

**AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS
DOCUMENT No. AFDP-008, Rev A**

DOCUMENT AFDP-008

**MAINTENANCE INSTRUCTIONS
AFDP-1 DOWN POST UTILITY BRACKET
FOR THE
EUROCOPTER AS350 AND AS355 SERIES ROTORCRAFT
STC No. SR01784LA**



**AIRFILM CAMERA SYSTEMS
6245 AERODROME WAY
HANGAR NO. 2
GEORGETOWN, CA**

Revision: A

April 20, 2011

**AIRFILM CAMERA SYSTEMS
 MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
 AIRWORTHINESS
 DOCUMENT No. AFDP-008, Rev A**

RECORD OF REVISIONS

Date	Revision / Change	Description
4-03-05	NC	Original Release
4-20-11	A	Revised entire document

LIST OF EFFECTIVE PAGES

All pages contained herein are at latest revision shown in Log of Revisions.

LIST OF EFFECTIVE PAGES

1 – 9

AIRFILM CAMERA SYSTEMS MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS DOCUMENT No. AFDP-008, Rev A
--

TABLE OF CONTENTS

SECTION	TITLE	PAGE
	RECORD OF REVISIONS	1
	TABLE OF CONTENTS	2
1.1	INTRODUCTION	3
1.2	PURPOSE	3
1.3	SCOPE	3
1.4	APPLICABILITY	3
1.5	DOCUMENT CHANGE CONTROL.....	3
1.6	SPECIAL TOOLS.....	3
2.0	AIRWORTHINESS LIMITATIONS	3
3.0	INSPECTION REQUIREMENTS	4
3.1	SCHEDULED INSPECTIONS	6
3.1.1	100 HOUR INSPECTION INTERVALS.....	6
	TABLE 3.1.1 100 HOUR TIME IN SERVICE INSPECTIONS ON HELICOPTER	6
3.2	1000 HOUR TIME IN SERVICE INSPECTION INTERVAL.....	6
	TABLE 3.2.1 COMPONENT INSPECTIONS.....	6
3.3	SPECIAL INSPECTIONS	7
3.4	INSPECTION LIMITS	7
4.0	WEIGHT AND BALANCE	7
5.0	INSTALLATION	7
6.1	REMOVAL	9

**AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS
DOCUMENT No. AFDP-008, Rev A**

1.0 GENERAL

1.1 INTRODUCTION

This manual presents the Maintenance Instructions for the installation of the Airfilm Camera Systems model AFDP-1 Down Post Universal Bracket. This mount is to be installed on the Eurocopter AS350 and AS355 Rotorcraft. The mount is designed to facilitate the attachment of equipment such as video cameras and infrared sensors. The cover page of this document shows the typical mount installation with a camera installation.

1.2 PURPOSE

The purpose of this document is to provide Maintenance Instructions to inspect the Airfilm Camera Systems Model AFDP-1 Down Post Utility Bracket.

1.3 SCOPE

The scope of this document is limited to information, procedures, requirements and limitations for this Supplemental Type Certificate. When a requirement specified in the appendix to the regulations is not applicable to this Supplemental Type Certificate the requirement will not be included in the Maintenance Instructions.

1.4 APPLICABILITY

These Maintenance Instructions are applicable to the Airfilm Camera Systems AFDP-1 Down Post Utility Bracket.

1.5 DOCUMENT CHANGE CONTROL

Changes to this document will be distributed to registered owners of the AFDP-1 Down Post Utility Bracket within 10 days after the revision is approved. Changes to this document will be indicated by a revision number in the footer, vertical lines adjacent to the change, and in the Record of Revisions.

