Chapter 47: Mobile Elevating Work Platforms

Equipment Requirements

1 Purpose

The purpose of these requirements is to ensure mobile elevating work platforms (MEWPs) meet applicable standards and are maintained in good working order. They cover design, marking, inspection, maintenance, and modification of MEWPs. They apply to workers (as operators), custodians, and Fleet Services.

2 Requirements

Any MEWP brought on-site – SLAC-owned, leased, rented, and equipment owned by subcontractors – must be designed and manufactured in accordance with applicable standards (see Section 5, “References”) and marked, inspected, maintained, and modified following the requirements below.

2.1 Controls

All controls must be clearly labeled and guarded to prevent accidental operation. MEWP control panels must require dual activation by the operator to activate the directional (horizontal or vertical movement) controls. Time-delay ramping feature activation controls are not permitted.

Authorized controls include the following:

- Joystick equipped with an enable switch that has a time-out function of 10 seconds or less (non-locking or spring loaded)
- Joystick with guarded trigger mechanism
- Joystick with a separate enable switch (continuously pressed)
- Joystick with a pull-up trigger
- Joystick and foot pedal

Controls not on this list must be approved by authorized ESH personnel.

2.1.1 Upper and Lower

Any powered MEWP must have both upper and lower control devices. The upper control device must be in or beside the platform, within easy reach of the operator. The lower control device must be able to lower the platform when the operator is in jeopardy.

An emergency stopping device must be provided at both the upper and lower controls.
2.2 Guarding

All rotating shafts, gearing, and other moving parts must be guarded to conform with Group 6 of the General Industry Safety Orders.

2.3 Fall Protection

MEWPs must have the following:

- Toe boards at sides and end that are at least 3.5 inches high
- A hinged trap access door, if applicable
- A platform that must be at least 16 inches wide
- Automatic safety device or system to prevent free fall of the platform the power supply or elevating system fail
- Critical components of the hydraulic or pneumatic system having a bursting strength that exceeds the pressure attained when the system is subjected to the equivalent of 4 times the rated work load. Critical components are those in which a failure would result in a free fall or free rotation of the boom. All non-critical hydraulic components must have a bursting safety factor of at least 2 to 1.

The platform deck must be equipped with a guardrail or other structure around its upper periphery at least 42 inches high, plus or minus 3 inches, with a midrail. (Chains or the equivalent may be substituted where they give equivalent protection.)

Where the guardrail is less than 39 inches high, an approved personal fall protection system as defined in 8 CCR 3207 must be used in accordance with the requirements of 8 CCR 3648(o).

2.4 Marking

A plate or other legible marking verifying that the MEWP is designed and manufactured in accordance with the applicable standard must be conspicuously displayed and bear the following information:

1. Make, model, and manufacturer’s serial number
2. Rated capacity, including maximum capacity at the platform’s maximum height
3. Platform height, including maximum travel height
4. Maximum recommended operating pressure of any hydraulic or pneumatic system(s)
5. Any applicable operation restrictions and cautions
6. Operating instructions
7. Manufacturer’s rated line voltage (dielectric capability)
8. Alternative configurations require, in addition to the above:
   - Chart, schematic, or scale showing capacities of all combinations in their operating positions
   - Caution or restrictions or both of operation of all alternate or combinations of alternate configurations
2.5 Inspection

MEWPs must pass an initial inspection, conducted by a custodian, when first brought on-site and a pre-use inspection, conducted by the operator, before each shift (see MEWP: Inspection Procedures).

2.5.1 Non-SLAC Equipment

Before bringing a non-SLAC-owned MEWP on-site, the custodian will verify that the vehicle meets the minimum requirements of this program.

2.6 Maintenance

Custodians in coordination with Fleet Services will establish and follow a program of regular maintenance to ensure that MEWPs remain in safe operating condition. Custodians will ensure maintenance records are kept for a minimum of three years and remain available upon request.

Only employees of Fleet Services or a third-party approved by it are permitted to maintain or repair MEWPs.

2.7 Modification

No modifications or additions to MEWPs will be performed without written authorization from the manufacturer.

3 Forms

The following forms and systems are required by these requirements:

- None

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- The custodian will ensure inspection records are kept for a minimum of three years and made available upon request.
- Fleet Services will maintain records of repair for each MEMP for a minimum of three years that include the date of the work, a description, and the person or entity that performed the work

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)
- Chapter 47, “Mobile Elevating Work Platforms”
MEWP: Operating Requirements (SLAC-I-730-0A21S-008)
MEWP: Inspection Procedures (SLAC-I-730-0A21C-008)

- Chapter 45, “Fall Protection”

Other Documents


- American National Standards Institute (ANSI)/Scaffold Industry Association (SIA)
  - ANSI/SIA A92.2, “Vehicle-mounted Elevating and Rotating Aerial Devices” (ANSI/SIA A92.2)
  - ANSI/SIA A92.3, “Manually Propelled Elevating Aerial Platforms” (ANSI/SIA A92.3)
  - ANSI/SIA A92.5, “Boom-supported Elevating Work Platforms” (ANSI/SIA A92.5)
  - ANSI/SIA A92.6, “Self-propelled Elevating Work Platforms” (ANSI/SIA A92.6)