

# RISK ASSESSMENT FOR GO APE, ADVENTURE FOREST LIMITED

## FALLS FROM HEIGHT FROM TREE TOP CHALLENGE SELF BELAY ROPES COURSE (formerly known as TTA)

RISK ASSESSMENT NUMBER TTC P1/01/19

### Go Ape 1

Reviewed by Operations Team and H&S Manager – April 2019

Next Review: January 2020

**Introduction:** The European Standard “Sports and recreational facilities – Ropes courses” comes in two parts: EN 15567-1:2015 (Construction and safety requirements) and EN 15567-2:2015 (Operation requirements). AAIAAC in conjunction with the European Ropes Course Association (ERCA) produced an update to the “UK Ropes Course Guide” (Edition 4.1) in July 2015. The European Standard forms the basis for and is a key reference document for the Go Ape risk assessment.

Assessing risks is simple in principle. It involves identifying hazards or examining what in a particular situation could cause harm or damage and then assessing the likelihood that harm will actually be experienced by a specified population and what the consequences would be (i.e. the risk). The overall objective is to obtain a view on how to manage the risk or to compare the risk with other risks. At a conceptual level, it has proved useful to make a distinction between an assessment of the risks (the evaluation of the likelihood of harm and its consequences for populations or individuals as described above) and risk control (the prioritisation of risks and the introduction of measures that might be put in place to reduce, if not prevent, the harm from occurring). This stems from the belief that an assessment of risks by and large can be scientific and objective but risk control less so because it integrates the results of an assessment of risks with other critical inputs. ([www.hse.gov.uk/risk](http://www.hse.gov.uk/risk))

#### Step 1. Identify the Hazards.

<b>Step 2. Identify “Who may be harmed?”</b>	Course User	People who are taking part in the High Wire Activity Course
	Employees	All Adventure Forest Ltd Staff
	Public	The general public who are not actually taking part in the course (spectators or forest users).
	Contractors	People working for a company or individual contracted by Go Ape to work on or around the course, etc.

#### Step 3. Evaluate the Risk.

##### LIKELIHOOD

Very low	Definitely will not happen
Low	Unlikely to happen
Medium	Moderate chance of accident happening
High	Quite likely to happen
Very high	Likelihood will happen

##### CONSEQUENCE

Very low	Injury very insignificant i.e. splinters
Low	Injury fairly minor i.e. minor cut, grazes, bruising
Medium	Injury would stop casualty continuing with task.
High	Serious injury requiring medical assistance i.e. broken bones, deep cut
Very high	Very serious injury or possible fatality

**Step 4. Existing Control Measures <sup>2</sup>.** These are the measures we have put in place to keep the risk to an acceptable level. The Residual Risk (RR) is the level of risk that remains after putting all the control measures into practice.

##### RESIDUAL RISK

Very low	Minimal risk, control measure more than necessary
Low	Control measures satisfactory
Medium	Control measures adequate
High	Control measure requires constant supervision. Re-assess situation
Very high	Control measures inadequate. Stop activity

**Step 5. The Review Process.** Go Ape risk assessments will be reviewed when it is suspected that the assessment is no longer valid or there has been a significant change. In addition, they will be thoroughly reviewed annually.

Go Ape risk assessments are written in compliance with the Management of Health and Safety at Work Regulations and in accordance with HSE’s 5 Steps to Risk Assessment. The assessments are reviewed when it is suspected that the assessments are no longer valid or there has been a significant change. They are also reviewed annually. Go Ape recognises that risk assessments are fundamental in ensuring a safely run Tree Top Challenge Course. By continuous and dynamic assessment of risk by all Go Ape staff,

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adhering to the Go Ape operational and training systems<sup>1</sup>, risks are reduced to a reasonable level. To carry out daily risk management all staff must be able to fully understand the Risk Assessment procedure as detailed above.

