

**REPORT NO. AFSP-V2-008**

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS  
AIRFILM CAMERA SYSTEMS  
AFSP-V2 UTILITY MOUNT ON AS350 OR AS355 MODEL  
HELICOPTER**



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BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 1
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

## RECORD OF REVISIONS

*When updated, this document is revised in its entirety.*

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BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 2
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

## Table of Contents

1.0	GENERAL .....	3
1.1	Introduction .....	3
1.2	Scope .....	3
1.3	Applicability .....	3
1.4	Document Change Control .....	3
1.5	Special Tools .....	3
2.0	AIRWORTHINESS LIMITATIONS .....	3
3.0	INSPECTION REQUIREMENTS .....	3
3.1	Scheduled Inspections .....	3
3.1.1	100-Hour Inspection Intervals .....	3
3.1.2	1000-Hour Inspection Intervals .....	4
3.2	Inspection Limits .....	4
4.0	REMOVAL, DISASSEMBLY, REASSEMBLY, AND INSTALLATION .....	5
5.0	WEIGHT AND BALANCE .....	8

BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 3
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

## 1.0 GENERAL

### 1.1 Introduction

This manual presents the Instructions for Continued Airworthiness (ICA) for the installation of Airfilm Camera Systems AFSP-V2 Utility Mount. This utility mount is to be installed on AS350 and AS355 model rotorcraft.

### 1.2 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.

### 1.3 Applicability

These Instructions for Continued Airworthiness are applicable to Airfilm Camera Systems AFSP-V2 Utility Mount installed on AS350 and AS355 rotorcraft.

### 1.4 Document Change Control

Changes to this document will be distributed to registered owners of the AFSP-V2 Utility Mount within 10 days of revision approval. Changes to this document will be indicated by a revision number in the header, vertical lines adjacent to the specified change, and listed in the Record of Revisions table.

### 1.5 Special Tools

No special tools are needed for the maintenance of the AFSP-V2 Utility Mount.

## 2.0 AIRWORTHINESS LIMITATIONS

NONE.

The Airworthiness Limitations section is FAA approved and specifies inspections and other maintenance required under §43.16 and §91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

## 3.0 INSPECTION REQUIREMENTS

### 3.1 Scheduled Inspections

The schedule inspections required by this ICA are contained in the following checklists. These checklists, when completed, are to become a permanent part of the AFSP-V2 Utility Mount records.

**NOTE: There are no field repairs or overhaul allowed for the AFSP-V2 Utility Mount.**

If any component fails the following inspections, the mount is to be removed from the rotorcraft 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 areas of the AFSP-V2 Utility Mount installation.

BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 4
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

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

The inspections listed in Table 1 are required while the AFSP-V2 Utility Mount is installed on the rotorcraft at the time in service interval as specified. The inspection is to be performed by maintenance personnel.

Table 1 – 100-Hour Time in Service Mount Inspections on Rotorcraft

Inspection Interval Hours	Inspection	Maintenance Personnel Initial
100	Visually inspect aluminum brackets for cracks, nicks, or deep scratches.	
100	Visually inspect hardware for cracks, dents, deep scratches, or damage.	
100	Visually inspect hardware for security and tightness.	
100	Check hardware for correct torques.	

### 3.1.2 1000-Hour Inspection Intervals

The 1000-hour time in service inspection is to be performed for every 1000 hours of time in service. The Utility Mount must be removed from the rotorcraft and disassembled as described in Section 4.0.

The inspections listed in Table 2 are required after the AFSP-V2 Utility Mount is removed from the rotorcraft at the time in service interval as specified. The inspection is to be performed by maintenance personnel.

Table 2 – 1000-Hour Time in Service Mount Inspections

Inspection Interval Hours	Inspection	Maintenance Personnel Initial
1000	Visually inspect bolt holes for damage.	
1000	Visually inspect brackets for cracks, nicks, or deep scratches	
1000	Visually inspect Airframe near forward attach point (T Bracket at Hammer Weight) and Keel Beam Flanges from STA 40 to 60.	

### 3.2 Inspection Limits

The AFSP-V2 Utility 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
Dents, scratches, or nicks:	Greater than 0.010 inches

BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 5
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

## 4.0 REMOVAL INSTRUCTIONS

### 4.1 Single Pole Configuration:

4.1.1 Remove all payloads, adapters, or vibration dampers that may be attached to the mount arm and set aside.

4.1.2 Remove the two (AN6-21A) bolts from the T-Bracket lower bolt holes shown in the figure below. Lower the forward portion of the mount beam and let it rest on the ground.



Figure 1. Forward Attachment point and T-Bracket of the AFSP-V2

4.1.3 Locate the forward cross tube and the aft clamp of the mount. Remove the two AN5-25A clamp bolts from the AFSP-V2-1-021 and AFSP-V2-1-023 half clamps and unhinge the clamp to detach it from the cross tube. Rest the lower portion of the mount onto the ground.

