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 left hand margin, and the Revision No. and the date will be shown on the bottom left hand of the page.

Rev. No.	**Affected Pages**	**Description**	**Issue Date**	**Approval Date**
1	0.1, 4.1, 4.4, 4.5, 4.7, 4.9, 4.11, 4.13, 4.14, 5.5, 5.6, 6.3, 6.9, 7.4, 7.7-7.9, 8.2, 8.3	Manual-revision TN 370-1	July 90	**LBA approved** 13.07.90
2	0.4, 9.1, 9.2, 9.3	Installation of winglets to 17 m wing tip extensions TN 370/4	Febr. 94	**LBA approved** March 95
3	0.1, 0,3, 4.1, 4.14	Manual-revision TN 370-10	Febr. 06	EASA approved 25.04.2006
4	0.1, 0.3, 0.4, 2.3, 7.2, 7.4, 7.7	Manual-revision DG-SS-07	August 2021	Approved unter privilege DOA Ref. EASA.21J.530 31.08.2021

0.2 List of effective pages

Section		page	issued	replaced	replaced
0		0.0	April 88		
		0.1	/	see record of revisions	
		0.2	/	"	
		0.3	April 88	"	
		0.4	"	"	
		0.5	April 88		
1		1.1	"		
		1.2	"		
		1.3	"		
		1.4	"		
		1.5	"		
2	App.	2.1	"		
	"	2.2	"		
	"	2.3	"	August 2021	
	"	2.4	"		
	"	2.5	"		
	"	2.6	"		
	"	2.7	"		
	"	2.8	"		
	"	2.9	"		
	"	2.10	"		
3	"	3.1	"		
	"	3.2	"		
	"	3.3	"		
4	"	4.1	Febr. 06		
	"	4.2	April 88		
	"	4.3	"		
	"	4.4	July 90	August 2021	
	"	4.5	"		
	"	4.6	April 88		
	"	4.7	July 90		
	"	4.8	April 88		
	"	4.9	July 90		
	"	4.10	April 88		
	"	4.11	July 90		
	"	4.12	April 88		
	"	4.13	July 90		
	"	4.14	Febr. 06		
	App.	4.15	April 88		

0.2 List of effective pages (cont.)

Section		page	issued	replaced	replaced
5	App.	5.1	April 88		
	"	5.2	"		
	"	5.3	"		
	App.	5.4	"		
		5.5	July 90		
		5.6	"		
		5.7	April 88		
6		6.1	"		
		6.2	"		
		6.3	July 90		
		6.4	April 88		
		6.5	"		
		6.6	"		
		6.7	"		
		6.8	"		
		6.9	July 90		
		6.10	April 88		
7		7.1	"		
		7.2	"	August 2021	
		7.3	"		
		7.4	July 90	August 2021	
		7.5	April 88		
		7.6	"		
		7.7	July 90	August 2021	
		7.8	"		
		7.9	"		
8		8.1	April 88		
		8.2	July 90		
		8.3	"		
		8.4	April 88		
		8.5	"		
9		9.1	April 88		
	with TN 370/4 (optional)				
		9.1	Febr.94		
		9.2	"		
		9.3	"		

2.2 **Airspeed**

Airspeed limitations and their operational significance are shown below:

	Speed	(IAS) km/h(kts)	Remarks
VNE	Never exceed speed 0°, -5°, -10°, -15°	270 (146)	Do not exceed this speed in any operation and do not use more than 1/3 of control deflection.
VRA	Rough air speed	200 (108)	Do not exceed this speed except in smooth air and then only with caution. Rough air is in lee-wave rotor, thunderclouds etc.
VA	Manoeuvring speed	200 (108)	Do not make full or abrupt control movement above this speed, because under certain condition the sailplane may be over-stressed by full control movement.
VFE	Maximum Flap Extended speed		Do not exceed these speeds with the given flap setting
	L = + 15°	150 (81)	
	+10°, +5°	200 (108)	
VW	Maximum winch-launching speed	150 (81)	Do not exceed this speed during winch- or auto-tow-launching
VT	Maximum aero-towing speed	200 (108)	Do not exceed this speed during aerotowing
VLO	Maximum landing gear operating speed	200 (108)	Do not extend or retract the landing gear above this speed

Warning: At higher altitudes the true airspeed is higher than the indicated airspeed, so VNE is reduced with altitude see sect. 4.5.5.

