Flight manual DG-800S

Record of revisions

0.1

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.	Affected	Description	Issue	LBA	Inserted
No.	Pages/	_	Date	Approval	Date
	section			Date	Signature
1	0.5,	TN 384/5	June 98	22.7.1998	
	9.1-9.3	Winglets at the 18 m wingtips			
2	0.4, 7.5	TN 384/6 Parking brake	Dec,	7.02.2001	
		combined with an airbrake	2000		
		securing device (Piggott-			
		hook)			
3	0.3, 0.4,	TN 384/8 manual revision	Nov.	17.12.01	
	2.5, 4.11,		2001		
	4.15, 5.3,				
	6.9				
4	0.5, 9.1,	TN 384/9 emergency bail out	January	13.02.03	
	9.2, 9.4-	aid NOAH	2003		
	9.6				

Flight manual DG-800S

0.2 List of effective pages (cont.)

Section	page	issued	replaced	replaced
8	8.1	April 1997		
	8.2	"		
	8.3	"		
	8.4	"		
	8.5	"		
9	9.1	January 2003		
	9.2	"		
	9.3	June 1998		
	9.4	January 2003		
	9.5	"		
	9.6	"		

Flight manual DG-800S

Flight manual DG-800S

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.	Affected	Description	Issue	LBA	Inserted
No.	Pages/		Date	Approval	Date
	section			Date	Signature
1	0.5,	TN 384/5	June 98	22.7.1998	
	9.1-9.3	Winglets at the 18 m wingtips			
2	0.4, 7.5	TN 384/6 Parking brake	Dec,	7.02.2001	
		combined with an airbrake securing device (Piggott-	2000		
3	0.2(a)	hook) TN 384/8 manual revision	Nov.	17.12.01	
5	0.3(a), 0.4(a), 2.5, 4.11, 4.15,	11 364/8 manual revision	2001	17.12.01	
	5.3, 6.9				
4	0.5(a), 9.1,	TN 384/9 emergency bail	January	13.02.03	
	9.2, 9.4-	out aid NOAH	2003		
	9.6				

0.2 List o	f effective p	ages (cont.)

Section	page	issued	replaced	replaced
8	8.1	Nov. 93		
	8.2	"		
	8.3	"		
	8.4	"		
	8.5	"		
9	9.1	January 2003		
	9.2	"		
	9.3	June 1998		
	9.4	January 2003		
	9.5	"		
	9.6	"		

Section 9

Supplements 9.

- Introduction 9.1
- 9.2 List of inserted supplements
- 9.3
- Winglets at the 18m wingtips Emergency bail-out aid NOAH 9.4

Flight manual DG-800S

9.1 Introduction

This section contains the appropriate supplements necessary to safety and efficiently operate the sailplane when equipped with various optional systems and equipment not provided with the standard sailplane.

9.2 List of inserted supplements

Date of	Document No.	Title of the inserted supplement
insertion		
June 1998	9.3	Winglets at the 18m wingtips TN 384/5
January 2002	9.4, 9.5, 9.6	Emergency bail-out aid NOAH TN 384/9

9.3 Winglets at the 18m wingtips

Section 1

Introduction

In the following text the changes to those sections of the flight manual which are effected by the installation of winglets at the 18m wingtips will be given

Brief description

In addition to the wing configurations described in sections 1 up to 8 of the flight manual winglets at the 18m wingtips are approved. The installation of the winglets to the 18m wingtips must be executed according to the technical note TN 873/9.

The height of the winglets is 0,50m (19.7 in.).

Section 4

Assembly and disassembly of the winglets

To assemble the winglets pull off the wingtips and slot in the winglets. The winglets are secured to the wings by means of a quarter turn fastener. With a screw driver turn the fastener a 1/4 turn in clockwise direction until it engages. Removal is the opposite of that described above.

To fly with wingtips instead of winglets, secure the wingtips to the wings by taping the gap.

Section 5

Gliding performance

Comparison to 18m span:

Thanks to the winglets the max. L/D is increased by approx. 1.5 points. The min. sink is reduced by approx. 0.03 m/s (0.6 ft/min.)

9.4 Emergency bail-out aid NOAH

Section 1

Introduction

In the following text the changes to those sections of the flight manual which are effected by the installation of winglets at the 18m wingtips will be given

Brief description

NOAH is a system to facilitate the bail-out of the cockpit in an emergency. NOAH is a supplementation to the parachute.

NOAH features an airbag similar to a car airbag. The gas which is necessary to inflate the bag is stored in a pressurised gas cylinder. The actuation is by mechanical means via a handle at the right hand side near the control stick. To actuate NOAH the canopy must be opened or jettisoned first. The system is secured by a metal plate at the actuation unit which is blocked by a GFRP block at the canopy frame.

When the NOAH system is activated the seat harness buckle will be opened prior to the opening of the pressurised gas cylinder. The pilot will be lifted by the airbag so that he can roll himself out of the cockpit.

If NOAH is used together with an automatic parachute, the emergency bail out procedure will be more or less automatic after operation of the NOAH handle.

Note: There is a small hole in the NOAH airbag close to the pressure relief valve. In case of inadvertent inflation of the airbag gas can stream out of this hole. This is to prevent injuries to the pilot if the seat harness buckle is not open.

Technical data: Mass of all parts: approx. 4,5 kg Generation of pressure: nitrogen approx. 200 bar Filling time: approx. 2 seconds Design range: pilot mass 110 kg up to 4 g

Flight manual DG-800S

Flight manual DG-800S

Section 3

Use of NOAH in case of an emergency bail out:

Note: We recommend strongly the use of an automatic parachute. Only with an automatic parachute will the bail out procedure be nearly automatic and precious time and altitude can be saved.

For the bail out jettison the canopy first, therefore pull the canopy emergency release and if necessary push the canopy upwards.

Warning: If there are loops at the rudder pedals make sure that your feet are out of the loops first.

Then pull the NOAH handle (at the right hand side next to the control stick, marked black and yellow) **strongly and quickly** up to its stop. Roll out of the cockpit to the right hand side if possible, as on the left hand side the airbrake handle may impede the procedure.

Note: Don't operate the NOAH handle on the ground with open canopy as you may release NOAH and the pressurised gas cylinder must be filled again.

Section 4

a) Pre-flight inspection

Check the airbag, the high pressure hose and the operating cables for correct positioning and for any wear.

Check especially if the nipple of the cable which opens the seat harness buckle is positioned aft of the cam of the actuation unit see sketch:



detail of the actuation unit (at the right hand side cockpit wall in front of the main bulkhead)

b) For normal opening of the seat harness buckle rotate the buckle only in clockwise direction.

Section 7

The NOAH actuation handle is located at the right hand side abeam the control stick, it is marked black and yellow. A sticker is wrapped around the actuation handle and the guiding tube for the actuation cable. The sticker serves as an additional means to guard against inadvertent operation.



Section 8

For inspections and maintenance please refer to the "manual for the emergency bail out-aid NOAH".