## **0** MANUAL CONTENTS

## **0.1** Log 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 on the right margin, and the revision No. and the date will be shown on the bottom left hand of the page

Rev.	Pages affected	Description	Date	EASA
No.				Approval
	0.1,0.2, 0.4, 0.5, 0.6, 0.7,	TN8017, necessary changes	Nov. 2010	14.03.11
	4-9, 4-55, 7-15, 7-21, 8-7	to the power plant	1107. 2010	
2	0.1, 0.2, 0.4, 0.5, 0.6,	TN8019, wheel brake	February	13.10.11
	4-27, 4-42, 4-43, 4-52,	actuated by airbrake handle	2011	
	7-3		2011	
3	Title page, 0.1, 0.2, 0.4,	ÄM LS8-1, Miscellaneous	December	14.02.12
	0.6, 1-4, 2-5, 2-6, 4-4,	improvements Ser.no. 8474	2011	
	4-16, 4-21, 7-3, 7-6,	and from ser. No. 8527 on		
	7-13a, 7-15a, 7-16, 7-40			
4	0.1, 0.4, 0.6, 4-15, 7-7	TN8021 small tailwheel	January	24.02.
			2015	2015
5	0.1, 0.7, 9-5	TN DG-G-11 NOAH	May2015	7.07.
		Improvements		2015
6	0.1, 0.2, 0.4, 0.6, 2-14,	TN 8024 Manual revision	June 2016	5.08.
	4-24, 7-40			2016

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	Warnings	April 2005					
	0-1	See log of revi	sions				
	0-2	See log of revi	sions				
	0-3	See log of revisions					
	0-5	See log of revisions					
	0-6	See log of revisions					
	0-7	See log of revisions					
	0-8	April 2005					
1	1-1	April 2005					
	1-2	April 2005					
	1-3	April 2005					
	1-4	April 2005	Dec. 2011				
	1-5	April 2005					
2	2-1	April 2005					
	2-2	April 2005					
	2-3	April 2005					
	2-4	April 2005					
	2-5	April 2005	Dec. 2011				
	2-6	April 2005	Dec. 2011				
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	7-40	April 2005	Dec. 2011	Juni 2016	

## **2.14 Further Limitations**

## 2.14.1 OPERATING PLACARDS FOR LIMITATIONS

DG Flugzeugbau GmbH								
Type: LS8-t Serial No.:								
Data Pl	acard							
Airspeed Limits:	km/h	Kt	MPH					
Winch launch/Auto tow	140	76	87					
Aero tow	195		121					
In rough air	195		121					
Never exceed (VNE)	280	151						
Extend/retract engine	110		68					
Engine extended	160	99	86					
m		kg						
Max. Take-off Mass *) 15			1157					
with 4"-wheel: 18								
with 5"-wheel: 18		575	1267					
*) including water ballast								
Aerobatic manoeuvres <b>no</b>								
Take-off under own power	r <b>not</b> a	pprov	ed					
Weight Lir	Weight Limitations							
Maximum Cockpit Load max. kg/lbs								
Minimum Cockpit Load								
with tail battery, tail tank fu	n الد	nin		_kg/lbs				
with tail battery, tail tank e	mpty r	nin		_kg/lbs				
without tail battery, tail tan				_kg/lbs				
without tail battery, tail tan				_kg/lbs				
Lighter pilots must compensate lack of weight as								
suggested in Flight Manua	al							

at right hand cockpit wall

MINIMUM COCKPIT LOAD:	kg/lbs
with tail battery, tail tank full min.	
with tail battery, tail tank empty min.	
without tail battery, tail tank full min.:	
without tail battery, tail tank empty min.	•

under instrument panel cover

	m	ft		km/h	mph	Kt.
Up to	2000 (	6500)	-	280	174	151
Up to	3000 (	9800)	-	266	165	144
Up to	4000 (	13100)	-	253	157	137
Up to	6000 (	19700)	-	227	141	122
Up to	8000 (2	26200)	-	202	126	109
Up to	10000 (	32800)	-	179	111	97
Up to	12000 (	39400)	-	156	97	84

Maximum baggage weight 5 kg (11 lbs) (Soft items only)

at baggage compartment

near airspeed indicator, if not marked on ASI

## 4.7 NORMAL PROCEDURES

#### 4.7.1 COCKPIT-CHECKLIST

#### LS8-st Checklist

This powered sailplane must be operated in compliance with operating limitations stated in the form of markings, placards and EASA approved Flight Manual.

- 1. Main pins secured?
- 2. Elevator secured?
- 3. Winglets secured?
- 4. Check controls
- 5. Tail fin valve operation checked?
- 6. When using water ballast, then always in wing and tail!
- 7. Check loading conditions
- 8. Check tail dolly removed?
- 9. Fasten seat belt harness
- 10. Fasten parachute and connect parachute static line
- 11. Lock air brakes
- 12. Check trim position
- 13. Check release system
- 14. Lock canopy
- 15. Propulsion system ready for use?
- 16. Sufficient amount of fuel?
- 17. Propulsion system retracted?

#### 7.13 VARIOUS EQUIPMENT

## 7.13.1 EXPENDABLE BALLAST (TRIM WEIGHTS)

Expendable ballast to compensate pilot weight below Minimum Cockpit Load, may be fitted in front of rudder pedals and secured with knurled nut.

#### 7.13.2 ADDITIONAL BATTERIES

#### Vertical Tail Fin Battery

Optional. The tail fin battery must be equipped with a main fuse according to drawing 3BR-199. Measurements L 155mm \* B 35mm \* H 100mm (over terminals), 6V 7.2Ah, 2 cells required.

**Ser.no. 8474 and from ser.no. 8527 on (ÄM LS8-1):** If an optionally battery will be installed in the fin the locking bow (part 10L35 made from piano wire) must be removed. The locking bow prevents the installation of a battery and serves as indicator if a battery is installed, as its ends are visible from the outside.

After removing the battery reinstall the locking bow.

## Battery in Baggage Compartment

Optional. Installation on landing gear box, see Maintenance Manual section 4.13. The battery must be equipped with an appropriate main fuse! Measurements identical to forward seat battery with identical holder or for instance Dittel ZT 092, 12V 6.5Ah complete with holder.

#### 7.13.3 OXYGEN SYSTEM

Fiberglas receptacle at left main bulkhead for 3 or 4 Litre oxygen bottles of 100 mm < 3.94 in>in diameter.

After permanent installation of an oxygen system according to its manufacturers instructions by an adequately licensed repair shop, the powered sailplane including oxygen system must be inspected (Weight and Balance, Loading Instructions).

When using a removable oxygen unit, its weight must be counted as useful load.

## 7.13.4 EMERGENCY LOCATOR TRANSMITTER (ELT)

Permanent installation according to Maintenance Manual chapter 11 and to manufacturers instructions. Possible installation location optionally in special receptacle at right side main bulkhead (optional equipment), remote control from instrument panel necessary. After installation, cockpit loading limit values must be checked according to Maintenance Manual chapter 5.

Caution: When installing a 406 MHZ ELT proceed according to TN DG-G-08.

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