



SUBJECT: Continuous Belay

RISK ASSESSMENT REF: CB 01/2022/V1

WRITTEN BY: Operations Team/Health and Safety Team

		Risk Matrix						
Risk rating guidance	Likelihood (L)	5	5	10	15	20	25	Likelihood (L) x Severity (S) = Risk Rating (RR).
		4	4	8	12	16	20	
		3	3	6	9	12	15	
		2	2	4	6	8	10	
		1	1	2	3	4	5	
				1	2	3	4	
		Severity (S)						
Acceptability of risk guidance	High-risk: 15 – 25	High-risk activities should cease immediately. Further effective control measures to mitigate risks must be introduced.						
	Medium-risk: 8 – 12	Medium-risks are an acceptable level based on the reduced likelihood after sufficient control measures are implemented						
	Low-risk: 1-6	Low-risks are largely acceptable. Where it is reasonable to do so, efforts should be made to reduce risks further.						
Guidance. When completing a risk assessment, you should:	<ol style="list-style-type: none"> Identify the persons at risk and the significant hazards. Calculate an initial RR for the activity. Identify risk control measures that reduce the risks to an acceptable level. Calculate a revised RR - you should consider how much safer the task will be if the control measures are followed. Here, you should consider changing both the likelihood (L) and the severity (S) ratings. 							
Note. Ideally, you should look to reduce the risks so that the task can be classified as “low-risk”.								

Likelihood	Definition	Points rating
Inevitable	If the work continues as it is, there is almost 100% certainty that an accident will happen, for examples: A broken stair or broken rung on a ladder, Bare, exposed electrical conductors, Unstable stacks of heavy boxes	5
Highly likely	Will happen more often than not. Additional factors could precipitate an incident but it is still likely to happen without this additional factor.	4
Possible	The accident may occur if additional factors precipitate it, but it is unlikely to happen without them.	3
Unlikely	This incident or illness might occur but the probability is low and the risk minimal.	2
Remote possibility	There is really no risk present. Only under freak conditions could there be any possibility of an accident or illness. All reasonable precautions have been taken - This should be the normal state of the workplace.	1

Severity	Definition	Points rating
Very high	Causing multiple deaths and widespread destruction eg. fire, course/building collapse.	5
High	Causing death, serious injury or permanent disability to an individual.	4
Moderate	Temporary disability causing injury (to member of the public, contractor or employees) or disease capable of keeping an employee off work for seven days or more and reportable under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995).	3
Slight	Minor injury (to member of the public, contractor or employee), which would allow the individual to continue work after first aid treatment on site or at a local surgery. The duration of the stoppage or treatment is such that the normal flow of work is not seriously interrupted.	2
Nil	Very minor injury, bruise, graze, no risk of disease.	1

The Review Process. This risk assessment will be reviewed when it is suspected that the assessment is no longer valid or there has been a significant change. In addition, it will be reviewed annually.



This Risk Assessment covers all Adventure and Adventure Plus Courses, as well as Challenge Courses that operate on a continuous belay safety system.

HAZARD	L	S	RR	WHO MIGHT BE HARMED	CONTROL MEASURES	FURTHER CONTROL MEASURES: Reviewed annually to formulate Risk Reduction Plan	L	S	RR
<p>Falling to the ground, onto another person, onto another part of the course or another object due to:</p> <p>Deliberately removing equipment or unclipping from the safety system then slipping, jumping or falling, either unintentionally or intentionally</p> <p>Being attached on to the safety cable (system) incorrectly</p> <p>Failure of part of the course infrastructure</p> <p>PPE failure, incorrect selection, use, fitting, etc</p> <p>Tree/Pole/support structure failure, falling over or onto the course, etc</p> <p>Slips and trips This could happen whilst opening or closing the course, operating the course, participating on the course,</p>	4	4	16	<p>Employees Course Users Contractors Onlookers Trespassers</p>	<ul style="list-style-type: none"> Continuous Belay Safety System does not require course users to remove their trolley at any point. In harness set up the maillons will have Loctite applied and will be spanner tight to prevent tampering (Mk1 poulliz) Course Users to have second line as a back up to the Continuous Belay system Instructors to attach customers to safety system on the ground (exception Bedgebury, Moors Valley Black Park Loop 6 & Chessington S5) On Adventure Courses minimum height of 1m wearing footwear to enable users to move their safety line around the safety system. Height markers installed. Instructors carry out check. Under 6 year olds to be accompanied by an adult (1:2) to assist with safety lines. On Adventure + Courses minimum height 1m 20. On Continuous Belay Challenge Courses minimum height 1m 40. Maximum weight of 20.5 stone/ 130 kg due to load limits of course (Altus load testing advice). Scales provided at sites. Information provided to customers on booking confirmation documents, RAD and website. Anyone deemed to be under the influence of alcohol or drugs is not permitted access onto the course. 		2	4	8

