Airfilm Camera Systems 6245 Aerodrome Way, Hangar #2 Georgetown, CA 95634 Supplement No. AF-R44NM-007

# **FAA APPROVED ROTORCRAFT FLIGHT MANUAL SUPPLEMENT** FOR THE NOSE UTILITY MOUNT (AF-R44-1)

# **ROBINSON HELICOPTER MODEL R44/R44II AND R66**

REGISTRATION #:	_ SERIAL #:
The information in this supplement is FAA attached to the FAA Approved Robinson R Manual when the rotorcraft has been modif R44-1 Utility Mount System in accordance w	44/R44II and R66 Rotorcraft Flight ied by the installation of Airfilm AF-
The information contained herein supplement the basic Rotorcraft Flight Manual only in Limitations, Procedures and Performance Supplement, consult the basic Rotorcraft Flight	n those areas listed herein. For information not contained in this
FAA APPROVED:Manager, West Flight Tederal Aviation Admin	
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Supplement for Robinson Helicopter Models R44/R44II and R66 RFM when modified with the Airfilm Utility Mount System STC Number <u>SR02660LA</u>

Supplement No AF-R44NM-007

# **LOG OF PAGES**

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## **SECTION 1: GENERAL INFORMATION**

## NOSE UTILITY MOUNT INFORMATION

The Nose Utility Mount (AF-R44-1) attaches to the nose of the Robinson R44/R44II and R66 helicopter to provide a means for attaching external payload up to 50 lbs. Typical payloads could include but are not limited to: cameras, sensors, and searchlights. The nose utility mount attaches at the position of the landing light cover located at FS 2.36/WL 42.0/BL 0.0

Searchlight/camera/sensor payloads are attached either direct or with the use of DT-1-1 and DT-1-11 (dovetail).

The mount is approved for VFR Operations.



Figure 1. R44 Nose Utility Mount installation

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## **SECTION 2: LIMITATIONS**

#### **AIRSPEED LIMITS**

#### AIRSPEED LIMITS FOR UTILITY MOUNT

- Reduce the published VNE by 10 KIAS with a payload installed on the Nose Utility Mount having a total frontal area of 0.7 ft<sup>2</sup> or less.
- Reduce the published VNE by 30 KIAS with a payload installed on the Nose Utility Mount having a total frontal area of .71 ft<sup>2</sup> to 1.5 ft<sup>2</sup>.
- No airspeed reduction with only the Utility Mount installed.

## KINDS OF OPERATION LIMITATIONS

#### NOSE UTILITY MOUNT LIMITATIONS

The payload limited to a maximum allowable frontal area of 1.5 ft<sup>2</sup>. and a weight of 50 lbs.

If the payload obscures the landing light beam, or produces reflections in the cockpit, and an alternate landing light sources are not installed or nonfunctional, the aircraft is restricted to day VFR conditions only.

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# **SECTION 2: LIMITATIONS (cont'd)**

## **PLACARDS**

In clear view and readable by pilot in flight:

# WITH A PAYLOAD INSTALLED ON THE NOSE UTILITY MOUNT REDUCE THE PUBLISHED VNE BY:

10 KIAS when payload frontal area of .7 ft<sup>2</sup> or less.

30 KIAS when payload frontal area of .71 ft<sup>2</sup> to 1.5 ft<sup>2</sup>.

# **SECTION 3: EMERGENCY PROCEDURES**

No change from the basic Rotorcraft Flight Manual.

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# **SECTION 4: NORMAL PROCEDURES**

## **DAILY OR PREFLIGHT CHECKS**

12a. Nose Utility Mount:

Nose Utility Mount & payload hardware ... Check security

Nose Structure around Mount......Check for signs of stress, distortion, fatigue cracking or other damage

# **SECTION 5: PERFORMANCE**

- Hover Performance No Change
- o Climb Performance 75 ft/min reduction

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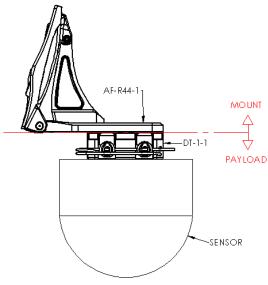
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## **SECTION 6: WEIGHT & BALANCE**

The Nose Mount payload CG Locations are:

DESCRIPTION	Weight (lbs)	STATION (in)	BL (in)
Nose Utility Mount Payload (50 Max)	Use Actual Payload	2.36	0.0
DT-1-1 Dovetail (Optional)	2.4	2.36	0.0

The maximum weight of an external payload on the nose mount is 50 pounds.



**Figure 2 Utility Mount Payload Depiction** 

## **CAUTION**

The longitudinal CG can be easily exceeded with a nose mounted payload attached. Check weight & balance prior to each flight

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