

Aerial Platform and Scissor Lift Procedure

1. Purpose
 - 1.1. This procedure outlines the safety measures associated with owning, operating, and maintaining aerial platforms and scissor lifts. This document contains practices and procedures to protect employees from hazards associated with aerial platforms and scissor lifts in compliance with OSHA 29 CFR 1926.452(w), 29 CFR 1926.453, and ANSI/SIA A92.2 through A92.6 Standards (2001 through 2006).
2. Scope
 - 2.1. This procedure applies to all University-owned or rented aerial platforms, scissor lifts, and the University employees who use them.
3. Definitions
 - 3.1. **Aerial platform:** A mobile device with an adjustable position platform supported from ground level by a structure. This includes scissor lifts and boom lifts. It may also be called a MEWP (mobile elevated work platform).
 - 3.2. **Competent person:** One who, by possessing a recognized degree, certificate, or professional standing, or by extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems related to the subject matter, the work, or the project.
 - 3.3. **Familiarization:** Providing information regarding the control functions and safety devices for the aerial platform(s) to a qualified person or operator who controls the movement of the aerial platform(s) being delivered.
 - 3.4. **Guardrail system:** A vertical barrier primarily intended to protect against personnel falling to lower levels.
 - 3.5. **Hazardous location:** Any location that contains, or has the potential to contain, an explosive or flammable atmosphere as defined in ANSI/NFPA 505 -1996, Powered Industrial Trucks.
 - 3.6. **Maintenance:** The act of upkeep such as inspection, lubrication, refueling, cleaning, adjustment, and scheduled part(s) replacement.
 - 3.7. **Manufacturer:** A person or entity who makes, builds, or produces an aerial lift.
 - 3.8. **Operation:** Performance of functions of an aerial lift within the scope of its specifications and per the manufacturer's instructions, the user's work rules, and applicable governmental regulations.
 - 3.9. **Operator:** A qualified person who controls the movement of an aerial lift.
 - 3.10. **Outriggers:** Devices that increase the stability of the aerial lift and can lift and elevate the aerial platform.
 - 3.11. **Platform:** The portion of an aerial lift intended to be occupied by personnel with their necessary tools and materials.
 - 3.12. **Repair:** The act of restoring to a good condition that which has been broken, damaged, or worn due to use, abuse, or other reasons.
 - 3.13. **Shall:** The word "shall" is understood as mandatory.
 - 3.14. **Stability/Stable:** A condition of an aerial lift in which the sum of the moments that tend to overturn the unit is less than or equal to the sum of the moments tending to resist overturning.

- 3.15. **Stabilizers:** Devices that increase the aerial lift's stability but are incapable of lifting or leveling the aerial platform.
- 3.16. **Training:** Instruction to enable the trainee to become an operator.
- 3.17. **User:** A person or entity who has care, control, and custody of the aerial platform. This person or entity may also be the operator's employer, dealer, owner, lessor, lessee, or operator.

4. Responsibilities

4.1. Risk Management & Safety Department's Responsibilities:

- 4.1.1. Audit this program annually and revise it as necessary.
- 4.1.2. Coordinate training opportunities and maintain approved aerial lift operator records.
- 4.1.3. Approve trainers that carry out specific lift familiarization training.
- 4.1.4. Provide technical support to departments and employees when questions or concerns arise regarding MEWP safety.
- 4.1.5. Maintain an inventory of all aerial lifts and trained operators, ensuring that any newly obtained lifts are documented within 60 (sixty) days.
- 4.1.6. Conduct periodic audits to ensure that:
 - 4.1.6.1. Annual inspections are being completed appropriately.
 - 4.1.6.2. Maintenance is being completed at the proper intervals.
 - 4.1.6.3. Training is completed for all identified operators.
 - 4.1.6.4. Records are being maintained properly.
 - 4.1.6.5. Pre-use and workplace inspections are being completed appropriately.
- 4.1.7. Ensure a contract agreement is in place with a qualified contractor to conduct the annual inspections and maintenance.
- 4.1.8. Serve as the approval authority for any campus lift rentals or purchases to ensure this procedure's requirements are followed.

4.2. Department Responsibilities:

- 4.2.1. Ensure that this program's responsibilities are assigned to individuals within their unit/department.
- 4.2.2. Actively support the implementation and follow-through of this program within their unit/department.
- 4.2.3. Ensure adequate funding is available to support this program, including operator training and equipment upkeep.
- 4.2.4. Before purchasing an aerial lift, Department Managers/Supervisors shall:
 - 4.2.4.1. Contact Risk Management & Safety (RMS) for approval to ensure that tracking information can be obtained.
 - 4.2.4.2. Ensure that operating and maintenance manuals have been received, made available to each operator, and placed in a weather-proof compartment on the lift.
 - 4.2.4.3. Acquire the repair and parts manuals within 60 (sixty) days of acquiring a new lift.
 - 4.2.4.4. If buying used equipment, work with RMS to ensure an annual inspection is completed on the lift before placing the unit in service.
- 4.2.5. Ensure operators are properly trained.

