

# OPTIONAL SERVICE BULLETIN NO. OSB40-03

## Retrofit installation for Night-VFR Operation

### I. TECHNICAL DETAILS

#### 1.1 Category

Optional

#### 1.2 Airplanes affected

DA 40 serial numbers 40.005 and subsequent

#### 1.3 Time of Compliance

n.a.

#### 1.4 Subject

Retrofit installation for Night-VFR Operation

#### 1.5 Reason

Modification of the DA 40 to obtain approval for Night-VFR Operation

#### 1.6 Concurrent Documents

- ✧ DA 40 Airplane Flight Manual (AFM), Doc.No. 6.01.01-E, or appropriate national version
- ✧ DA 40 Airplane Maintenance Manual (AMM), Doc.No. 6.02.01

## 1.7 Approval

The information and instructions relate to change no. OÄM 40-064, which has been approved by Austro Control GmbH.

The technical information contained in this document has been approved under the authority of JAA Design Organisation Approval No. MOT JA-01.

## 1.8 Accomplishment/Instructions

1. To implement this OSB 40-03 into the airplane the Modification Status of the airplane must be assessed. Only if the following Design Change Advisories have been carried out, the implementation of this OSB 40-03 is possible:

Mandatory Design Change Advisories: corresponding  
Work Instruction

MÄM 40-015	. Landing Light I	WI-MÄM-40-015
MÄM 40-021	. Capillary in the Static System	WI-MÄM-40-021
MÄM 40-022	. Capillary in the Fuel System	WI-MÄM-40-022

Optional Design Changes Advisory: corresponding  
Work Instruction

OÄM 40-052	.. Equipment Cooling Fan Cyclon 21	WI-OÄM-40-052
OÄM 40-053	.. Digital Chronometer LC-2	WI-OÄM-40-053
OÄM 40-055	.. Directional Gyro AIM 205 1 BLD	WI-OÄM-40-055
OÄM 40-056	.. Attitude Indicator AIM 1100-28L	WI-OÄM-40-056
OÄM 40-057	.. Turn Coordinator 1394T100-3Z	WI-OÄM-40-057
OÄM 40-058	.. CDI, VOR/LOC KI 208	WI-OÄM-40-058
OÄM 40-058a	. Removal of Temp. Limitation KI 208	WI-OÄM-40-058a
OÄM 40-059	.. Illuminated Placards	WI-OÄM-40-059
OÄM 40-068	.. Essential Bus System	WI-OÄM-40-068
OÄM 40-072	.. Alternate Static System	WI-OÄM-40-072
OÄM 40-082	.. Lightning Protection consistent with IFR	WI-OÄM-40-082

2. Carry out the missing Design Changes Advisories according to the corresponding work instructions.
3. Carry out the Night-VFR Design Change Advisories according to work instruction WI-OÄM-40-064.
4. Perform DA 40 Night VFR Post Installation Test according to DA 40 Night VFR Post Installation Test report IG.002, Chapter 1
5. Furnish the airplane with AFM, Doc. 6.01.01-E, Revision 4 or higher (english version), or with the appropriate national version.

6. Complete the modification status in AFM Chapter 1.1.
7. Complete the Equipment Inventory AFM Chapter 6.5. Consider the new equipment.
8. Complete the Supplement List AFM Chapter 9.2 and add the required supplements to the AFM.
9. If AMM is required by national regulations, furnish the airplane with AMM, Doc. 6.02.01, Revision 3 or higher.

### **1.9 Mass (Weight) and CG:**

- ✧ weigh the airplane and determine the new empty mass and the new center of gravity
- ✧ report the new empty mass and the new center of gravity in AFM Chapter 6.3 (English version) or in the appropriate national version.

## **II. PLANNING INFORMATION**

### **2.1 Material & Availability:**

The information about the necessary materials and parts is published in the work instructions.

The work instructions are available from Diamond Aircraft Industries, N.A. Otto-Straße 5, A-2700 Wr. Neustadt (Phone. +43(0)2622/26700-52, Fax: +43(0)2622/26620 ) or a Diamond Aircraft General Distributor.

### **2.2 Special Tools:**

The information about the necessary tools is published in the work instructions.

### **2.3 Reference Documents:**

Diamond Aircraft DA 40 Airplane Flight Manual, Doc. No. 6.01.01-E, or appropriate national version.

Diamond Aircraft DA 40 Airplane Maintenance Manual, Doc. No. 6.02.01  
DA 40 Night VFR Postinstallation Testreport IG.002, Chapter 1