



**Environmental Health Safety
& Risk Management**

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Mobile Elevated Work Platforms (MEWP)

[Previously Identified as Aerial Lifts]

Operation Plan

New Mexico State University

Environmental Health Safety and Risk Management

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1. Purpose

The purpose of this program is to promote the safe use of Mobile Elevating Work Platforms (MEWPs) and prevent accidents, personal injuries, and property damage resulting from their use. This document provides the requirements for MEWP application, inspection, training, maintenance, repair, and safe operation as well as the responsibilities of users, operators, supervisors, and occupants use at NMSU.

2. Scope

It is the policy of New Mexico State University to take every reasonable precaution to provide a work environment free from recognized hazards for its employees in accordance with the General Duty Clause of the OSHA act (Public Law 91-596 Section 5(a)(1) and in accordance with specific OSHA (and other applicable) standards.

3. Program Requirements

- a. All departments and personnel (supervisors, operators, and/or occupants) authorized to use a MEWP shall comply with this program.
- b. The operating departments shall monitor personnel performance and supervise their work to ensure the use, application and operation of the MEWP is in conformance with the provisions set forth in this program.

4. Acronyms, Definitions, and Regulations

- Aerial device: Any device, extensible, articulating or both, which is primarily designed and used to position personnel, designed to the ANSI/SAIA A92.20 standard.

Note: This device may handle material, if designed and equipped for that purpose.

- Authorized personnel (authorized person): Personnel approved or assigned by the user to perform a specific type of duty or duties at a specific location or locations at a work site.
- Control: By virtue of possession through custody, as defined in this standard, the required use of power, influence, and authority to behave and/or to direct the behavior

of those who are involved in the application, use, inspection, maintenance of an MEWP, and compliance with all applicable provisions of this standard.

- Control(s): A device actuated by an operator to affect a response from the MEWP.
- Fall arrest system: Personal fall protection system designed to arrest the fall of a worker.
- Fall restraint system: Protection system that restrains or prevents a worker from exposure to a fall.
- Familiarization: Providing the necessary information regarding the features, functions, devices, limitations, and operating characteristics as defined by the manufacturer in the operator's manual, of a specific model MEWP, to include the location of the manufacturer's operation manuals.
- Lessee: An entity to whom a MEWP is by lease, rental, loan or other arrangement.

Note: A manufacturer, dealer, owner, user, operator, lessor, or broker is and assumes the responsibilities of a lessee when that entity is acting in the capacity of this definition.

- Lessor: An entity who leases, rents, loans or otherwise provides a MEWP to another party for the beneficial use of that party.

Note: A manufacturer, dealer, owner, user, operator, lessee, or broker is and assumes the responsibilities of a lessor when that entity is acting in the capacity of this definition.

- Maintenance: The act of upkeep such as inspection, lubrication, refueling, cleaning, adjustment and scheduled part(s) replacement.
- Mobile Elevating Work Platform (MEWP): Machine/device intended for moving persons, tools and material to working positions, consisting of at least a work platform with controls, an extending structure and a chassis.
- Occupant: An individual on the work platform.
- Operation manuals/Owner's Manual: Manuals provided by the MEWP manufacturer at the time of delivery located on the MEWP in a weather resistant storage location intended to be an integral part of the MEWP.

- Operator: An individual qualified to control the movement of a MEWP.

Note: A manufacturer, dealer, owner, user, lessor, lessee or broker has and assumes the responsibilities of an operator when that individual is acting in the capacity of this definition.

- Owner: An entity who has possession of the MEWP by virtue of purchase or legal possession of the MEWP.

Note: A manufacturer, dealer, user, operator, lessor, lessee or broker has and assumes the responsibilities of an owner when that entity is acting in the capacity of this definition.

