



SavannahTM-XL
Ultralight Aircraft
Pilot Operating Handbook

English
Version

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4 Operating limitations

The present section describes the operational limits of the aircraft. They can be obtained also from the marks on the instruments. Even an inexperienced pilot, as long as keeping to the instructions of the present manual and observing the indications of the instruments and plaques can rely on a safe use of the aircraft, of the engine, of the systems and equipment on board.

4.1 Stalling speeds at maximum takeoff weight (V_{S1} and V_{S0})

Flap at 0° V_{S1} 56 kph/35 mph/30.4 KIAS

Flap at 30° V_{S0} 48 kph/30 mph/26 KIAS

4.2 Flap extended speed range (V_{S0} to V_{FE})

Maximum speed with flaps extended (30°) from 48 kph/30 mph/26 KIAS to 111kph/69mph/60KIAS

4.3 Maximum manoeuvring speed (V_A)

V_A = 137kph/85mph/74KIAS

Up to the speed V_A all control surfaces can be fully deflected.

4.4 Never exceed speed (V_{NE})

V_{NE} = 230kph/143mph/124KIAS

From V_A to V_{NE} only use 1/3 of the maximum deflections of the controls surfaces is allowed.

4.5 Crosswind and wind limitations

The maximum cross-wind component allowed during take-off and landing is 30 mph/48km/h/26 knots.

4.6 Service ceiling

The maximum ceiling is about 14,000 ft/4200 m pressure altitude at the maximum weight.

4.7 Load factors

The design positive and negative limit manoeuvring load factors referred to a design weight being 560 Kg (1234 lbs) are:

Minimum manoeuvring speed (V_A)	+4.0 g
Design speed (V_C)	+4.0 g
Maximum admissible speed (V_{ne})	+4.0g / -2.0 g
Design speed with flaps out (V_{fe})	+2.0 g

The ultimate load factors can be obtained by multiplying the previous ones by 1.5.

4.8 Prohibited manoeuvres

The airplane is intended for non-aerobatic operations only.

The aircraft can be used in all VFR daylight flight conditions, with the usage limitations here contained.

DANGER

Flight in a cloudy weather is forbidden and in any case when there is no visual control.

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