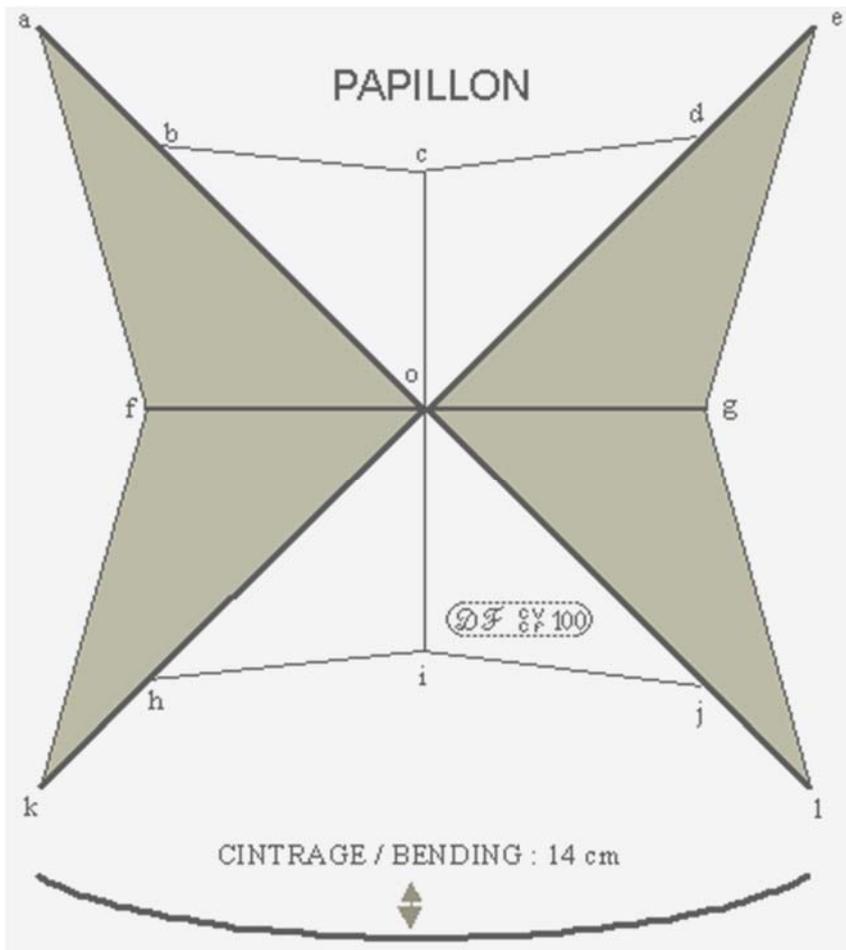


Papillon Kite—Didier Ferment



Connection Points and tension lines.

- $b-o = d-o = h-o = j-o = 59\text{cm}$
- $f-o = g-o = 52\text{cm}$
- the angles : $a-o-f = f-o-k = e-o-g = g-o-l = 45^\circ$
- $b-c = c-d = h-i = i-j = 40.5\text{cm}$

Bridles

- at points c and i , the bridles are fixed by a button
- bridle $c-i = 74\text{cm}$
- when the 5 tension lines above are fixed, the lateral bending of the kite is about 14cm
- the 120cm long bridle $c-m-o-i$ slides (at point o) through a fishing ring
- the kite line is fixed at m : $c-m =$ about 46cm
- the pulling of the line pulls more on the rear bridle, therefore the rear part of the kite is more bowed than the front part.

To make the Papillon kite turn, let go the line : it will start to spin. To make it go in the direction you have chosen, pull the line a little to come out of the spin. Your Papillon kite will then go in this direction.

If the kite takes a dive, don't pull on the line ! just let go slightly the line : the kite will take a turn, then pull the line to go back in the sky.

One of Kelvin's lasting legacies is his use of the Butterfly (Papillon) kite as an opportunity for many kite fliers to come together and fly these en-mass. Everyone who took part in these sessions enjoyed flying these kites and we hope that in the future many festivals will include a slot to continue with Kelvin's passion. The original design is by Didier Ferment and this is reproduced with permission.

The Papillon kite can be flown as a quadliner or as a fighting kite (a steerable single line kite). It is a simple design and easy to construct. Never the less, it has been a long and hard journey to get to the final design. The fighting version flies in light wind even almost none: it takes off before the Delta kite, and it can do the 360° revolution.

Construction

- Spars $a-l$ and $e-k$ made of 2m long carbon tube 4mm . Make sure that the 2 spars are exactly the same; otherwise, the kite will fly erratically.
- spar $f-g$ made of 104cm long carbon rod 3mm
- the angle of the sail at corner $a-o-k$ and $e-o-l$ is 90°
- sail sleeves: $a-o = e-o = l-o = k-o = 98\text{cm}$. Make sure the 2 sails are symmetrical
- at tips a, e, l, k : nock and 3mm elastic to stretch the sail

One last tip when you will become a master : give a quick and gentle pull on the line when the kite spins, to increase the turning motion.

