Press release

Nesselwang/Unterwössen, 25.06.2015

Successful Alps double crossing with less than 18 kWh energy:
Elektra One Solar flies as first electric-/solaraircraft over the alps in both directions

Elektra One Solar from PC-Aero GmbH (Germany) started in Unterwössen (Germany) on 25 june for the Alps crossing over the Grossglockner and landed in the sunny town of Lienz in East Tyrol (Austria). The flight took around 2.5 hours. After the successful flight on the south side of the Alps, *Elektra One Solar* started on the way back on 2 july (few days before the e-Genius of the University of Stuttgart also flew over the alps) in quite difficult weather conditions. Despite headwinds and strong gusts the plane crossed

the Alps at an altitude of more than 3000 m and landed after about 2 hours and 190 kilometers flight as planned at the airfield in Zell am See (Austria).

The emission and noise free flight was possible using 280 solar cells applied on the wing surface of the ultralight airplane and a 11.5 kWh battery package.
The series production solar cells from the Solar World company in Germany provided about 30% of the needed energy.
The maximum actual range of the aircraft is about 500 km.

On Bord: 3D-camera

A special high resolution camera for 3D landscape mapping (up to 5 cm resolution) was installed on board. The system was developed by the partner company Elektra UAS GmbH.

„We need not reinvent the aircraft for a clean mobility, we need only integrate and optimize existing technologies, says Calin Gologan", the CEO of PC-Aero GmbH and Elektra UAS GmbH.

Rarely were so many future technologies integrated in a single product like the *Elektra One Solar:*

- Light weight structures
- High efficient electric engines and controls
- modern Li-Ion batteries
- Solarsystems
- 3D Camera
- Autonomous flight

***Elektra One Solar* Datasheet:**

Max. weight	300 kg
Empty weight (without Batteries)	120 kg
Battery weight	60 kg
Max. payload	100 kg
Wing span	13 m
Wing surface	10 m^2
Continuous engine power	16 kW
Max. range	up to 500 km
Max. endurance	over 5 hours
Cruising speed	100 km/h
Wing aspect ratio	16.9
Best glide ratio	over 30
Certification	Ultralight Class Germany (LTF-UL)

About PC-Aero GmbH
PC-Aero GmbH is a design, prototyping and certification office.
Since about 5 years the company entered in the electric-solar aircraft business.
Five Elektra One electric-/solar aircrafts were built in different versions from 8.6 m to 15 m wing span.
The German ultralight certification will be finished up to the end of this year.
The design of the two seat side by side version, Elektra Two trainer , was finished and the building of the prototype will be started this year. A license contract was signed with an US partner (aircraft name – Sun Flyer).
The two seat tandem version, Elektra Two Record, was designed for high altitude stratospheric record flights up to 24 km. One prototype was just ordered by the Swiss company SolarXplorer.
The prototype building was started and the first flight will take place in the first part of next year.

Abou Elektra UAS GmbH
Elektra UAS is responsible for the unmanned (also Optional Pilot) applications of the aircraft platforms designed by PC-Aero. The applications includes 3D landscape/city mapping and communications like internet and mobile phone.

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