

ANSI/SAIA A92.7 – 2014

AMERICAN NATIONAL STANDARD

for

**Airline Ground Support
Vehicle-Mounted Vertical Lift
Devices**



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

Date of Publication: March 26, 2014

This Standard will become effective: September 26, 2014

This Standard was approved by the American National Standards Institute on March 4, 2014

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.

The Scaffold & Access Industry Association, Inc. (SAIA) does not “approve,” “rate,” or “endorse” any item, construction, proprietary device or activity.

The Scaffold & Access Industry Association, Inc. (SAIA) does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document, and does not undertake to ensure anyone utilizing a standard against liability for infringement of any applicable Letters Patent, nor assume any such liability. Users of this standard are expressly advised that the determination of the validity of any such patent rights, and the risk of the infringement of such rights, is entirely their own responsibility.

Participation by federal agency representative(s) or person(s) affiliated within the industry is not to be interpreted as government or industry endorsement of this standard.

The Scaffold & Access Industry Association, Inc. (SAIA) accepts responsibility for only those interpretations issued in accordance with governing ANSI Essential Requirements which preclude the issuance of interpretations by individual volunteers.

ANSI/SAIA
A92.7-2014

AMERICAN NATIONAL STANDARD
for Airline Ground Support Vehicle-Mounted
Vertical Lift Devices

PREVIEW ONLY

Secretariat
Scaffold & Access Industry Association, Inc.

Approved March 4, 2014
American National Standards Institute, Inc.

AMERICAN NATIONAL STANDARD

Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standard or not, from manufacturing, marketing, purchasing, or using products, or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This American National Standard may be revised or withdrawn any time. The procedures of the American National Standards Institute require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of approval. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Published by
Scaffold & Access Industry Association, Inc.
400 Admiral Boulevard
Kansas City, MO 64106
www.saiaonline.org

Copyright ©2014
Scaffold & Access Industry Association, Inc.
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

Printed in the United States of America

FOREWORD

This foreword is not part of American National Standard for Airline Ground Support Vehicle-Mounted Vertical Lift Devices, ANSI/SAIA A9.7-2014.

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 & Access Industry Association, Inc. serves as Secretariat.

The primary objective of this standard is to prevent accidents associated with the use of Airline Ground Support Vehicle-Mounted Vertical Lift Devices by establishing requirements for design manufacture, installation, maintenance, performance, use and training.

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 shall be forwarded in writing to the ASC A92 Committee, c/o Secretariat ~ Scaffold & Access Industry Association, 400 Admiral Boulevard, Kansas City, MO 64106

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

Dave Merrifield, Chairman
Frank Bonesteel, Vice-Chairman

<i>Alimak Hek</i>	<i>Gregory Janda</i>
<i>Altec HiLine LLC</i>	<i>Eric Lumberg</i>
<i>Altec Industries, Inc.</i>	<i>Bryan Hall</i>
<i>American Rental Association</i>	<i>Carla Brozick</i>
<i>Arrowhead Aerial Products, Inc.</i>	<i>Sharon McCarty</i>
<i>Arrowhead Product Development, Inc.</i>	<i>Gary Werkhoven</i>
<i>Association of Equipment Manufacturers</i>	<i>Daniel Moss</i>
<i>Blazing Technologies</i>	<i>Robert Backer</i>
<i>Brewington & Company</i>	<i>John Brewington</i>
<i>C.W. Wright Construction</i>	<i>Michael Stiles</i>

