FATALITY NARRATIVE

Roofer Crushed Between Beam and Boom-Supported Elevating Work Platform

**Industry:** Roofing contractors

**Task:** Installing metal siding panels on building

**Occupation:** Roofer

**Type of Incident:** Crushed between/Machine-related

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SHARP-Research for Safe Work
SHARP Report No.: 71-126-2013s
On September 18, 2012, a 23-year-old roofer working from a boom-supported elevating work platform (also known as a boom or aerial lift) died when he was crushed between a horizontal building beam and the platform.

The operator had worked in the construction industry for 29 years and was a trained lift operator. The victim had worked in the industry for several months. They both had worked at the site for more than three weeks.

Working 14 feet above the ground from the elevated platform, the victim and an equipment operator were installing metal siding panels on a building. In front of the platform was a vertical column and an overhead horizontal beam. The operator began to move the lift sideways to the building to position it so that they could install another panel. As the lift began to move, the operator was watching to ensure that he did not hit the vertical column. The operator was just about to retract the boom, when the platform suddenly rotated 90 degrees counter clockwise. This action pinned and crushed the victim between the horizontal beam and the platform’s control panel.

The operator, unable to access the panel, called for assistance from workers on the ground who were able to operate the lift’s ground controls. An investigation found that the victim likely inadvertently activated the platform’s rotation switch, which can be done by slight pressure, thereby causing the platform to rotate.
Recreation of the incident scene showing the elevated work platform. The operator was standing on the left side of the raised platform and the victim (roofer) on the right side. The victim inadvertently activated the platform’s rotation control which caused the platform to rotate 90 degrees counter clockwise, crushing the victim between the overhead beam and the platform control panel.
Post-incident scene showing the position of the lowered work platform.
Work platform at incident scene. Victim was standing to the left of the operator.
Work platform controls.

A reenactment showing how the victim’s elbow might have made contact with and activated the platform’s rotational control.
Requirements

Employers must make sure that employees who operate elevating work platforms do the following both before and while driving the platform elevated:

- Maintain a clear view of the path of travel.
- Keep a safe distance from obstacles, debris, drop-offs, holes, depressions, ramps, and other hazards to safe travel.
- Keep a safe distance from overhead obstacles.

(See WAC 296-869-60030)
Recommendations

• Perform a job/task hazard assessment to identify overhead obstructions and plan how to avoid them.
• Consider purchasing or retrofitting aerial lifts with an operator protective structure (OPS) to protect workers from being crushed against overhead obstructions. (Employers must have written permission from the manufacturer before modifying an elevating work platform. See WAC 296-869-30020)
• Equipment manufacturers should design aerial platform controls so that they are protected against inadvertent activation by workers on the work platform.

Example of an operator protective structure (OPS) mounted on a work platform.
Statewide Statistics: This was number 46 of 64 work-related fatalities in Washington State during 2012, and was number 6 of 8 construction-related fatalities.

This bulletin was developed to alert employers and employees of a tragic loss of life of a worker in Washington State and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.

Developed by Washington State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), Washington State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH). For more information, contact the Safety and Health Assessment and Research for Prevention (SHARP) Program, 1-888-667-4277.

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