ATTENTION

MANUAL OF RESPONSIBILITIES

for

Dealers, Owners, Users, Operators,
Lessors and Lessees

of

ANSI/SIA A92.5-1992
Boom-Supported Elevating Work Platforms

WARNING

FAILURE TO COMPLY with your REQUIRED
RESPONSIBILITIES in the use and operation of the Aerial
Platform could result in DEATH OR SERIOUS INJURY.
IMPORTANT

You are required by ANSI/SIA A92.5-1992 to read and understand YOUR RESPONSIBILITIES before you use or operate this Aerial Platform.

This Manual and the manufacturer's operation and safety manual are considered integral parts of the Aerial Platform and are VITAL TO COMMUNICATE NECESSARY SAFETY INFORMATION to users and operators. They MUST BE KEPT ON THE AERIAL PLATFORM in the storage compartment.

The operation of any aerial platform is subject to certain HAZARDS that can be protected against only by the exercise of INTELLIGENCE, CARE AND COMMON SENSE. It is essential to have COMPETENT, CAREFUL PERSONNEL, TRAINED in the INTENDED USE, SAFE OPERATION, MAINTENANCE AND SERVICE of this type of equipment.

The USER AND OPERATOR MUST MAKE DECISIONS on the maintenance, use and operation of the Aerial Platform with due consideration for the fact that the SAFETY OF THE OPERATOR AND OTHER PERSONNEL is dependent on those decisions. FAILURE TO COMPLY with your REQUIRED RESPONSIBILITIES in the use and operation of the Aerial Platform could result in DEATH OR SERIOUS INJURY. Remember that all personnel in the platform must wear a body belt with a lanyard attached to the boom or platform.

Refer to the manufacturer's operation and safety manual for the INTENDED USE of the aerial platform and for further INFORMATION ON SAFE USE AND OPERATION.

The ANSI/SIA A92.5-1992 standard for Boom-Supported Elevating Work Platforms has an effective date of January 2, 1994. This Manual incorporates sections from that standard as follows:

<table>
<thead>
<tr>
<th>Definitions</th>
<th>Section 3</th>
<th>Page 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibilities of Dealers</td>
<td>Section  5</td>
<td>Page 2</td>
</tr>
<tr>
<td>Responsibilities of Owners</td>
<td>Section  6</td>
<td>Page 2</td>
</tr>
<tr>
<td>Responsibilities of Users</td>
<td>Section  7</td>
<td>Page 4</td>
</tr>
<tr>
<td>Responsibilities of Operators</td>
<td>Section  8</td>
<td>Page 6</td>
</tr>
<tr>
<td>Responsibilities of Lessors</td>
<td>Section  9</td>
<td>Page 8</td>
</tr>
<tr>
<td>Responsibilities of Lesssees</td>
<td>Section 10</td>
<td>Page 8</td>
</tr>
<tr>
<td>Examples of A92.5 Aerial Platforms</td>
<td>Figure 1</td>
<td>Page 9</td>
</tr>
<tr>
<td>Minimum Safe Approach Distance</td>
<td>Figure 3</td>
<td>Page 10</td>
</tr>
</tbody>
</table>

Published by
Scaffold Industry Association, Inc.
14039 Sherman Way, Van Nuys, California 91405-2599

Copyright © 1993 by Scaffold 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

Single copy list price................. $ 4.95
3. Definitions

aerial platform: A mobile device that has an adjustable position platform, supported from ground level by a structure.

alternative configuration(s): Arrangements of the aerial platform or its components which differ from each other. Alternative configurations may or may not have the same rated work load.

authorized personnel (authorized person): Personnel approved or assigned to perform a specific type of duty or duties at a specific location or locations at a job site.

base: The relevant contact points of the aerial platform that form the stability fulcrum (e.g., wheels, casters, outriggers, stabilizers).

boom: A cantilever beam which supports the platform.

chassis: The integral part of the aerial platform which provides mobility and support for the elevating assembly.

configurations: All positions in which an aerial platform or any part thereof can be placed within its intended operating limits.

dealer: A person or entity who buys from a manufacturer or distributor and who generally sells, rents, and services aerial platforms.

delivery: Transfer of care, control, and custody of the aerial platform from one person or entity to another person or entity.

directional controls: Controls that initiate functions that affect movement of the platform or the aerial platform.

elevating assembly: The mechanisms used to position the platform relative to the aerial platform chassis.

guardrail system: A vertical barrier primarily intended to protect against personnel falling to lower levels.

