

**INCH-POUND**A-A-58036  
August 10, 1994

## COMMERCIAL ITEM DESCRIPTION

## STAIRCASE, AIRCRAFT BOARDING

The General Services Administration has authorized the use of this commercial item description as a replacement for Mil-S-26851, type MA-1, for all federal agencies.

1. SCOPE. This commercial item description covers one type of mobile, aircraft boarding staircase, designated type MA-1. The intended use of this staircase is for loading and unloading passengers onto and off from various types of military aircraft in various temperature extremes and conditions.

2. SALIENT CHARACTERISTICS. Failure of the aircraft boarding staircase to meet the following salient characteristics will require rejection of the offer. The aircraft boarding staircase shall be free from faulty construction or any defect which affects appearance, serviceability, and durability. The loaders shall be representative of the quality and workmanship found in aircraft boarding staircases offered for new commercial sale.

2.1 Design and construction: The staircase shall be designed and constructed so that no part will work loose in service. The staircase shall be constructed of lightweight, high strength-weight ratio material.

2.2 The staircase shall be adjustable to all heights above ground level within the range of 85 to 145 inches. The adjustment provision shall be such that the top platform will mate with aircraft loading doors at any height without forming a height variance of more than +3/8 inch between the aircraft doorsill and the top platform.

2.3 Air Transportability: The staircase shall be capable of being transported in a C-141 military transport aircraft, The requirements for this are contained in MIL-STD-1791.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be addressed to SA-ALC/TILDD with copy to SA-ALC/LDEE Kelly AFB, TX 78241-7280, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 1730

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2.4 Mobility: The staircase shall have a high degree of mobility over rough concrete and smooth sod with emphasis on ease of manual positioning about the aircraft. The staircase shall be capable of being towed at a maximum of 15 MPH.

2.5 Running Gear Design: The staircase shall have four pneumatic-tired casters conforming to MIL-C-4751. Two MS24373-8WSC swivel casters shall be provided at the aircraft end of the staircase. Two rigid casters shall be provided at the front of the staircase. Swivel locks shall be provided.

2.6 Towbar: A towbar shall be provided. It shall be designed to permit rapid attachment and detachment and shall swivel in the vertical plane. Towbar attachment fittings shall be located at the rear, or aircraft end, of the staircase. Adequate means shall be provided for stowing the towbar in a suitable location on the staircase frame.

2.7 Performance: The staircase shall be capable of withstanding a temperature range from -65 degrees to +160 degrees F. Withstand wind velocities up to 60 MPH from any direction.

2.8 Lift: The staircase shall be provided with a lift mechanism that shall be operated manually through mechanical or hydraulic means from ground level by means of a hand-operated crank or lever. A device shall be provided to automatically lock the staircase in any ascent or descent position attained by the lift mechanism.

2.9 Electrical System: The staircase shall feature a 24-volt power system provided by batteries connected in series. The batteries shall be housed in an enclosed box in a convenient and protected location and fitted with a quick-release cover to facilitate ease of inspection and servicing.

2.10 Lighting System: The staircase shall be equipped with amber-colored clearance lights located at the upper platform and ground end. The clearance lights shall permit visibility from any position around the staircase. The steps shall be illuminated to a sufficient degree that every step and the platform will be clearly visible at night to personnel ascending and descending the staircase. The step lights shall be recessed flush with the side of the staircase and shall illuminate the entire step and platform areas,

2.11 Steps and Top platform: Each step shall be 36 inches wide with a 12 inch tread and an 8 inch rise. The step treads shall not deviate more than 1-1/2 degrees from the horizontal plane in any position. The step treads shall be coated with nonslip material equivalent to standard commercial offering. The top step shall be made in the form of a platform and a suitable bumper included to prevent damage to the aircraft. The width of the platform shall conform to the width of the steps and shall be 60 inches in length.

2.12 Finish: All exterior surfaces shall be painted using offeror's standard commercial paint system. Finish color shall be 24052 as per FED-STD-595.

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**2.13 Immobilizing Jacks:** The staircase shall be provided with four immobilizing jacks, one at each corner of the base, to hold the staircase rigid during all loading and unloading operations. The jacks shall be capable of supporting the fully elevated staircase with a static load of 500 lbs placed upon the top platform. The jacks shall be provided with a retracting mechanism so designed that manual release of the ground jack pressure will cause the jack to fully retract without further attention of the operator.

**2.14 Handrails:** The staircase shall be provided with handrails on each side extending from the base of the stairs to the aircraft end of the top platform. The handrails shall maintain a constant height of 35 inches above the steps and top platform at all heights within the operating range of the staircase.

### **3. REGULATORY REQUIREMENTS.**

**3.1 Reclaimed Material:** The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR). Used, rebuilt, or remanufactured components shall not be incorporated in the vehicle.

### **4. QUALITY ASSURANCE PROVISIONS.**

**4.1 Contractor Certification:** The contractor shall certify that the product offered meets the salient characteristics of this Commercial Item Description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices, and is the same product offered for sale in the commercial marketplace. The government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

**4.2 Market Acceptability:** Offerors shall provide, as part of their proposals, the following information on the vehicle (or its earlier models) being offered as a commercial item.

4.2.1 Total sales to the Government of to contractors for the U. S. Government use during the three years immediately preceding the issuance date of the solicitation.

4.2.2 Total sales of the item to the general public during the three years immediately preceding the issuance date of the solicitation.

4.2.3 Length of time product has been sold in the commercial marketplace.

4.2.4 Points of contact and phone numbers of customers to which the item has been sold in the commercial marketplace.

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5. PACKAGING Unless otherwise provided in the contract, the vehicle shall be packaged in accordance with the contractor's commercial practice and packed to assure acceptance by common carrier and provide product protection against loss and damage while in transit.

6. NOTES

6.1 Other Documents:

a. Uniform Freight Classification Rules: Application for copies of the above publication should be addressed to the Consolidated Classification Committee, Tarif Publication Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.

MILITARY INTERESTS:

CUSTODIAN:  
AIR FORCE-99

PREPARING ACTIVITY:  
AIR FORCE-82

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AIR FORCE 99

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