Aerial Lift Policy
January 7, 2015 – Last Revision

1.0 Intent:
   This program has been developed to reduce the risk of physical injury or property
damage in areas where aerial lifts are in operation. It also brings the University
into compliance with federal, state, and local regulations.

2.0 Scope:
   This program applies to the operation of all aerial lifts operated by University at
Albany employees and students.
   Please see Appendix C – Examples of Aerial Lifts for specific examples.

3.0 Policy:
   It is the policy of the University at Albany to take all necessary measures to
prevent injuries to employees and students while using aerial lifts. Departments
using aerial lifts must insure that supervisors and operators comply with this
safety program. All University employees and students must successfully
complete a training program and receive certification prior to the operation of any
aerial lift.
This program has been developed in accordance with the following Standards:

   - OSHA Standard 29CFR 1910.67, 1910.68 (Powered Platforms, Manlifts,
     and Vehicle-Mounted Work Platform)
   - OSHA Standard 29CFR 1926.453 (Aerial Lifts)
   - ANSI/SIA A92.6-2006 (Self-Propelled Elevated Work Platforms)

4.0 Responsibilities:

   Environmental Health and Safety (EH&S):
   - Periodically review and update the Aerial Lift Safety Program as
     necessary.
   - Periodically evaluate the work site usage of aerial/scissor lifts.
   - Coordinate training.
Supervisors:

- Review and ensure understanding of this program and its applicability to your department.
- Ensure employees, including any students, comply with all provisions of this program, including completing the appropriate checklists.
- Ensure employees, including students, receive training appropriate to their assigned tasks and maintain documentation.
- Ensure employees, including students, are provided with and use appropriate personal protective equipment (PPE).
- Take prompt action when unsafe conditions or acts are observed.
- Investigate aerial and scissor lift usage injuries and damage and inform EH&S.
- Ensure all required maintenance is performed on the lift.

Aerial and scissor lift operators:

- Adhere to owner’s manual and all provisions in this program.
- Attend and adhere to all required training.
- Immediate report any unsafe acts or conditions to supervisor.
- Complete pre-start and worksite inspections using the appropriate checklist, and consult with supervisor and/or EH&S regarding any unusual hazards.

5.0 Definitions:

Aerial Lifts: Any powered, mobile, vehicle-mounted device that may elevate, telescopically extend, articulate and may (or may not) rotate around a substantial axis, in order to raise and support personnel to elevated job sites.

Aerial lifts include: extendible boom platforms; vehicle-mounted aerial ladders; articulating, rotating boom platforms; vertical self-elevating towers; cherry pickers; bucket trucks and any other equipment built in accordance with either

**Scissor Lifts:** Any powered, mobile device that has a personnel work platform, which is mechanically raised vertically above the carriage by means of controls on the work platform. This equipment is designed and fabricated according to either ANSI A92.6 (1990), Self-Propelled Elevating Work Platforms, or ANSI A92.3 (1990), Manually Propelled Elevating Aerial plat

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

**Articulating boom:** An aerial device with two or more hinged boom sections.

**Insulated Platform:** A platform designed and tested to meet the specific electrical insulation ratings consistent with the manufacturer’s identification plate.

**Outriggers:** Devices that increase the stability of the aerial lift platform and that are capable of lifting and leveling the aerial/scissor lift platform.

**Platform:** Any personnel carrying device, such as a bucket, basket, cage, stand or tub that is a component of a mobile elevated work platform.

**Pre-use inspection:** A thorough equipment and area inspection conducted prior to each shift and before putting a mobile elevated work platform into service.

**Qualified mechanic:** Shall be one who has received training, instruction or a certificate from the aerial lift manufacturer’s representative to conduct aerial lift mechanical inspections.

**Qualified Trainer:** Shall be one who has knowledge, training and experience with aerial lifts proficient enough to train others on the safe use and operation of these devices. Qualified trainers may include the manufacturer or manufacturer’s representative.

**Rated Work Load:** Is the designated capacity of the aerial platform as specified by the manufacturer.

**Stabilizers:** Devices that increase the stability of the aerial lift platform but are not capable of lifting or leveling the aerial/scissor lift platform.
6.0 Aerial Lift Procedures:

6.1 Pre-Use Inspection:

• Prior to the operation of any aerial lift, the Pre-Use Inspection Checklist found in Appendix A must be completed. **This applies at the beginning of every work period, and whenever a new equipment operator takes control of the aerial lift.**

• Any safety defects (such as hydraulic fluid leaks; defective brakes, steering, lights, or horn; and/or missing fire extinguisher, lights, seat belt, or back-up alarm) must be reported for immediate repair. The lift must also be locked and tagged, and taken out of service.