hazardous location: Any location that contains, or has the potential to contain, an explosive or flammable atmosphere as defined in ANSI/NFPA 505 powered industrial trucks.

instability: A condition of an aerial platform in which the sum of the moments which tend to overturn the unit exceeds the sum of the moments tending to resist overturning.

insulated platform: A platform designed and tested to meet the specific electrical insulation ratings consistent with the manufacturer's identification plate.

interlock: A control or mechanism that, under specified conditions, automatically allows or prevents the operation of another control or mechanism.

manufacturer: A person or entity who makes, builds, or produces an aerial platform.

maximum travel configuration(s): The most adverse configuration(s) with respect to stability in which travel is permitted by the manufacturer, without outriggers, stabilizers, or extendible axles properly set.

modification, modifies: To make a change(s) to an aerial platform which affects the operation, stability, safety factors, rated load, or safety of the aerial platform in any way.

multiple rating(s), multiple rated loads: Two or more different rated work loads based on alternative configurations of the aerial platform.

operator: A qualified person who controls the movement of an aerial platform.

outriggers: Devices that increase the stability of the aerial platform and that are capable of lifting and leveling the aerial platform.

override: To take over aerial platform movement control functions at the upper control station by those at the lower control station.

owner: A person or entity who has possession of an aerial platform by virtue of proof of purchase.

passive: Under specified conditions, automatically performed and not requiring any specific action to accomplish.

platform: The portion of an aerial platform intended for occupation by personnel with their necessary tools and materials.

platform height: The vertical distance measured from the floor of the platform to the surface upon which the aerial platform is being supported.

platform reach: The horizontal distance measured from the center line of rotation to the outer most edge of the platform.

powered functions: Those which control motion of the platform or the aerial platform and are caused by electromechanical, hydraulic, or pneumatic forces.

qualified person: A person who by reason of knowledge, experience or training, is familiar with the operation to be performed and the hazards involved.

rated work load: The designed carrying capacity of the aerial platform as specified by the manufacturer.

shall: The word "shall" is to be understood as mandatory.

stability, stable: A condition of an aerial platform in which the sum of the moments which tend to overturn the unit is less than the sum of the moments tending to resist overturning.

stabilizers: Devices that increase the stability of the aerial platform but are not capable of lifting or leveling the aerial platform.

unintended motion: Motion of the aerial platform or platform without activation of any control.

unrestricted rated work load: The maximum designed carrying capacity of the aerial platform allowed by the manufacturer in all operating configurations.

user: Person(s) or entity(s) that has care, control, and custody of the aerial platform. This person or entity may also be a dealer, owner, lessor, lessee, or operator.
5. Responsibilities of Dealers

5.1 Basic principles: Sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the training of operators, in maintenance, application, safety provisions and operation of the aerial platform with due consideration of the knowledge that the unit will be carrying personnel.

5.2 Manuals: Dealers shall keep and maintain copy(ies) of the operating and maintenance manual(s) required in section 4.19 of this standard. Operating manual(s) shall be provided with each rental, lease, or sale delivery. These manual(s) shall be stored in the location required by section 4.20 of this standard. These manual(s) are considered an integral part of the aerial platform and are vital to communicate necessary safety information to users and operators. In addition, parts and maintenance manual(s) shall be provided with each sale delivery.

5.3 Pre-delivery preparation. Aerial platforms shall be inspected, serviced and adjusted to manufacturer's requirements prior to each delivery by sale, lease, or rental.

5.4 Maintenance safety precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:
   a) Powerplant stopped and starting means rendered inoperative.
   b) All controls in the "off" position and all operating systems secured from inadvertent motion by brakes, blocks, or other means.
   c) Boom and platform lowered to the full down position, if possible, or otherwise secured by blocking or cribbing to prevent dropping.
   d) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.
   e) Safety props or latches installed where applicable as prescribed by the manufacturer.

5.5 Replacement parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

5.6 Training. Whenever a dealer directs or authorizes an individual to operate an aerial platform he shall ensure that the individual has been trained under the direction of a qualified person in accordance with the manufacturer's operating manual and requirements listed in section 8, of this standard, before operating the aerial platform.

5.6.1 Training on delivery. Manufacturer's operating instruction and required training on the proper use and operation of the aerial platform shall be provided upon each delivery by sale, lease, or rental.

