WSHAlert



19 May 2021, 2122012

Accident Advisory: Worker found unconscious on boom lift

Ref: 2021091 WSH Alert Accident Notification dated 10 February 2021

On 1 February 2021, a plasterer was found unconscious and slouched against the control panel of his boom lift. He was subsequently rescued and conveyed to the hospital where he was pronounced dead.



The boom lift that the worker was working on.

Recommendations

Stakeholders in control of similar workplaces and work activities, such as occupiers, principals and employers, are advised to consider and implement the following risk control measures to prevent similar accidents:

Competent operator

- Deploy only competent and authorised operators to operate any mobile elevated work platform (MEWP) such as a boom lift or scissor lift.
- Ensure operators have received adequate training conducted by an accredited training provider. Relevant certifications include Workforce Skills Qualifications (WSQ) Operate Boom Lift course, WSQ Operate Scissor Lift course and WSQ Perform Work At Height course.
- Provide operators with refresher training following a period of inactivity (e.g. due to COVID-19). Such training should include specific equipment familiarisation to refresh the worker's competency, especially for operators of heavy equipment.
- Remind/instruct co-workers who are not trained in MEWP operation that they should never attempt to manoeuvre the MEWP under any circumstance.

Safe MEWP operation

- Instruct MEWP operators on the safe work positions to adopt when using the MEWP e.g. always keep within the MEWP basket with both feet on the work platform.
- Provide the appropriate PPE for the task including a travel restraint system anchored to the manufacturer's designated anchor point inside the MEWP.
- Remind/instruct MEWP operators (e.g. during toolbox meetings) to look out for overhead
 - and surrounding obstacles that may impede operation or cause worker entrapment. It is important for operators to slow down the ascent of the work platform when approaching an overhead obstruction.
- Use a ground guide (banksman) to guide boom lift movement when in confined areas and areas where there are obstacles/obstructions.

Engineering controls

- Consider installing an overhead obstacle proximity warning system to alert the boom lift operator of a dangerous situation.
- Consider installing a suitable secondary guarding device (e.g. physical cage, side protection bars, pressure sensing bar) to reduce the risk of worker entrapment or crush injury while working on the boom lift. See guide on secondary guarding devices for MEWPs under Further Information.

Safe work procedures

- Establish and implement safe work procedures (SWPs) for all on-site MEWP operations.
- Implement strict controls to prevent the unauthorised operation of heavy equipment and machinery e.g. SWP to indicate shutdown of MEWP after use and removal of the ignition key.
- Provide the necessary on-site supervision to ensure that SWPs are strictly adhered to.

Risk Assessment

Conduct a thorough Risk Assessment (RA) before carrying out on-site work activities including the use of heavy equipment and machinery. All identified hazards and foreseeable risks must be suitably addressed with risk controls implemented to protect workers from harm. The RA should cover, but not limited to; the following areas:

- MEWP ignition key access control and possible operation by untrained personnel;
- Presence of overhead and on-the-ground obstacles/obstructions that may impede MEWP operation and/or result in an accident;
- Presence of other moving equipment or vehicles in the vicinity of MEWP operation;
- Measures to deter haste to complete works at the expense of safety or health; and
- Emergency preparedness and response plan.

Further Information

- 1. Workplace Safety and Health Act
- 2. Workplace Safety and Health (Risk Management) Regulations
- 3. Workplace Safety and Health (General Provisions) Regulations
- 4. Workplace Safety and Health (Construction) Regulations 2007
- 5. Code of Practice on Workplace Safety and Health Risk Management
- 6. Code of Practice for Working Safely at Heights
- 7. MOM Circular on Examination And Testing Requirements For Statutory Lifting Equipment
- 8. MOM Circular on Safe Use of Mobile Elevated Working Platform
- 9. Singapore Standard SS 616: 2016 Code of Practice for Safe Use of Mobile Elevating Work Platforms
- 10. WSH Guidelines on Contractor Management
- 11. WSH Council's Construction Case Studies Booklet

12. UK International Powered Access Federation's (IPAF's) Guidance on Secondary Guarding Devices for MEWPs

Information on the accident is based on preliminary investigations by the Ministry of Manpower as at 23 February 2021. This may be subject to change as investigations are still on-going. Please note that the recommendations provided here are not exhaustive and they are meant to enhance workplace safety and health so that a recurrence may be prevented. The information and recommendations provided are not to be construed as implying any liability on any party nor should it be taken to encapsulate all the responsibilities and obligations under the law.

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