UC Santa Barbara Aerial Lift and Elevating Work Platform (AL/EWP) Safety Program Manual

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EH&S Program Administrator: Jesse Bickley, CIH, CSP

Deputy Program Administrator: Bryan E Bowe

Email: bbowe@ucsb.edu Phone: 805.893.5407

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I. Purpose/Introduction

There are a variety of state and federal regulations that govern the occupational use of Aerial Lift/Elevating Work (AL/EWP) equipment. The purpose of this document is to establish procedures that ensure safe and legal operation of AL/EWP equipment by University of California Santa Barbara personnel, contractors, and vendors.

II. Applicability/Scope

The Aerial Lift/Elevating Work Platform Safety Program applies to all use of AL/EWP equipment by University of California at Santa Barbara faculty, staff, students, volunteers, contractors, and vendors while engaged in University related activities.

III. Definitions

See Section V: Aerial Lift/Elevating

Work Platforms for descriptions of different AL/EWP equipment classifications.

Aerial Device - Any vehicle mounted or a self-propelled device that is telescoping, extensible, articulating, or both, used to position personnel.

AL - Aerial Lift

AL/EWP - Acronym for "Aerial Lift/Elevating Work Platform"

Boom - An elevating member, the lower end of which is so attached to a rotating or non-rotating base that permits elevation of the free end in the vertical plane.

Counter Weight - The rear section or area of the lift which is usually made of solid steel, and/or combination of steel and the weight of the battery on electric lifts, that counter balances the boom leverage and basket load.

Chassis- the base frame of a motor vehicle or other wheeled conveyance.

Data Plate - The manufacturer's equipment specification and information data, which includes basket load rating, lift capacity, lift heights, vehicle weight, and vehicle attachments. This plate is required to be affixed to all Aerial Lift Equipment by regulatory code. This is the operator's primary source of basic information about their vehicle for safe-work and use planning.

Emergency Lowering Means - Any elevating work platform equipped with a powered elevating assembly that has a platform height exceeding 60 inches must be supplied with safe means of lowering the basket or platform during an emergency or malfunction.

EWP - Elevating Work Platform

Insulated Aerial Device - An aerial device designed for work on energized lines and apparatus.

Energized – Electrically connected to or having a source of voltage (2021 NFPA 70E), or electrically charged to have a potential significantly different from that of earth in the vicinity.

Fall Protection - Fall protection is the use of controls designed to protect personnel from falling or in the event they do fall, to stop them without causing severe injury.

Guard Rails - Railing around the perimeter of the work platform. This railing consists of a top rail between 39" – 45" with a mid-rail. Units with the top rail less than 39" must have fall protection in use to operate.

Lower Controls - Operating controls located on the base of the unit which can be switched to override the basket or platform control during an emergency.

Mast - Part of the lifting mechanism to which the hydraulic lift cylinder or worm drive is attached that supports the basket as it is lifted up and down.

MEWP- Mobile Elevating Work Platforms

Outriggers - Extendable legs that are either manually set in place or, in some cases, hydraulically extended to give added stability to the unit base.

Override - The taking over of primary control functions from a secondary location.

Platform - Any personnel carrying device (bucket, basket, cage, stand, tub, or equivalent) which is a component of an aerial device.

Qualified Person - means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work, or the project.

Rated Work Load - The safe design live load carrying capacity of the work platform.

Responsible Person – The individual responsible for overseeing campus controlled (owned, leased, borrowed, or rented) AL/EWP equipment.

Stability - A condition of a work platform in which the sum of the moments, which tends to overturn the unit is less than the sum of the moments tending to resist overturning.

Work Platform, Adjustable - Any device that has a platform which is vertically, horizontally or rotationally adjustable and supported by a structure.

Upper Controls - Operating controls located on the basket or work platform of the unit. These controls can only be overridden with the operator's permission or in case of an emergency.

IV. Responsibilities

A. Department Heads and Chairs

Directors and Department Chairs are responsible for:

- Ensuring departmental compliance with the requirements of this program;
- Identifying "AL/EWP Equipment Responsible Person(s)" and ensuring they have the knowledge and authority to carry out their responsibilities listed below; and
- Providing the necessary resources to ensure the health and safety of their employees.

B. Responsible Persons (Principal Investigators, Supervisors, and Equipment Managers)

AL/EWP Equipment Responsible Persons are responsible for:

Understanding and complying with all Cal/OSHA and UCSB AL/EWP Program requirements;

- Evaluating equipment needs and ensuring proper equipment is selected and used for each job task under their purview;
- Ensuring documented AL/EWP Equipment Selection and Site Hazard Evaluations are conducted for each use location and piece of equipment under their purview (see attachments);
- Notifying the EH&S Program Administrator of changes in equipment and ensuring equipment not previously approved by the EH&S Program Administrator is reviewed and approved prior to purchase, lease, rental, or operation;
- Identifying qualified operators and ensuring proper AL/EWP certification and training documentation for the equipment they will operate;
- Keeping an accurate usage log for the piece of equipment that includes the operators name, use hours, and any problems noted during operation.
- Ensuring Pre-operation Inspections are performed and documented by the operator prior to each work shift using the equipment (see attachments);
- Ensuring maintenance and repairs are performed by a qualified person in accordance with the manufacturer's specifications;
- Ensuring maintenance, inspection, and training records are maintained per the requirements of this program;
- Locking-out and/or tagging-out equipment that has not been properly inspected, maintained, or is otherwise unsafe to operate;
- Enforcing safe operation and ensuring all use of AL/EWP equipment under their purview meets the requirements of this program, and:
- Notifying the EH&S Program Administrator of any unsafe and/or unauthorized use of equipment under their purview.

C. Operators (Faculty, Staff, Students and Volunteers)

UCSB personnel who operate AL/EWP while engaged in University related activities are responsible for:

- Understanding and complying with all Aerial Lift/Elevating Work Platform Safety Program requirements;
- Notifying their Supervisor or EH&S about any hazardous conditions observed;
- Only using AL/EWP equipment that they are certified and trained to operate;
- Operating equipment in accordance with instruction and training provided by EH&S Program Administrator, their Supervisor, and the Responsible Person;
- Always operating AL/EWP equipment in a safe manner;
- Informing their Supervisor or the EH&S Program Administrator if they are on medication or have any other conditions or concerns, that could result in unsafe operation of AL/EWP equipment;
- Not disassembling, modifying, or otherwise altering equipment in any way;
- Performing AL/EWP Equipment Selection and Site Hazard Evaluations and pre-operation inspections prior to equipment use (see attachments), and;
- Reporting any observed or suspected malfunctioning of equipment to their Supervisor, Responsible Person, or the EH&S Program Administrator.

D. AL/EWP Equipment Passengers (Non-operators)

AL/EWP passengers must complete Fall Protection, AL/EWP Awareness training, and receive EH&S Program Administrator and/or Responsible Person approval prior to riding on or in AL/EWP

equipment. Passengers are not to use the operator's controls and are not considered rescue personnel. Passengers must not interfere with the safe operation of AL/EWP equipment.

E. Office of Environmental, Health and Safety (EH&S)

The UCSB AL/EWP Program is administered by the Office of Environmental Health and Safety (EH&S). EH&S is responsible for:

• Designating an individual who is qualified by appropriate training and/or experience to administer the program.

