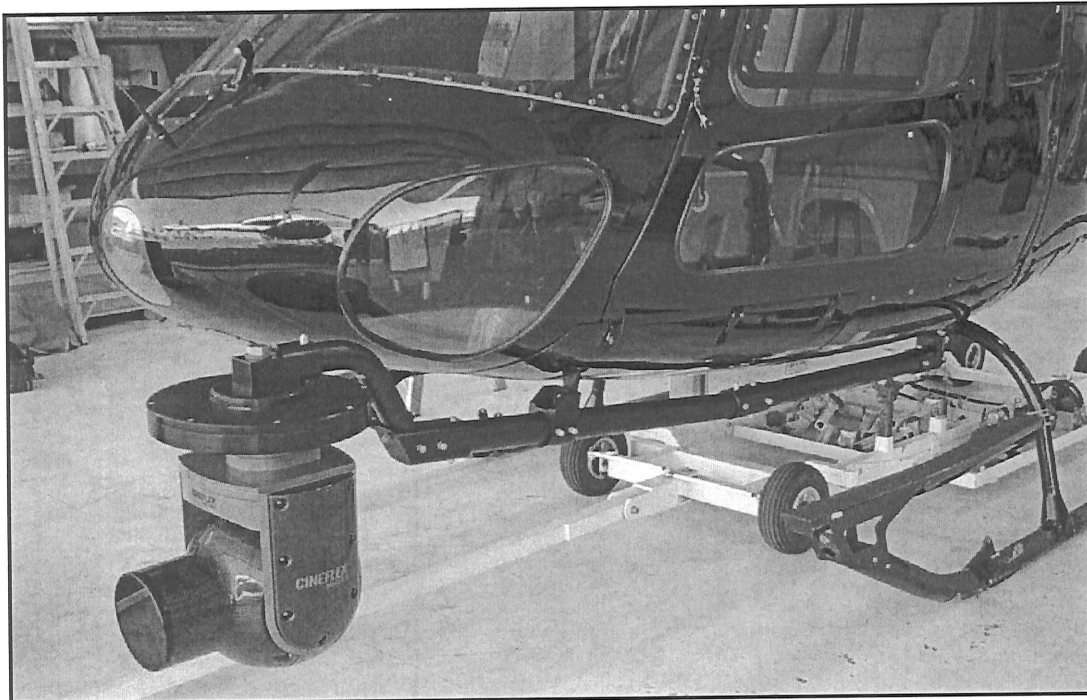


DOCUMENT AFSP-008

MAINTENANCE INSTRUCTIONS

AFSP-1 SINGLE POLE NOSE MOUNT
FOR THE
EUROCOPTER AS350 AND AS355 SERIES ROTORCRAFT



STC No. SR01785LA

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

<p align="center">AIRFILM CAMERA SYSTEMS MAINTENANCE INSTRUCTIONS DOCUMENT No. AFSP-008</p>
--

RECORD OF REVISIONS

No.	Revision Inserted	Date	By	No.	Revision Inserted	Date	By
N/C	N/C	5-12-05	JCF	8			
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			

TABLE OF CONTENTS

SECTION	TITLE	PAGE
RECORD OF REVISIONS		1
TABLE OF CONTENTS		1
1.1	INTRODUCTION	2
1.2	PURPOSE	2
1.3	SCOPE	2
1.4	APPLICABILITY	2
1.5	DOCUMENT CHANGE CONTROL.....	2
1.6	SPECIAL TOOLS.....	2
2.0	AIRWORTHINESS LIMITATIONS	2
3.0	INSPECTION REQUIREMENTS	3
3.1	SCHEDULED INSPECTIONS	4
3.1.1	100 HOUR INSPECTION INTERVALS.....	4
	TABLE 3.1.1 100 HOUR TIME IN SERVICE INSPECTIONS ON HELICOPTER	4
3.2	1000 HOUR TIME IN SERVICE INSPECTION INTERVAL.....	4
	TABLE 3.2.1 COMPONENT INSPECTIONS.....	4
3.3	SPECIAL INSPECTIONS	5
3.4	INSPECTION LIMITS	5
4.0	REMOVAL, DISASSEMBLY, REASSEMBLY AND INSTALLATION.....	5
5.0	WEIGHT AND BALANCE	5
APPENDIX A	AFSP-006 INSTALLATION INSTRUCTIONS	A.1

<p style="text-align: center;">AIRFILM CAMERA SYSTEMS MAINTENANCE INSTRUCTIONS DOCUMENT No. AFSP-008</p>

1.0 GENERAL

1.1 INTRODUCTION

This manual presents the Maintenance Instructions for the installation of the Airfilm Camera Systems model AFSP-1 Single Pole Nose Mount. 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 AFSP-1 Single Pole Nose 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 AFSP-1 Single Pole Nose Mount.

1.5 DOCUMENT CHANGE CONTROL

Changes to this document will be distributed to registered owners of the AFSP-1 Single Pole Nose 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

