



## AIRWORTHINESS DIRECTIVE

Issue 1

TYPES AFFECTED:

DG 300 - Serial Nos. 3E1 to 3E210

SUBJECT:

Overseas experience has required the issue of two new LBA approved Technical Notes from Glaser-Dirks:-

TN 359/11 which deals with aileron flutter, and

TN 359/12 which introduces numerous Flight Manual, Maintenance Manual and repair manual changes or additions.

ACTION REQUIRED:

1. Add or exchange Manual pages in accordance with TN 359/11 and TN 359/12 by 30th April, 1987.
2. Remove both ailerons and determine the mass balance figure for each by weighing (Refer page 12 Maintenance Manual). Re-balance if necessary in accordance with TN 359/11 by 30th April, 1987.

IMPLEMENTATION:

1. Manual pages may be exchanged by any competent person.
2. Aileron mass balance to be checked and changed if necessary by a DoA 1109 inspector authorised for C. of A. inspection FRP and the work entered in the sailplane logbook.

MATERIALS:

1. Manual pages are available from the GFA Secretariat.
2. As listed in TN 359/11, available from Glaser-Dirks, Postfach 4120, 7520 Bruchsal 4, West Germany.

ENCLOSURES:

TN 359/11, TN 359/12

COMPLIANCE:

The requirements of this Airworthiness Directive are mandatory. This Airworthiness Directive is issued pursuant to Air Navigation Regulations under the delegated authority of the Secretary of the Department of Aviation.

Issued by:

Chief Technical Officer,  
Airworthiness

12/3/1987

For and on behalf of:

GLIDING FEDERATION OF AUSTRALIA

Sheet 1 of 1

Subject: Massbalance of the ailerons

Concerning: DG-300 (ELAN) serial no. 3 E 1 upto 3 E 210

Accomplish-  
ment : within 30 days

Reason: We have observed low frequency (ca. 2 Hertz)  
aileron flutter in the airspeed range 120 km/h  
( 65 kts) up to 150 km/h (80 kts). The flutter  
was possible due to very low aileron control  
friction.

Increasing the massbalancing the flutter could  
be prevented.

- Measures:
1. Exchange page 12 of the maintenance manual  
to the new issue Nov. 1986.  
The max. allowable spring balance reading  
is reduced from 0,8 kg (1.764 lbs) to 0,66 kg  
(1.45 lbs).
  2. For all DG-300 where the spring balance rea-  
ding was exceeded during production or by  
repairs or repainting the massbalance weight  
is to be increased. Instructions see mainte-  
nance manual section 4.5, page 22a,b,c.  
From the enclosed list you can see if your  
ailerons exceeded the 0,66 kg factorynew.  
If you are uncertain you have to disassemble  
the ailerons and to determine the massbalance  
data.

**Material needed:**

Measure 1: Maintenance manual page 12

Measure 2: Tefloncoated glasfibrefabricband

50 x 0,08 mm, etched on 1 side ca. 7 m ( 23 ft.)

1 roll of film tape 3M No. 465, 9 mm wide,

contact adhesive e.g. Pattex,

2 selflocking nuts M5 DIN 985-8 zn,

leadballs diameter 2 mm (3/32 in.),

Epoxy- or Polyesterresin with hardener,

2 steelrods diameter 5 mm (3/16 in.) each

100 mm (4 in.) long.

**Note:** Measure 1 may be executed by the owner himself.

If measure 2 has to be executed this should be done by a licensed repair shop, and be inspected.

The measures are to be entered in the aircraft logs mentioning TN 359/11.

Technical Note No. 359/12 should be carried out at the same time.

Author Bruchsal 4  
28.11.86

*W. Dirks*  
Dipl.Ing. W. Dirks

Type certification inspector

*U. Schil*

LBA-approved:  
The German original of this TN has been approved by the LBA under the date of Jan.7.1987 and is signed by Mr. Skov. The translation into English has been done by best knowledge and judgement. In any case of doubt the German original is authoritative.

