



Aerial Lift Program

GENERAL

The UNCW Environmental Health & Safety Department (EH&S) is authorized by [UNCW Policy 05.600](#) to develop and manage comprehensive environmental, health and safety programs. Additionally, they are tasked to identify and address regulatory requirements. In that spirit, this Aerial Lift Policy has been developed to protect employees by ensuring that all employees understand the Aerial Lift Policy before employees perform servicing and maintenance activities. This policy is intended to meet the Occupational Safety and Health Requirements for General Industry outlined in 29 CFR 1910.67 and 1910.68.

SCOPE

This policy applies to all university employees regardless of status or type of employment. It may be used as minimum guidelines for contractors and/or vendors that are expected to maintain their own safety program. Examples of aerial platform lifts include one-man lifts, scissor lifts, boom trucks, cherry pickers, (etc.).

APPLICATION

This written policy outlines responsibilities, training and program requirements with regard to the Aerial Lift Policy.

RESPONSIBILITIES

UNCW EH&S or other authorized provider shall conduct training and provide technical support to departments and employees when questions or concerns arise with regard to Aerial Lift safety. Each Department shall be responsible for the implementation of the Aerial Lift Program procedures. Employees shall have lift-specific training in understanding the significance of implementing the procedures. Employees will use the Aerial Lift Program when working in conditions where there is a danger of injury because of potential hazards associated with Aerial Lifts.

Upon the purchase of an aerial platform lift, the department shall:

1. Register each piece of equipment with EH&S within 10 days of receipt/ delivery and shall include
 - a) Make, model and serial number of equipment
 - b) Department owning equipment
2. Ensure that the operating and maintenance manuals have been received.
 - a) Once copy shall remain with the lift at all times
 - b) One copy shall be retained in the owing department

- c) One copy, hard or electronic, shall be provided to the UNCW EH&S Department
3. Acquire repair and parts manuals within 30 days of acquisition.
4. Provide the manufacturer of the lift with the name and address of the university department along with the model and serial number of the lift.
5. An outside vendor shall perform an annual inspection on the lift prior to placing the unit in service.
6. Place a copy of the operating and maintenance manuals in a pouch or compartment on the lift.

Maintenance, Inspection and Repair

1. *Maintenance:* The department responsible for each aerial platform lift shall work with UNCW Motor Pool and/ or a qualified vendor arrange for maintenance that is appropriate for their lift. The department shall establish a preventive maintenance program based on the manufacturer's recommendations, the environment it is to be used in and the frequency at which it is to be used. Records shall be kept, at a minimum, 5 years.
2. *Inspections:* The inspection process is a critical step in preventing aerial lift accidents that are caused from faulty or worn out equipment. Aerial platform lifts that are not in proper operating condition shall be removed from service until the problems have been corrected by an authorized and trained maintenance technician.

Pre-Start Inspections

Before each day's use or at the beginning of each shift that the aerial platform lift is used it shall be given a pre-start inspection, which is a visual inspection, and functional test that includes the following criteria:

1. Operating and emergency controls.
2. Safety devices.
3. Personal protective devices.
4. Air, hydraulic and fuel system leaks.
5. Cables and wiring harness.
6. Loose or missing parts.
7. Tires and wheels.
8. Placards, warnings, control markings and operating manual(s).
9. Outriggers, stabilizers and other structures.
10. Guardrail system.
11. Other items specified by manufacturer.

Frequent Inspections

Any time an aerial platform lift has not been used for a period of 3 months or more (or after the lift has been purchased), then a frequent inspection shall be performed by a qualified person from an outside vendor and shall include the following:

1. All functions and their controls for speed(s) smoothness, and limits of motion.
2. Lower controls including the provisions for overriding of upper controls.
3. All chain and cable mechanisms for adjustment wear or damaged parts.
4. All emergency and safety devices.

5. Lubrication of all moving parts, inspection of filter element(s), hydraulic oil, engine oil and coolant as specified by the manufacturer.
6. Visual inspection of structural components and other critical components such as fasteners, pins, shafts and locking devices.
7. Placard, warnings and control markings.
8. Additional items specified by the manufacturer.

Annual Inspections

An annual inspection shall be performed on each aerial platform lift each year by an outside vendor. A preventative, maintenance task list shall be developed with the vendor. The inspection shall be performed by a qualified mechanic who is authorized to perform maintenance duties on the lift. The inspection shall include all items specified by the manufacturer for an annual inspection.

