

DOCUMENT AF135-008

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

**STEP MOUNT
FOR THE
EUROCOPTER EC135 ROTORCRAFT**



**AIRFILM CAMERA SYSTEMS
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HANGAR NO. 2
GEORGETOWN, CA**

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DOCUMENT No. AF135-008**

RECORD OF REVISIONS

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1.0 GENERAL

1.1 INTRODUCTION

This manual presents the Maintenance Instructions for the installation of the Airfilm Camera Systems model AFM-SM135-1 STEP Mount. This mount is to be installed on the Eurocopter EC135 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.

1.2 PURPOSE

The purpose of this document is to provide Maintenance Instructions to inspect the Airfilm Camera Systems Model AFM-SM135-1 STEP Mount.

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 AFM-SM135-1 STEP Mount.

1.5 DOCUMENT CHANGE CONTROL

Changes to this document will be distributed to registered owners of the AFM-SM135-1 STEP Mount 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

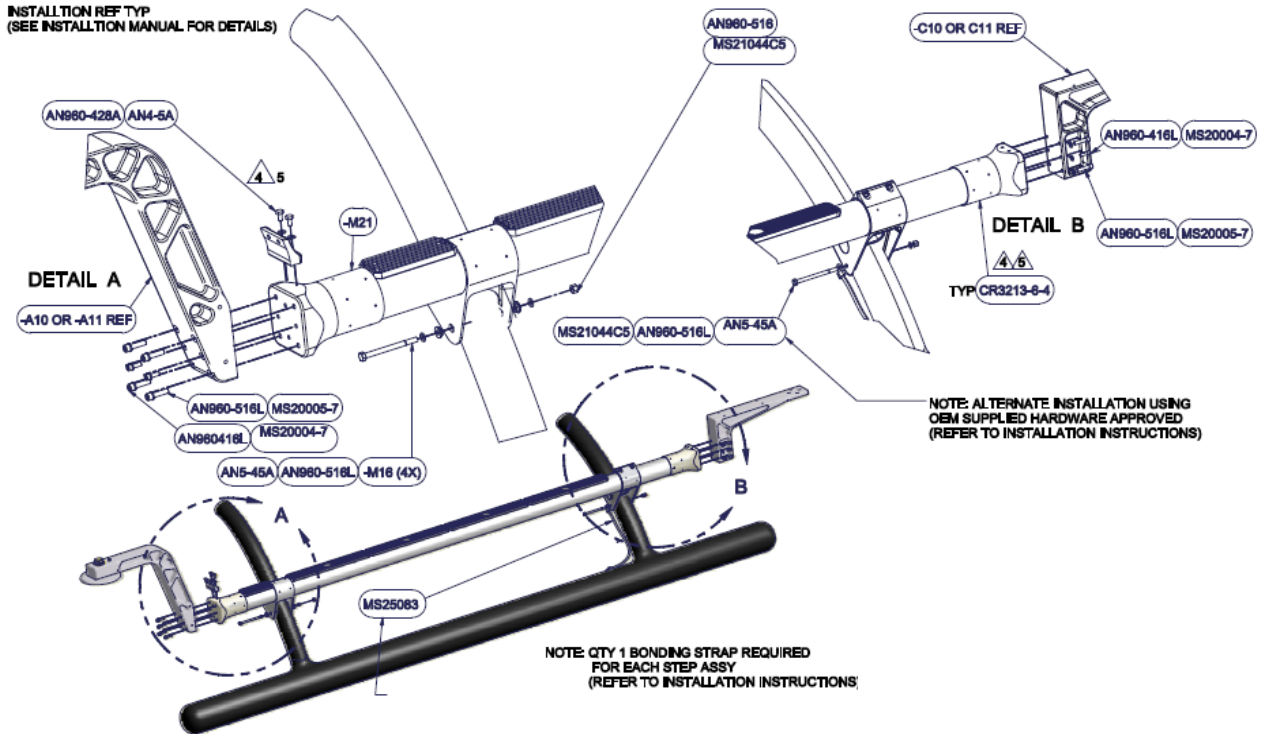
2.0 AIRWORTHINESS LIMITATIONS

NONE AFFECTED

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3.0 INSPECTION REQUIREMENTS

FIGURE 3.1 AFM-SM135-1 STEP MOUNT.



