



Electrician falls from the bucket of an aerial lift

(Safety Notes: December 2014) Two journeyman electricians were relocating power poles to service job trailers at a landfill. They were using an older digger derrick truck that had a boom and an auger for drilling holes. The end of the boom had a motorized hoist for setting the poles and there were two side-by-side buckets on a separate onboard aerial work platform at the end of the boom.

At the start of the day, they drilled two holes for poles near a tall shop building and set the first of two 50-foot poles without incident.

They picked up the second pole using the hoist cable at the end of the digger derrick boom. A synthetic-fiber lifting strap was wrapped around the pole and attached to the hook. Another rope was attached to the eye of the strap so that the strap could be loosened from the ground. After they set the pole, one of the electricians was unable to remove the strap by tugging on it, so he decided to remove it from the aerial platform.

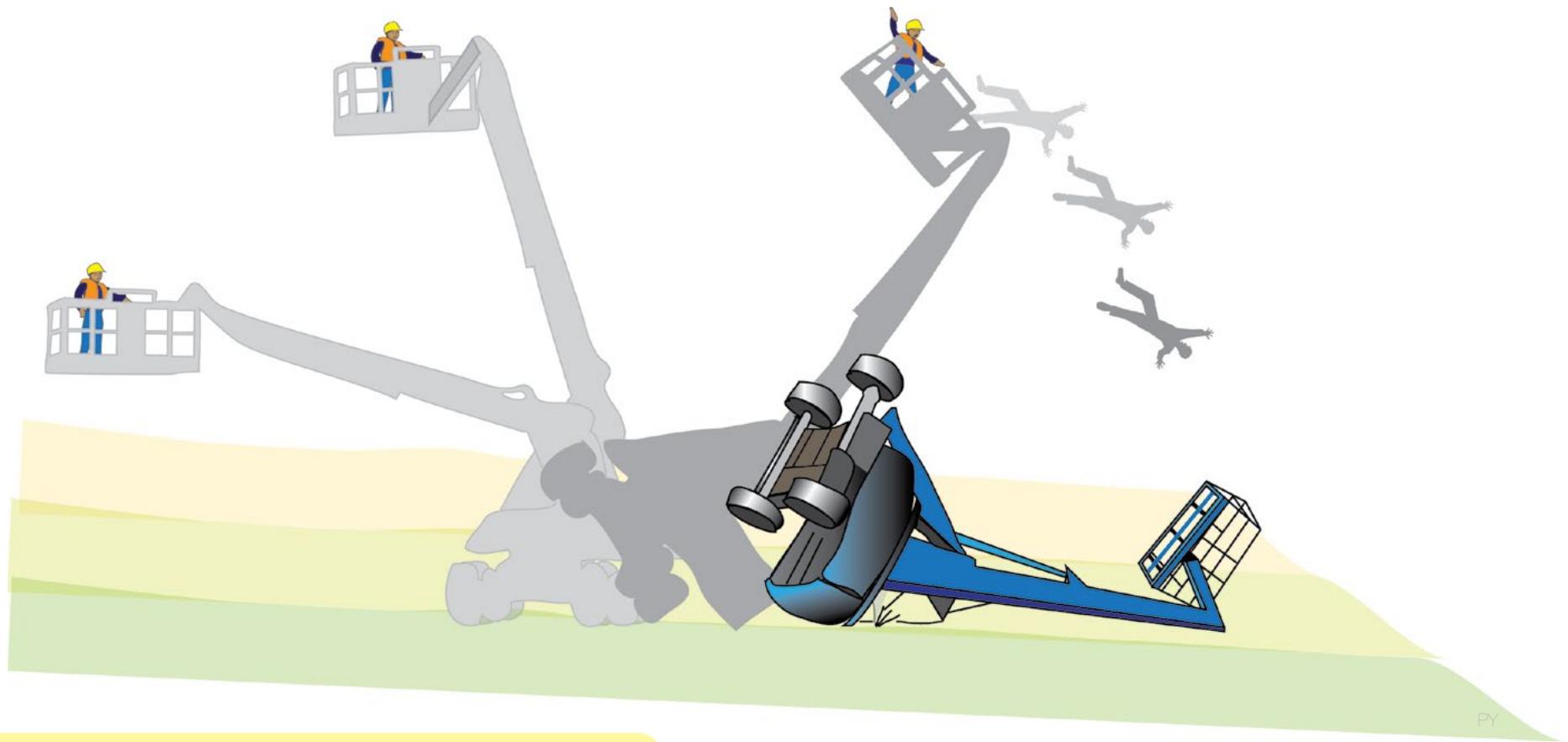
He climbed the onboard fixed ladder, grabbed the top of the bucket with both hands, and placed one foot on its outside lower lip. As he swung his other foot over the top of the bucket, the bucket-leveling cable, which kept the bucket level as the boom was raised and lowered, broke under his weight. The bucket swiveled vertically and he fell, hitting parts of the truck and landing on the ground. His injuries included two fractured vertebrae and soft tissue damage.