Workplace Inspections

Before an aerial lift is used and during its use, the operator shall check the area in which the aerial lift is to be used for possible hazards such as, but not limited to:

1. Drop-offs or holes.
 2. Slopes.
 3. Bumps and floor obstructions.
 4. Debris.
 5. Overhead obstructions and high voltage conductors.
 6. Hazardous locations and atmospheres.
 7. Inadequate surface and support to withstand all forces imposed by the aerial lift.
 8. Wind and weather conditions. Lifts shall not be used in sustained winds of 25 mph or greater or where lighting is within 5 miles of the worksite.
 9. Presence of unauthorized people.
 10. Other possible unsafe conditions.
3. *Repair*: When safety related items have been discovered, the lift shall be placed out of service until the item(s) has been repaired. All replacement parts or components that are replaced shall be identical to or equivalent to the original parts based on information provided by the manufacturer or supplier.

TRAINING

Each department is responsible for arranging the training of all authorized users of the lift through the UNCW EH&S Department. Training shall be lift-specific. No personnel shall operate or ride on an aerial platform lift if they have not been trained. Retraining shall occur every two (2) years.

All operators and users of aerial platform lifts shall attend an aerial lift training session sponsored by the EH&S Department or authorized provider. The contents of the training shall include the following:

1. Purpose and use of manuals.
2. Pre-start inspection process.
3. Identification of malfunctions and problems.

4. Factors affecting stability.
5. Purpose of placards and decals.
6. Workplace inspections.
7. Safety rules and regulations; including required PPE.
8. Authorization to operate.
9. Operator warnings and instructions.
10. Operation of the aerial platform.
11. Demonstrate competency.

Attendance records for UNCW-provided training shall be retained by UNCW EH&S Department and made available upon request to lift owners. All "outside" training records from authorized providers shall be forwarded to the UNCW EH&S Department within 7 days of course completion. Owing departments may also set a retention policy for employee training records.

PROGRAM REQUIREMENTS

General Requirements

To ensure safe practices, the following general procedure is used when an authorized user uses an aerial platform lift:

1. Obtain any necessary authorization to use the lift.
2. Create a pre-job plan with supervisor
3. Check the last pre-start inspection for any comments or notes.
4. Perform a pre-start inspection on the lift, document the inspection and place it in the reserved storage location on the lift.
5. Perform a workplace inspection in the area that the lift will be used.
6. Extend and adjust the outriggers, stabilizers, extendible axles or other stability enhancing means.
7. Ensure that the guardrails are installed and are in place.
8. Ensure that the load being placed on the lift is within the rated capacity of the lift.
9. Test the controls of the lift.
10. Use two-person teams; one in the bucket and one on the ground per matrix (see [Appendix B](#))

Because the user has direct control over the application and operation of aerial platform lifts, conformance with good safety practices in this area is the responsibility of the user and the operating personnel. Decisions on the use and operation of the lift shall be made with the understanding that the platform will be carrying personnel whose safety is dependent on those decisions. Users and operators of aerial lifts have responsibilities involving the following:

Manuals

Users of aerial lifts must review and acknowledge that they have reviewed the operating manuals for all lifts that they use. The user is expected to know and understand the following about the lift he/she operates prior to initial operation of the lift:

1. The operation of the lift.
2. All control features of the lift.
3. All placard warnings.
4. All safety devices on the lift.
5. Where to locate the user manual.
6. Who can operate or use the aerial lift.

If the user does not understand any of the above, they shall consult with UNCW EH&S prior to using the lift.

Pre-job Planning

Users of aerial lifts and their supervisors shall complete a pre-job plan and safety meeting at least daily and shall include location(s) of work, potential hazards and rescue plan.

1. All persons operating a lift shall be knowledgeable of how to use equipment. This shall include basket & ground controls and operation of manual descent controls during power loss or emergencies.
2. In case of emergency, where the person in the basket can no longer operate the equipment due to equipment failure or personnel emergency, the attendant on the ground shall:
 - Have immediate access to a phone or otherwise to contact 911
 - Dial 911 immediately and provide details as to emergency and location
 - Use manual descent operations to safely return person in basket to ground ONLY if equipment controls and functions properly
 - DO NOT use manual descent operation if doing so may cause (further) injury or damage to equipment.
 - If equipment is not operable, communicate your needs to 911 dispatch as far as need for rescue equipment
 - Call supervisor as soon as scene is safe to alert them as to the occurrence
3. Equipment shall be locked out/ tagged out until a qualified person can inspect equipment and determine it is safely operable.
4. PPE shall be removed from service until properly examined and cleared by a qualified person

Platform Qualifications

Specifications for platforms

- A. The following criteria shall be met to be an approved platform on a lift:
 1. Platform width shall be not less than 18 inches and shall have a slip resistant surface.
 2. The platform shall have a guardrail system around its periphery. It is removable or can be lowered. The means used to secure it in the normal operating position shall be readily accessible for inspection and maintenance.
 3. The guardrail system shall include a top rail that is between 39 and 45 inches high, a mid rail that is approximately half-way from the platform to the top rail, and a toe board that is at least 4 inches high. Tie-off points shall be included.
- B. When to use personal fall protection

Fall protection shall be worn at all times when operating lifts. Tie-off points must be located on the lift and NOT to a separate working surface.

