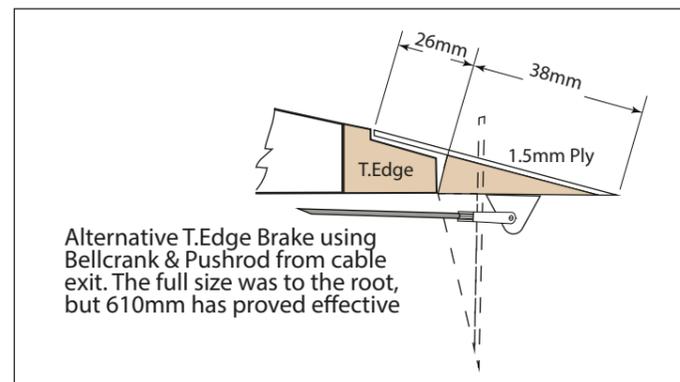
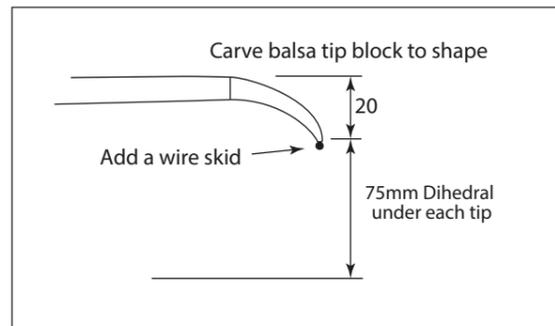
Takeoff is simple, but extra care needs to be taken on the initial part of the ground run. With the glider sitting at 15 degrees on flat ground the wing tips at low speed (below 20 knots) are prone to stall and hence cause a wing drop if provoked by the pilot. Do not move the stick to the full range of the aileron control if a wing starts to go down. Instead progressively move the stick and apply full opposite rudder to pick up the wing. Do not worry if this causes a slight mis-position on the tug leave the glider tracking the tug line until after take off. Take off is started with the stick neutral and as the glider reaches flying speed progressively move the flap lever to about 2-4 degrees at which point the glider will gracefully unstick from the ground. Leave the flap setting to give you a comfortable view ahead. At release you now may put the wheel away (you should not do so on tow as the hook is on the undercarriage mounting). If winch launching fly near max winch speed with full +ve flaps as the compromise hook fitted to the VEGA will back release if you pull too steep an angle on the winch cable. Always ensure the wingman knows to run in order to give you airflow over the wings, especially on calm days when the potential for wing drop is higher. It is worth noting that in 17m configuration the wing drop problem is virtually eliminated. However, it is always good practise to follow the above so that on the 5 knot average day when you fill it full of water and leave the tips of to get faster speeds you change nothing in your approach!

Landing is simple, lower undercarriage and select full positive flap as soon as you have made your landing decision. Approach speed is 52 knots in still air with the normal increases for wind speed. The airbrakes are very powerful and will give you up to 1:6 approach angle so very steep approaches can be made. The brakes are pitch neutral and no special precautions are necessary when opening or closing them. On round out compared to some gliders the VEGA sits at a high angle to the ground and the first time it will feel quite nose up. However for field landing this is superb as it keeps the glider out of the nasty holes in the ground compared to some gliders. The way to land it is to concentrate on holding the glider off the ground for as long as possible and to try and touch the tail wheel first, this will not happen but if you do it right then it will gently sink into a two wheel perfect landing.

Speed to fly is set for you by the flight computer just set the Macready and you will get a good indication of speed to fly for the Macready setting. When it goes to worms and you want best glide select about -2 degrees of flap and fly at 52 knots and watch the standard class drop away!

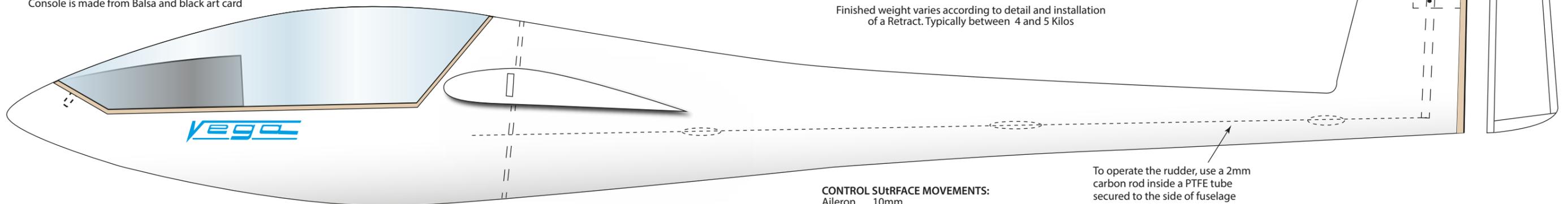


Wing Plan and Ruder/Tailplane Plan on separate sheet



BALANCE POINT is on the front edge of the main spar. Adjust to suit individual model and pilot preference.

CANOPY - Shape frame from 6mm ply (supplied)
 Console is made from Balsa and black art card



Finished weight varies according to detail and installation of a Retractor. Typically between 4 and 5 Kilos

CONTROL SURFACE MOVEMENTS:
 Aileron 10mm
 Elevator 10mm up and down
 Rudder 32mm each way

To operate the rudder, use a 2mm carbon rod inside a PTFE tube secured to the side of fuselage with dabs of f/glass OR closed loop