

**SUPPLEMENT A05**

**TO THE AIRPLANE FLIGHT MANUAL**

**DA 40 NG**

**Conventional Cockpit DA 40 NG Club**

**Doc. No. : 6.01.15-E**

**Date of Issue : 15-Mar-2011**

**Design Change Advisory : OÄM 40-321**

The technical information contained in this document has been approved under the authority of DOA No. EASA.21J.052.

## 0.2 RECORD OF REVISIONS

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

### 0.3 LIST OF EFFECTIVE PAGES

Chapter	Page	Date
0	9-A05-1	15 Mar 2011
	9-A05-2	15 Mar 2011
	9-A05-3	15 Mar 2011
	9-A05-4	15 Mar 2011
1	9-A05-5	15 Mar 2011
2	EASA approved 9-A05-6	15 Mar 2011
3	9-A05-7	15 Mar 2011
	9-A05-8	15 Mar 2011
4A	9-A05-9	15 Mar 2011
4B	9-A05-10	15 Mar 2011
	9-A05-11	15 Mar 2011
	9-A05-12	15 Mar 2011
	9-A05-13	15 Mar 2011
5, 6	9-A05-14	15 Mar 2011
7	9-A05-15	15 Mar 2011
	9-A05-17	15 Mar 2011
	9-A05-18	15 Mar 2011
8	9-A05-19	15 Mar 2011

## 0.4 TABLE OF CONTENTS

	Page
1. GENERAL .....	9-A05-5
2. LIMITATIONS .....	9-A05-6
3. EMERGENCY PROCEDURES .....	9-A05-7
4A. NORMAL OPERATING PROCEDURES .....	9-A05-9
4B. ABNORMAL OPERATING PROCEDURES .....	9-A05-10
5. PERFORMANCE .....	9-A05-14
6. MASS AND BALANCE .....	9-A05-14
7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS .....	9-A05-15
8. AIRPLANE HANDLING, CARE AND MAINTENANCE .....	9-A05-19

## 1. GENERAL

This Supplement supplies the information necessary for the efficient operation of the airplane when the Conventional Cockpit DA 40 NG Club is installed. The information contained within this Supplement is to be used in conjunction with the complete AFM.

This Supplement is a permanent part of this AFM and must remain in this AFM at all times when the Conventional Cockpit DA 40 NG Club is installed.

## 2. LIMITATIONS

No change.

### **3. EMERGENCY PROCEDURES**

#### **3.10 AIRPLANE RELATED WARNINGS**

##### **3.10.1 START**

<b>START</b>	Engine starter is engaged.
--------------	----------------------------

Proceed according to:

AFM Section 3.4.3 - STARTER MALFUNCTION.

##### **3.10.2 DOORS**

<b>DOORS</b>	Canopy and/or rear door are/is not closed and locked.
--------------	---

Proceed according to:

AFM Section 3.9.3 - UNLOCKED DOORS.

##### **3.10.5 ALTERNATOR**

<b>ALTERNATOR</b>	Engine alternator has failed.
-------------------	-------------------------------

Proceed according to:

AFM Section 3.2.8 - ALTERNATOR FAIL.

**3.10.6 FUELPRESS (on SED)**

<b>FUELPRESS</b>	Engine fuel pressure is low.
------------------	------------------------------

Proceed according to:

AFM Section 3.2.6 - FUEL PRESSURE.



## 4A. NORMAL OPERATING PROCEDURES

### 4A.6 ADVISORY ALERTS

#### 4A.6.1 FUEL TRANS

<b>FUEL TRANS</b>	Fuel transfer from auxiliary to main tank is in progress.
-------------------	---

#### 4A.6.2 GLOW

<b>GLOW</b>	Engine glow plug active.
-------------	--------------------------

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

### **4B.8 ENGINE INSTRUMENT INDICATIONS OUTSIDE OF GREEN RANGE**

#### **4B.8.1 OP - OIL PRESSURE**

Proceed according to:

AFM Section 4B.2.4 - OIL PRESSURE.

#### **4B.8.2 OT - OIL TEMPERATURE**

Proceed according to:

AFM Section 4B.2.3 - OIL TEMPERATURE.

#### **4B.8.3 CT - COOLANT TEMPERATURE**

Proceed according to:

AFM Section 4B.2.2 - COOLANT TEMPERATURE.

#### **4B.8.4 GT - GEARBOX TEMPERATURE**

Proceed according to:

AFM Section 4B.2.5 - GEARBOX TEMPERATURE.

