0 Revisions

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	0.3-0.5, 2.1,	Manual revision	September	Sept.	
	2.9, 2.11,	TN 413/2	2003	25. 2003	
	4.5, 5.4, 6.3,				
	6.5, 6.10,				
	7.10				
2	0.3, 2.12,	Manual revision	May 2004	May	
	3.2, 4.3	TN 413/3	·	10. 2004	
3	0.3, 0.5, 4.5,	Ballast box in the	June 2004		
	7.6	fin			
		TN 413/4			

Issued: May 2004 TN 413/3 0.1

0.2 List of effective pages

Section	page	issued	replaced/	replaced/
0	0.0	March 2002		
O .	0.1	see manual a	mendments	
	0.2	"		
	0.3	"		
	0.4	"		
	0.5	"		
	0.6	March 2002		
1	1.1	"		
_	1.2	"		
	1.3	"		
	1.4	"		
	1.5	"		
	1.6	11		
2 App.	2.1	March 2002	Sept. 2003	
11	2.2	"	_	
"	2.3	"		
"	2.4	"		
ľ	2.5	"		
"	2.6	"		
"	2.7	"		
ľ	2.8	"		
ľ	2.9	"	Sept. 2003	
ľ	2.10	"	_	
ľ	2.11	"	Sept. 2003	
11	2.12	"	May 2004	
3 "	3.1	March 2002		
"	3.2	"	May 2004	
"	3.3	11	-	
ľ	3.4	"		
11	3.5	"		
4 "	4.1	March 2002		
"	4.2	"		
"	4.3	"	May 2004	
"	4.4	"	•	
n	4.5	11	Sept. 2003	June 2004

Issued: June 2004 TN 413/4 0.3

0.2 List of effective pages (cont.)

Section	Page	issued	replaced/	replaced/
7	7.1	March 2002		
	7.2	"		
	7.3	"		
	7.4	"		
	7.5	"		
	7.6	"	June 2004	
	7.7	"		
	7.8	"		
	7.9	"		
	7.10	"	Sept. 2003	
	7.11	"	•	
	7.12	"		
	7.13	"		
8	8.1	March 2002		
O	8.2	Wiaicii 2002		
	8.3	"		
	8.4	"		
	8.5	"		
	8.6	"		
	0.0			
9	9.1	March 2002		

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4.2.3 Filling the fin ballast tank

This tank must be filled after filling the wingtanks. Determine the amount (see section 6.8.6). Connect the transparent funnel equipped filling hose (supplied with the aircraft) via the hose connector GRS 10-12 to the hose which comes out of the left rear end of the fuselage.

The funnel can be suspended at the top of the rudder.

Fill with clean water using a graduated measuring vessel.

In addition you may check the content level by holding the filling hose against the scale on the fin.

After filling, push the fin tank dump lever in a forward direction (the dump valve will be closed by a spring).

Then remove the filling hose with the hose connector.

4.2.4 Ballast box in the fin

To fill the ballast box remove the Plexiglas cover plate by inserting a 6mm pin into the hole of the upper locking device and move the locking pin downwards. Determine the amount of trim-weights according to section 6.8.7. Slide the weights into the rails of the box. The heavy weights with 2,4 kg (5.3 lbs.) each must be installed in the lower 4 sections and the lighter weights with 1,2 kg (2.65 lbs.) each in the upper 2 sections. It doesn't matter in which sections the weights are installed (in case that not all sections will be filled up), but it is not allowed to insert the light weights into the sections for the heavy weights. Close the compartment.

Warning: Check that the locking device has engaged completely.

Tape the cover of the fin ballast box with tape min. 19mm (3/4 in.) wide prior to each flight.

A control light in the front instrument panel starts blinking after each transaction with the weights. By counting the amount of blinks, the amount of ballast can be determined. For a heavy weight 2 blinks appear and 1 blink for a light weight, this means 10 blinks if the box is filled up completely. After a pause of 2-3 seconds the blinking will be repeated etc. The blinking can be stopped by pressing on the control light. Pressing again on the control light reactivates the blinking feature.

After filling the ballast box you should check the correct indication of the control light.

In addition with TN413/4 executed, standard from ser. no. 10-48 on:

A switch will be operated by the locking pin of the ballast box cover. As long as the switch is not closed, the control light for the ballast box will blink with doubled speed without interruption. The blinking can't be switched off by pressing on the control light, contrary to the blinking which indicates the amount of ballast.

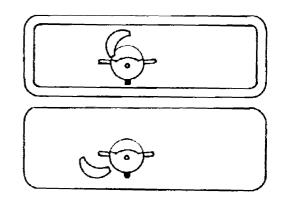
Issued: June 2004 TN 413/4 LBA app. 4.5

16) Canopy opening handle - white-red towards the nose = closed

into cockpit = open

17) Canopy emergency release handle - red towards the nose = closed into cockpit = open

For emergency release also handle 16 has to be operated!



Water ballast dump handles - silver lever on top of the handles = fintank

Rotate backward to dump. The wing waterballast can only be dumped after

dumping the fin waterballast

upper handle = right wingtank lower handle = left wingtank forward = valve closed

into the cockpit = valve open. The wing ballast can only be dumped after opening the fin tank

19) Push to talk button (Option)

20) 12 V socket for charging the batteries.

Senden transmit

- Adjustment strap for the rear seat shell (to be operated on the ground)
- Outside-air temperature gauge (required with fin tank).
- 23) Control light for the trim ballast box in the fin:

The control light in the front instrument panel starts blinking after each transaction with the weights. By counting the amount of blinks, the amount of ballast can be

Trim-ballast box in the fin					
Min. load in the front seat					
kg	kg				
box empty	box filled				

determined. For a heavy weight 2 blinks appear and 1 blink for a light weight, this means 10 blinks if the box is filled up completely. After a pause of 2-3 seconds the blinking will be repeated etc.. The blinking can be stopped by pressing on the control light. Pressing again on the control light reactivates the blinking feature.

In addition with TN413/4 executed, standard from ser. no. 10-48 on:

A switch will be operated by the locking pin of the ballast box cover. As long as the switch is not closed, the control light for the ballast box will blink with doubled speed without interruption. The blinking can't be switched off by pressing on the control light.

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