This Risk Assessment is produced in accordance with the Chartered Institute of Environmental Health “Risk Assessment Principles and Practice” programme. This risk assessment looks at the risk of falls on the ropes course and groups the control measures into various categories (see “existing control measures in table below). The assessment refers to the Go Ape operational and training systems

### FALLS FROM HEIGHT FROM THE TREE TOP CHALLENGE, SELF BELAY ROPES COURSE

SER	HAZARD	LHD	CON	WHO MIGHT BE HARMED	EXISTING CONTROL MEASURES <sup>2</sup>	FURTHER CONTROL MEASURES	RR
1001	<p>Falling to the ground or onto another person or onto another part of the course or another object due to:</p> <ul style="list-style-type: none"> <li>• Unclipping from safety system then slipping, jumping or falling, either unintentionally or intentionally</li> <li>• Clipping on to the safety wire (system) incorrectly</li> <li>• Failure of part of the course infrastructure</li> <li>• PPE failure, incorrect selection, use, fitting, etc</li> <li>• Tree/pole failure, falling over or onto the course, etc</li> <li>• Slips and trips</li> </ul> <p>This could happen whilst opening or closing the course, operating the course, participating on the course, carrying out inspections or repairs or carrying out a rescue.</p>	Low	Very High	Employees Course Users Contractors Onlookers Trespassers	<p>See below. Control measures 1001 – 1010 categorised into:</p> <ul style="list-style-type: none"> <li>• admission controls</li> <li>• supervision</li> <li>• provision of information</li> <li>• training</li> <li>• course inspections</li> <li>• PPE provision</li> <li>• operational systems and controls</li> <li>• trees/poles</li> <li>• working on the course</li> </ul>	<p>See below. Nil currently.</p>	Low
1002	<b>Admission Controls</b>						
	<ul style="list-style-type: none"> <li>• Minimum age of 10 years, due to learning ability for attaching to safety system. Age confirmed on Risk Acknowledgement and Disclaimer (RAD). Booking Terms and Conditions (BTC). Website.</li> <li>• Minimum height of 4ft 7in / 1m 40 cm (wearing footwear) due to course construction and ability to attach to safety system due to height. Safety Rules (SR) “before starting”. Construction documents. Height markers installed at all courses. Instructors carry out check if unsure. BTC.</li> <li>• Maximum weight of 20.5 stone / 130 kg due to load limits of course (Altus construction file). Scales provided at sites. Information provided to customers on booking confirmation documents, SR “before starting” and website. Instructors carry out check if unsure. BTC.</li> <li>• Alcohol. Anyone who is deemed to be under the influence of alcohol or drugs is not permitted access onto the course. Instructor check. Training Manual (TM). BTC.</li> <li>• Existing physical injuries. Anyone who has an existing physical injury must inform the staff and complete a notification stating they are aware of the risks. Information provided on RAD. Policy: Notification of existing physical injury or condition. Operational document (OD). BTC.</li> <li>• Pregnancy Policy to recommend that pregnant people do not take part on the course. OD.</li> <li>• Accessibility. A document outlining Go Ape’s policy on participants with special needs is available to ensure such participants are attached at all times and have assistance and supervision levels as required. Policy available on website. Policy: Advice on Accessibility document. OD.</li> <li>• Unable to fit harness. The maximum waist measurement of the customer harness is 110 cm and leg loops is 70 cm (Gym) and &lt; 75 cm (Panji), waist 125cm and leg loops 80cm (Edelrid Radilalis Comp). Anyone who does not fit into a harness correctly cannot participate on the course. BTC. Instructor check. Policy: Don’t Fit Can’t Go. OD.</li> <li>• Anyone who does not comply with the SR and / or unattaches from the safety system will be / is removed from the course. Instructor patrol check. Red and Yellow Card Policy. OD.</li> </ul>						