4.2.3 **Filling the fin waterballast tank**

Determine the amount see sect. 6.
Connect the transparent plastic filling hose via the hose connector GS 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 (Filling hose with connector and funnel are supplied with the aircraft).
Fill with clean water using a graduated measuring vessel.

In addition, the loaded quantity can be checked by holding the filling hose to the scale at the fin (communicating tube).

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

Then remove the filling hose with the hose connector.

4.2.4 **Derigging**

Derigging follows the reverse of rigging. Water ballast must be dumped before derigging. The airbrakes should be closed.

4.2.5 **Rigging and derigging the wing tip extensions**

1. Disassemble the small 15 m wing tips.
   Use a diameter 6 mm pin for pressing in the locking pin on the wings upper side.
2. Insert the 17 m wing tip into the wing. Press in the locking pin with your finger. Insert the wing tip as far as the flaperon connector starts to slide into the flaperon slot.
   Strike firmly with the palm of your hand on to the wing tip to lock in the wing tip extension.
3. Disassembling of the wing tip
   This has to be done analogous to the small 15 m wing tips.

   The rigging of the small 15 m wing tips and of the winglets has to be done analogous to the 17 m wing tips.

7.1 **Introduction**

This section provides description and operating of the sailplane and its systems.

Refer to section 9 "Supplements" for details of optional systems and equipment.

M.M. = Maintenance manual

7.2 **Airframe**

The DG-600 is a singleseater high performance sailplane with 15 m wing span and wing tip extensions for 17 m span and with flaperons.
With 15 m wing span normal wing tips and as an option small winglets are available.

Construction

Wings and flaperons	CFRP-foam-sandwich-skin CFRP-Rovings
Elevator	GFRP-skin
Horizontal tailplane and rudder	GFRP-foam-sandwich-skin
Fuselage	GFRP-skin

Canopy

Large single piece canopy, hinged at the nose, supported by a gas strut. Canopy glass made from clear Plexiglas or Plexiglas GS green 777 as option.

Tailplane

T-Tail with conventional stabilizer-elevator and spring trim.

Colour

Airframe:		white	
registration numbers:		grey	RAL 7001
	or	red	RAL 3020
	or	blue	RAL 5010
	or	bloe	RAL 5012
	or	green	RAL 6001
	or	similar colours	

7.6 **Landing gear** see diagram 2 M.M.

a) Main wheel: retractable, assisted by a gas strut.
Spring mounted with steel compression springs.
Fully sealed landing gear box,
internal drum brake,
Tyre 5.00 - 5 4 PR or 6 PR
Diameter 362 mm (14.25 in)
Tyre pressure 3.3 bar (46 psi)

b) Tailwheel: Tyre 200 x 50 2 PR
Diameter 200 mm (7.87 in)
Tyre pressure 2 bar (28 psi)

7.7 **Tow hooks** see diagram 5 M.M.

Safety release "Europa G 73"or "Europa G 88" for winch- and aerotow installed near the C.G.

additional as option "nose release E 75" or "nose release E 85" installed under the instrument console only for aerotow.

Both hooks are operated by the same handle.

7.8 **Seats and safety harness**

The seat is constructed as an integral inner shell.
The backrest is adjustable by means of an aircushion (Adjustment see sect. 7.12 item 22).
The backrest can be screwed to the seat shell at 3 dipperent positions dependent on the thickness of the parachute.

7.9 **Baggage compartment**

Max. load 15 kg (33 lbs).
Each floor can carry 7.5 kg (16.5 lbs). Heavy pieces of baggage must to be secured to the floors.
The right floor is equipped with a compartment suitable for a battery no. Z 01.

7.10 **Waterballastsystem** see diagram 5 M.M.

a) The wingtanks are constructed as double wall bags with a capacity of 65 l(17.15 U.S.gal) or 90 l (23.8 U.S. gal) per wing. The 90 l tanks are separated in 2 chambers to reduce the pressure load in case of spinning and positive g-loads. The separation also improves the handling of the glider with the tanks filled partly.
The dump valves are mounted in the wings and the control is hooked up automatically when rigging the glider.