



SUITABILITY OF HELICOPTERS FOR



This document outlines the required configuration of helicopters intended to be used as a filming platform with **Cineflex V14 and V14MS HD Camera Systems** installed.

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AIRFILM MOUNT TYPE DESCRIPTION

Mount: Airfilm G1-1 nose mounted Utility Mount FAA STC # SR01654LA

For Bell 206 and 407 series helicopters

The G1-1 is attached to the exterior of the landing light housing area of the aircraft and the Cineflex Gimbal with Airfilm Vibration Isolator is attached to the underside of the bracket. The attachment of the G1-1 prohibits the use of the standard landing light and taxi light. If night operations are required the Airfilm G-3 light kit may be fitted.



G1-1 Nose Mount with Vibration Isolator and Cineflex V14 Gimbal

Mount: Airfilm G2-1 Counterweight Assembly FAA STC # SR01654LA

For Bell 206 series helicopters

The G2-1 Counterweight Assembly is optional and installed when needed to maintain the Centre Of Gravity limits of the particular helicopter. It is generally only fitted to Bell 206 A & B model helicopters. The attachment is made to the aft skid crosstube about 9" left of the centreline and the pole reaches back closely following the contour of the belly to attach to the aft jacking pad. See the Installation Instructions for details.



G2-1 Counterweight Assembly installed on Bell 206

AIRFILM MOUNT TYPE DESCRIPTION

Mount: Airfilm AFSP-1 FAA STC # SR01785LA

For AS350 and 355 helicopters

The AFSP-1 is a single pole mount assembly which attaches to the forward skid cross tube and is supported with a bracket attached to the floor tuning hammer weight. A modification to the belly pan is required to allow for the T Bracket.

The Cineflex is suspended from the attachment point at the end of the pole under the nose. The AFSP-1 can be installed on the left or right side of the centreline. Usually it is installed on the left side.



AFSP-1 with Vibration Isolator mounted on AS350 B3

AIRFRAME CONSIDERATIONS

The following items may interfere with the installation of mounts and operation of the Cineflex and may need to be removed beforehand:

- * **Wire strikes**
- * **Mirrors**
- * **Antennae**
- * **Projecting landing light housing**
- * **Clamps, sleeves, cables and hoses attached to the crosstubes where Airfilm brackets must be fitted**
- * **Equipment installed under the belly or attached to the skids and crosstubes such as spray booms, winches and lights**

For G2-1 Counterweight Assembly for Bell 206 series:

- * **Anti- Collision and Strobe lights**
- * **Antennae and Radio/Nav aids which protrude from the underbelly**
- * **Slings and bucket brackets which are aft of the aft crosstube**
- * **Clamps and fittings around the aft crosstube at the G2 clamp attachment point**
- * **Anything attached to the aft jacking pad**



Examples of items prohibiting the installation of the G1 and Cineflex on Bell 206 and 407 series

HIGH SKIDS

The Cineflex must be installed only on **high skid** aircraft because the ground clearance tolerance is compromised if landing on rising ground or if the power supply to the gimbal has failed and the gimbal has 'drooped'.

AS350/355

The forward belly pan on AS350 and 355 needs to have a cutout made to allow attachment of the hanging T bracket to the hammerweight mount. See Installation Instructions for details.

POWER CONSIDERATIONS

The Cineflex operates from the helicopter's 28 volt DC power supply. Usually the system is connected to an Auxilliary power circuit with a circuit breaker or fuse within the the pilot's reach. The minimum voltage requirement is **26VDC** and the minimum amperage required is **15Amps**. If mounting the Cineflex V14 MSII model camera system the aircraft will require a 30Amp fuse. Power supplied from the helicopter must be confirmed by the helicopter supplier's engineer as B-Pos. The Cineflex system consists of the gimbal turret itself and its accessories such as monitors and recorders. Some of the accessories are 12vDc and can be powered by additional batteries. The Gimbal and the Cineflex Auxilliary Junction Unit however must have a clean 28vDc supply. It is advisable that any other device on the helicopter's Aux Power circuit be decommissioned when the Cineflex system is installed.

CAUTION: Cineflex have achieved their remarkable stability by a combination of gyros, rate sensors and encoders. When it is not powered up, the Cineflex is vulnerable to shock and vibration because its 'defense mechanism' is not active. The Cineflex system must NEVER be flown or roughly moved when it is not powered up.

OTHER CONSIDERATIONS

Communications: The Cineflex operator uses both hands while filming. The operator must have either voice-activated (VOX) or open-mike comms with the pilot and other crew within the aircraft.

Cabin installations: If the helicopter has other equipment installed within the cabin, adequate space must be available for the operator and equipment. Generally, the operator sits in the rear and needs at least 2 seat places vacant.

Weight and Balance: The STC only accounts for weight and balance changes as a result of the externally fitted equipment. Refer to the 'Sample Weight and Balance' schedule in advance that also includes all internally fitted equipment and the weights of our camera crew. Please note that the external components of the Cineflex system are mounted at an extreme forward station. The inclusion of a second crew member or passenger in the co-pilot's seat may therefore require aft counterbalance weight and reduce endurance.

Insurance: Helifilms Australia carries worldwide Multi Risks insurance for our Cineflex whilst it is in transit to the helipad, stored in your hangar and attached to the aircraft. However on confirmation of shoot we need to see your Hull Insurance and would ask that Helifilms Australia Pty Ltd be added as "additional insured" on your policy and that your policy "special conditions" should include "film work". We also need you to confirm our cameraman is covered under your passenger insurance and our pilot, if supplied by us, is covered under your crew policy. Please either email or fax your insurance document to us on confirmation of the shoot.