

## FALL ARREST EQUIPMENT

### SUMMARY

Fall arrest equipment is widely used in shipbuilding and ship-repair. This paper introduces guidance advising on harness suspension and the inspection of fall arrest equipment made from webbing or rope. Advice is also given on the use of harnesses whilst working from mobile elevating work platforms (MEWPs)

### BACKGROUND

1. Paper 44/G provided details of an alert issued by HSE highlighting the importance of carrying out appropriate pre-use checks and inspections of fall arrest equipment. This followed on from research, which identified the severe impact that small cuts or nicks in the edge of webbing lanyard can have on the integrity of a lanyard. The research itself was commissioned following 2 fatalities resulting from the failure of fall arrest systems.

2. A free HSE leaflet *Inspecting fall arrest equipment made from webbing or rope* is due to be issued in mid September. The leaflet is mainly aimed at employers who are responsible for the use of fall arrest equipment incorporating energy-absorbing lanyards made from webbing. It gives generic advice on inspection regimes for this type of equipment where it is used to provide protection against falls from a height. Many of the principles can however, be applied to non-energy absorbing lanyards and safety harnesses used for the same purpose. They can also be applied to similar equipment made from rope.

3. The leaflet:

- highlights the importance of an effective inspection regime;
- identifies what the inspection regime should include;
- the scope of the inspection regime including the need for pre-use checks and detailed inspections at least every six months; and
- examples of defects and damage having the potential to result in the degradation and/or weakening of the lanyard. This section includes colour photographs.

4. Copies of the leaflet will be available either from HSE Books or from HSE's website at: <http://www.hse.gov.uk/pubns/index.htm>

5. A Contract Research Report *Harness suspension: review and evaluation of existing information* (CRR 451/2002) has been issued by HSE. The review identifies three stages of a fall; the fall itself, the arrest and then the suspension stage. The review focuses primarily on the dangers of the suspension stage including suspension trauma, which in some cases can result in kidney failure and can be life threatening. The review also highlights

how leaving an unconscious person suspended on a rope can cause death in less than 10 minutes.

6. Advice is given in the CRR on:

- the rescue and treatment of a person suffering from suspension trauma including the importance of not laying them horizontally after being rescued;
- fall protection systems;
- harness types;
- weight and size issues relating to fall arrest equipment including the possible need for a harness worn by a heavier person to have its strap and padding dimensions increased (to take account of the likely increase in pain experienced by the person in the event of a fall);
- selecting harnesses;
- advantages and disadvantages of front and rear attachment points on a full body harness (e.g. a front attachment point is not as good as a back attachment point for vertical rescue from confined spaces as a person hangs less vertically); and
- information on test standards used in several different countries including America and Australia.

7. A pdf copy of the report can be downloaded for free from:

[http://www.hse.gov.uk/research/crr\\_pdf/2002/crr02451.pdf](http://www.hse.gov.uk/research/crr_pdf/2002/crr02451.pdf) Alternatively a paper copy of the report (ISBN 0717625265) can be purchased from HSE Books price £20.

8. At previous SSHSCC meetings reference has been made to HSE Operational Circular (OC) 314/19 *Mobile elevating work platforms (MEWPs) and safety harnesses*. The OC describes situations where the use of a safety harness should normally be required for work at heights involving a MEWP. This document however, is in the process of being redrafted as it has since been identified that not all MEWPs are designed for use as an anchorage point for safety harnesses. It is likely that the revised guidance will be issued as an information sheet. Guidance contained in the Shipbuilders and Shiprepairers Association health and safety guidance note *Safe use of mobile elevating work platforms in shipbuilding and ship repair yards* was based on the advice contained in the OC. When the redrafted guidance has been issued it will be necessary to amend the advice contained in the SSA guidance note. In the meantime those members who use MEWPs are advised to contact the MEWP supplier to verify their suitability as an anchorage point.

## **ACTION**

9. Members are asked to note the guidance available.