

Title: Mobile Elevated Work Platform Safe Use Program (MEWP)		Print Date: 7/2/2020
Revision # A	Prepared By: Jennifer Stones	Date Prepared: 06/01/2020
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Revision History: Initial		

1. Purpose

The purpose of this program is to establish policies and procedures for maintenance, usage, training and documentation of activities involving mobile elevated work platforms (MEWPs).

2. Scope

The University Mobile Elevated Work Platform safe use program applies to all University owned or operated mobile elevated work platforms as well as University staff working as operators, occupants and direct supervisors of operators and occupants.

3. Definitions:

Assisted rescue – Rescue of MEWP operator/occupant by others on the work site

MEWP – Mobile elevated work platform

MEWP Groups – Determined by the platforms location in relation to the tipping line

Group A: A MEWP where the platform always stays within the tipping lines of the chassis

Group B: A MEWP where the platform extends outside of the tipping lines of the chassis

MEWP Type – Determined by travel

Type 1: A MEWP where traveling is only allowed in the stowed position

Type 2: A MEWP where traveling while elevated is controlled from the bottom

Type 3: A MEWP where traveling while elevated is controlled from the work platform

Operators – A person qualified to control the movement of the MEWP

Occupants – A person on the work platform.

Self-rescue – Rescue done by operator/occupant

Supervisor - A person assigned to monitor operator performance and supervise their work.

Technical rescue – Rescue of MEWP operator/occupant by emergency services

4. Rule

A. Roles and Responsibilities:

I. EHS Responsibilities

- a. Develop a MEWP safe use program and revise it when necessary
- b. Ensure program complies with all applicable local, state and federal regulations
- c. Conduct periodic audits to ensure continued effectiveness of the program

II. Equipment Owner Responsibilities

- a. Provide equipment compliant with applicable local, state and federal regulations
- b. Manage the MEWP maintenance and repair program
- c. Coordinate and track MEWP preventative and corrective maintenance items in accordance with ANSI and manufacturer requirements
- d. Manage MEWP inspection schedules
- e. Maintain all operator manuals in good condition
- f. Ensure operator manual is kept in a weatherproof compartment on the vehicle
- g. Periodically audit equipment and inspection records
- h. Collect and store all MEWP inspection reports

III. Supervisor Responsibilities

- a. Ensure only trained and authorized employees perform work with MEWP's
- b. Provide required training to employees
- c. Provide required personal protective equipment to employees
- d. Ensure proper use of required PPE by employees
- e. Monitor employees to verify they are using safe work practices
- f. Complete all required training
- g. Work in accordance of the rules of this program

IV. Operator/Occupant Responsibilities

- a. Complete all required training
- b. Wear all required personal protective equipment
- c. Work in accordance with the rules of this program
- d. Report safety issues to a supervisor

V. Trainer Responsibilities

- a. Only train on MEWP's for which they are qualified
- b. Accurately assess the knowledge and skills of each trainee

B. Procedure

- I. Equipment Selection: The Supervisor/Operator will select the appropriate MEWP based on the requirements of the task and conditions of the worksite.

a. MEWP Groups

1. Group A: Platform always stays within the tipping lines of the chassis
2. Group B: Platform extends outside of the tipping lines of the chassis

b. MEWP types

1. Type 1: Traveling is only allowed in the stowed position
2. Type 2: Traveling while elevated is controlled from the bottom
3. Type 3: Traveling while elevated is controlled from the work platform

II. Risk Assessment: A competent person will perform an assessment of the risks associated with MEWP use on the job site and determine appropriate controls to manage the risk using the risk assessment and controls form (Appendix A). Elements of the risk assessment include:

a. Identify task to be done

b. Select appropriate MEWP for task

c. Assess the risks associated with task and worksite

d. Identify control measures

e. Create a rescue from height plan

- i. Address actions to take during equipment failures
- ii. Address actions to be taken after a fall from the platform
 1. Self rescue
 2. Assisted rescue
 3. Technical rescue

f. Communication of risks

- i. Train operator/occupant
- ii. Document training

III. Equipment inspections: The following inspections are required for all MEWP devices

a. Pre-start inspection: Before use of an aerial lift:

