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NATO STANDARD

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LOCATION OF ELECTRICAL CONNECTORS FOR AIRCRAFT STORES

Edition A Version 1

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NORTH ATLANTIC TREATY ORGANIZATION

ALLIED ENGINEERING PUBLICATION

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6 February 2020

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CHAPTER 1 Introduction

1.1 REFERENCES

1.1.1 Related Documents

1. STANAG 3441 – Design of Aircraft Stores
2. STANAG 3576 – Electrical Connectors for Dispensers and Internal Intervalometer Type Rocket Launchers for Aircraft
3. STANAG 3837 – Aircraft Stores Electrical Interconnection System

1.2 PURPOSE

The purpose of this standard is to establish common locations for the electrical connections through which 1,000 lb (500 kg) and 2,000 lb (1,000 kg) class stores can be controlled.

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CHAPTER 2 Location of Electrical Connectors for Aircraft Stores—Specific Details

2.1 GENERAL

Aircraft stores in this context are stores other than missiles. The 1,000 lb (500 kg) class includes stores weighing from 101 to 1,450 lbs (45.81 to 657.72 kg). The 2,000 lb (1,000 kg) class includes stores weighing from 1,451 to 3,500 lbs (658.17 to 1587.60 kg).

2.2 LOCATION

The aircraft electrical connections shall be located as per Annex A.

2.2.1 Connector Height

The top surface of the STANAG 3837 connector shall be between 1.9 inches (48.3 mm) and 2.4 inches (61 mm) below the hook/lug reference line. (The hook/lug reference line is the line through the contact area where the front hook and front lug make contact, and the aft hook and aft lug make contact). If this cannot be met, and if store design permits connector repositioning in selected locations as far as 2.5 inches (63.5 mm) aft of the standard location, the height range may extend from 0 inches (0 mm) to 2.4 inches (61 mm) below the hook/lug reference line.

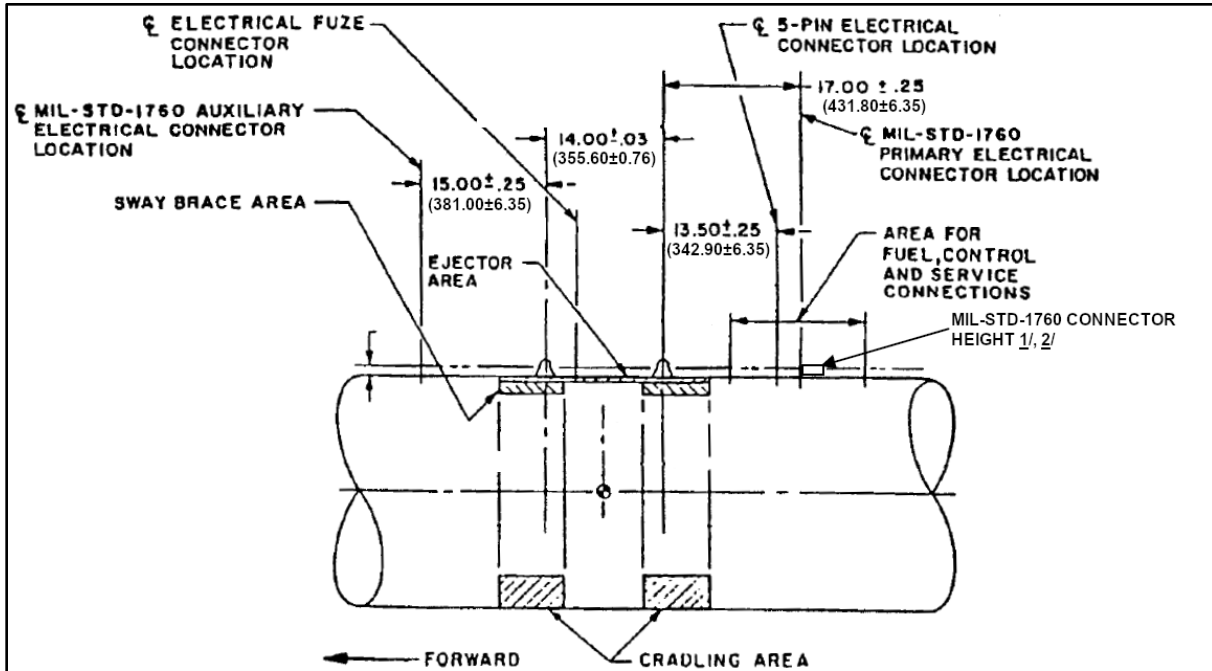
2.2.2 Connector Vertical Axis

The vertical axis of the STANAG 3837 connector shall be perpendicular to the hook/lug reference line within ± 2 degrees.

