

SAF-2126 Scissor Lifts and Aerial Work Platforms

Purpose

Flagship Facility Services is committed to providing a safe and healthy work environment and to protecting employees by reducing the risk of injury or fatality from uncontrolled hazards in the workplace related to the use of Aerial and Scissor Lifts. The purpose of this Aerial and Scissor Lift Safety Program is to establish work policies, practices, and procedures for the operation and servicing of aerial lifts and scissor lifts.

Scope

This Scissor Lifts and Aerial Work Platform Program procedure applies to all Flagship Facility Services employees temporary employees, and contractors. All employees are required to follow the minimum procedures outlined in this document. Deviation from this procedure is not authorized without prior approval from the business unit President and the Vice President of EHS & Risk Management or their appointed designees.

Affected or Authorized Employees shall be informed if all or parts of this document is superseded by a bridging document or other recognized agreement with the client. (E.g., bridging documents specifying Flagship employees working as contractors on client sites must learn and follow the procedures protocols for that site.)

However, in the absence of such notification, this document will serve as the official requirements for all Flagship employees and supersedes all previous procedures.

Nothing in this document shall be construed as limiting the use of good judgment and common sense in matters not foreseen or covered. Questions, concerns, or suggested revisions are to be directed to the Divisional Safety Manager.

Definitions

Aerial Lift	An device that is designed and manufactured to raise personnel to an elevated work position on a platform supported by masts or booms. Aerial lifts include vehicle-mounted elevating work platforms, self-propelled elevating work platforms, and boom-supported elevating work platforms.
Aerial Work Platform	The personnel-carrying component of an aerial lift, such as a bucket, basket, stand, or equivalent. The term "Aerial Work Platform" is used interchangeably with "Aerial Platform" in this policy.
Articulating Boom	An aerial lift with two or more hinged boom sections.
Authorized Employee (Operator)	A person approved or assigned by the employer to perform a specific type of duty or duties or to be at a specific location or locations at the jobsite.
Competent/Qualified Person	One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate or mitigate the hazards.
Contractors	Contractors refer to all third-party groups performing work on behalf of Flagship or client assets.
Extendable Boom Platform	An aerial lift with a telescopic or extendable boom.

Fall Arrest	Any combination of an anchorage, connectors, body harness, lanyard, deceleration device or lifeline used to arrest a fall from any working level.
Fall Protection	Equipment and methods to both guard against the injurious consequences of a fall and to prevent a fall where possible. There are several types of fall protection including fall arrest systems, fall restraint systems, and guardrails.
Insulated Aerial Lift	An aerial lift with dielectric components designed and tested to meet the specific electrical insulating rating consistent with the manufacturer's identification plate.
Scissor Lift	A self-propelled elevating work platform (mobile scaffold) utilizing a scissor type framework for positioning the platform vertically.
Signal Person or Spotter	A person capable of giving direction to both the lift operator and 3rd parties while the lift is traveling to prevent contact, damage, and injury.

Procedure Responsibilities

Management.

Flagship Facility Services is responsible for providing the tools and resources necessary to implement this procedure and ensuring that the Program Administrator is following the procedure's provisions.

Program Administrator.

The Procedure Administrator, Divisional Safety Manager or their designee, the Account Manager and Site Lead is responsible for:

- Ensuring each department or functional area has a copy of the procedure
- Fulfilling the role of qualified person, as defined by OSHA, or assigning an appropriate person(s) to be the qualified person
- Identifying work tasks that need to be performed by a qualified employee
- Correcting safety hazards as soon as possible
- Ensuring all new equipment and components comply with this program
- Verifying content and ensuring training for employees
- Stopping any unsafe work practice that is not in accordance with this procedure
- Reviewing the procedure annually and updating it as needed to ensure compliance with all applicable federal and state regulations

Supervisors.

Site Leads and Supervisors are responsible for:

- Ensuring employees are provided with and use the appropriate PPE
- Ensuring employees comply with all aspects of this safety program
- Ensuring all new equipment and components comply with this program
- Maintaining a list of all qualified employees in a like-named safety binder
- Scheduling employee training and ensuring new hires are properly trained on the procedure
- Stopping any unsafe work practice that is not in accordance with this procedure
- Shall verify that aerial and scissor lifts are inspected prior to use by the operator(s) and documented on **"Scissor and Aerial Lift Pre-Use Inspection Form - FFS-SAF-FRM-2126D"**
- Shall ensure that any aerial or scissor lift identified as unsafe by the operator is not used .
- Shall verify that the type of fall protection is compatible and properly worn and used.
- Shall stop work if conditions change, or if work with aerial lift or scissor lift exceeds original job scope.

