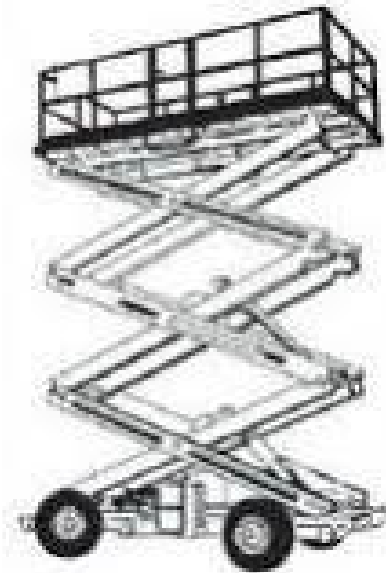


Elevated Work Platforms



Equipment designed to lift personnel to perform work.

Purpose	<p>The purpose of this program is to comply with:</p> <ul style="list-style-type: none"> • 29 CFR 1910.67 Vehicle Mounted Elevating and Rotating Work Platforms • 29 CFR 1926.453 Aerial Lifts <p>for the prevention of injuries and accidents resulting from unsafe operation of an elevated work platform.</p>
Scope	<p>This program applies to all Forest Lake ISD #831 school employees or contractors which may be required to use an elevated work platform for a work assignment.</p>
Records Created	<p>Appendix A: Inventory Appendix B: Pre-Operation Inspection Checklist Annual Inspection Records Training Records</p>
References	<p>ANSI A92.2 Vehicle-Mounted Elevating Work Platforms ANSI A92.3 Manually Propelled Elevating Work Platforms ANSI A92.5 Boom-Supported Elevating Work Platforms ANSI A92.6 Self Propelled Elevating Work Platforms Personal Protective Equipment Program</p>
Terminology	<p>Aerial work platform – mobile or manually propelled device that has an adjustable position platform, supported from ground level. Articulating boom (also called a knuckle lift) – aerial lift that has two (2) or more hinged sections. Extensible boom (also called a telescoping lift) – aerial lift that can extend straight, no hinges. Operator – a person who is authorized and trained to use an aerial lift. Personal protective equipment – equipment worn by operators to minimize exposure to hazards. Platform – the bucket, basket, stand, cage, or equivalent on an aerial lift that is designed to be occupied by the operator. Qualified – a person who possess a recognized degree, certificate, professional standing, or by knowledge, training, and experience has demonstrated ability in the subject matter.</p>

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1.0 OVERVIEW

Elevated work platforms, otherwise known as aerial work platforms or aerial lifts, are commonly used for maintenance, repair, inspection, and during construction activities to lift personnel to elevations to perform work tasks. Such lifts are designed to move people not objects or materials. Due to their mobility, flexibility, and generally safe operation, they have replaced ladders and scaffolding as the preferred choice of equipment for various activities. Proper use of elevated work platforms is necessary to avoid a potentially life threatening or serious injury. Failure to follow safe work procedures established in this safety program will result in disciplinary action.

2.0 SCOPE

This program applies to any Forest Lake ISD #831 school employee or approved contractor who is required to use an aerial work platform while on the job. Contractors using District owned lifts will be provided of a copy of this written program and shall follow all principles and rules listed in this plan. It is the responsibility of the contractor to ensure that only qualified operators use District owned elevated work platforms. Furthermore, it is the responsibility of the contractor to ensure that they have a written program that is at least as stringent as this plan and that their operators follow it while using contractor lifts at any District jobsite.

3.0 TYPES

Elevated work platforms include:

Vehicle-Mounted Elevated Work Platforms (figure 1)

- Aerial Ladders
- Articulating (Knuckle) Booms
- Extendable (Telescoping) Booms

***Manually Propelled Elevated Work Platform (figure 2)**

- Vertical and/or Articulating Towers

Boom-Supported Elevated Work Platform (figure 3)

