Manual contents and amendments

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12	Flight-m. S. 2, 8, 19 ,27 Maint.-m. S.7a, 7b, 20-23	Calculation of the maximum weight with waterballast; Cloud flying; Flight in rain and thunderstorms ; Increase of service time; Instr.and Acc.list modified (TN 323/15)	April 2007	

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2.5 Maximum G-Loadings

The following G-Loadings are not to be exceeded:

at manoeuvre airspeed:	V_M + 5.3	- 2.65
at maximum airspeed:	V_{NE} + 4	- 1.5

2.6 Weights

Maximum Take-Off mass
with 90kg waterballast at least: 450kg

without waterballast: W = WNLP + Wwings

WNLP = max. mass of al non lifting parts See below
Wwings = actual mass of the wings (see weighing record)

Maximum landing mass: 450kg

„Caution“: It is recommended to dump the waterballast before landing on airfields. Dump the ballast before an outlanding in any case.

Maximum mass of all non lifting parts 250kg

Maximum mass in baggage compartment 15kg

„Caution“: Heavy peaces of baggage must be secured to the baggage compartment floors (screwing to the floors or with belts). Each floor can support 7.5kg (16.5lbs).

2.7 Centre of gravity

The centre of gravity range in flight is
230 mm up to 385 mm behind the leading edge of the wing
or 33 % up to 55 % of the wing chord.

Leveling fuselage: Slope of rear top surface of fuselage 100: 3.67 tail down

4.6 High Speed flying: Flap settings 0°, -4°, -8°, -12°

The parallelogram stick configuration adds to the stable flight characteristics of the DG-200. It helps reduce the possibility of pilot induced oscillations. The DG-200 may be trimmed at any speed up to maximum. At high speeds the stick should be held at all times.

Do not exceed the maximum airspeed of 270 km/h (146knots) (168mph).
Do not exceed 190 km/h (103 knots) (118mph) with the flaps in the +4° or +8° settings.

4.7.0 Cloud flying:

Take care to fly cleanly. Do not induce a spin as a method for losing altitude in the clouds. In a case of emergency, pull out the drive brakes fully and dive at 190 km/h (103 knots) (118 mph) to leave the cloud.
Set the flaps on 0°.
Warning: Flying in or near thunderstorm-clouds is prohibited.

4.7.1 Flight in rain and thunderstorms

With rain the stall speed and the sink rate increases and the approach speed has to be increased accordingly.
Warning: Flights and especially winch launches in the vicinity of thunderstorms should be avoided. Due to lightning discharge, composite structures may be destroyed.

4.8 Simple Aerobatics: Flap settings 0°

Permissible only without water ballast.
Execute only the approved figures. At the recommended entry airspeeds there is no need to pull up abruptly, unnecessarily stressing the aircraft.
The following manoeuvres are easy to execute.

Approved manoeuvres:

1. Spins		
2. Inside Loop	Entry Speed 92 knots (106 mph)	170 km/h
3. Stall turn	"	170 km/h
4. Chandelle	"	170 km/h
5. Lazy Eight	"	170 km/h

Turn:

The turn is especially graceful when the pilot uses a touch of aileron along with the rudder deflection to lead into the turn. At the tpo a little opposite aileron should then be deflected.

Diagram 2 is a rate of sink polar. The competition pilot should set up the DG-2oo with the CG near the aft limit. This enhances thermalling performance, but be prepared for some pitch sensitivity.

Of course the wing fuselage gap and the stabilizer bolt should be taped. The sailplane must be clean to obtain the performance shown in diagram 2. Dirty surfaces and / or rain reduce flight performance.

6.2 Maintenance

Before every assembly all fittings should be cleaned and lubricated. Every 3 month all the bearings and hinges should be cleaned and greased, see the greasing program sect.7 of the maintenance manual. Also the emergency release of the single piece canopy should be greased and checked. At the annual inspection all displacements, weights, adjustments and general condition must be checked. See maintenance manual.

6.3 Repair

Minor damage may be repaired by a licensed airframe mechanic. Advises see maintenance manual. Don't do any repairs without considering the maintenance manual!

6.4 Tow release

C.G. release: To be serviced as detailed in "SH 72" and "S 72“ manuals, issued Nov.1977, LBA-approved.

and if installed:
Operating Manual for Tow Releases
Series: E 85 Nose Tow Release
Date of Issue: March 1989

6.5 Maximum total service time and concerning inspections

see maintenance manual section 3 (inspections).