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**FAA APPROVED**

**ROTORCRAFT FLIGHT MANUAL  
SUPPLEMENT**

***Eurocopter Model EC120B***

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

FAA Approved: John Rippe  
for Manager, Seattle Aircraft Certification Office  
Date: 16 Nov 09  
Revised:



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## 1. INTRODUCTION

This supplement must be attached to the appropriate FAA approved Eurocopter Rotorcraft Flight Manual when an Onboard Systems 200-351-00 Cargo Hook Kit is installed in accordance with Supplemental Type Certificate (STC) No. SR02028SE. 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 Rotorcraft Flight Manual Supplement – External Load Transport “Cargo Sling”.

The cargo hook kit, in combination with the rotorcraft's existing cargo hook provisions, provides a means for transporting external loads. The installation includes the cargo hook and an external manual release cable to interface with the rotorcraft's internal manual release system. The cargo hook kit also includes an electrical connector that allows it to interface with the rotorcraft's existing cargo hook electrical release system.

## 2. LIMITATIONS

The basic Flight Manual and Eurocopter Flight Manual Supplement – External Load Transport “Cargo Sling” remain applicable.

The cargo hook is approved for non-human external cargo only.

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.



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**2. LIMITATIONS** continued

**Weight Limitation**

The Cargo Hook is rated for 3600 lbs (1632 kgs).

Consult the Eurocopter Flight Manual Supplement - External Load Transport “Cargo Sling” for rotorcraft external load limitations.

**Longitudinal CG Limits**

Consult the Eurocopter Flight Manual Supplement - External Load Transport “Cargo Sling” for longitudinal cg limits when an external load is attached.

**Airspeed Limits**

Consult the Eurocopter Flight Manual Supplement – External Load Transport 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 responsibility of the operator to establish the maximum operational speed for each specific configuration.

**Placards**

Consult the Eurocopter Flight Manual Supplement - External Load Transport “Cargo Sling” for placard information.

**3. EMERGENCY PROCEDURES**

Consult the Eurocopter Flight Manual Supplement for your particular rotorcraft model for emergency procedures.



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#### 4. NORMAL PROCEDURES

The normal procedures specified in the basic Flight Manual and in the Flight Manual Supplement - External Load Transport “Cargo Sling” remain applicable and are completed or modified by the following.

Before each Cargo Hook use perform the following.

1. Visually check all cargo hook fasteners to ensure that they are secure.
2. Visually check the cargo hook electrical connector for damage and security.
3. Visually check the cargo hook case for cracks and damage.
4. Visually check the cargo hook load beam for gouges and cracks.
5. Visually check the manual release cable for damage and security.
6. Cycle the cargo hook’s electrical release mechanism to ensure proper operation. Pressing the CARGO RELEASE switch on cyclic should cause the cargo hook load beam 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.

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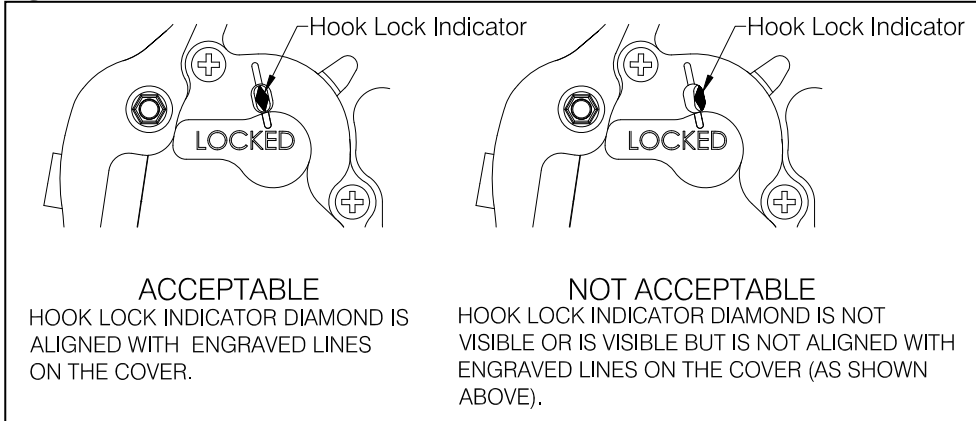
**4. NORMAL PROCEDURES** continued

7. Cycle the manual release mechanism to ensure proper operation. Pull the manual release lever in the cockpit. The cargo hook load beam must open. Return the cargo hook load beam to the locked position by manually pushing up on it. The load beam should snap shut. Verify that the hook lock indicator on the side of the hook returns to the fully locked position.



