

**SUPPLEMENT S08
TO THE AIRPLANE FLIGHT MANUAL
DA 42 NG**

Removal of Variable Elevator Stop

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Design Change Advisories : OÄM 42-199

This Supplement to the Airplane Flight Manual has been approved under Approval Number 10042877.

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0.1 RECORD OF REVISIONS

Rev. No.	Reason	Chapter	Page(s)	Date of Revision	Approval No.	Verification	Date Inserted	Signature
1	MAM 42-659, MAM 42-678, MAM 42-759, OAM 42-253, OAM 42-260, Corrections	All	All except Cover Page	01-Apr-2014	Rev. 1 to AFM Supplement S08 to AFM Doc. No. 7.01.16-E is approved by EASA under Approval No.10048945.			

0.2 LIST OF EFFECTIVE PAGES

Chapter	Page	Date
0	9-S08-1	15 Nov 2012
	9-S08-2	01 Apr 2014
	9-S08-3	01 Apr 2014
	9-S08-4	01 Apr 2014
	9-S08-5	01 Apr 2014
1	9-S08-6	01 Apr 2014
2	EASA approved 9-S08-7	01 Apr 2014
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3, 4A, 4B, 5	9-S08-9	01 Apr 2014
6	9-S08-10	01 Apr 2014
	9-S08-11	01 Apr 2014
	9-S08-12	01 Apr 2014
7	9-S08-13	01 Apr 2014
8	9-S08-14	01 Apr 2014

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1. GENERAL

The DA 42 NG may be operated with a removed variable elevator stop (OÄM 42-199) under the regime governed by this Supplement.

The information contained in this Supplement supersedes and supplements the information in the DA 42 NG AFM only as far as included in this Supplement. For all operating limitations, procedures and performance specifications not included in this Supplement, the DA 42 NG AFM remains valid.

This Supplement is a permanent part of this AFM and must remain in this AFM at all times when OÄM 42-199 is implemented.

2. OPERATING LIMITATIONS

2.8 CENTER OF GRAVITY

Center of Gravity Limitations

The center of gravity (CG position) for flight conditions must be between the following limits:

Most forward flight CG:

- 2.350 m (92.52 in) aft of datum plane at 1450 kg (3197 lb)
- 2.350 m (92.52 in) aft of datum plane at 1468 kg (3236 lb)
- 2.418 m (95.20 in) aft of datum plane at max. take-off mass 1900 kg (4189 lb)
- If MÄM 42-678 is installed:
 - 2.434 m (95.83 in) aft of datum plane at max. take-off mass 1999 kg (4407 lb)
 - linear variation in between

Most rearward flight CG:

- 2.454 m (96.61 in) aft of datum plane at 1450 kg (3197 lb)
- 2.460 m (96.85 in) aft of datum plane at 1510 kg (3329 lb)
- 2.460 m (96.85 in) aft of datum plane at max. take-off mass
- linear variation in between

Refer to Section 6.4.4 for a graphical illustration of the CG limitations.

WARNING

Exceeding the center of gravity limitations reduces the controllability and stability of the airplane.

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CAUTION

If OÄM 42-199 (Removal of Variable Elevator Stop) is installed with other design changes limiting the rearward flight CG limitation (e.g. OÄM 42-168 (Universal Nose), OÄM 42-169 (Belly Pod), OÄM 42-170 (Nose Pod),...) the most limiting rearward CG limitation is applicable.

3. EMERGENCY PROCEDURES

No change.

4A. NORMAL OPERATING PROCEDURES

4A.6.1 PRE-FLIGHT INSPECTION

I. Cabin check

Check procedure:

Items g) through k) and the following CAUTION are not applicable, if OÄM 42-199 (Removal of Variable Elevator Stop) is carried out.

4B. ABNORMAL OPERATING PROCEDURES

4B.4.11 STICK LIMIT

This procedure is not applicable if OÄM 42-199 (Removal of Variable Elevator Stop) is carried out.