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	<ul style="list-style-type: none"> <li>• Footwear: Anyone who does not have the correct footwear (e.g. unsuitable sandals) or clothing that may lead to a slip or a trip is not allowed onto the course. BTC. SR. Instructor check.</li> <li>• Assessments of course participants during the Safety Brief (SB) element, so that if a participant completes the first 3 obstacles incorrectly they are required to repeat the first 3 obstacles (e.g. site 1 ladder, crossing and zip); if they still fail to complete this part safely (i.e. they have not understood or cannot understand the safe system of completing the course on their own), they will be / are removed from the course (and offered a full refund). Instructor check.</li> </ul>
1003	<p style="text-align: center;"><b>Supervision</b></p> <ul style="list-style-type: none"> <li>• Supervision by instructors to comply with The EN Standard on levels 1, 2 and 3 supervision. E.g. direct supervision (level 1) provided at the training site (SR “supervision”).</li> <li>• Participating adults maintain in supervision of children in their care (UK Ropes Course Guide, The EN 15567-2:2015) and ensure the children read, understand and follow rules set out in SR and training provided by instructors. RAD. SB.</li> <li>• Supervision ratios implemented whereby a participating adult accompanies under 16 year olds (this was changed for 2015 season). One participating adult is permitted to supervise up to two 10-15 year olds. (Changed for 2007 season after advice). This is to ensure under 16’s remain attached to the safety system and follow the safety rules. SLE Worldwide risk survey. SR. Instructor check.</li> <li>• 16-17 year olds are responsible for their own supervision but will not be permitted to supervise any under 16 year olds. 16-17s are deemed to be mature enough to understand the safety rules and the importance of following them.</li> <li>• 10-15 year olds must be under direct supervision and the supervising adult must be able to see attachments at all times and they cannot be more than 1 platform in front of or behind the supervising adult. SR. SB. UK Ropes Course Guide and The EN Standard draft 2015. SB.</li> <li>• Supervision of under 16’s (e.g. by another person who has not signed for them or from the ground) must follow the Supervision Policies. OD. There must be a handover of responsibility and paperwork is signed to acknowledge this. Patrolling instructor check.</li> <li>• Under 16’s are to be no more than 1 crossing away from their supervising adult. SLDC EHO advice. SB. In order to assist with this the decision was taken in 2005 to allow the number of course users on a platform to be increased from 2 to 3. SLDC EHO advice. SB. Patrolling instructor check.</li> <li>• Supervising adults who need glasses to drive are advised to wear them when participating on the course so they can clearly see. BTC. SR.</li> <li>• Site 2, first 5 obstacles monitored by an instructor under level 2 supervision, paying particular attention to change overs. EN(2).</li> <li>• Regular patrolling of the course, by an instructor, to take place whenever anyone is on the course to ensure they are safe and completing the course correctly and are not in difficulty. Site Managers complete a Site Patrolling Method Statement. Ops team audit check.</li> <li>• Site specific patrol plans written by Site Manager to identify areas where more / less supervision is required.</li> <li>• Only competent instructors are allowed to give a SB; this is to ensure they do not forget essential information and can handle difficult groups when under pressure. This is checked by initial then periodical SB assessments, which are recorded. Training records. OD.</li> <li>• Accessibility Policy for those with special needs who may require additional supervision whilst on the course to ensure they remain attached to the safety system at all times. Available on the website. OD.</li> </ul>
1004	<p style="text-align: center;"><b>Provision of Information</b></p> <ul style="list-style-type: none"> <li>• Provision of suitable and sufficient information and training to course participants to ensure they, and any children under their supervision, are safe on the course. This information is provided in a number of ways including on the website, in the Go Ape Booking Terms and Conditions, at the course (through specific customer safety literature e.g. RAD and SR and the verbal instructor delivered SB) and includes explanation of; inherent risks, supervision, PPE and adjusting, demonstration, the need to always stay attached, course signs, communication - see BTCs sent to all who have booked in advance, RAD completed by all participants 16 years and over. SR which is read by all course participants, Instructors SB given to all course participants. (For example this includes advice to the supervising adult to descend the zip wire last to ensure 10-15 year olds are clipped onto the safety system correctly before descending.) EN(2). BTC, RAD and SR and this Risk Assessment available on the website.</li> <li>• SR available in a number of languages including English, Czech, French, German, Italian, Polish, Portuguese, Spanish and Welsh. SR.</li> <li>• Participants of 16 yr olds or older are informed that they are personally responsible for ensuring they are attached to the safety system at all times. BTC. SR.</li> <li>• Participants who are supervising children are informed that they are personally responsible for ensuring the children follow the SR and are correctly attached to the safety system at all times and if they are not prepared to do this they do not need to proceed. SR. SB. Signage on Site 2 stockade door.