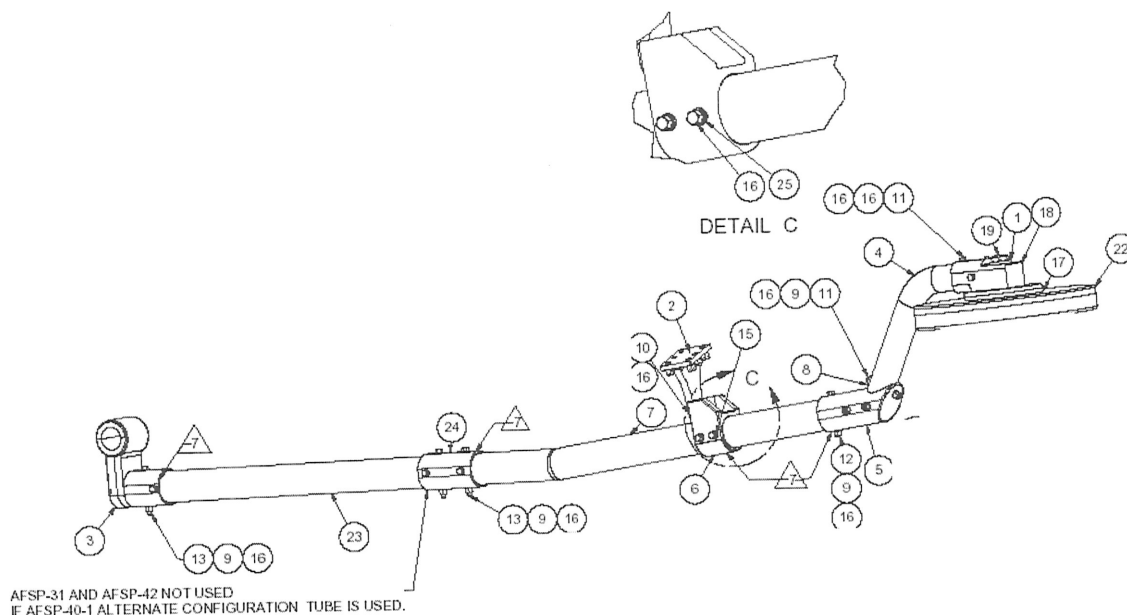
2.0 AIRWORTHINESS LIMITATIONS

NONE AFFECTED

**AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS
DOCUMENT No. AFSP-008**

3.0 INSPECTION REQUIREMENTS

FIGURE 3.1 AFSP-1 SINGLE POLE NOSE MOUNT.



			Parts List	
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	1	98025A038	WASHER	
2	1	A952	T-BRACKET ASSY	
3	1	AFSP-10	FWD CROSS TUBE BRACKET ASSY	
4	1	AFSP-32	RISER TUBE	
5	1	AFSP-35	ANGLE BRACKET	
6	1	AFSP-36	COLLAR BRACKET	
7	1	AFSP-40	MAIN TUBE FWD	
8	1	AFSP-41	SADDLE WASHER	
9	13	AN365-624A	STOP NUT	
10	1	AN6-23A	HEX BOLT	
11	3	AN6-35A	HEX BOLT	
12	3	AN6-40A	HEX BOLT	
13	9	AN6-42A	HEX BOLT	
15	8	AN960-416L	WASHER THIN	
16	29	AN960-616	WASHER	
17	1	CF-10	CINEFLEX MALE TAPER FITTING ASSY	
18	1	CF-11	CINEFLEX STYLE FEMALE TAPER ASSY	
19	1	CF-112	HEX BOLT SPECIAL	
20	1	CINEFLEX_HD	CINEFLEX CAMERA (OR EQVL @ PAYLOAD)	
21	8	MS16998-43	SOCKET CAP SCREW	
22	1	V1725	17.25 INCH VIBRATION REDUCER	
23	1	AFSP-31	MAIN TUBE AFT	
24	1	AFSP-42	CONNECTION SLEEVE	
25	4	AFSP-43	BUSHING	

**AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS
DOCUMENT No. AFSP-008**

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 AFSP-1 Single Pole Nose Mount records.

NOTE: There are no field repairs or overhaul allowed for the AFSP-1 Single Pole Nose 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 AFSP-1 Single Pole Nose 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 AFSP-1 Single Pole Nose 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 Mounts components for cracks, nicks, dents or scratches	
	Visually inspect hardware for security and tightness	
	Visually inspect Mount 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
1000	Visually inspect bolt holes for damage	
	Visually inspect Mount components for corrosion	
	Visually inspect Mount components for cracks, nicks, dents or scratches	

**AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS
DOCUMENT No. AFSP-008**

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 AFSP-1 Single Pole Nose 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

4.0 REMOVAL, DISASSEMBLY, REASSEMBLY AND INSTALLATION

For latest update refer to the Airfilm Camera systems Installation Instructions, Document AFSP-006 included in Appendix A of this document.

5.0 WEIGHT AND BALANCE

The following table presents the location of the weight center of gravity of the mount and payload sensor/camera 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)
AFSP-1 MOUNT	44	53.9	-21