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<p>carrying out inspections or carrying out a rescue.</p>					<ul style="list-style-type: none"> • Anyone who does not have the correct footwear (e.g. sandals) or clothing that may lead to a slip or a trip will not be allowed onto the course. • Instructors will access the course using the standard Go Ape Self Belay Safety Lines and system of use (see self belay risk assessment). • Only trained and assessed instructors will be allowed to supervise the Continuous Belay Courses. • Instructors to be trained and assessed in moving customers on the Continuous Belay course. GAD “Transfer Method Statements” 				
					<p>Training Instructors will be trained in accordance with the training manual.</p>	<p>Instructors have received, demonstration, monitoring and scenario training which has been recorded on their training log.</p>			
					<p>Course inspections and checks</p> <ul style="list-style-type: none"> • Pre-use course checks are carried out by instructors to ensure the course is safe to use. Opening/closing procedure. Hazards caused by cold weather Damage to Course Policy • Periodic site operational checks are carried out and recorded by a competent person. • Servicing and maintenance as advised by the manufacturer (eg switches, quickflight, stopfalls) • Inaugural inspections by an appropriately qualified Type A inspection body. • Annual periodical inspection of the course by a competent person 				

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					<p>PPE provision and checks</p> <ul style="list-style-type: none"> • Effective procurement and management system, using reputable suppliers to ensure all PPE is of the correct standard (CE or UKCA marked, etc) and design and has correct information provided for use and is therefore safe and appropriate for its intended use. • PPE to be assembled correctly, and correct procedures are documented. • Each site will have a minimum of one competent person trained in PPE inspection. Instructors are trained internally in pre and post use checks. • PPE will be checked prior to first use (from the manufacturer) • PPE is visually checked prior to and after each use. • PPE examinations are carried out and recorded by a competent person in accordance with EN standards. • Where PPE is thought to be defective it is placed in the quarantine box. • PPE is to be stored in a dry, clean area, away from any chemicals. • PPE must be cleaned and dried as detailed in the manufacturer’s guidelines • All PPE is documented and logged, including inspection and maintenance records. • The Site Managers ensure that instructors are trained in the correct fitting of PPE, its operation and its operating limits, inspection of the PPE and record the training. • A selection of equipment is break tested as required to gather information. 			
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					<ul style="list-style-type: none"> • Trained instructors check course participants’ harnesses are fitted correctly before participating in the activity. • Patrolling instructors carry out visual checks of course users to ensure that PPE remains fitted correctly. • Different types of harness are used for the Continuous Belay Courses to fit people of different shapes and sizes. • Personal PPE must not be used, (except in exceptional circumstances by a contractor – clearance for this is required). • Helmets are worn for all construction work, rescue training and during rescues. When moving off the normal customer route to carry out inspections, maintenance and repairs (to mitigate a fall or objects falling onto the rescue participants and workers). • Builders and contractors using their own PPE are responsible for ensuring it is fit for use. • Maillons on sit harnesses are tightened with a spanner so they cannot be undone by hand. • No smoking whilst wearing PPE • No use of chemicals 				
					<p>Operation systems and controls of the course</p> <ul style="list-style-type: none"> • When the course is “closed” or left unmanned access stairs will be secured. • First aid supplies are available and there is a minimum of one First Aid qualified member of staff on duty each day. • Emergency course evacuation procedure in place for each course. 				

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					<ul style="list-style-type: none"> Guidelines are available for organisations wishing to conduct filming at height. 				
					<p>Trees/Poles/Support Structures</p> <ul style="list-style-type: none"> Prior to a new course opening all trees that form part of the course are inspected for stability and disease by a qualified arboriculture expert. An Arboricultural periodical inspection is completed by the Senior Tree Officer and is to be carried out at least once per calendar year and within a maximum interval of 15 months. System for monitoring trees where a potential problem has been identified. Measures are taken to protect tree roots from compaction. 				
Falling objects	3	3	9		<p>Retainers and Lanyards</p> <ul style="list-style-type: none"> Course users must attach or secure all loose items (such as cameras). Mobile phones can be used to take photographs but should be secured to the user to prevent them falling. Cameras should be secured. Lanyards available. When instructors are carrying out maintenance tasks at height, reasonable adjustments should be made. When moving a customer the MK1 trolley must be attached to the instructor while it is being removed from the wire. <p>Trees</p> <ul style="list-style-type: none"> All course trees visually checked during opening the course, for loose and broken branches. Deadwood should be removed. 	Note: Battersea is directly above a children’s playground and mini golf course – therefore camera’s and phones currently not permitted unless attached to specific equipment, provided by site.	2	3	6
Impact including:	3	3	9		<p>Course design</p> <ul style="list-style-type: none"> Design of the course must take into consideration the possibility of impact 		2	3	6