F. Program Administrator

The AL/EWP Program Administrator will function as a technical resource and assist departments in carrying out their responsibilities as necessary. The AL/EWP Program Administrator is responsible for:

- Developing and maintaining the UCSB AL/EWP Program and ensuring it meets applicable regulatory requirements;
- Communicating requirements, objectives, and program changes to departments impacted by this program;
- Developing, maintaining, and providing AL/EWP training and other program materials as needed:
- Overseeing program records and ensuring they are retained for the appropriate amount of time:
- Working with responsible persons to identify safe locations where "hands on" field training may be conducted;
- Conducting regular program audits to ensure the program is being properly implemented and assessing overall program effectiveness;
- Conducting periodic "customer service" inquiries to learn how the program can be modified to better meet client department need;
- Reviewing new equipment purchases/rentals/leases and ensuring it meets the current regulations, is covered by this program, and determining if further specialized training is necessary;
- Keeping an accurate and up to date inventory of campus AL/EWP based on information provided by responsible persons and information gathered during annual inspections, and;
- Assisting with AL/EWP Equipment Selection and Site Hazard Evaluations upon request.

G. Contractors and Vendors using AL/EWP on UCSB Property

Contractors and vendors who are certified under their company's Aerial Lift/Elevating Work Platform Safety program and have permission from a University Representative, may operate AL/EWP equipment owned/leased/rented by their company on UC Santa Barbara property. All use of UCSB owned/rented/leased equipment by non-UCSB Personnel must be reviewed and approved by the EH&S Program Administrator. Non-certified or otherwise unqualified operators must be directed to stop work immediately and the incident must be reported to the EH&S Program Administrator.

V. Aerial Lift/Elevat Work Platform Descriptions

A. Equipment Classifications

The American National Standards Institute (ANSI) A92 standards define an aerial lift as a "machine/device intended for moving persons, tools, and material to working positions, consisting of at least a work platform with controls, an extending structure, and a chassis." Aerial lifts are also referred to as Mobile Elevating Work Platforms (MEWPs).

Aerial lift classifications are made up of a lift Type (with reference to traveling) with an associated lift Group (platform location in reference to tipping line):

- Type 1 traveling is only allowed in the stowed position
- Type 2 traveling elevated is controlled from the chassis
- Type 3 traveling elevated is controlled from inside the work platform

Group A – vertical projection of the platform is inside the tipping lines at maximum inclination in all platform configurations

Group B – all other aerial lifts, typically identified as boom-type aerial lifts

| ANSI Classification | | BNL Job-Performance Measure (JPM) code |
|---------------------|------------------------|--|
| • A92.2 | | • TQ-AERIAL-P92.2 |
| Type 1, Group A | | TQ-AERIAL-P1A |
| Type 3, Group A | | TQ-AERIAL-P3A |
| Type 1, Group B | | TQ-AERIAL-P1B |
| Type 3, Group B | Contract of the second | • TQ-AERIAL-P3B |

B. Common AL/EWP Equipment

Articulating Boom Lift - An aerial device with two or more hinged boom sections.

Fall Protection (Restraint) is required when operating this Lift.



Elevating Work Platform - A device designed to elevate a platform in a substantially vertical axis. This device is stationary once set up and cannot be moved. Devices can only be used on a stable level surface.

Fall Protection (Restraint) is recommended when operating this equipment.



Extensible Boom Platform - An aerial device (except ladders) with an extensible boom. Telescopic booms with personnel platform attachments are considered to be extensible boom platforms.



Scissor Lift - A device designed to elevate a platform in a substantially vertical axis. This device can also be driven by an operator inside the work platform and is generally designed to carry more than one person. Devices can only be used on a stable level surface.



Fall Protection (Restraint) is recommended when operating this Lift.

Trailer Mounted Lift - A device that can be towed by a vehicle to a work site, then un-hitched. These units have extendable or folding outriggers to give stability while being operated.



Fall Protection (Restraint) is required when operating this Lift.



Vehicle Mounted Lift – These devices typically have a Bucket in place of a basket, which is designed for one person. Vehicle must have the brakes set, wheels chocked, and outriggers in place while operating this device.

Fall Protection (Restraint) is required when operating this Lift.



Pin-On Work Platforms – These devices are designed to be paired with an industrial powered truck (Forklift) to lift employees. These require authorization for use from the industrial powered truck manufacturer in writing, approval from the EH&S Program Administrator, and specialized training.



Fall Protection (Restraint) is required when using pin on platforms.

Mast-Climbing Work Platform - A powered elevating work platform or platforms, supported on one or more vertical masts, for the purpose of positioning personnel, along with necessary tools and materials, to perform their work. Device can only be used on a level surface. These require approval from EH&S and specialized training.

Fall Protection systems must be used when there is a gap in the guardrail system.



Orchard Lift - An aerial device designed to elevate and position personnel for the purpose of harvesting and/or pruning fruit and nut trees. **These require approval from EH&S and specialized training.**





VI. Requirements/Procedures

A. Responsible Person (Pls, Supervisors, Project Leads, and Equipment Managers)

Directors and Department Chairs whose departments own, lease, rent, or otherwise operate AL/EWP equipment must identify Responsible Person(s) who are responsible for implementing the following program requirements:

Evaluation of AL/EWP Equipment Needs and Worksite Hazards

The Responsible Person must ensure that hazards have been evaluated and equipment needs are assessed prior to AL/EWP equipment procurement and operation. This process is documented using the "Site Evaluation Checklist" (Attachments 1-6) which helps ensure proper AL/EWP equipment is selected and hazards in the work area are identified and mitigated prior to commencing work. Unusual or potentially hazardous areas or operations in a location's work environment must be marked with appropriate warnings via signage and paint striping, and/or reduced through operator training and appropriate equipment selection and maintenance. A completed copy of the AL/EWP Equipment Selection and Site Hazard Evaluation Form must be available for each worksite. A copy of this form is located on the reverse side of the "Pre-operation Inspection Form" (Attachments 1-6).

New AL/EWP Equipment and Inventory Updates

The Responsible Person must notify the EH&S Program Administrator of any changes that need to be made to the UCSB Industrial Safety <u>Skill Certification Matrix & Equipment Inventory</u>. The equipment inventory is used to identify equipment status, equipment classification, max lift capacity, and last inspection or service date.

Approval from EH&S must be obtained prior to purchasing/renting/leasing/operating equipment not previously reviewed and approved by the Program Administrator in order to ensure the following:

- 1. Equipment meets current Cal/OSHA standards
- 2. Equipment is covered in this program
- 3. Further specialized training is conducted, if required
- 4. The online master inventory list is updated

Assembly or Erection of AL/EWP

AL/EWP must be assembled and erected by a qualified person in accordance with the manufacturer's specifications and must be maintained in safe operating condition. If the manufacturer is no longer in business and instructions are no longer available, assembly and erection must be performed by a qualified person under the direction of a registered professional engineer experienced in the design of elevating work platforms or aerial devices.

Equipment Manuals, Instructions, and Marking

AL/EWP equipment must have a manual containing instructions for maintenance and operation. If the AL/EWP is able to be operated in different configurations, these configurations must be clearly described, including the rated capacity in each configuration. Each AL/EWP must have a conspicuously displayed legible plate or other legible marking verifying the unit meeting the applicable ANSI standard specified in Title 8, Cal. Code Regs., section 3638(b)(1) or (2). The plate must contain the following data, when applicable:

- Make, model, and manufacturer's serial number:
- Rated capacity at the maximum platform height;

- Maximum platform travel height
- Maximum recommended operating pressure of hydraulic or pneumatic system(s) or both;
- Basic cautions or restrictions of operation or both;
- Basic operating instructions, and/or instructions referring users to the manufacturer's operating manual, and;
- Rated line voltage (if applicable).
- In addition to the above, alternative configurations must require:
 - Chart, schematic, or scale showing capacities of all combinations in their operating positions and
 - Caution or restrictions or both of operation of all alternate or combinations of alternate configurations

Annual Equipment Inspections

Annual equipment inspections must be performed at least every 13 months by a qualified person and in accordance with the manufacturer's recommendations. Records of inspections must document the date of inspection, any deficiencies found, the corrective actions recommended if any, and the name(s) of the qualified individual(s) performing the inspection. Inspection records must be retained for at least 3 years.