6.2 General Safe Work Practices:

• Operators shall not wear any loose clothing or any accessory that can catch in moving parts.

• Before machine is started, the operator must walk completely around the machine to ensure everyone and everything is clear of the machine.

• Articulating boom and extendable boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated, unless permission has been obtained from the employee in the lift, except in case of emergency.

• Modifications and additions that may affect the capacity or safe operation of an aerial/scissor lift are strictly prohibited without the manufacturer’s written approval. Capacity, operation, and maintenance instruction markings will be changed as necessary, if the manufacturer approves a modification.

• The insulated portion (if applicable) of an aerial/scissor lift shall not be altered in any manner that might reduce its insulating value.

• Any signs, plates, or decals which are missing or illegible must be replaced.

• If the aerial/scissor lift becomes disabled, an “out of service” tag or equivalent shall be attached to the controls inside the platform in a conspicuous location.

• Aerial/scissor lift devices with noted, reported deficiencies shall not be operated until repairs are made and equipment is authorized for use.
• Operators must report all accidents, regardless of fault and severity, to their Supervisor.

6.3 Safe work practices before operation:

- Consideration shall be given to the amount of wind. Follow the manufacturer’s instruction regarding operation in windy conditions. As a general rule, aerial lifts 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, lifts will be lowered to a maximum height of 20 feet.
- At 28mph wind speeds or anticipated gusts, lifts will be grounded.
- If at any time, the operator feels unsafe in a lift, they may make decision to ground the lift.
- 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 lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position (if equipped).
- 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 lifts shall not be operated from trucks, scaffolds, or similar equipment.

6.4 Safety during operation:

- Attention shall be given towards the direction of travel, clearances above, below and on all sides.
- Employees shall not sit or climb on the guardrails of the aerial lift.
- Planks, ladders or other devices shall not be used on the work platform.
- An aerial lift shall not be moved when the boom is elevated in a working position with employees in the basket.
• Aerial lift shall not be placed against another object to steady the elevated platform.

• Aerial lift shall not be used as a crane or other lifting device.

• Aerial lift devices shall not be operated on grades, side slopes or ramps that exceed the manufacturer's recommendations.

• The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface.

• Speed of aerial lift devices shall be limited according to the conditions of the ground surface, congestion, visibility, slope, and location of personnel and other factors that may cause hazards to other nearby personnel.

• Stunt driving and horseplay shall not be permitted.

• Booms and elevated platform devices shall not be positioned in an attempt to jack the wheels off the ground.

• The area surrounding the elevated platform shall be cleared of personnel and equipment prior to lowering the elevated platform.

• All equipment must be secured on the inside of the aerial lift.

• Operators are to call for assistance, if the platform or any part of the machine becomes entangled.

6.5 Safe work practices after operation:

• Safe shutdown shall be achieved by utilizing a suitable parking area, placing the platform in the stowed position, placing controls in neutral, idling engine for gradual cooling, turning off electrical power, and taking the necessary steps to prevent unauthorized use.

• Aerial lifts shall be shut off prior to fueling. Fueling must be completed in well ventilated areas free of flames, sparks or other hazards which may cause fires or explosions.

6.6 Maintenance:

• Any aerial lift not in safe operating condition must be removed from service. Authorized personnel must make all repairs.
• Repairs to the fuel and ignition systems of aerial lifts that involve fire hazards must be conducted only in locations designated for such repairs.

• Aerial lifts in need of repairs to the electrical system must have the battery disconnected before such repairs.

• Only use replacement parts that are currently recommended by the manufacturer.

7.0 Training requirements

All aerial lift operators, including students, are required to successfully complete an aerial lift operating training program, along with hands-on training prior to operating an aerial lift. All operators must be retrained every three years through successful completion of the hands-on training. If operators cannot demonstrate proficiency or are involved in an accident using the lift, training must be repeated.

The operator training program includes classroom instructions, a written test and proficiency demonstration of hands-on operation. This training should be given by a qualified trainer.

Training should include:

• Explanation of electrical, fall, and falling object hazards.
• Procedures for dealing with hazards.