</li> <li>• Participants are told and reminded to always stay / remain attached to the safety system when at height. SR, SB, Signage.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Safety signage is on course reminding course participants to remain attached to the safety system; also signage (colour coded obstacles) giving difficulty level of obstacles so that participants can avoid hardest “black” obstacles. Safety Signs and Signals Regs. EN(1). Course inspection check.</li> <li>• Participants who are supervising children are informed that having completed the training site they will no longer be supervised by an instructor and will be responsible for their own safety and the safety of any children in their care and if they do not want to proceed further they can return to the cabin and will receive a full refund. SB. Safety sign to be attached to stockade 2 door.</li> <li>• Safety signage at zip wire landings warning people to keep out of zip wire areas due to participants descending at speed. Safety Signs and Signals Regs. EN(2). Course inspection check.</li> <li>• On the Tarzan Swing, additional signage is supplied so that course users understand how to complete the activity correctly. A training Tarzan Swing rope is to be used during the initial SB training. SB. EN(1).</li> <li>• All incidents are recorded and reviewed on a regular basis with an annual report being provided so lessons can be learnt and changes made where identified. Head of Health &amp; Safety.</li> </ul>
1005	<p style="text-align: center;"><b>Training</b></p> <ul style="list-style-type: none"> <li>• A TM with a Training and Assessment Policy (OD) and accompanying presentations (some including film) are maintained, up to date, and reviewed annually with relevant TOs by the Customer Experience and Site Teams (AM’s).</li> <li>• Instructor training <sup>3</sup>. Instructors must be competent at working on the course and have completed all required training demonstrating they are competent, as stated by an assessment procedure laid down in the TM. Individual training records are maintained by the Site Manager. WAH Regs. Ops team audit checks.</li> <li>• Instructors must be competent at delivering the SB to course participants in order to be able to do so. The SB (and assessments). OD. WAH Regs. EN(2).</li> <li>• Instructors SB Assessments by competent person ensure instructors are including all the correct critical safety information in the SB. Training records. Ops team audit check.</li> <li>• Training then assessment of course users to ensure they are safe to complete the course and understand that they must remain attached at all times. WAH Regs. EN(2).</li> <li>• 4 stage Training Session to drip feed critical information, starting participants off at ground level and slowly gaining height:             <ol style="list-style-type: none"> <li>1. Course users read SR at office in a calm environment (not under pressure) and complete RAD.</li> <li>2. Course users trained in how to use PPE and attach to the safety system (at ground level) whilst wearing PPE. (Note: in 2011 the system was changed to include an initial self learn process through the use of signage, SR “your kit”). SB.</li> <li>3. Demonstration on how to safely negotiate the course (off ground, low level). Assessment: Course users must demonstrate safe use and competence before being allowed to continue. EN(2).</li> <li>4. Course users are monitored while completing the next 5 elements and must be within instructor’s field of view so any mistakes can be identified and rectified. Monitoring of Site 2. OD. EN(2).</li> </ol> </li> <li>• Specific additional training is provided at ground level for the correct use of the Tarzan Swing. Where Site 2 Tarzan Swing cannot be seen or used when walking to Site 1, an additional training sign is used at the SB. Ops team audit checks.</li> <li>• Specific additional training is provided on Site 1 for the correct use of Zip Wires. SR. SB.</li> <li>• A Rescue Policy, Rescue Training and Rescue Procedures document (OD) is maintained by the Customer Experience Team detailing rescue procedures, training requirements, equipment and checks that are to be carried out.</li> <li>• A minimum of one qualified rescue trained person (Manager or Instructor) is available whenever there is anyone (employee or course user) at height. A rescue bag is available, maintained with the correct equipment and checked regularly. Rescue procedures (see separate risk assessment). WAH Regs. Rescue Policy, Rescue Training and Rescue Procedures. OD.</li> <li>• Instructors are trained in the correct fitting and basic inspection of PPE to ensure they are safe for course participants and they cannot fall out of the harness and the harness is in good order and will not break. OD. PPE Regs. TM.</li> <li>• Site Managers undergo a 1 day PPE inspection course so they are competent to inspect Go Ape PPE. Customer Experience Team check.</li> <li>• All Managers and instructors are trained in the correct use of ladders for access and egress from the course to ensure they do not fall whilst climbing a ladder. TM.</li> <li>• During initial training of instructors ascending zip wires, brake lines are used.</li> <li>• Duty Managers undergo further training to ensure they are competent to operate the course when the Site Manager is not at site. DMT package. OD.</li> <li>• All training is recorded on the individual “Staff Training Record” by the Site Manager or Rescue Trainer. Site Teams audit checks.</li> </ul>

