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FAA APPROVED

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT

Onboard Systems
External Load Swing Suspension System
With Keeperless Cargo Hook

Eurocopter Helicopter Models
AS355E, AS355F, AS355F1,
AS355F2, AS355N, and AS355NP

R/N _____ S/N _____

FAA Approved: _____
for Manager, Seattle Aircraft Certification Office

Date:

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INTRODUCTION

This supplement must be attached to the appropriate FAA approved Eurocopter Rotorcraft Flight Manual when an Onboard Systems 200-292-01 Cargo Hook Swing Suspension is installed in accordance with Supplemental Type Certificate (STC) NO. SR01424SE. In addition it is necessary to obtain Eurocopter's EXTERNAL LOAD TRANSPORT "CARGO SWING" Flight Manual Supplement for your particular AS355 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 "Cargo Swing" Flight Manual Supplement issued by Eurocopter.

The 200-292-01 Cargo Hook Swing Suspension System is comprised of:

- A suspended pyramid frame that supports the cargo hook and is designed to reduce swinging of the load.
- 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 system, which provides an additional means of releasing a cargo hook load. It is actuated by a lever mounted to the collective.
- A load weigh system, which is comprised of an indicator mounted within the cockpit and a load cell at the cargo hook.

I. LIMITATIONS

I.1 Airspeed Limits

Consult the Eurocopter Flight Manual Supplement for your particular AS355 model for airspeed limits when an external load is attached.

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 Swing" 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 rotorcraft may also be operated with the suspension removed and the fixed provisions portion of the kit installed only. The fixed provisions include fittings at the rotorcraft hard points, fixed manual and electric release cables, and all cargo hook related equipment in the cockpit.

I.3 Weight and CG

Consult the Eurocopter Flight Manual Supplement for your particular AS355 model for longitudinal cg limits when an external load is attached.

I.4 Cargo Hook Load

The Cargo Hook Swing Suspension System is rated for 2500 lbs (1134 kg).

Consult the Eurocopter Flight Manual Supplement for your particular AS355 model for external load limitations.

I.5 Placards

Consult the Eurocopter Flight Manual Supplement for your particular AS355 model for placard information.

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. Visually check all mounting fasteners to ensure that they are tight.
2. Visually check the electrical connectors for damage and security.
3. Visually check the cargo hook case and covers for cracks and damage.
4. Visually check the cargo hook load beam for gouges and cracks.
5. Visually check the suspension cables for damage and fraying.
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 cargo hook mechanical release mechanism.
7. Visually check for cracks in suspension frame. The frame tubes contain a corrosion preventative compound, which may leak out through a crack and also provide an indication.

II.1.2 Interior Check

1. Cycle the manual release mechanism to ensure proper operation. Pulling manual release handle will cause hook to open. Hook may be returned to the locked position by manually pushing up on the load beam. The hook should snap shut. The 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 CARGO RELEASE switch on cyclic will cause hook to open. Hook may be returned to the locked position by manually pushing up on the load beam. The hook should snap shut. The 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.

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.

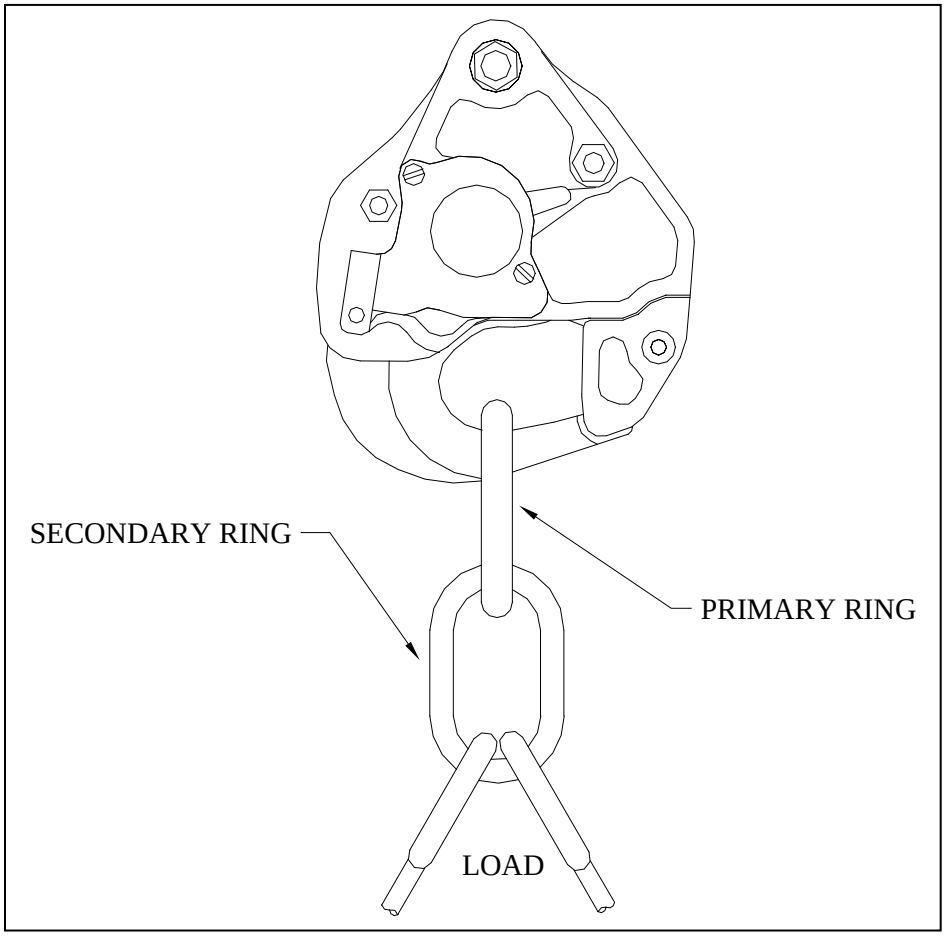
Nylon Type Straps or Rope

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 Flight Manual Supplement for your particular AS355 model for normal in flight procedures.

Figure 1. Example of Recommended Cargo Hook Rigging



III. EMERGENCY PROCEDURES

Consult the Eurocopter Flight Manual Supplement for your particular AS355 model for 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 Swing" 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.