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**FAA APPROVED  
ROTORCRAFT FLIGHT MANUAL  
SUPPLEMENT**

***Onboard Systems  
Cargo Hook Sling Suspension System  
Retrofit Kit***

***Eurocopter AS350 Series***

R/N \_\_\_\_\_ S/N \_\_\_\_\_

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Date:  
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## INTRODUCTION

This supplement must be attached to the appropriate FAA approved Rotorcraft Flight Manual when an Onboard Systems P/N 200-287-00 Cargo Hook Sling Suspension System is installed in accordance with Supplemental Type Certificate (STC) NO. SR01394SE. In addition, it is necessary to obtain Eurocopter's EXTERNAL LOAD TRANSPORT "CARGO SLING" Flight Manual Supplement for your particular AS350 model helicopter.

The information contained herein supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures and performance information not contained in this supplement, consult the basic Rotorcraft Flight Manual and Eurocopter's Flight Manual Supplement.

The 200-287-00 Cargo Hook Sling Suspension System is comprised of:

A gimbaled suspension with load cell that supports the cargo hook.

An electrical release system that provides means for release by pilot actuation of the push-button on the control console and a switch on the cyclic.

A manual release adapter cable, which interfaces with the existing fixed release cable and lever. This system provides an additional means of releasing a cargo hook load. The lever mounted to the collective stick actuates it.

A load weigh system, which is comprised of an indicator mounted to the RH door pillar within the cockpit and a load cell at the cargo hook.

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## I. LIMITATIONS

### I.1 Airspeed Limits

Consult the Eurocopter Flight Manual Supplement for airspeed limits for your particular AS350 model.



*Maximum operational air speed with external loads is dependent upon the load configuration and sling length. It is the operator's responsibility to establish the maximum operational speed for each specific configuration.*

### I.2 Type of Operation

The basic Flight Manual and "Cargo Sling" Flight Manual Supplement issued by Eurocopter remain applicable.

With a load attached to the cargo hook, operation shall be conducted in accordance with the respective national operational requirements. For U.S. operators FAR Part 133 is applicable. This cargo hook is approved for non-human cargo, class B rotorcraft load combinations only.

The helicopter may also be operated with the fixed provisions portion of the kit installed only. This includes the fixed manual and electric release cables and all Cargo Hook related equipment in the cockpit.



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**I.3 Weight and CG**

Consult the Eurocopter Flight Manual Supplement for your particular AS350 model for longitudinal c.g. limits when an external load is attached.

**I.4 Cargo Hook Load**

The lesser of that specified by the Eurocopter "Cargo Sling" Flight Manual Supplement for your particular AS350 model or 1660 lbs (750 kgs).

**I.5 Placards**

Consult the Eurocopter Flight Manual Supplement for your particular AS350 model for placarding information.

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## II. NORMAL PROCEDURES

### II.1 Daily or Pre-Flight Check

Before each cargo hook use perform the following procedures. If the procedures are not successful do not use the equipment until the problem has been corrected.

#### II.1.1 Exterior Check

1. Inspect all mounting fasteners to ensure that they are tight.
2. Inspect the electrical connectors and harness for damage.
3. Inspect the cargo hook and suspension linkage for cracks and damage.
4. Inspect the cargo hook load beam for gouges and cracks.
5. Inspect the mechanical release cable for damage and chafing.
6. Swing the cargo hook and the suspension assembly to their full extremes to verify that they do not reach the limit of the mechanical release cable range of motion and actuate the mechanical release mechanism. Verify that the electrical release harness and load cell harness are not strained in any possible cargo hook and load cell location.



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## II.1.2 Interior Check

1. Cycle the manual release mechanism to ensure proper operation. Pulling manual release lever should cause the cargo hook to open. The cargo hook may be returned to the locked position by manually pushing up on the load beam. The load beam should snap shut. The cargo hook may be flown in the open position to facilitate loading by a ground crew.
2. Cycle the electrical release mechanism to ensure proper operation. Pressing the CARGO RELEASE switch on cyclic should cause the cargo hook to open. The cargo hook may be returned to the locked position by manually pushing up on the load beam. The load beam should snap shut. The cargo hook may be flown in the open position to facilitate loading by a ground crew.
3. Power on the hook Load Indicator and allow it to warm up for 5 minutes (with no load on the hook). Press both Indicator buttons at the same time to go to the setup mode. Scroll through the menu until the symbol "0 in" is displayed, then press the right button. Remove any weight that is not to be zeroed out and press either button to complete the procedure.

