

## Combat-sickle (ERIS from Sky Paragliders) - Fly and Glide 7/2005

For the fight for points in OLC and World Cup Sky Paragliders sends a unique comp-sickle into the race: the Eris.

The season 2005 obviously stands under the sign of new comp-wings. Besides renowned companies also some of the "underdogs" emit new stuff into the market and enrich the scene with interesting concepts. After 12 (!) years of absence and a development period of 16 months Sky Paragliders returns to the comp-circus with the "Eris".

Constructor Alexandre Paux relies on an eye-catching design. A comparably slim profile together with high aspect-ratio and small surface determine an optically distinctive comp-sickle, that also distinguishes from competitors by other construction details. Besides a double D-band in lower and upper sail, Sky Paragliders - as one of few manufacturers - utilizes mainlines, that only furcate once and lead directly into the gallery-lines. 81 cells are supported by very large v-tapes directly connected to the upper sail. Eyecatchers are the very narrow stabilizer-area, that only consists of 4 closed cells and the outer brakelines, that are caught together by small o-rings. Overall the "Eris" makes a ripe technical impression and is very cleanly made.

### Hard "wing"?

Slightly overloaded, with a wing-loading of 4,59 (!) kilogram per squaremeter, the M-size of the "Eris" nearly resembles a rigid wing. The canopy cleanly stands above the pilot and is notably stable even in turbulent air. Despite an aspect-ratio of 6,4 no performance-ruining swinging or twisting ever disturbs; the canopy appears surprisingly rigid and should be flown according to this. In turbulent air the "Eris" certainly requires a guiding hand. This dynamic wing has to be controlled – but should be left "running", refraining from overbraking the wing. Near the minimum-speed the "Eris" sensitively reacts to oversteering and quickly stalls. Distinctive stall-behaviour with quick turns also are a sign of extreme flight manoeuvres. Fullstall and negative spin should – as with all comp-wings – be flown very neatly to avoid uncontrollable situations. Collapses and frontstalls gain further dynamic by the "Eris"’s sliding risers. Pulling down the A-riser results in a sudden load-throw-off of the frontal lines releasing the linking band to the D-riser. Without the pull of the D-lines near the trailing edge instant braking is required, should the wing not dive off too far.

### Agile thermal behaviour

When circled in strong thermals the wing shows his strengths and cuts through thermals like a knife. Flying this dynamic wing is big fun, but should be enjoyed letting the wing run. The "Eris" likes excessive speed more than hard braking and even in steep and narrow circles transforms climbing into a quick gain in altitude. In weak thermals also a higher speed is of advantage, where the agile wing corners effortlessly, easing the centering of narrow cores. On full glide the "Eris" cuts the air very neatly. Here the hard canopy once more demonstrates it's benefits and produces maximum glide-performance out of the wing.

### Forward launch:

The canopy cleanly climbs and nearly has no tendency to front-stall; very easy launch for a comp-wing

### Backward launch:

Simple handling despite the aspect-ratio of 6,4; the canopy can be pulled up again from every position; before reaching the apex a small further impulse can be needed

### Agility:

Very agile wing even with few brake applied together with high stability



**Steering behaviour:**

Continuously rising pressure; stall can appear creepingly when flying near the minimum-speed for a longer time

**Extreme flight:**

The canopy is very sensitive near it's minimum-speed and stalls quickly; all extreme flight manoeuvres require instant and correct reactions of the pilot; sliding risers add further dynamic, the use of brakes for stabilizing and reducing the shooting is absolutely recommended.

**Accelerator:**

The sliding risers make the accelerator very effortlessly to apply, high speeds can be achieved without problems; the canopy retains on it's way to v-max lots of stability and a high resistance to collapses.



**Pilot profile:** Experienced XC- and competition-pilots trained in handling extreme flight situations.

**Measurements:** *(measured with Bräuniger IQ Compeo)*

v-min/v-trim: 27 km/h / 39-40 km/h

v-max accelerated: 59-60 km/h

min. sinking: -1,0 m/sec

takeoff-weight: 101 kg

wing-loading: 4,59 kg/m<sup>2</sup>

**Summary:**

The "Eris" is a pure-bred competition wing for experienced pilots. In their hands the dynamic wing makes his performance available. An interesting choice for friends of warp-resistant and hard canopies.