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1006	<p style="text-align: center;"><b>Course design, inspections and checks</b></p> <ul style="list-style-type: none"> <li>• Courses are designed and constructed in compliance with EN Standard, including choice of materials, loads, support systems, marking, inspection and maintenance and documentation. Inaugural and annual inspection check.</li> <li>• The course is designed so that there is a stockade surrounding the access ladders, with a secure coded door lock and self-closing hinges so that an onlooker (perhaps young) cannot access the ladder and climb up onto the course (without wearing the appropriate PPE and having received instruction).</li> <li>• The course is designed so that the safety system that course users attach to is easily identifiable, by being colour coded red. This includes placing a red buffer at each end of a crossing. This is referred to in the SB. EN(1).</li> <li>• Before a course is inaugurated, it is to be inspected by an appropriately qualified Type A inspection body (ISO 17020). EN(1).</li> <li>• Pre-use course checks and routine visual inspections are carried out by instructor when opening up the course to ensure the course is safe to use and no overnight damage has occurred. This is completed from the base of the zip wire where possible so any overnight vandalism can be checked. This includes checking correct functioning of stopfalls and condition of the safety system and obstacles. WAH Regs. EN(2). Opening up procedure TM.</li> <li>• Periodic site operational checks (2 monthly) are carried out and recorded by the Site Manager or a competent person appointed by the Site Manager. The course check reports are regularly reviewed by the AM. EN(2). Ops team audit checks.</li> <li>• Annual periodical inspection of the course, including the Tarzan Swing, ladder halos, all anchor points and points used for rescues, by a competent person / company (Type C, ISO 17020). A qualified inspector carries out this inspection, and a report is submitted. LOLER &amp; PUWER Regs. EN(2).</li> <li>• Records of inspections and examinations, maintenance, testing and certificates of conformity are maintained. Daily Report and Monthly Course Inspection. WAH Regs. Ops team audit checks.</li> <li>• Following high winds, snow and lightning the course must be checked thoroughly for any damage, initially from the ground and then on the course, prior to opening the course to participants. Hazards Caused by Cold Weather. OD. Advice to Duty Managers on Damage to Courses. OD.</li> <li>• Inspection records are audited by the AM when sites are open.</li> <li>• Tarzan Swing inspection is carried out by Site Managers. Method Statement for Inspecting Tarzan Wire. OD.</li> <li>• Wire rope is inspected for breaks during course checks. Wire Rope Replacement Policy. OD.</li> <li>• Hauling systems and bracing wires are either inaccessible to participants or clearly identified as not being a safe connection point. Bracing wires have a device that prevents misuse or uncontrolled descent (e.g. either out of reach so customers cannot attach with their PPE or a no entry disc with wire rope grip). EN(1). Annual inspection check.</li> </ul>
1007	<p style="text-align: center;"><b>PPE provision and checks</b></p> <ul style="list-style-type: none"> <li>• Effective procurement and management system, using reputable suppliers to ensure all PPE is of the correct standard (CE marked, etc) and design and has correct information provided for use and is therefore safe and appropriate for its intended use. PPE Regs.</li> <li>• Advice on selection of correct PPE that is fit for purpose and is sought from industry experts and suppliers.</li> <li>• All equipment must be / is used correctly as directed by manufacturers' guidelines. A copy of each new batch of PPE's manufacturing guidelines is to be kept on the PPE file. EN(2).</li> <li>• PPE compatibility policy (where more than 1 item of PPE is being worn); to be checked by an area/operations manager, who has undertaken the 4 day PPE inspection course and who must seek advice from reputable suppliers on compatibility. This ensures that it is safe for two pieces of PPE to be used together in a system and applies to chest harnesses and fall arrest lanyards, etc. PPE Regs.</li> <li>• PPE must be / is assembled correctly and correct procedures are included in the OD. SM check.</li> <li>• When moving away from a stable platform, when crossing / using a dynamic obstacle, the PPE system of attachment to the safety system has a back up so if one element of the PPE is attached incorrectly, there is always a backup (e.g. Tarzan Swing).</li> <li>• All PPE is checked for faults prior to first use (from the manufacturer) PPE Regs. SM check.</li> <li>• PPE inspections are carried out and recorded every two months by the Site Manager or a trained person appointed by the Site Manager. The equipment reports are regularly reviewed by the AM. Where PPE is thought to be defective it is placed in the quarantine box until examined by a qualified PPE inspector. Faulty PPE is returned to the supplier for repair or replaced. PPE Policy. PPE Regs. Stopfalls are serviced and inspected as detailed in the specific stopfall service statements. OD.</li> <li>• PPE is visually checked prior to and after each use by instructors. This includes harnesses and rescue equipment, which is inspected by a trained instructor to ensure it, is safe to use. PPE Regs. EN(2B).</li> <li>• PPE is examined annually by a competent and trained person who has attended an appropriate 4 day PPE course. PPE Regs. EN(2). Customer Experience team check</li> </ul>