**AIRFILM CAMERA SYSTEMS
MAINTENANCE INSTRUCTIONS
DOCUMENT No. AFSP-008**

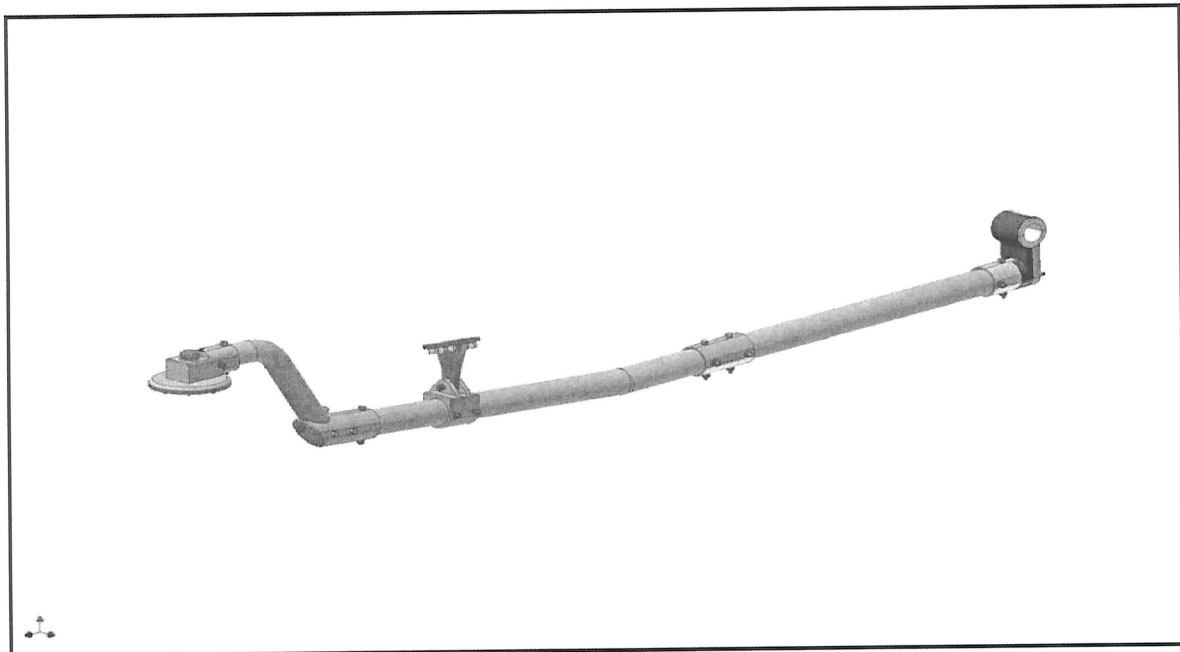
APPENDIX A AFSP-006 INSTALLATION INSTRUCTIONS

AIRFILM CAMERA SYSTEMS

REPORT NO. AFSP-006

INSTALLATION MANUAL

AFSP-1 SINGLE POLE UTILITY MOUNT



STC NUMBER SR01785LA

6245 Aerodrome Way
Hangar No. 2
Georgetown, Ca 95634

LOG OF REVISIONS

REV	REVISION DATE	PAGES EFFECTED	COMMENTS
N/C	5/10/2005	ALL	ORIGINAL SUBMITTAL

1.0 INTRODUCTION AND GENERAL DESCRIPTION:

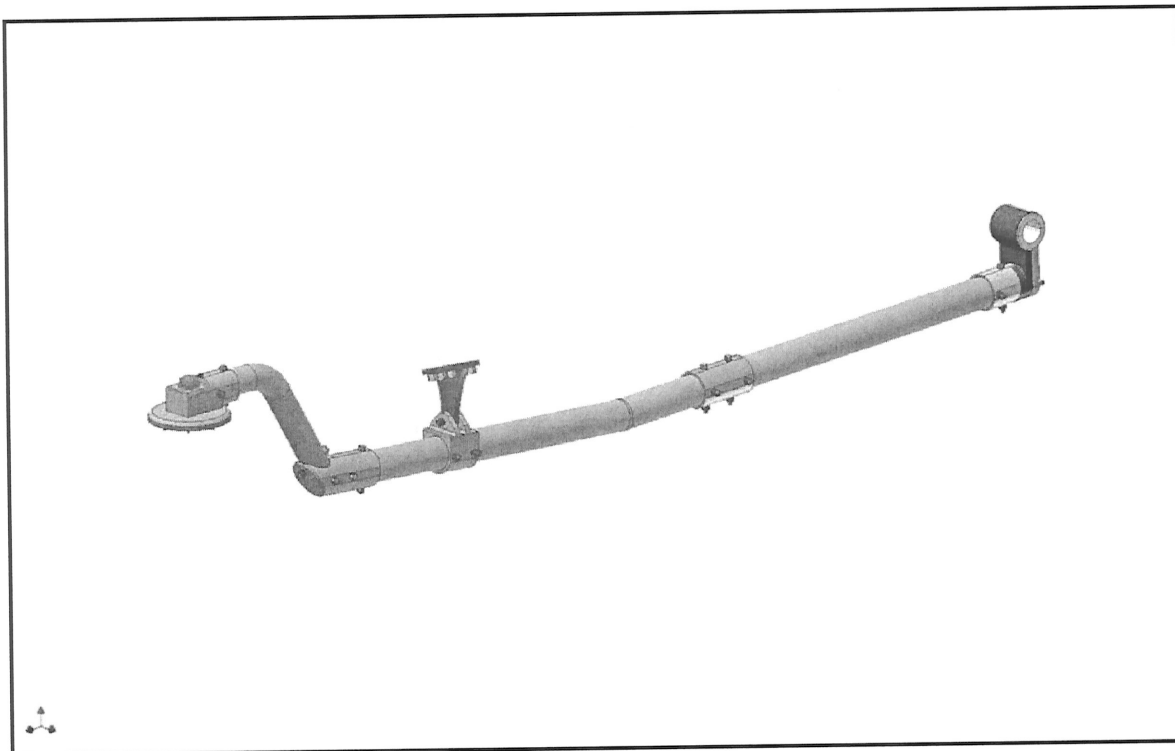
The AFSP-1 Single Pole Mount system is Installed on the Eurocopter AS350 & AS355 series helicopters. It can be installed on High or Low Gear aircraft. The mount can be installed on the right or left hand side of the aircraft.

AS350 models B, B1, B2, BA, B3, C, D, and D1
AS355 models E, F, F1, F2 and N

The AFSP-1 mount system consists of a support bar that attaches to the forward landing gear cross tube and floor tuning hammer weight attachment points. A single tube allows for the mounting of a camera / sensor system.

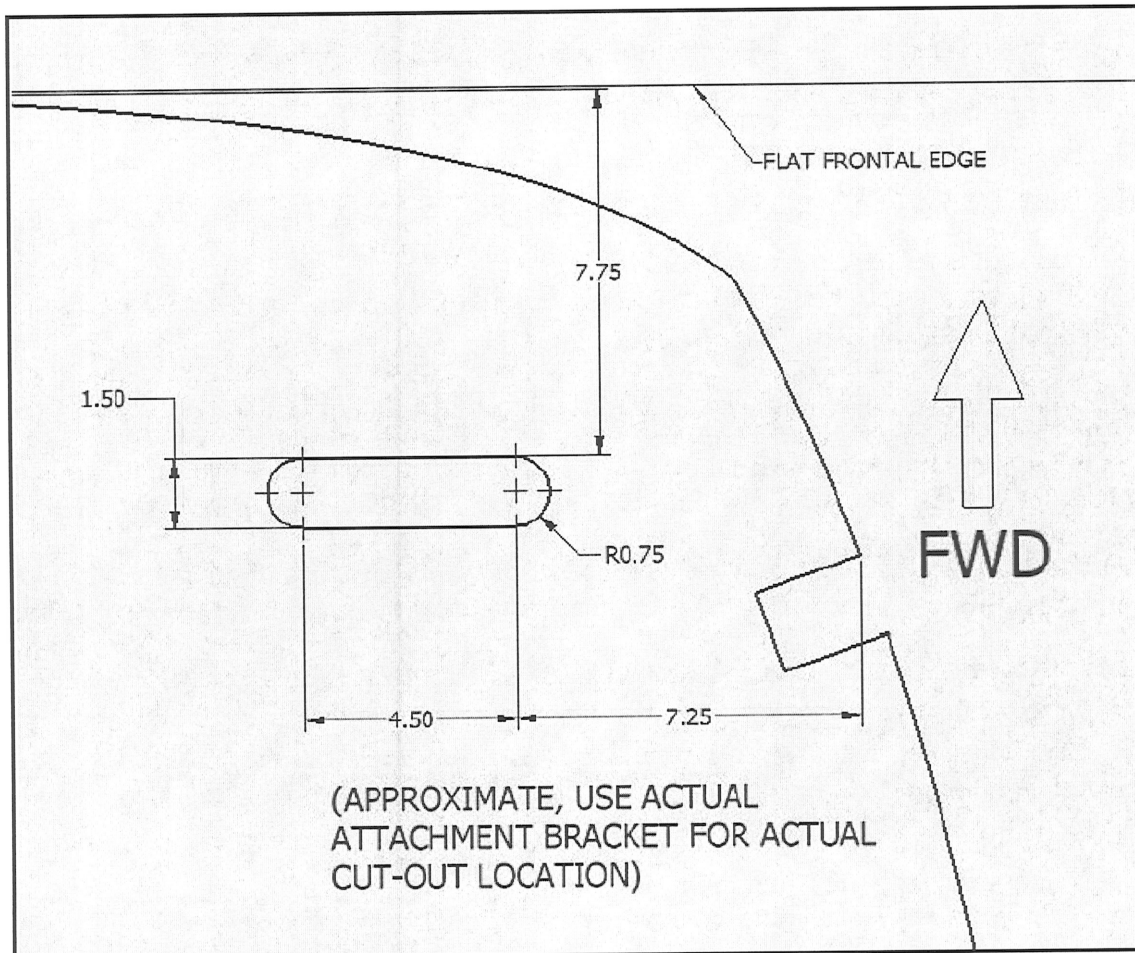
After installation, calculate weight and balance for Installed items and check for proper loading of aircraft.

