



# THE ENSTROM HELICOPTER CORPORATION

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## SERVICE INFORMATION LETTER

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SERVICE INFORMATION LETTER NO. T-045

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DATE: March 29, 2011

1. SUBJECT: Supplemental Information for Restraining Cargo in the Cabin
2. MODEL: 480 and 480B Helicopters
3. EFFECTIVITY: All
4. BACKGROUND:

The cabin of the Enstrom 480/480B aircraft can be configured to allow open space capable of containing large objects or cargo. The operator must remember that the cargo can become a hazard if it shifts in flight or during an emergency landing. The cargo must be properly restrained. This service information letter provides guidance on loading and restraining cargo in the cabin of the 480-series aircraft.

5. LOADING REQUIREMENTS:

- 5.1 The operator must remember the aircraft must remain within the CG envelope and at, or below maximum gross weight, as specified in Section 6 of the Rotorcraft Flight Manual.

### NOTE

**It is the responsibility of the pilot in command to calculate the weight and balance for the aircraft for each flight including legs within that flight where the loading of personnel or cargo changes. A check should be made to determine whether or not the CG will remain within limits for the entire flight as fuel is consumed.**

- 5.2 The cargo loading chart (Figure 6-9 of the Rotorcraft Flight Manual) provides moment/100 for varying weights at the designated fuselage stations.

- 5.3 The pilot should also be aware of asymmetrical cargo loadings and check the lateral moment prior to flight. The lateral arm can be determined by measuring from the aircraft centerline to the center of gravity of the item, using negative distances for items left of center and positive distances for items right of center. Moment is determined by multiplying the weight of the item by its lateral arm.

**CAUTION**

**Floor loading from the cargo must not exceed 400 psi.**

- 5.4 Floor loading from the cargo must not exceed the 400 psi allowable distributed load of the 480-series floor structure. Pads or other protective material should be used to distribute concentrated loads.

6. **RESTRAINING REQUIREMENTS:**

- 6.1 Features such as straps, nets, ropes, and other means of restraint may be used when necessary to prevent the hazardous shifting of cargo, especially in an emergency or during an abrupt maneuver.

- 6.2 Enstrom recommends using the Ancra International P/N 40340-20 Single Stud Track Fitting, or equivalent, to secure cargo straps, nets, ropes, etc. The Track Fitting is designed to fit in the seat track of the 480-series aircraft.

- 6.2.1 Enstrom recommends a minimum of four Track Fittings for cargo loads less than 500 pounds; and a minimum of six Track Fittings for cargo loads between 501-800 pounds.

**CAUTION**

**Cargo loads must not exceed 800 pounds.**

- 6.3 The Track Fittings should be equally spaced between at least two seat tracks; maintaining the CG and weight limits defined by the Rotorcraft Flight Manual.

7. **OPERATIONAL REQUIREMENTS:**

- 7.1 The pilot must ensure the cargo load is secured so it does not interfere with the flight controls.

- 7.2 The pilot must ensure there is an unobstructed view of the instrument console and adequate outside visibility when the cargo is installed in the cabin.