Equipment Maintenance

Maintenance records must include the date of the work, a description of the work performed, and the names of the qualified person(s) performing the work. All maintenance records must be kept for the life of the equipment.

Equipment Tag Out

If deficiencies are noted during AL/EWP operation, inspections, or maintenance the equipment must be "tagged out" and removed from service immediately. Tagged out equipment must not be put back into service until all deficiencies are corrected and corrections have been documented. Equipment shall be tagged out by controlling all keys for the vehicle, and placing a "Warning Tag" near the controls with the following information:

- Person's name that has "Tagged Out" the vehicle and has the keys in their possession as well as their contact information.
- Date vehicle was "Tagged Out".
- Reason(s) for "Tagging Out" the vehicle including all noted deficiencies. (A photocopy of the completed inspection form may be taped to the basket or steering wheel if on a vehicle-mounted lift for this purpose.)
- Name and contact information for the department's responsible person for implementation of this program.

Identifying Certified Operators

The responsible person must ensure that operators hold current certification(s) in the classes of equipment that they are authorized to use. Please see Training Requirements for more information on the operator certification process. A current list of certified equipment operators can be found online using the UCSB Industrial Safety - Skill Certification Matrix & Equipment Inventory.

Personal Protective Equipment (PPE) and Fall Protection Equipment (FPE)

The responsible person ensures required personal protective equipment and fall protection equipment is available and worn by equipment operators. Full body harnesses must be used with a restraint lanyard or self-retracting lifeline when required. Restraint system must limit the ability of the operator to fall over the edge of the safety rails and contain the operator to the safe working area. Operators must inspect all equipment prior to using it. Equipment that has damage will be addressed and replaced immediately. (See the UCSB Fall Protection Program website for more information and requirements).

B. Equipment Operators

Equipment operators must hold current certification(s) for the classification(s) of equipment they operate and are responsible for the following:

AL/EWP Equipment Selection and Site Hazard Evaluation Form

Operators must complete or review the AL/EWP Equipment Selection and Site Hazard Evaluation Form for each worksite prior to equipment operation (see attachments). An AL/EWP Selection and Site Hazard Evaluation Forms must be completed by the Operator or Responsible Person prior to operating equipment in new or unfamiliar locations or whenever a new hazard is identified. This assessment ensures that the proper AL/EWP equipment is selected for the work, and that all hazards in the work area are identified and mitigated prior to commencing work. Unusual or potentially hazardous areas or operations in a location's work environment must be marked with appropriate warnings via signage and paint striping, and/or reduced through operator training and appropriate equipment selection and maintenance. A completed copy of the AL/EWP Equipment Selection and Site Hazard Evaluation Form must be available for each worksite. A copy of this form is located on the reverse side of the "Pre-operation Inspection Form" (Attachments 1-6).

Pre-Operation Inspection Form and Use of Fall Protection

Operators must conduct a documented "Pre-Operational Inspection" of AL/EWP equipment prior to use and at least once per shift. This inspection is specific to the type of lift equipment, and includes all safety and operational components. Results of the inspection are documented on the Pre-operation Inspection Form. AL/EWP equipment must not be used until all deficiencies discovered during a Pre-Operation Inspection are corrected. If a deficiency is discovered during the Pre-Operation Inspection, the operator alerts their supervisor and the Responsible Person of the condition, and ensures the equipment is "Tagged Out". Records of inspections must be maintained for at least three (3) years.

Some types of AL/EWP equipment require that fall protection must be worn and properly attached to the equipment by the operator of the equipment. The use of Fall Protection equipment is regulated by Cal-OSHA and use requirements are outlined in the UCSB Fall Protection Program Manual. The use of fall protection gear is always recommended by EH&S, but the requirement or option to wear fall protection is outlined on the Pre-Operation Inspection Form listed below based upon equipment type.

Refer to the following program attachments for Pre-Operation Inspection and Site Evaluation Forms to determine need for fall protection, document inspections, and conduct Hazard Evaluation / Equipment Selection for work sites.



Operating Procedures/Hazard Identification and Controls Common to Aerial Lifts (ALs) and Elevating Work Platforms (EWPs)

Prior to operation at the beginning of each work-shift, operators must review and assess the following equipment/work area conditions:

- 1. Review work area for hazards, and remove/control them prior to operation.
- 2. Always conduct a documented AL/EWP Equipment Selection and Site Hazard Evaluation (see attachments) prior to selecting / using AL/EWP equipment.
- Only use AL/EWP equipment designed to safely work in the work-area conditions observed.
- 4. Review operating instructions, limitations, warnings, and precautions for the type of AL/EWP being operated.
- 5. Prior to operation at the beginning of the work-shift, inspect and document the equipment for damage, proper function of controls and instrumentation. Is there any damage? Does the equipment operate correctly?
- 6. Alert all persons in the work area of intended work activities and hazards.
- 7. Always face the direction of travel if possible.
- 8. Use extreme caution when traveling horizontally with the platform elevated or extended.
- 9. Don't exceed the basket, bucket, or platform capacity.
- 10. Position equipment on a firm surface and minimize blocks or ramps for leveling the AL/EWP equipment.
- 11. Always set outriggers prior to use if the AL/EWP is equipped with them. When used, outriggers must be positioned on pads or a solid surface. All outriggers must be equipped with hydraulic holding valves or mechanical locks at the outriggers.

- 12. Wear proper safety harnesses and only tie-off to the work platform's fall protection tie-off point.
- 13. "Barrier off" the lift swing work-area below the AL/EWP equipment's work zone.
- 14. Don't sit or climb on guardrails, climb on ladders or stand on other items when working on the basket, bucket or platform.
- 15. Practices good housekeeping when working in and around the platform equipment.
- 16. Never drop or throw objects to or from the work basket, bucket or platform.
- 17. Always look below the platform and confirm it's safe to lower the equipment before lowering the equipment.
- 18. Never use the boom to push against something, or try and pull the AL / EWP equipment along in a horizontal direction. Never use the AL/EWP to push or pull against something in any direction.
- 19. Lower level controls must not be operated unless permission has been obtained from the employee in the device, except in case of emergency.

Operating Procedures/Hazard Identification and Controls Specific to ALs

- Wear proper safety harnesses and only tie-off to the work platform's fall protection tie-off
 point. Only restraint methods are approved unless prior approval for fall arrest systems has
 been granted by the EH&S Program Administrator.
- 2. Never lean the basket or bucket on or against structures.
- 3. Ensure the AL is the type that allows horizontal movement when basket is elevated.

Operating Procedures/Hazard Identification and Controls Specific to EWPs

- 1. Always conduct a documented AL/EWP Equipment Selection and Site Hazard Evaluation (see attachments) prior to selecting/using EWP equipment. Employees must not work on units when exposed to high winds exceeding the limits called out in the unit's manual or storms producing lighting or excessive rain.
- 2. Ensure the surface upon which the unit is being operated is level with no hazardous irregularities or accumulation of debris which might cause a moving platform to overturn.
- 3. If Fall Protection is used only restraint methods are approved. Wear proper safety harnesses and only tie-off to the work platform's fall protection tie-off point.
- 4. Employees climbing or descending vertical ladders must have both hands free for climbing. Note: Employees should remove foreign substances, such as mud or grease from their shoes.
- 5. Never apply horizontal force to an EWP while elevated that is in excess of 75 lbs.
- 6. Pin-on safety guardrails must be securely pinned to the platform at all times.
- 7. Ensure the AL is the type that allows horizontal movement when basket is elevated.

C. Training Requirements

AL/EWP Approved Trainers

UCSB personnel must be trained by qualified EH&S personnel or an approved 3rd party vendor. Individuals must meet the qualified person definition to be approved as a trainer. EH&S or the approved 3rd party vendor will ensure that individuals are trained and competent in their

responsibilities and in compliance with Cal/OSHA requirements through the successful completion of the training requirements outlined below.