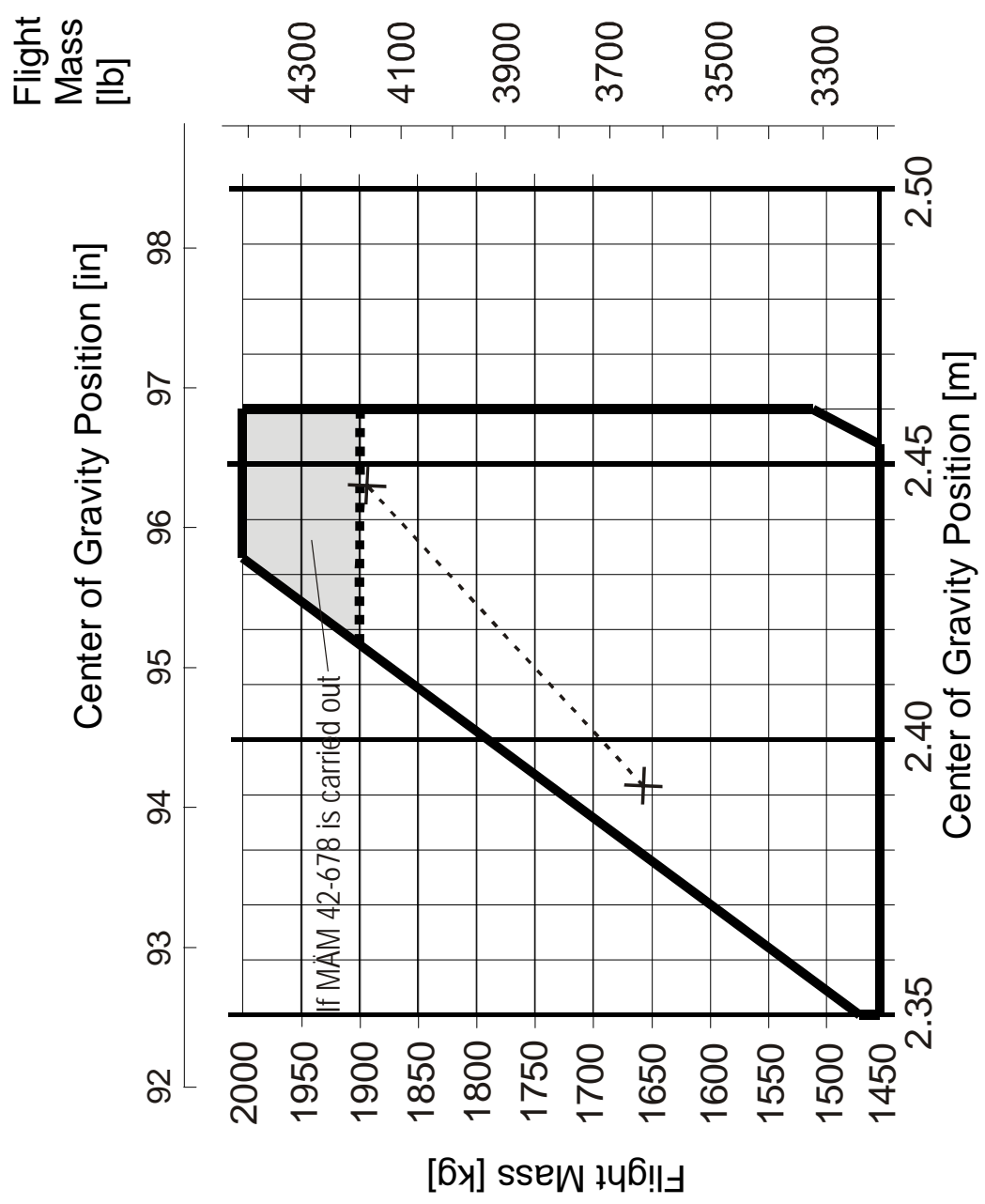
5. PERFORMANCE

No change.

6. MASS AND BALANCE

6.4 FLIGHT MASS AND CENTER OF GRAVITY

6.4.4 PERMISSIBLE CENTER OF GRAVITY RANGE



The center of gravity (CG position) for flight conditions must be between the following limits:

Most forward flight CG:

- █ 2.350 m (92.52 in) aft of datum plane at 1450 kg (3197 lb)
- █ 2.350 m (92.52 in) aft of datum plane at 1468 kg (3236 lb)
- █ 2.418 m (95.20 in) aft of datum plane at max. take-off mass 1900 kg (4189 lb)
- █ If MÄM 42-678 is installed:
 - █ 2.434 m (95.83 in) aft of datum plane at max. take-off mass 1999 kg (4407 lb)
 - █ linear variation in between