<i>Century Elevators</i>	<i>Erik Nordfelth</i>
<i>CPWR – The Center for Construction Research & Training</i>	<i>Pam Susi</i>
<i>Disneyland</i>	<i>Kenneth Colonna</i>
<i>Diversified Inspections/ITL</i>	<i>Leland Bisbee</i>
<i>Duke Energy Carolina East</i>	<i>David Benson</i>
<i>Duke Energy Florida</i>	<i>Daniel Mueller</i>
<i>Eckstine & Associates, Inc</i>	<i>Dennis Eckstine</i>
<i>Elliott Equipment Company</i>	<i>Jason White</i>
<i>Entergy</i>	<i>Howard Guillory</i>
<i>Equipment Consultant Services Unlimited Inc</i>	<i>Bradley Nester</i>
<i>Equipment Safety Consultants, Inc</i>	<i>Charles Recard</i>
<i>Equipment Technology LLC</i>	<i>Brian Davis</i>
<i>Eric A. Schmidt, PE</i>	<i>Eric Schmidt</i>
<i>Evulich & Associates</i>	<i>Barris Evulich</i>
<i>EZ Scaffold</i>	<i>James Hinton</i>
<i>Florida Power & Light Company</i>	<i>Mike Paulson</i>
<i>Fraco Products Ltd.</i>	<i>Francois Villeneuve</i>
<i>GAR Equipment</i>	<i>Richard Stollery</i>
<i>Genie Industries</i>	<i>Richard Curtin</i>
<i>Global Rentals</i>	<i>Joshua Chard</i>
<i>Global Safety & Equipment, Inc</i>	<i>Geoffrey Arther</i>
<i>H&E Equipment Services</i>	<i>Frankie Wynn</i>
<i>Haulotte Bil-Jax</i>	<i>Shahid Qureshi</i>
<i>Hayden Enterprises</i>	<i>Bud Hayden</i>
<i>Heath & Associates</i>	<i>Frederick Heath</i>
<i>Helac Corporation</i>	<i>Carl Kishline</i>
<i>Hy-Brid Lifts/Custom Equipment</i>	<i>Jeff Valind</i>
<i>Hydro-Mobile, Inc</i>	<i>Kevin O'Shea</i>
<i>Intercontinental Equipment Company LLC</i>	<i>Ron Norris</i>
<i>International Masonry Institute</i>	<i>Michael Kassman</i>
<i>IPAF, Ltd</i>	<i>Tony Groat</i>
<i>Irex Contracting Group</i>	<i>Tom Pokornik</i>
<i>Ives Training & Compliance Group Inc</i>	<i>Robert Vetter</i>
<i>JLG Industries, Inc</i>	<i>Steven Forgas</i>
<i>Klimer Platforms</i>	<i>James Gordon</i>
<i>Lee Electrical Construction, Inc</i>	<i>John Cook</i>
<i>Lift-A-Loft Corporation</i>	<i>Chris Barefoot</i>
<i>MEC Aerial Work Platforms</i>	<i>David White</i>
<i>Merrifield Safety Consulting LLC</i>	<i>Dave Merrifield</i>
<i>NES Rentals</i>	<i>Teresa Kee</i>
<i>New York State Dept of Transportation</i>	<i>Frank Bonesteel</i>
<i>OEM Controls, Inc</i>	<i>Harold Meeker</i>
<i>Paula R. Manning</i>	<i>Paula Manning</i>
<i>PCD, LLC</i>	<i>Paul Young</i>
<i>Phenix Technologies</i>	<i>Mark Miller</i>
<i>Pike Electric</i>	<i>Cliff Edwards</i>
<i>Power Equipment Leasing Company, Inc</i>	<i>Tracy Schroeder</i>
<i>Reynolds Engineering Servicing Inc</i>	<i>Stephen Reynolds</i>
<i>Safway Services</i>	<i>Ted Beville</i>

<i>SEA, Ltd</i>	<i>Brian Boggess</i>
<i>Sexton's Equipment Rental, Inc</i>	<i>David Sexton</i>
<i>Skyjack, Inc</i>	<i>Brad Boehler</i>
<i>Snorkel International, Inc</i>	<i>Jeff Eckhardt</i>
<i>Southern California Edison</i>	<i>Randy Stone</i>
<i>Southern Company – Alabama Power Company</i>	<i>Ted Barron</i>
<i>Sunbelt Rentals</i>	<i>Jeff Stachowiak</i>
<i>Sunstate Equipment Co.</i>	<i>Lance Sullivan</i>
<i>Terex Telelect</i>	<i>Jim Olson</i>
<i>The VON Corporation</i>	<i>Fred von Herrmann</i>
<i>Time Manufacturing Company</i>	<i>James Christian</i>
<i>TRICO Lift</i>	<i>Hiliary Holloway</i>
<i>TRL Rents, LLC</i>	<i>Keith Joseph</i>
<i>United Rentals</i>	<i>Jim Dorris</i>
<i>Utility Truck Equipment & Parts, LLC</i>	<i>John Mlaker</i>
<i>Vollmer-Gray Engineering</i>	<i>Paul Guthron</i>
<i>Waco Boom Company, Ltd.</i>	<i>Jonathan Woods</i>
<i>Wiss, Janney, Elstner Associates, Inc</i>	<i>Jason Kamman</i>
<i>Xtreme Manufacturing</i>	<i>Richard Hoffelmeyer</i>