A modification to the forward belly panel per Section 2 is required to provide for the T Bracket. Antenna, lights, and additional installed equipment may need to be relocated to provide clearance for the camera mount system.



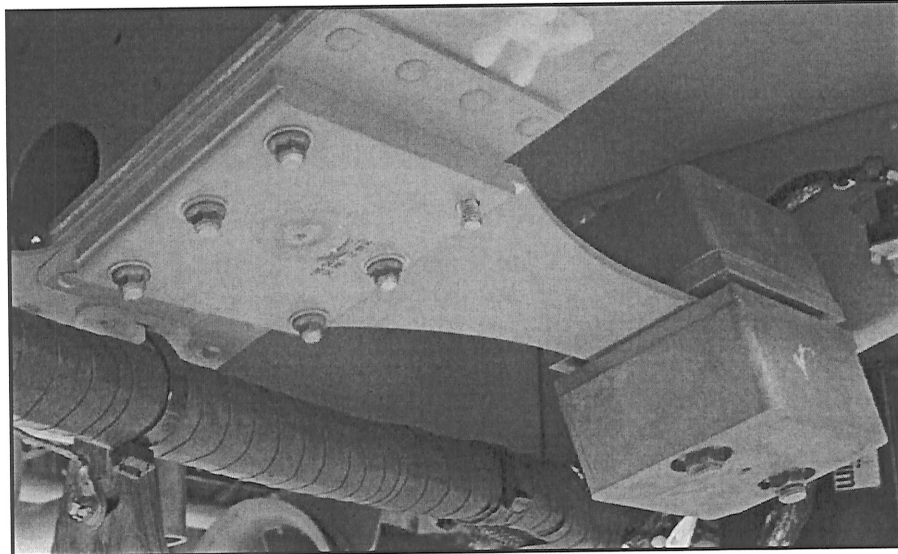
2.0 INSTALLATION INSTRUCTIONS: NOSE MOUNT SUPPORT

- 2.1 Confirm that the mount will not interfere with any exterior kits, antennas, and other exterior mounted assemblies.
- 2.2 Remove the forward belly panel – Use caution for any antennas located on the panel. Disconnect any cabling before removing the panel.
- 2.3 Straight cut through material per the following drawing.



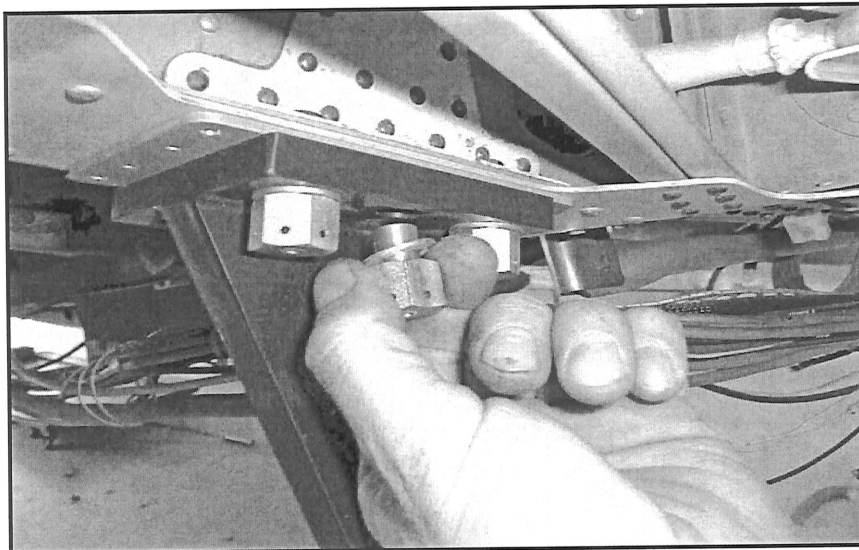
- 2.2 Remove foam core from around edge of cutout. Min 0.200 in depth.
- 2.3 Edge fill cutout in belly panel with epoxy / filler with supplied West Systems 101 Epoxy Repair Kit, refer to manufacturer's instructions or equivalent ie: Ciba Giegy AV1258/HV1258.
- 2.4 Lay-up 9 oz fiberglass tape as supplied in West Systems 101 Epoxy Repair Kit (or equivalent) over edge filling to provide edge protection for belly panel. Refer to manufacturers instructions.