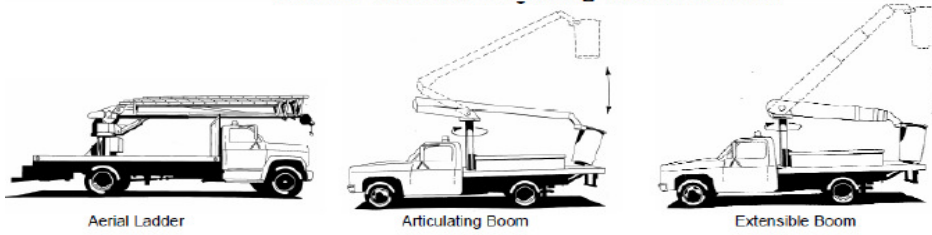
- Articulating (Knuckle) Booms
- Extendable (Telescoping) Booms

Self Propelled Elevated Work Platform (figure 4)

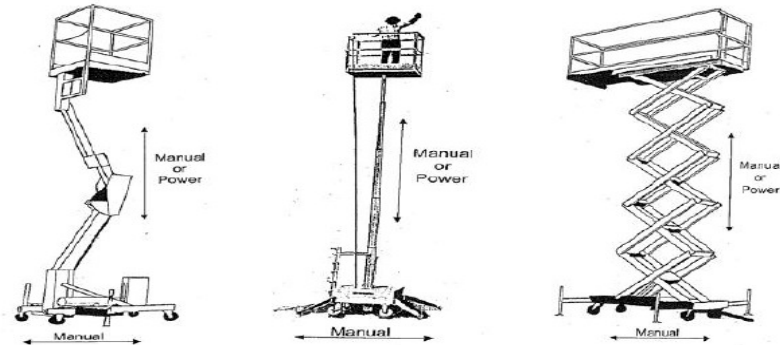
- Vertical and/or Articulating Towers

**note: represents District approved types of elevated work platforms used by employees. See Appendix A: Inventory for detailed information on District owned lifts.*

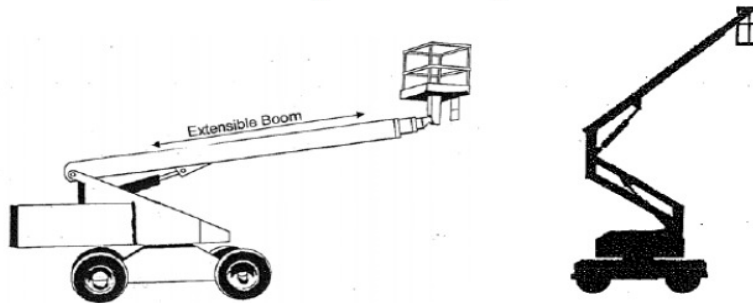
**Figure 1
Vehicle-Mounted Elevating Work Platform**



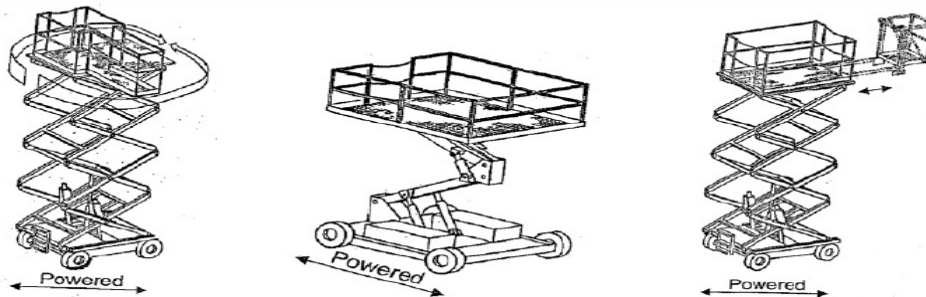
**Figure 2
Manually Propelled Elevating Work Platform**



**Figure 3
Boom-Supported Elevating Work Platform**



**Figure 4
Self Propelled Elevating Work Platform**



4.0 HAZARDS

The following hazards, among others, can lead to personal injury or death while using an elevated work platform:

- Fall from elevated level to ground below
- Objects falling off lift contacting workers below
- Tip overs
- Ejection from the platform
- Electric shock
- Entanglement
- Accidental contact with objects including overhead obstructions
- Chemical burns related to battery maintenance

Because of these hazards, it's required that employees using elevated work platforms understand how to recognize and avoid such risks in order to prevent serious injuries.