- i. A qualified operator will perform a pre-start inspection using the aerial lift pre-operation inspection form (Appendix B)
- ii. Inspection documentation must be kept on the vehicle
- iii. If repairs are required, equipment must be removed from service and tagged out for use.
- iv. Notify supervisor of need to repair equipment
- v. Vehicle may not be placed back in service until all malfunctions have been corrected

vi. Repairs must be performed by a qualified person

b. Annual inspections: Annual inspections must occur no more than 13 months from the date of the previous annual inspection.

i. Must be performed by a person qualified to inspect the specific make and model of the MEWP

ii. Inspection documentation must be kept on the vehicle

iii. Vehicle may not be placed back in service until all malfunctions have been corrected

iv. The annual inspection must include:

1. Items specified by the manufacturer

2. Review of safety recalls for equipment

IV. Equipment maintenance:

a. Completed by a qualified person

b. Documented in accordance with the recommendations of the manufacturer and ANSI standards

V. Safe work practices: The following safe work practices must be followed:

a. Ensure all guardrails are installed and in place

b. Never drive vehicle up to someone standing in front of a fixed object

c. When unattended, the basket must be lowered, controls neutralized, and brakes set

d. When parked on an incline, wheel blocks must be used

e. Do not connect fall protection equipment to adjacent structures outside the basket

f. Stand on the floor of the basket while working. Do not stand on boxes or other items

g. Drive at a reasonable speed and obey speed limits

h. Ensure sufficient headroom under overhead obstacles, such as pipes and electrical wires

i. Do not block walkways or fire and emergency exits

j. Always secure equipment to prevent unauthorized use

k. Do not work during snowy conditions, unless the snow has stopped, and ice and snow has been removed from the work platforms

l. Do not work in wind speeds that exceed the wind speed rating of the equipment

m. Do not work while lightening conditions exist. Wait a suitable amount of time after storm passage to recommence work

VI. Fall protection: Workers using mobile elevated work platforms must use fall protection equipment as outline in the University Fall Protection Program.

a. A full body harness and lanyard must be used at all times.

b. The lanyard must be attached to an anchor point on the structural member of the lift.

c. A fall protection lanyard must never be attached to the guardrails.

VII. Training

a. Initial training

- i. Conducted by qualified trainer
- ii. Must include a hands-on skills test using the appropriate evaluation form (Appendix C-E)
- iii. Training must be documented

b. Annual Refresher

- i. Conducted online or in-person
- ii. Trainee must pass a knowledge test
- iii. Training must be documented

c. Periodic Refresher

- i. Conducted after an incident or at the discretion of direct supervisor
- ii. Conducted online or in person
- iii. May include a skills test or knowledge test or both at the discretion of direct supervisor
- iv. Training must be documented

d. Operators must be trained on the following:

- i. Characteristics and limitations of MEWP's groups and types
- i. Proper equipment selection
- ii. Location and proper storage of operation manuals
- iv. Equipment inspection
- v. Potential risks associated with use of equipment
- vi. Control methods to reduce risk
- vi. Rescue from heights
- vii. Trouble-shooting problems or malfunctions affecting operation
- viii. Factors affecting stability
- ix. Recognition and avoidance of hazards
- xi. Assessing weather related hazards
- xii. Function of equipment controls (platform, ground, emergency descent)
- xiii. Applicable regulations, standards and safety rules
- xiv. Use of personal protective equipment (PPE)
- xv. Safe use of equipment accessories
- xv. Hazards related to equipment operation
- xv. Site specific work procedures
- xv. Safe traveling practices.
- xvi. Issues associated with transport (if appropriate).
- xvii. Securing equipment from unauthorized use
- xviii. Manufacturer's warnings and instructions