Subcommittee A92.7 on Airline Ground Support Vehicle-Mounted Vertical Lift Devices, which developed this standard, had the following members:

<i>Bob Backer, Chairman</i>	<i>Blazing Technologies</i>
<i>Christopher Barefoot</i>	<i>Lift-A-Loft Corporation</i>
<i>Donald Blasdell</i>	<i>Blazing Technologies</i>
<i>Andy Davis</i>	<i>LSG Sky Chefs</i>
<i>Bill Fulton</i>	<i>Lift-A-Loft Corporation</i>
<i>Frederick Heath</i>	<i>Heath and Associates</i>
<i>Jim Heinzl</i>	<i>Delta Airlines</i>
<i>Daniel Pohly</i>	<i>US Technics Company</i>
<i>Shahid Qureshi</i>	<i>Haulotte Bil-Jax</i>
<i>Don Redwine</i>	<i>Southwest Airlines</i>
<i>Jon Sturnick</i>	<i>Disneyland</i>
<i>Jerry Tanner</i>	<i>Diversified Inspections/ ITL</i>
<i>Gary Werkhoven</i>	<i>Arrowhead Product Development, Inc</i>
<i>Keith Whitaker</i>	<i>Smith Transportation Equipment</i>

Contents

Section		Page#
1	Scope, Purpose and Application.....	13
1.1	Scope.....	13
1.1.1	Equipment Covered.....	13
1.1.2	Effective Date.....	13
1.1.3	Equipment Not Covered.....	13
1.2	Purpose.....	14
1.3	Requirements.....	14
2	Referenced and Related American National Standards and SAIA Publications.....	14
2.1	Referenced American National Standards.....	14
2.2	Other Referenced Standards.....	14
2.3	Related American National Standards.....	15
2.4	Referenced Scaffold & Access Industry Association Publications.....	15
2.5	Related Scaffold & Access Industry Association Publications.....	15
3	Definitions.....	15
4	Responsibilities of Manufacturers.....	18
4.1	Basic Principles.....	18
4.2	Design and Construction Requirements.....	18
4.2.1	General.....	18
4.2.2	Chassis.....	18
4.2.3	Construction Materials.....	18
4.3	Load Ratings.....	18
4.3.1	Rated Work Load.....	18
4.3.2	Multiple Ratings.....	19
4.4	Quality Control.....	19
4.5	Proof Test.....	19
4.6	Welding Standards.....	19
4.7	Structural Strength Factors.....	19
4.7.1	Ductile Elements.....	19
4.7.2	Non-Ductile Elements.....	19
4.7.3	Structural Strength Factor Formulas.....	19
4.8	Controls.....	20
4.8.1	Upper Controls.....	20
4.8.2	Lower Controls.....	20
4.8.3	Emergency Stop Device.....	20
4.8.4	Emergency Lowering.....	20
4.8.5	Outrigger Controls.....	20
4.9	Stability Testing.....	20
4.9.1	Vertical Load Test.....	20
4.9.2	Static Load Test on Slope.....	21
4.9.3	Wind Loading.....	21
4.9.4	Wind Stability Verification.....	21
4.10	Test Requirements for Driving.....	21
4.10.1	General.....	21
4.10.2	Test Fixture.....	21
4.11	Interlock Requirements.....	21

This document is copyright protected and may not be reproduced or distributed to any other party.