1.6 SPECIAL TOOLS

No special tools are required for maintenance of this appliance

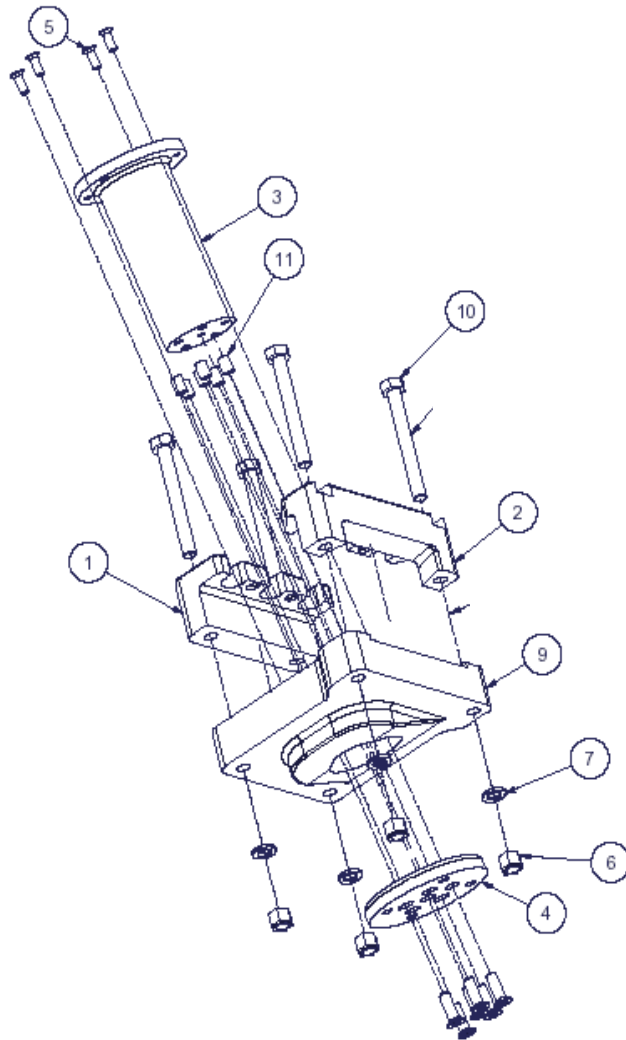
2.0 AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations Section is required under 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

NONE AFFECTED

AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS
DOCUMENT No. AFDP-008, Rev A

