

## Aerial Work Platforms

This Aerial Work Platform Safety Program covers any equipment that is used primarily for mechanically elevating personnel, along with their tools and equipment, on a platform.

Such equipment includes, but is not necessarily limited to, any equipment meeting the American National Standards Institute (ANSI) standards listed below:

- ANSI Standard A92.2-2015 "Vehicle-Mounted Elevating and Rotating Devices"
- ANSI Standard A92.3-2006 "Manually Propelled Elevating Aerial Platforms"
- ANSI Standard A92.5-2006 "Boom-Supported Elevating Work Platforms"
- ANSI Standard A92.6-2006 "Self-Propelled Elevating Work Platforms"
- OSHA Standard 29 CFR 1910.67 "Powered Platforms, Manlifts and Vehicle-Mounted Work Platforms"
- OSHA Standard 29 CFR 1926.453 "Scaffolds; Aerial Lifts"
- OSHA Standard 29 CFR 1926.502 "Fall Protection Systems criteria and practices"

Equipment not designed for elevating personnel, such as forklifts or cranes, even if modified to elevate personnel, shall not be used to lift personnel. Any employee, student or contract personnel operating aerial work platforms on FSU property is subject to the requirements of this program.

### **Responsibilities**

#### Environmental Health and Safety

- Annually review and update the Program as needed.
- Monitor the effectiveness of the Program.
- Provide support to departments in implementing the Program.

#### Departments

- Must implement, administer, and comply with all aspects of this Program.
- Review the Program annually for compliance and effectiveness.
- Develop internal procedures for each aerial work platform to include authorized users and uses, training, inspection and maintenance schedules, and record keeping.
- Verify that all employees who operate or work near aerial work platforms are properly trained.
- Maintain written records of operator training on each model of aerial work platform and the name of the trainer.

#### Supervisors

- Coordinate or provide training as detailed in this Program.
- Ensure that only trained and authorized individuals use aerial work platforms.
- Provide specific operational training for each aerial work platform.
- Observe the operation of aerial work platforms and correct unsafe practices.

#### Operators

- Attend training and review the requirements of the Program and specific departmental procedures.
- Operate the equipment in a safe and responsible manner.
- Observe the operation of the aerial work platform and report unsafe practices to your supervisor.

### **Definitions**

**Aerial device** or **aerial work platform** means an entire device that is designed and manufactured to raise personnel to an elevated work position on a platform supported by scissors, masts, or booms.

**Aerial ladder** means an aerial device that consists of a single- or multiple-section rung ladder.

**Articulating boom platform** means an aerial device with two or more hinged boom sections.

**Authorized person** means a person who is approved and assigned to perform specific types of duties by the employer and who is qualified to perform those duties because of his or her training or experience.

**Extensible boom platform** means an aerial device (except ladders) with a telescopic or extensible boom. Telescopic derricks with personnel platform attachments shall be considered to be extensible boom platforms when used with a personnel platform.

**Insulated aerial device** means an aerial device designed for work on energized lines and apparatus.

**Mobile unit** means a combination of an aerial device, its vehicle, and related equipment.

**Platform** means any personnel-carrying device (basket or bucket) which is a component of an aerial device.

**Qualified person** means a person who possesses a recognized degree, certificate, professional standing, or skill and who, by knowledge, training, and experience, has demonstrated the ability to deal with problems relating to the subject matter, the work, or the project.

**Vehicle** means any carrier that is not manually propelled

**Vertical tower** means an aerial device designed to elevate a platform in a substantially vertical axis.

### **Design and Construction**

All aerial work platforms manufactured on or after July 1, 2006, shall meet the design and construction requirements of ANSI A92.2-2001, American National Standard for Vehicle-Mounted Elevating and Rotating Aerial Devices. All aerial work platforms manufactured before July 1, 2006, shall meet the design and construction requirements of ANSI A92.2-1969, American National Standard for Vehicle-Mounted Elevating and Rotating Work Platforms.

### **Modifications**

Aerial work platform equipment shall not be modified for any use other than that intended by the manufacturer, unless such modifications are certified in writing by the manufacturer or equivalent entity. The certification must state that the modification is at least as safe as the original equipment and that the equipment still meets the applicable ANSI specifications.

### **Maintenance**

All aerial work platform equipment must be inspected, maintained, repaired, and kept in proper working condition according to the manufacturer's instructions provided with the equipment, or according to

manufacturer's repair and/or maintenance manuals. Any equipment that is not in proper working order must be immediately removed from service and repaired or replaced before reuse.

### **Equipment Security**

If the aerial work platform is accessible to others, the key shall be removed and returned to the supervisor or other designated location that will prevent unauthorized use. If the key is to be left in the device, the aerial work platform must be locked in a secure area in order to prevent unauthorized use.

### **Operator Requirements**

Only authorized and qualified personnel are allowed to operate aerial work platforms as defined in the definitions section of this program.

### **Operator Training**

#### **Operator Pre-start Inspection**

Each operator must complete a pre-start inspection of the aerial work platform before use. If items are found to be unsafe, the aerial work platform shall be taken out of service and the unsafe condition reported to the supervisor for repairs. The aerial work platform shall not be used until the unsafe condition is addressed.