- 2.5 Using a 6mm-socket remove an existing metric nut off of the hammer weight. Replace with special nuts provided 6 each side (A700)



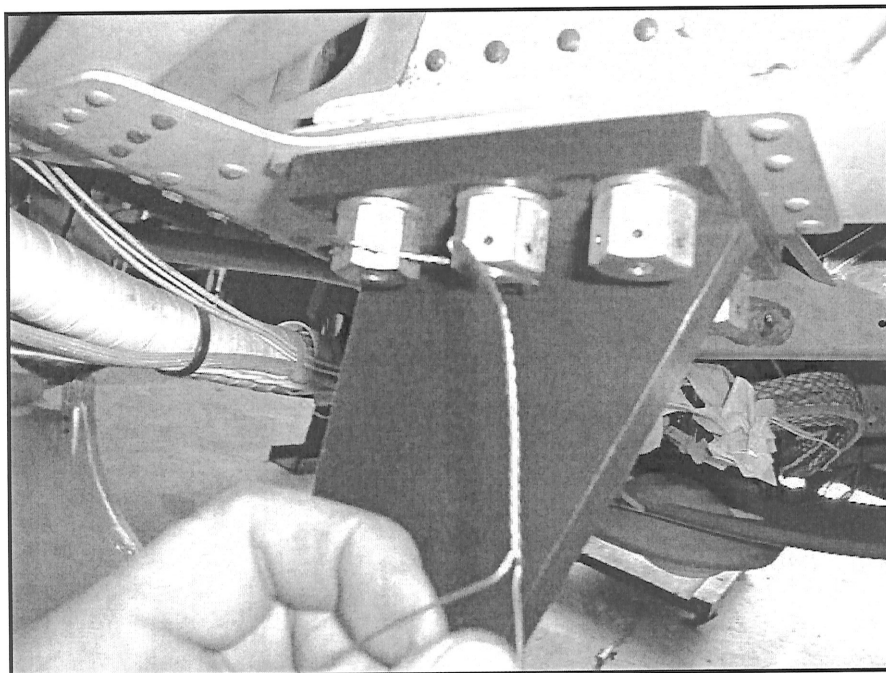
CAUTION: REMOVE AND REPLACE NUTS ONE AT A TIME, TO ENSURE THE HAMMER WEIGHT DOES NOT MOVE FROM PRESET LOCATION

- 2.6 Attach the HAMMER WEIGHT -T BRACKETS (A701) to the hammer weight existing bolts. (SEE ABOVE CAUTION)
Place the bracket up to the underside of the hammer weight attachment nuts.

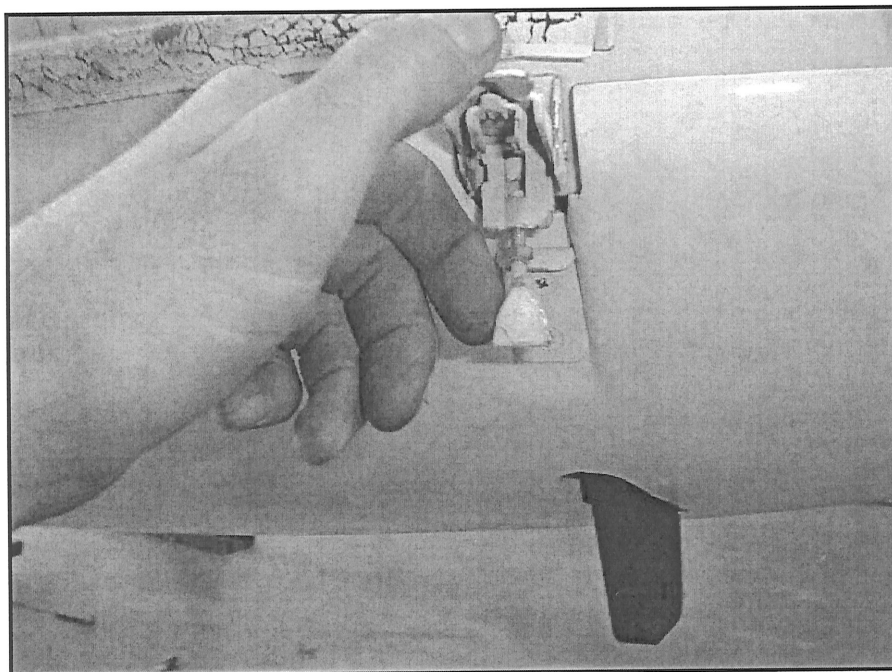


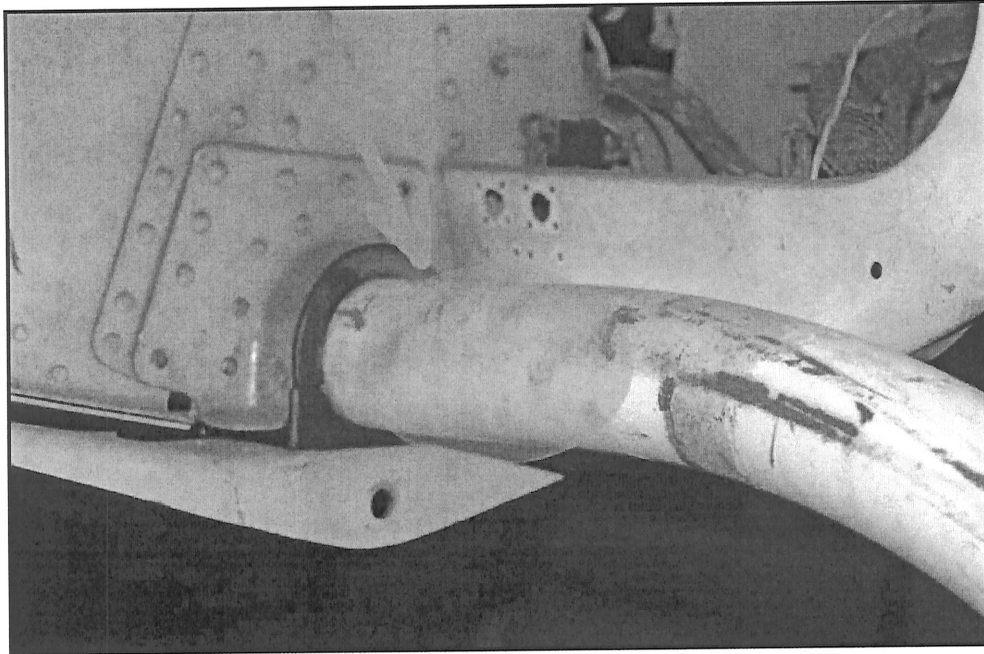
- 2.7 Torque nuts to 72-84 in lbs. (use caution when using the 3/4" socket wrench to tighten bolts- note that the bolts are 6mm dia and proper torque will be achieved quickly).

- 2.8 Use 0.032 diameter safety wire to secure all nuts as shown.