Aerial or Scissor Lift Competent Person.

- Shall perform a documented annual inspection of the aerial lift or scissor lift.

- Shall tag equipment out of service if an item is found deficient and cannot be fixed prior to use.

Authorized Employee (Operator).

- Shall not modify an aerial lift or scissor lift without manufacturer's prior written approval.
- Shall test the lift controls before use each day to ensure they are in safe working condition.
- Shall perform a pre-use and inspection of the aerial or scissor lift prior to each shift's use. As part of the pre-use inspection a Work Area Safety Assessment will be performed as well.
 - Both inspections are on **"Scissor and Aerial Lift Pre-Use Inspection Form - FFS-SAF-FRM-2126D"**
- Shall consider the work area where the aerial or scissor lift will be used and provide input to site leader for identifying any additional hazards and mitigations
- Shall complete the aerial lift-specific or scissor lift-specific operator orientation prior to operating.
- Shall operate aerial lifts in accordance with training received and manufacturer's recommendations.
- Shall report defective or malfunctioning equipment and any incident involving the use of aerial or scissor lifts to their supervisor as soon as practical.
- Shall obey the signals of the Signal Person and stop the task if contact with the Signal Person is broken.
- Shall stop work if conditions change, or if work with aerial lift or scissor lift exceeds current job scope.

Signal Person or Spotter

- Shall function as the sole signaler at any given time (but anyone can give the stop signal).
- Shall have a direct line of sight of equipment movement and make sure contact with anything at ground level or overhead is avoided.
- Shall adhere to a clear, agreed upon, standard set of signals for communicating with the operator, or if out of the operator's direct line of sight uses agreed-upon verbal commands by radio.
- Shall control the job site access to prevent other personnel from walking under the elevated work platform.
- Shall verify that overhead obstructions have been identified and mitigated.
- Shall stop work if conditions change, or if work with aerial lift or scissor lift exceeds current job scope.

Employees (Non-Compliance is a Cardinal Rule Violation)

- Except during training, untrained employees are not permitted to inspect, operate or board, or work from an aerial lift or scissor lift.
- All employees are authorized to give the stop signal if they believe there is an imminent danger of injury or damage to equipment or property.

Procedures

General Non Compliance is a Cardinal Rule Violation:

- Only trained Authorized Employee's shall operate an aerial lift or scissor lift.
- Before the aerial lift is used, the worksite shall be surveyed for hazards.
- Employees working in an aerial lift shall utilize appropriate fall arrest or fall restraint systems.
- The lift operator shall visually inspect the aerial or scissor lift prior to each day's use.
- Lifts shall be lowered to grade before equipment is moved from position, at no time shall an employee travel with the scissor lift or aerial lifts elevated.
- Before and during each use, the operator shall:
 - Check for overhead obstructions and electrical conductors.
 - Ensure that the load on the platform and/or load lifting devices are in accordance with the manufacturer's rated load capacity.

- Ensure that outriggers and stabilizers are used if the manufacturer's instructions require their use.
- Ensure that guardrails are properly installed, and the gates are closed, or chain secured.
- Use outrigger pads when necessary to provide firm footing.
- If a vehicle mounted aerial lift has a separate power source to operate the movement of the base (e.g. truck) versus the movement of the aerial platform:
 - The vehicle engine shall be shut off.
 - The wheels shall be chocked if outriggers are not used.
 - The ignition key shall be removed and kept with the equipment operator before using the aerial platform.
- The aerial lift shall not be operated on grades, side slopes or ramps exceeding those for which the aerial platform is rated by the manufacturer.
- For aerial lifts, the brakes shall be set and when outriggers are used they shall be positioned on pads or a solid surface.
- Wheel chocks shall be installed before using an aerial lift on an incline provided they can be safely installed.
 - Scissor lift shall not be utilized on an incline.
- When so equipped, outriggers or stabilizers and extendable axles shall be fully extended and placed on firm level surfaces or mats as required by the manufacturer. Stabilizer mats and pads shall be:
 - At least three times larger in surface area than the footprint the mats support,
 - Level where the outrigger or stabilizer contacts the mat to prevent the outrigger from sliding off,
 - Strong enough to withstand the loads imposed by the outrigger(s).
- Floor protection shall be utilized whenever a lift is to be used inside buildings with finished floors or where this is potential to damage structure, i.e., tank bottom welded seams, tile, carpeting, wood floors.
- Lift controls shall be operated in a smooth, controlled manner at all times. Avoid sudden starts, stops, or changes in direction. Never suddenly change the controls from one travel direction to another (stop first).
- All body parts and equipment shall remain inside the platform while moving the equipment.
- When boom lifts must be moved on an incline, the boom shall be positioned uphill of the wheels and the wheels chocked if it is parked on an incline.
- Operators shall maintain a firm footing on the aerial platform floor while working thereon. Operators shall not sit or climb on the edge of the platform or use planks, ladders, or the railings of the platform to gain a work position or as a climbing device to access other work levels.
- People must not be allowed under a lift. If aerial lifts are going to be used in an area near pedestrians, operators shall isolate the work area by establishing a perimeter and safely diverting the traffic flow (walking & driving). Danger signs, caution tape, barriers, and a worker directing others to stay away are all acceptable means of establishing a work area perimeter.

