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SUBJECT: Stevedore Falls to Deck of Tug in Dutch Harbor (AK-95-03)

SUMMARY

A stevedore died as a result of head injuries sustained during a fall from the stern of a vessel on January 27, 1995. The victim had been loading a Japanese refrigeration/cargo vessel, the M/V Akama. He was exiting the vessel to return to shore via a transport tug in Captain's Bay. While climbing down a rope ladder secured to the stern, he stopped after descending 3-4 rungs and appeared to panic. He let go of the ladder from approximately 10-12 feet above the deck of the tug. He landed feet first on the deck, but may have slipped on deck ice. He fell backwards and struck his head on a metal box on the forward deck of the tug. Although later conscious and capable of walking to an ambulance, he died at a local clinic about two hours later.

INTRODUCTION

It was not possible to physically visit the incident site prior to the departure of the "Tramper." Records and media reports were reviewed to evaluate possible risk factors related to this incident. Also, the Federal OSHA Compliance Officer was interviewed for additional details.

The Akama was a refrigeration and cargo ship of Japanese registry. This vessel, which was anchored offshore, was being loaded with boxes of cod for transportation to Japan on the day of the incident. The victim was a stevedore, working in a union gang crew of a shore-based company. The gang crew was exiting the Akama to return via a tug to shore after the end of their work shift.

The local company was a longshoring services company that hired stevedores from a local union. The company of 165 workers specialized in the loading and unloading of fish and seafood products. The company had a written safety and health plan. Safety meetings were periodically conducted with three longshoring companies and the local union. Topics of training included shipboard safety, hazard communications, and other safety-related areas. The union "Gang boss" functioned as a collateral safety officer when the crew worked in a ship's hold. A normal gang crew numbered 12 workers. The victim was reported to have only been hired on the day of the incident, and had limited to no experience as a stevedore.

Weather conditions at the time of the incident were as follows:

Temperature:	23˚ F
Winds:	21-38 knots
Light:	Good conditions
Seas:	14 foot swells

INVESTIGATION

A 23-year-old, white, male stevedore died after falling approximately 10-12 feet from a rope ladder to the deck of a tug. This incident occurred at approximately 1915, when a gang crew of stevedores were leaving a vessel after a 10-hour work shift. Three members of a gang crew were planning to leave the Japanese merchant vessel via a rope ladder at the vessel's stern to a pilot ship (tugboat) below. The first stevedore climbed down the Jacob's ladder successfully and entered the pilot house of the tugboat. The second stevedore descended 3-4 rungs and stopped. Witnesses state that he began saying that he didn't think he could make it. The first stevedore came back out on deck to attempt to talk the victim down. The stevedore let go of the ladder, and fell 10-12 feet onto the forward deck of the tugboat. He initially landed on his feet, but fell backwards (possibly slipping on the ice). The back of his head struck a utility box that was mounted on the forward deck. Workers on the tugboat found that the victim was unconscious. The tugboat immediately returned to the dock and emergency medical services were called. On the way to the dock, the victim regained consciousness, but was described as being dazed and incoherent. He attempted to get up, but was restrained by workers on the tug. The victim was assisted to a fuel barge at the dock, which went to shore where an ambulance was waiting. During this time the victim walked (assisted by crew from the tugboat) to the fuel barge and the ambulance. His only external injury was described as a cut on the back of the head with moderate bleeding. He died approximately two hours later at a local clinic.

CAUSE OF DEATH

The autopsy revealed the cause of death as, "Complication of closed head injury (probable diffuse axonal injury).

RECOMMENDATIONS

Recommendation #1: Employers should ensure that appropriate equipment is available for ingress and egress of vessels.

Discussion: The Jacob's ladder used at the stern of the "Tramper" was made of rope, and did not have double rungs, flat tread, wooden steps, or stabilizers. The ladder was approximately 1 inch thick with 12 inch wide rope rungs. The ladder was slung over the stern, was free swinging, and was not supported by the ship's hull. Because of the curvature of the stern, the rope ladder was underneath the hull at approximately five feet below the deck. The ladder was held at the bottom by a tugboat crewman rather than properly rigged. Such an arrangement would have been inherently less stable than acceptable marine ladders.

Recommendation #2: Employers should ensure that all workers exposed to shipboard environments receive appropriate training in ingress and egress of vessels..

Discussion: All workers required to work onboard vessels must receive specific training for appropriate entry and egress, which includes knowledge of acceptable marine ladders. In this incident, the victim had no specific training in this area, and limited to no experience in longshoring. This was his first day on the job. In fact, he had just purchased a hard hat prior to beginning his shift. Co-workers indicated that they believed the victim to be of limited training and experience based on his work ability. The victim was unlikely to know the limitations and physical effects of such ladders, when in motion and in heavy seas. In addition, he weighed approximately 300 pounds. Overweight individuals who are inexperienced may have unusual difficulty in negotiating potentially hazardous rigging.