4.11.1	Driving.....	22
4.11.2	Stabilizing Devices.....	22
4.12	Bursting Safety Factors.....	22
4.13	Hydraulic Cylinders.....	22
4.13.1	Safety Factors.....	22
4.13.2	Column Load.....	22
4.13.3	External Load.....	22
4.13.4	Threaded Components.....	22
4.13.5	Hydraulic Pressure Rise.....	22
4.14	Unintended Platform Motion.....	22
4.14.1	Hydraulic/Pneumatic System.....	22
4.14.2	Wire Rope/Chain System.....	22
4.15	Unintended Retraction of Outriggers and Stabilizers.....	23
4.16	Personal Protection and Warning.....	23
4.16.1	Personal Protection.....	23
4.16.2	Warning for Platform Lowering.....	23
4.17	Platforms.....	23
4.17.1	Width and Surface.....	23
4.17.2	Guardrail System.....	23
4.17.3	Flexible Materials.....	23
4.17.4	Structural Integrity.....	23
4.17.5	Toeboards.....	23
4.17.6	Access.....	23
4.18	Anchorage(s) for Personal Fall Protection.....	24
4.19	Instructions and Markings.....	24
4.19.1	Manufacturer's (Remanufacturer's) Information.....	24
4.19.2	Platform Workloads.....	25
4.19.3	Manufacturer Safety Bulletins.....	25
4.20	Manuals.....	25
4.20.1	Operator's Manual.....	25
4.20.2	Repair and Parts Manual.....	25
4.21	Weather-Resistant Storage.....	25
4.22	Electrical System.....	25
4.23	Training and Training Materials.....	25
4.24	Manufacturer as Dealer.....	25
4.25	Remanufacture.....	25
4.26	Provision for Passengers.....	25
5	Responsibilities of Dealers and Installers.....	26
5.1	Basic Principle.....	26
5.2	Manuals.....	26
5.2.1	Machine Manual(s).....	26
5.2.2	Manual of Responsibilities.....	26
5.3	Pre-delivery Preparation.....	26
5.4	Maintenance, Inspection and Repair.....	26
5.4.1	Maintenance.....	26
5.4.2	Inspection.....	26
5.4.3	Repairs.....	26
5.5	Maintenance Safety Precautions.....	26
5.6	Replacement parts.....	26

5.7	Training.....	26
5.8	Familiarization on Delivery.....	27
5.9	Dealer or Installer as User.....	27
5.10	Assistance to Owners and User.....	27
5.11	Record Retention and Dissemination.....	27
5.11.1	Record Retention.....	27
5.11.2	Proof of Training.....	27
5.11.3	Record Dissemination.....	27
5.12	Modifications.....	27
5.13	Manufacturer’s (Remanufacturer’s) Safety Bulletins.....	28
5.14	Responsibilities Upon Sale.....	28
5.15	Vehicle Specifications.....	28
5.16	Vehicle Weight Distribution.....	28
5.17	Installations.....	28
5.18	Provision for Passengers.....	28
6	Responsibilities of Owners.....	28
6.1	Basic Principles.....	28
6.2	Responsibilities Upon Purchase.....	28
6.3	Manuals.....	29
6.3.1	Machine Manual(s).....	29
6.3.2	Manual of Responsibilities.....	29
6.4	Maintenance, Inspection and Repair.....	29
6.4.1	Maintenance.....	29
6.4.2	Inspection.....	29
6.4.3	Repairs.....	29
6.5	Pre-delivery Preparation.....	29
6.6	Frequent Inspection.....	29
6.7	Annual Inspection.....	30
6.8	Maintenance and Repair Safety Precautions.....	30
6.9	Replacement Parts.....	30
6.10	Maintenance and Repair Training.....	30
6.11	Training.....	30
6.11.1	Operator Training.....	30
6.11.2	Assistance to User.....	30
6.12	Familiarization Upon Delivery.....	30
6.13	Operation.....	31
6.14	Assistance to Others.....	31
6.15	Record Retention and Dissemination.....	31
6.15.1	Record Retention.....	31
6.15.2	Proof of Training.....	31
6.15.3	Record Dissemination.....	31
6.16	Modifications.....	31
6.17	Manufacturer’s Safety Bulletins.....	31
6.18	Responsibilities Upon Sale.....	31
6.19	Provision for Passengers.....	32
7	Responsibilities of Users.....	32
7.1	Basic Principles.....	32
7.2	Manuals.....	32
7.2.1	Machine Manual(s).....	32

