




AS350 SPRAY SYSTEM

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA)

CAA REFERENCE 10/21E/15

OCEANIA AVIATION STC.OAL.004

EUROCOPTER AS350B, BA, B1, B2, B3 & D

<i>Certified Master Copy TECHAIR LTD, DO 63214</i>	
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CONTENTS

1.0 GENERAL.....	3
2.0 EFFECTIVITY	3
3.0 INSPECTION REQUIREMENTS.....	3
4.0 DEFECT CLASSIFICATION.....	4
5.0 DEFECT RECTIFICATION	5

RECORD OF ISSUES

ISSUE	DATE	DESCRIPTION	PARAGRAPH	PAGES AFFECTED
1	10/13	INITIAL RELEASE	ALL	1 - 5
2	08/14	VARIANT SYSTEM ADDED	3.3	4

1.0 GENERAL

This modification installs a removable composite carbon fibre tank to the rotorcraft's cargo hook mounts and fixed provisions to the left hand side of the rotorcraft landing gear for the pump.

Information in this document supplements or supersedes information in the basic rotorcraft maintenance manual. For information not contained in this supplement refer to the basic rotorcraft maintenance manuals.

2.0 EFFECTIVITY

Eurocopter AS350 B, BA, B1, B2, B3 & D rotorcraft, equipped with high skid gear (Eurocopter P/N 350A82-4010-03).

Note: Eurocopter AMS 07-2225 (improved landing gear dampers) must be installed if the maximum permitted take-off weight includes jettisonable payload.

3.0 INSPECTION REQUIREMENTS

Refer to Section 4 of these instructions for defect classification and to Section 5 for allowable defects and defect rectification procedures.

3.1 100Hr / Annual Inspection:

The following checks should be carried out every 100 hours or every 12 calendar months of rotorcraft operation, whichever occurs first, following embodiment of this modification.

- a. Remove the tank from the rotorcraft and inspect the exterior of the tank, booms and adjacent rotorcraft structure for signs of contact, wear, cracks, delamination, impact damage, general condition and security.
- b. Inspect the tank mounting brackets for cracking, corrosion, loose fasteners, general condition and security.
- c. Clean and inspect the interior of the tank, check for signs of cracking, delamination, impact damage and loose fasteners.
- d. Inspect the rotorcraft mounting clamps and mounting pins for corrosion, cracking, deformation, loose hardware, correct alignment, general condition and security.
- e. Check all placards listed in the FMS for presence and legibility.
- f. Check the Pump assembly for corrosion, cracking, deformation and security.
- g. Install the system and perform the functional tests as described in the Installation Instructions.

3.2 TM Series Water Meter/Annual Inspection

- a. Meter inspection

The meter is virtually maintenance-free. However, it is important the rotor moves freely. Keep the meter clean and free of contaminants. If the rotor does not turn freely, apply a penetrating lubricant on the rotor, shaft and bearings.

Remove any debris or deposits from the rotor using a soft brush or small probe. Be careful not to damage the turbine rotor or supports. Blowing compressed air through the turbine assembly could damage the rotor.

- b. Battery Replacement

The computer display is powered by two 3-volt lithium batteries which may be replaced while the meter is installed. When batteries are removed or lose power, the batch and cumulative totals and the field and factory calibrations are retained.

If the display becomes dim, blank or the low battery message appears (**LobAtt**), replace the batteries as follows:

1. Remove the four Phillips-head screws from the face of the meter and lift the faceplate from the turbine.
2. Remove the old batteries and clean any corrosion from the terminals.
3. Install new batteries. Make sure the positive post is in the correct position.
4. When the batteries are replaced, the faceplate will power ON. Check the display to ensure normal functions have resumed before assembling again.
5. Reseat batteries, if necessary, and position the faceplate on the turbine housing.

To avoid moisture damage, make sure the seal is fully seated. Tighten the four screws on the faceplate.

c. Calibration

Verify Accuracy Before Beginning Field Calibration

For the most accurate results, dispense at a flowrate which best simulates your actual operating conditions. Avoid “dribbling” more fluid or repeatedly starting and stopping the flow. This can result in less accurate calibrations.

Make sure you meet the meter’s minimum flowrate requirement which is 20 GPM (75 LPM).

The use of a uniformly dependable, accurate calibration container is recommended for the most accurate results. Calibration must be carried out annually and due to the high flowrates, it is strongly recommended that calibration be completed with a combination of volume and weight using fine resolution scales.

3.3 Auxiliary Dump Pressure Gauge Calibration.

(Original system STC.OAL.004-1 only, does not apply to variant system STC.OAL.004-1A)

- a. Calibrate auxiliary dump pressure gauge annually. The gauge is located in the right hand boom support.

4.0 DEFECT CLASSIFICATION

This defect classification guide applies to both the removable tank and the landing gear fixed provisions. All defects are classified as Class II, unless specifically described as Class I.

4.1 CLASS I

Class I damage includes:

- Nicks, scratches, or dents, of the tank (interior or exterior) composite structure, not more than
- 0.5 mm deep and that do not penetrate the carbon fibre skin
- Nicks, scratches, dents or surface corrosion, to any metallic structure less than 0.5 mm depth
- Punctures of the tank interior skin less than 10mm in diameter and not less than 50mm from any other puncture

4.2 CLASS II

Class II damage includes, but is not limited to:

- Delamination, or suspected delamination of any composite structure
- Cracking of any composite or metal structures or hardware
- Punctures of the tank external skin
- Loose or missing hardware or fasteners

5.0 DEFECT RECTIFICATION

5.1 CLASS I

No immediate action required. Flight operations and use of the Spray System may continue and the operator may elect to rectify defects when convenient.

Note:

If unsure the defect should be reported to Oceania Aviation Ltd.

5.2 CLASS II

Rectification action required. Use of the tank is discontinued and the tank must be removed before further flight.

Any Class II defects must be reported to Oceania Aviation Limited using the feedback form supplied.

5.3 REPAIRS

Replace defective components with identical items.

All repairs are to be in accordance with the requirements of NZCAR Part 43. The FAA advisory circulars listed under "Methods Techniques and Practices" in NZCAA advisory circular AC43-1, in addition to FAA advisory circular AC43.13, are acceptable means of carrying out maintenance.

For further information on defects or damage and rectification procedures not otherwise described above, contact:

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