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<p>Course users swinging into something solid</p> <ul style="list-style-type: none"> • On the course • At the landing (e.g. resulting in lower leg injury) • Being struck by parts of the course <p>Collision</p> <ul style="list-style-type: none"> • On Zip Wires • At Zip landing 				<p>problems. Materials are finished to provide smooth, surfaces. Zip Wires and landing areas are designed and installed to arrive at an optimum landing speed.</p> <ul style="list-style-type: none"> • Landing sites are constructed to provide a soft and moveable surface of woodchip or wood peel. • Tree to tree landing platforms • Where applicable; Zip landing sites are fenced to discourage members of the public and children wandering into them. <p>Operating Procedures</p> <ul style="list-style-type: none"> • Landing areas are prepared (raked or dug) on a regular basis. • Only 1 course participant is allowed on the zip wire at any one time. • On the adventure course, if the instructor at the zip wire take off platform leaves their position whilst the course is in operation they must attach the zip stop rope to stop customers descending the zip wire. <p>Provision of Information</p> <p>Safety Brief (video audio or verbal) given to all course participants.</p>				
<p>Head impact on metal brackets at junctions</p>	3	3	9	<p>Padding to be added to junctions to draw attention to their position and provide protection.</p> <p>On Adventure courses handrails designed so that the safety cable doesn't need to drop in height to pass under them and the need for customers to duck under them</p>		2	3	6
<p>Entanglement in ropes nets, cables or chains and body parts trapped in</p>	2	3	6	<p>Course Design</p> <ul style="list-style-type: none"> • Activities designed to minimise the risk of entanglement or entrapment. <p>Operating Procedures</p>		1	3	3

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RISK ASSESSMENT FOR GO APE, ADVENTURE FOREST LTD



	moving parts of the course					Safety brief (video, audio or Verbal) Long hair tied up				
	Unauthorised Users	2	3	6		<p>Course</p> <p>Access to be</p> <ul style="list-style-type: none"> Secured overnight Secured when the course is unattended during the day A gate to be installed on the ground to control access. <p>Brief Site & Low Level Activities</p> <p>The site may be accessed by non-authorized users at any time either during opening hours or when closed.</p> <ul style="list-style-type: none"> To be built low to the ground Surrounding area to be cleared of hazards in the event of a fall Surface to be covered with wood peel to provide a fall surface 		1	3	3
	Plummet	3	3	9		<p>Manned by an instructor to ensure correct:</p> <ul style="list-style-type: none"> retraction of the tape (and monitor condition) attachment departure <p>Area secured when not in use</p>		1	3	3

Refs	<p>HSW Act 1974, MHSW regs amend 1999, WAH regs 2005, PUWER 1998, LOLER 1998, PPE regs 1992, Workplace HSW regs 1992, H&S (Safety Signs) regs 1996, First Aid regs 1981, Occupiers Liability Act 1984, EN 15567 – 2015+A1 2020(Construction and safety requirements) and EN 15567-2:2015 (Operation requirements), GAD = Go Ape documents, Setting up additional lines for adventure harnesses.</p>
	<p>Note 1: Control Measures - Where a control measure has been identified, it is only included once and not repeated under every serial number. Therefore, for a specific hazard identified, a control measure in a serial above may apply to that hazard. (HSE RA guidance.)</p> <p>Note 2: Instructors Training - Go Ape instructors must pass through a rigorous training and assessment programme before they can instruct on Go Ape. To be selected for training prospective instructors must demonstrate they have the requisite aptitude and experience. They then undergo training in safety instruction and procedures, operational limits on the use of the course, course inspections during daily course opening and closing, patrolling techniques, personal protective equipment, harness fitting and inspection, emergency operations, health and safety and customer management. Only instructors with experience and the correct aptitude are selected for additional training in rope rescue techniques.</p> <p>Instructors are first aid trained.</p>

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