

Doc. No.: HS-083ENG	<h1 style="margin: 0;">Topic Sheet No. 3</h1> <h2 style="margin: 0;">Avoiding dropped back-up devices</h2>	
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## 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.

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- 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 (v005, 20/05/2021)<sup>2</sup>
- 6.6.2, Back-up devices
- 7.2 For a list of current (and past) ‘safety communications’ by IRATA, see [www.irata.org](http://www.irata.org)

<sup>1</sup> [www.irata.org/downloads/2055](http://www.irata.org/downloads/2055)

<sup>2</sup> [www.irata.org/downloads/2059](http://www.irata.org/downloads/2059)

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## 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, [www.irata.org/publications](http://www.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>

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<sup>3</sup> [https://www.hse.gov.uk/research/crr\\_pdf/2001/crr01364.pdf](https://www.hse.gov.uk/research/crr_pdf/2001/crr01364.pdf)

<sup>4</sup> <https://www.heightec.com/news/back-up-device-review-paper/>

IRATA SAFETY AND HEALTH TOPIC SHEET – RECORD FORM			
<b>Site:</b>			
<b>Date:</b>			
<b>Topic(s) for discussion:</b>		Topic Sheet No. 3: Avoiding dropped back-up devices	
<b>Reason for talk:</b>			
<b>Start time:</b>		<b>Finish time:</b>	
<b>Attended by</b> <i>Please sign to verify understanding of briefing</i>			
<b>Print name:</b>		<b>Signature:</b>	
<i>Continue overleaf (where necessary)</i>			
<b>Matters raised by employees:</b>		<b>Action taken as a result:</b>	
<i>Continue overleaf (where necessary)</i>			
<b>Briefing leader</b> <i>I confirm I have delivered this briefing and have questioned those attending on the topic discussed.</i>			
<b>Print name:</b>		<b>Signature:</b>	
			<b>Date:</b>
<b>Comments:</b>			