0.1 Record of revisions

Any revision of the present manual, except actual weighing data, must be recorded in the following table and in case of approved sections endorsed by the responsible airworthiness authority.

The new or amended text in the revised page will be indicated by a black vertical line in the right hand margin, and the Revision No. and the date will be shown on the bottom left hand of the page.

Rev. No.	Affected Pages/ section	Description	Issue Date	LBA Approval Date	Inserted Date Signature
1	0.5, 7.8	DEI circuit breaker, manual revision TN 843/13	Oct. 1999	03.11.99	
2	0.3, 4.8	Greasing schedule, manual revision TN 843/16	Jan. 2001	07.02.01	
3	0.3, 0.4, 0.5, 3.3, 3.4, 4.3, 4.5, 4.8, 4.12, 4.13, 4.14, 4.18, 4.21, 4.22, 5.5, 7.6, 7.7, 7.8, 7.12, 8.7	Engine control, manual extension and retraction control, manual revision TN 843/17	July 2002	31.07.02	
6	0.4, 0.5, 4.20, 8.7	Manual revision TN 843/19	March 2004	20.04.04	
7	0.3, 0.4, 2.8, 3.7, 3.8, 4.1, 4.25, 4.26	Manual revision TN 843/24	January 2006	6.03.06	
Rev. No.	Affected Pages/ section	Description	Issue Date	EASA Approval Date	Inserted Date Signature
8	0.3, 0.5, 3.2, 4.8, 7.1, 7.18, 7.19	Manual revision TN 843/28	May 2006	August 1. 2008	

0.2 List of effective pages

Section		Page	issued	replaced	replaced	replaced
0		0.0	July 1999			
		0.1	See Record of revisions			
		0.2	"			
		0.3	"			
		0.4	"			
		0.5	"			
		0.6	Nov. 98			
1		1.1	Nov. 98			
		1.2	July 1999			
		1.3	Nov. 98			
		1.4	"			
		1.5	"			
		1.6	"			
		1.7	"			
2	App..	2.1	Nov. 98			
	"	2.2	"			
	"	2.3	"			
	"	2.4	"			
	"	2.5	"			
	"	2.6	"			
	"	2.7	"			
	"	2.8	"	Jan. 06		
	"	2.9	"			
	"	2.10	"			
	"	2.11	"			
	"	2.12	"			
3	"	3.1	Nov. 98			
	"	3.2	"	May 08		
	"	3.3	"	July 02		
	"	3.4	"	July 02		
	"	3.5	"			
	"	3.6	"			
	"	3.7	"	Jan. 06		
	"	3.8	Jan. 06			
4	"	4.1	Nov. 98	Jan. 06		
	"	4.2	"			
	"	4.3	"	July 02		
	"	4.4	"			
	"	4.5	"	July 02		
	"	4.6	"			
	"	4.7	"			
	"	4.8	"	Jan.01	July 02	May 08
	App.	4.9	"			

0.2 List of effective pages (cont.)

Section	page	issued	replaced	replaced
7	7.1	Nov. 98	May 08	
	7.2	"		
	7.3	"		
	7.4	"		
	7.5	"		
	7.6	"	July 02	
	7.7	"	July 02	
	7.8	"	Oct. 99	July 02
	7.9	"		
	7.10	"		
	7.11	"		
	7.12	"		July 02
	7.13	"		
	7.14	"		
	7.15	"		
	7.16	"		
	7.17	"		
	7.18	"	May 08	
	7.19	"	May 08	
8	8.1	Nov. 98		
	8.2	"		
	8.3	"		
	8.4	"		
	8.5	"		
	8.6	"		
	8.7	"	July 02	March 04
9	9.1	Nov. 98		

3.1 Introduction

Section 3 provides a checklist and amplification for coping with emergencies that may occur. Emergency situations can be minimized by proper preflight inspections and maintenance.

Caution: Canopy jettison and bailing out should be trained several times on the ground before flying the aircraft.

