

Environmental Health &
Safety
Muncie, IN 47306

Aerial Lift Program



**BALL STATE
UNIVERSITY**

WE FLY

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Aerial Lift Program

A. Statement of Policy

Ball State University is committed to the responsibility of providing a work environment that is free from recognized hazards for its employees. Consistent with this duty is the Standard for Manually Propelled Elevating Aerial Platforms (29 CFR 1910.68), promulgated by the Occupational Safety and Health Administration (OSHA).

Ball State University is required by OSHA's Aerial lift Standard to develop and carry out the provisions of an Aerial Lift Program. The basic Aerial Lift Program principles are sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use and expected environment in order to prevent injury to employees.

The Ball State University Aerial Lift Program will be evaluated and updated on an as needed basis. This program will be made readily available to employees, union representatives, and any individual representing OSHA.

B. Purpose and Objectives

This procedure establishes the minimum standards for aerial lift vehicles at Ball State University. It is designed to:

1. Ensure that the employees who follow the procedure will be protected from the hazards that are recognized to be present while operating, servicing, or in the area of operation;
2. Comply with the OSHA Standard, 29 CFR 1910.68 and the American National Standards Institute (ANSI) /SIA A.92.3-2006;
3. Provide a uniform approach to the control of an aerial lift platform at Ball State University while still providing flexibility;
4. Ensure that the most appropriate aerial lift platform equipment is purchased and used.

C. Scope

This program applies to all aerial lift platforms, operators, and maintenance activities at Ball State University operations and facilities collectively referred to throughout this document as the "University."

This program contains safety requirements relating to design, maintenance, controls, power-plant, components, and safety props of the aerial lift platforms.

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D. Definitions

Aerial platform: A manually propelled device that has an adjustable position platform, supported from ground level by a structure.

Anchorage(s): A secure point of attachment to be used with personal fall protection equipment.

Authorized personnel: Personnel approved or assigned to perform a specific type of duty or duties at a specific location or locations at a work site.

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

Broker: An independent business entity or person that arranges a lease or transfer of ownership of an aerial platform, but does not own the aerial platform. If the entity or person is an employee of the buyer, seller, lessor, or lessee of the aerial platform, he shall not be considered a broker.

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

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

Critical components(s): Load supporting elements, which support or stabilize the platform or aerial platform.

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.

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Directional Controls: Controls that initiate functions that affects movement of the platform or aerial platform.

Ductile materials: Materials having a minimum elongation of 10% in 2 inches (50.8mm).

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

Familiarization: Providing information regarding the control functions and safety devices for the aerial platform(s) to a qualified person or operator.

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.

Instability: A condition in which the sum of the moments that tend to overturn the aerial platform 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.

Lessee: 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 dealer, owner, user or operator.

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Lessor: 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.

Maintenance: The act of up-keep such as inspection, lubrication, refueling, cleaning, adjustment, and scheduled part(s) replacement.

Manufacturer: A person or entity that makes, builds, or produces an aerial platform.

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

Most adverse stability condition(s): The permitted configurations of the aerial platform most likely to cause instability while maintaining stability. Factors to consider shall include:

- 1) Up to and including maximum platform height
- 2) All positions and configurations of the platform(s)
- 3) All wheel and axle positions
- 4) Forward and backward configurations of the elevating assembly
- 5) All other moveable features, which affect the stability of the aerial platform

Non-ductile materials: Materials having an elongation of less than 10% in 2 inches (50.8mm)

Operation: Performance of functions of an aerial platform within the scope of its specifications and in accordance with the manufacturer's instructions, the user's work rules, and applicable governmental regulations.

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.

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

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Platform: The portion of an aerial platform intended to be occupied 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 machine is being supported.

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

Qualified person: One who, by possession of a recognized degree, certificate, or professional standing, or by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project.

Rated horizontal force: The maximum permissible horizontal force, which can be applied at the upper periphery of the aerial platform as specified by the manufacturer.

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

Rebuild/recondition: The act of disassembly, repair or adjustment of an aerial platform or component, utilizing replacement parts and components, in accomplishing work beyond the scope in order to restore, to the extent possible, the aerial platform or component to the original manufactured specifications.

Remanufacture: The modification of an aerial platform, either by its original manufacturer or another qualified entity, so that the aerial platform will comply with the ANSI standard in effect on the date the modification is completed.

Repair: The act of restoring to good condition that which has been broken, damaged or worn due to use, abuse or other reasons.

Stability/Stable: A condition in which the sum of the moments that tend to overturn the aerial platform 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.

Tilt-back feature: A device used to lower the height of an aerial platform for transport under fixed objects.