## DG 300 ailerons

Serial No.	weight / kg		spring balance reading / g	
	3 - 5,7 kg		max. 660 g	
	left	right	left	right
3 E 2	4,6	4,6	675	675
3 E 12	3,65	3,55	675	625
3 E 16	3,95	3,9	675	630
3 E 18	3,7	3,7	675	620
3 E 19	3,95	3,9	750	650
3 E 20	3,8	3,7	650	670
3 E 22	3,9	3,9	725	625
3 E 25	3,8	3,8	750	750
3 E 27	3,9	3,9	700	720
3 E 29	3,8	3,7	700	710
3 E 31	3,7	3,7	725	675
3 E 32	3,7	3,65	675	675
3 E 33	3,7	3,7	675	620
3 E 35	4,2	4,2	720	650
3 E 36	3,95	3,85	750	725
3 E 37	3,9	3,8	725	625
3 E 38	3,85	3,6	675	550
3 E 42	3,8	3,75	700	650
3 E 43	3,7	3,65	675	620
3 E 44	3,9	4,2	700	730
3 E 45	4,3	3,65	740	650
3 E 46	3,9	3,65	675	650
3 E 47	3,95	3,85	725	650
3 E 48	3,9	3,9	750	675
3 E 49	3,85	3,8	750	675
3 E 50	3,85	3,95	675	600
3 E 51	4,05	3,95	725	650
3 E 52	3,8	3,75	675	550
3 E 56	4,0	3,8	700	650
3 E 58	3,75	3,65	700	625
3 E 62	3,95	4,00	750	675
3 E 63	3,9	3,9	700	675
3 E 64	3,9	3,65	675	625
3 E 66	3,8	3,75	700	625
3 E 68	3,95	3,9	725	650
3 E 85	3,6	3,5	675	600
3 E 91	3,6	3,8	625	675
3 E 92	3,7	3,65	675	650
3 E 93	3,7	3,7	675	650
3 E 95	3,6	3,6	650	675
3 E 97	3,8	3,7	725	675
3 E 98	3,65	3,7	625	700
3 E 101	3,7	3,75	650	675
3 E 102	3,8	3,75	725	725
3 E 109	3,65	3,65	675	625

DG 300      ailerons

Serial No.	weight / kg		spring balance reading / g	
	3 - 5,7 kg		max. 660 g	
	left	right	left	right
3 E 116	3,7	3,7	700	625
3 E 117	3,65	3,6	675	625
3 E 119	3,85	3,85	675	650
3 E 131	3,70	3,55	675	650

Bruchsal 4      11/1986



Dipl.Ing. W. Dirks

Subject: Flight- maintenance and repair manual  
 Concerning: DG-300 (ELAN) Serial No. 3 E 1 up to 3 E 210  
 Accomplish-  
 ment: within 30 days  
 Reason: Manual revisions  
 Measures: Exchange or ammend the enclosed manual pages  
 new issue Nov. 1986. The new passages are  
 marked and to be studied carefully.

Concerning	page
Flight manual	
Cover	
Content	1 + 2
Min. equipment cloud flying	10
Spins	23
Rigging of the stabilizer	26
Filling the waterballast tanks	27
Parking	28
Care	29 + 29a
Maintenance manual	
Cover	
Contents	1 + 2
Undercarriage	10
Care	18
Greasing	19
Removal and installation of the ailerons	22a/b/c
Fixing excessive free play of the canopy	22d
elevator control	1 diagram
landing gear	" 2
aileron control	" 3
Repair manual	
Content	3/2
Foam	3/6, 3/7
Resin for wings	3/7

Note: This measure may be executed by the owner himself  
 and is to be entered in the aircraft logs mentioning  
 TN 359/12.

Author Bruchsal 4  
 28.11.86

*W. Dirks*  
 Dipl. Ing. W. Dirks

Type certification inspector

*U.S.D.-L*

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