Mobile Elevated Work Platforms

This Mobile Elevated Work Platform Safety Program covers any equipment that is used primarily for mechanically elevating personnel, along with their tools and equipment, on a platform. This program covers the use of aerial lifts, scissor lifts, single personnel lifts, and bucket trucks.

Such equipment includes, but is not necessarily limited to, any equipment meeting the American National Standards Institute (ANSI) standards listed below:

- ANSI Standard A92.2-2015 "Vehicle-Mounted Elevating and Rotating Devices"
- ANSI Standard A92.3-2006(R2014) "Manually Propelled Elevating Aerial Platforms"
- ANSI Standard A92.5-2006(R2014) "Boom-Supported Elevating Work Platforms"
- ANSI Standard A92.6-2006(R2014) "Self-Propelled Elevating Work Platforms"
- ANSI/SAIA A92.22-2018 "Safe Use of Mobile Elevating Work Platforms (MEWPs)"
- ANSI/SAIA A92.24-2018 "Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPs)"
- OSHA Standard 29 CFR 1910.67 "Powered Platforms, Manlifts and Vehicle-Mounted Work Platforms"
- OSHA Standard 29 CFR 1926.453 "Scaffolds; Aerial Lifts"
- OSHA Standard 29 CFR 1926.502 "Fall Protection Systems Criteria and Practices"

Equipment not designed for elevating personnel, such as forklifts or cranes, even if modified to elevate personnel, must not be used to lift personnel. Any employee, student, or contract personnel operating a Mobile Elevating Work Platform (MEWP) on FSU property is subject to the requirements of this program.

Responsibilities

Environmental Health and Safety

- Annually review and update the Program as needed.
- Monitor the effectiveness of the Program.
- Provide support to departments in implementing the Program.
- Maintain written records of operator training on each model of MEWP and the name of the trainer.

Departments

- Must implement, administer, and comply with all aspects of this Program.
- Review the Program annually for compliance and effectiveness.
- Develop internal procedures for each MEWP to include authorized users and uses, training, inspection, maintenance schedules, and record keeping.
- Verify that all employees who operate or work near MEWP are properly trained.

Supervisors

Coordinate or provide training as detailed in this Program.

- Ensure that only trained and authorized individuals use MEWP.
- Provide specific operational training for each MEWP.
- Observe the operation of MEWP and correct unsafe practices.

Operators

- Attend training and review the requirements of the Program and specific departmental procedures.
- Operate the equipment in a safe and responsible manner.
- Report unsafe practices and/or any issues with the MEWP that could result in injury or property damage.

Definitions

Aerial device or **aerial work platform** means an entire device that is designed and manufactured to raise personnel to an elevated work position on a platform supported by scissors, masts, or booms.

Aerial ladder means an aerial device that consists of a single - or multiple-section rung ladder.

Articulating boom platform means an aerial device with two or more hinged boom sections.

Authorized person means a person who is approved and assigned to perform specific types of duties by the employer and who is qualified to perform those duties because of his or her training or experience.

Extensible boom platform means an aerial device (except ladders) with a telescopic or extensible boom. Telescopic derricks with personnel platform attachments shall be considered to be extensible boom platforms when used with a personnel platform.

Fall arrest system means a personal fall protection system designed to arrest the fall of a worker.

Fall restraint system means a protection system that restrains or prevents a worker from being exposed to a fall.

Insulated aerial device means an aerial device designed for work on energized lines and apparatus.

Mobile Elevating Work Platform (MEWP) means a machine/device intended for moving persons, tools, and materials to working positions; consisting of at least a work platform with controls, extending structure, and a chassis.

Mobile unit means a combination of an aerial device, its vehicle, and related equipment.

Platform means any personnel-carrying device (basket or bucket) which is a component of an aerial device.

Qualified person means a person who possesses a recognized degree, certificate, professional standing, or skill and who, by knowledge, training, and experience, has demonstrated the ability to deal with problems relating to the subject matter, the work, or the project.

Vehicle means any carrier that is not manually propelled.

Vehicle-mounted MEWP means a MEWP whose elevating assembly is designed for and installed on a vehicle chassis designed for use on public roads.

Vertical tower means an aerial device designed to elevate a platform in a substantially vertical axis.

Design and Construction

All MEWPs manufactured on or after July 1, 2006, shall meet the design and construction requirements of ANSI A92.2-2001, American National Standard for Vehicle-Mounted Elevating and Rotating Aerial Devices. All MEWPs manufactured before July 1, 2006, shall meet the design and construction requirements of ANSI A92.2-1969, American National Standard for Vehicle-Mounted Elevating and Rotating Work Platforms.

Modifications

MEWP equipment shall not be modified for any use other than that intended by the manufacturer, unless such modifications are certified in writing by the manufacturer or equivalent entity. The certification must state that the modification is at least as safe as the original equipment and that the equipment still meets the applicable ANSI specifications.

Maintenance

All MEWP equipment must be inspected, maintained, repaired, and kept in proper working condition according to the manufacturer's instructions provided with the equipment, or according to manufacturer's repair and/or maintenance manuals. Any equipment that is not in proper working order must be immediately removed from service and repaired or replaced before reuse.

Equipment Security

If the MEWP is accessible to others, the key shall be removed and returned to the supervisor or other designated location that will prevent unauthorized use. If the key is to be left in the device, the MEWP must be locked in a secure area to prevent unauthorized use.

Operator Requirements

Only authorized and qualified personnel can operate MEWPs as defined in the definitions section of this program.