*In the closed and fully locked position the hook lock indicator must align with the lines on the manual release cover (see Figure 1).*

**Figure 1 Hook Lock Indicator**



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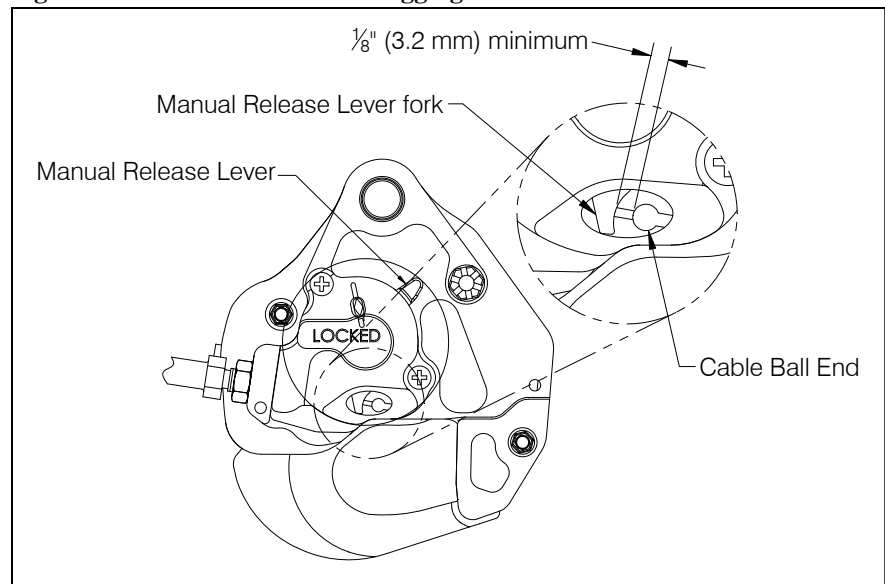
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**4. NORMAL PROCEDURES** continued

8. Check the manual release cable rigging through the window in the cargo hook manual release cover. With the cargo hook closed and locked, rotate the manual release lever clockwise to remove the free play (the free play is taken up when the hook lock indicator begins to move, this is also readily felt as the lever rotates relatively easily for several degrees as the free play is taken up) and hold it in this position while checking the gap between the release lever fork and the cable ball end as shown below. Visually check that there is approximately a minimum gap of 1/8" (3.2 mm) as shown in Figure 2.

**Figure 2 Manual Release Cable Rigging**



4. **NORMAL PROCEDURES** continued

**Cargo Hook Rigging**

Extreme care must be exercised in rigging a load to the Cargo Hook. Figure 3 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 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.*



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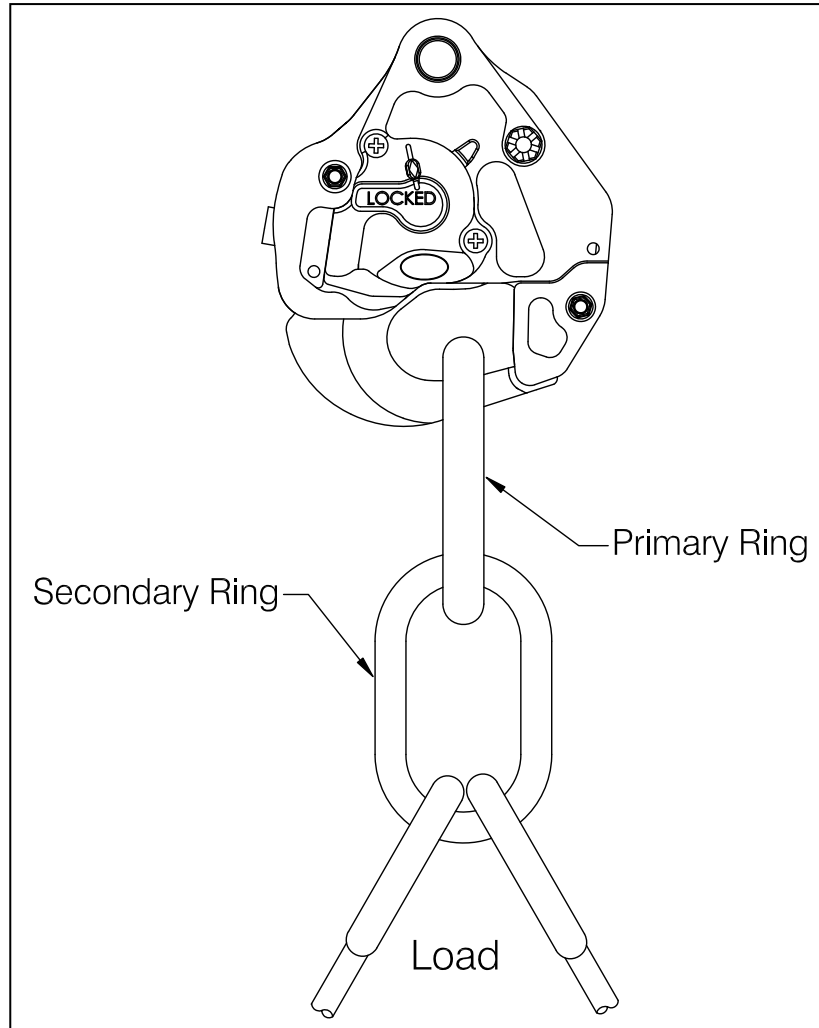
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#### 4. NORMAL PROCEDURES continued

Figure 3 Example of Recommended Cargo Hook Rigging



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## 5. PERFORMANCE

The basic Flight Manual and Flight Manual Supplement - External Load Transport “Cargo Sling” issued by Eurocopter remain applicable.



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