Longshore Worker Crushed by Lug on Suspended Load

The moral of this fatality is: Never work beneath a suspended load. That was the tragic lesson learned by longshore workers who watched in horror as a colleague was crushed by a 750-pound lug while working under a suspended turbogenerator.

How It Happened
A barge-mounted crane was being used to transfer a turbogenerator onto a railcar. The generator was suspended in the air six to 12 inches above the railcar. Each of four lugs was secured to the generator's housing by four nut-and-bolt assemblies.

Crewmembers attempted to put support timbers on the railcar beneath the edges of the generator, but the nut-and-bolt assemblies were blocking placement of the timber. So the workers decided to remove the nuts securing the lugs to provide the necessary clearance for the timber.

A supervisor removed one nut-and-bolt assembly from the bottom of the lug. The foreman then removed the second nut at the bottom of the same lug. That's when the lug fell and crushed him.

The Mistake
The first mistake was working beneath a suspended load. The second mistake the crew made: believing that when the bottom nuts were removed, each lug would be held in place by its nut-and-bolt assemblies.

None of the longshore workers was aware that the top assemblies were not secured to the turbogenerator.

What Workers Should Have Done
A hazard assessment should have been conducted prior to the lift. This would have revealed that the lugs were not secured to the generator housing by the two horizontal bolts of the lifting lugs. In addition, the workers should have discussed an alternate method of bracing the generator on the railcar. A preconstructed platform would have eliminated suspending the load above the railcar.

What OSHA Says
The Occupational Safety and Health Administration (OSHA) says standards dictate that employees "stay clear of the area beneath overhead drafts or descending lifting gear."

OSHA says a hazard assessment should have been conducted for the procedure of

removing the nuts and lugs prior to performing the task. And a pre-lift safety meeting with all the employees would have identified the risks associated with the lift. Training in safe work practices (moving large equipment) would also have made a difference in the outcome, according to OSHA .