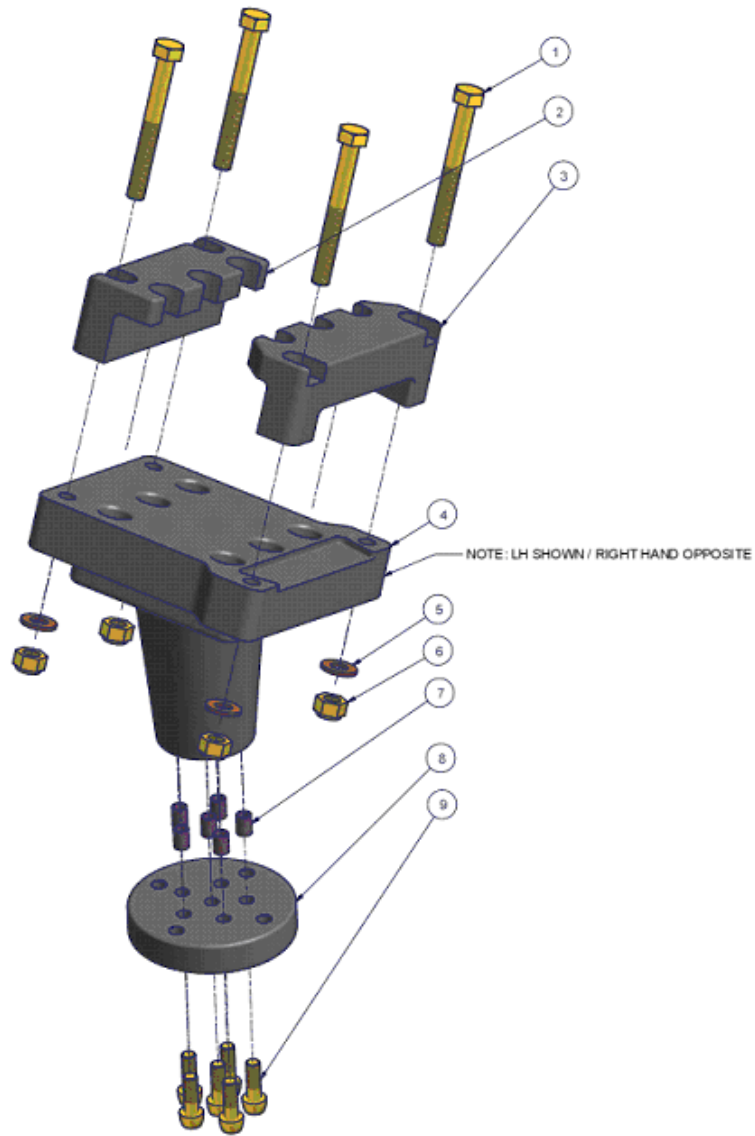
3.0 INSPECTION REQUIREMENTS



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	AFDP-11	T-BRACKET TOP FWD
2	1	AFDP-12	T-BRACKET TOP AFT
3	1	AFDP-13	DOWN POST
4	1	AFDP-14	ATTACH PLATE
5	4	MS24694-S58	MS24694-S58
6	4	AN365-524A	STOP NUT / OR EQVL NUT
7	4	AN960-516	WASHER
8	6	MS24694-S104	MACHINE SCREW
9	1	AFDP-10	T BRACKET CLAMP C
10	4	AN5-27A	HEX BOLT
11	6	MS21209-FY-F16 HX25X375	LOCKING HELICOIL

FIGURE 3.1 EXPLODED VIEW OF AFDP-1-0 DOWN POST UTILITY BRACKET

AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS
DOCUMENT No. AFDP-008, Rev A



Parts List				
ITEM	-1 QTY (LH)	-1R QTY(RH)	PART NUMBER	DESCRIPTION
1	4	4	AN5-25A	HEX BOLT
2	1	1	AFDP-11	T-BRACKET CLAMP B
3	1	1	AFDP-12	T-BRACKET CLAMP A
4	1	--	AFDP-10	CLAMP BASE RH BRACKET
5	4	4	AN960-516	WASHER
6	4	4	AN365-524A	STOP NUT
7	5	5	MS21209-F4-15	LOCKING HELICOIL
8	1	1	AFDP-14	ATTACH PLATE
9	5	5	MS20004-4	INTERNAL WRENCHING CAP SCREW
10	--	1	AFDP-10R	CLAMP BASE LH BRACKET (NOT SHOWN)

FIGURE 3.2 Exploded View of AFDP-1-1 (-2 Right Side) Down Post Utility Bracket

**AIRFILM CAMERA SYSTEMS
 MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
 AIRWORTHINESS
 DOCUMENT No. AFDP-008, Rev A**

3.1 SCHEDULED INSPECTIONS

The scheduled inspections required by this document are contained on the following checklists. This checklist, when completed, is to become a permanent part of the AFDP-1 Down Post Utility Bracket records.

NOTE: There are no field repairs or overhaul allowed for the AFDP-1 Down Post Utility Bracket.

If any component fails the following inspections, the mount is to be removed from the helicopter and returned to Airfilm Camera Systems.

3.1.1 100 HOUR INSPECTION INTERVALS

The 100 hour time in service inspections consist of visually inspecting the critical area of the AFDP-1 Down Post Utility Bracket.

Due to the simplicity of the mount structure, all scheduled 100 hour inspections consist of the same items since the mount is inspected while installed on the helicopter.

The inspections per Table 3.1.1 are required while the AFDP-1 Down Post Utility Bracket is installed on the helicopter at the time in service interval as specified. The inspection is to be performed by maintenance personnel.

TABLE 3.1.1 100 HOUR TIME IN SERVICE INSPECTIONS ON HELICOPTER

Inspect. Interval Hours	Inspection	Maintenance Personnel Initial
100	Visually inspect mount components for cracks, nicks or deep scratches	
	Visually inspect hardware for security and tightness	
	Check hardware for correct torques	

3.2 1000 HOUR TIME IN SERVICE INSPECTION INTERVAL

Removed appliance from the helicopter and disassemble per Section 4.0.

TABLE 3.2.1 COMPONENT INSPECTIONS

Inspect. Interval Hours	Inspection	Maintenance Personnel Initial
1000	Visually inspect bolt holes for damage	
	Visually inspect bracket components for cracks, nicks or deep scratches	

AIRFILM CAMERA SYSTEMS MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS DOCUMENT No. AFDP-008, Rev A
--

3.3 SPECIAL INSPECTIONS

Lightning Strike: Inspect for signs of lightning exit. Remove if indications are evident.

Hard Landing: Inspect for evidence of ground contact or damage. Remove if indications exist.