5.7 Operation. When a dealer operates an aerial platform in sales demonstrations or otherwise for his beneficial use, he and his operating personnel shall assume the responsibilities of users as specified in section 7 and responsibilities of operators as specified in section 8 of this standard.

5.8 Assistance to owners and users. If a dealer is unable to answer an owner's or user's question relating to rated capacity, intended use, maintenance, repair, inspection, or operation of the aerial platform, the dealer shall obtain the proper information from the manufacturer and provide that information to the owner or user.

5.9 Record retention. Dealer(s) shall retain the following records for at least three years:
   a) Name and address of the purchaser of each aerial platform by serial number and date of delivery.
   b) Records of the person(s) trained upon each delivery of an aerial platform.
   c) Records of the pre-delivery preparation performed prior to each delivery.

5.10 Modifications. Modification or alteration of an aerial platform shall be made only with prior written permission of the manufacturer.

5.11 Manufacturers safety bulletins. The dealer shall comply with safety related bulletins as received from the manufacturer.

5.12 Ownership records. When a change in ownership of an aerial device occurs, it shall be the responsibility of the seller to notify the manufacturer, or successor, of the unit, model and serial number and the name and address of the new owner within sixty (60) days.

6. Responsibilities of Owners

6.1 Basic principles. Sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the performance of the responsibilities of owners with due consideration of the knowledge that the unit will be carrying personnel.

6.2 Manuals. Owners shall keep and maintain copy(ies) of the operating and maintenance manual(s) required in section 4.19 of this standard. Operating manual(s) shall be provided with each rental, lease, or sale delivery. The operating manual(s) shall be stored in the location required in section 4.20 of this standard. These manual(s) are considered an integral part of the aerial platform and are vital to communicate the necessary safety information to users and operators. In addition, parts and maintenance manual(s) shall be provided with each sale delivery.
6.3 Pre-delivery preparation. Aerial platforms shall be inspected, serviced and adjusted to manufacturer's requirements prior to each delivery by sale, lease, or rental.

6.4 Maintenance. The owner of an aerial platform shall arrange that the maintenance specified in this standard is properly performed on a timely basis. The owner shall establish a preventive maintenance program in accordance with the manufacturer's recommendations and based on the environment and severity of use of the aerial platform. The owner shall arrange that frequent and annual inspections are performed. All malfunctions and problems identified shall be corrected before the aerial platform is returned to service.

6.5 Frequent inspection. The owner of an aerial platform shall cause a frequent inspection to be performed on the aerial platform:

a) That has been in service for three (3) months or 150 hours, whichever comes first.

b) Before putting into service a machine which has been out of service for a period longer than three months of time.

The inspection shall be made by a person qualified as a mechanic on the specific make and model of the aerial platform. The inspection shall include all items specified by the manufacturer for a frequent inspection and shall include but not be limited to the following:

a) All functions and their controls for speed(s), smoothness, and limits of motion.

b) Lower controls including the provisions of overriding of upper controls.

c) All chain and cable mechanisms for adjustment and worn or damaged parts.

d) All emergency and safety devices.

e) Lubrication of all moving parts, inspection of filter element(s), hydraulic oil, engine oil, and coolant as specified by the manufacturer.

f) Visual inspection of structural components and other critical components such as fasteners, pins, shafts, turntable attachment bolts, and locking devices.


g) Placard, warnings and control markings.

h) Additional items specified by the manufacturer.

i) Correction of all malfunctions and problems identified and further inspection if necessary.

j) After correction or replacement of any component, the unit shall be inspected and tested in accordance with above paragraph 6.5.

6.6 Annual inspection. The owner of an aerial platform shall cause an annual inspection to be performed on the aerial platform no later than thirteen (13) months from the date of the prior annual inspection. The inspection shall be performed by a person(s) qualified as a mechanic on the specific make and model of the aerial platform. The inspection shall include all items specified by the manufacturer for an annual inspection.

6.7 Maintenance safety precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:

a) Powerplant stopped and starting means rendered inoperative.

b) All controls in the "off" position and all operating systems secured from inadvertent motion by brakes, blocks, or other means.

c) Elevating assembly and platform lowered to the full down position, if possible, or otherwise secured by blocking or cribbing to prevent dropping.

d) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.

e) Safety props or latches installed where applicable as prescribed by the manufacturer.

6.8 Replacement parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

6.9 Maintenance training. The owner shall train his maintenance personnel in inspection and maintenance of the aerial platform in accordance with sections 6.4, 6.5, 6.6, 6.7, 6.8, and 7.3.3 of this standard and with the manufacturer's recommendations.

