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SOCIETY OF AUTOMOTIVE ENGINEERS, INC.
485 LEXINGTON AVENUE
NEW YORK 17, N.Y.

CANCELLED

AEROSPACE RECOMMENDED PRACTICE

ARP 835

MINIMUM REQUIREMENTS FOR PALLET DOLLY

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Revised

1. PURPOSE - It is the purpose of this recommended practice to specify minimum requirements for handling of air cargo pallets by nonmotorized dollies, between a fixed ground level cargo assembly facility and an airplane, or between aircraft of similar types.
2. SCOPE - This recommended practice covers a nonmotorized towed dolly that could be used in the buildup and transport of loaded air cargo pallets.
3. GENERAL REQUIREMENTS
 - 3.1 Materials
 - 3.1.1 All materials and components assembled and fabricated into the equipment are to be new and unused, of first-grade quality, of current production, and free from all defects and imperfections which might affect the serviceability or appearance of the finished product.
 - 3.1.2 Materials shall be selected which experience and/or test have demonstrated to be suitable and dependable for use on nonmotorized aircraft ground handling equipment.
 - 3.1.3 Materials selected shall be corrosion-resistant or protected by plating or other surface treatment.
 - 3.2 Workmanship
 - 3.2.1 High standards of workmanship and methods of fabrication shall be basic requirements.
 - 3.2.2 All components, assemblies, and subassemblies incorporated into the equipment shall be designed and manufactured to reasonable dimensional tolerances which will permit future interchangeability between parts.
 - 3.3 Codes - The design, manufacturing processes, and use of materials shall conform to established city, state, and national codes and industry standards.
 - 3.4 Safety
 - 3.4.1 All personnel platforms and walkways shall have a high-traction, open surface.
 - 3.4.2 SAE J594-class "A" reflectors, if required, are to be provided on all four sides for nighttime identification.
 - 3.4.3 Handrails, if required, shall be provided along all walkways which are located adjacent to the side of the dolly.

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3.5 Environment - The dollies shall be designed and constructed of materials which will provide for maximum serviceability under environmental conditions intended. Consideration shall be given to ambient temperature variations, rain and freezing precipitation, dust, salt sea air and reasonable variations in atmospheric pressure. Typical temperature values recommended are -40 to +135 F.

3.6 Mobility

3.6.1 The dolly shall be capable of being towed in train at a speed of 15 mph, accelerated at a rate of 5 ft/sec/sec and decelerated at the rate of 20 ft/sec/sec.

3.6.2 The dolly, while on a flat ramp, when loaded to its normal operating weight, shall have a minimum of 6 in. under clearance from any portion of the equipment to the ground.

3.6.3 The dolly, while negotiating two ramps with a 15-deg difference in ramp angle, and loaded to its normal operating weight, shall have a minimum of 5 in. clearance from any portion of the equipment to the ground.

3.6.4 The dolly should be maneuverable under ice and snow conditions and the wheels have free rotating capabilities in ice and snow conditions.

3.7 Mechanical

3.7.1 Except where city, state, or national codes apply, the stresses to be used in design of equipment structure shall be no more than one-third of the yield stress of the material or one-fourth of the ultimate stress if the yield stress is not applicable to the type of material.

3.7.2 Loads to be used in the design of equipment structure shall be based on the sum of the tare weight plus the weight of the load.

3.8 Maintenance

3.8.1 The design shall also permit assembly, disassembly and maintenance with general-purpose tools and equipment normally commercially available.

3.8.2 All small loose parts, such as pins, locks and access plates which might easily be lost, shall be attached to the equipment with cable or chain.

3.8.3 Means shall be provided for lubricating all mechanical equipment in accordance with accepted good practice.

3.9 Controls

3.9.1 Controls shall be grouped and located so as to be convenient to the operator from his normal operating station which is adjacent to the front hitch.