DATE: April 3, 1996

FROM: Minnesota Fatality Assessment and Control Evaluation (MN FACE) Program Minnesota Department of Health

SUBJECT: MN FACE Investigation 96MN00201
Mechanic Dies As Result of Injuries Sustained In Fall With Personnel Lift

SUMMARY On the morning of the incident, the victim used a personnel lift in order to work on a suspended hoist monorail system. The lift was raised to an elevation of 17 feet 6 inches when it tipped over and fell to the ground. The victim was not wearing fall protection equipment. The machine was a single person lift on wheels with a hydraulic pump reservoir operated by a 12 volt battery. The scaffold did not have any type of a brake system, but outriggers were available to stabilize it. At the time of the incident, the outriggers were not being used to increase the stability of the lift. The victim may have pushed away from the hoist system causing the lift to tip back on its wheels and fall over. The victim was thrown to the floor and the lift fell on top of an electric cart which was parked on the floor. The victim was transported to a hospital where he died two days later.

- employers should ensure that personnel lifts are properly erected before use;
- employers should ensure that workers are properly trained in the safe use of all equipment;
- employers should encourage employees using any type of personnel lift to tie -off to a stationary support above the working height; and
- employers should design, develop, and implement a comprehensive safety program.

INTRODUCTION

On December 16, 1996, MN FACE investigators were notified of a construction work-related

fatality that occurred on January 9, 1996. During MN FACE investigations, incident information is obtained from a variety of sources such as law enforcement agencies, county coroners and medical examiners, employers, coworkers, and family members. A site investigation by MN FACE investigators was denied by the victim's employer.

The employer in this incident was a major airline that provided domestic and international transportation to locations throughout the world.

INVESTIGATION

On the morning of the incident, the victim used a personnel lift in order to work on a suspended hoist monorail system. The lift was raised to an elevation of 17 feet 6 inches when it tipped over and fell to the ground. The victim was not wearing fall protection equipment. The machine was a single person lift on wheels with a hydraulic pump reservoir operated by a 12 volt battery. The scaffold did not have any type of a brake system, but outriggers were available to stabilize it. At the time of the incident, the outriggers were not used to increase the stability of the lift. The victim was thrown to the floor and the lift fell on top of an electric cart which was parked on the floor. The victim was transported to a hospital where he died two days later.

CAUSE OF DEATH

The cause of death listed on the death certificate was blunt force craniocerebral injuries due to, or as a consequence of fall from an elevation.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should ensure that personnel lifts are properly erected before use.

Discussion: The personnel lift involved in this incident was supplied with outriggers. Without the use of the outriggers the personnel lift can easily become unbalanced when the worker moves about the bucket and the lift can tip over. The outriggers are intended to provide stability to the machine when being used for lifting personnel.

Recommendation #2: Employers should ensure that workers are properly trained in the safe use of all equipment.

Discussion: Employers should ensure that all employees are trained to use all safety equipment

pertinent to the work they are required to do. In this incident proper training would have included the need for outriggers with a personnel lift and the emphasis that it is never acceptable to use any equipment without all safety features intact and operating.

Recommendation #3: Employers should encourage employees using any type of personnel lift to tie-off to a stationary support above the working height.

Discussion: There are no legal requirements that employees tie-off to either the lift itself or a separate stationary support when using the type of lift involved in this incident. However, because there is always the possibility of equipment failure, it may be prudent for workers to tie-off to a separate stationary support when working from any type of lift.

Recommendation #4 Employers should design, develop, and implement a comprehensive safety program.

Discussion: Employers should ensure that all employees are trained to recognize and avoid hazardous work conditions. A comprehensive safety program should address all aspects of safety related to specific tasks that employees are required to perform. OSHA Standard 1926.21 (b) (2) requires employers to "instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury." Safety rules, regulations, and procedures should include the recognition and elimination of hazards associated with tasks performed by employees.

REFERENCES

1. Office of the Federal Register: Code of Federal Regulations, Labor, 29 CFR Part 1926.21 (b) (2), U.S. Department of Labor, Occupational Safety and Health Administration, Washington, D.C., July 1, 1994.

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