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## II.2 Cargo Hook Rigging

Extreme care must be exercised in rigging a load to the Cargo Hook. The following illustration shows the recommended rigging configuration.



*The example shown is not intended to represent all possibilities. It is the responsibility of the operator to assure the hook will function properly with the rigging. Some combinations of small primary rings and large secondary rings could cause fouling during release.*

## Nylon Type Straps or Rope

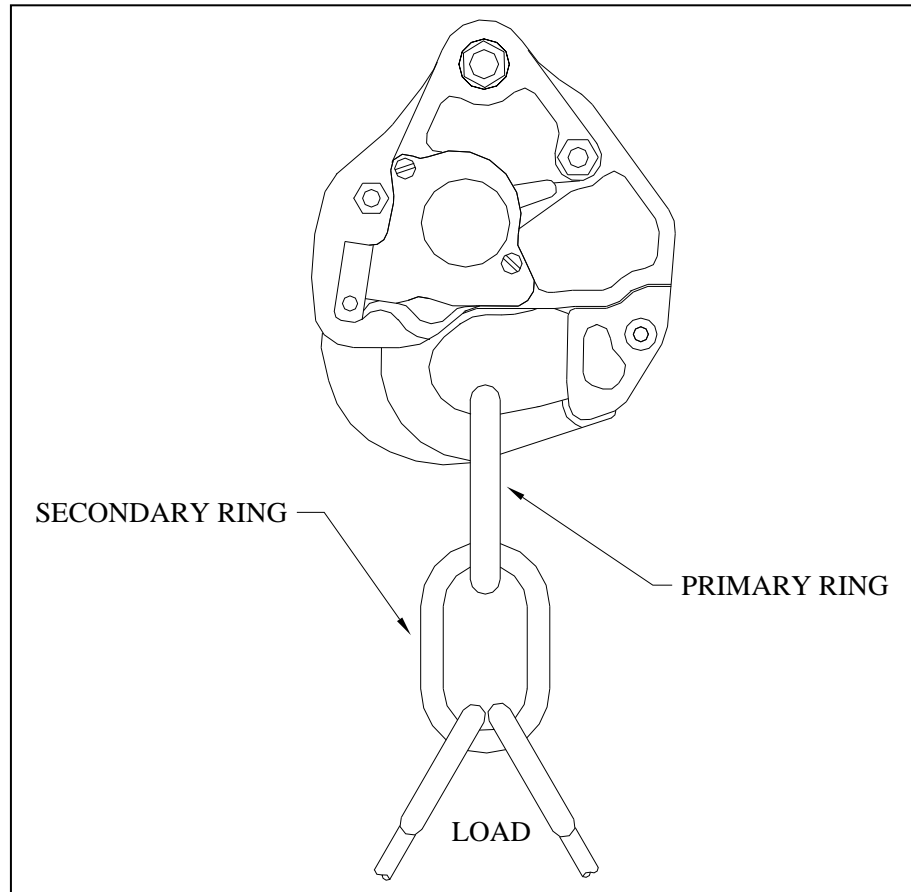


*Nylon type straps (or similar material) or rope must not be used directly on the cargo hook load beam. If nylon straps or rope must be used they should be first attached to a steel primary ring. Verify that the ring will freely slide off the load beam when it is opened. Only the primary ring should be in contact with the cargo hook load beam. See Figure 1.*

## II.3 In Flight

Consult the Eurocopter “Cargo Sling” Flight Manual Supplement for your particular AS350 model for normal in flight procedures.

Figure 1 Cargo Hook Rigging



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### III. EMERGENCY PROCEDURES

#### III.1 Cargo Hook Fails to Release Electrically

In the event that the Cargo Hook will not release the external load electrically, proceed as follows:

1. Pull the mechanical release lever to release the external load.

### IV. PERFORMANCE

The basic Flight Manual and “Cargo Sling” Flight Manual Supplement issued by Eurocopter remain applicable when there is no external load attached.

When there is an external load, performance will be reduced depending on its size, weight and shape.

The Load Weigh System is designed and installed as a means of MONITORING the load (weight) suspended from the Cargo Hook. Functional and performance characteristics have not been determined on the basis of Load Cell indication or display. Therefore, this instrument shall NOT be used as a primary indication of performance and flight operation must NOT be predicated on its use



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