One of the electricians said that he never performed a pre-operation inspection or thorough periodic inspection on the digger derrick or the aerial boom lift. Just after the incident, workers were unable to find the lift's maintenance manual, but later discovered it in the truck, soaked in hydraulic fluid and unreadable. Also, the company failed to report the incident to Oregon OSHA within 24 hours.

Applicable standards

- **437-003-0415(1):** Equipment and rigging were not inspected and maintained in safe operating condition.
- **437-003-0465:** The manufacturer's operation and maintenance manual were not available and the operating instructions and maintenance procedures were not followed.
- **437-001-0700(21)(c):** The employer did not report the incident to Oregon OSHA within 24 hours.



Installation technician dies when aerial lift tips over

(Safety Notes: June 2014) After an installation technician and a coworker hooked up a cellular antenna system on a 55-foot power pole, they lowered the boom on their articulating boom lift and stepped off the platform.

While the coworker hooked up a meter to verify that the system was working, the technician got a camera, returned to the platform, and began raising the boom to photograph their completed work.

He was operating the lift on an 8- to 10-degree slope with counterweight on the downhill side; however, the manufacturer's instruction warned against operating the lift on a hillside. Although he was wearing a body harness for fall protection, he did not attach his lanyard to one of the manufacturer's approved anchorage points on the platform.

As the technician raised the platform to its maximum height with the boom retracted, the lift suddenly tipped over, throwing him 10 feet from the platform.

Applicable standards

- **437-003-0073(1):** The employer did not follow the manufacturer's operating and maintenance instructions when using the aerial lift.
- **437-003-0073(2):** Workers were not using personal fall protection when they were working in the boom-supported aerial lift.
- **1926.502(d)(15):** Anchorages used for attachment of personal fall arrest equipment were not capable of supporting at least 5,000 pounds per employee.



Worker contacts high-voltage line in aerial lift

(Safety Notes: December 2009) A foreman and two of his employees had been subcontracted to replace porch overhangs on third-story walkways at a three-story apartment complex.