Responsible Persons

Responsible persons will receive guidance and support from the AL/EWP Program Administer concerning their responsibilities in implementing training for this program.

Operator Training and Certification Procedures

All operators must successfully complete operator training and certification prior to operation of AL/EWP equipment while engaged in University related activities. Operators may only operate the class of AL/EWP equipment that they are certified for, unless under the direct supervision of persons who have the knowledge, training and experience to train operators and evaluate their competence "in the field". Training must be conducted in a location where such AL/EWP equipment operation does not endanger property, the trainee, or others. Please contact the Program Administer to provide guidance and support training for Department personnel.

AL/EWP Operation Principals Training

Operation principals training (in person or online) must include familiarization with equipment classifications, components, hazard assessment and mitigation, equipment inspection requirements, and other requirements of this program. Successful completion is documented through a final exam that demonstrates the trainee's understanding of basic AL/EWP operation, safety, and fall protection with a passing grade of 85% or more.

Hands-On 'Practical' Training

Individuals may only proceed with hands-on training after successful completion of the classroom or online section. Hands-On training and testing must be conducted using a representative piece of AL/EWP equipment under the direct supervision of approved UCSB EH&S personnel, 3rd party vendors, or responsible persons, who have the knowledge, training and experience to train AL/EWP operators and evaluate their competence. Field training using AL/EWP equipment includes demonstrations performed by the trainer, practical exercises performed by the trainee and observed by the trainer, as well as a documented evaluation of the trainee's performance on a standard skills assessment course.

Operator Certification

Upon successful completion of training, the EH&S Program Administrator or approved 3rd party vendor will certify that the operator has been trained and evaluated as required by this program and Cal-OSHA regulations. The certification is valid for three (3) years. However, retraining may also be required if equipment, job tasks, or environmental conditions change significantly from those when original training took place. A current list of certified equipment operators can be found using the online https://www.ehs.ucsb.edu/programs-services/industrial-safety/aerial-lifts

Retraining and/or Certification

Cal-OSHA requires refresher training to ensure the operator has the knowledge and skills needed to operate AL/EWP equipment safely when:

- The operator has been observed operating the AL/EWP in an unsafe manner;
- The operator has been involved in an accident or near-miss incident;
- The operator has received an evaluation that reveals that the operator is not operating the AL/EWP safely;
- The operator is assigned to a classification of AL/EWP that they are not currently certified on:
- A condition in the workplace changes in a manner that could affect safe operation of the AL/EWP;
- The operator suffered a medical event that would require re-evaluation; or
- The operator's current certification has expired.

VII. Record Keeping Requirements

A. Responsible Persons

Responsible Persons must maintain accurate and readily available records of the following:

Records Retention Period

| AL/EWP Equipment Selection and Site Hazard Evaluation Form | Retain the most recent version for each work location | | |
|--|---|--|--|
| Pre-operation Inspection Forms 1 year | | | |
| Annual Inspection Records | 3 years | | |
| Equipment Maintenance Records | Life of Equipment | | |
| Rental/lease/purchase agreements | 1 Year | | |
| Current Operator Training Records | 3 Years | | |

B. EH&S Program Administrator

The EH&S Program Administrator will maintain accurate and up to date records of the following:

- Operator training records for training conducted or provided by EH&S
- Equipment Inventory

VIII. References

The following standards and other resources were used to help dictate the requirements of this program:

- CCR, Title 8, Sections 3636-3648 <u>Elevating Work Platforms and Aerial Devices</u>
- CCR, Title 8, Section 1670 <u>Personal Fall Arrest Systems, Personal Fall Restraint Systems and Positioning Devices</u>
- ANSI/SAIA 92.2 American National Standard for Elevating and Rotating Platforms

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IX. Issued by and Next Review Date

Issued by: Jesse R. Bickley, CIH, CSP

Date: February 5, 2024

Next Review Date: Annually or sooner if necessitated by regulatory update or other

deficiencies identified.

X. Links & Attachments

Link - UCSB Industrial Safety - Skill Certification Matrix and Equipment Inventory

Attachment 1. Articulating Boom Pre-Operation Inspection Form

Attachment 2. <u>Elevating Work Platform Pre-Operation Inspection Form</u>

Attachment 3. Extensible Boom Platform Pre-Operation Inspection Form

Attachment 4. Scissor Lift Pre-Operation Inspection Form

Attachment 5. Trailer Mounted Aerial Lift Pre-Operation Inspection Form

Attachment 6. Vehicle Mounted Lift Pre-Operation Inspection Form

Attachment 7. Lift Operator Skills and Evaluation Form

a. Attachment 1 - Articulating Boom Lift Pre-operation Inspection Form

| Lift MFG: | Model: | Seria | al Number: | | _ | | | 3 | |
|--|-----------------------------|-----------------------------|--------------------------|-------------|----------------|-------------|----------|------|-----|
| | | | | | | Type 3, Gro | ир В | | |
| Date: | Start Time | e:AN | 1 / PM (circle one) | <u>FALL</u> | PROTECTIO | N REQUIRED | | | |
| Key-Off Procedures | | | | | | | Pass | Fail | N/A |
| Verify that the operator is | trained and certified and I | nas current FPE | | | | | | | |
| Operator's manual, decals | s, and data plate are pres | ent and legible | | | | | | | |
| Operator has reviewed the | e manual and is aware of | the equipment's limitatio | ns and safe operation pr | ocedures | | | | | |
| Check hydraulic cylinders | /lifting mechanism/fluid le | vel | | | | | | | |
| Check welds, pins, missin | g nuts or bolts and other | structural parts for cracks | s or defects | | | | | | |
| Check drive hubs & engin | e for oil leaks | | | | | | | | |
| Check basket entry mid-rail/gate for proper function | | | | | | | | | |
| Check for good housekeeping in the basket or on the equipment | | | | | | | | | |
| Examine the battery & fire | extinguisher | | | | | | | | |
| Check fuel level to ensure | that the unit can operate | for the duration of the jo | b | | | | | | |
| Inspect all PPE and Fall P | Protection equipment for d | efects or damage | | | | | | | |
| Key-On Procedures | | | | | | | Pass | Fail | N/A |
| Check all ground controls | for proper operation, inclu | uding emergency lowerin | g means (remember, the | ese could | save your life | | | | |
| Check all basket controls, | foot switch, horn for prop | er operation | | | | | | | |
| Battery discharge indicator, hour meter | | | | | | | | | |
| Steering and drive system | | | | | | | | | |
| Check limit switches, alarms, and flashing beacon if equipped (operating the lift by raising/swing/extending booms, tilt/rotate the basket | | | | | | | | | |
| Ensure emergency stop s | witch is functioning prope | rly | | | | | | | |
| Starting Hour Meter Rea | iding: O | perator's Name: (Printe | ed / Signature) | | Operator's | Employee | <u> </u> | | |
| | Hours | | | | ID: | | | _ | |

Instructions: Operator must inspect and verify the items above prior to operation each shift. See the reverse side of this page and complete the Work Site Evaluation for each location the equipment will be operated in.

