



AEROSPACE INFORMATION REPORT

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Superseding AIR1375C

Minimum Safety Requirements for Special Purpose Airline Ground Support Equipment

RATIONALE

Despite several attempts to revise this document it has not been possible to do it as the resources and the needed expertise were not available in the AGE-2C committee. Intent of the committee for a future revision would be to make a major update and harmonisation with EN 1915-1 and ISO 6966-2 standards. Therefore, until the time comes when such revision can be done, the document is put in the "Stabilized" category.

STABILIZED NOTICE

This document has been declared "Stabilized" by the SAE AGE-2C Vehicle Maintenance and Aircraft Servicing Committee. This document should be considered as non-current and used for historic purposes only. Until a document revision is done, the reader is advised to use current references like: EN 1915-1 and ISO 6966-2.

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Documents

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1. SCOPE:

This document applies to special purpose equipment which is used in the ground handling, servicing, and maintenance of transport aircraft. Fixed airport facilities and equipment covered under other sections of Part 1910 of Code of Federal Regulations (OSHA) are excluded from the scope of this document.

1.1 Purpose:

This document identifies minimum safety requirements for special purpose aircraft ground equipment. It is intended to be used as a resource for determination of design requirements for this type of equipment.

2. APPLICABLE DOCUMENTS:

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

ARP1247	General Requirements for Aerospace Ground Support Equipment Motorized and Nonmotorized
ARP1328	Aircraft Ground Support Equipment Vehicle Stability Analysis
AIR1558	Interface Protective Devices - Ground Equipment to Aircraft
ARP1838	Pictograms for Ground Support Equipment
J377	Performance of Vehicle Traffic Horns, Standard

2.2 ANSI Publications:

Available from ANSI, 11 West 42nd Street, New York, NY 10038-8002.

ANSI A92.7	Safety Requirements for Airline Ground Support Vehicle - Mounted Vertical Lift Devices
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2.3 ISO Publications:

Available from International Organization for Standardization, Case Postale 56, CH-1211 Geneve 20, Switzerland.

ISO 6966 Aircraft - Basic Requirements for Aircraft Loading Equipment
ISO 11995 Aircraft - Stability Requirement for Loading and Servicing Equipment

2.4 IATA Publications:

Available from Publications Assistant, International Air Transport Association, 2000 Peel Street, Montreal, Quebec, Canada H3A 2R4.

Airport Handling Manual
AHM 913 Basic Safety Requirements for Aircraft Ground Support Equipment

2.5 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

Code of Federal Regulations, Title 49, Part 571 - Federal Motor Vehicle Safety Standards (FMVSS)

Code of Federal Regulations, Title 29, Part 1910 - Occupational Safety and Health Administration (OSHA)

3. DEFINITIONS:

- 3.1 BOOTED FOOT is the foot of an operator sheathed appropriately for protection of the operator from normal job hazards and environmental weather conditions.
- 3.2 DEADMAN is a control design such that continuous, deliberate pressure on the control is necessary for activation and continuous operation, and such that relief of that pressure will cause control deactivation.
- 3.3 ELEVATED WORKING SURFACE is any platform or area, 4 ft or more above the next lowest working surface, on or in which an employee may be located in the performance of his/her working duties.
- 3.4 EQUIPMENT is any and all units, not an aircraft element, but mobile or semi-mobile, motorized or portable; intended or used as a means of providing access to aircraft; intended or used as an aid to an aircraft ground support activity, at or in the vicinity of an aircraft.
- 3.5 FMVSS refers to the Federal Motor Vehicle Safety Standard.

- 3.6 FUNCTIONAL means capable of servicing the purpose for which it was designed.
- 3.7 GLOVED HAND is the hand of an operator sheathed appropriately for dexterity and protection of the hand from normal job hazards and environmental weather conditions.
- 3.8 GUARDRAIL is a barrier erected along exposed edges of elevated work surface to prevent falls of persons.
- 3.9 HANDRAIL is a member supported on a stairway or ramp, to furnish persons with a handhold.
- 3.10 HIGHWAY USAGE is the operation of equipment on a public street or road such that state motor vehicles licensing of the vehicle is required.
- 3.11 HYDROSTATIC DRIVE means a vehicle has a hydrostatic transmission as opposed to a drive shaft and differential and where the oil is pumped from the hydraulic pump on the engine or electric motor directly to the hydraulic motor on the driven axle or wheels. The oil returns directly to the pump instead of going through a reservoir.
- 3.12 OPERATIONAL means the ability to perform intended function.
- 3.13 RISE is the vertical distance from the top of one tread to the top of the next higher tread.
- 3.14 RUNG is a ladder cross-member for use as a horizontal foot/hand hold.
- 3.15 SHALL is a term used to stress maximum advisability, and to qualify a provision as the minimum acceptable.
- 3.16 SHOULD is a term qualifying a provision as advisable but not critical.
- 3.17 STABILITY means the ability of remaining in the designed position and attitude.
- 3.18 STEP is a horizontal flat surface member of a stair, ladder, or a single foothold between two levels, capable of accepting a working load.
- 3.19 STEP WIDTH is the distance between the handrails of a stair or ladder, inside to inside.
- 3.20 TOE BOARD is a vertical barrier erected along exposed edges of elevated work surfaces to prevent materials from falling.
- 3.21 TREAD DEPTH is the horizontal distance from front tread facing edge to the riser or rear edge of the tread.
- 3.22 UNIT is any piece of equipment; or a coupled equipment set.
- 3.23 VEHICLE is any piece of mobile equipment which is self-propelled and capable of carrying the operator.