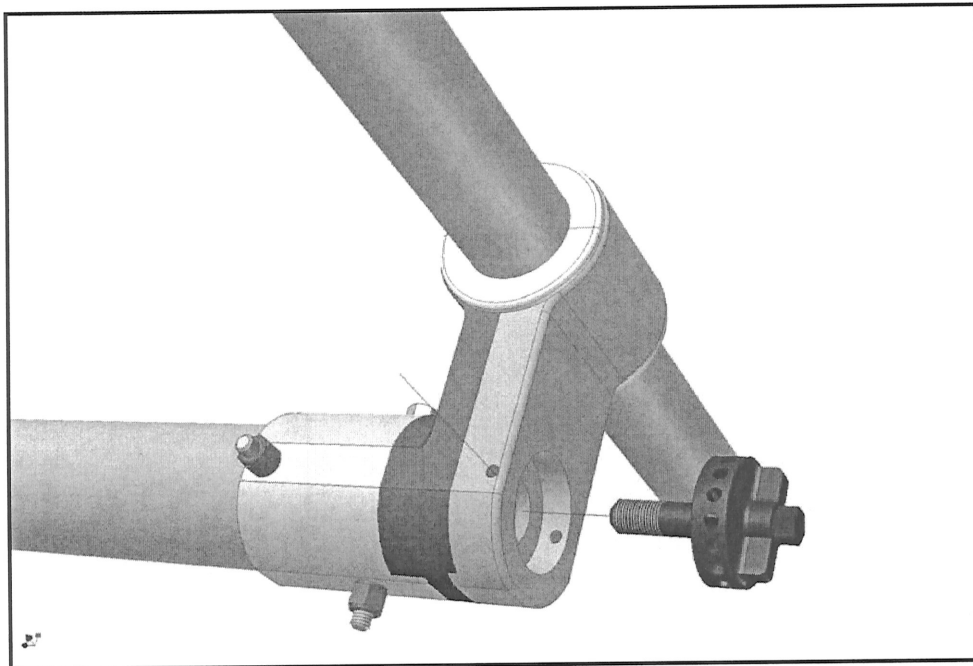


- 2.9 Attach the modified forward belly panel. Check that clearance holes allow the T brackets to extend through the panel.

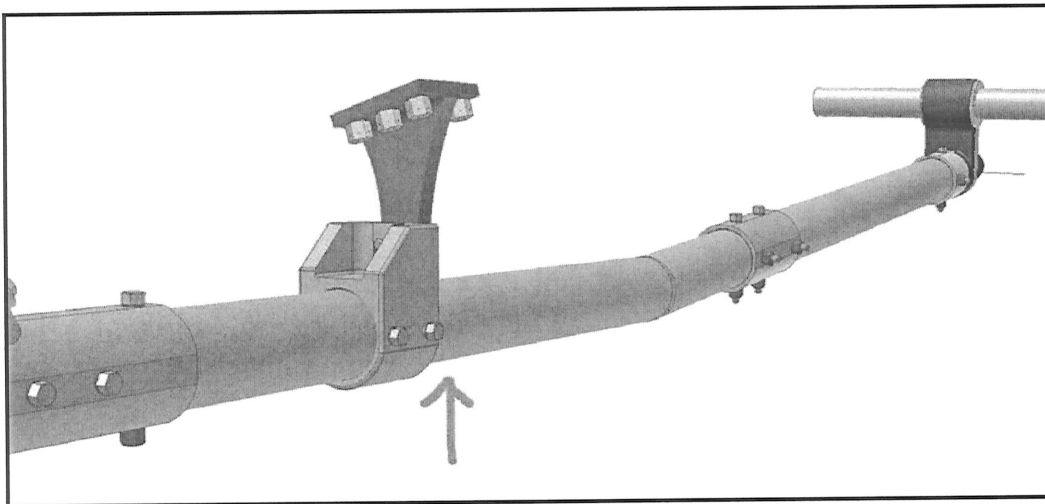




- 2.10 Locate area on FWD cross tube as shown in picture above. The attachment area is approximately 2 inches outside of the cargo swing attach bracket shown in green.

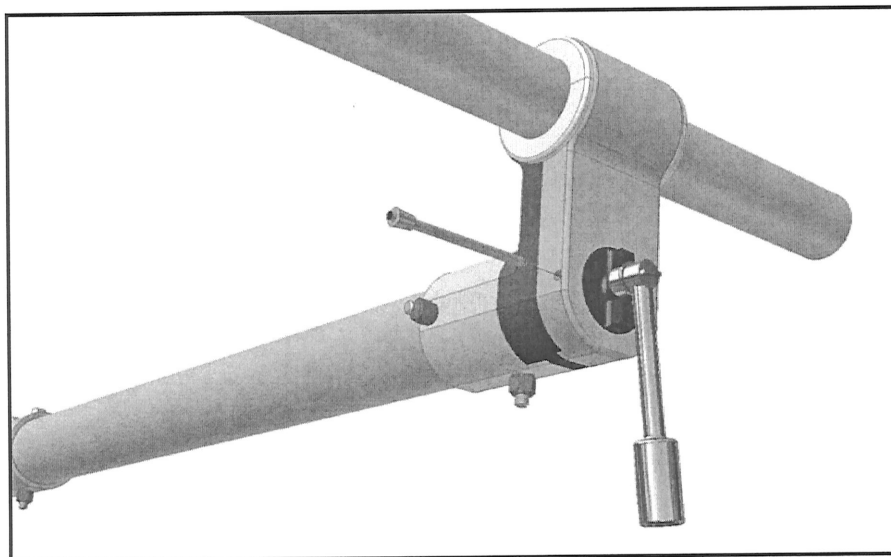


- 2.11 Attach the aft end of the AFSP-1 mount to the forward cross tube. Use the Delrin Gear pad's AFSP-25 or 3/16" Neoprene rubber to protect the aircraft landing gear. Hand tighten the assembly and allow the forward area of the mount to rest on floor.



- 2.12 Raise the AFSP-1 Mount assembly to line up the AFSP-36 with the installed T-bracket. Attach using the following fasteners and torque to 160-190 In Lbs.

QTY	TYPE - NUMBER	ITEM
1	AN6-23A	HEX HEAD BOLT
2	AN960-616	WASHERS
1	AN365-624A	STOP NUTS



- 2.13 Torque the AFSP-1 aft section around the FWD cross tube to 160-240 Inch Lbs.