6.10 Operator training. Whenever an owner directs or authorizes an individual to operate an aerial platform, he shall ensure that the individual has been trained in accordance with the manufacturer's operating manual, and requirements listed in section 8 of this standard before operating the aerial platform.

6.10.1 Training on delivery. Manufacturer's operating instructions and required training on the proper use and operation of the aerial platform shall be provided upon each delivery by sale, lease, or rental.

6.11 Operation. When an owner operates an aerial platform, he shall have the responsibilities of users as specified in section 7 of this standard and his operating personnel shall have responsibilities of operators as specified in section 8 of this standard.

6.12 Assistance to users and operators. If an owner is unable to answer a user's or operator's questions relating to rated capacity, intended use, maintenance, repair, inspection, or operation of the aerial platform, the owner shall obtain the proper information from the dealer or manufacturer and provide that information to the user or operator.

6.13 Record retention. The owner shall retain the following records for at least three years:

a) Name and address of the purchaser of each aerial platform by serial number and date of delivery.

b) Records of the person(s) trained upon each delivery of an aerial platform.

c) Written records of the frequent and annual inspections shall be kept by the owner when he performs the inspection. The record shall include deficiencies found, corrective action and identification of the person(s) performing the inspection and repairs.

d) Records of the pre-delivery preparation performed prior to each delivery.
6.14 Modifications. Modification or alteration of an aerial platform shall be made only with prior written permission of the manufacturer.

6.15 Manufacturers safety bulletins. The owner shall comply with safety related bulletins as received from the manufacturer or dealer.

6.16 Ownership records. When a change in ownership of an aerial device occurs, it shall be the responsibility of the seller to notify the manufacturer, or successor, of the unit, model and serial number and the name and address of the new owner within 60 days.

7. Responsibilities of Users

7.1 Basic principles. The information in this standard must be supplemented by good job management, safety control, and the application of sound principles of safety, training, inspection, maintenance, application and operation consistent with all data available regarding the parameters of intended use and expected environment. Since the user has direct control over the operation and operation of aerial platforms, conformance with good safety practices in this area is the responsibility of the user and his operating personnel including the operator. Decisions on the use and operation of the aerial platform must always be made with due consideration for the fact that the machine will be carrying personnel whose safety is dependent on those decisions.

7.2 Manuals. Users shall keep and maintain copy(ies) of the operating and maintenance manual(s) required in section 4.19 of this standard. The operating manual(s) shall be stored in the location required in section 4.20 of this standard. These manuals are considered an integral part of the aerial platform and are vital to communicate the necessary safety information to users and operators.

7.3 Inspection and maintenance. Users shall inspect and maintain the aerial platform as required to ensure proper operation. The frequency of inspection and maintenance shall be determined by the manufacturer's recommendations and be compatible with operating conditions and the severity of the operating environment. Aerial platforms that are not in proper operating condition shall be immediately removed from service until repaired. Repairs shall be made by a qualified person and the repairs shall be in conformance with the manufacturer's recommendations.

7.3.1 Frequent inspection. An inspection as outlined in section 6.5 of this standard shall be conducted.

7.3.2 Annual inspection. An inspection as outlined in section 6.6 of this standard shall be conducted.

7.3.3 Pre-start inspection. Before use each day or at the beginning of each shift, the aerial platform shall be given a visual inspection and functional test including but not limited to the following:
   a) Operating and emergency controls.
   b) Safety devices.
   c) Personal protective devices, including fall protection.
   d) Air, hydraulic and fuel system leaks.
   e) Cables and wiring harness.
   f) Loose or missing parts.
   g) Tires and wheels.
   h) Placards, warnings, control markings, and operating and safety manual(s).
   i) Outriggers, stabilizers, extendible axles and other structures.
   j) Guardrail system.
   k) Items specified by the manufacturer.

7.3.4 Maintenance safety precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:
   a) Powerplant stopped and starting means rendered inoperable.
   b) All controls in the "off" position and all operating systems secured from inadvertent motion by brakes, blocks, or other means.
   c) Boom and platform lowered to the full down position, if possible, or otherwise secured by blocking or cribbing to prevent dropping.
   d) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.
   e) Safety props or latches installed where applicable as prescribed by the manufacturer.
   f) Precautions specified by the manufacturer.

7.4 Replacement parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

7.5 Maintenance training. The user shall train his maintenance personnel in inspection and maintenance of the aerial platform in accordance with sections 7.3, 7.3.1, 7.3.2, 7.3.3, and 7.3.4 of this standard and with the manufacturer's recommendations.