- e. Occupants must be trained on the following:
 - i. Use of personal protective equipment (PPE)
 - ii. Factors affecting stability of equipment
 - iii. Safe use of equipment accessories
 - iv. Site-specific work procedures
 - v. Hazards related to equipment operation
 - vi. Function of equipment controls (platform, ground, emergency descent)
 - vii. Manufacturer's warnings and instructions

- f. Supervisors must be trained on the following:
 - i. Characteristics and limitations of MEWP's groups and types
 - i. Proper equipment selection
 - ii. Location and proper storage of operation manuals
 - iv. Equipment inspection
 - v. Potential risks associated with use of the equipment
 - vi. Control methods to reduce risk
 - vi. Rescue from heights
 - vii. Trouble-shooting problems or malfunctions affecting operation
 - viii. Factors affecting stability of equipment
 - ix. Recognition and avoidance of hazards
 - xi. Assessing weather related hazards
 - xii. Function of equipment controls (platform, ground, emergency descent)
 - xiii. Applicable regulations, standards and safety rules
 - xiv. Use of personal protective equipment (PPE)
 - xiv. Safe use of equipment accessories
 - xiv. Hazards related to equipment operation
 - xiv. Site work procedures
 - xv. Safe traveling practices
 - xvi. Issues associated with transport (if appropriate)
 - xvii. Securing equipment from unauthorized use
 - xviii. Manufacturer's warnings and instructions

VII. Record retention. The following records must be maintained for at least four years:

- a. Inspections
- b. Service and repairs
- c. Training

5. References:

- A. OSHA 29 CFR 1910.76
- B. ANSI 92.22

6. University of Utah contacts:

- A. Jen Stones, Associate Director, Occupational Health and Safety
- B. David Cook, Occupational Safety Manager

Risk Assessment and Controls Form

Department Name:		Date:
Jobsite location:	Assessor:	
Task:	Authorized MEWPS:	
Does this risk assessment replace a previous assessment? (circle) No Yes If Yes, date of previous:		

Site Risk Evaluation	Potential Risk	OK	N/A
Is the work surface structurally strong enough to handle the lift			
Is the work area free of drop-offs			
Are surface conditions free of obstructions and on a level surface			
Can proper barricades be placed to control pedestrian and vehicle traffic in work zone			
Look for overhead obstructions that exist in area of operation			
Will basket handle the loads to be carried without exceeding the rated capacity			
Does the lift have the proper lift height and capacity for the job			
Look for ramps and other sloped surfaces that could affect the vehicle's stability			
Are there high voltage lines near work area			
Is there proper lighting in work area			
Is the basket free of trip hazards			
Will work be done in an area with sufficient ventilation			
Is weather a concern (wind, lightening, etc.)			
Is the fueling and/or charging area well ventilated			
List below other potentially hazardous process-conditions that could affect safe operation			

Potential Risk	Control Measure

Rescue from height	
Equipment Failure:	1. Notify supervisor. 2. Use auxiliary power to lower platform. 3. If unavailable, use secondary manual descent control to lower platform.
Fall from platform:	<input type="checkbox"/> Self-rescue <input type="checkbox"/> Assisted Rescue <input type="checkbox"/> Emergency Service

Pre-operation Equipment Inspection Checklist

Operator: _____ Worksite: _____

Lift MFG: _____ Model: _____ Serial Number : _____

Date: _____ Start Time: _____ AM/PM (circle one)