- 4.2.5.1. Work with RMS to arrange for the manufacturer or approved vendor to provide initial aerial lift training and “Specific Lift Familiarization Training” to the department’s operators before using the lift. This includes when renting an aerial lift.
 - 4.2.5.2. All training shall be documented and provided to RMS with the training date, attendee information, trainer information, and which lift was used for training.
 - 4.2.6. Ensure that all employee operators of the lift review the operator’s manual and sign the acknowledgment form before the initial use of the lift.
 - 4.2.7. Appoint an individual within the Department to be the point of contact with RMS and employees concerning lift safety.
 - 4.2.8. Repair the lift as necessary.
 - 4.2.9. Complete required inspections.
 - 4.2.9.1. Workplace and pre-use inspections prior to using any aerial lift.
 - 4.2.9.2. Annual inspections are performed on the lift per the manufacturer’s recommendations and this procedure. Contact RMS to schedule an annual inspection.
 - 4.2.10. When safety-related concerns have been discovered, either through annual inspections, pre-use inspections, or at any other time, the lift shall be taken out of service and locked and tagged out until the defects have been repaired.
 - 4.2.11. Ensure personnel do not operate an aerial lift if they have not completed the classroom and hands-on aerial lift training on the specific lift they will be operating.
 - 4.2.12. Empower operators to lower the lift at any time they have concerns for their safety. Operators have the authority to terminate work activities when using an aerial lift.
 - 4.2.13. Contact Risk Management & Safety before selling, donating, or destroying any lift to ensure that it is removed from Notre Dame’s electronic inventory and the Maintenance Logistics website inventory page.
- 4.3. Employee/Operator Responsibilities
- 4.3.1. Before operating a lift, operators shall:
 - 4.3.1.1. Complete aerial lift training, including classroom and familiarization training.
 - 4.3.1.2. Complete fall protection training.
 - 4.3.1.3. Review the operator’s manual of the lift being used prior to initial use. Documentation of this shall be completed using the “Operator Manual Acknowledgement Form” linked in this document and can be found on the RMS website.
 - 4.3.1.4. Know how to operate the lift safely.
 - 4.3.1.5. Identify possible hazardous conditions which jeopardize safety.
 - 4.3.1.6. Understand lift control features.
 - 4.3.1.7. Identify all placard warnings.
 - 4.3.1.8. Be familiar with the operation of all lift safety devices.
 - 4.3.1.9. Know the location of the user manuals (OEM, AEM, and ANSI).
 - 4.3.1.10. Identify those permitted to operate or ride on the lift.
 - 4.3.1.11. Identify where, if applicable, Personal Fall Arrest Equipment attaches to the lift.
 - 4.3.1.12. Perform Pre-Use Inspections.
 - 4.3.1.13. Perform Workplace Inspections.

5. Inspections

5.1. Pre-Use Inspections – To be completed User/Operator

5.1.1. A Pre-Use inspection shall be completed before each day's use or at the beginning of each shift that the aerial lift is being used, whichever comes first. A visual inspection and functional test that includes the following criteria shall be completed:

5.1.1.1. Operating and emergency controls.

5.1.1.2. Safety devices.

5.1.1.3. Personal protective devices.

5.1.1.4. Air, hydraulic, and fuel system leaks.

5.1.1.5. Cables and wiring harness.

5.1.1.6. Loose or missing parts.

5.1.1.7. Tires and wheels.

5.1.1.8. Placards, warnings, control markings, and operating manual(s).

5.1.1.9. Outriggers, stabilizers, and other structures.

5.1.1.10. Guardrail system.

5.1.1.11. Other items specified by the manufacturer.

5.1.1.12. If outdoors, a functioning and calibrated anemometer is attached to platform.

5.1.2. All Pre-Use inspections shall be documented on the Qualtrics Survey utilizing the QR code placed on the equipment.

5.1.3. Workplace Inspections

5.1.3.1. Before operating an aerial lift, the operator shall visually inspect the area where the aerial lift will be used. The operator shall document the inspection on the electronic Aerial Lift Pre-Use Inspection form. This form can be accessed utilizing the QR code placed on the equipment.

