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**MOBILE ELEVATING
WORK PLATFORMS:
*Safe Use and
Requirements*
(Concise)**

**Leader's Guide, Fact Sheet
& Quiz**

Item Number: 5112
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This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

5112 MOBILE ELEVATING WORK PLATFORMS: *Safe Use and Requirements (Concise)* FACT SHEET

LENGTH: 14 MINUTES

PROGRAM SYNOPSIS:

Mobile elevating work platforms, or MEWP's, are critical components of most maintenance and construction operations. When a worker must perform a task above ground, a platform, such as a scissor lift or boom lift is often utilized to complete the job in a safe and efficient manner. Also known as aerial work platforms, these powerful vehicles are available in many different sizes and configurations; however, all of them have one thing in common: They can be very dangerous. To better protect operators, other platform occupants and workers on the ground, the American National Standards Institute, ANSI, in conjunction with the Scaffold and Access Industrial Association, SAIA, has adopted revisions of its A92 suite of mobile elevating work platform regulations that focus on the design of these vehicles, their safe use and the training of all personnel who participate in aerial lift operations, including operators, occupants, maintenance workers and supervisors. This program reviews the important changes in the new standards and discusses the basic safe work practices platform operators must follow to prevent accidents and injuries.

Topics include platform classification, ANSI training requirements, site risk assessment, rescue planning, pre-operational inspection, driving safety and raising and working on the platform.

PROGRAM OBJECTIVES:

After watching the program, the participant should be able to explain the following:

- How mobile elevating work platforms are now classified according to ANSI;
- What the training requirements are for platform operators;
- How to conduct a site risk assessment;
- How to perform pre-operational and work zone inspections;
- Which hazards to consider when driving a platform;
- How to safely raise and work on a platform;

INSTRUCTIONAL CONTENT:

NEW MOBILE ELEVATING WORK PLATFORM STANDARDS

- Mobile elevating work platforms, or MEWP's, are critical components of most maintenance and construction operations. When a worker must perform a task above ground, a platform, such as a scissor lift or boom lift is often utilized to complete the job in a safe and efficient manner.
- Also known as aerial work platforms, these powerful vehicles are available in many different sizes and configurations.
- To better protect operators, other platform occupants and workers on the ground, the American National Standards Institute, ANSI, in conjunction with the Scaffold and Access Industrial Association, SAIA, has adopted revisions of its A92 suite of mobile elevating work platform regulations that focus on the design of these vehicles, their safe use and the training of all personnel who participate in aerial lift operations, including operators, occupants, maintenance workers and supervisors.

MOBILE ELEVATING WORK PLATFORM CLASSIFICATION

- The first thing you need to know about the new regulations is that mobile elevating work platforms are now classified by how they function and operate rather than the equipment type. This is important because your training will be specific to the mobile elevating work platform's classification.
- All mobile elevating work platforms now fall into one of two groups. Those in Group A have platforms that move vertically, but stay within the tipping lines. A scissor lift is an example of a Group A mobile elevating work platform.
- All other mobile elevating work platforms, such as boom lifts, are considered Group B. These lifts feature platforms that extend beyond the unit's chassis.

- Mobile elevating work platforms are further classified into one of three types. Type 1 vehicles can only be driven in the stowed, or lowered, position.
- Type 2 platforms can be driven while elevated, but may only be only controlled from the chassis while doing so.
- Type 3 lifts can also be driven elevated, but they may be controlled from the platform while doing so.

TRAINING

- To become a qualified operator authorized by your organization, you will undergo training in three segments: theory, practice and evaluation.
- The theory portion of your training will focus on the ANSI Safe Use standard, A92.22 and how it applies to each vehicle you are learning to operate. Such training can be provided in a classroom setting or through online courses.
- You will be instructed on recognizing and controlling common hazards, how to perform a pre-operational inspection and the proper operation of all lift controls and emergency stops.
- You will also learn the location of all the manuals on the machine and the information they contain. This includes the manufacturer’s operating manual and any other printed material provided by the manufacturer.
- The practice segment of your training will involve applying the safe use techniques you have learned during hands-on experience and vehicle operation.
- The evaluation segment of your training will properly document that you are able to demonstrate the knowledge and skills necessary to safely operate the specific type of mobile elevating work platform you will be using.
- You will be retrained by a qualified person whenever you are observed operating a mobile elevating work platform unsafely, preparing to operate a vehicle with different controls or features or if you haven’t used a platform for an extended period of time or your operator’s license has expired.
- No matter how much experience you have, familiarization training must take place whenever you plan to operate a different mobile elevating work platform than you usually use. This brief training will include location and presence of all manuals, a hands-on review of the controls, use of specific options and any other topics specified by the manufacturer.
- The updated mobile elevating work platform regulations also require “platform occupant” training. This is important to understand because you, as the platform operator, will likely be the person who provides this training to those co-workers who accompany you on the platform to perform work.

