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Topic Sheet No. 13

Falls during training



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SAFETY AND HEALTH TOPIC SHEET NO. 13: FALLS DURING TRAINING

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 Training courses provide an environment in which inexperienced trainees may be susceptible to injury, including falls from a height.
- 1.2 It is important to remove the risk of a trainee falling during training, to avoid injury to trainees and/or trainers.
- 1.3 A specific risk assessment shall be made for the training area and appropriate control measures detailed and implemented¹.
- 1.4 It is essential that all trainees whether a first time Level 1 or recertifying Level 3 are closely supervised and, importantly, receive clear instructions prior to the start of any training.

2 WHAT CAN GO WRONG ...

- 2.1 Things can go wrong for a number of reasons. For example, a trainee may:
 - abseil off the end of the rope;
 - incorrectly load and/or use their descender;
 - fail to close the side plate on their descender;
 - trigger an uncontrolled descent;
 - end up in an uncontrolled descent with a 'casualty';
 - use their equipment, e.g. back-up device, incorrectly;
 - use damaged or unsuitable equipment;
 - feel over-confident;
 - not be supervised closely.

Case study 1

A trainee - the 'rescuer' - ended up in an uncontrolled descent. As they started to pick up speed, they lost control of the descender and failed to release their back-up device. This resulted in both the 'rescuer' and 'casualty' sustaining broken ankles on hitting the ground. The supervisor did not directly witness the incident.

Form 006, *Requirements for any IRATA training venue*, should be completed and posted in any training area(s).

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Case study 2

A trainee - the 'rescuer' - had their ropes on the opposite side to that taught. Their back-up device locked up on the ropes when at about 2.5m from the ground, with the casualty suspended below. They locked off their descender in order to release the back-up device. When recommencing descent, the 'rescuer' controlled the handle of their descender with their right hand (instead of their left) and released their back-up device without holding the tail of their working rope; resulting in a rapid descent. The 'casualty' sustaining a broken leg.

Source: IRATA Safety Bulletin 21.1, Rescue training incidents (28 July 2011)

Case study 3

Two Level 1s were practicing a snatch rescue (for the third time) about 3m from the ground, using a single set of ropes. As the 'rescuer' operated the 'casualty's' descender, to bring their weight on to the rescuer, the working line suddenly came out - with a loud noise - leaving both Level 1s suspended from the rescuer's back-up device. The unclosed descender had held the rescuer's weight up to this point. The Level 1s were quickly removed to ground with no ill effects, apart from minor rope burns to the rescuer's hand.

Source: IRATA Safety Bulletin 12, Descender incident, Failure to check catch on side plate (December 2009)

3 WHY THINGS CAN GO WRONG ...

- 3.1 Falls during training can occur for a number of reasons. For example:
 - incorrect threading of a descender;
 - not checking that the side plate or catch is correctly closed;
 - not listening to, or ignoring, the trainer's instructions;
 - instructions not clearly provided by the trainer;
 - poorly rigged ropes;
 - rushing the task;
 - nervousness during assessment;
 - equipment failure.

4 WHAT YOU CAN DO ...

- 4.1 Trainers and/or assessors should:
 - assess the risks in the training area (significant risks should be recorded in writing);
 - make sure that trainees undertake pre-use and function checks;
 - ensure that trainees utilise 'buddy checks';
 - monitor trainees carefully;
 - ground control the trainee's main descent rope, if appropriate;
 - ensure that there are knots in the ends of all ropes.
- 4.2 Trainers and/or assessors should also make sure:
 - that ropes are long enough;
 - the trainee understands any instructions;

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- that all ropes are rigged correctly;
- that the trainee is put at ease and encouraged.
- 4.3 Trainers and assessors should:
 - check that a trainee's back-up device and descender are loaded correctly;
 - aim to put the trainees at ease.
- 4.5 When training, the training company should assess the need for crash mats, particularly in the early stages of training;
- 4.6 Ensure increased supervision for trainees when carrying a rescue.

5 HOW YOU CAN DO IT ...

- 5.1 The risk of falling from a height during training can be reduced by:
 - the close monitoring of trainees;
 - good communication;
 - providing additional trainers, where possible, i.e. increasing the trainee/trainer ratio;
 - limiting the number of trainees 'on rope' at any one time.

6 ACTION

6.1 Review your management system's procedures for the control measure to be taken to protect against falls from height during training.

7 REFERENCES

- 7.1 Further information can be found in:
 - (a) IRATA International code of practice for industrial rope access (Third edition, September 2016)²:
 - Part 1, 1.4, Principles and controls
 - o Part 2, 2.5, Training
 - (b) Training, Assessment and Certification Scheme (TACS) for personnel engaged in industrial rope access methods (Edition 3.1, October 2015)³:
 - 4.4.2, Training ratios
 - 6.2.3, Hazard identification and risk assessment
 - 6.2.4, Selection of access method
 - o 6.2.5, Selection of personnel and competence
 - 6.2.8, Planning for emergencies
 - 6.5.1, Rigging for rescue
 - o 7.7.13, Training venue risk assessment
 - o 7.7.14, Live 'casualty' risk assessment

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- o 7.7.17, Rescue plans
- o 9.2.1, Pre-training course checklist
- 7.2 For a list of current (and past) 'safety communications' by IRATA, see www.irata.org

8 RECORD FORM

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

9 FURTHER READING

BS 8454:2006, Code of practice for the delivery of training and education for work at height and rescue

IRATA Trainer File

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IRATA SAFETY AND HEALTH TOPIC SHEET – RECORD FORM					
Site:					
Date:					
Topic(s) for discussion:			Topic Sheet No. 13: Falls during training		
Reason for talk:					
Start time:			Finish time:		
Attended by Please sign to verify understanding of briefing					
Print name:			Signature:		
Continue overleaf (where necessary)					
Matters raised by employees:			Action taken as a result:		
Continue overleaf (where necessary)					
Briefing leader I confirm I have delivered this briefing and have questioned those attending on the topic discussed.					
Print name:		Signature:		Date:	
Comments:					