Parts List			
QTY	PART NUMBER	DESCRIPTION	
A/R	AFM-SM135-10	LH UTILITY STEP ASSY EC135	
A/R	AFM-SM135-11	RH UTILITY STEP ASSY EC135	
A/R	AFM-SM135A-10	LH STEP ASSY EC135 (LONG STYLE)	
A/R	AFM-SM135A-11	RH STEP ASSY EC135 SERIES (EC145) (LONG STYLE)	
A/R	-M16	BUSHING	
A/R	-M21	END TUBE ATTACHMENT CAP	
A/R	-M22	END TUBE CAP	
A/R	-C10	SHORT ARM UTILITY BRACKET	
A/R	-C11	MEDIUM ARM UTILITY BRACKET	
A/R	-A10	LONG ARM UTILITY BRACKET ASSY CF STYLE	
A/R	-A11	LONG ARM UTILITY BRACKET ASSY DT STYLE	
A/R	MS21044-5	STOP NUT	
A/R	AN980-516(L)	WASHER	
A/R	DIN65268-08AMJ OR AN5-42A	HEX BOLT	
A/R	AN5-43A	HEX BOLT	
A/R	AN980-416(L)	WASHER	
A/R	MS20004	INTERNAL WRENCHING BOLTS 1/4 X 28	
A/R	MS20005	INTERNAL WRENCHING BOLTS 5/16 X 24	
A/R	CR3213-6-4	RIVET CHERRY MAX	
A/R	CR3213-6-6	RIVET CHERRY MAX	
A/R	3591-4CN500	1/4 X 28 X .5 UNF LOCKING HELICOIL (MIL 21209 OR EQVL)	
A/R	3591-5CN625	5/16 X 24 X .625 UNF LOCKING HELICOIL (MIL 21209 OR EQVL)	
A/R	MS25083 OR EQVL	BONDING STRAP 12 INCH LENGHT	
A/R	AN4-4A	HEX BOLT	

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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 AFM-SM135-1 STEP Mount records.

NOTE: There are no field repairs or overhaul allowed for the AFM-SM135-1 STEP Mount.

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 AFM-SM135-1 STEP Mount.

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 AFM-SM135-1 STEP Mount 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 components for cracks, nicks, dents or scratches	
	Visually inspect hardware for security and tightness	
	Visually inspect rivets for security and tightness	
	Visually inspect components for corrosion	
	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
100	Visually inspect components for cracks, nicks, dents or scratches	
	Visually inspect hardware for security and tightness	
	Visually inspect rivets for security and tightness	
	Visually inspect components for corrosion	
	Check hardware for correct torques	

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3.3 SPECIAL INSPECTIONS

- Rotor Strike: Inspect for signs of damage, or permanent set. Remove if indications are evident exist.
- Hard Landing: Inspect for evidence of ground contact or damage. Remove if indications exist.

3.4 INSPECTION LIMITS

The AFM-SM135-1 STEP Mount 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 |
| Corrosion: | Any Indication |
| Dents, scratches, wear or nicks | Greater than 0.015 inches |

4.0 REMOVAL, DISASSEMBLY, REASSEMBLY AND INSTALLATION

4.1 INSTALLATION

Reference Figure 3.1

- 4.1.1 Align forward and aft landing gear skid fitting with holes on landing gear cross tubes as shown in Details A and B.
- 4.1.2 Install: 2 ea M16 shoulder bushing
 2 ea AN5-42A bolt or equivalent
 2 ea MS21044-5 nut or equivalent
 4 ea AN960-516L washer or equivalent
- - Torque nut to 100-120 in-lbs
 - Mark torqued hardware with torque seal
- 4.1.3 Installation Complete

4.2 REMOVAL

- 4.2.1 Remove: 2 ea M16 shoulder bushing
 2 ea AN5-42A bolt or equivalent
 2 ea MS21044-5 nut or equivalent
 4 ea AN960-516L washer or equivalent
-
- 4.2.2 Remove Step Mount
- 4.2.3 Removal complete

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5.0 WEIGHT AND BALANCE

Table 5.1: COMPONENT WEIGHTS

PART NO.	DESCRIPTION	WEIGHT (LBS)	STATION (IN)	BL (IN)
AFM-SM135-10	LH Utility Step Assy EC135 Series	27	142.21	-39.5L
AFM-SM135-11	RH Utility Step Assy EC135 Series	27	142.21	39.5R
AFM-SM135A-10	LH Utility Step Assy EC135 Series (Long Style)	29	142.21	-39.5L
AFM-SM135A-11	RH Utility Step Assy EC135 Series (Long Style)	29	142.21	39.5R
AFM-SM135-A10	Long Arm Bracket Assy, CF Style	16.8	Front 83.5 Rear 200.9	39.5R/-39.5L
AFM-SM135-A11	Long Arm Bracket Assy, DT Style	14.2	Front 85.5 Rear 199.0	39.5R/-39.5L
AFM-SM135-C10	Short Arm Utility Bracket	9.0	Front 87.3 Rear 197.2	39.5R/-39.5L
AFM-SM135-C11	Medium Arm Utility Bracket	9.0	Front 84.2 Rear 200.2	39.5R/-39.5L