SITE RISK ASSESSMENT

- The new ANSI regulations require your organization to develop a mobile elevating work platform safe use program. You should learn what your facility calls this program and how it works to ensure everyone’s safety during mobile elevating work platform operations.
- The safe use program begins with the performance of a site risk assessment to identify hazards, evaluate risk, develop control measures and communicate with all personnel involved.

Step 1: Defining the Work

- The first step in a site risk assessment is to define the work by spelling out which specific tasks must be done to complete the job, when the work must be finished and if there are any times during the day when mobile elevating work platform operations are infeasible.
- This will also include the preparation and maintenance of the work site, including an evaluation of the support surface to make sure it can adequately support the weight of the mobile elevating work platform.

Step 2: Platform Selection

- Step number two is selecting the appropriate lift for the task at hand.
- As a mobile elevating work platform operator, you must consider a variety of factors in determining which platform is best suited for the task at hand.
- First, you need to make sure if the platform or basket of the machine is large enough to hold all personnel who will occupy it.
- You also must estimate the load weight of the lift, which includes the weight of all workers, tools and supplies and ensure that it will not exceed the lifting capacity of the vehicle.
- The mobile elevating work platform’s “working envelope,” or range of vertical and horizontal motion must be taken into consideration when deciding if a platform can safely reach the work zone.

- The work location and ground conditions are also key factors when selecting the appropriate machine. Some job sites have fixed obstacles that may require a specific platform to avoid. Also, mobile elevating work platforms that are noisy or emit harmful vapors may be restricted from use in indoor environments.

Step 3: Evaluating Potential Hazards

- The third step in the site risk assessment is to evaluate all the potential risks of the planned operation, including the weight capacity limit of the platform, overhead obstacles such as power lines, accessing hard-to-reach areas, keeping workers on the ground safe and preventing unauthorized use of the equipment.
 - If your path to the work site is outdoors, look for drop-offs or holes. Check for bumps and other floor obstructions if traveling indoors.
 - Be sure that you can navigate on or around any sloped surfaces. Look for unstable or slippery surfaces as well so you can avoid them.
 - Make sure that wind and other weather conditions won't affect the platform's stability during travel or during the task at the work zone.
- prevent collisions with the platform.
- At the site of the work zone, inspect the surface to ensure it can withstand all of the load forces presented by the mobile elevating work platform.
 - Also, make sure to inform unauthorized personnel in the area of your intentions and have them clear the area.

Step 4: Identifying Hazard Controls

- Step number four is to identify the controls to be used to mitigate the hazards. This includes the correct use of PPE and fall arrest systems, ensuring all personnel have been properly trained, scheduling the work to occur during the least hazardous times and ensuring a rescue plan is in place.
- Everyone working in or around a mobile elevating work platform must receive training on how to respond if they witness someone fall from a platform or they fall themselves.
- The plan must set a time limit for how long a properly restrained worker can hang suspended in the air. A hanging person awaiting rescue can suffer serious bodily injury after 15 to 20 minutes.
- Rescue plans may include self-rescue by the fallen person, assisted rescue by others in the work area or technical rescue by emergency services.
- The rescue plan should also detail the proper procedures to follow when freeing an entangled or "snagged" platform.

Step 5: Communication

- The final step in the process is communication. Communication means making sure the operator is trained and authorized, that any occupants are aware of their responsibilities, monitoring of the operation by the supervisor and ensuring maintenance has been performed by a technician in accordance to the manufacturer's requirements.

PRE-OPERATIONAL INSPECTION

- After you have selected the right mobile elevating work platform for the job, you must verify that the equipment is in safe operating condition by performing a pre-operational inspection.
- First, make sure that the operator's manual and any other required printed materials are located in the storage container on the platform. These must stay onboard at all times so they can be consulted when needed.
- Then, walk around the unit and check for fluid leaks, loose or broken parts, structural damage or any other signs of unsafe conditions. Also, be on the lookout for excessive rust, corrosion or oxidation.
- Make sure all safety decals and placards are legible and haven't been damaged or removed from the platform.
- Check the tread of the tires and look for cuts or embedded objects. If the tires are inflatable, make sure they have the manufacturer's recommended air pressure.
- Make sure oil, fuel, hydraulic fluid, coolant and any other fluids are at the appropriate level.
- The guardrails and gates on the machine should be checked to make sure there are no cracked welds or missing parts.
- If the mobile elevating work platform has a swinging gate, confirm that it can only swing inward. Gates that swing outward are unsafe and must be repaired.
- If the lift is a Group B vehicle equipped with outriggers or stabilizers, make sure they work properly and aren't damaged.
- If you discover any damage or defects during your inspection, do not operate the platform. Follow your organization's policies for removing it from service and having it repaired.