3.4 INSPECTION LIMITS

The AFDP-1 Down Post Utility Bracket is to be removed from service and returned to Airfilm Camera Systems if the following inspection limits are exceeded.

Cracks:	Any indication
Bolt hole elongation	Any Indication
Dents, scratches or nicks	Greater than 0.010 inches

4.0 WEIGHT AND BALANCE

The following table presents the location of the weight center of gravity of the mount for adjustment of the aircraft weight and center of gravity with the mount installed.

TABLE 5.1 WEIGHT AND CENTER OF GRAVITY LOCATIONS

DESCRIPTION	WEIGHT (lbs)	STATION (in)	BL (in)
AFDP-1-0 Left Side Mount	4.1	40.4	-21
AFDP-1-1 Left Side Mount	5.3	40.4	-21
AFDP-1-2 Right side Mount	5.3	40.4	+21

5.0 INSTALLATION

Reference Figures 5.1 and 5.2

- 5.1 Remove lower belly panel P/N 350A21-0040.
- 5.2 Install blade tape or equivalent to all mount / airframe contact surfaces.
- 5.3 To ease installation of hardware, Teflon type protective coating may be applied.
- 5.4 Install P/N's: -11 / -12 top T-brackets, install lower mount assembly to airframe

AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS
DOCUMENT No. AFDP-008, Rev A

- 5.5 Install AN 5-27A (for AFDP-1-0) or -25A (for AFDP-1-1) bolts,
- 5.6 Install AN960JD-516 / NAS1149D-0516 washers as required to ensure a maximum 0.010 gap. **Maximum of 0.010 gap is allowed with complete mount assembly installed prior to final fastener torque.**
- 5.7 Install AN365-524A nuts. Torque nut to 100-120 inch pounds, tighten bolts in diagonal pattern to ensure even torque pressure.
- 5.8 Mark hardware with torque seal.

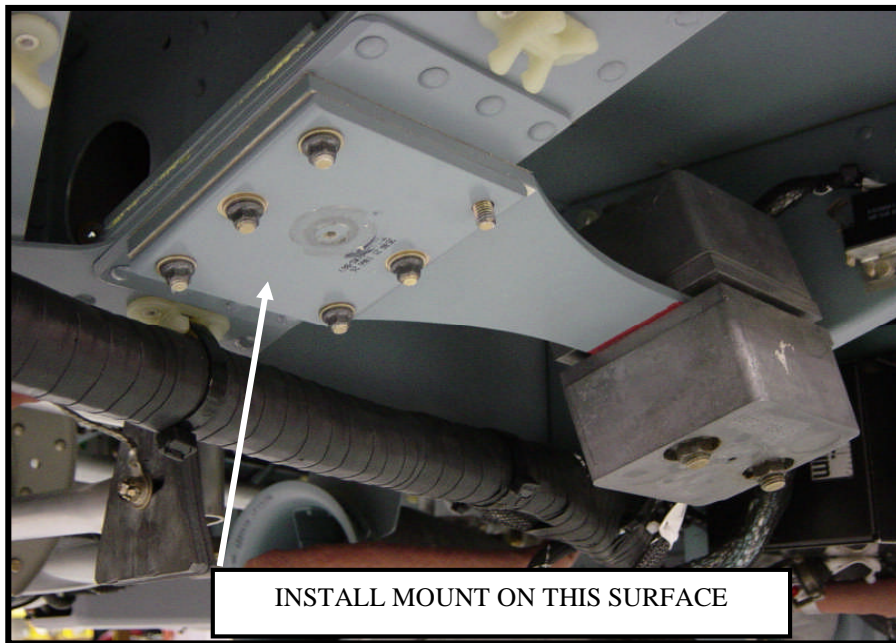


Figure 5.1 Mount Location



Figure 5.2 Completed Installation

**AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS
DOCUMENT No. AFDP-008, Rev A**

6.1 REMOVAL

- 6.1 Un-torque and remove AN365-524 nuts, AN960JD-516 / NAS1149D-0516
- 6.2 Remove AN5-27A (for AFDP-1-0) or -25A Bolts (for AFDP-1-1 or -1-2)
- 6.3 Remove P/N's: AFDP-11 / -12 top T-brackets, and lower assembly
- 64 Mount removal completed