| AL/EWP Equipment Selection and Site Hazard Evaluation F | orm |
|---|-----|
|---|-----|

| Site Location: | _ | | |
|---|----------|--------|-----|
| Conducted By: | | | |
| Type of Work to be conducted: | _ | | |
| Instructions: This form must be completed prior to operating AL/EWP equipment unfamiliar location or when new hazards are identified. This assessment ensures th AL/EWP equipment is selected for the work, and that all hazards in the work area are imitigated prior to commencing work. | at the p | oroper | |
| Site Evaluation | YES | NO | N/A |
| Is the work surface structurally strong enough to handle the lift, and free of drop-offs? | | | |
| Are surface conditions where the lift is used free of obstructions and on reasonably level surface? | | | |
| Are there proper barricades to control pedestrian and vehicle traffic in work zone? | | | |
| Are there overhead obstructions or restricted places where the lift will be operated? | | | |
| Will the basket handle the loads to be carried without exceeding the rated capacity? | | | |
| Are there ramps and other sloped surfaces that could affect the vehicle's stability? | | | |
| Will the lift be used for electrical work or near high voltage lines? | | | |
| Are there "Classified Hazardous" locations where the vehicle will be operated? | | | |
| Is there an enclosed environment(s) or other areas where insufficient ventilation could cause a | | | |
| build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen gas buildup at electric vehicle recharging stations? | | | |
| Is wind or other weather a concern? Are there sustained winds or gusts stronger than the | | | |
| manufacturer's rated design allowance? | | | |
| List below other potentially hazardous site-conditions that could affect safe operation: | | | |
| Are there designated parking areas for lift(s)? (Clear of exits, fire extinguishers, hydrants, pedestrian-aisles, doorways, footpaths, or electrical panels) | | | |
| Process/Use of Lift | YES | NO | N/A |
| Has the proper lift been chosen for the type of work being conducted? | | | |
| Does the Lift have the proper lift height and capacity for the job? | | | |
| Are proper PPE and full body harnesses w/ restraint lanyards available? | | | |
| Is the basket free of trip hazards and proper housekeeping maintained? | | | |
| List below other potentially hazardous process-conditions that could affect safe operation: | | | |
| | ı | | |

Operator/Evaluator:______Date evaluated:__/__/

b. Attachment 2 - Elevating Work Platform Pre-Operation Inspection Form

| Lift MFG: | Model: | Serial Number : |
|-----------|--------------|----------------------|
| Date: | _Start Time: | AM / PM (circle one) |

| Gente |
|---------|
| 3- 3-00 |

Type 1, Group A

FALL PROTECTION RECOMMENDED

| Key-Off Procedures | | | Pass | Fail | N/A |
|---|--|-------------------------------------|------|------|-----|
| Verify that the operator is trained and certific | ed and has current FPE | | | | |
| Operator's manual, decals, and data plate a | re present and legible | | | | |
| Operator has reviewed the manual and is av | ware of the equipment's limitations and safe | operation procedures | | | |
| Check hydraulic cylinders/lifting mechanism | /fluid level | | | | |
| Check welds, pins, missing nuts or bolts and | d other structural parts for cracks or defects | | | | |
| Check outriggers, outrigger limiting switches | s, and locking pins | | | | |
| Check platform entry mid-rail/gate for proper | r function | | | | |
| Check for good housekeeping in the platform | n or on the equipment | | | | |
| Examine the battery & fire extinguisher | | | | | |
| Check battery level to assure that the unit can operate the duration of the job | | | | | |
| Inspect all PPE and Fall Protection equipme | nt for defects or damage | | | | |
| Key-On Procedures | | | Pass | Fail | N/A |
| Check all ground controls for proper operation | on, including emergency lowering means (re | member, these could save your life) | | | |
| Check all basket controls, foot switch, horn f | for proper operation | | | | |
| Battery discharge indicator, hour meter | | | | | |
| Check limit switches, alarms, and flashing beacon if equipped (operating the lift by raising/swing/extending booms, tilt/rotate the basket) | | | | | |
| Ensure emergency stop switch is functioning | g properly | | | | |
| Starting Hour Meter Reading: | Operator's Name: (Printed / Signature) | | • | • | |
| Hours | | Operator's Employee ID: | | | |

Instructions: Operator must inspect and verify the items above prior to operation each shift. See the reverse side of this page and complete the Work Site Evaluation for each location the equipment will be operated in.

| AL/EWP Equip | pment Selection and Site Hazard Evaluation Form | |
|------------------|---|--|
| Site Location: _ | | |

Conducted By: ______

Type of Work to be conducted: _____

Instructions: This form must be completed prior to operating AL/EWP equipment in a new or unfamiliar location or when new hazards are identified. This assessment ensures that the proper AL/EWP equipment is selected for the work, and that all hazards in the work area are identified and mitigated prior to commencing work.

| Site Evaluation | YES | NO | N/A |
|---|-----|----|-----|
| Is the work surface structurally level, strong enough to handle the lift, and free of drop-offs? | | | |
| Are surface conditions where the lift is used free of obstructions and on level surface? | | | |
| Are there proper barricades to control pedestrian and vehicle traffic in work zone? | | | |
| Are there overhead obstructions or restricted places where the lift will be operated? | | | |
| Will the basket handle the loads to be carried without exceeding the rated capacity? | | | |
| Are there ramps and other sloped surfaces that could affect the vehicle's stability? | | | |
| Will the lift be used for electrical work or near high voltage lines? | | | |
| Are there "Classified Hazardous" locations where the vehicle will be operated? | | | |
| Is there an enclosed environment(s) or other areas where insufficient ventilation could cause a build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen gas buildup at electric vehicle recharging stations? | | | |
| Is wind or other weather a concern? Are there sustained winds or gusts stronger than the | | | |
| manufacturer's rated design allowance? | | | |
| List below other potentially hazardous site-conditions that could affect safe operation: | | | |
| Are there designated parking areas for lift(s)? (Clear of exits, fire extinguishers, hydrants, pedestrian-aisles, doorways, footpaths, or electrical panels) | | | |
| Process/Use of Lift | YES | NO | N/A |
| Has the proper lift been chosen for the type of work being conducted? | | | |
| Does the lift have the proper lift height and capacity for the job? | | | |
| Is the basket free of trip hazards and proper housekeeping maintained? | | | |
| If used, are proper PPE and full body harnesses w/ restraint lanyards available? | | | |
| Is there proper lighting in the areas the lift is being used? | | | |
| List below other potentially hazardous process-conditions that could affect safe operation: | | | |

| Operator/Evaluator: | Date evaluated: | / | / |
|---------------------|-----------------|---|---|
| · · | | | |

Ensure emergency stop switch is functioning properly

Hours

Starting Hour Meter Reading:

Lift MFG: _____ Model: ____ Serial Number: _

c. Attachment 3 – Extensible Boom Platform Pre-Operation Form

| Date: | Start Time: | AM / PM (circle one) | | | |
|--------------------------------|---|---|---------|------|------------|
| | FALL I | PROTECTION REQUIRED | Type 3, | Grou | р <u>В</u> |
| Key-Off Procedures | | | Pass | Fail | N/A |
| Verify that the operator is tr | rained and certified and has current FPE | | | | |
| Operator's manual, decals, | and data plate are present and legible | | | | |
| Operator has reviewed the | manual and is aware of the equipment's | limitations and safe operation procedures | | | |
| Check hydraulic cylinders/li | ifting mechanism/fluid level | | | | |
| Check welds, pins, missing | nuts or bolts and other structural parts for | or cracks or defects | | | |
| Check drive hubs & engine | for oil leaks | | | | |
| Check basket entry mid-rai | l/gate for proper function | | | | |
| Check for good housekeep | ing in the basket or on the equipment | | | | |
| Examine the battery & fire | extinguisher | | | | |
| Check fuel level to assure t | that the unit can operate the duration of the | he job | | | |
| Inspect all PPE and Fall Pr | otection equipment for defects or damage | е | | | |
| Key-Off Procedures | | | Pass | Fail | N/A |
| Check all ground controls for | or proper operation, including emergency | lowering means (remember, these could save your life) | | | |
| Check all basket controls, f | oot switch, horn for proper operation | | | | |
| Battery discharge indicator. | , hour meter | | | | |

Instructions: Operator must inspect and verify the items above prior to operation each shift. See the reverse side of this page and complete the Work Site Evaluation for each location the equipment will be operated in.