- Qualified person: Person who, by possession of a recognized degree, certificate or professional standing, or by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work or the project.
- Safety related bulletin: Publication from the manufacturer of the MEWP that requires attention to ensure safe operation of the MEWP that identifies and provides resolution to a safety-related issue.
- Supervisor: An entity assigned by the user to monitor operator performance and supervise their work.
- Training: Instruction to enable the employee to become a qualified person regarding the task assigned, including knowledge regarding potential hazards.
- Work platform: Component of the MEWP intended for carrying personnel along with their necessary tools and materials.

5. Standards and Regulations

- OSHA 1910 Subpart F: Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms
- 29 CFR 1910.66 Powered platforms for building maintenance.
- 29 CFR 1910.67 Vehicle-mounted elevating and rotating work platforms.
- 29 CFR 1910.68 Manlifts.
- OSHA 1926 Subpart L: Scaffolds
 - 29 CFR 1926.453 Aerial lifts.
- OSHA 1926 Subpart R: Steel Erection
 - 29 CFR 1926.759 Falling object protection.

- g. ANSI A92: Work/Aerial Work Platforms
 - iii. ANSI A92.20 – 2018: Design, Calculations, Safety Requirements And Test Methods For Mobile Elevating Work Platforms (MEWPs)
 - iv. ANSI A92.22 – 2018: Safe Use Of Mobile Elevating Work Platforms (MEWPs)
 - v. ANSI A92.24 – 2018: Training Requirements For The Use, Operation, Inspection, Testing And Maintenance Of Mobile Elevating Work Platforms (MEWPs)
- h. ANSI 121 – 2018: American National Standard For Dropped Object Prevention Solutions

Failure to follow NMSU guidelines, trainings, and safety requirements can result in disciplinary actions being taken. Aerial lift devices are hazardous equipment that can lead to severe injury and death. Operators and crew must be training and knowledgeable of regulations and responsibilities.

6. Requirements for all MEWP (Aerial Lifts)

- a. Basic Principles
 - i. EHS&RM ensures trained, qualified and authorized personnel have the knowledge of the intended use of, safe operation, inspection, maintenance, and understanding of various models and types encountered in the work force.
 - ii. Supervisor of said departments are responsible for ensuring that employees have attended training, follow regulations, maintain the units according to regulation, and monitor for safe operation
- b. Operator Manuals
 - iii. All MEWPs shall be provided with a manual of operation and stored in a weatherproof compartment on the unit
- c. Modifications
 - iv. Permission is mandatory from the manufacturer for any modification of MEWPs.
 - v. If the manufacturer no longer exists, a modification under the direction of an engineer with expertise in MEWPs is required.

7. Machine Maintenance and Inspection

- a. The operating department shall set up a preventive maintenance program in accordance with the manufacturer's recommendations, this includes an annual inspection to be completed on the unit.
 - i. All malfunctions and problems identified that affect safe operation will be corrected by a qualified person and authorized by the department before the MEWP is put back in service.

- ii. The department will verify any MEWP rented, leased, or used in any form is inspected, repaired, and adjusted in accordance with the manufacturer's specifications prior to use.
- iii. Prior to first use of the day or shift the lift must be inspected at least once per day or once per shift the supervisor shall ensure, and the operator shall perform, a pre-start and functions test that includes the following:
 - 1. Operating and emergency controls
 - 2. Audible and visual alarms and beacons
 - 3. Personal protective devices that will be worn while operating/occupying the MEWP
 - 4. Air, hydraulic and fuel-system leaks
 - 5. Electrical cables and wiring harness
 - 6. Loose, damaged, worn or missing parts
 - 7. Tires (where applicable tire pressure), wheels and wheel fasteners
 - 8. Instructions, warnings, control markings and operator's manual(s)
 - 9. Structural items including extending structure and stabilizers/outriggers
 - 10. Work platform, including guardrail system, floor, anchorage and mounting
 - 11. Cleanliness and general signs of damage
 - 12. Brake operation and performance
 - 13. Fluid levels including engine coolant, engine oil and hydraulic oil
 - 14. Pins, pin securing devices and visible damage to the means of support of the work platform and extending structure
 - 15. Operation of stabilizers/outriggers, extendable and oscillating axles
 - 16. Any additional item specified by the manufacturer

8. Job Hazard Analysis

- a. The operating department is responsible to ensure performance and documentation of the Job Hazard Analysis (JHA).
- b. EHS&RM will provide a template that can be completed by any department. EHS&RM will then review said document once it is completed.
- c. JHA should identify hazards, the mitigations or avoidance needed, and be as accurate to the job as possible.