• Recognizing and avoiding unsafe conditions in the work setting.

• Instructions for correct operation of the lift (including maximum intended load and load capacity).

• Demonstration of the skills and knowledge needed to operate an aerial lift before operating it on the job.

• When and how to perform inspections.

• Review of this policy and accompanying checklists.

8.0 Inspections:

The inspection process is a critical step in preventing aerial platform and scissor lift accidents that are caused from faulty or worn out equipment. Aerial platform and scissor 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
Prior to each work shift, conduct a pre-start inspection using the checklist in Appendix A to verify that the equipment and all its components are in safe operating condition. The manufacturer’s recommendations should be followed and include a check of:

- Proper fluid levels (oil, hydraulic, fuel and coolant).
- Wheels and tires.
- Battery and charger.
- Lower level controls.
- Horn, gauges, lights and back up alarms.
- Steering and brakes.
- Operating and emergency controls.
- Personal protective devices.
- Fiberglass and other insulating components.
- Placards, warnings, control markings and operating manual(s).
- Cables and wiring harness.
- Outriggers, stabilizers and other structures.
- Guardrail system.

Work Zone Inspections:
Before an aerial platform lift is used, the operator, using the checklist in Appendix B, shall visually check the workplace area where the aerial platform or scissor lift is to be used, identifying potential hazards such as, but not limited to:

- Drop-offs or holes.
- Inadequate ceiling heights.
- Slopes, ditches, or bumps.
- Debris and floor obstructions.
- Overhead obstructions and high voltage conductors.
- High wind and other severe weather conditions such as ice.
Note: Operation of Aerial platform lifts is prohibited when wind speeds reach 28 MPH or greater, when lightening is visible or when thunderstorm warnings are in effect.

Annual Inspections:
An annual inspection shall be performed on all aerial platform and scissor lifts every twelve months (no later than 13 months from the date of the prior annual inspection). The inspection shall be performed by a qualified mechanic who is authorized to perform maintenance duties on the lift. The qualified mechanic’s inspection shall include all items specified by the manufacturer for an annual inspection.
AERIAL/SCISSOR LIFT PRE-START INSPECTION CHECKLIST

The pre start inspection shall be performed prior to each day’s use. Documentation of the inspection shall be maintained by each department, with a copy of most recent day’s inspection document stored on the lift.

Check off the items that have been inspected or mark N/A, if the item does not apply to the lift being inspected. If there are any of these items that are not satisfactory, place the lift out of service until the item is corrected.

Department Lift belongs to: ____________________________  Make of Lift: ________________

Model: ______________________________ Serial #: __________________________

Inspectors Name: ____________________________  Date of Inspection: ________________

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<th>Not Okay</th>
<th>N/A</th>
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<tr>
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<tr>
<td>Wheels and Tires</td>
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<td>Battery and charger</td>
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<tr>
<td>Lower Level Controls</td>
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<td>Horn, Gauges, &amp; lights, Back up Alarms</td>
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<td>Operating Manual</td>
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<tr>
<td>Cables and wire harness</td>
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<td>Guardrail system</td>
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Comments:__________________________________________________________________________________________

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January 2015
Appendix B

AERIAL/SCISSOR LIFT WORK ZONE INSPECTION CHECKLIST

The workplace inspection shall be performed prior to using the aerial platform lift. The workplace inspection must be performed by the individual who will be using the lift.

Check off the items that have been inspected and abate any safety issues that were identified prior to using the lift. Place any comments in the space provided below.

<table>
<thead>
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<th>Inspectors Name: _______________________________</th>
<th>Date of Inspection: ____________</th>
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<thead>
<tr>
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<th>Completed/comments</th>
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<td>o Slopes, ditches, or bumps........................................................................</td>
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<td>o Debris and floor obstructions ...................................................................</td>
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<td>o Overhead obstructions and High Voltage conductors ..................................</td>
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<td>o Inadequate ceiling heights ......................................................................</td>
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<td>o High Wind and other severe weather conditions…….................................</td>
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**Note:** Operation of Aerial lift is prohibited when wind speeds reach 28 MPH or greater, when lightning is visible or when thunderstorm warnings are in effect.
Appendix C

EXAMPLES OF AERIAL LIFTS

Articulating boom lift: This aerial lift has several hinged sections which are used to increase mobility.

Extendable/telescoping aerial lift:

Scissor lift

Manlift