## HIGH-RANGER (AERIAL LIFT) SAFETY PROCEDURES

All persons operating aerial lift trucks must be certified through the Facilities Management training program to do so. The Facilities Management "Aerial Lift Training and Operations Manual" is to be used as the primary source of reference for use of aerial lift equipment.

These procedures have been prepared to provide a basic source of reference and a means of uniformity in use of aerial lift equipment. When a questions arises that cannot be suitably answered by reference to these operating procedures, it is suggested that you refer to the Operator's manual or discuss the matter with your supervisor.

Anyone using the aerial lift truck must be certified by Facilities Management. Non-certified personnel are not to operate the equipment under any circumstances. It is recommended that at <u>least</u> two people operate the lift, one of whom must be on the ground. If operating an aerial lift alone, or if there is no certified person on the ground, the operator is required to carry an operating two-way radio in the bucket. When work is being performed from aerial lifts, operators and crew shall comply with the safety rules specified in this section.

All types of stabilizers will be referred to as "outriggers." On aerial lifts with more than one boom, these will be referred to as the "upper" and "lower" boom.

### **PERSONNEL**

<u>Person in charge</u>: The operator shall be assigned responsibility for operations required of the aerial lift truck. Before starting work, a visual inspection of the unit shall be made to insure it is in safe, operating condition.

<u>Crew:</u> It is recommended that at least two people work with an aerial lift truck. The recommended crew would consist of a qualified person in the bucket and one person on the ground that is trained and qualified in the emergency letdown procedure. If operating alone, or without someone on the ground, the operator is required to carry a working two-way radio in the bucket. The operator is also required to ensure that the radio frequency is being monitored by either Facilities Dispatch or CSU Police and perform a radio check before going aloft.

<u>Job briefing:</u> Before any job is started with an aerial lift truck, a job briefing shall be conducted by the person in charge with all personnel concerned. If during the course of a job the procedure, method, or personnel is to be changed, work shall be stopped and the person in charge shall instruct all personnel about the change and its results.

<u>Qualified workers:</u> All work from an aerial lift shall be performed by persons qualified to do such work. Each qualified person shall be familiar with the operation of the truck and aerial lift controls, maneuverability, and load carrying capabilities.

<u>Unauthorized personnel:</u> Unauthorized persons shall not be allowed to operate the booms of the equipment.

# MOVING THE EQUIPMENT

<u>Drivers:</u> persons who drive aerial lift trucks shall make sure there is adequate clearance for exposed equipment above the cab of the truck.

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<u>Driving to and from a job site:</u> When aerial lift trucks are being driven to and from job sites, the booms and buckets shall be locked into the cradled position and the outriggers, if any, shall be retracted. Personnel shall not be permitted to ride in the bucket while the truck is moving.

Moving truck at job site: Under no condition shall the aerial lift truck be moved with the booms elevated from the cradled position or with personnel in the bucket.

<u>Parking at the job site:</u> When the aerial lift truck is being positioned for work, it shall be legally parked whenever possible. Approved safety signs, lights, cones, and caution tape shall be placed accordingly.

#### **WORK PROCEDURES**

<u>Operating from the bucket:</u> When operating from the bucket, the operator shall always face the direction in which he is moving and be aware of existing conditions such as the location of structures, equipment, conductors, and other obstructions.

<u>Safety equipment:</u> Each occupant of the bucket shall wear an appropriate safety harness and lanyard at all times while operating the aerial lift. The lanyard shall be securely attached to both the safety harness and the bucket anchor at all times while operating. The lanyard shall be disposed of and replaced after being deployed. Lanyards shall not be repacked and reused. Each occupant of the bucket shall wear a hard hat at all times while in the bucket.

<u>Positioning the truck:</u> Positioning the truck at the job location is an important factor in utilizing the equipment to the best advantage on the job. The footing where the aerial lift is to be positioned shall be examined carefully for adequate support of wheels and outriggers.

Additional working height: At no time shall a worker sit or stand on the lip of the bucket or place anything across the top of the bucket to gain additional working height.

<u>Boom used as a derrick:</u> The aerial lifts are never to be overloaded. The lifting capacities are shown on attached charts. Do not use the lift as a fulcrum for prying or as a crane for lifting. The lift is designed to take a worker to their work site, complete their work without exiting the bucket, and return the worker to a safe position with the booms resting in the cradle. The lift will not be used for any other purpose, including being used as a man lift.

## DAILY OPERATIONAL CHECK

- 1. Does lift respond properly to all controls?
- 2. Are controls faulty or sticky?
- 3. Is response sluggish, erratic, or jerky?
- 4. Does equipment drift when controls are in neutral?
- 5. Do holding valves on upper and lower booms keep arms in proper position?
- 6. Raise booms to 45-degree angle, stop engine, and operate ground controls; arms should stay in position. Does bottom of bucket stay parallel to the truck bed in all positions?
- 7. Does speedup and slowdown switch operate properly?
- 8. Does the interlock system operate properly?

## DAILY VISUAL INSPECTION BY OPERATOR

- 1. Inspect for and remove loose objects from arms and buckets.
- Inspect for oil leaks.
- 3. Inspect for structural damage
- 4. Inspect the bucket and arm covers to be sure they are in good condition.
- 5. Inspect to ensure buckets are clean inside and outside.

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- 6. Inspect the metal parts of the boom to be sure they are not cracked.
- 7. Inspect the auxiliary arm to be sure it is clean and free of cracks.
- 8. Inspect the elbow pin and turret to be sure they have been lubricated.
- 9. Inspect the hydraulic lines and fittings to be sure they are not crushed or bent.
- 10. Inspect the outriggers to be sure the pads are not cracked.
- 11. Inspect the hydraulic fluid reservoir to be sure it is at the proper level.

# SAFETY DEVICES ON HI-RANGER

- 1. Safety interlock trigger
- 2. Ground-control palm button
- 3. Outrigger boom interlock system
- 4. Boom UP warning light
- 5. Upper boom hold down
- 6. Lower boom lock
- 7. Outrigger sag light
- 8. Outrigger warning buzzer
- 9. Beacon light
- 10. Mobile unit backup buzzer
- 11. Turn signals
- 12. Safety harness and lanyard for operator (Lanyard is disposed of after being deployed.)
- 13. Safety decals, such as those indicated on the following three pages, should be displayed on the Hi-Ranger and consulted before operating.

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