FUNCTION TESTS

- After completing the pre-operational inspection, you must then perform functions tests to ensure there are no malfunctions in the controls before putting the machine into service.
- Always begin function testing at the ground controls. Test each device and control through the full range of motion.
- Also, verify the emergency stop is functioning properly.
- If all ground controls function properly, proceed to the platform controls. Test the forward, reverse, steering and lifting controls. Then ensure the brakes are working.
- If the lift features a two-hand control system, check to see that the controls cannot be activated unless the controlling button or foot pedal is depressed.
- Be sure to check the platform emergency stop button as well.

DRIVING SAFETY

- If you determine your mobile elevating work platform safe for operation, you may mount the lift and drive it to your destination.
- When driving the vehicle, keep the platform fully lowered if possible and maintain a safe speed that allows you to avoid obstacles and pedestrians.
- When you reach the work destination, make sure to park the vehicle on a firm, flat surface.

PREPARING TO RAISE THE PLATFORM

- There are several practices and precautions that must be taken before raising the platform. Don't forget to deploy the outriggers or other stabilizers if the unit is equipped with them. Make sure the feet are placed on a firm surface and are adjusted to keep the lift level.
- Be aware that the tilt alarm will activate if the mobile elevating work platform is more than five degrees out of level. Never attempt to raise a platform on an incline.
- You also need to account for windy conditions if working outdoors. Don't raise the platform if wind speeds exceed levels indicated in the operator's manual.
- Confirm that the total weight of all supplies, tools and personnel does not exceed the unit's weight capacity. This weight limit is listed in the operator's manual and on the platform's data plate.

RAISING THE PLATFORM

- While elevating the platform, or any other time it is in motion, keep all body parts inside the railings to avoid crush or pinch injuries. Make sure any occupants also keep their body parts inside the platform.
- Also, scan the area above the platform as it moves upward to make sure you are a safe distance away to avoid contact.
- Exercise extra caution when raising the platform near power lines or other energized electrical equipment. You must maintain a clearance of 10 feet or more from energized parts up to 50,000. The operator's manual will specify clearance distances for higher voltages.

WORKING SAFELY ON THE PLATFORM

- Tip-overs are a primary concern as one in four fatalities involving aerial lifts results when a vehicle overturns. To prevent a mobile elevating work platform from tipping over, avoid side loading the platform excessively.
- Every platform has a side load capacity that the operator and occupant must be aware of. Side loading is the lateral or sideways force exerted by people or loads in the platform when they are pushing or pulling something. If the force is too much, the mobile elevating work platform will likely tip over.
- Also, never use the platform as a crane or to hoist loads. This common, yet prohibited, practice can easily decrease the stability of the platform and cause it to overturn.

MOBILE ELEVATING WORK PLATFORMS:
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ANSWERS TO THE REVIEW QUIZ

1. a

2. b

3. a

4. c

5. c

6. b

7. b

8. a

9. a

MOBILE ELEVATING WORK PLATFORMS: *Safe Use and Requirements*
REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.

Name _____ Date _____

1. A scissor lift is an example of a _____ mobile elevating work platform.
 - a. Group A
 - b. Group B

2. _____ platforms can be driven while elevated, but may only be only controlled from the chassis while doing so.
 - a. Type 1
 - b. Type 2
 - c. Type 3

3. No matter how much experience you have, familiarization training must take place whenever you plan to operate a different mobile elevating work platform than you usually use.
 - a. True
 - b. False

4. _____ is most likely to provide occupant training for workers who accompany operators on a platform.
 - a. A supervisor
 - b. A service technician
 - c. The operator

5. The first step in a site risk assessment is to _____.
 - a. Select the appropriate platform for the job
 - b. Evaluate the job's potential risks
 - c. Define the work by spelling out specific tasks to be done

6. When selecting a platform for a job, you first need to _____.
 - a. Estimate the load weight of the lift
 - b. Make sure the platform or basket can hold all personnel who will occupy it
 - c. Decide if the platform can safely reach the work
 - d. Determine how long the operation will take

7. If a platform has a swinging gate, you should confirm that it can only swing outward during your pre-operational inspection.
 - a. True
 - b. False

8. When testing the functions of a self-propelled or trailer-mounted boom, you must wear the proper personal fall arrest equipment during the test.
 - a. True
 - b. False

9. When raising the platform near power lines or energized parts up to 50,000 volts, you must maintain a proper clearance of at least _____.
 - a. 10 feet
 - b. 15 feet
 - c. 25 feet