Operator's Employee ID:

Check limit switches, alarms, and flashing beacon if equipped (operating the lift by raising/swing/extending booms, tilt/rotate the basket)

Operator's Name: (Printed / Signature)



AL/EWP Equipment Selection and Site Hazard Evaluation Form

| Site Location: | |
|-------------------------------|--|
| Conducted By: | |
| Гуре of Work to be conducted: | |

Instructions: This form must be completed prior to operating AL/EWP equipment in a new or unfamiliar location or when new hazards are identified. This assessment ensures that the proper AL/EWP equipment is selected for the work, and that all hazards in the work area are identified and mitigated prior to commencing work.

| Site Evaluation | YES | NO | N/A |
|---|-----|----|-----|
| Is the work surface structurally strong enough to handle the lift, and free of drop-offs? | | | |
| Are surface conditions where the lift is used free of obstructions and on reasonably level surface? | | | |
| Are there proper barricades to control pedestrian and vehicle traffic in work zone? | | | |
| Are there overhead obstructions or restricted places where the lift will be operated? | | | |
| Will the basket handle the loads to be carried without exceeding the rated capacity? | | | |
| Are there ramps and other sloped surfaces that could affect the vehicle's stability? | | | |
| Will the lift be used for electrical work or near high voltage lines? | | | |
| Are there "Classified Hazardous" locations where the vehicle will be operated? | | | |
| Is there an enclosed environment(s) or other areas where insufficient ventilation could cause a | 1 | | |
| build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen | | | |
| gas buildup at electric vehicle recharging stations? | | | |
| Is wind or other weather a concern? Are there sustained winds or gusts stronger than the | | | |
| manufacturer's rated design allowance? | | | |
| List below other potentially hazardous site-conditions that could affect safe operation: | | | |
| Are there designated parking areas for Lift(s)? (Clear of exits, fire extinguishers, hydrants, pedestrian-aisles, doorways, footpaths, or electrical panels.) | | | |
| Process/Use of Lift | YES | NO | N/A |
| Has the proper lift been chosen for the type of work being conducted? | | | |
| Does the Lift have the proper lift height and capacity for the job? | | | |
| Are proper PPE and full body harnesses w/ restraint lanyards available? | | | |
| Is the basket free of trip hazards and proper housekeeping maintained? | | | |
| List below other potentially hazardous process-conditions that could affect safe operation: | | | |

| | Operator | /Evaluator: | Date evaluated: | / | / |
|--|----------|-------------|-----------------|---|---|
|--|----------|-------------|-----------------|---|---|

Aerial Lift and Elevating Work Aerial Lift and Elevating Work Platform Safety Program University of California Santa Barbara

d. Attachment 4 - Scissors Platform Lift Pre-operation Inspection Form

| Lift MFG: | Mo | odel:Serial N | Number: | 601 | ň | 10 |
|--------------------------|-------------------------------|--|--|-------------|------|-----|
| Date: | Start Time: | AM / PM (circle one) | FALL PROTECTION RECOMMEN | <u>IDED</u> | | |
| KEY OFF Procedu | ires | | | Pass | Fail | N/A |
| Verify that the operator | or is trained and certified a | and has current FPE | | | | |
| Operator's manual, de | ecals, and data plate are p | oresent and legible | | | | |
| Operator has reviewe | d the manual and is awar | e of the equipment's limitations and sa | afe operation procedures | | | |
| Check Hydraulic cylin | ders/lifting mechanism/flu | id level | | | | |
| Check welds, pins, mi | issing nuts or bolts and ot | her structural parts for cracks or defec | ets | | | |
| Check platform entry | mid-rail/gate for proper fu | nction | | | | |
| Check for good house | ekeeping in the platform o | r on the equipment | | | | |
| Examine the battery 8 | k fire extinguisher | | | | | |
| Check battery level to | assure that the unit can | operate the duration of the job | | | | |
| If used, inspect all PP | E and Fall Protection equ | ipment for defects or damage. | | | | |
| KEY ON Procedure | s | | | Pass | Fail | N/A |
| Check all ground cont | trols for proper operation, | including emergency lowering means | (remember, these could save your life) | | | |
| Check all platform cor | ntrols, foot switch, horn fo | r proper operation | | | | |
| Battery discharge indi | icator, Hour meter | | | | | |
| Steering and drive sys | stem | | | | | |
| Check limit switches, | alarms, and flashing bead | con if equipped | | | | |
| Ensure emergency sto | op switch is functioning pr | roperly | | | | |
| Starting Hour Meter | Reading: | Operator's Name: (Printed / Signatur | e) | | | |
| | Hours | | Operator's Employe | ee ID: | | |

Instructions: Operator must inspect and verify the items above prior to operation each shift. See the reverse side of this page and complete the Work Site Evaluation for each location the equipment will be operated in.

| AL/EWP Equipr | ment Selection and Site Hazard Evaluation Form |
|-----------------|--|
| Site Location: | |
| Conducted By: _ | |

Type of Work to be conducted:

Instructions: This form must be completed prior to operating AL/EWP equipment in a new or unfamiliar location or when new hazards are identified. This assessment ensures that the proper AL/EWP equipment is selected for the work, and that all hazards in the work area are identified and mitigated prior to commencing work.

| Site Evaluation | YES | NO | N/A |
|---|-----|----|-----|
| Is the work surface structurally strong enough to handle the lift, and free of drop-offs? | | | |
| Are surface conditions where the lift is used free of obstructions and on level surface? | | | |
| Are there proper barricades to control pedestrian and vehicle traffic in work zone? | | | |
| Are there overhead obstructions or restricted places where the lift will be operated? | | | |
| Will the basket handle the loads to be carried without exceeding the rated capacity? | | | |
| Are there ramps and other sloped surfaces that could affect the vehicle's stability? | | | |
| Will the lift be used for electrical work or near high voltage lines? | | | |
| Are there "Classified Hazardous" locations where the vehicle will be operated? | | | |
| Is there an enclosed environment(s) or other areas where insufficient ventilation could cause a build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen gas buildup at electric vehicle recharging stations? | | | |
| Is wind or other weather a concern? Are there sustained winds or gusts stronger than the | | | |
| manufacturer's rated design allowance? | | | |
| List below other potentially hazardous site-conditions that could affect safe operation: | | | |
| Are there designated parking areas for Lift(s)? (Clear of exits, fire extinguishers, hydrants, pedestrian-aisles, doorways, footpaths, or electrical panels.) | | | |
| Process/Use of Lift | YES | NO | N/A |
| Has the proper lift been chosen for the type of work being conducted? | | | |
| Does the Lift have the proper lift height and capacity for the job? | | | |
| Is the basket free of trip hazards and proper housekeeping maintained? | | | |
| If used, are proper PPE and full body harnesses w/ restraint lanyards available? | | | |
| Is there proper lighting in the areas the Lift is being used? | | | |
| List below other potentially hazardous process-conditions that could affect safe operation: | | | |

| Operator/Evaluator: | Date evaluated: | / | / |
|---------------------|-----------------|---|---|
| · · | | | |

