TOOLBOX TALK #42

FALL PROTECTION FOR MEWPS

On a MEWP (Mobile Elevated Work Platform), guardrails are the primary fall protection. Therefore, it is critical to stay within the platform and keep the guardrails and entry gate fixed in position. Tying the gate open drastically increases the risk of a fatal accident. Also, climbing onto or over guardrails or exiting at height are other ways a user can bypass the protection provided by the guardrails and increase the risk of an injury.

Occupants can also be ejected from the boom lift platform, resulting in a fall from height if a suitable fall protection system is not used. A high rate of ejections occurs in tree-care operations when falling branches hit the platform or boom structure. Another common cause of ejection is the MEWP being struck by a vehicle, crane or other machinery. This can occur while elevated or when unloading and requires planning to set up the MEWP in an isolated position, clear from vehicles and other machinery.

Additionally, the catapult effect can cause occupants to be thrown from the platform. Sudden movements of the boom create this scenario and is often caused by two situations that are typically addressed during training: first, after the MEWP has been blocked by an object (snagged) and then released; and second, the MEWP is jolted when driving over a curb or pothole or unloading from a truck ramp, causing the boom to whiplash. Due to the configuration of boom lift MEWPs, the catapult risk cannot be eliminated, so it is important for those on boom lifts to always wear a correctly configured harness and lanyard to reduce the severity of an incident.

Regardless of the configuration or the personal fall protection equipment used, if a worker if ejected from a MEWP, a significant chance of injury exists. So, if staying in the MEWP is the goal, what is the best way to achieve that? Is it better to use a lanyard or a retractable? Do you want a fall arrest or a fall restraint system? A proper risk assessment will help evaluate the most appropriate solution based on the site and MEWP equipment conditions.

In the past, the most common solution was to use a 6-ft energy-absorbing lanyard to tie off in a MEWP, but two challenges arose from that application. First, a perception was perpetuated though the industry that if a worker was tied off and fell out of the MEWP, the fall impact would topple the MEWP. Therefore, the fall arrest overturning test is used by manufacturers to verify that a Group B (boom lifts) MEWP will remain stable if a fall occurs. Technical standards do not require this test for Group A (scissors lifts) MEWPs.

Second, a January 2009 OSHA letter of interpretation led some to believe that a fall clearance distance of 18.5 feet was required when using a MEWP, meaning the fall protection system did not provide adequate protection until the MEWP with worker was 18.5 feet in the air. To address the confusion of this issue, OSHA rescinded the letter in August 2011, stating that the system must limit the free fall to less than 6 feet was their actual intention.