

SAFETY STAND-DOWN FOR YOUR MISHAP PREVENTION

Accident Type: OVERTURNED
Injury: AERIAL LIFT
Damage: FATALITY
Type of Work: OVERTURNED/
 DAMAGED
 EQUIPMENT
Equipment: PAINTING EXTERIOR
 OF BUILDING
 ARTICULATING
 BOOM PLATFORM



ACCIDENT DESCRIPTION:

♦ Employee was performing building exterior painting from an Aerial Lift. Equipment overturned when positioned at the minimum telescopic extension point however in a close to vertical upright position. As the equipment began to travel it flipped backwards. Indications are that the rotating structure was positioned perpendicular to the supporting (wheel) base structure. Worker was wearing Fall Protection PPE, however the employee fell or was ejected out of the basket striking a steel storage box and landing under the lift basket.

IN-HOUSE & CONTRACTOR WORKFORCE:

- ♦ Validate that all articulating boom platform lifts in use have functioning safety interlocks in accordance with manufacturer's instructions. Interlocks may include warning alarms, engine shut down, level interlocks for uneven surfaces (usually 3-5 degrees), speed controls, and extension/telescopic stops. Equipment found to be deficient must be immediately taken out of service for repair in accordance with manufacturer instructions.
- ♦ Ensure operators use the lifts with outrigger wheels in the fully extended position. Wheels not extended are for equipment transportation only (to fit in the truck) and not intended for use during site work activities. Stop work if this procedure is not followed.
- ♦ Validate that all man lift operators have accomplished the prescribed current "Competent Person" training necessary for the equipment they are operating. (Attachments 1 & 2 can be used to augment training). *Includes Aerial lifts rented.* Do not allow operation if not trained. Should include "hands on" training.
- ♦ Use the manufacturer's instructions for travel speed. In most cases travel when in any elevated position shall be in the "CREEP" mode only as indicated by the equipment controls. Stop work when equipment is operated in accordance with manufactures instructions.
- ♦ Before using any articulating boom platform assure thorough pre use inspections are performed. Ensure these walk around checks on the equipment are in accordance with the manufacturer's operation manual and documented using Operational Daily Check List or equivalent provided by the equipment manufacturer. Contractors should refer to USACE EM 385-1-1 Chapter 16. Do not allow equipment use without documented inspections.



Aerial Lifts Safety Tips

Aerial lifts include boom-supported aerial platforms, such as cherry pickers or bucket trucks. The major causes of fatalities are falls, electrocutions, and collapses or tip overs.

Safe Work Practices

- Ensure that workers who operate aerial lifts are properly trained in the safe use of the equipment.
- Maintain and operate elevating work platforms in accordance with the manufacturer's instructions.
- Never override hydraulic, mechanical, or electrical safety devices.
- Never move the equipment with workers in an elevated platform unless this is permitted by the manufacturer.
- Do not allow workers to position themselves between overhead hazards, such as joists and beams, and the rails of the basket. Movement of the lift could crush the worker(s).
- Maintain a minimum clearance of at least 10 feet, or 3 meters, away from the nearest overhead lines.
- Always treat powerlines, wires and other conductors as energized, even if they are down or appear to be insulated.
- Use a body harness or restraining belt with a lanyard attached to the boom or basket to prevent the worker(s) from being ejected or pulled from the basket.
- Set the brakes, and use wheel chocks when on an incline.
- Use outriggers, if provided.
- Do not exceed the load limits of the equipment. Allow for the combined weight of the worker, tools, and materials.



**PERSONNEL AERIAL LIFTS REQUIRE SPECIAL CARE,
REGULAR MAINTENANCE AND TRAINING**
Sections in bold and highlighted for emphasis

Outriggers--a requirement for all lifts

Whether you're using a lift to reach eight feet or 20 feet, all safety equipment, especially the outriggers, needs to be used. Although the base of the lifts might seem heavy enough to support an individual, once the platform has been extended up or at an angle, lifts can easily tip over. Outriggers should extend in all four directions from the base of the lift to stabilize the equipment. Refer to the manufacturer's operating manual of the lift for details and instructions.

All users need to receive proper training

All lifts have an operator's manual for the use and maintenance of the specific lift. **If you do not have a manual for your lift, contact the manufacturer and order a manual immediately. Stop using the lift until you can verify the safe and proper use of the lift.** The manual should remain with the lift so operators can easily use it as a resource when they have a question. Follow the manufacturer's guidelines for training and operating the lift. **Only trained authorized personnel should operate the personnel lift.** If a professional trainer is recommended, contact a vendor that sells the equipment in your area.

Common lift accidents

- Tip overs due to the lack of use or incorrect use of outriggers
- Misapplication of the equipment
- Hitting obstacles on the ground or in the air such as beams or tree limbs
- Hitting electrical wires

Always inspect before using

An inspection of the lift should be conducted prior to every use, and a maintenance log should be kept. Other safety tips include:

- Keep the equipment secured to prevent unauthorized use
- Do not make repairs to the lift if you are not capable
- Always use the manufacturer's approved replacement parts
- Do not modify the equipment in any way
- If a lift is donated or purchased second hand, have it professionally inspected before using. Equipment manufacturers offer this service usually for around \$100.00. Purchased equipment should also be registered with the manufacturer to assure up to date notices are obtained.