## Sky Sailing, Inc

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242 lbs.

True

135

135

135

+4.0 to -1.5

31930 Highway 79 Warner Springs Ca 92086 (760) 782-0404

Stall

Safety Is No Accident

Maximum Rear Pilot

@ Maneuvering Speed +5.3 to -2.65

123

112

104

Load Limit Factors

@ Redline

## **GROB G-103 TWIN II**

The G-103 is a two seat, T-tail, high performance sailplane. This sailplane is fitted with a non-retractable, tandem landing gear, and upper airbrakes.

## WEIGHTS - SPEEDS & SPECIFICATIONS Wingspan - 17.5 m Empty Weight (57.4') 838 lbs. Payload 441 lbs.

36 kts. \* Solo Gross 1279 lbs. Dual 41 kts. Solo w/ airbrakes 41 kts. Minimum Forward Pilot w/ two trim wts. 121-138 lbs. Dual w/ airbrakes 46 kts. Minimum Forward Pilot w/ one trim wt. 138-153 lbs. Minimum Sink Minimum Forward Pilot Solo 126 fpm @ 43 kts. 138 fpm @ 46 kts. w/ no trim weight 154 lbs. Dual Maximum Forward Pilot 242 lbs. Best Glide

Solo 36.5 @ 51 kts. 37 @ 57 kts. Dual

Minimum recommended landing speed 51 kts. Maneuvering (Va)

True Airspeed vs. IAS 92 kts. Altitude Indicated 5,000 feet Rough Air Redline 92 kts. 10,000 " 15,000 "

Maximum Aero Tow 92 kts.

Maximum Dive Brake 135 kts.

Redline (Vne) 135 kts.

\* Airspeed indicators are calibrated in knots. Indicated Vne will be lower with increasing altitude. NOTE: The Deductible Insurance for all Sky Sailing fiberglass sailplanes is \$2,500. We highly recommend RENTERS INSURANCE. The deductible also includes down time.

BRAKE: Aft end of spoilers, like the Schweizer sailplanes.

<u>CHECK OUT</u>: No checkouts in cross-wind. You should sit in the ship to become familiar with the controls before your instructor starts with you. You will have to have flown at SKY SAILING for at least 3hrs, so you are familiar with our procedures.

**GROUND HANDLING:** Most ground maneuvering is common sense, and at this stage in your flying, abuse of the ship cannot be tolerated, use your best judgment. PLEASE WIPE YOUR FEET BEFORE ENTRY

- DO NOT place any side load on the tail wheel.
- DO NOT leave canopy open when moving (the hinges are a weak point, and must be watched)
- DO NOT lift by the tail or pull on the wing tips
- DO NOT open or close the canopy by the storm vent rails.
- DO NOT depend heavily on the spoilers, they are of only medium effectiveness.
- DO NOT fly in strong x-winds (max 11 kts or 12 mph @ 90 deg).
- DO NOT land with heavy spoilers as the brake will be on.
- DO be ahead of the ship, once your nosewheel gets down this ship will tend to go only straight (except in x-wind).
- DO inspect for cracks in the fiberglass (before and after).
- DO move the ship backwards, since it is easier to find push points (Watch for any hills or pot holes the rudder might hit and split on) **SEATING:** Be sure the rudder pedals are correct since they could move out

of position and might not be even.

**CANOPY:** Be very careful when opening or closing the canopy. The hinges and fittings are very weak, as are the rails around the small windows. Always use the correct cleaner, and wipe in the same direction as the airflow. Be especially alert that you do not move the ship with the canopy open.

**TAKE-OFF**: Keep the wings from dragging, if you drag a wing and the heading is more than 15 deg from straight, RELEASE. You will find that the nose is heavy and will not immediately come up.

**PATTERN:** Pattern altitude is the same as everyone else, ie. 600-700 feet abeam the hangar. Remember that you are higher performance and at higher speeds, the 2-33 behind you who might be a student is at 20:1 and more nervous than you!! Do not extend beyond the hills. Set up the pattern way out, you must be ahead of the game. PLAN your fitting in early. Be careful not to run over your traffic. Just because you are now in a higher performance sailplane doesn't mean your pattern is different, set up normally.

**LANDING**: The trick is to plan ahead, trim, and relax. Airspeed control is imperative. Your glide path is controlled by the spoilers not the stick, extra speed will be very hard to get rid of. On the landing roll the nose will try to go down, and you will find that even with full back stick, your nose will sneak down before you really want it to. Full back stick on roll out is mandatory, as well as good practice. Always attempt to land two point and do not force the nose down.

WARNING: Emergency Canopy Release is easy to pull, watch it!! Rain will increase the stall speed by 6 kts and may make the L/D like a SGS 2-33. THIS IS A NICE PRETTY GLASS SHIP AND WE WILL NOT TOLERATE ERRORS THAT WE WOULD IN A 1-26. YOUR JUDGMENT MUST BE EQUAL AND AHEAD OF THE SHIP. YOU MUST THINK HI-PERFORMANCE, NOT JUST FLY IT!!!