

GFA AD 590

(ISSUE 2)

GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED:

Grob G103 Twin II, Twin II Acro & Twin III Acro, all serial nos.

SUBJECT:

ISSUE 1 of this AD called for a Reduction in operating speeds, prohibition of aerobatics and installation of new markings and placards in accordance with LBA AD No 2003-185 and Grob Alert SB No ASB 315-63/2

ISSUE 2 Reverses the instructions in Issue 1 with regard to the G103 Twin II, and some *but not all* restrictions on the Twin II Acro or Twin III Acro. For full restoration of limits for Acro versions see AD 606.

BACKGROUND:

Following an in flight failure initial investigations indicated the possibility of insufficient fuselage reserve strength at limit loads. Subsequent investigations have shown that the reserve strength is satisfactory and thus the restrictions are now lifted.

- 1. Reductions to Vne, Maneuver and Rough Air speeds are withdrawn and ASI markings & cockpit placards may be returned to original markings and limits. Modified ASI markings and placard to be fitted to Twin III Acro.
- 2. Placard prohibiting aerobatics may be removed. "Simple Aerobatics"ie. Spinning, loop, lazy eight, chandelle are now approved. (Not Twin III Acro).

DOCUMENTATION:

Luftfahrt-Bundesamt (LBA) AD No 2004-002 and Grob SB No MSB 315-65 form part of this AD.

ACTION REQUIRED:

Carry out actions described in the above LBA and Grob documentation.

WEIGHT AND BALANCE: Not affected.

IMPLEMENTATION:

Before further flight.

SENIOR TECHNICAL OFFICER AIRWORTHINESS

COMPLIANCE:

The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and

Regulations of the Gliding Federation of Australia.

SIGNED:

For and on behalf of:

THE GLIDING FEDERATION OF AUSTRALIA

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GROB Luft- und Raumfahrt Lettenbachstrasse 9

D-86874 Tussenhausen-Mattsies

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SERVICE BULLETIN NO. MSB315-65

I. TECHNICAL DETAILS

1.1 Category:

Mandatory

1.2 Airplanes Affected:

GROB G 103 TWIN II

S/N 3501 - 3729

S/N 3730 - 3878

S/N 33879 - 34078

GROB G 103A TWIN II ACRO

S/N 3544 - 34078 (with Suffix "K")

GROB G 103C TWIN III ACRO

S/N 34101 - 34203

1.3 Time of Compliance:

Prior to next flight

1.4 Subject:

ATA-Code:

Limitations of Operation

1.5 Reason:

The approved speeds were reduced and aerobatic manouvers prohibited with "Alert Service Bulletin No. 315-63/2". This Service Bulletin provides the revised manual pages (for Flight and Maintenance Manual). The v_{NE} , reduced with ASB 315-63, is increased from 230 km/h (124 kts, / 143 mph) to 250 km/h (135 kts, 155 mph).

Also "simple aerobatics" (looping, turn, lazy eight, chandelle, spinning) for G 103 TWIN II and G 103A TWIN II ACRO is re-approved. For G 103C TWIN III ACRO "Aerobatic Flights" and "Cloud Flying" is further more prohibited, because with the reduced $v_{\rm NE}$ the 45° dive with airbrakes fully extended cannot be fulfilled in accordance with the certification regulations.

This MSB 315-65 is the terminating action for all G 103 TWIN II.

For all G 103A TWIN II ACRO and G 103C TWIN III ACRO this MSB is also a terminating action, unless OSB 315-66 (installation of stiffeners), which is currently in preparation, is accomplished.

CAUTION:

This MSB is mandatory in any case, regardless if the reinforcement according to OSB 315-66 is installed afterwards.



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1.6 Concurrent Documents:

None

1.7 Approval Note:

The technical information contained in this document has been approved by the authority (Luftfahrt-Bundesamt).

1.8 Accomplishment / Instructions

1.8.1 For G 103 TWIN II and G 103A TWIN II ACRO:

The following placard (installed near to the front and rear airspeed indicator) may be removed.



1.8.2 For G 103 TWIN II and G 103A TWIN II ACRO:

The yellow mark at the front and rear airspeed indicator at 167 km/h (90,2 kts, / 103,8 mph) may be removed, $v_B = 170$ km/h (92 kts, 105 mph) is valid again.

For G 103C TWIN III ACRO:

The yellow mark at the front and rear airspeed indicator at 167 km/h (90,2 kts, / 103,8 mph) must be removed and a new yellow mark has to be applied newly at v_{RA} = 170 km/h (92 kts, 105 mph).

1.8.3 Apply the following limitation placard over the existing placard on the front and rear RH cockpit side wall:

For G 103 TWIN II and G 103A TWIN II ACRO:

Maximum flying weight	580 kg / 1280 lbs			
Maximum airspeeds:		km/h	kts	mph
in calm air:	V _{NE}	250	135	155
in rough air:	V _B	170	92	105,5
aerotow:	V _T	170	92	105,5
winch or auto tow:	V _w	120	65	74,5
airbrakes extended:	V _{FE}	250	135	155
manoeuvering speed:	V _A	170	92	105,5



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For G 103C TWIN III ACRO:

Maximum flying weight	600 kg / 1323 lbs			
Maximum airspeeds:		km/h	kts	mph
in calm air:	V _{NE}	250	135	155
in rough air:	V _{RA}	170	92	105,5
aerotow:	V _T	170	92	105,5
winch or auto tow:	Vw	120	65	74,5
airbrakes extended:	V _{FE}	250	135	155
manoeuvering speed:	V _A	170	92	105,5

1.8.4 In the Flight and Maintenance Manuals the following revisions must be incorporated:

G 103A TWIN II ACRO:

- Flight Manual:

Revision 5, 15.09.03

G 103A TWIN II ACRO Canadian issue

- Flight Manual:

Revision 6, 15.09.03

G 103A TWIN II ACRO FAA issue

- Flight Manual:

Revision 3 15.09.03

G 103A TWIN II ACRO Italian issue

- Flight Manual:

Revision 3, 15.09.03

Manual G 103A TWIN II ACRO (see also Revision 5, page. 5a).

The "Flight Handbook for Acrobatics" is invalid and must be removed from the Flight

- Flight Manual:

Revision 5, 15.09.03

- Maintenance Manual:

G 103C TWIN III ACRO:

Revision 5, 15.09.03

1.9 Repetitive Actions:

None

CAUTION:

1.10 Mass (Weight) and CG:

Not affected



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II. PLANNING INFORMATION

2.1 Material & Availability:

The placards (qty. 2 each) and the revision pages for the flight and maintenance manual are attached to this Service Bulletin.

2.2 Special Tools:

not required

2.3 Labour Costs:

20 Minutes

2.4 Reference Documents:

Not affected

2.6 Credit:

Not affected

III. Remarks

- 3.1 The correct execution of the instructions may be performed by a competent person and has to be certified in the logbook by an authorised inspector.
- 3.2 If you have sold your aircraft in the meantime, would you kindly pass this information on to the new owner and forward his address and aircraft S/N to us.
- 3.3 For questions and assistance please contact:

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