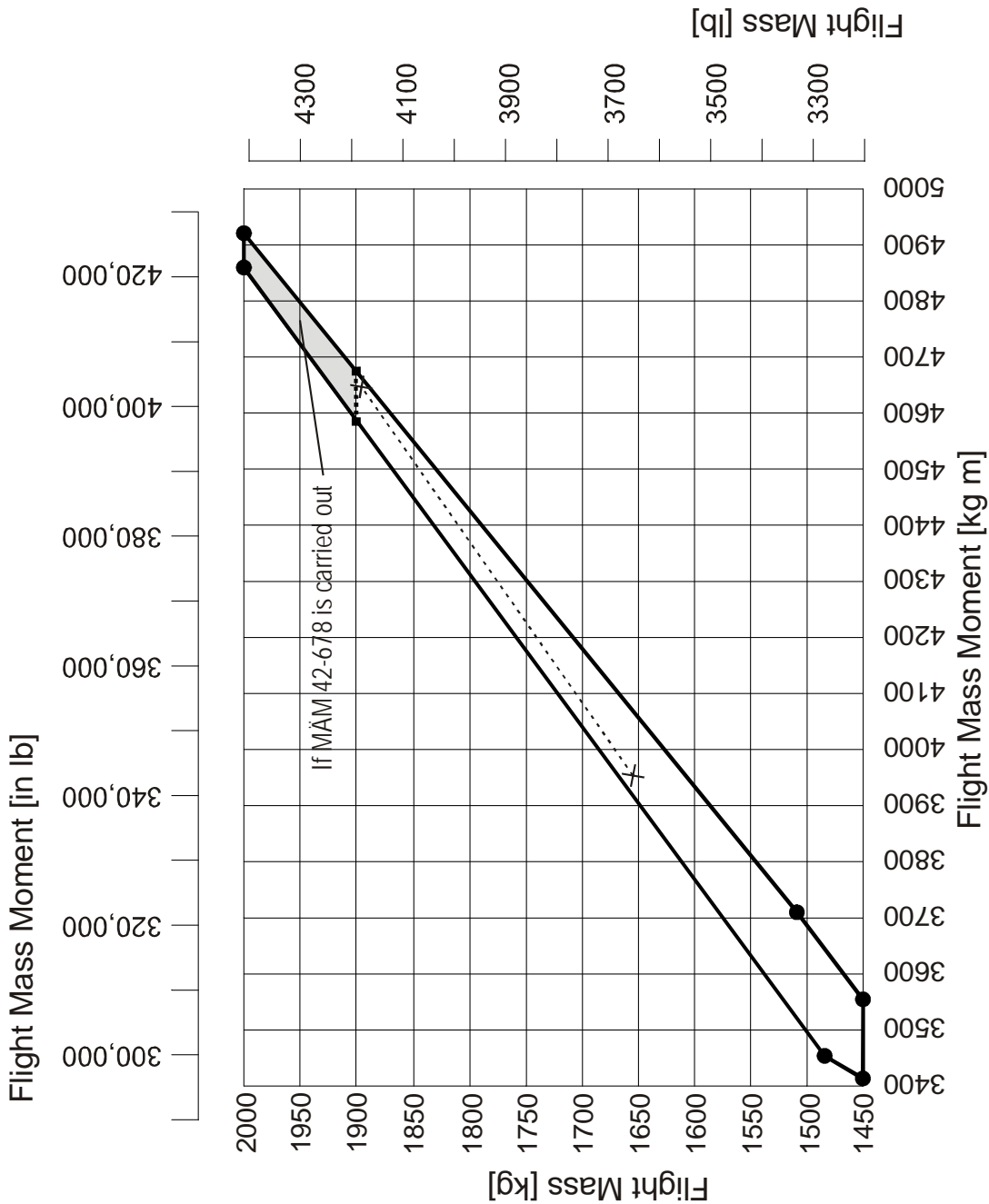
Most rearward flight CG:

- █ 2.454 m (96.61 in) aft of datum plane at 1450 kg (3197 lb)
- █ 2.460 m (96.85 in) aft of datum plane at 1510 kg (3329 lb)
- █ 2.460 m (96.85 in) aft of datum plane at max. take-off mass
- █ linear variation in between

CAUTION

If OÄM 42-199 (Removal of Variable Elevator Stop) is installed with other design changes limiting the rearward flight CG limitation (e.g. OÄM 42-168 (Universal Nose), OÄM 42-169 (Belly Pod), OÄM 42-170 (Nose Pod),...) the most limiting rearward CG limitation is applicable.

6.4.5 PERMISSIBLE MOMENT RANGE



The flight mass moments shown in the diagram are those from the example in Table 6.4.3 (a) - CALCULATION OF LOADING CONDITION, rows 11 and 14.

7. SYSTEM DESCRIPTION

7.3 FLIGHT CONTROLS

Elevator

Variable Elevator Stop:

The variable elevator stop is not installed if OÄM 42-199 is carried out.

7.10.3 WARNING, CAUTION AND ADVISORY MESSAGES

Caution Alerts on the G1000

Caution Alerts	Meaning / Cause
STICK LIMIT	STICK LIMIT is not applicable if OÄM 42-199 (Removal of Variable Elevator Stop) is carried out.

8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.