7.2.2	Manual of Responsibilities.....	32
7.3	Inspection and Maintenance.....	32
7.3.1	Frequent Inspection.....	32
7.3.2	Annual Inspection.....	32
7.3.3	Prestart Inspection.....	32
7.3.4	Maintenance Safety Precautions.....	33
7.4	Replacement Parts.....	33
7.5	Maintenance and Repair Training.....	33
7.6	Operator Training and Retraining.....	33
7.6.1	Trainee Records.....	33
7.7	Familiarization Before Use.....	33
7.8	Workplace Inspections.....	33
7.9	Determination of Hazardous Locations.....	34
7.10	Operator Warnings and Instructions.....	34
7.11	User as Operator.....	36
7.12	Shutdown of Aerial Platform.....	36
7.13	Record Retention and Dissemination.....	36
7.13.1	Record Retention.....	36
7.13.2	Record Dissemination.....	37
7.13.3	Proof of Training.....	37
7.14	Modifications.....	37
7.15	Manufacturer’s Safety Bulletins.....	37
7.16	Provision for Passengers.....	37
8	Responsibilities of Operators.....	37
8.1	Basic Principles.....	37
8.2	Manuals.....	37
8.2.1	Machine Manuals.....	37
8.2.2	Manual of Responsibilities.....	37
8.3	Prestart Inspection.....	37
8.4	Problems or Malfunctions.....	38
8.5	Training, Retraining, and Familiarization.....	38
8.5.1	General Training.....	38
8.5.2	Retraining.....	38
8.5.3	Familiarization.....	38
8.6	Before Operation.....	38
8.7	Workplace Inspection.....	38
8.8	Prior to Each Elevation.....	39
8.9	Understanding of Hazardous Locations.....	39
8.10	Operator Warnings and Instructions.....	39
8.11	Record of Training.....	41
8.12	Provision of Passengers.....	41
9	Responsibilities of Lessors.....	41
9.1	Basic Principles.....	41
9.2	Lessor as a Dealer.....	41
9.3	Lessor as an Owner.....	41
9.4	Lessor as a User.....	42
9.5	Lessor as an Operator.....	42
9.6	Provision for Passengers.....	42
10	Responsibilities of Lessee.....	42

10.1	Basic Principles.....	42
10.2	Lessee as a Dealer.....	42
10.3	Lessee as an Owner.....	42
10.4	Lessee as a User.....	42
10.5	Lessee as an Operator.....	42
10.6	Provision for Passengers.....	42
11	Responsibilities of Broker.....	42
11.1	Responsibilities Upon Sale.....	42
11.2	Responsibilities with Re-Rents, Leases, or Any Other Form of Beneficial Use.....	42
11.3	Provision for Passengers.....	42

PREVIEW ONLY

This document is copyright protected and may not be reproduced or distributed to any other party.

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

1. Scope, Purpose and Application

1.1 Scope. This standard applies only to airline ground support vehicle mounted vertical lift devices specifically designed for servicing aircraft while outdoors on a paved airport ramp surface. The chassis may be either a commercial type vehicle or one custom designed to accommodate the vertical lift structures. This standard does not apply to those portions of the airline ground support vehicle intended to facilitate or accommodate passengers as defined in this standard.

1.1.1 Equipment Covered. Typical examples are shown in Figures 1 and 2.

- (1) Catering Trucks
- (2) Ambulatory Lifts*
- (3) Cabin Service
- (4) Lavatory Service / Potable Water Truck
- (5) Refuelers
- (6) Maintenance Lifts
- (7) Disabled Passenger Lifts*
- (8) Mobile Passenger Lounges*
- (9) Cargo Loaders
- (10) Staircase Vehicles*

* Excluding requirements specifically applicable to passengers as they are defined in this standard.