Fall Protection

Body harnesses must be worn with a lanyard no longer than 3 feet in length or a self-retracting lifeline when working from elevated mobile work platforms. The point of attachment must be the anchor point installed and designated by the equipment manufacturer. Employees will not attach lanyards to adjacent poles, structures or equipment while they are working from the aerial lift. Employees will not move/relocate an aerial lift while the boom is in an elevated working position and the operator is inside the lift platform.

(Scissor lifts do not require the use of a harness and lanyard as long as the work platform is protected by a proper guardrail system.)

Operators shall not work in any lift where the guard rails are damaged or not in place shall be required to wear an approved fall arrest or fall restraint system.

Employees shall remain tied-off until the work is finished, and the platform has been safely lowered to the ground.

See SOP “**Fall Protection and Elevated Work FFS-SAF-SOP-2116**”

Moving and Traveling

- An aerial lift truck shall not be moved when the boom is elevated in a working position with personnel in the platform except for equipment which is specifically designed for this type of operation.
- Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position except for equipment which is specifically designed for this type of operation.
- When lowering elevated aerial platforms, the operator shall inspect the area around the machine to ensure that no personnel, equipment, or obstructions are in the path of travel. If the area in the path of movement is not visible, the platform shall not be lowered until determined to be clear by a signal person located at ground level
- The use of a signal person should be considered when:
 - The operator cannot see the path of travel.
 - A lift is working within 15 feet of live power lines.
 - A lift is traveling within 5 feet of stationary equipment, vehicles, or plant.

If aerial lifts or scissor lifts are transported, e.g. on a truck or trailer, they shall be secured or restrained as appropriate for the task.

Use of Lifts near Live Electrical Lines

Any overhead wire shall be considered to be an energized line unless it has been disconnected and is visibly grounded in the work area. Exact voltage shall be determined prior to working near live electrical lines.

When an unqualified person, as defined in the “**Electrical Safety Program - FFS-SAF-SOP-2127**” , is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object they may contact cannot come closer to any unguarded, energized overhead line than the following distances:

- For voltages to ground 50kV or below - 10 feet.
- For voltages to ground over 50kV - 10 feet plus 4 inches for every 10kV over 50kV.

Elevated Lift Egress and Access

Exiting and accessing an elevated platform is permissible only when it is determined to be the safest means of access to an elevated work area, and the manufacturer allows it.

The manufacturer's instructions and the following minimum procedures shall be used to access or exit an elevated platform:

- 100% fall protection shall be maintained while exiting or entering an elevated aerial platform. The employee shall secure a second lanyard to an anchorage point outside the platform before disconnecting their lanyard from the platform anchor point and exiting maintaining one point of tie-off at all times. (be sure not to remain anchored outside the platform after reentering)
- The floor of the platform should be at the same level as the structure to be accessed.
- At no time shall employees exit or enter over the lift controls.

Aerial and Scissor Lift Inspections

Aerial and Scissor Lift Pre-Use Inspection

The aerial or scissor lift operator shall inspect the aerial or scissor lift prior to each day's use.

- Inspections are documented on Scissor and Aerial Lift Pre-Use Inspection Form - FFS-SAF-FRM-2126D Place a copy of the completed inspection in the Scissor Lift Binder.
- Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition.
- Any suspected deficient items shall be carefully examined or tested and a determination made as to whether they constitute a safety hazard.
- All unsafe items shall be replaced or repaired before use.
- If a lift fails inspection, it shall be locked and tagged DO NOT USE.