5.1.3.2. The workplace shall be inspected for hazards such as, but not limited to:

5.1.3.2.1. Drop-offs or holes.

5.1.3.2.2. Slopes.

5.1.3.2.3. Bumps and floor obstructions.

5.1.3.2.4. Debris.

5.1.3.2.5. Overhead obstructions and high voltage conductors.

5.1.3.2.6. Hazardous locations and atmospheres.

5.1.3.2.7. Inadequate surface and support to withstand all load forces the aerial lift imposes.

5.1.3.2.8. Wind and weather conditions.

5.1.3.2.9. Presence of unauthorized people.

5.1.3.2.10. To prevent unauthorized people from being in the area surrounding the lift, the area shall be demarcated with, at a minimum, orange cones.

5.1.3.2.11. Other possible unsafe conditions.

5.2. Annual Inspections – To be performed by a qualified mechanic.

5.2.1. Inspections shall be made by a person qualified as a mechanic on the specific type of aerial lift or one having similar design characteristics. The inspection shall be performed per manufacturer recommendations.

5.2.2. Annual inspections shall be performed on all aerial lifts no later than 13 months from the date of the prior annual inspection.

- 5.2.3. RMS shall contract a vendor to conduct inspections and maintenance. Departments will initiate maintenance to address noted deficiencies promptly following all inspections.
6. Maintenance
- 6.1. All maintenance performed on aerial lifts shall be performed by the University's contracted vendor. Departments are responsible for scheduling maintenance with the contracted vendor.
7. Battery Charging and Fueling
- 7.1. Battery charging and fueling of aerial lifts shall be done in a non-hazardous environment with adequate ventilation.
- 7.2. At a minimum, a 10 lb ABC fire extinguisher and spill kit shall be easily accessible.
- 7.3. Units will be shut down while filling fuel tanks.
8. Standard Procedures
- 8.1. Aerial lifts shall not be used as a crane or material lifting mechanism.
- 8.2. Aerial lifts shall not be operated from a position on trucks or trailers.
- 8.3. Reckless or stunt driving is strictly prohibited.
- 8.4. Operating with Passengers
- 8.4.1. Lift operators are responsible for providing instruction or confirming that all occupants have received basic training to work safely on the MEWP. An overview of what needs to be covered with an occupant before elevating the lift includes:
- 8.4.1.1. Personal Fall Protection training and equipment.
- 8.4.1.2. An explanation of actions that could affect the machine's stability.
- 8.4.1.2.1. Do not lean over the platform guardrail.
- 8.4.1.2.2. Always maintain firm footing on the platform floor; do not climb up on the toe guard, mid rail, or top rail.
- 8.4.1.2.3. Do not jump up and down or shake the platform.
- 8.4.1.2.4. Do not push off or pull toward any object outside the platform.
- 8.4.1.2.5. Do not touch the platform controls.
- 8.4.1.3. Use of accessories (access deck, panel cradle, fall arrest bar, etc.).
- 8.4.1.4. Explain any site-specific work procedures the occupants must follow related to the operation of the MEWP.
- 8.4.1.5. Discuss all hazards related to the task and their avoidance and include any applicable site risk assessment(s).
- 8.4.1.6. Review the manufacturer's warnings and instructions for operating the MEWP.
- 8.4.1.7. Review with at least one of the occupants:
- 8.4.1.7.1. The intended purpose and function of the MEWP platform controls.
- 8.4.1.7.2. The intended purpose and function of the safety-related items specified by the manufacturer, including secondary guarding systems and emergency shut-down procedures, and the intended use and function of the lowering procedures, to the extent required to lower the MEWP safely to the ground or the stowed position.
9. Fall Protection
- 9.1. Fall protection shall always be in place when operating an aerial lift or scissor lift.

- 9.2. Personal fall protection equipment shall always be worn when operating any lift equipped with an approved anchor point.
- 9.3. For fall protection requirements, see the Risk Management & Safety Fall Protection Procedure.

10. Hard Hats

- 10.1. Hard hats shall be worn whenever an overhead or at-head height safety risk exists.
- 10.2. Exceptions to this requirement must be arranged with Risk Management & Safety.

11. Use of Forklifts as Aerial Lifts – See the Risk Management & Safety Powered Industrial Truck Procedure.

12. Contractors

- 12.1. Contractors shall not use University-owned equipment. If an aerial lift is necessary, it shall be provided by the contractor. The contractor shall also provide a trained operator.
- 12.2. It is the contracting department's responsibility to verify that the operator has received appropriate training to operate the lift.
- 12.3. Exceptions to this requirement must be arranged with Risk Management & Safety.

13. Weather Hazards

- 13.1. Outdoor operation of aerial lifts is prohibited when:
 - 13.1.1. Wind speeds reach 28 mph or more.
 - 13.1.2. When a wind warning of 28 mph or more is in effect.
 - 13.1.3. When the nearest lightning strike is within 10 miles.
 - 13.1.4. When thunder is heard and/or when thunderstorm warnings are issued.
- 13.2. When lifts are used outdoors weather conditions shall be continuously monitored through a real-time weather monitoring service source (e.g. WeatherBug). Weather conditions shall be documented on the Aerial Lift Pre-Use Inspection form.

