

**Supplement 004**  
**TO THE AIRPLANE FLIGHT MANUAL DA 42 NG**  
**Operation without Unfeathering Accumulator**

**Doc. No.** : 7.01.16-E  
**Date of Issue** : 15-Nov-2012  
**Design Change Advisories** : OÄM 42-224

This Supplement to the Airplane Flight Manual has been approved by EASA with EASA Approval No. 10043478.

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## 0.1 RECORD OF REVISIONS

Rev. No.	Reason	Chapter	Page(s)	Date of Revision	Approval Note	Date of Approval	Date Inserted	Signature

## 0.2 LIST OF EFFECTIVE PAGES

Chapter	Page	Date
0	9-O04-1	15-Nov-2012
	9-O04-2	15-Nov-2012
	9-O04-3	15-Nov-2012
	9-O04-4	15-Nov-2012
	9-O04-5	15-Nov-2012
1	9-O04-6	15-Nov-2012
2	EASA approved 9-O04-7	15-Nov-2012
3	9-O04-8	15-Nov-2012
4A	9-O04-9	15-Nov-2012
4B, 5, 6	9-O04-10	15-Nov-2012
7	9-O04-11	15-Nov-2012
8	9-O04-12	15-Nov-2012

Page 9-O04-4	Rev. 0 15-Nov-2012	Doc. # 7.01.16-E
--------------	--------------------	------------------

### 0.3 TABLE OF CONTENTS

	Page
1. GENERAL .....	9-004-6
2. LIMITATIONS .....	9-004-7
3. EMERGENCY PROCEDURES .....	9-004-8
4A. NORMAL OPERATING PROCEDURES .....	9-004-9
4B. ABNORMAL OPERATING PROCEDURES .....	9-004-10
5. PERFORMANCE .....	9-004-10
6. MASS AND BALANCE .....	9-004-10
7. SYSTEM DESCRIPTION .....	9-004-11
8. AIRPLANE HANDLING, CARE AND MAINTENANCE .....	9-004-12

## **1. GENERAL**

This Supplement supplies the information necessary for operation of a DA 42 NG without propeller unfeathering accumulators.

The information contained in this Supplement is to be used in conjunction with the complete AFM. The limitations and information contained herein either supplement or, in the case of conflict, override those in the Airplane Flight Manual or its previous Temporary Revisions.

This Supplement is a permanent part of this AFM and must remain in this AFM at all times if OÄM 42-224 is implemented.

## 2. LIMITATIONS

### 2.4 POWER-PLANT LIMITATIONS

*Items x and y are amended to read:*

- x) Restart airspeed (starter assisted) : max.100 KIAS or airspeed for a stationary propeller, whichever is lower
- y) Intentional in-flight engine shutdown is prohibited.

### 2.15 LIMITATION PLACARDS

*The following is added:*

In the forward view of the pilot, if OÄM 42-224 is carried out:

**INTENTIONAL IN-FLIGHT ENGINE SHUT-DOWN IS PROHIBITED**

### **3. EMERGENCY PROCEDURES**

*The following headline is amended to read:*

#### **3.7.4 RESTARTING THE ENGINE IN FLIGHT**

Restarting the Engine with the Starter

*Items 5 and 6 of the checklist are amended to read:*

5. ENGINE MASTER of affected engine . . . . . ON
6. STARTER of affected engine . . . . . engage, 5 seconds maximum

*The NOTE is added and item 7 is amended to read:*

#### **NOTE**

Unfeathering of the propeller is done in the restart sequence  
by building up system oil pressure when cranking the starter.

7. Circuit breakers . . . . . check / reset if necessary.

*The Paragraph is added:*

If engine does not start: wait 30 seconds and proceed with item 6. If engine does not start after 3 attempts proceed according to AFM Section 3.7.6 - ENGINE FAILURES IN FLIGHT.

Restarting the Engine by Windmilling

*The NOTE is added and replaces the content of the Paragraph:*

#### **NOTE**

A windmilling restart is not possible without the unfeathering  
accumulator (if OÄM 42-224 is carried out).

Page 9-O04-8	Rev. 0	15-Nov-2012	Doc. # 7.01.16-E
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## **4A. NORMAL OPERATING PROCEDURES**

### **4A.6 CHECKLISTS FOR NORMAL OPERATING PROCEDURES**

#### **4A.6.21 DEMONSTRATION OF ENGINE SHUTDOWN/RESTART**

*The NOTE is added and replaces the content of the Section:*

#### **NOTE**

If OÄM 42-224 is carried out, demonstration of an intentional engine shut-down in flight is prohibited.

#### **4B. ABNORMAL OPERATING PROCEDURES**

No change.

#### **5. PERFORMANCE**

No change.

#### **6. MASS AND BALANCE**

No change.

## 7. SYSTEM DESCRIPTION

### 7.9 POWER PLANT

#### 7.9.2 PROPELLER

##### Propeller Control

##### *Feathering:*

##### ***The Paragraph is amended to read:***

To feather the propeller the engine must be shut down with the appropriate ENGINE MASTER switch. This will open the electric governor valve. All oil will flow back from the propeller hub, allowing the blades to move into the feathered pitch position.

Feathering is only possible at propeller speeds above 1300 RPM.

### **CAUTION**

If the engine is shut down below an RPM of 1300 the propeller pitch remains below the start lock position. In this case the speed must be increased to increase the propeller RPM.

##### *Unfeathering:*

##### ***The Paragraph is amended to read:***

To unfeather the propeller, the associated ENGINE MASTER switch must be set to ON. The electric governor valve will be closed. Cranking the engine will build up pressure in the propeller hub moving the propeller blades towards a low pitch position.

## 8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.