7.6 Operator training. Whenever a user directs or authorizes an individual to operate an aerial platform, he shall ensure that the individual has been trained in accordance with the manufacturer's operating and maintenance manual, the user's work instructions and requirements listed in section 8 of this standard before operating the aerial platform.

7.6.1 Model training. The user shall be responsible for the operator being trained on the model of the aerial platform that he will be operating. Such training shall be in an area free of obstructions, under the direction of a qualified person for a time sufficient to determine that the trainee displays proficiency in knowledge and actual operation of the aerial platform. Only properly trained and authorized personnel shall be permitted to operate the aerial platform.

7.6.2 Trainee records. A record of the trainee's aerial platform instructions shall be maintained by the user for at least three years.

7.7 Before operation. Before authorizing an operator to operate an aerial platform, the user shall ensure that the operator has:
a) Been instructed by a qualified person in the intended purpose and function of each control.
b) Read and understood the manufacturer's operating instructions and user's safety rules, or been trained by a qualified person on the contents of the manufacturer's operating instructions and user's safety rules.
c) Understood by reading or by having a qualified person explain all decals, warnings, and instructions displayed on the aerial platform.
d) Determined that the purpose for which the aerial platform is to be used is within the scope of the intended applications defined by the manufacturer.
e) Been provided with approved fall protection devices and other safety gear for all personnel in the platform.

7.8 Work place inspection. Before the aerial platform is used and during use, the user shall check the area in which the aerial platform is to be used for possible hazards such as but not limited to:
   a) Drop-offs or holes.
   b) Bumps and floor obstructions.
   c) Debris.
   d) Overhead obstructions and high voltage conductors.
   e) Hazardous locations.
   f) Inadequate surface and support to withstand all load forces imposed by the aerial platform in all operating configurations.
   g) Wind and weather conditions.
   h) Presence of unauthorized persons.
   i) Other possible unsafe conditions.

7.9 During operation. The aerial platform shall be used in accordance with this standard. The user shall ensure that before each movement of the aerial platform, if repositioning of the platform, that the operator shall ensure:
   a) The aerial platform is operated on a surface within the limits specified by the manufacturer.
   b) The outriggers, stabilizers, extendible axles, or other stability enhancing means, are used as required by the manufacturer.
   c) Guardrails are installed and access gates or openings are closed per manufacturer's instructions.
   d) The load and its distribution on the platform and any platform extension are in accordance with the manufacturer's rated capacity for that specific configuration.
   e) There is adequate clearance from overhead obstructions.
   f) The minimum safe approach distances (M.S.A.D.) to energized power lines and parts, as listed in Table I are maintained. (See Fig. 3, page 23, for examples of safe operating procedures.)
   g) The precautions defined in 7.3.3, 7.7, 7.8, 7.9, 7.10, and 7.11 of this standard are followed during operation of the aerial platform.

7.10 Hazardous locations. It shall be the responsibility of the user to determine the hazard classification of any particular atmosphere or location according to ANSI/NFPA 505-1987.

7.10.1 Hazardous locations. Aerial platforms operated in hazardous locations shall be approved and of the type required by ANSI/NFPA 505-1987.

7.11 Warnings and instruction. The user shall direct his operating personnel and supervise their work to ensure operation of the aerial platform in compliance with this standard.

7.11.1 Personnel footing. Personnel shall maintain a firm footing on the platform floor while working therein. Use of planks, ladders, or any other device on the aerial platform for achieving additional height or reach shall be prohibited.

7.11.2 Precaution from other moving equipment. When other moving equipment or vehicles are present, special precautions shall be taken to comply with local ordinances or safety standards established for the workplace. Warnings such as, but not limited to, flags, roped-off areas, flashing lights, and barricades shall be used.

7.11.3 Reporting problems or malfunctions. The operator shall immediately report any problem or malfunctions which become evident during operation. Any problems or malfunctions that affect the safety of operations shall be repaired prior to continued use.

7.11.4 Altering safety devices. Altering or disabling of interlocks or other safety devices shall be prohibited.

7.11.5 Entanglement. Care shall be taken to prevent rope, electric cords and hoses from becoming entangled in the aerial platform.

7.11.6 Capacity limitation. Rated capacities shall not be exceeded when loads are transferred to the platform at any height.

7.11.7 Work area. The operator shall ensure that the area surrounding the aerial platform is clear of personnel and equipment before lowering the platform.