#### **4B.8.5 RPM**

Proceed according to:

AFM Section 4B.2.1 - RPM.

#### **4B.8.6 FT - FUEL TEMPERATURE**

Proceed according to:

AFM Section 4B.2.6 - FUEL TEMPERATURE.

#### **4B.8.7 VOLTAGE/V**

Proceed according to:

AFM Section 4B.2.7 - VOLTAGE.

#### **4B.8.8 CURRENT/A**

Proceed according to:

AFM Section 4B.2.8 - CURRENT.

## **4B.9 CAUTION-ALERTS**

### **4B.9.1 LOW VOLTS**

<b>LOW VOLTS</b>	Bus voltage is less than 25 Volt.
------------------	-----------------------------------

Proceed according to:

AFM Section 4B.2.7 - VOLTAGE.

### **4B.9.2 ECU A**

<b>ECU A</b>	* Engine ECU A has failed or * is being tested during FADEC test procedure before take-off check.
--------------	---

Proceed according to:

AFM Section 4B.3.1 - ECU A FAILURE.

### **4B.9.3 ECU B**

<b>ECU B</b>	* Engine ECU B has failed or * is being tested during FADEC test procedure before take-off check.
--------------	---

Proceed according to:

AFM Section 4B.3.2 - ECU B FAILURE.

Doc. # 6.01.15-E	Rev. 0	15 Mar 2011	Page 9 - A05 - 12
------------------	--------	-------------	-------------------

#### **4B.9.4 PITOT**

<b>PITOT</b>	Pitot heating system has failed.
--------------	----------------------------------

Proceed according to:

AFM Section 4B.3.5 - PITOT HEATING FAILURE.

#### **4B.9.5 LOW FUEL**

<b>LOW FUEL</b>	Left fuel quantity is low.
-----------------	----------------------------

Proceed according to:

AFM Section 4B.3.3 - FUEL QUANTITY LOW.

#### **4B.9.6 ENGINE**

<b>ENGINE</b>	Engine limit exceeded.
---------------	------------------------

Proceed according to:

AFM Section 4B.3.6 - ENGINE CAUTION.

#### **4B.9.7 WATERLEV (on SED)**

<b>WATERLEV</b>	Engine coolant level is low.
-----------------	------------------------------

Proceed according to:

AFM Section 4B.3.4 - COOLANT LEVEL.

Doc. # 6.01.15-E	Rev. 0	15 Mar 2011	Page 9 - A05 - 13
------------------	--------	-------------	-------------------

## 5. PERFORMANCE

No change.

## 6. MASS AND BALANCE

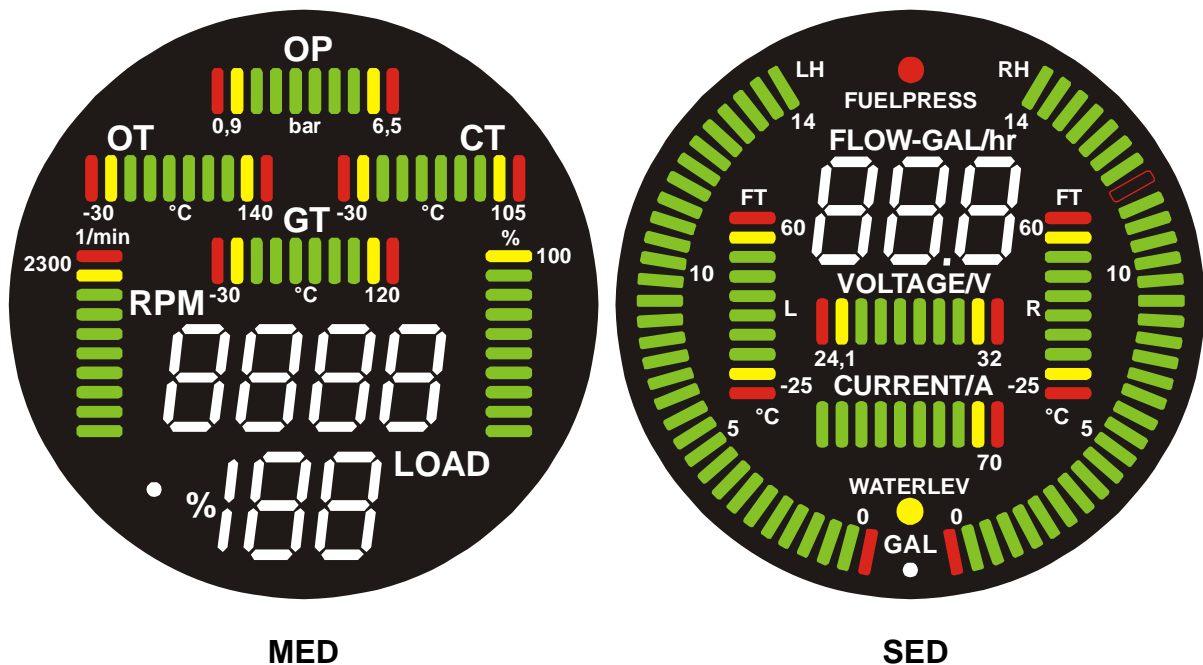
No change.