- 2.14 Install ¼ Safety Pin provided to secure AFSP-24 locking bolt.
- 2.15 **Check entire mount for proper bolt torque settings, and security.**

3.0 FINAL INSTALLATION INSTRUCTIONS:

- 3.1 Check entire mount for security and proper bolt torque settings.
- 3.2 Calculate Weight and Balance.
- 3.3 Install the following Placard in cockpit.

REDUCE PUBLISHED V_{NE} BY 15 KIAS
WITH A PAYLOAD INSTALLED OR MOUNT ONLY

- 3.4 Make log book entries as required by Federal Aviation Regulations.
- 3.5 Return aircraft to service

4.0 REMOVAL INSTRUCTIONS

To remove AFSP-1 mount from aircraft::

- 4.1 Follow directions in reverse order and replace all original hardware / fixtures that were removed for installation of AFSP-1 mount.
- 4.2 Remove any AFSP-1 mount placards from cockpit
- 4.3 Calculate weight and balance
- 4.4 Make appropriate log book entry
- 4.5 Return Aircraft to service

5.0 WEIGHT AND BALANCE

The following table presents the location of the weight center of gravity of the mount and payload sensor/camera 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)
AFSP-1 MOUNT	44	53.9	-21
PAYLOAD	150 max	5.7	-21.8

6.0 QUALIFIED PAYLOAD LIST

The maximum weight and frontal area allowed to be installed on AFSP-1 Single Pole Utility Mount are as follows:

W = 150 lbs
Frontal area = 2.5 square feet
Gimbal/Payload Diameter = 15.5 inches
Minimum ground clearance = 6 inches

Table 6.1 contains a list of payloads that meet the above parameters. If a sensor or payload is not on the list, determination of the frontal area and weight must be made to establish if it is eligible for installation.