7.11.8 Fueling. The engine shall be shut down while fuel tanks are being filled. Fueling shall be done in a well-ventilated area free of flame, sparks, or other hazards which may cause fire or explosion.

7.11.9 Battery charging. Batteries shall be charged in a well-ventilated area free of flame, sparks, or other hazards which may cause fire or explosion.

7.11.10 Platform positioning. The aerial platform shall not be positioned against another object to steady the platform.

7.11.11 Misuse as a crane. The aerial platform shall not be used as a crane.

7.11.12 Operating area. The aerial platform shall not be operated from a position on trucks, trailers, railway cars, floating vessels, scaffolds, or similar equipment unless the application is approved in writing by the manufacturer.

7.11.13 Travel speed. Under all travel conditions, the operator shall limit travel speed according to conditions of ground surface, congestion, visibility, slope, location of personnel, and other factors causing hazards of collision or injury to personnel.
7.11.14 Elevated driving requirements. Before and during driving while the platform is elevated, the operator shall:
   a) Maintain a clear view of the path of travel.
   b) Maintain a safe distance from obstacles, debris, drop-offs, holes, depressions, ramps, and other hazards to ensure safe elevated travel.
   c) Maintain a safe distance from overhead obstacles.
7.11.15 Stunt driving. Stunt driving and horseplay shall not be permitted.
7.11.16 Unauthorized use. Means shall be used to protect against use by unauthorized person(s).
7.12 Operation of the aerial platform. If a user is also the operator of an aerial platform, he shall have the responsibilities of operators specified in section 8 of this standard as well as responsibilities of users as specified in section 7 of this standard.
7.13 Assistance to operator. If a user is unable to answer an operator's question(s) relating to rated capacity, intended use, maintenance, condition of the aerial platform or safety of operation of the aerial platform, the user shall obtain the proper information from the dealer, owner, or manufacturer and provide that information to the operator before use of the aerial platform in the application of concern.
7.14 Shutdown of aerial platform. The user shall direct his operating personnel to cease operation of the aerial platform in case of any suspected malfunction(s) or any potentially hazardous condition(s) that may be encountered. Further information concerning safe operation shall be requested from the owner, dealer, or manufacturer before further operation.
7.15 Record retention. The user shall retain the following records for at least three (3) years:
   a) Records of the operator(s) trained on each model of an aerial platform.
   b) Written records of the frequent and annual inspection shall be kept by the user when he performs the inspection(s). The records shall include the date of inspection, any deficiencies found, the corrective action recommended and identification of the person(s) performing the inspection.
   c) Written records of all repairs accomplished on the aerial platform shall include the date of any such repair, a description of the work accomplished and identification of the person(s) performing the repair.
7.16 Modifications. Modification or alteration of an aerial platform shall be made only with prior written permission of the manufacturer.
7.17 Manufacturer's safety bulletins. The user shall comply with safety related bulletins as received from the manufacturer, dealer, or owner.

8. Responsibilities of Operators

8.1 Basic principles. The information in this standard must be supplemented by good judgment, safety control, and caution in evaluating each situation. Since the operator is in direct control of the aerial platform, conformance with good safety practices in this area is the responsibility of the operator. The operator must make decisions on the use and operation of the aerial platform with due consideration for the fact that his own safety as well as the safety of other personnel in the platform is dependent on those decisions.
8.2 Manuals. The operator shall be aware that the operating and safety manuals, including the manual which defines the responsibilities of dealers, owners, lessors, lessees, users and operators are stored on the aerial platform and the location where they are stored. The operator shall be familiar with the manuals stored on the aerial platform and consult them when questions arise with respect to the aerial platform.
8.3 Pre-start inspection. Before use each day or at the beginning of each shift, the aerial platform shall be given a visual inspection and functional test including but not limited to the following:
   a) Operating and emergency controls.
   b) Safety devices.
   c) Personal protective devices, including fall protection.
   d) Air, hydraulic and fuel system(s) leaks.
   e) Cables and wiring harness.
   f) Loose or missing parts.
   g) Tires and wheels.
   h) Placards, warnings, control markings and operating manual(s).
   i) Outriggers, stabilizers, extendible axles and other structures.
   j) Guardrail system.
   k) Items specified by the manufacturer.
8.4 Problems or malfunctions. Any problems or malfunctions that affect the safety of operations shall be repaired prior to the use of the aerial platform.
8.5 Training. The operator shall be trained on the same model of aerial platform or one having operating characteristics consistent with the one to be used during actual work site operation. Under the direction of a qualified person, the trainee shall operate the aerial platform for a sufficient period of time to demonstrate proficiency and knowledge in the actual operation of the aerial platform. Care shall be taken to ensure the area of such operation has a minimum of obstacles and is conducive to training. Only properly trained and authorized personnel shall be permitted to operate the aerial platform.
8.6 Before operation. Before being authorized to operate the aerial platform, the operator shall have:
   a) Been instructed by a qualified person in the intended purpose and function of each of the controls.
   b) Read and understood the manufacturer's operating instruction(s) and user's safety rules, or been trained by a qualified person on the contents of the manufacturer's operating instruction(s) and user's safety rules.
   c) Understood by reading or by having a qualified person explain all decals, warnings, and instructions displayed on the aerial platform.
8.7 Work place inspection. Before the aerial platform is used and during use, the operator shall check the area in which the aerial platform is to be used for possible hazards such as, but not limited to:
   a) Drop-offs or holes.
   b) Bumps and floor obstructions.
   c) Debris.
   d) Overhead obstructions and high voltage conductors.
   e) Hazardous locations.
   f) Inadequate surface and support to withstand all load forces imposed by the aerial platform in all operating configurations.
   g) Wind and weather conditions.
   h) Presence of unauthorized persons.
   i) Other possible unsafe conditions.