e. Attachment 5 - Trailer Mounted Aerial Lift Pre-operation Inspection

| Lift MFG: | Mod | del: | Serial Number: | | I | | |
|---------------------------------|------------------------|------------------------------|--------------------------------|-----------------------------------|---------------|------|-----|
| - | | | | | Гуре 1, Group | B | |
| Date: | Start [·] | Time: | AM / PM (circle one) | FALL PROTECTION REQ | <u>UIRED</u> | | |
| KEY OFF Procedures | | | | | Pass | Fail | N/A |
| Verify that the operator is tra | ined and certified ar | nd has current FPE | | | | | |
| Operator's manual, decals, a | and data plate are pr | esent and legible | | | | | |
| Operator has reviewed the n | nanual and is aware | of the equipment's limitat | ions and safe operation prod | edures | | | |
| Check hydraulic cylinders/life | ting mechanism/fluid | level | | | | | |
| Check welds, pins, missing i | nuts or bolts and oth | er structural parts for crac | ks or defects | | | | |
| Check drive hubs & engine f | or oil leaks | | | | | | |
| Check basket entry mid-rail/ | gate for proper funct | ion | | | | | |
| Check for good housekeepir | ng in the basket or o | n the equipment | | | | | |
| Examine the battery & fire ex | xtinguisher | | | | | | |
| Check fuel level to assure the | at the unit can opera | ate the duration of the job | | | | | |
| Inspect all PPE and Fall Pro | tection equipment fo | r defects or damage | | | | | |
| Ensure outriggers are on a f | irm surface and lock | ed in place. | | | | | |
| KEY ON Procedures | | | | | Pass | Fail | N/A |
| Check all ground controls fo | r proper operation, ir | ncluding emergency lower | ing means (remember, these | e could save your life) | | | |
| Check all basket controls, fo | ot switch, horn for p | oper operation | | | | | |
| Battery discharge indicator, | Hour meter | | | | | | |
| Check limit switches, alarms | , and flashing beacc | n if equipped (operating t | he lift by raising/swing/exten | ding booms, tilt/rotate the baske | et) | | |
| Starting Hour Meter Readir | ng: | Operator's Name: (Printe | ed / Signature) | | | | |
| | Hours | | / | Operator's Employee ID:_ | | | |

Instructions: Operator must inspect and verify the items above prior to operation each shift. See the reverse side of this page and complete the Work Site Evaluation for each location the equipment will be operated in.

AL/EWP Equipment Selection and Site Hazard Evaluation Form Site Location: Conducted By: Type of Work to be conducted: _____ Instructions: This form must be completed prior to operating AL/EWP equipment in a new or unfamiliar location or when new hazards are identified. This assessment ensures that the proper AL/EWP equipment is selected for the work, and that all hazards in the work area are identified and mitigated prior to commencing work. **Site Evaluation** YES NO N/A Is the work surface structurally strong enough to handle the lift, and free of drop-offs? Are surface conditions where the lift is used free of obstructions and on level surface? Are there proper barricades to control pedestrian and vehicle traffic in work zone? Are there overhead obstructions or restricted places where the lift will be operated? Will the basket handle the loads to be carried without exceeding the rated capacity? Are there ramps and other sloped surfaces that could affect the vehicle's stability? Will the lift be used for electrical work or near high voltage lines? Are there "Classified Hazardous" locations where the vehicle will be operated? Is there an enclosed environment(s) or other areas where insufficient ventilation could cause a build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen gas buildup at electric vehicle recharging stations? Is wind or other weather a concern? Are there sustained winds or gusts stronger than the manufacturer's rated design allowance? List below other potentially hazardous site-conditions that could affect safe operation: Are there designated parking areas for Lift(s)? (Clear of exits, fire extinguishers, hydrants, pedestrian-aisles, doorways, footpaths, or electrical panels.) Process/Use of Lift YES N/A NO Has the proper Lift been chosen for the type of work being conducted? Does the Lift have the proper lift height and capacity for the job? Are proper PPE and full body harnesses w/ restraint lanyards available? Is the basket free of trip hazards and proper housekeeping maintained? Is the fueling and/or charging area well ventilated? Is there proper lighting in the areas the Lift is being used?

| Operator/Evaluator: | Date evaluated: / | / |
|---------------------|-------------------|---|
|---------------------|-------------------|---|

List below other potentially hazardous process-conditions that could affect safe operation:

f. Attachment 6 - Vehicle Mounted Lift Pre-operation Inspection Form

| Lift MFG: | Mod | el:Seri | ial Number: | | 0 | | | |
|-----------------------------------|------------------------|-----------------------------------|-----------------------|-----------------------|-------------------|------|------|-----|
| Date: | Start T | ime:AM / | / PM (circle one) | FALL PROTECT | ION REQUIRED | | | |
| KEY OFF Procedures | | | | | | Pass | Fail | N/A |
| Verify that the operator is train | ned and certified and | d has current FPE | | | | | | |
| Operator's manual, decals, ar | nd data plate are pre | esent and legible | | | | | | |
| Operator has reviewed the ma | anual and is aware o | of the equipment's limitations a | nd safe operation pr | ocedures | | | | |
| Check hydraulic cylinders/lifting | ng mechanism/fluid | level | | | | | | |
| Check welds, pins, missing no | uts or bolts and othe | r structural parts for cracks or | defects | | | | | |
| Check outriggers, outrigger lin | miting switches, and | locking pins | | | | | | |
| Examine the battery & fire ext | • | | | | | | | |
| Check for good housekeeping | • | | | | | | | |
| Check fuel level to assure that | • | _ | | | | | | |
| Monitor tire air pressure (Fror | · — | ont Leftpsi, Right Rear | psi, Left Rear | psi) | | | | |
| Check lights, reflectors, parking | ng brake | | | | | | | |
| Inspect all PPE and Fall Prote | ection equipment for | defects or damage. | | | | | | |
| KEY ON Procedures | | | | | | Pass | Fail | N/A |
| Check all ground controls for | proper operation, in | cluding emergency lowering m | eans (remember, the | ese could save you | r life) | | | |
| Check all basket controls, foo | t switch, horn for pro | oper operation | | | | | | |
| Check limit switches, alarms, | and flashing beacor | n if equipped (operating the lift | by raising/swing/exte | ending booms, tilt/re | otate the basket) | | | |
| Check outriggers, leveling jac | ks and foot pads | | | | | | | |
| Starting Hour Meter Reading | g: | Operator's Name: (Printed / | Signature) | | _ | | • | • |
| | Hours | | <i></i> | Operator's | Employee ID: | | | |

Instructions: Operator must inspect and verify the items above prior to operation each shift. See the reverse side of this page and complete the Work Site Evaluation for each location the equipment will be operated in.

AL/EWP Equipment Selection and Site Hazard Evaluation Form

| te Location: | _ | | |
|--|--------|----|-----|
| onducted By: | | | |
| pe of Work to be conducted: | _ | | |
| estructions: This form must be completed prior to operating AL/EWP equipment in unfamiliar location or when new hazards are identified. This assessment ensures the oper AL/EWP equipment is selected for the work, and that all hazards in the work are entified and mitigated prior to commencing work. | at the | | |
| Site Evaluation | YES | NO | N/A |
| Is the work surface structurally strong enough to handle the lift, and free of drop-offs? | | | |
| Are surface conditions where the lift is used free of obstructions and on reasonably level surface? | | | |
| Are there proper barricades to control pedestrian and vehicle traffic in work zone? | | | |
| Are there overhead obstructions or restricted places where the lift will be operated? | | | |
| Will the basket handle the loads to be carried without exceeding the rated capacity? | | | |
| Are there ramps and other sloped surfaces that could affect the vehicle's stability? | | | |
| Will the lift be used for electrical work or near high voltage lines? | | | |
| Are there "Classified Hazardous" locations where the vehicle will be operated? | | | |
| Is there an enclosed environment(s) or other areas where insufficient ventilation could cause a | | | |
| build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen gas | | | |
| buildup at electric vehicle recharging stations? | | | |
| Is wind or other weather a concern? Are there sustained winds or gusts stronger than the manufacturer's rated design allowance? | | | |
| List below other potentially hazardous site-conditions that could affect safe operation: | | | |
| Are there designated parking areas for Lift(s)? (Clear of exits, fire extinguishers, hydrants, pedestrian-aisles, doorways, footpaths, or electrical panels) | | | |
| Process/Use of Lift Truck | YES | NO | N/A |
| Has the proper Lift been chosen for the type of work being conducted? | | | |
| Does the Lift have the proper lift height and capacity for the job? | | | |
| Are proper PPE and full body harnesses w/ restraint lanyards available? | | | |
| Is the basket free of trip hazards and proper housekeeping maintained? | | | |
| Is the fueling and/or charging area well ventilated? | | | |
| Is there proper lighting in the areas the Lift is being used? | | | |
| List below other potentially hazardous process-conditions that could affect safe operation: | 1 | | |

| Operator/Evaluator: | Date evaluated: | / , | / |
|---------------------|-----------------|-----|---|
| | | | |