Airfilm Camera Systems
AFSP-1 SINGLE POLE MOUNT - INSTALLATION INSTRUCTIONS

AFSP-006
Rev. NC

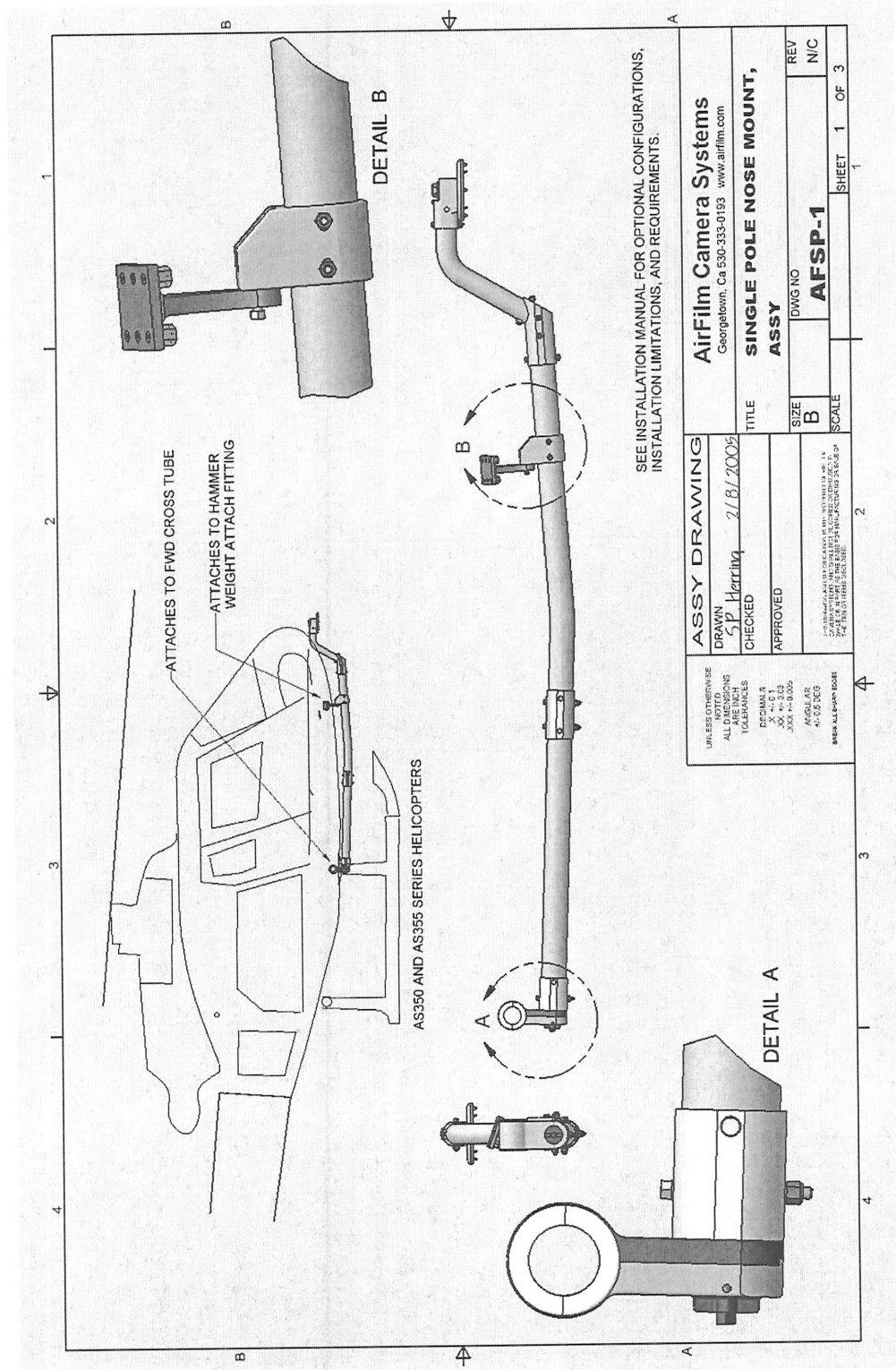
TABLE 6.1 AFSP-1 SINGLE POLE UTILITY BRACKET QUALIFIED PAYLOAD LIST

MFG.	PART NUMBER DESCRIPTION	MAX WEIGHT (lbs)	DIA (in)	HT (in)	AREA (ft ²)	ADAPTOR OR ISOLATOR	DOVE TAIL OR QUICK DISC
CINEFLEX	HIDEF V14	70.0	14.5	20.8	2.0	ISO-RING	DOVETAIL OPTIONAL
FLIR SYSTEMS	STAR SAFIRE SERIES TURRET	105	15.1	19.50	1.8	ISO-RING OPTIONAL	QUICK DISC
FLIR SYSTEMS INC	ULTRA FORCE II / LEO SERIES	95.0	16.0	20	2.2	FLIR ADAPTOR	
FLIR SYSTEMS INC	ULTRA MEDIA SERIES	88.0	15.0	17.5	1.8	ISO-RING OPT / QUICK DISC	
FLIR SYSTEMS INC	STAR SAFIRE SERIES	105.0	15.1	19.1	1.8	ISO-RING OPT/ QUICK DISC	
ISRAEL AIRCRAFT IND	POP SENSOR 200 SERIES	36.4	11.0	15.0	1.2	COLLAR	DOVETAIL
ISRAEL AIRCRAFT IND	HMOSP SERIES SENSOR	70.5	15.0	20	2.1	ADAPTOR	
POLYTECH INC	KELVIN 275 SERIES /COBALT	25	11.0	15.0	1.2	SPIDER PLATE	DOVETAIL
POLYTECH INC	KELVIN 350 SERIES	49	14.0	17.0	1.7	SPIDER PLATE	DOVETAIL
POLYTECH	KELVIN 350 MK II	51.0	14.0	17	1.7	SPIDER PLATE	
WESCAM INC	MODEL 12 / MX-12 SERIES IMAGER	46	12.0	14.6	1.1		DOVETAIL
WESCAM INC	MX-15 SERIES IMAGER	94	15.5	18.5	2.2	WESCAM ADAPTOR	
GYROCAM	DAY / NIGHT VISION	75.0	15.0	18.5	1.8		DOVETAIL
GYROCAM	TRIPLE SENSOR	65.0	15.1	18.5	1.8		DOVETAIL
GYROCAM	36 XLD BROADCAST	75	13.8 3	18.5	1.7		DOVETAIL
GYROCAM	GYROLIGHT	60.0	15.0	20.8	2.2		DOVETAIL
SPECTROLAB	SX-5 STARBURST SEARCHLIGHT	19.0	7.5	11.3	0.6		DOVETAIL OPTIONAL
SPECTROLAB	SX-16 NIGHTSUN	40.0	11.0	18	1.8		DOVETAIL OPTIONAL
SPECTROLAB	NIGHTSUN XP	54.0	12.0	23.7	2.0		DOVETAIL OPTIONAL

Airfilm Camera Systems AFSP-1 SINGLE POLE MOUNT - INSTALLATION INSTRUCTIONS

AFSP-006
Rev. NC

APPENDIX A: - REFERENCE DRAWINGS



Airfilm Camera Systems

AFSP-1 SINGLE POLE MOUNT - INSTALLATION INSTRUCTIONS

AFSP-006
Rev. NC

NOTE:

- ATTACHES TO AS350 / AS355 SERIES AIRCRAFT RH / LH
- ITEMS 20 & 22 SHOWN FOR TYPICAL INSTALLATION AT MOUNTING POINT - NOT REQUIRED SEE APPROVED PAYLOAD LIST.

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	98025-A038	WASHER
2	1	A952	T-BRACKET ASSY
3	1	AFSP-10	FWD CROSS TUBE BRACKET ASSY
4	1	AFSP-32	RISER TUBE
5	1	AFSP-35	ANGLE BRACKET
6	1	AFSP-36	COLLAR BRACKET
7	1	AFSP-40	MAIN TUBE FWD
8	1	AFSP-41	SADDLE WASHER
9	13	AN365-624A	STOP NUT
10	1	AN6-23A	HEX BOLT
11	3	AN6-35A	HEX BOLT
12	3	AN6-40A	HEX BOLT
13	9	AN6-42A	HEX BOLT
15	8	AN960-416L	WASHER THIN
16	29	AN960-616	WASHER
17	1	CF-10	CINEFLEX MALE TAPER FITTING ASSY
18	1	CF-11	CINEFLEX STYLE FEMALE TAPER ASSY
19	1	CF-112	HEX BOLT SPECIAL
20	1	CINEFLEX HD	CINEFLEX CAMERA (OR EQVL @ PAYLOAD)
21	8	MS16988-43	SOCKET CAP SCREW
22	1	V1725	17.25 INCH VIBRATION REDUCER
23	1	AFSP-31	MAIN TUBE AFT
24	1	AFSP-42	CONNECTION SLEEVE
25	4	AFSP-43	BUSHING

AFSP-31 AND AFSP-42 NOT USED
IF AFSP-40-1 ALTERNATE CONFIGURATION TUBE IS USED.

ASSY DRAWING

DRAWN: *Sp Herring* 2/18/2005

CHECKED: _____

APPROVED: _____

AirFilm Camera Systems
Georgetown, Ca 530-333-0193 www.airfilm.com

TITLE SINGLE POLE NOSE MOUNT, ASSY

SIZE B **DWG NO** AFSP-1 **REV** N/C

SCALE _____ **SHEET** 2 **OF** 3

Jeffrey C. Fox

85 Fairway Circle

Medford, OR 97504

Home : (541)245-0224 Cell: (310)210-4127

May 12, 2005

Manager
Federal Aviation Administration
Los Angeles Certification Office
3960 Paramount Blvd.
Lakewood, CA 90712-4137

Attn: Mr. Charles Matheis ANM-120L

Ref: Project Number ST11568LA-R

Dear Sirs,

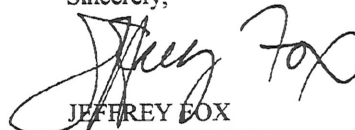
Enclosed please find the following document(s).

DOCUMENT NO.	TITLE
AFSP-008 Revision NC Dated May 12, 2005	Maintenance Instructions AFSP-1 Single Pole Nose Mount for the Eurocopter AS350 and AS355 Series Rotorcraft

This report presents the Maintenance Instructions for the Airfilm AFSP-1 Single Pole Utility Bracket for the Eurocopter Model AS350 and AS355 Series Rotorcraft.

Your review and concurrence is requested.

Sincerely,


JEFFREY FOX
DERT-605173-NM