5.0 RESPONSIBILITIES

5.1 Buildings and Grounds Supervisor

The Buildings and Grounds Supervisor is responsible to:

- Perform periodic audits to ensure effectiveness of program.
- Ensure all operators are in compliance with the principles, safe work practices, and complete the Pre-Operation Inspection Checklist as provided in this program.
- Ensure only trained operators are allowed to use such lifts.
- Ensure training is available and assigned for elevated work platform operators; provide additional on-the-job training when new hazards are discovered or as needed.
- Maintain training records for District operators.
- Provide personal protective equipment as necessary.
- Ensure required maintenance is completed on elevated work platforms.
- Maintain records of maintenance and manufacturer manuals as described in this program.
- Ensure contractors are provided with safe operation instruction as provided in this written program.
- Conduct an annual review of the program.

5.2 Operators

Operators of elevated work platforms are responsible to:

- Follow all principles and safe work practices provided in this program including completing the Pre-Operation Inspection Checklist prior to operating an elevated work platform.
- Evaluate the functioning operation of elevated work platforms and if unsafe conditions or if corrective items are found during the Pre-Operation Inspection, report them immediately to the Buildings and Grounds Supervisor.
- Use applicable personal protective equipment.
- Attend training as required.

6.0 FALL PROTECTION

ANSI standard A92.2 for **Vehicle-Mounted Elevating Work Platforms** (figure 1) and ANSI standard A92.5 for **Boom-Supported Elevating Work Platforms** (figure 3) require use of a lanyard and harness in addition to a guardrail for operator fall protection. The primary purpose of a secondary fall arrest system is to prevent the operator from being ejected from the platform while the machine is in motion.

ANSI standard A92.3 for **Manually Propelled Elevating Work Platforms** (figure 2) and ANSI standard A92.6 for **Self Propelled Elevating Work Platforms** (figure 4) do not require use of a personnel fall arrest system in addition to manufacturer designed guardrails. If operators or supervisors identify a fall hazard because of the work assignment, use of a harness and lanyard is suggested to prevent overreaching, climbing, or accidental ejection.

Securing the lanyard to an adjacent pole, beam, or to an unapproved structure is not permitted. Designated anchorage points do exist on District owned elevated work platforms.

7.0 PRE-OPERATION INSPECTION

It is the responsibility of the operator to conduct a pre-operation inspection consisting of a visual inspection, function test, and work area inspection (in that order). The pre-operation inspection must be documented and reside with the elevated work platform (templates provided in Appendix B). A completed checklist should remain with the lift until the next pre-use inspection occurs.

Any elevated work platform found to be unsafe (does not pass pre-operation inspection) must be removed from service until repaired. Operators are required to notify the Buildings and Grounds Supervisor immediately of any lift that fails inspection.

Any unsafe conditions identified during the work area inspection must be corrected prior to use.

8.0 MAINTENANCE

Routine maintenance items that are required to be performed by operator(s) include:

- Checking hydraulic oil level and adding oil as necessary.
- Checking battery condition. Review cables, connections, and battery acid level. If battery acid level appears low, wear safety goggles, chemical resistant gloves, apron, and add distilled water to battery fill tube. Do not overfill.

When replacing batteries, do not use batteries that weigh less than the original equipment as they are a crucial component to the machine's stability. Check the manufacturer's operating manual for specific information regarding required battery weights.

Scheduled maintenance is required for all aerial lifts in accordance with manufacture's operating or maintenance repair manuals. At a minimum, an annual inspection conducted by a qualified mechanic shall occur with a decal that states the date of the inspection. **Elevated work platforms that have not been inspected within the last year shall not be used by any operator.**

9.0 GENERAL SAFETY PROCEDURES

The following safe work practices shall be followed:

- Only trained operators shall be permitted to use an elevated work platform.
- A pre-operation inspection shall be performed prior to use per manufacturer's protocol.
- Elevated work platforms must not be field modified for uses other than those intended by the manufacturer, unless a modification has been certified in writing by the manufacturer or by any other equivalent entity. Mounting attachments for holding tools or other materials onto the platform, toe boards, or guardrail system can conversely impact the overall weight and safe operation of a lift.
- Elevated work platforms must be equipped with emergency controls at ground level.
- Rotating shafts, gears, and other moving parts that are exposed to contact must be guarded.
- An operator's manual must be kept with each lift.
- Manufacturer's recommendations for use in windy conditions must be followed. As a general rule, elevated work platforms shall not be operated in winds exceeding 30 miles per hour or during severe inclement weather events unless during a necessary emergency response event.
- Follow manufacturer's instructions on how to safely transport an elevated work platform for highway travel.
- Operators of elevated work platforms shall position such equipment away from vehicular traffic and other hazardous conditions whenever possible. Use traffic control measures and other work zone warnings such as cones or signs as necessary.
- Elevated work platforms that are not specifically electrically insulated must NOT come within ten (10) feet of energized overhead power lines.

10.0 OPERATING PROCEDURES

The following procedures will be followed while using an aerial lift:

- Operators must always stand firmly on the floor of a lift, and must not sit or climb on the edge of guardrails, or use planks, ladders or other devices for a work position.
- When outriggers and/or stabilizers are used, they must be positioned on pads or a solid surface and whenever appropriate brakes shall be locked.
- The designed rated capacity for a given angle of elevation must not be exceeded.

- The manufacturer's rated load capacity must not be exceeded. The load and its distribution on the platform must be in accordance with the manufacturer's specifications. The elevated work platform rated load capacity must not be exceeded when loads are transferred to the platform at elevated heights.
- Only the operator(s), their tools, and necessary materials must be on or in the platform.
- Elevated work platforms that are manually propelled (drivable), the operator of a platform must look in the direction of travel, keep a clear view of the path of travel, and make sure that the path is firm and level. Operators shall avoid pedestrians, moving vehicles or other equipment, debris, drop-offs, holes, depressions, ramps, overhead obstruction including electrical lines, and other hazardous conditions.
- Platform gates shall be closed while the platform is in an elevated position.
- Elevated work platforms that have both upper and lower controls, the lower controls shall not be operated unless permission has been granted from the employee in the basket, except in case of an emergency.
- When moving in reverse, use an audible alarm to signal movement.
- Stunt driving and horseplay are strictly prohibited.

11.0 SHUT DOWN PROCEDURES

The following procedures will be followed after operation of an elevated work platform:

- Park the lift in an area away from vehicular traffic or other moving equipment.
- Place controls in neutral and turn off electrical power.
- Do not leave keys in an aerial device after use.
- Notify the Buildings and Grounds Supervisor of any malfunctions of the lift after each use and remove from service if repairs are warranted.

12.0 OPERATOR TRAINING REQUIREMENTS

Employees who are authorized to operate aerial lifts must receive training, conducted by a qualified trainer, prior to engaging in their duties.

Initial training shall include the following:

- Explanations of electrical, fall, and falling object hazards.
- Procedures for dealing with hazards.
- Recognizing and avoiding unsafe conditions in the work area.
- Instructions for correct operation of the elevated work platform (including maximum intended load and load capacity).
- Demonstrations of the skills and knowledge needed to operate the elevated work platform before operating it on the job.
- When and how to perform necessary inspections.
- Manufacturer instructions unique to the lift.

Training shall include formal classroom instruction and hands-on operation of the type of elevated work platforms expected to be used by the employee(s). It is not expected that multiple detailed training sessions will need to be performed if an operator is to operate two different manufacturers' models of a similar type of lifts. For example, an operator who is trained to operate self-propelled elevating work platforms does not need to attend a detailed training course on a JLG model, if they attended detailed classroom and hands on training on a Genie model. However, the trained operator is responsible for reviewing the new model specific hazard information provided in the owner's manual.

Upon successful completion of the classroom and hands-on portions of the elevated work platform training, operators will receive a hard card indicating the type of lift the employee(s) is qualified to operate.

