DOCUMENT AF-G1-008

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AIRFILM CAMERA SYSTEMS

G1-1 & G1-V2 UTILITY BRACKET

FOR BELL AIRCRAFT 206 A, B & L SERIES AND 407 AIRCRAFT



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

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RECORD OF REVISIONS

Rev	Date	Ву	Description	FAA Approved
N/C	1-17-04	SH	Original	SEE STC
A	2-22-16	JM	Updated Format, W&B, Added Reference for Bell 407, Added Reference for G1-V2	
В	11-13-17	СВ	Removed 206L and 407 Models from G2-1 W&B. Added W&B for G1-V2 Assy. Added References for G1-V2	

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1. GENERAL

1.1 <u>INTRODUCTION</u>

This manual presents the Instructions for Continued Airworthiness (ICA) for the installation of the Airfilm Camera Systems model G1-1 and G1-V2 Universal Mounts (herein referred to as G1 Universal Mount). This mount is eligible for installation on the Bell Helicopters model 206 A, B, and L Series and model 407 helicopters. The G1-1 and G1-V2 Universal Mounts consist of a machined aluminum structure. The mount is designed to facilitate the attachment of equipment such as video cameras or searchlights. The cover page of this document shows the typical mount installation with a camera installation.

The G1-1 and G1-V2 Universal Mount attaches to the nose of the aircraft located on centerline at the landing / taxi light location.

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1.2 PURPOSE

The purpose of this document is to provide Instructions for Continued Airworthiness to inspect the Airfilm Camera Systems Model G1-1 and G1-V2 Universal 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 Instructions for Continued Airworthiness.

1.4 APPLICABILITY

These Instructions for Continued Airworthiness are applicable to the Airfilm Camera Systems G1-1 and G1-V2 Universal Mount installed on the Bell Helicopters A, B, & L Series and 407 helicopters.

1.5 DOCUMENT CHANGE CONTROL

Changes to this document will be distributed to registered owners of the G1-1 and G1-V2 Universal 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.

2. 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. <u>INSPECTION REQUIREMENTS</u>



Figure 1. G1-1 Utility Bracket Mount Assy



Figure 2. G1-V2 Utility Bracket Mount Assembly



Figure 3. G2-1 Counterweight Assy (Optional)

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3.1 <u>SCHEDULED INSPECTIONS</u>

The scheduled inspections required by this ICA are contained on the following checklists. This checklist, when completed, is to become a permanent part of the G1-1 and G1-V2 Universal Mount records.

NOTE: There are no field repairs or overhaul allowed for the G1-1 or G1-V2 Universal mount.

If the mount 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 G1 Universal Mount installation.

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 G1-1 or G1-V2 Universal 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	Inspection	Maintenance Personnel
Hours		Initial
100	Visually inspect aluminum brackets for cracks, nicks or deep scratches	
	Visually inspect hardware for cracks, dents, deep scratches or damage	

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3.2 <u>1000 HOUR TIME IN SERVICE INSPECTION INTERVAL</u>

The 1000 hour time in service inspection is to be performed every 1000 hours time in service. The mount must be removed from the helicopter and disassembled per Section 4.0.

TABLE 3.2.1 FITTING INSPECTIONS

Inspect.		Maintenance
Interval	Inspection	Personnel
Hours		Initial
1000	Visually inspect bolt holes for damage	
	Visually inspect brackets for cracks, nicks or deep scratches	
	Visually G1-2 Counterweight assembly for cracks, nicks or deep scratches	

TABLE 3.2.2 AIRFRAME INSPECTIONS

Inspect.		Maintenance
Interval	Inspection	Personnel
Hours		Initial
1000	Visually inspect airframe at G1-1 or G1-V2 interface for cracks	
	Visually inspect bolt holes for signs of cracks, elongation or damage.	
	Visually inspect fasteners and fastener threads for signs of damage	

3.3 <u>INSPECTION LIMITS</u>

The G1-1 and G1-V2 Universal Mounts are 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

Tube Dents:

Greater than 0.010 inches

Greater than 0.020 inches

Greater than 0.010 inches

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4. REMOVAL, DISASSEMBLY, REASSEMBLY AND INSTALLATION

For latest update refer to the Airfilm Camera Systems Installation Instructions AF-G1-006 & AF-G1-007

5. WEIGHT AND BALANCE

The weight and balance location for the G1 Universal Mount is:

G1 UNIVERSAL NOSE MOUNT BRACKET ASSY

DESCRIPTION	WEIGHT (lbs)	STATION (in)	BL (in)
G1 Bracket Assy	7.2	5.0	0.0
PAYLOAD	Use Actual Weight MAX 130 pounds.	2.0	0.0

G1-V2 UNIVERSAL NOSE MOUNT BRACKET ASSY

DESCRIPTION	WEIGHT (lbs)	STATION (in)	BL (in)
G1-V2 Bracket Assy	7.6	5.0	0.0
G1-V2-11 Bolt Holder Kit (Optional)	0.8	5.0	0.0
G1-V2-13 or -15 Spacer Kit (Optional)	0.5	5.0	0.0
PAYLOAD	Use Actual Weight MAX 130 pounds.	2.0	0.0

G2-1 COUNTER WEIGHT ASSY (OPTIONAL)

HELICOPTER MODEL	WEIGHT	STATION	BL
	(lbs)	(in)	(in)
Bell 206 A & B	47.5	193.7	-2.5