8.8 During operation. The aerial platform shall be used in accordance with this standard. The operator shall ensure the following before each elevation of the platform:
   a) Ensure the aerial platform is operated on a surface within the limits specified by the manufacturer.
   b) Ensure the outriggers, stabilizers, extendible axles, or other stability enhancing means, are used as required by the manufacturer.
   c) Ensure that guardrails are installed and access gates or openings are closed per manufacturer's instructions.
   d) Ensure the load and its distribution on the platform and any platform extension(s) are in accordance with the manufacturer's rated capacity for that specific configuration.
   e) Ensure there is adequate clearance from overhead obstructions.
   f) Ensure that the minimum safe approach distances (M.S.A.D.) to energized power lines and parts are maintained. (See Fig. 3, page 10 for examples of safe operating procedures.)
   g) Ensure all personnel in the platform are wearing fall protection devices and other safety gear as required at all times.

8.9 Hazardous Locations. It shall be the responsibility of the user to determine the hazard classification of any particular atmosphere or location according to ANSI/NFPA 505-1987.

8.9.1 Hazardous locations. Aerial platforms operated in hazardous locations shall be approved of and of the type required by ANSI/NFPA 505-1987.

8.10 Warnings and instructions. The operator shall ensure the operation of the aerial platform is in compliance with this standard.

8.10.1 Personnel footing. Personnel shall maintain a firm footing on the platform floor while working therein. Use of planks, ladders, or any other devices on the aerial platform for achieving additional height or reach shall be prohibited.

8.10.2 Precaution for other moving equipment. When other moving equipment and vehicles are present, special precautions shall be taken to comply with local ordinances or safety standards established for the workplace. Warnings such as, but not limited to, flags, roped-off areas, flashing lights, and barricades shall be used.

8.10.3 Reporting problems or malfunctions. The operator shall immediately report to his supervisor any problems or malfunctions of the aerial platform which become evident during operation. Any problems or malfunctions that affect the safety of operation shall be repaired prior to continued use.

8.10.4 Reporting potentially hazardous locations. The operator shall immediately report to his supervisor any potentially hazardous location(s) (environment) which become evident during operation.

8.10.5 Altering safety devices. Altering or disabling of interlocks or other safety devices shall be prohibited.

8.10.6 Entanglement. Care shall be taken to prevent rope, electric cords and hoses from becoming entangled in the aerial platform.

8.10.7 Capacity limitation. Rated capacities shall not be exceeded when loads are transferred to the platform at any height.

8.10.8 Work area. The operator shall ensure that the area surrounding the aerial platform is clear of personnel and equipment before lowering the platform.

8.10.9 Fueling. The engine shall be shut down while fuel tanks are being filled. Fueling shall be done in a well-ventilated area free of flame, sparks, or other hazards which may cause fire or explosion.

8.10.10 Battery charging. Batteries shall be charged in a well-ventilated area free of flame, sparks, or other hazards which may cause fire or explosion.

8.10.11 Improper platform stabilization. The aerial platform shall not be positioned against another object to steady the platform.