Additional training or refresher training shall occur if:

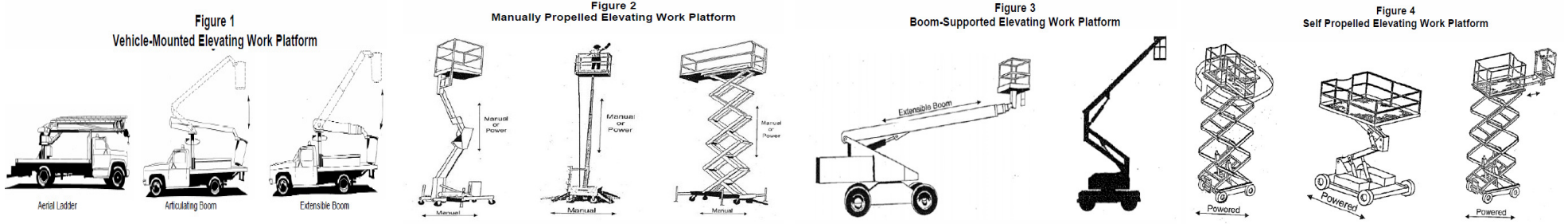
1. An accident occurs while operating an elevated work platform,
2. New workplace hazards involving a lift are discovered, or
3. A different type of elevated work platform is assigned to an operator(s).

The Buildings and Grounds Supervisor can establish refresher training on scheduled intervals based on his/her discretion.

A sign-in sheet and agenda must be used to indicate a roster of employees that participated in training sessions including the name of the qualified instructor. Training records shall be maintained by the Buildings and Grounds Supervisor.

Inventory

Elevated work platforms are categorized into four types:



Type (see above)	Building	Manufacturer	Model	# of People Allowed on Platform	Platform Height (ft.)	Max. Platform Capacity (lbs.)
Manually Propelled Elevating Work Platform	Forest Lake Area High School	Genie	AWP-30S	1	29	350
	Century Junior High		AWP-25S	1	24	350
	Southwest Junior High		AWP-25S	1	24	350

Pre-Operation Inspection Checklist

Checklist is required to be completed for each shift using the elevated work platform.

Inspected by:	Date:	
Make:	Model:	
Visual Inspection		
Task	Complete	N/A
Check for operators manual	<input type="checkbox"/>	<input type="checkbox"/>
Check that safety decals are legible	<input type="checkbox"/>	<input type="checkbox"/>
Check for visible damage	<input type="checkbox"/>	<input type="checkbox"/>
Check for hydraulic leaks	<input type="checkbox"/>	<input type="checkbox"/>
Inspect belts, hoses, lifting chains, cables, and pulleys	<input type="checkbox"/>	<input type="checkbox"/>
Inspect pins, connections, and fasteners	<input type="checkbox"/>	<input type="checkbox"/>
Ensure battery is charged and in good condition	<input type="checkbox"/>	<input type="checkbox"/>
Inspect electrical wires, connections, and cabling	<input type="checkbox"/>	<input type="checkbox"/>
Inspect tires	<input type="checkbox"/>	<input type="checkbox"/>
Check guardrails, platform, and entry ladder/gate	<input type="checkbox"/>	<input type="checkbox"/>
Inspect outriggers, leveling jacks, and foot pads	<input type="checkbox"/>	<input type="checkbox"/>
Ensure emergency, manual lowering lever properly operating	<input type="checkbox"/>	<input type="checkbox"/>
Inspect outriggers, leveling jacks, and foot pads	<input type="checkbox"/>	<input type="checkbox"/>
Inspect fall protection equipment	<input type="checkbox"/>	<input type="checkbox"/>
Function Test		
Task	Complete	N/A
Check horn, left and right steering control, up/down lifting controls, and braking	<input type="checkbox"/>	<input type="checkbox"/>
Workplace Inspection		
Task	Complete	N/A
Check floor/ground conditions, housekeeping, travel directions, and overhead obstructions	<input type="checkbox"/>	<input type="checkbox"/>
<p>Note: During inspection, if items require maintenance or repair, do not use equipment – mark Out of Service – and inform the District Buildings and Grounds Supervisor.</p> <p>Comments: _____</p>		