Markings and Decals

In addition to any other markings or decals that are placed on the lift by the manufacturer, the following information shall be displayed on all aerial lifts in a clearly visible, accessible area and in a durable manner:

1. The make, model, serial number and manufacturer's name and address.
2. The rated workload, including rated number of occupants.
3. The maximum platform height.

APPENDIX A

Aerial Lift Checklist and Inspections

The checklist and inspections shall be performed prior to each shift by an authorized and trained user of the lift. Documentation of the inspection shall be maintained by each department for 5 years.

Make of lift: _____ **Model of lift:** _____ **Serial #:** _____

General Requirements Checklist	Yes	No	
Obtained necessary authorization to use the lift?			
Checked the <i>last</i> pre-start inspection for any comments or notes?			
Ensure that the load being placed on the lift is within the rated capacity?			
Using two-person teams; one in the bucket and one on the ground per matrix (see <u>Appendix C</u>)			
Pre-job plan completed and communicated to supervisor?			
Pre-start Inspection	OK	Not OK	N/A
Brake(s)			
Operating Controls			
Emergency Controls			
Safety Devices (flashing light, beeper, horn, etc.)			
Fuel System			
Electrical System			
Pneumatic System			
Hydraulic System			
Battery			
Cables			
Wiring Harness			
Loose/Missing Parts (nuts, bolts, pins)			
Tires & Wheels			
Placards & Warnings			
Operations Manual present			
Outriggers			
Guardrail system & Locking Gate			
PPE			
Boom			
Basket/ platform			
Work Site Inspection	OK	Not OK	N/A
Drop-offs or holes			
Slopes			
Bumps and floor obstructions			
Debris			
Overhead obstructions and high voltage conductors			
Hazardous locations and atmospheres			
Inadequate surface and support to withstand all forces imposed by the aerial lift (e.g., utility vaults)			
Wind and weather conditions. Lifts shall not be used in sustained winds of 25 mph or or where lighting is within 5 miles of the worksite			
Presence of unauthorized people in work zone			
Other possible unsafe conditions			

Additional Comments:

Operator's Signature: _____ **Date:** _____

Ground Crew's Signature: _____ **Date:** _____

APPENDIX B

Required Persons to Operate Aerial Lifts

Type of Lift	Required Persons	Job or Task
Bucket Truck	1	Changing light bulbs or ballasts on exterior lamp posts
Bucket Truck	1	Hanging banners from lamp posts or buildings
Bucket Truck	2	Running gas-powered equipment (chain saw, pole saw, pressure washer, etc.)
Bucket Truck	2	Cleaning roof drains or gutters
Bucket Truck	2	Accessing roof top for work not being completed with lift
Bucket Truck	1	Window cleaning (traditional)
Aerial / Boom Lift	2	Changing light bulbs or ballasts on exterior lamp posts
Aerial / Boom Lift	2	Hanging banners from lamp posts or buildings
Aerial / Boom Lift	2	Running gas-powered equipment (chain saw, pole saw, pressure washer, etc.)
Aerial / Boom Lift	2	Cleaning roof drains or gutters
Aerial / Boom Lift	2	Accessing roof top for work not being completed with lift
Aerial / Boom Lift	2	Window cleaning (traditional)
Scissor/one-person Lift	2	Changing light bulbs or ballasts on exterior lamp posts
Scissor/one-person Lift	2	Hanging banners from lamp posts or buildings
Scissor/one-person Lift	2	Running gas-powered equipment (chain saw, pole saw, pressure washer, etc.)
Scissor/one-person Lift	2	Cleaning roof drains or gutters
Scissor/one-person Lift	2	Accessing roof top for work not being completed with lift
Scissor/one-person Lift	2	Window cleaning (traditional)

- **Please contact the UNCW EH&S Department for guidance on other jobs or tasks that may not be listed toddd@uncw.edu or 910-962-4287**
- **Student workers shall always work in 2-person teams and their supervisor must be on campus during the use of equipment.**