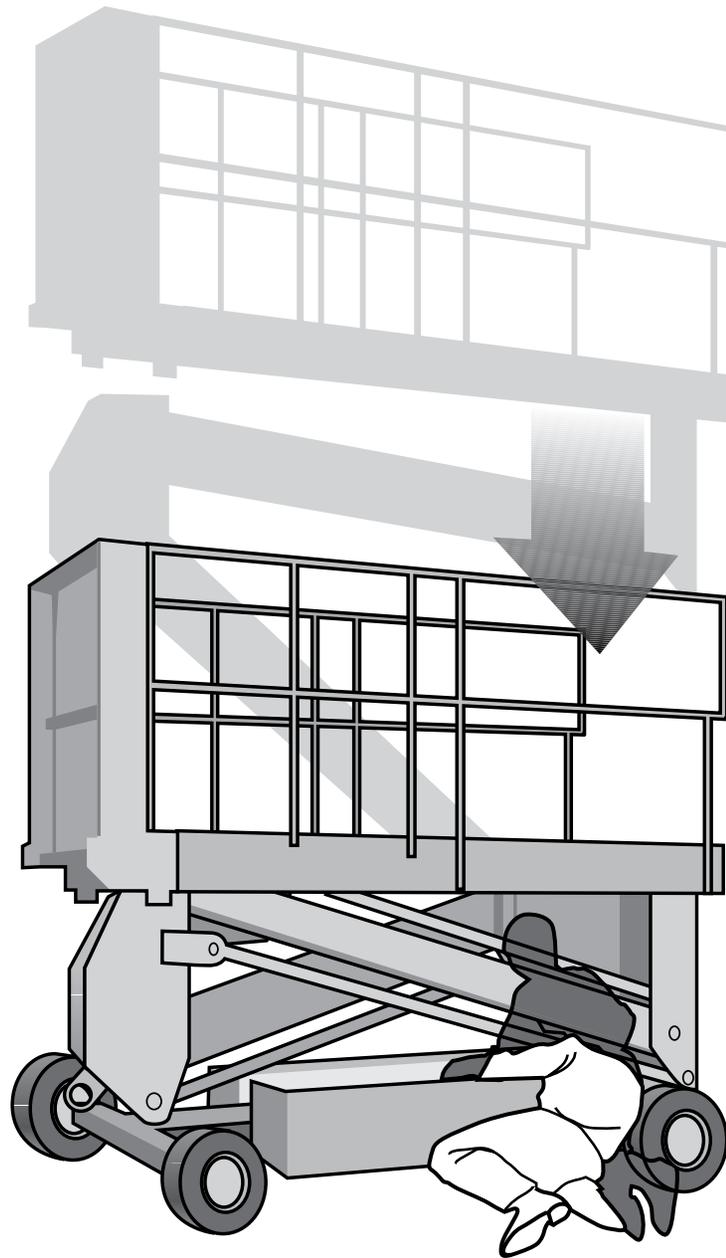
They decided to use an aerial lift that the general contractor rented (but which was not working correctly) to get to the work area – about six feet from a 7,200-voltage power line. To do the work, one of the workers agreed to be a spotter who would watch for approaching traffic and make sure the lift platform, which measured eight feet by four feet, did not touch the power line.

When the foreman saw the two workers go up in the lift with lumber that they were going to cut for an overhang, he told them to come back down and make the cut on the ground. After they made the cut, one of the workers went back up in the lift to take a measurement. As he was taking the measurement, his shoulder touched the high-voltage line. Sparks flew in all directions as he went into convulsions and fell to the floor of the lift.

After they brought the injured worker down, the foreman decided to put him in the back of his pickup truck and take him to the hospital, rather than call 911. The worker survived, but had severe burns from the electrical shock.

Applicable standards

- **437-003-0047(2):** The subcontractor allowed his employees to enter and work within the restricted space surrounding an overhead high-voltage line.
- **437-001-0760(7)(a):** The subcontractor did not promptly replace or repair defective equipment.
- **437-001-0760(1)(b)(B):** The general contractor did not require his employees to conduct their work in compliance with all applicable safety and health rules.
- **1926.454(a):** The subcontractor did not ensure that his employees were trained by a person qualified to recognize hazards associated with the aerial lift.



Worker crushed under scissor lift platform

(Safety Notes: March 2000) The son of the owner of a drywall construction company, an employee of the company, was preparing a scissor lift for a job after replacing two battery terminals.

He raised the platform and was reaching toward the battery compartment across the metal enclosure that houses the lift's toggle controls when it suddenly dropped and pinned him near the control panel. His father found him and called 911 but he died by the time emergency responders arrived.

The lift's emergency valve, hydraulic hoses and fittings, and electrical wiring system were inspected after the accident and found to have no defects, but the on-off key switch had been bypassed to allow the operator to use the toggle switches without the key. The battery charging system was missing a fuse that would prevent the system from accepting a charge and the spring-loaded toggle switches that controlled the boom did not have guards to prevent them from being moved unintentionally. There were no lockout procedures, the boom had not been blocked to prevent it from descending during maintenance work, and the father had not reviewed the operator's manual with his son or the other employees.

Applicable standards

- **437-001-0760(1)(b)(D):** The employer failed to ensure that employees did not remove a required safety device, guard, notice, or warning.
- **1910.147(c)(4)(i):** Procedures were not developed, documented, and used for the control of potentially hazardous energy.