## 7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS

### 7.9 POWER PLANT

#### 7.9.8 ENGINE INSTRUMENTS

The related parameters are displayed on the Main Engine Display (MED) and Secondary Engine Display (SED).



The MED indicates the load, engine speed, coolant temperature, oil pressure, oil temperature and gearbox temperature. The SED displays the fuel flow, bus voltage, alternator current, LH and RH fuel quantity, LH and RH fuel temperature and provides a low fuel pressure warning and low coolant level caution.

Designation	Indication	Unit
OP	Oil pressure	bar
OT	Engine oil temperature	°C
CT	Coolant temperature	°C
GT	Gearbox temperature	°C
RPM	Propeller RPM	1/min
LOAD	Available power	%
FLOW-GAL/hr	Fuel flow	US gal/hr
FT	Fuel temperature	°C
VOLTAGE/V	Volt	V
CURRENT/A	Ampère	A
GAL	Fuel quantity	US gal

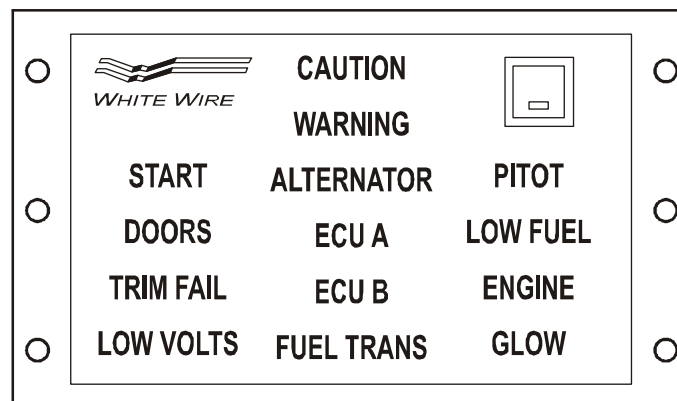


## 7.10 ELECTRICAL SYSTEM

### 7.10.3 WARNING, CAUTION AND ADVISORY MESSAGES

#### White Wire Annunciator Panel

The White Wire annunciator panel is designed to provide visual and aural alerts to the flight crew.



#### Testing the Annunciator Panel

In the process of the pre-flight check, proper functioning of the annunciator panel must be verified. This functional check is automatically started after switching the ELECTRIC MASTER switch ON. All lights are flashed, and the aural alert is muted. By pressing the 'acknowledge' button, the lights are extinguished, and a momentary aural alert is sounded. This test verifies functionality of the microprocessor, the lights, and the aural signal.

The pilot may initiate additional system tests by holding the 'acknowledge' button for 2 seconds. All lights will begin flashing, and the aural alert will sound continuously.

#### Warning, Caution and Advisory Alerts

A list of all alerts is given in AFM Section 2.6 - WARNING, CAUTION AND STATUS LIGHTS.

### Alert Levels

Alerts are divided into three levels as follows:

Level	Text Color	Importance	Audible Tone
Warning	Red	May require immediate corrective action	Warning chime tone which repeats without delay until acknowledged by the crew
Caution	Yellow	May require future corrective action	Single warning chime tone
Annunciation Advisory	White		None

### Warning Messages

A warning is indicated by a continuous aural alert (sounded in the airplane's intercom system), flashing of the red WARNING light, and flashing of the red warning light associated with the affected system.

By pressing the 'acknowledge' button, which is now illuminated green, the aural alert will be terminated, and the WARNING light will be extinguished. The warning light associated with the affected system will change from flashing to solid illumination.

### Caution Messages

A caution is indicated by a momentary aural alert (sounded in the airplane's intercom system), flashing of the amber CAUTION light, and flashing of the amber caution light associated with the affected system.

By pressing the 'acknowledge' button, which is now illuminated green, the CAUTION light will be extinguished. The caution light associated with the affected system will change from flashing to solid illumination.

## 8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.

Intentionally left blank.