1.1.2 Effective Date. The Standard will become effective September 26, 2014 as follows:

- (1) Design, manufacture and remanufacture requirements. The design and manufacturing requirements of this Standard shall apply to all airline ground support vehicles produced on and after the effective date. Airline ground support vehicles manufactured on and after the effective date of this standard shall comply with the requirements of this standard.
- (2) Rebuild/recondition requirements. Rebuilt/reconditioned airline ground support vehicles shall comply with the standard in effect as of the date of their original manufacture.

- (3) Responsibilities for dealers, owners, users, operators, lessors, lessees and brokers. All provisions detailed for dealers, owners, users, operators, lessors, lessees and brokers apply to both new and existing units delivered by sale, lease, rental or any form of beneficial use on or after the effective date

1.1.3 Equipment Not Covered. This standard does not apply to the equipment listed below. When these referenced standards are superseded by a revision, the revision shall apply.

- (1) Ladder and ladder stands such as those covered in American National Standards for Ladder and ladder Stands, ANSI A14 Series
- (2) Scaffolding such as those covered in American National Standard for Construction and Demolition Operations – Scaffolding-Safety Requirements, ANSI A10.8
- (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
- (4) Non-self-propelled aerial 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 Manually Propelled Elevating Work Platforms, ANSI/SIA A92.3
- (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/SIA A92.5
- (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

- (7) Vehicle-Mounted Bridge Inspection and Maintenance Devices, ANSI/SIA A92.8
- (8) Mast Climbing Work Platforms, ANSI/SIA A92.9
- (9) Transport Platforms, ANSI/SIA A92.10
- (10) Suspended powered platforms for exterior building maintenance, ANSI A120.1
- (11) Vertically adjustable equipment used primarily to raise and lower materials and equipment from one elevation to another such as American National Standards in the A17, B30 and B56 series
- (12) Fire-fighting equipment such as that covered in American National Standard for Automotive Fire Apparatus, ANSI/NFPA 1901
- (13) 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
- (14) Aircraft deicing vehicles such as those covered by SAE ARP 1971.

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

- (1) Prevention of accidents and personal injuries
- (2) Establishment of criteria for design, manufacture, remanufacture, rebuild/recondition, testing, performance, inspection, training, maintenance, and operation
- (3) Establishment and understanding by designers, manufacturers, dealers, owners, users, operators, lessors, lessees and brokers of their respective responsibilities

1.3 Requirements. The requirements of this standard shall be met or exceeded.

2. Referenced and Related American National Standards and Scaffold & Access Industry Association publications.

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 Z535.1, Safety Color Code
- ANSI Z535.3, Criteria for Safety Symbols
- ANSI Z535.4, Product Safety Signs and Labels
- ANSI/AWS D1.1M, Structural Welding Code Steel
- ANSI/AWS D1.2M, Structural Welding Code Aluminum
- ANSI/NFPA 58, Storage and Handling of Liquefied Petroleum Gases
- ANSI/NFPA 70, National Electrical Code
- ANSI/NFPA 505, Powered Industrial Trucks, Including Type Designations Areas of Use, Maintenance, and Operation
- ANSI/UL 201 Standard for Garage Equipment
- ANSI/UL 50 Enclosures for Electrical Equipment

2.2 Other Referenced Standards and Regulations.

This Standard is also intended to be used in conjunction with the following standards. When these referenced standards are superseded by a revision, the revision shall apply:

- (1) Part 29 Code of Federal Regulations standard number 1910.333 Selection and Use of Work Practices
- (2) Part 29 Code of Federal Regulations standard number 1910 Subpart D, Walking and Working Surfaces
- (3) SAE AS 4828 for Technical Manual Development for Ground Support Equipment
- (4) SAE ARP 1247 for General Requirements for Aerospace Ground Support Equipment Motorized and Non-Motorized
- (5) SAE ARP 1328 for Aircraft Ground Support Equipment – Wind Stability Determination
- (6) SAE ARP 1971 Aircraft Deicing Vehicle – Self-Propelled, Large and Small Capacity