9. Training

a. General Operator Training

- i. Operators will attend either a NMSU taught course, or one approved by EHS&RM. Said program will include a practical evaluation (physical operation of MEWP).

b. Occupant Training/Spotter training

- i. The MEWP operator shall provide instruction or otherwise ensure all occupants have a basic level of knowledge to work safely on the MEWP. This instruction does not give the occupant authorization to operate the controls at any time except in an emergency. The knowledge that every occupant must have shall include as a minimum the following:
 1. The requirement to use fall protection and the location of fall protection anchors
 2. Factors including how their actions could affect stability
 3. Safe use of MEWP accessories they are assigned to use
 4. Site-specific work procedures the occupants must follow related to the operation of the MEWP
 5. Hazards related to the task at hand and their avoidance, to include any applicable site risk assessment
 6. General knowledge of the intended purpose and function of MEWP controls and safety- related items specified by the manufacturer, including emergency shut-down and lowering procedures, to the extent required to lower the MEWP safely to the ground/stowed position
 7. Manufacturer's warnings and instructions

c. Supervisor Training

- i. The operating department shall ensure supervisors of MEWP operators have the following training regarding:
 1. Proper selection of the correct MEWP for the work to be performed
 2. The rules, regulations, and standards applicable to MEWPs including the safe use, training and familiarization, and the work performed
 3. Potential hazards associated with use of MEWPs and the means to protect against identified hazards
 4. Manufacturer's operation manuals are an integral part of the MEWP and need to be stored properly in the weather-resistant compartment on the MEWP

d. Equipment rentals

- i. Rental Agencies are not responsible for training lessees in MEWP operations. At most during rental drop off the rental agency is only responsible for:
 - 1. Ensuring any familiarization is needed
 - 2. Machine is in good repair upon drop off
 - 3. Water proof box is on the machine and contains an owner's manual

e. Fall Protection Training

- i. Fall protection training will be provided by EHS&RM for all MEWP operations.
- ii. Fall protection training will meet the requirements of NMSU Fall Protection Plan.
- iii. Employees and supervisors are responsible for following said plan.
- iv. Construction and implementation of a fall rescue plan

10. Retraining/Refresher

- a. Retraining
 - i. Retraining is defined as a complete go through of the entire course.
 - ii. Retraining occurs when one of two criteria is met. Either skill and knowledge has degraded to the point that the operator is no longer clear on their responsibility, or, unsafe work behavior has been seen and reported
- b. Refresher
 - iii. Refresher training is required for any NMSU operator. This occurs after either:
 - 1. It has been 3 years since the initial training occurred
 - 2. It has been 3 years since the last refresher
 - 3. It has been a significant time since the operator last operated a MEWP device.

11. Accident/Incident Reporting and Plan Evaluation.

- a. MEWP plan will be evaluated annually to ensure that
 - i. Current training is adequate to the jobs being completed
 - ii. Plan covers the operations conducted at NMSU
 - iii. Regulatory changes are followed and communicated
- b. Accident/Incident Reporting will be completed.
 - i. Following any incident in which an aerial lift has become disabled
 - ii. Personnel have been ejected from the vehicle
 - iii. The vehicle has impacted, or damaged NMSU property

- iv. The vehicle has caused a hazardous spill/management issue
 - v. An injury caused by a MEWP device
 - vi. A motor vehicle collision
 - vii. A tip over or turn over situation
- c. Following the completion of a report EHS&RM will either arrive on scene to document the incident, or will schedule a meeting to investigate the incident to evaluate the need for changes to training or this plan.