1.4 Description and Technical Data

The ASH 25 is a high performance two-seater glider of the FAI Open Class specification. Its performance equals that of single-seater gliders and makes it for suitable record breaking and competition flying. We would stress the opportunity it offers for introducing inexperienced pilots to high performance gliding, and to train them on this type. Not least, its pleasant flying characteristics make the ASH 25 suitable for use in performance-orientated clubs.

The installation of the compact power-plant, a single rotor engine, type AE50R, expands the operational range of this sailplane. It allows the flight to be extended to different kinds of terrain - so long as they offer landing possibilities - and their meteorological conditions, which would be out of reach of a pure sailplane.

The ASH 25 M is a shoulder wing glider with damped T-tail and sprung, retractable landing gear with hydraulic disc brake. The wing is equipped with trailing edge flaps extending over the full span, to allow a choice of optimum wing camber in relation to drag throughout the speed range. With landing flap selected the deflection of these flaps will generate high drag combined with good control which, together with the airbrake paddles on the upper wing side, permits very short landing approaches. The propeller of this self-launching sailplane is fitted in the fuselage behind the wing and is extended electrically. Together with the rigid twin-bladed propeller the power-plant obtains a good performance and provides excellent rates of climb even at maximum all-up weight.
2.4 Power-Plant

Engine Model: AE50R
Max. power:
- take-off 37 kW (5 minute limit) 7500 rpm
- continuous 34.6 kW 6900 rpm

Max. take-off revs: 7500 rpm
Max. continuous revs: 6900 rpm
Max. overspeed revs (20 sec.): 7800 rpm

Max. coolant temperature: 107 °C (224°F)
Max. coolant temp., take-off: 90 °C (194°F)
Min. coolant temp., take-off: 60 °C (140°F)
Max. rotor cooling air temp.: 125 °C (257°F)

Lubricant: Total loss oil lubrication
at ratio: 1:60 approx.

Transmission: Toothed belt transmission with 1:3.26 reduction ratio.

The installation of the following propeller is type-approved:

Manufacturer: TechnoFlug Leichtflugzeug GmbH
Propeller: KS 1 C 154 R 110