

Reed College Mobile Elevated Work Platforms Safety Program



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1.0 Purpose and Scope

The Reed College Powered Mobile Elevated Work Platform (MEWP) Safety Program establishes guidelines for operators, trainers, and record-keeping personnel. The program outlines standard operating procedures for MEWP use and is intended to establish a safe work environment for MEWP operators and the community at large. Additionally, this program establishes training, maintenance, and repair standards.

2.0 Responsibilities of Positions

2.1 Environmental Health and Safety Department (EHS)

EHS is responsible for the design, development, review and implementation of the MEWP Safety Program. Additionally, record-keeping, including maintenance records and training certifications, is managed by EHS staff. Annual preventive maintenance is coordinated by EHS with a qualified third-party vendor.

2.2 Supervisors

Supervisors are responsible for ensuring members of their department are properly trained before utilizing an MEWP. Supervisors must also be knowledgeable of hazards associated with MEWPs; limitations and proper utilization of different types of MEWP; and any rules, regulations, and standards pertaining to MEWP use.

Additionally, supervisors must promptly relay any maintenance or repair needs to EHS to help facilitate a safe working environment.

2.3 Operators

Operators are employees who have been trained and cleared to use and control a MEWP. Operators are responsible for behaving in a professional, safe manner. Operators must complete a thorough pre-use inspection of the MEWP and read any affiliated instruction manuals prior to use. Operators must also be aware of hazards associated with MEWP limitations and proper utilization of different types of MEWP, and best operation practices.

Should an operator discover an issue with an MEWP, they must notify their supervisor and place an “Out of Order” sign on the equipment to prevent use until the required repairs are made.



3.0 Training

3.1 Initial Operator Training

All operators must receive initial training prior to using an MEWP, regardless of prior experience outside of Reed College. Training is provided by an external third-party and can be coordinated by EHS. Supervisors should notify EHS when there is a new employee in need of initial training.

Initial operator training consists of both classroom and practical training.

The classroom training consists of the following topics:

- General Powered Mobile Elevated Work Platform operation information
- Inspections and maintenance
- Vehicle capacity and stability
- Standard Operating Procedures
- Recharging
- Personal fall restraint and arrest system inspection, care, use and performance
- Workplace-related topics (determined from open classroom discussions)

Practical training consists of the following topics:

- Inspection
- Vehicle capacity/limitations
- Vehicle stability
- Controls and Instrumentation
- Steering and maneuvering.
- Operation on sloped surfaces
- Workplace-related topics (determined from open classroom discussions)

3.2 Supervisor Training

For purposes of MEWP training, a “supervisor” is a person assigned to monitor operator performance and supervise MEWP work. In other words, it’s the person(s) who directly supervises MEWP operators. Supervisors at Reed College are the Maintenance Supervisor, Building Services Manager, Custodial Shift Supervisors, Theatre Technical Director, and Audio-Visual Manager. Supervisors at Reed College are trained to know:

- What type of MEWP is appropriate for the given job.
- The rules, regulations and standards that apply to MEWPs including safety procedures.
- The hazards associated with MEWPs and how to prevent accidents.
- Ensuring the operator manual is safely stored, easily accessible and used for inspections.
- Confirm maintenance technicians are trained to inspect and service the MEWP according to manufacturer’s recommendations.



3.3 Refresher Training

Refresher training for all operators, supervisors and maintenance personnel is required within three years of last completion.

4.0 Inspections

4.1 Pre-Operation Inspection

Prior to using an MEWP, a pre-operation inspection should be conducted. Forms can be found in appendix 1. Should any of the inspection criteria fail, action should be taken to remedy the issue. If a fix is not possible, work may not begin. Pre-operation inspections include the following:

- Checking for leaks
- Checking Tires
- Checking all fluid levels
- Checking Hoses/Belts/Cables
- Checking Horns/Alarms
- Checking Gauges/controls
- Checking Safety equipment
- Checking Steering
- Checking Brakes
- Checking for Unusual Noise/Odors
- Checking for Overhead Hazards

4.2 Periodic Inspection

Periodic inspections are conducted during annual preventative maintenance. Additional inspections may be required before returning equipment to work if a device has been removed from operation or needed repair. Inspection forms can be found in appendix 2.

