

ASW 15 B - Flight Manual-

For example at 30° bank 70 km/h, 38 knots, 43,5 mph (80km/h, 43 knots, 50 mph) and at 45° bank 75 km/h, 40,5 knots, 47 mph (85 km/h, 46 knots or 53 mph) are given.

The best rate of sink is obtained at 70 km/h, 38 knots, 43,5 mph (80 km/h, 43 knots, 50 mph) in level flight. The best L/D at 90 km/h, 48,5 knots or 56 mph (100km/h, 54 knots or 62 mph). The best circling speeds are 74 to 80 km/h (83 to 90 km/h) at 30° bank and 80 to 85 km/h (90 to 95 km/h) at 45° bank.

With Winglets all speeds above reduce by 1 - 2 km/h.

Dangerous flight Attitudes

The ASW 15 B has extremely harmless stalling characteristics. The stall warning occurs at 68-70 km/h (37-38 knots, 42-44 mph) and is indicated by large stick movement in the elevator. With the stick hard back, the aileron and rudder respond up to approximately half control movements in the normal sense.

Full rudder and aileron deflection during a stall will cause wing dropping. Only with the C. of G. near the maximum rearward position will lead to a spin.

Wing dropping As well As spinning are terminated with the (German) standard procedure (opposite rudder and elevator neutral).

If no corrective measures are started, the sailplane will terminate the sideskid or spin by itself and will develop a spiral like sideslip. This sideslip can also be ended with opposite rudder.

If still no corrective measures are taken, then this sideslip will eventually change to a spiraldive with the typical buildup of high speeds.

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"Semi"-Aerobatics

Besides spinning the following aerobatics are approved:

Loops, Stall Turns, Lazy Eight and Chantelle As well As combinations of these manoeuvres are approved. Negative load factors are not certified.

Loop: A starting speed in the lowest point of about 160-180 km/h (86-98 knots, 100-112 mph) is recommended.

Stall Turn: A stall turn is also started with 160-180 km/h in level flight. At 70 km/h (83 knots, 44 mph) or a bit earlier the turn is started by full application of the rudder. With some aileron to the outside of the turn one must avoid an inverted flight attitude.

Lazy Eight: This manoeuvre can be done up to 170 km/h (92 knots, 106 mph) in the crossing point.

Chandelle: This manoeuvre is started like a stall turn, however at 90 km/h (49 knots, 56 mph) and with full rudder and full contrary aileron deflection applied, the transition to the level flight must be started. Also the stick must be markably pushed.

Aerobatics are not approved with water ballast on board and/or with winglets installed.

1.7 Empty weight Centre of Gravity Limit

After repairs or installations of additional equipment have been made or after the sailplane has been repaired, special attention is to be given to the empty weight centre of gravity, remaining within the permissible limits.

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2.1 Rigging

All pins and fittings including the ball pip fittings are to be cleaned and lubricated. The right wing (2 prong spar end) is inserted from the side into the fuselage tunnel, then the left wing is inserted from the opposite side. Align the main fittings, push in the main pins and safety. Now the wing tips can be released.

Connect ailerons and dive brakes and double check the connection by trying to pull the push pull rods away from the ball fittings.

After setting up of the wings:

- set up the winglets from above
- screw in the fastening bolt sturdy from underneath with the accompanying fastening tool.

Insert left elevator half with the tube into the fitting in the rudder fin. Pull back the safety catch on the second elevator half and push over torsion tube. Release safety catch on the trailing edge and push it all the way in, if needed.

Please note: The top side of the elevator has a convex surface, whereas the underside has a concave rear portion (under camber).

The taping of the wing-fuselage junction with a plastic tape brings a lot of performance for very little effort (1-2 points on the L/D).

Do not tape the canopy gap, otherwise any emergency exit is jeopardised. It is recommended to wax the taping area prior to taping, so that tape can later be removed without pulling the lacquer finish off.

Loading of water ballast

Water ballast must only be filled into the rigged glider.