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ANNEX A LOCATION OF ELECTRICAL CONNECTORS FOR AIRCRAFT STORES

A.1 FOR 1000 LB CLASS STORES

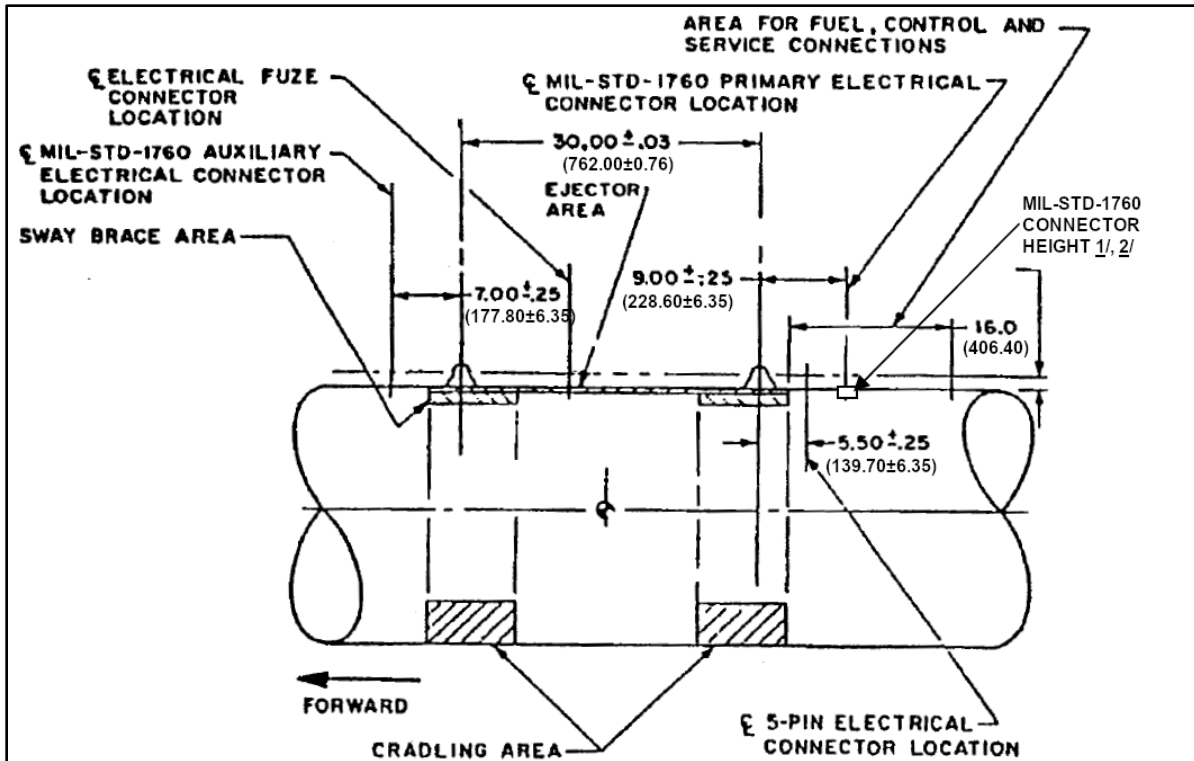


1. The top surface of the MIL-STD-1760 connector shall be between 1.9 inches and 2.4 inches below the hook/lug reference line. If this cannot be met, and if store design permits connector repositioning in selected locations as far as 2.5 inches aft of the standard location, the height range may extend from 0 inches to 2.4 inches below the hook/lug reference line.

2. The vertical axis of the MIL-STD-1760 connector shall be perpendicular to the hook/lug reference line within ± 2 degrees.

Note: Dimensions are in inches; metric units are in parentheses.

A.2 FOR 2000 LB CLASS STORES



1. The top surface of the MIL-STD-1760 connector shall be between 1.9 inches and 2.4 inches below the hook/lug reference line. If this cannot be met, and if store design permits connector repositioning in selected locations as far as 2.5 inches aft of the standard location, the height range may extend from 0 inches to 2.4 inches below the hook/lug reference line.

2. The vertical axis of the MIL-STD-1760 connector shall be perpendicular to the hook/lug reference line within ± 2 degrees.

Note: Dimensions are in inches; metric dimensions are in parentheses.

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