Scaffold Safety Fatality File

A 37-year-old male painter died when the platform he was working from fell 65 feet inside a municipal water storage tank. The victim was a member of a three-man crew that was using an improvised suspension scaffold to paint the interior of the 68-foot-tall, 32-foot-diameter water tank. The scaffold consisted of an aluminum ladder used as a platform and secured to steel "stirrups" made of steel bar stock bent into a box shape and attached to each end of the ladder. Wire cables from each stirrup ran to a common tie-off point. A cable from this common tie-off was rigged to a block and tackle used from ground level to raise and lower the platform. The block and tackle supporting the system was secured to a vertical steel pipe on top of the tank with a cable that was fashioned into a loop by U-bolting the dead ends of a piece of wire rope.

The victim had been painting from one end of this scaffold while wearing a safety belt and lanyard attached to an independent lifeline. When the victim finished painting, he unhooked his lanyard from his lifeline and moved along the ladder platform to a position where he could hand his paint spray gun to the foreman (who was at the top of the tank). As the foreman took the spray gun, he heard a "pop" and saw the scaffold and the victim fall 65 feet to the floor of the tank.

Investigation of the incident revealed that the two U-bolts on the loop of cable supporting the block and tackle had loosened enough to allow the cable ends to slip through, causing the scaffold to fall. This particular rig had been used without incident every day for 2 weeks preceding this fatal fall.