Instructions: Check off each item as pass, fail or not applicable.	Pass	Fail	N/A
KEY OFF Procedures			
Check that the operator's manual and decals are in place and legible			
Check Hydraulic cylinders/Lifting mechanism/Fluid level			
Check welds, pins, missing nuts or bolts and other structural parts for cracks or defects			
Check drive hubs, engine for oil leaks			
Check platform entry mid-rail/gate, and platform or basket housekeeping			
Examine the battery & fire extinguisher			
Check battery level to assure that the unit can operate the duration of the job			
Check fuel level to assure that the unit can operate the duration of the job			
Operator is responsible for inspecting all fall protection and insure that all fall protection is being worn and attached properly			
Tires/Rollers/Monitor tire air pressure if pneumatic (Front Right _____psi, Front Left _____psi, Right Rear _____psi, Left Rear _____psi)			
Check outriggers, outrigger limiting switches, and locking pins			
KEY ON Procedures			
Check all ground controls for proper operation, including emergency lowering means			
Check all basket controls, foot switch, horn for proper operation			
Battery discharge indicator, Hour meter			
Steering and drive system			
Check limit switches, alarms, and flashing beacon if equipped (operating the lift by raising/swing/extending booms, tilt/rotate the basket)			
Check outriggers for proper operation if equipped			
Starting Hour Meter Reading: _____ Hours	NOTE: If vehicle fails inspection, it must be taken out of service and tagged out. Notify Supervisor.		

MEWP Type 1 Evaluation Form

Company Name: University of Utah Date of Evaluation: _____

Employee Name: _____

Instructor Name: _____

Trainer initial if acceptable

		*Vertical Axis	**Work Platform	Notes
Suitability	Assess the suitability for the task.			
Verification	Visually check the condition of the MEWP.			
	Verify that the safety-related items specified by the manufacturer operate correctly			
Positioning	Direct the operator and evaluate ability to interpret and execute commands and communication gestures			
	Position the vehicle at a location			
	Bring the MEWP into service			
	Set up the markers and signs			
	Adjust the stabilizers			
	Set the MEWP horizontal			
	Position the work platform along a flat vertical surface			
	Move the work platform along a flat vertical surface			
	Position the work platform above a flat surface			
	Move the work platform across this surface			
	Position the work platform below a flat surface			
	Move the work platform across this surface			
	Position the work platform in a restricted space			
	Put the MEWP into the transport position			
	Smoothness of the maneuvers			
	Accuracy of the maneuvers			
Emergency	Perform recovery maneuvers			
	Perform rescue maneuvers (from the ground position)			

*Note: "Vertical Axis" refers to the vertical movements of the work platform due to movements of the lifting structure. It includes awareness of the position of the platform and lifting structure when raising and lowering the platform and when slewing the lifting structure.

**Note: "Working platform movement" refers to any movement of the work platform excluding movements resulting from operation of the lifting structure. This includes horizontal platform movements when the MEWP base is moved, vertical and horizontal movements caused by traveling over uneven ground, bounce and sway resulting from lifting structure flexing.

Certification		
I certify that this employee has completed the company aerial lift safety training and can safely operate and perform work on Type 1 MEWPs.	Name	Date

MEWP Type 2 Evaluation Form

Company Name: University of Utah

Date of Evaluation: _____

Employee Name: _____

Instructor Name: _____

Trainer initial if acceptable

			*Vertical Axis	**Work Platform	Notes
Suitability		Assess the suitability for the task			
Verification		Visually check the condition of the MEWP			
		Verify that the safety-related items specified by the manufacturer operate correctly			
Positioning		Direct the operator and evaluate ability to interpret and execute commands and communication gestures			
		Get someone else to position the vehicle			
		Position the work platform along a flat surface vertical surface			
		Move the work platform along this surface			
		Position the work platform above a flat surface			
		Move the work platform across this surface			
		Position the work platform below a flat surface			
		Move the work platform across this surface			
		Position the work platform in a restricted space			
		Demonstrate the correct procedure in the event of an inclination warning			
		Put the MEWP into transport position			
		Smoothness of the maneuvers			
		Accuracy of the maneuvers			
Emergency		Perform recovery maneuvers			
		Perform rescue maneuvers (from the ground position)			
Positioning		Position the unit at a location			
Suitability		Carry out the suitability examination			
Travelling		Visually check the condition of the MEWP			
Platform raised	Platform on vehicle axis	Travel in a straight line forward			
		Travel in a straight line backward			
		Travel in a curve forward			
		Travel in a curve backwards			
	Platform at right	Travel in a straight line forward			
		Travel in a straight line backward			

