Inflight Engine Stop Procedure

① Ignition OFF
(by moving engine lever to position DECO)

② Reduce airspeed to
90 km/h (49 kts, 56mph) without water ballast
100km/h (54 kts, 62mph) with water ballast

③ When propeller does not slow down any more,
move engine lever to position PROPELLER FREE

④ Wait until it nearly does not overcome the compression any more and

⑤ Engage propeller stopper
(by moving engine-lever to position EXTRACT)

⑥ When propeller is vertical (Mirror),
move engine-lever to position RETRACT

⑦ When green LED beams,
turn power-plant main switch OFF

Remarks:

on ③: The propeller must not stand direct above the propeller stopper. Only after the rotational speed has almost completely died down, the stopper may be swivelled into the arc of the propeller.

on ④: You can control the impetus, with which the propeller overcomes the top dead centres and finally comes to a halt at the stopper, by reducing or increasing airspeed.

Height loss during stopping and retracting the power-plant, **usually** about: 100 m (330 ft)

Time to stop and retract the power plant, about: 50 – 70 s:

NOTE: *If the engine revs up again from step ② to ③, keep the decompression longer open. Cooling down the engine usually improves the situation.*

*This is important, when the airspeed must be higher due to **water ballast**.*

Powered Flight

CAUTION: *Medical investigations have shown, how much the interior noise of powered sailplanes with retractable engines can harm the unprotected ear. Therefore always wear ear protection during powered flight. To compensate for this, turn the radio louder.*

The largest cruising range can be achieved with a saw-tooth pattern. That means, to fly under power with the speed of the best climb-rate and glide with retracted engine and the speed of the best glide-ratio.

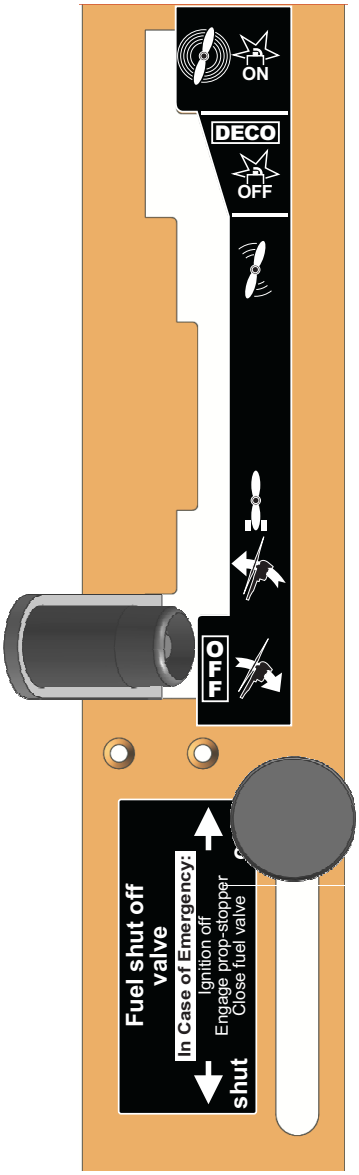
See section 5.3.6 for performance information.

Pay attention to the fuel amount in the fuselage tank, and – if installed – open the valve of the wing-tanks in time.

CAUTION: *The wing tanks valve will switch off automatically only if the tank selector is set to "AUTO". With manual position "ON" selected the valve will not close when the fuselage tank is full and fuel will be lost via the ventilation! Therefore, the fuel level indicator must be monitored and the wing tank valves closed in good time.*

A detailed description of the power-plant instrument is given under section 7.12.

View of the control console:



Position	**Remark**
Ignition ON	Decompression CLOSED Position for powered flight
DECO	Decompression OPEN Ignition OFF
Propeller FREE	Decompression CLOSED
EXTEND Engine	Propellerbrake ENGAGED
RETRACT Engine	Position for soaring
Fuel cock OPEN	
Fuel cock CLOSED	

CAUTION: *The operation of the engine lever has been modified compared to the ASW 28-18E without TN14. It is now identical to the ASG 29E (Nov. 2013). The order of the functions was changed, so that Deco-valves open again when switching off ignition. This makes the engine reduce high revs more quickly.*

The power-plant lever protrudes form a slot, which has several positions:

Position	Description	Change
IGNITION ON	Position of lever during engine run	
DECO	Decompression valves are open to overcome compression	Close / open decompression; Switch on / off ignition
PROPELLER FREE	Ignition is off, but propeller is released	Open / close decompression
EXTEND ENGINE	Engine is extended as long as lever is in this position, propeller is blocked	Engage / disengage propeller-brake
RETRACT ENGINE	Engine is retracted as long as lever is in this position. Position for Soaring	

IMPORTANT NOTE: *The fuel cock can only be closed completely, when the power-plant lever is in positions EXTEND or RETRACT.*