14. Training Program

- 14.1. Classroom safety training:
 - 14.1.1. All aerial lift operators shall attend MEWP safety training sponsored by RMS before operating a lift. The contents of the training shall include the following:
 - 14.1.1.1. Purpose and use of manuals and where they shall be located.
 - 14.1.1.2. Pre-Use inspection process.
 - 14.1.1.3. Identification of malfunctions and problems.
 - 14.1.1.4. Factors affecting stability.
 - 14.1.1.5. Purpose of placards and decals.
 - 14.1.1.6. Workplace inspections.
 - 14.1.1.7. Safety rules and regulations.
 - 14.1.1.8. Authorization to operate.
 - 14.1.1.9. Operator warning and instructions.
 - 14.1.1.10. The requirements of aerial lift fall arrest systems.
 - 14.1.1.11. The use of wind monitoring equipment, including the lift anemometer for outdoor lift use, and reinforcement of the operator's authority to come down from the lift if they have any safety concerns.

- 14.1.2. All aerial lift operators shall attend a “Specific Lift Familiarization Training” session specific to the make and model of the lift they will be operating. The selection of the trainer shall be approved by RMS. Successful completion of the classroom and specific lift familiarization portions of the training authorizes an employee to use the aerial lift.
- 14.1.3. All operators and passengers shall complete Fall Protection Training before operating or riding on a lift.
- 14.1.4. Retraining shall take place for both operators and campus instructors:
 - 14.1.4.1. If an operator has been involved in an incident involving an aerial lift. Additionally, the operator is prohibited from operating a lift until re-trained.
 - 14.1.4.2. If an operator has been observed operating the lift unsafely.
 - 14.1.4.3. Every three (3) years after initial training for hands-on, lift-specific training.

15. Record Retention

- 15.1. Training records shall be maintained by Risk Management & Safety for a period of five (5) years.
- 15.2. The following records shall be maintained by each department owning an aerial lift for the entire lift ownership:
 - 15.2.1. Annual inspection documentation.
 - 15.2.2. All maintenance performed on the lift.
 - 15.2.3. All signed Operator’s Manual Acknowledgement forms.

History	Effective Date
Replaced “Aerial Platform & Scissor Lift Policy” dated October 2012 with this newly created procedure.	March 2019
Replaced “Aerial Platform & Scissor Lift Policy” dated 3/7/2019 with this newly created procedure. Revised for clarity, updated appendices with links to electronic forms, and added specific guidelines for an Operator with a Passenger section.	April 2023



Appendix A

UND Aerial Platform or Scissor Lift Certification Form Specific Lift Familiarization Training

This form documents the OSHA-Required Aerial Platform or Scissor Lift training that is performed by an approved, competent person. Risk Management & Safety shall approve the trainer based on their experience with the particular lift or safety training experience. The training may also be performed by the lift manufacturer's or vendor's appointed representative or through a video provided by the manufacturer specific to the particular lift. Each operator shall be trained on each aerial platform or scissor lift. The Specific Lift Familiarization Training shall consist of a review of the following items:

- A. All safety placards and warnings
- B. All switches, drive mechanisms, adjustments, and controls (both lower & upper controls)
- C. The functional operation of the lift
- D. Using the outriggers or stabilizing equipment
- E. All gauges, horns, and lights
- F. Proper fueling and/or battery charging procedures
- G. Inspections and the inspection process

Mobile Elevated Work Platform (MEWP) Information:

Lift Manufacturer	Model	Serial Number
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I certify that I have met with the trainee identified below and have reviewed the operations of the specific lift identified above and made myself available to answer any questions they may have had regarding the operation of this lift.

Trainer's Name (print)	Trainer's Signature	Date
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I certify that I have met with the trainer identified above and that they have reviewed the operations of the specific MEWP identified above. I was allowed to ask questions that, if any, were answered to my satisfaction, and I now have the necessary understanding of the operations of this lift. I also certify that I have received general training on the safe operation of MEWPs through the Risk Management & Safety Department, which covers responsibilities, inspections, platform stability, precautions, safety considerations, standard operating procedures, and other related safety concepts. I have reviewed the operator's manual for this lift and have been allowed to ask questions I may have had.

Trainee's Name (print)	Trainee's Signature	Date
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Trainer's Dept. or Company Name: _____



Appendix B
Links to Necessary Documents and Forms

[Operating Manual Acknowledgement Form](#)

[Aerial Lift Pre-Use & Workplace Inspection Form](#)