UCSB AERIAL LIFT OPERATOR SKILLS EVALUATION FORM

g. Attachment 7 - Skills Evaluation Form

| <u>raii</u> | Protection Training Aerial Lift Operator Safety Course | | | | | | | | |
|---|--|--|-----|-------|-------|--|--|--|--|
| Yes | s □ No □ Classroom: Yes □ No □ Date: | | | | | | | | |
| Dat | te Completed: Written Exam: Yes No Date: | | | | | | | | |
| | Pass: ☐ Fail: ☐ Score: | | | | | | | | |
| | | <u> </u> | | | | | | | |
| Hands-On Skill Evaluation | | | | | | | | | |
| Types of Equipment | | | | | | | | | |
| | | | | | | | | | |
| Manually-Propelled Elevating Platform Type 1, Group A | | | | | | | | | |
| Scissor Lift Type 3, Group A | | | | | | | | | |
| Vehicle Mounted Lift (Bucket Truck) | | | | | | | | | |
| | iler Mounted Aerial Lift Type 1, Group I | | | | | | | | |
| Arti | culating Boom Lift Type 3, Group B $\;\Box$ | | | | | | | | |
| | | | | | | | | | |
| I. HAZARDS & SAFETY CONSIDERATIONS | | | | | | | | | |
| | | NCE MEASURE | SAT | UNSAT | NA | | | | |
| 1 | Check work surface slope, conditions | · • | | | | | | | |
| 2 | Checks travel route and approach clearances | | | | | | | | |
| 3 | Identifies overhead electrical hazards & safe distance | | | | | | | | |
| 4 | Ensure clearance with overhead obstructions | | | | | | | | |
| 5 | Establish a safe work zone using barricades | | | | | | | | |
| _ | / | _ | | _ | | | | | |
| 6 | Has/uses required PPE and Fall Prote | ection equipment | | | | | | | |
| | PRE-OPERATION CHECKS | ection equipment | | | | | | | |
| | PRE-OPERATION CHECKS PERFORMANCI | E MEASURE | SAT | UNSAT | NA NA | | | | |
| | PRE-OPERATION CHECKS PERFORMANCI | | | | | | | | |
| II. | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates | E MEASURE unit and understood by the operator | SAT | UNSAT | NA | | | | |
| 1 2 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable | E MEASURE unit and understood by the operator | SAT | UNSAT | NA | | | | |
| 1 2 3 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles | E MEASURE unit and understood by the operator & control markings are present & | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cable | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cable Checks electrical systems, componen | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 6 7 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cabl Checks electrical systems, componen Checks hydraulic/pneumatic systems | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les ts & batteries s & components | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 6 7 8 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cabl Checks electrical systems, componen Checks hydraulic/pneumatic systems Checks capacity indicator & moveme | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 6 7 8 9 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cable Checks electrical systems, component Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms s, and out-of-level warnings | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 6 7 8 9 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cabl Checks electrical systems, componen Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger Start Engine, check emergency shut-o | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms s, and out-of-level warnings off, level indicator | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 6 7 8 9 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cabl Checks electrical systems, componen Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger Start Engine, check emergency shut-operations | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms s, and out-of-level warnings off, level indicator unction tests | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 6 7 8 9 10 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cabl Checks electrical systems, componen Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger Start Engine, check emergency shut-operations Perform all aerial platform control for | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms s, and out-of-level warnings off, level indicator | SAT | UNSAT | NA | | | | |
| 11. 2 3 4 5 6 7 8 9 10 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cabl Checks electrical systems, componen Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger Start Engine, check emergency shut-operations Perform all aerial platform control for Hare OPERATING SKILLS | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms s, and out-of-level warnings off, level indicator unction tests inds-On Skill Evaluation | SAT | UNSAT | NA | | | | |
| II. 1 2 3 4 5 6 7 8 9 10 11 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cable Checks electrical systems, component Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger Start Engine, check emergency shut-operations and platform control for the Component Checks of the Check emergency shut-operating SKILLS PERFORMANCE | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms s, and out-of-level warnings off, level indicator unction tests inds-On Skill Evaluation | SAT | UNSAT | NA | | | | |
| III. (1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cabl Checks electrical systems, componen Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger Start Engine, check emergency shut-operations Perform all aerial platform control for Hand OPERATING SKILLS PERFORMANCE Deploy / Set-up outriggers | E MEASURE unit and understood by the operator a & control markings are present & guard rails, hand rungs, fasteners les its & batteries a & components int alarms s, and out-of-level warnings off, level indicator unction tests inds-On Skill Evaluation MEASURE | SAT | UNSAT | NA | | | | |
| II. 1 2 3 4 5 6 7 8 9 10 11 | PRE-OPERATION CHECKS PERFORMANCI Ensures manufacturers manual is on Ensures warnings, decals, data plates readable Visually inspects tires, rims, axles Visually inspects platform structure, Checks fluid levels, belts, chains, cable Checks electrical systems, component Checks hydraulic/pneumatic systems Checks capacity indicator & moveme Checks pothole protectors, outrigger Start Engine, check emergency shut-operations and platform control for the Component Checks of the Check emergency shut-operating SKILLS PERFORMANCE | E MEASURE unit and understood by the operator s & control markings are present & guard rails, hand rungs, fasteners les its & batteries s & components int alarms s, and out-of-level warnings off, level indicator unction tests inds-On Skill Evaluation MEASURE ints of contact | SAT | UNSAT | NA | | | | |

| 4 | Connects lanyard to fall protection anchor point | | | | | | |
|---|---|---|---------------------------------------|--|--|--|--|
| 5 | Drive and creep/inch forward & reverse | | | | | | |
| 6 | Raise and lower platform using on-board controls | | | | | | |
| 7 | Boom up & down, in & out | | | | | | |
| 8 | Rotate/swing 360 degrees in each direction | | | | | | |
| 9 | Operate emergency controls with & without power | | | | | | |
| 10 | 66 | | | | | | |
| 11 | 11 Secure the unit and work area in a safe manner | | | | | | |
| IV. C | GRADING (PASS / FAIL) | | | | | | |
| succ | Based on my evaluation, the operator has ressfully completed the evaluation and is to | Equipment Used for Practical Test: | | | | | |
| ope | operate the following class of equipment: | | ☐ GENIE AWP30 Manually Propelled Lift | | | | |
| ☐ Based on my evaluation, the operator <u>has</u> <u>not demonstrated competence</u> in operating the following class of equipment: | | ☐ GENIE AWP20 Manually-Propelled Lift | | | | | |
| | | ☐ GENIE 3246 Scissor Lift | | | | | |
| | | ☐ GENIE GS332 Scissor Lift | | | | | |
| V. EVALUATOR COMMENTS | | ☐ GENIE GR20 Self-Propelled Lift | | | | | |
| | | ☐ GENIE TZ-50 Trailer-Mounted Articulating Boom Lift | | | | | |
| | | ☐ GENIE Z 34-22 Self-Propelled Articulating Boom Lift | | | | | |
| | | ☐ JLG 20MVL Self-Propelled Single Mast Lift | | | | | |
| | | ☐ JLG 20DVL AXXESSOR™ Self-Propelled Single-Mast Lift | | | | | |
| | | ☐ Other: | | | | | |
| | | | | | | | |
| Ope | Operator Signature: | | Date: | | | | |
| Eval | Evaluator Signature: | | Date: | | | | |