Improper Rigging Results in Fatality



What happened:
A drilling crewmember died when a twin clevis link used in a rig floor winch hoisting assembly failed, dropping a joint of drill pipe onto him.

At the time of the accident, the crew was laying drill pipe down the V-door ramp. This involved using a winch line to pick up pipe from the mouse hole and have workers stand behind the pipe and push it over the edge of the rig floor onto the V-door ramp. The pipe was then lowered with the winch line, through the rig's V-door ramp, to the catwalk below. The rig crewmember was under the pipe being pushed when the twin clevis link broke.

What caused it:
The winch line was connected to a tail chain with the use of a twin clevis link. The winch line and tail chain were attached to the clevis link by a metal pin inserted through the lugs of the link. Only a cotter key kept that pin in place.

The tail chain was too small to work properly with the twin clevis link. The link was not designed for overhead lifting since it was not manufactured from Grade 80 alloy-based steel. Only Grade 80 or better alloy-based steel rigging and rigging components should be used in overhead lifting applications.

Corrective actions
Here are some corrective actions for rig crews that could have helped prevent this accident:

Ensure that the rigging is safe. The American Society of Mechanical Engineers (ASME) and American National Standards Institute (ANSI) set acceptable standards for safe use of rigging.

Ensure that you are trained to use the rigging correctly. Before you use rigging make sure you have been trained properly.

Ensure that rigging is regularly inspected at intervals recommended by the manufacturer. Rigging usually has some kind of marking that indicates usage and inspection information as well as safe length of service.

Make sure you have the necessary information, instruction, training and supervision prior to performing the task. Training and supervision are key components to preventing these types of accidents.

Ensure that you have been trained to recognize hazards of the rigging equipment.

Before starting work, make sure that you have been trained to identify what good and bad rigging looks like.