Training: Instruction to enable the trainee to become a qualified person regarding the task to be performed, including knowledge regarding potential hazards.

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Unintended movement: Motion of the aerial platform or platform without activation of any control.

User: A person(s) or entity who has care, control, and custody of the aerial platform. This person or entity may also be the employer of the operator, a dealer, owner, lessor, lessee, or operator.

E. Program Elements

1. General Requirements

- a. Principles of safety, training, inspection, maintenance, application, and operation consistent with all data and regulatory rules regarding the parameters of intended use and excepted environment shall be applied in the performance of the aerial lifts.
- b. All aerial lift vehicles shall have operating and maintenance manuals.
- c. Shall ensure that frequent and quarterly inspections are current and are performed.
- d. Maintenance of the aerial lifts will be performed by qualified individuals.
- e. All University Employees who use the aerial lifts are trained and are familiar with the program, operations and safety features.
- f. All outside aerial lifts (not University owned lifts) that are used on the University campus are subject to all regulatory requirements and site specific (University Policy) standards. No one is permitted to operate University owned aerial lifts if they are one of the following:
 - i. Not an employee and/or student of the University.
 - ii. Anyone who has not been properly trained by an approved training provider or by the EHS Office.
 - iii. Outside contractor who has not been properly trained.

2. Safety

- a. Every operator of the University who operates a University owned aerial lift will be trained by a qualified person who either is in the possession of a recognized degree, certificate, or professional standing, or by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject and is able to train other University operators with the knowledge and skills need to operate the aerial lift in a safe and responsible way.
- b. EHS Office will ensure University operators are trained every three (3) years.
- c. EHS Office will ensure University operators are familiar with the aerial lift that is to be used.
- d. All University operators will be made aware of all the responsibilities that come with operating an aerial lift.

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- e. All regulatory and site specific standards will be implemented and followed when aerial lifts are operated on any University project that requires the use of any University owned aerial lift.
- f. Any and all site specific requirements including additional fall protection; maintenance; personnel; or any of site specific standards will be observed during the operation of the aerial lift.

3. Training

- a. Each employee will be trained by a qualified and competent person from the EHS Office or an individual contracted by the University and/or the department's deemed competent person.
- b. Training will be conducted on an as needed basis for individuals who have not received an initial training course. Training will be conducted as a re-fresher every three (3) years thereafter.
- c. Training will consist of all regulatory OSHA standards and ANSI guidelines. Training will be focused on the following topics; however, not limited to the following:
 - 1. Purpose and use of manuals
 - 2. Pre-start inspection sheet
 - 3. Associated problems or malfunctions affecting the operation of the aerial platform
 - 4. Factors affecting stability
 - 5. Purpose of placards and decals
 - 6. Workplace inspection
 - 7. Safety rules and regulations
 - 8. Authorization to operate
 - 9. Actual operation/instruction of the aerial platform
 - 10. Proper storage

4. Owner's Manual

- a. Each aerial lift will be equipped with the owner's manual that is easy and convenient to obtain prior to use, during use, and after use.
- b. All owners' manuals will be in good condition.
- c. Owners' manuals should be located in weather-resistant storage compartments; however, if not applicable then owners' manuals shall either be attached to the aerial lift or placed in easily accessible compartments on the aerial lift.

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5. Inspections

- a. EHS Office will arrange third party inspections for the aerial lifts.
- b. Every aerial lift will be inspected on an annual basis by a certified Technician.
- c. Inspections will be maintained in the EHS Office and will be made available for view by anyone who requests proof of inspection including OSHA.
- d. Pre-shift inspection checklist will be performed at the beginning of each shift that the aerial lift is to be operated. Checklists will be maintained on the lifts and any deviations will be reported to the immediate supervisor. The EHS Office will ensure the collection and availability of the pre-shift inspection checklist.

6. Non-BSU Owned Aerial lifts

- a. All outside aerial lifts (rented or temporary loaners) will meet all regulatory standards and all site specific standards.
- b. All aerial lifts will be operated in-accordance with this operational plan.
- c. Only trained personnel will be allowed to operate the aerial lifts.
- d. Training should be provided by the dealer and/or owner of the aerial lift before operating. The EHS Office reserves the right to conduct an audit of the training and may offer additional training as necessary.
- e. It is preferred that the EHS Office must be contacted if an aerial lift is going to be used by University employees or students that is not University owned. The following information must be provided before operation of the lift:
 - 1. Operator performing the work
 - 2. Documentation of operator training
 - 3. Duration of use
 - 4. Safety equipment to be used
 - 5. Make and model of the aerial lift
 - 6. Pre-inspection sheet
 - 7. Owner / lessor of the aerial lift