Operator Training

Personnel must be trained before they are permitted to operate an MEWP. This training will be provided by an authorized and qualified in-house staff member or an outside qualified trainer. Training materials provided by the manufacturer of the MEWP shall be included as a component of the required operator training and maintained in a location accessible to the operator. Additional operator training is required whenever a new or different type of MEWP is to be operated.

Training must include both classroom/online training and hands-on operation and evaluation. Classroom/Online training shall include MEWP safe use as defined by ANSI standards. Under the direction and evaluation of the qualified trainer, the trainee shall operate the MEWP for a sufficient period of time to demonstrate proficiency.

Detailed Information on Mobile Elevated Work Platforms-Operator Training can be found here.

Operator Pre-start Inspection

Each operator must complete a pre-start inspection of the MEWP before use. If items are found to be unsafe, the MEWP shall be taken out of service and the unsafe condition reported to the supervisor for repairs. The MEWP shall not be used until the unsafe condition is addressed.

A qualified person must examine or test any items found to be unsafe to determine if they constitute a safety hazard. Items found to be unsafe shall be repaired or replaced before use.

Operator Pre-start Inspection - Test or inspect for the following component or systems:

- Conditions interfering with proper operation of controls and associated mechanism
- Functional status of visual and audible safety devices
- Visible deterioration or leaks in hydraulic or pneumatic systems
- Visible damage or contamination of fiberglass and other insulating components
- Ensure operational and instructional markings are present and legible
- Malfunction or signs of excessive deterioration, dirt, and moisture accumulation in electrical systems of, or related to, the MEWP
- Ensure locking devices, bolts, pins, and other fasteners are in place and not loose or deformed

An inspection checklist form can be found at this link: Appendix A-MEWP Inspection.pdf

Workplace Survey

Before using an MEWP, the operator shall survey the area for hazards such as:

- Un-tamped earth fills
- Ditches
- Drop-offs and floor obstructions
- Debris
- Overhead obstructions and electrical conductors
- Weather conditions
- Unauthorized persons in the area
- Uneven ground that exceeds the manufacturer's requirements for slope

All potentially unsafe conditions identified in either the visual inspection, equipment check, or area inspection must be corrected prior to using the MEWP.

If it is determined that there is limited unsafe clearance from electrical power lines, the owner of the electrical lines, or his/her representative, must be notified and informed of the intended work to be done in proximity to the lines. This notification must take place prior to the commencement of work. Any overhead wires must be considered energized until the owner of the electrical lines, or his/her representative has verified a zero-energy state and locked and tagged out the line. FSU employees must be allowed to join the lockout with their lock.

Moving the Mobile Elevated Work Platform

Make sure the boom is properly cradled and the outriggers are in the stowed position before moving the MEWP. The MEWP may be moved with the boom elevated and personnel on the platform only if the equipment is specifically designed for such use and the manufacturer allows for this type of operation.

Aerial Ladders

Secure aerial ladders in the lower traveling position, using the locking device or other means provided by the manufacturer, before moving it for highway travel.

All persons working from an aerial ladder must wear manufacturer's recommended or appropriate fall protection.

Safe Work Practices

- When operating a MEWP a minimum of 2 trained personnel must be present at all times.
- Set the brakes and make sure outriggers, when used, are positioned on pads or a solid surface. When using the MEWP on an incline, install wheel chocks if they can be installed safely.
- Never exceed the boom and platform load limits specified by the manufacturer.
- Always stand firmly on the floor of the platform. Sitting or climbing on the edge of the platform
 is prohibited. Use of guardrails, planks, ladders, or any other device to gain additional height or
 reach is prohibited.
- All persons on the platform shall wear a full body harness as required by the manufacturer with a lanyard attached to the manufacturer's recommended attachment point.
- Never attach a lanyard to an adjacent pole, structure, or equipment.
- Operators shall not wear any loose clothing or any accessory that can catch in moving parts.
- Before the machine is started, the operator must walk completely around the machine to ensure everyone and everything is clear of the machine.
- 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.
- Operators must report all accidents, regardless of fault and severity, to their Supervisor and Environmental Health and Safety.
- Consideration shall be given to the amount of wind anticipated during operation. Follow the
 manufacturer's instruction regarding operation in windy conditions. As a general rule, MEWPs
 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, MEWPs will be lowered to a maximum height of 20 feet.
 - At 25mph wind speeds or anticipated gusts, MEWPs will be grounded. If at any time, an operator feels unsafe in an MEWP, he/she may decide to ground the equipment until safe conditions are re-established.
- Guardrails must be installed, and access gates or openings must be closed before raising the platform.
- Before moving an MEWP for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers (if equipped) are in the stowed position.
- Consideration shall be given to the protection of bystanders via barricading, having another employee keep bystanders at a safe distance, or by other means.
- MEWPs shall not be operated from trucks, scaffolds, or similar equipment.

Rescue Plan

A rescue plan must be in place prior to operation of the MEWP. Information on rescue plans can be found in the <u>Fall Protection Program</u>. The rescue plan form can be found in Appendix B of this program.

Resources

External Resources:

OSHA Aerial Lift Fact Sheet

OSHA Using Aerial Lifts Fact Sheet

Scissor Lift Hazard Warning

Appendices

Appendix A- MEWP Inspection Form

Appendix B-Fall Protection Rescue Plan

Appendix C- MEWP Risk Assessment

Appendix D- Workplace Check Sheet