

Guidance on AWP selection where the risk of sustained involuntary operation of controls and/or overhead entrapment is identified



1.0 Introduction

The use of aerial work platforms (often referred to as AWP) can save time, make work at height more efficient, effective and safer than using traditional methods of access. Current data clearly shows that, when used safely, AWP significantly reduce the risk of injuries attributed to work at height.

Unfortunately, accidents involving the use of AWP have occurred, including tragically some fatalities. Of these incidents, some have involved persons being crushed while driving, accessing their work area, or while working at height near obstructions. These incidents could have been prevented by correct use, thorough planning, preparation, and selection of the appropriate equipment.

2.0 Means of prevention

Currently there is no single solution to prevent overhead entrapment. Reducing the number of serious incidents requires the combined efforts of operators, site management, rental companies and manufacturers working to:

- Improve operator competency (training, influence behavior)
- Improve management of AWP on site including site and ground conditions
- Clarify supplier roles and responsibilities
- Continue AWP design initiatives and improvements

3.0 Existing Guidance

IPAF has worked closely with the UK Strategic Forum for Construction, Plant Safety Group (SFCPSG) to produce guidance on "*Avoiding trapping/crushing injuries to people in the platform*", which provides straightforward, comprehensive and easy to adopt information for management (Part 1), and supervisors / AWP operators (Part 2). Published in July 2010, copies are available free at the Publications/Technical Guidance section of www.ipaf.org. It is recommended that the SFCPSG guidance is read in conjunction with this document. The document was additionally converted for use in the North American market and may be downloaded from the Publications/Technical Guidance section of www.awpt.org.

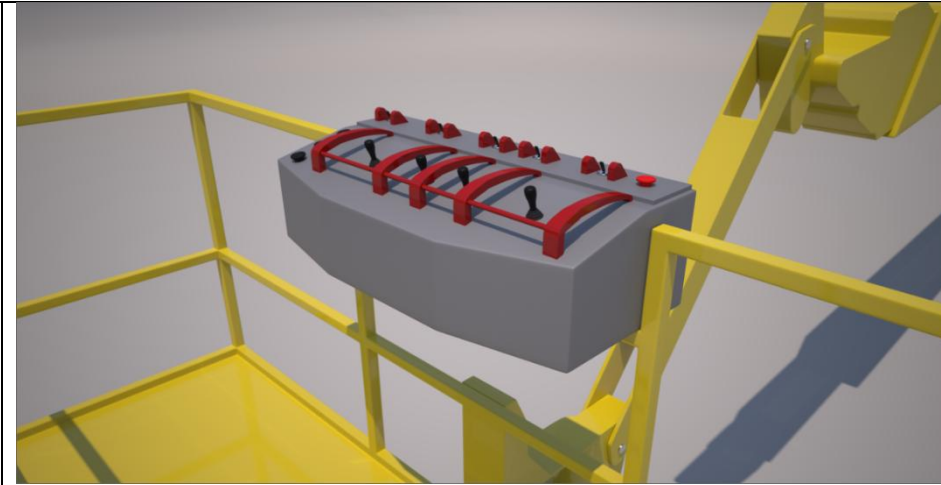



4.0 Available equipment or features




This document is intended to assist managers, planners and others to differentiate between the possible options available, when considering the selection of an appropriate AWP and additional equipment where the increased risk of sustained involuntary operation of controls and/or potential overhead entrapment has been identified. Such equipment is not intended to replace the operator's responsibility to be aware of his or her surroundings and avoid hazards. Correct selection of AWP and possible use of additional devices is the responsibility of those planning the work at height. Device selection should be the result of a comprehensive risk assessment encompassing: -

- Travelling to and from the work area
- Accessing the work area
- Working at height
- Emergency rescue procedures

The pictorial examples in this document illustrate platform devices and additional equipment currently available for a variety of boom type AWP (1b and 3b). However, some of the designs and additional equipment may be capable of application to scissor lifts (3a).

Please note: Inclusion or exclusion of devices or equipment in this document does not indicate any preference but simply reflects those designs currently known to IPAF. The designs and devices depicted are randomly positioned and are in no particular order or preference.

<p>Item 1</p> <p>Local control surround stand-ups</p>	
<p>Item 2</p> <p>Control well and front stand-off bar – with or without ergonomically designed pressure sensing feature</p>	
<p>Item 3</p> <p>Stand-off bar (above controls)</p>	
<p>Item 4</p> <p>Control panel with shroud</p>	

<p>Item 5</p> <p>Physical platform cage</p>	
<p>Item 6</p> <p>Side protection bars</p>	
<p>Item 7</p> <p>Pressure sensing bar with audible and visual alarm</p>	

5.0 Caution

It should be noted that: -

- No one particular device or item of equipment will prevent overhead entrapment in all known circumstances when operating a AWP (See Section 2 above)
- In selecting a device or equipment to address a single hazard, consideration should be given to the potential for significantly increasing other possible hazards
- Some of the devices and equipment shown above can be fitted to existing machines, used independently or in conjunction with each other

6.0 Fitting of additional devices or equipment

Some of the devices and equipment shown are fitted to AWP's by the manufacturer during the assembly process and as such are an integral part of the original machine design and certification.

Where it is intended to fit additional devices or equipment to existing machines, it is recommended that those intending to fit or use the devices refer to the SFCPSG "*Avoiding trapping/crushing injuries to people in the platform*" document, Part 1 Section 6 "Fitting additional devices or equipment on AWP's".

7.0 Future developments

In addition to promoting and improving upon existing operator training programs, IPAF supports manufacturers, rental companies and contractors developing new devices and features to further improve the safe operation of AWP's. Furthermore, IPAF recognizes the need to review and update this document as necessary in order to reflect current developments to minimize the risk of entrapment or sustained involuntary operation. Those with knowledge of relevant devices or equipment not included in this document should forward the information to IPAF at info@ipaf.org or contact the IPAF Technical Officer chris.wraith@ipaf.org

8.0 Further information

The employer and site management have a duty to ensure that a safe system of work has been devised to ensure that all work tasks can be carried out safely. The safe system of work should be communicated to all persons involved in the planning, management, carrying out of the work tasks and potential rescue. Management, supervisors and operators should have the competency to enable them to identify entrapment risks and carry out their duties safely.

Further information to assist with appropriate machine selection where an increased risk of sustained involuntary operation of controls and/or potential entrapment has been identified may be obtained from both the manufacturer and supplier of the AWP, and by referring to the UK Strategic Forum for Construction, Plant Safety Group guidance, "*Avoiding trapping/crushing injuries to people in the platform*" which is freely available to download from the Publications/Technical Guidance section of www.ipaf.org or www.awpt.org.