5.0 Mobile Elevated Work Platform Operation

The safe operation of Powered Mobile Elevated Work Platforms is the only way to prevent certain hazards from occurring. Reed College regulates the use of Powered Mobile Elevated Work Platforms in order to ensure that only qualified personnel use them in safe and responsible manners.

5.1 Classification of Mobile Elevated Work Platforms

MEWP are broadly classified into two groups:

- Group A - The platform moves vertically within the tipping lines (ie Scissor Lifts).
- Group B - The platform can move beyond the tipping lines (ie Boom Lifts).



Furthermore, each group contains types that describe the lift controls:

- Type 1 - Can only be driven with the platform in the stowed position.
- Type 2 - Can be driven while elevated, but controlled from the chassis (base).
- Type 3 - Can be driven while elevated, and is controlled from the platform.

5.2 Risk Assessment and Site Safety Plan

A documented risk assessment and site safety plan must be completed and shared with workers within the vicinity of the MEWP prior to use. Forms for the risk assessment, including rescue plans, can be found in appendix 3.

Risk Assessment

The risk assessment document should contain information about the following:

- A description of the work, including location and timeframe.
- Risks related to using a MEWP, other equipment, and/or hazardous materials.
- Names of properly trained operators and supervisors present.
- Measures to prevent the unauthorized use of the MEWP.
- Safe work procedures and other safety measures to be taken.
- A rescue plan in the event of a fall or MEWP malfunction.

Rescue Plan

The rescue plan includes the following required information:

- What rescue steps are to be taken after a fall (including a time limit for how long a properly-restrained worker can hang suspended in the air, and available options for self-rescue, assisted rescue, or technical rescue.)
- What rescue steps are to be taken if the platform becomes entangled.
- What rescue steps are to be taken if the machine fails.

The rescue plan to be completed and brought as a hard-copy to the work site. All workers in the vicinity should be briefed on the rescue plan and be trained on what to do if they witness, or are involved in, a fall from an MEWP.

5.3 Standard Operating Procedures

The following standard operating procedures should be followed when using an MEWP:

- Lift controls must be tested before use.
- Only personnel authorized by a fall protection competent person may operate a Powered Mobile Elevated Work Platform.
- Employees must always stand firmly on the floor of the basket and may not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
- A full-body harness must be worn and a lanyard attached to the boom or basket when working from a Powered Mobile Elevated Work Platform (exception: a harness is not



required in a scissor lift or personal man lift with surrounding guardrail system and closing gate or latch chain, but is considered best practice).

- Belting off to an adjacent pole structure, or equipment while working from a Powered Mobile Elevated Work Platform is not permitted.
- Boom and basket load limits specified by the manufacturer may not be exceeded.
- The brakes shall be set and, when outriggers are used, they must be positioned on pads or another solid surface. Wheel chocks must be installed when using a Powered Mobile Elevated Work Platform on an incline.
- A Powered Mobile Elevated Work Platform truck may not be moved when the boom is elevated in a working position, except for equipment which is specifically designed for this type of operation.
- Articulating and extensible boom platforms must have both platform and ground controls.
- Before moving a Powered Mobile Elevated Work Platform for travel, the boom must be inspected to ensure that it is properly cradled and outriggers are in the stowed position.
- Aerial equipment must have a working back-up alarm or use a spotter for when backing.
- Pedestrians have the right-of-way when moving Powered Mobile Elevated Work Platforms.

5.4 Power line Minimum Safe Approach Distance

Power lines present a complex overhead hazard for operators of MEWP. Prior to operating, all overhead hazards should be scoped and a plan enacted to avoid them. The following minimum safe approach distances for power lines and associated equipment must be maintained.

Voltage Range Phase to Phase	Distance (feet)
0 to 300 V	Avoid making contact
300 V to 50 kV	10