3.2 Canopy jettison

To bail out the white-red canopy opening handle (left) has to be operated with your right hand. Open the canopy as far as possible.
If the canopy doesn't stay open (or is not blown away by the oncoming air), but is closed by the air pressure, you have to release the canopy in it's closed position by operating the red emergency release handle (right) with your left hand, then push the canopy upwards.

The retaining lines will tear off.

The gas struts (if installed) will disengage automatically.

3.3 Bailing out

First jettison both canopies, then open the safety harness and bail out.
The low walls of the front cockpit allow for a quick push-off exit.

Warning: If bailing out with the engine running it is necessary to switch off the ignition and retract the engine with the manual switch even with the propeller still turning. The propeller will be stopped by the engine doors. Don't try to stop the propeller vertical and to retract the engine using the normal method.

3.4 Stall recovery

Easing the stick forward and picking up a dropping wing with sufficient opposite rudder the glider can be recovered from the stall.
To recognize and prevent the stall, please refer to sect. 4.5.4.

3.5 Spin Recovery

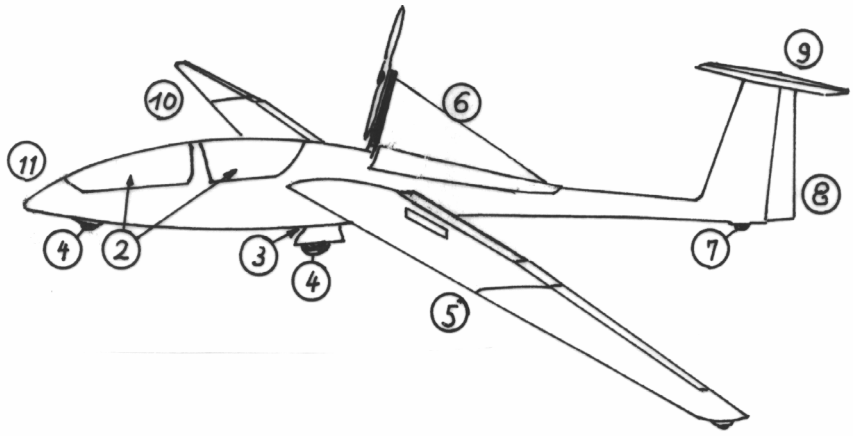
Apply full opposite rudder against direction of the spin, pause.

Then ease stick forward until the rotation ceases, centralize the controls and carefully pull out of the dive.

The ailerons should be kept neutral during recovery.

B Inspection after rigging

Walk around the aircraft



1. All parts of the airframe
   a) check for flaws such as bubbles, holes, bumps and cracks in the surface
   b) check leading and trailing edges of the wings and control surfaces for cracks
2. Cockpit area
   a) check the canopy locking mechanism
   b) check the canopy emergency release see sect. 7.15 (not each day, but min. every 3 month)
   c) check the main pin securing
      check the securing ropes of the headrest in the rear cockpit for wear function and length: is it possible that the headrest interferes with the control stick?
   d) check all controls for wear and function, incl. positive control check
   e) check the tow release system for wear and function incl. cable release check
   f) check for foreign objects
   g) check the instrumentation and radio for wear and function
   h) check the brake fluid level
   i) check if the fin tank is empty
   j) check the fuel filter for dirt and sludge
   k) switch on main switch. The fire warning light must flash once (self-test-function). Check the engine controls
   l) check all fuses including the battery fuse
   m) check the extension-retraction mechanism by operating it in both directions. The extension time should not exceed 15 seconds!
      Note: If the mechanism can't be operated with the ignition switch or with the manual switch, check the circuit breaker.
   n) extend the engine with the manual switch

Section 7

7. Sailplane and systems description

7.1 Introduction

7.2 Airframe

7.3 Cockpit, cockpit controls and placards

7.4 Flight controls

7.5 Airbrake system

7.6 Landing gear system

7.7 Tow hooks

7.8 Seats and safety harness

7.9 Baggage compartment

7.10 Water ballast system

7.11 Powerplant

7.12 Fuel system

7.13 Electrical system

7.14 Pitot and static system

7.15 Canopies

7.16 Miscellaneous equipment (Options)

7.16.1 Removable ballast
7.16.2 Radio installation with automatic commutation
7.16.3 Oxygen system
7.16.4 ELT
7.16.5 Heavy tailwheel

7.15 Canopies

To **jettison** the canopies in flight see section 3.2.

