

# Topic Sheet No. 3

## Avoiding dropped back-up devices



*A topic sheet prepared by © IRATA International (2017)*

### **SAFETY AND HEALTH TOPIC SHEET NO. 3: AVOIDING DROPPED BACK-UP DEVICES**

*A safety and health topic sheet aimed at raising awareness of hazards in the rope access industry. The series may be of use as a toolbox talk.*

## **1 INTRODUCTION**

- 1.1 Whether in an operational or training environment it is important to ensure that all back-up devices are used correctly and in accordance with the manufacturer's instructions.
- 1.2 Dropped objects are a significant area of concern to all working at height. Dropping a back-up device may put the user in a position where they are at risk of being on one point of attachment. A rescue may be required, or the technician may put others at risk.

## **2 WHAT CAN GO WRONG**

- 2.1 Injury to others may occur as a result of a back-up device falling. It may strike equipment or a person, in or outside the exclusion zone.
- 2.2 Other members of the team may be put at risk assisting the technician who has dropped the back-up device.

### **Case study**

Whilst removing their back-up device from the rope, a technician did not push the cam through the body to other side of the rope and replace the karabiner through the hole in the cam. The device was dropped subsequently.

## **3 WHY THINGS CAN GO WRONG ...**

- 3.1 There is always the potential for things to go wrong. This can include faulty equipment or operator error.
- 3.2 A technician may also use a device outside of the manufacturer's instructions. For example:
  - A cam type device is removed from the device lanyard karabiner before it is attached to the rope and is dropped.
  - A device that requires a short lanyard (cord) which is not attached to the karabiner enabling the back-up device to be dropped.
  - Attaching the device to a lanyard not recommended by the manufacturer.

## **4 WHAT YOU CAN DO ...**

- 4.1 Technicians should be fully conversant with the operation of their back-up device.

# Topic Sheet No. 3

## Avoiding dropped back-up devices



- 4.2 Any company has a responsibility to provide 'familiarisation training' on all equipment. This is particularly important where new equipment is being used or the technician is an inexperienced Level 1 (e.g. equipment is being used that was not used during their initial training and assessment).
- 4.3 Training companies should train candidates on as many back-up devices as possible.
- 4.4 Always carry out a pre-use function check of the back-up device, before ascending or descending ropes.

## 5 HOW YOU CAN DO IT ...

- 5.1 There are a large number of back-up devices available for use in rope access. When selecting any device, make an assessment of its susceptibility to being dropped.
- 5.2 Ensure that you:
  - use devices in accordance with the manufacturer's instructions;
  - comply with instruction and training;
  - remain vigilant; and
  - check the function before use.

## 6 ACTION

- 6.1 Review your management system's procedures for the selection of equipment, in particular back-up devices.

## 7 REFERENCES

- 7.1 Further information can be found in:
  - (a) IRATA International code of practice for industrial rope access (Third Edition, September 2016)<sup>1</sup>:
    - Part 2, 2.7.1.6.3, Information supplied by the manufacturer
    - Part 2, 2.7.1.6.5, Accidental removal
    - Part 2, 2.7.1.7, Knowledge of equipment
    - Part 2, 2.7.7, Back-up devices
    - Part 2, 2.7.7.5, Probability of foreseeable misuse
  - (b) Training, Assessment and Certification Scheme (TACS) for personnel engaged in industrial rope access methods (Edition 3.1, October 2015)<sup>2</sup>
    - 6.2.2, Back-up devices
- 7.2 For a list of current (and past) 'safety communications' by IRATA, see [www.irata.org](http://www.irata.org)

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<sup>1</sup> [www.irata.org/default.php?cmd=215&doc\\_id=4336](http://www.irata.org/default.php?cmd=215&doc_id=4336)

<sup>2</sup> [www.irata.org/default.php?cmd=215&doc\\_id=4193](http://www.irata.org/default.php?cmd=215&doc_id=4193)

# Topic Sheet No. 3

## Avoiding dropped back-up devices



### 8 RECORD FORM

- 8.1 An example Safety and Health Topic Sheet: Record Form is appended.
- 8.2 Members may have their own procedure(s) for recording briefings to technicians and others.

### 9 FURTHER READING

- 9.1 EN 12841: 2006, Personal fall protection equipment. Rope access systems. Rope adjustment devices
- 9.2 Manufacturers' instructions - various
- 9.3 IRATA website, Publications, <https://irata.org/publications>
- 9.4 Industrial rope access - Investigation into items of personal protective equipment, Contract Research Report 364/2001, HSE, 2001<sup>3</sup>
- 9.5 Industrial rope access back-up devices: a review, The heightec Group Ltd., July 2013<sup>4</sup>
- 9.6 Assessment of foreseeable misuse, A Forrest 2010

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<sup>3</sup> [www.hse.gov.uk/research/crr\\_hm/2001/crr01364.htm](http://www.hse.gov.uk/research/crr_hm/2001/crr01364.htm)

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Page 4 of 4

# Topic Sheet No. 3

## Avoiding dropped back-up devices



### IRATA SAFETY AND HEALTH TOPIC SHEET – RECORD FORM

<b>Site:</b>	
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<b>Date:</b>	
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<b>Topic(s) for discussion:</b>	Topic Sheet No. 3: Avoiding dropped back-up devices
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<b>Reason for talk:</b>	
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<b>Start time:</b>		<b>Finish time:</b>	
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**Attended by**  
*Please sign to verify understanding of briefing*

<b>Print name:</b>	<b>Signature:</b>
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*Continue overleaf (where necessary)*

<b>Matters raised by employees:</b>	<b>Action taken as a result:</b>
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*Continue overleaf (where necessary)*

**Briefing leader**

*I confirm I have delivered this briefing and have questioned those attending on the topic discussed.*

<b>Print name:</b>		<b>Signature:</b>		<b>Date:</b>	
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<b>Comments:</b>	
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