8.10.12 Misuse as a crane. The aerial platform shall not be used as a crane.

8.10.13 Unusual operating support conditions. The aerial platform shall not be operated from a position on trucks, trailers, railroad cars, floating vessels, scaffolds, or similar equipment unless the application is approved in writing by the manufacturer.

8.10.14 Travel speed. Under all travel conditions, the operator shall limit travel speed according to conditions of ground surface, congestion, visibility, slope, location of personnel, and other factors causing hazards of collision or injury to personnel.

8.10.15 Elevated driving requirements. Before and during driving while the platform is elevated, the operator shall:
   a) Maintain a clear view of the path of travel.
   b) Maintain a safe distance from obstacles, debris, drop-offs, holes, depressions, ramps, and other hazards to ensure safe elevated travel.
   c) Maintain a safe distance from overhead obstacles.

8.10.16 Stunt driving. Stunt driving and horseplay shall not be permitted.

8.10.17 Unauthorized use. The operator shall implement means provided to protect against use by unauthorized person(s).
10. Responsibilities of Lessees

10.1 Basic principles. Sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the performance of responsibilities of lessees with due consideration of the knowledge that the unit will be carrying personnel.

10.2 Lessee. A lessee is a person(s) or entity to whom an aerial platform is provided by lease, rental, loan, or other arrangement. A lessee may also be a user or operator.

10.2.1 Lessee as a dealer. When a lessee uses the aerial platform as a dealer, he shall have the responsibilities of dealers as specified in section 5 of this standard.

10.2.2 Lessee as an owner. When a lessee uses the aerial platform as an owner, he shall have the responsibilities of owners as specified in section 6 of this standard.

10.2.3 Lessee as a user. When a lessee uses the aerial platform as a user, he shall have the responsibilities of users as specified in section 7 of this standard.

10.2.4 Lessee as an operator. When a lessee uses the aerial platform as an operator, he shall have the responsibilities of operators as specified in section 8 of this standard.

9. Responsibilities of Lessor

9.1 Basic principles. Sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the performance of responsibilities of lessors with due consideration of the knowledge that the unit will be carrying personnel.

9.2 Lessor. A lessor is a person(s) or entity who leases, rents, loans, or otherwise provides an aerial platform to another party for the beneficial use of that party (the user). A lessor may also be a dealer, owner, lessee, user or operator.

9.2.1 Lessor as a dealer. When a lessor uses the aerial platform as a dealer, he shall have the responsibilities of dealers as specified in section 5 of this standard.

9.2.2 Lessor as an owner. When a lessor uses the aerial platform as an owner, he shall have the responsibilities of owners as specified in section 6 of this standard.

9.2.3 Lessor as a user. When a lessor uses the aerial platform as a user, he shall have the responsibilities of users as specified in section 7 of this standard.

9.2.4 Lessor as an operator. When a lessor uses the aerial platform as an operator, he shall have the responsibilities of operators as specified in section 8 of this standard.
Table 1 - Minimum safe approach distance (M.S.A.D.) to energized (exposed or insulated) power lines

<table>
<thead>
<tr>
<th>Voltage range (phase to phase)</th>
<th>Minimum safe approach distance (Feet)</th>
<th>(Meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 300V</td>
<td>Avoid Contact</td>
<td></td>
</tr>
<tr>
<td>Over 300V to 50 kV</td>
<td>10</td>
<td>3.05</td>
</tr>
<tr>
<td>Over 50 kV to 200 kV</td>
<td>15</td>
<td>4.60</td>
</tr>
<tr>
<td>Over 200 kV to 350 kV</td>
<td>20</td>
<td>6.10</td>
</tr>
<tr>
<td>Over 350 kV to 500 kV</td>
<td>25</td>
<td>7.62</td>
</tr>
<tr>
<td>Over 500 kV to 750 kV</td>
<td>35</td>
<td>10.67</td>
</tr>
<tr>
<td>Over 750 kV to 1000 kV</td>
<td>45</td>
<td>13.72</td>
</tr>
</tbody>
</table>

Denotes prohibited zone

Danger: - Do not allow machine personnel or conductive materials inside prohibited zone.
- Maintain M.S.A.D. from all energized lines and parts as well as those shown.
- Assume all electrical parts and wires are energized unless known otherwise.

Caution: - Diagrams shown are only for purposes of illustrating M.S.A.D. work positions, not all work positions.

Figure 3 - Minimum Safe Approach Distance (M.S.A.D.)