Removing a canopy:
Open the canopy, detach the restraining cable and if installed detach the gas strut from the front canopy. Then close the canopy and operate the red canopy emergency release handle (right) and the white-red canopy opening handle (left). Lift the canopy upwards.

Reinstalling a canopy:
Open emergency release and canopy locking levers. Place the canopy in vertical direction onto the fuselage. Close the emergency release. Open the canopy and snap in the retaining cable and the gas-strut (if installed).

Checking the canopy emergency release system:

a) check with open front canopy if the gas-struts (if installed) can be disengaged from their ball fittings (from canopy and from fuselage). Grease the ball fittings.
b) check with closed canopy if the emergency release handle can be operated and if the canopy can be removed easily, resp. if the canopy will be lifted by the gas-strut. Grease the locking pins.

7.16 Miscellaneous equipment (Options)

7.16.1 Removable ballast

The ballast box (Option) at the right hand side of the instrument console underneath the carpet can accommodate 3 lead ballast weights of min 2.2 kg (4.85 lbs.) each. Each weight compensates a pilot mass of 2.9 kg (6.4 lbs.). With 3 weights 8.7 kg (19.2 lbs.) missing pilot mass can be compensated.
The lead ballast weights are to be fixed in the box with a M 8 wingnut.

7.16.2 Radio installation with automatic commutation

If the factory approved radio installation set is installed, the radio will be switched automatically from "normal" mode to "engine on" mode with the engine extended. The commutation to "engine on" mode works only with the DEI working. If the DEI is not switched on the radio will remain in the "normal" mode. With "normal mode" only the goose neck microphones are working.
With "engine on" mode the intercom system is working. Only the microphones of the headsets are working.
The loudspeaker and the speakers of the headsets are working together in both modes.

7.16.3 **Oxygen system**

a) Installation of the oxygen cylinders

It is possible to install two oxygen cylinders with 3 l (0.8 U.S.gal.) capacity, diameter 100mm (3.94 in.) total length 575 mm (22.6 in.) (available through DG Flugzeugbau GmbH).
Installation place: one bottle in front of the rear seat and one bottle in the baggage compartment see installation plan 5 EP 31. It is mandatory to mount the oxygen bottles with the mounting parts available from DG Flugzeugbau.

b) Installation of the oxygen equipment

To ensure a safe installation ask DG Flugzeugbau for an installation instruction. For the installation of the Dräger Höhenatmer E 20088 you will find an installation plan 5EP31 in the maintenance Manual.

7.16.4 **ELT Emergency Locator Transmitter**

To ensure a safe installation ask DG Flugzeugbau for an installation instruction. For the ELT ACK you will find an installation plan 5 EP 50 in the maintenance manual.

Caution: Concerning 7.16.3 and 7.16.4
The installation has to be accomplished by the aircraft manufacturer or by an approved service station and to be inspected and entered in the aircraft log book by a licensed inspector.

7.16.5 **Heavy tailwheel**

Instead of the standard tailwheel with plastic hub a tailwheel with brass hub S27/1 may be installed. The installation kit S27/4 is available at DG Flugzeugbau.
The difference in mass between both hubs is 3.1 kg (6.84 lbs.). With the brass hub, the min. front cockpit load is increased by 8.5 kg (18.74 lbs.). This higher value must be entered in the cockpit data placards and on page 6.5. Even if the heavy tailwheel is installed only sometimes, the higher min. cockpit load must be entered.