Appendix 1: Pre-Operation Inspection

Mobile Elevated Work Platform Checklist **Date:** _____ **Initials** _____

1. Before an operation starts, the operator must:
<input type="checkbox"/> Be qualified and certified for safe operating and use including fall protection standards.
<input type="checkbox"/> Read and understand the operating instructions and safety rules for the equipment being used.
<input type="checkbox"/> Understand all decals, warnings and instructions displayed on the work platform.
2. Before each work shift starts, the operator must:
<input type="checkbox"/> Inspect for defects that would affect a lift's safe operation. Be alert for cracked welds or other structural defects, leaks in hydraulics, damaged control cables, loose wires, or bad tires.
<input type="checkbox"/> Test the controls to make sure they work.
<input type="checkbox"/> Check the operating condition of the brakes, lights and other automotive-operating accessories, such as horns and warning devices.
<input type="checkbox"/> Every occupant in the platform knows how to work safely on the MEWP.
<input type="checkbox"/> Ensure that there is someone on the ground who can act as the operator and return elevated workers to the ground in the event of an unexpected malfunction or an emergency.
3. Before each elevation, the operator must:
<input type="checkbox"/> Check for overhead obstructions and high-voltage conductors.
<input type="checkbox"/> Elevate the work on only a firm, level surface.
<input type="checkbox"/> Make sure the load and its distribution on the platform is according to the manufacturer's rated capacity. Never exceed the rated work load.
<input type="checkbox"/> Use the outriggers or stabilizers, if required, according to the manufacturer's instructions.
<input type="checkbox"/> Make sure guard rails on the platform are installed correctly, and the gates or openings are closed.
<input type="checkbox"/> Check all occupants' harnesses and lanyards, making sure they are attached correctly. Don't attach lanyards to objects outside the basket.
4. Before and while operating a lift with its platform elevated, the operator must:
<input type="checkbox"/> Look in the direction of and keep a clear view of the path of travel. Make sure the path is firm and level.
<input type="checkbox"/> Maintain a safe distance from obstacles (ahead and above), debris, holes, depressions, ramps, and other hazards.
5. While operating a lift, the operator must not:
<input type="checkbox"/> Use ladders or makeshift devices on the platform so workers can reach higher.
<input type="checkbox"/> Climb up or down extendable arms.
<input type="checkbox"/> Sit on or climb on the edge of the basket.
<input type="checkbox"/> Delay reporting any defects or malfunctions to the supervisor.
<input type="checkbox"/> Engage in stunt driving or horseplay.



Appendix 2: Periodic or Return-to-Service Powered Mobile Elevated Work Platform Inspection Checklist

Date		Inspector	
Location		Serial #	
Item	Rating: Adequate (A) or Inadequate (IA)	Comments/Follow Up Instructions	
1. Steps			
2. Step Fastenings			
3. Rails			
4. Rail Supports and Fastenings			
5. Rollers and Slides			
6. Belt and Belt Tension			
7. Handholds and Fastenings			
8. Floor Landings			
9. Guardrails			
10. Lubrication			
11. Limit Switches			
12. Warning Signs and Lights			
13. Illumination			
14. Drive Pulley			
15. Bottom (boot) Pulley and Clearance			
16. Pulley Supports			
17. Motor			
18. Driving Mechanism			
19. Brake			
20. Electrical Switches			
21. Vibration and Misalignment			
22. Skip on up or down run when mounting step			
Inspector		Date	



Appendix 3: Mobile Elevated Work Platform Risk Assessment and Rescue Plan

Risk Assessment
Describe the nature of the job (work), location and time frame that the MEWP will be operating. Nature of the Job: <hr/>
Location: <hr/>
Time Frame Start: _____ am / pm Stop: _____ am / pm
Describe the risks related to using the MEWP on this work job and any hazardous materials. <hr/>
Describe the measures to prevent unauthorized use of a MEWP. <hr/>
Describe the safe work procedures and safety measures taken to prevent injuries. <input type="checkbox"/> Training <input type="checkbox"/> Other: ± <input type="checkbox"/> Barriers <input type="checkbox"/> Other: ±
Rescue Planning
Describe the rescue steps are to be taken after a fall from a MEWP occurs. 1. _____ <hr/> 2. _____ <hr/> 3. _____ <hr/> 4. _____
Describe time limit for how long a properly-restrained worker may hang suspend in the air: _____ mins.
Describe the options for self-rescue, assisted rescue, or technical rescue are available. <hr/>
Describe the rescue steps are to be taken if the platform becomes entangled. <hr/>
Describe the rescue steps are to be taken if the machine fails. <hr/>



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MEWP RISK ASSESSMENT AND SITE SAFETY PLAN (CONTINUED)

List the employees working in the vicinity of the MEWP operating area and who have been shown this Plan:
Have all employees in the work area vicinity receive training on what to do if they see someone fall from the MEWP, or if they themselves fall? <input type="checkbox"/> YES
Comments:

Operator Signature _____ **Date** _____

Supervisor Signature _____ **Date** _____