Scissor and Aerial-Lift Quarterly Inspection

On a Quarterly basis, the aerial or scissor lift operator or other competent person shall inspect each aerial and scissor lift.

- The inspection shall be performed every 150 hours of operation or every 3 months (whichever comes first) or after any incident involving the lift.
- The inspection shall be documented using,
 - **“Scissor and Aerial-Lift Quarterly Inspection Form - FFS-SAF-FRM-2126Q”**
- Any suspected deficient items shall be carefully examined or tested and a determination made as to whether they constitute a safety hazard.
- All unsafe items shall be replaced or repaired before use.
- If a left fails inspection, it shall be locked and tagged DO NOT USE

Aerial and Scissor Lift Annual Inspection

A certified third-party contractor will annually inspect Scissor and Aerial-Lifts, after the passes inspection a decal will be affixed to the lift indicating the date and company performing the inspection

Scissor and Aerial-Lift inspection and maintenance records will be maintained on-site in a like-named binder.

Maintenance

- Any repairs or servicing beyond Operator maintenance level is to be performed by a manufacturer's authorized representative.
- Any problems or malfunctions that affect the safety or operation of an aerial or scissor lift shall be repaired and functionally tested before continued use.
- Operator maintenance shall be performed on aerial and scissor lifts in accordance with the manufacturer's recommendations.
- If a left fails inspection or is otherwise not functioning as designed, it shall be locked and tagged DO NOT USE

Fueling and Recharging Equipment

- The equipment shall be lowered to grade, parked, on a level surface and shut down prior to refueling or battery charging.
- Fueling and battery charging shall be done in a well-ventilated area free from flame, sparks, or other hazards that may cause a fire or explosion because of the fuel or the hydrogen generated from battery charging.
- Refueling shall be prohibited in any area where there is any primary source ignition (i.e. capable of igniting flammable vapors) work within 35 feet.

Employee Training

Only personnel who have received training regarding the inspection, application and operation of aerial lifts, including recognition and avoidance of hazards associated with their operation, shall operate an aerial lift.

Such items covered shall include, but not necessarily be limited to, the following issues and requirements:

- The purpose, use and proper storage of manuals.
- Aerial or scissor lift pre-use inspection.
- Responsibilities associated with problems or malfunctions affecting the operation of the aerial lift.
- Factors affecting aerial or scissor lift stability.
- The purpose of placards and decals.
- Workplace inspection for safe operation of the aerial or scissor lifts .
- Applicable safety rules, regulations, and policies.
- Duties of the Operator and Signal Person or Spotter
- The functions of the controls and features specific to the aerial or scissor lift they will be using.
- Operator warnings and instructions specific to the aerial or scissor lift they will be using
- Actual operation of the aerial lift. Under the direction of the trainer, the trainee shall operate the aerial platform for a sufficient period of time to demonstrate proficiency in the actual operation of the aerial platform.
- Proper use of personal fall protection equipment specific to the aerial or scissor lift they will be using.

If a new aerial or scissor lift is introduced operators using it will be retrained on

- The functions of the controls and features specific to the aerial or scissor lift they will be using.
- Operator warnings and instructions specific to the aerial or scissor lift they will be using
- Actual operation of the aerial lift. Under the direction of the trainer, the trainee shall operate the aerial platform for a sufficient period of time to demonstrate proficiency in the actual operation of the aerial platform.
- Proper use of personal fall protection equipment.

All training will be recorded in the Employee Training Record

Periodic SOP Review

At least annually, the Program Administrator will conduct a review to assess the plan's effectiveness. The review will consider the following:

- Injury trends and general safety observations
- Lessons learned from accidents and near misses
- Changes in operations or equipment
- New technologies
- Regulatory changes

Unless otherwise stated the Documents Database (DOC) is used to manage and track the Periodic Procedure Review of the SOP, Forms or associated documents

- The results of the annual review report will be presented to senior management during SMS Management Review Meetings

Record Retention

Flagship Facility Services Records Summary Database (RSD) identifies the record, record owners, record locations and retention periods.

Other Documents, Databases, Tables or Forms

- Scissor and Aerial-Lift Quarterly Inspection Form - FFS-SAF-FRM-2126Q
- Scissor and Aerial Lift Pre-Use Inspection Form - FFS-SAF-FRM-2126D
- Fall Protection and Elevated Work FFS-SAF-SOP-2116
- Record Summary Database (RSD)
- Documents Database (DOC)

Document History

REV. 00 01/15/22. To document the Scissor Lifts and Aerial Work Platforms Program procedure.