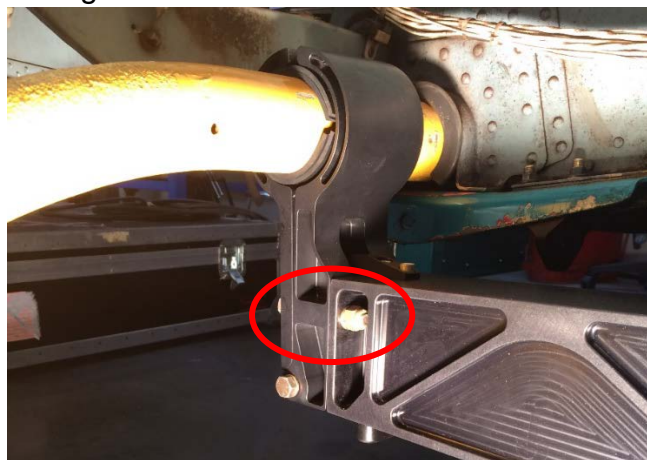


Figure 2. Aft Clamp of the AFSP-V2. Clamp bolts are circled in red

BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 6
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

#### 4.2 Dual Pole Configuration:

- 4.2.1 Remove all payloads, adapters, or vibration dampers that may be attached to the A918 Yoke and set aside.
- 4.2.2 Remove the A919 pitot extension tube from the aircraft pitot tube. Unbolt and remove the A918 yoke from the mount beams and set aside.
- 4.2.3 Follow steps 4.1.2 and 4.1.3 for both mount beams to remove them from the aircraft. Allow both beams to rest on the ground during service/inspection.

### 5.0 REINSTALLATION INSTRUCTIONS

- 5.1 Locate area on the forward cross tube as shown in Figure 3. The attachment area is shown in green, approximately 2 inches outside of the cargo swing attach bracket.



Figure 3. Location of rear clamp installation on forward cross tube

Remove the AN6-25A clamp bolts from the AFSP-V2-1-021 and AFSP-V2-1-023 half clamps and secure the tube clamp onto the forward cross tube with the supplied rubber to protect the aircraft landing gear. Reinstall the clamp bolts hand-tight. And allow the forward portion of the mount to rest on the floor.



BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 7
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

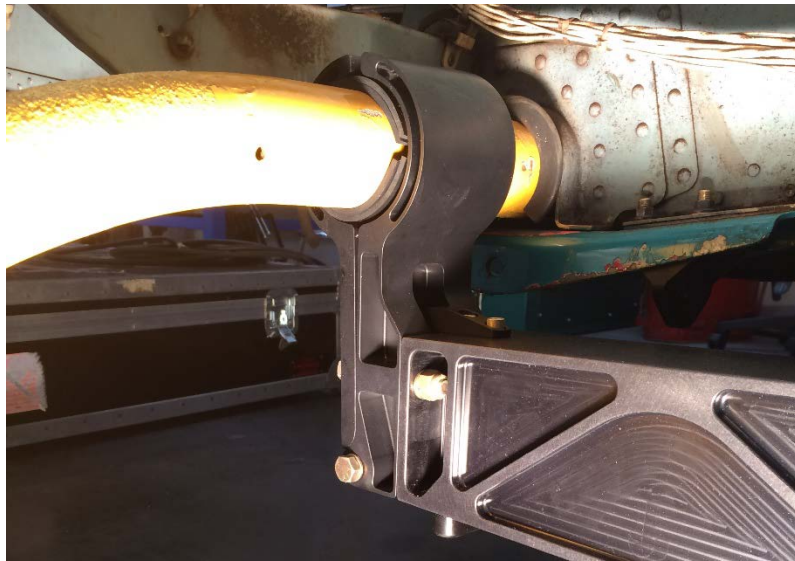


Figure 4 Aft Clamp installation on FWD Cross Tube

- 5.2 Before raising the forward portion of the mount up to the T Bracket assembly, ensure that the sliding and rotational portions of the attach bracket (AFSP-V2-1-005) are free to move. This will allow the brackets to align when attaching the T-Bracket and mount.
- 5.3 Raise the forward portion of the mount up to the T Bracket assembly and insert the two (AN6-21A) bolts into the T Bracket lower bolt holes.
- 5.4 If the installation is complete, torque all hardware per FAA AC43.13-1A and check that all hardware is fully secured. If a dual pole configuration is to be installed, leave fasteners hand tight and continue.
- 5.5 For the dual pole configuration, repeat Steps 5.1 through 5.4 to install the second beam.
- 5.6 Reinstall the A918 Yoke onto the two beams and fasten all hardware hand-tight. Reinstall pitot extension tube onto the aircraft pitot tube using the supplied Aero Seal (QS100-M8W) hole clamp. Check that the hole clamp is secure and hose is well retained.
- 5.7 Torque all hand-tight hardware per FAA AC43.13-1A and check that all hardware is fully secured, torqued, and safety wired.
- 5.8 Insure AFSP-V2 Mount does not interfere with existing aircraft equipment.



BY: RT	AIRFILM CAMERA SYSTEMS	REPORT NO: AFSP-V2-008	PAGE: 8
CHKD: JM	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS	DATE: 03/21/2016	REV: N/C

- 5.9 Install camera/sensor to AFSP-V2 Mount using Manufacturer's Instructions.
- 5.10 Route any control wire into aircraft so as not to interfere with the operation of doors or the operation of any flight controls or systems.
- 5.11 Check entire AFSP-V2 Assembly for flight integrity. System should be secure and not have free play movement.

Note: For the latest update of the removal/reinstallation instructions, refer to the Airfilm Camera Systems Installation Instructions, AFSP-V2-006.

## 6.0 WEIGHT AND BALANCE

The AFSP-V2 Utility Mount Single Pole configuration payload CG is:

Station 5.7 Longitudinal

Butt Line -21.8 Left Lateral or +21.8 Right Lateral

The maximum weight of payload on the AFSP-V2 Utility Mount Single Pole configuration is 175 pounds.

The AFSP-V2 Utility Mount Dual Single Pole configuration payload CG is:

Station 5.7 Longitudinal

Butt Line 0

The maximum weight of payload on the AFSP-V2 Utility Mount Dual Single Pole configuration is 215 pounds.