	angles to vehicle	Travel in a curve forward			
		Travel in a curve backwards			
Verification		Guide the operator and evaluate ability to Interpret and execute the command and communication gestures			
		Travel safely over different types of surface conditions approved by the manufacturer			
		Use the audible warning correctly			
		Look backwards before moving backwards			
		Demonstrate safe travel and obey all rules and notice boards			
		Adapt driving to suit the traffic conditions (congestion, bend, etc)			
		Smoothness of maneuvers			
		Accuracy of maneuvers			
		Demonstrate correct procedure in the event of an inclination warning			
		Position of the MEWP in its stowed/parked location (remove the key)			

*Note: "Vertical Axis" refers to the vertical movements of the work platform due to movements of the lifting structure. It includes awareness of the position of the platform and lifting structure when raising and lowering the platform and when slewing the lifting structure.

**Note: "Working platform movement" refers to any movement of the work platform excluding movements resulting from operation of the lifting structure. This includes horizontal platform movements when the MEWP base is moved, vertical and horizontal movements caused by traveling over uneven ground, bounce and sway resulting from lifting structure flexing.

Certification		
I certify that this employee has completed the company aerial lift safety training and can safely operate and perform work on Type 2 mobile elevated work platforms.	Name	Date

MEWP Type 3 Evaluation Form

Company Name: University of Utah

Date of Evaluation: _____

Employee Name: _____

Instructor Name: _____

Trainer initial if acceptable

			*Vertical Axis	**Work Platform	Notes
Suitability		Assess the suitability for the task			
Verification		Visually check the condition of the MEWP			
		Verify that the safety-related items specified by the manufacturer operate correctly			
Platform raised	Platform in direction of travel	Travel in a straight line forward			
		Travel in a straight line backward			
		Travel in a curve forward			
		Travel in a curve backwards			
	Opposite direction of travel	Travel in a straight line forward			
		Travel in a straight line backward			
		Travel in a curve forward			
		Travel in a curve backwards			
	Right angles to direction of travel	Travel in a straight line forward			
		Travel in a straight line backward			
		Travel in a curve forward			
		Travel in a curve backwards			
Travelling		Travel safely over different types of ground			
		Use the audible warning correctly			
		Look backwards before moving backwards			
		Display safe travel and obey all rules and notice boards			
		Adapt driving to suit the traffic conditions (congestion, bend, etc)			
		Smoothness of maneuvers			
		Accuracy of maneuvers			
Positioning		Position the work platform above a flat surface			
		Move the work platform across this surface			
		Position the work platform below a flat surface			
		Move the work platform across this surface			
		Position the work platform in a restricted space			
		Demonstrate the correct procedure in the event of an inclination warning			
		Move and position the platform with combined functions			

	Movements			
	Position the MEWP in its garage location (remove the key)			
Emergency	Perform recovery maneuvers			
	Perform rescue maneuvers from the ground position			

*Note: "Vertical Axis" refers to the vertical movements of the work platform due to movements of the lifting structure. It includes awareness of the position of the platform and lifting structure when raising and lowering the platform and when slewing the lifting structure.

**Note: "Working platform movement" refers to any movement of the work platform excluding movements resulting from operation of the lifting structure. This includes horizontal platform movements when the MEWP base is moved, vertical and horizontal movements caused by traveling over uneven ground, bounce and sway resulting from lifting structure flexing.

Certification		
I certify that this employee has completed the company aerial lift safety training and can safely operate and perform work on Type 3 mobile elevated work platforms.	Name	Date