A qualified person should examine or test any items found to be unsafe to determine if they constitute a safety hazard. Items found to be unsafe shall be repaired or replaced before use.

Operator Pre-start Inspection - Test or inspect for the following component or systems:

- Conditions interfering with proper operation of controls and associated mechanism
- Malfunction of visual and audible safety devices
- Visible deterioration or leaks in hydraulic or pneumatic systems
- Visible damage or contamination of fiberglass and other insulating components
- Ensure operational and instructional markings are present and legible
- Malfunction or signs of excessive deterioration, dirt, and moisture accumulation in electrical systems of, or related to, the aerial work platform
- Ensure locking devices, bolts, pins, and other fasteners are in place and not loose or deformed

#### **[Aerial Lift Inspection.pdf](#)**

### **Workplace Survey**

Before using an aerial work platform, the operator shall survey the area for hazards such as:

- Untamped earth fills
- Ditches
- Drop-offs and floor obstructions
- Debris
- Overhead obstructions and electrical conductors
- Weather conditions
- Unauthorized persons in the area

- Uneven ground that exceeds the manufacturer's requirements for slope

All potentially unsafe conditions identified in either the visual inspection, equipment check, or area inspection must be corrected prior to using the aerial work platform.

If it is determined that there is limited clearance from electrical power lines, the owner of the electrical lines, or his/her representative, must be notified and informed of the intended work to be done in proximity to the lines. This notification must take place prior to the commencement of work. Any overhead wires must be considered energized until the owner of the electrical lines, or his/her representative, states that they are de-energized.

### **Working from the Platform**

Set the brakes and make sure outriggers, when used, are positioned on pads or a solid surface. When using the aerial work platform on an incline, install wheel chocks if they can be installed safely.

The boom and platform load limits specified by the manufacturer shall not be exceeded.

Persons should stand firmly on the floor of the platform. Sitting or climbing on the edge of the platform is prohibited. Use of guardrails, planks, ladders, or any other device to gain additional height or reach is prohibited.

All persons on the platform shall wear a full body harness as required by the manufacturer with a lanyard attached to the manufacturer's recommended attachment point.

Never attach a lanyard to an adjacent pole, structure, or equipment.

### **Moving the Aerial Work Platform**

Make sure the boom is properly cradled and the outriggers are in the stowed position before moving the aerial work platform. The aerial work platform may be moved with the boom elevated and personnel on the platform only if the equipment was specifically designed for such use and the manufacturer allows for this type of operation.

### **Aerial Ladders**

Secure aerial ladders in the lower traveling position, using the locking device or other means provided by the manufacturer, before moving it for highway travel.

All persons working from an aerial ladder must wear manufacturer's recommended or appropriate fall protection.

### **Safe Work Practices**

- Set the brakes and make sure outriggers, when used, are positioned on pads or a solid surface. When using the aerial work platform on an incline, install wheel chocks if they can be installed safely.
- Never exceed the boom and platform load limits specified by the manufacturer.
- Always stand firmly on the floor of the platform. Sitting or climbing on the edge of the platform is prohibited. Use of guardrails, planks, ladders, or any other device to gain additional height or reach is prohibited.
- All persons on the platform shall wear a full body harness as required by the manufacturer with a lanyard attached to the manufacturer's recommended attachment point.
- Never attach a lanyard to an adjacent pole, structure, or equipment.

- Operators shall not wear any loose clothing or any accessory that can catch in moving parts.
- Before the machine is started, the operator must walk completely around the machine to ensure everyone and everything is clear of the machine.
- Any signs, plates, or decals which are missing or illegible must be replaced.
- If the aerial / scissor lift becomes disabled, a “out of service” tag or equivalent shall be attached to the controls inside the platform in a conspicuous location.
- Operators must report all accidents, regardless of fault and severity, to their Supervisor and Environmental Health and Safety.
- Consideration shall be given to the amount of wind anticipated during operation. Follow the manufacturer’s instruction regarding operation in windy conditions. As a general rule, aerial work platforms shall not be operated in winds exceeding 25mph although this can vary depending on the model of equipment.
  - At 20mph wind speeds or anticipated gusts, aerial work platforms will be lowered to a maximum height of 20 feet.
  - At 25mph wind speeds or anticipated gusts, aerial work platforms will be grounded. If at any time, an operator feels unsafe in an aerial work platform, he/she may make a decision to ground the equipment until safe conditions are re-established.
- Guardrails must be installed and access gates or openings must be closed before raising the platform.
- Boom and platform load limits specified by the manufacturer shall not be exceeded.
- Before moving an aerial work platform for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers (if equipped) are in the stowed position.
- Consideration shall be given to the protection of bystanders via barricading, having another employee keep bystanders at a safe distance, or by other means.
- Aerial work platforms shall not be operated from trucks, scaffolds, or similar equipment.

## **Resources**

### **External Resources:**

[OSHA Aerial Lift Fact Sheet](#)

[OSHA Aerial Lift Quick Card](#)

[Scissor Lift Hazard Warning](#)

### **Operator pre-inspection checklist:**

[Aerial Lift Inspection.pdf](#)