American National Standard

for

Airline Ground Support Vehicle-Mounted Vertical Lift Devices

ANSI American National Standards Institute
11 West 42nd Street
New York, New York
10036

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The design and manufacturing requirements of this standard apply to all aerial platforms manufactured on or after the effective date. All other provisions of this standard apply to both new and existing units delivered by sale, lease, rental or for any form of beneficial use on or after the effective date.

The effective date is established by the standards developer and not by the American National Standards Institute.

This standard was developed under procedures accredited as meeting the criteria for American National Standards. The Consensus Committee that approved the standard was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed standard was made available for public review and comment which provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

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ANSI/SIA
A92.7-1990 (R 1998)
Revision of
ANSI A92.7-1981

American National Standard for Airline Ground Support Vehicle-Mounted Vertical Lift Devices

Secretariat

Scaffold Industry Association, Inc.

Approved February 8, 1990

American National Standards Institute, Inc

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Foreword

(This Foreword is not part of American National Standard for Airline Ground Support Vehicle-Mounted Vertical Lift Devices, ANSI/SIA A92.7-1990.)

This standard is one of a series on aerial platforms developed under the committee procedures of the American National Standards Institute. The A92 standards committee was organized by the Institute in 1948. The Scaffold Industry Association serves as Secretariat.

The primary objective of this standard is to prevent accidents associated with the use of airline ground support vehicle-mounted lift devices by establishing requirements for design, manufacture, maintenance, performance, use and training.

This revision to A92.7-1981 standard separately addresses each entity to clearly define responsibilities. Care was taken to provide consistency between this and other A92 standards. Definitions have been expanded to clarify interpretation.

The rapid development of a wide variety of vehicle-mounted vertical lift device designs necessitates the establishment of standards for their design, manufacture, maintenance, training, performance, and use.

Vehicle-mounted vertical lift devices for airline ground support are intended for use in the airline industry. They are vehicle-mounted scissor lifts designed for stability and load factors (including the need to withstand the wind and jet blast pressures experienced on airport ramps). Specific engineering constraints associated with hydraulic scissor lift vehicles and flexibility are required in the design of device-to-aircraft interfaces.

The operation of any vehicle-mounted vertical lift device is subject to certain hazards that can be protected against only by exercising intelligence, care, and common sense and not by mechanical means only. It is essential to have competent, careful operators trained in the safe operation of this type of equipment.

Interpretations and Suggestions for Improvement

All inquiries requesting interpretation of the Committee's approved American National Standards must be in writing and directed to the Secretariat. The A92 Committee shall approve the interpretation before submission to the inquirer. (No one but the A92 Committee is authorized to provide any interpretation of this standard.)

The A92 Committee solicits comments on and criticism of the requirements of the standards. The standards will be revised from time to time where necessary or desirable, as demonstrated by the experience gained from the application of the standards. Proposals for improvement of this standard will be welcome. Proposals should be as specific as possible: citing the paragraph number(s), the proposed wording, and a detailed rationale for the proposal including any pertinent documentation.

All requests for interpretation and all suggestions for improvement should be sent to the A92 Committee, Scaffold Industry Association. 20335 Ventura Blvd., Suite 310, Woodland Hills. CA 91364-2471.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee Aerial Platforms, A92. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Aerial Platforms Committee had the following members.

Gary W. Larson, Chairman
David Merrifield, Vice-Chairman
Donald Reichert, Secretary

Organization Represented	*Name of Representative*
Aggregate Equipment & Supply	Byron G. Adkins
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USDOL/OSHA	Roy Gurnham
	Pat Cattafesta (Alt)
Waco Boom Company	Bob Simon

Subcommittee A92.7 on Airline Ground Support Vehicle-Mounted Vertical Lift Devices, which developed this standard, had the following members:
H.B. Hayden, Jr., Chairman (1984-1987)
Ed Sprang, Chairman (1987-1990)

Pat Cattafesta
Jim DeWitt
William P. Fulton
Roy Gurnham
Warren C. Leonard

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American National Standard for Airline Ground Support Vehicle-Mounted Vertical Lift Devices

1. Scope and Purpose

1.1 Scope. This standard applies to the design, construction, testing, inspection, maintenance, and use of airline ground support vehicle-mounted lift devices, the vehicles of which cannot be driven from the work platform when the platform is in an elevated position.

1.1.1 Equipment Covered. Typical examples are shown in Figure 1 through 5. (Pages 14 through 18)

1.1.2 Equipment Not Covered. This standard does not apply to the equipment listed below:

(1) Ladder and ladder stands such as those covered in American National Standards for Ladder and Ladder Stands, ANSI A 14 series

(2) Scaffolding such as those covered in American National Standard for Construction and Demolition Operations – Scaffolding – Safety Requirements, ANSI A10.8-1988

(3) Vehicle-mounted elevating and rotating aerial platforms such as those covered in American National Standard for Vehicle-Mounted Elevating and Rotating Aerial Devices, ANSI/SIA A92.2-1990

(4) Non-self-propelled elevating aerial platforms such as those covered in American National Standard for Manually-Propelled Elevating Aerial Platforms, ANSI/SIA A92.3-1990

(5) Self-propelled, drivable work platforms wherein the platform is supported by an elevating means that both elevates and rotates relative to the machine base such as those covered in American National Standard Boom-Supported Elevating Work Platforms, ANSI A92.5-1980

(6) Self-propelled vertically adjustable work platforms that are used to position personnel and their tools and necessary materials at overhead work locations such as those covered in American National Standard Self-Propelled Elevating Work Platforms, ANSI/SIA A92.6-1990

(7) Vehicle-Mounted Bridge Inspection and Maintenance Devices, ANSI/SIA A92.8[1]

(8) Mast Climbing Work Platforms, ANSI/SIA A92.9[2]

(9) Suspended powered platforms for exterior building maintenance, ANSI A120.1-1970[3]

(10) Vertically adjustable platforms used primarily to raise and lower materials or materials-handling equipment, or both, with their operating personnel, in order to transfer such materials between varying elevations

(11) Fire-fighting equipment such as that covered in American National Standard for Automotive Fire Apparatus, ANSI/NFPA 1901-1985

(12) Construction and demolition operation/digger derricks such as those covered in American National Standard for Construction and Demolition – Safety Requirements, Definitions and Specifications, ANSI A10.31-1987

1.2 Purpose. This standard is intended to serve as a guide for manufacturers, dealers, and users of vertical lift devices for airline support to achieve the following objectives:

(1) Prevention of personal injuries or accidents

(2) Uniformity in rating

(3) Establishment of standards for design and manufacture

(4) Establishment of performance criteria

(5) Establishment of standards for testing and inspection

(6) Understanding by manufacturers, dealers, installers, operators and users of their respective responsibilities

2. Referenced and Related American National Standards

2.1 Referenced American National Standards. This standard is intended to be used in conjunction with the following American National Standards. When these referenced standards are superseded by a revision approved by the American National Standards Institute, the revision shall apply:

ANSI/ASME B15.1-1984, Mechanical Power Transmission Apparatus
ANSI/AWS D1.1-90, Structural Welding Code – Steel

[1] At the time of publication of this standard, ANSI/SIA A92.8 was under development. Contact the Secretariat for more recent information.

[2] At the time of publication of this standard, ANSI/SIA A92.9 was under development. Contact the Secretariat for more recent, information.

[3] At the time of publication of this standard, ANSI A120.1 was scheduled to be revised and redesignated. Contact the Secretariat for more recent information.