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	<ul style="list-style-type: none"> <li>• PPE is stored in a dry, clean area, away from any chemicals. PPE is cleaned and dried as detailed in the manufacturers' guidelines. PPE Policy. PPE Regs. EN(2B).</li> <li>• All PPE is documented and logged by the Site Manager, including inspection and maintenance records. These records are checked periodically during the site audit by the Ops team. PPE Regs. EN(2B).</li> <li>• The Site Managers ensure that all instructors are trained in the correct fitting of PPE, its operation and its operating limits, inspection of the PPE and record the training on the individual staff "Training Record Sheet". PPE Regs.</li> <li>• A selection of lanyards are break tested periodically to ensure that they are still strong enough and suitable for the purpose. This is controlled by the Customer Experience Team.</li> <li>• A trained instructor checks all course participants' harnesses before they go onto the course to ensure they are correctly fitted. EN(2). TM.</li> <li>• If a course user removes their harness for a rest break or toilet break, they must be checked for correct fitting prior to the course user returning onto the course. EN(2).</li> <li>• Patrolling instructors carry out visual checks to ensure that PPE is still fitted correctly and has not slipped or moved so that it is unsafe.</li> <li>• Full body harnesses are fitted to course users who: have little or no hip definition whereby a normal sit harness may slip off their hips; are top heavy and may invert in a sit harness (this includes course users with large bellies, chests or slim hips). BTC. EN(2).</li> <li>• Only PPE approved by the Operations Manager for equipment is used on a Go Ape course. Personal PPE must not be / is not used, (except in exceptional circumstances by a contractor – clearance for this is required from the Operations Manager for equipment</li> <li>• Helmets are worn for all construction work, rescue training and 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).</li> <li>• A number of senior managers are competent to carry out thorough examinations of PPE and to that end must have attended a 4 day PPE inspection course. Operations Manager for equipment check.</li> <li>• Site Managers complete a 1 day PPE inspection training course so they can identify problems with PPE. Site Managers then train their instructors in PPE inspection and the identification of likely problems. The PPE inspection poster is displayed at all sites as a reminder. Site teams audit check.</li> <li>• Builders and contractors using their own PPE are responsible for ensuring it is fit for use and ensure that there is no scope for a fall due to faulty or incorrect PPE. They must provide a written undertaking that their PPE and systems of use meet PPE and WAH requirements.</li> <li>• Maillons on sit harnesses are tightened with a spanner so they cannot be undone by hand.</li> <li>• A PPE quarantine system is in place at each site so PPE identified unfit for use on the course does not enter circulation. AM check. TM.</li> <li>• In 2010, colour coding of PPE was introduced to make the training and use of PPE more obvious to participants.</li> </ul>
1008	<p style="text-align: center;"><b>Operation systems and controls of the course</b></p> <ul style="list-style-type: none"> <li>• Courses are operated in compliance with EN Standard Part 2 to include documentation, participant information, safety instruction, equipment, supervision, inspection and maintenance and emergency plans and where not written mitigation is to be provided. EN Part 2.</li> <li>• The system for clipping onto the safety system throughout the course has a backup (except when making a changeover on a stable platform), so that a "junction" can be passed without completely unclipping. Therefore, two lanyards are used. Likewise, in rescues there is a backup safety system. Rescue Procedures. In 2004 the system of clipping on to the pulley and safety wire was changed to allow a double back up system with inbuilt redundancy.</li> <li>• Operating restrictions of 3 customers per platform and 1 customer per obstacle to ensure elements are not overloaded and there is not overcrowding but to allow for correct supervision. Patrolling instructor check.</li> <li>• In lightning, high winds, heavy ice and snow, the course is evacuated and closed. Emergency Evacuation Procedures OD. DMT.</li> <li>• Whilst on the course, the use of mobile phones as telephones is not permitted as this can lead to distraction and unclipping from the course. Mobile phones can be used to take photographs but should be / are secured to the user to prevent them falling. Cameras should be / are also secured. Lanyards available. This is at the managers discretion. SR. SB. Instructor check.</li> <li>• When the course is "closed", the ladders allowing access onto the course are lifted up onto the platforms and locked so that trespassers cannot access the course. The Tarzan Swing rope and the Tarzan Net, where it is below 4.5 metres, is also raised and locked. Occupiers Liability Act. Closing a Course TM.</li> <li>• Where there are ground launch zips, a mechanism is fitted when the course is not in operation to reduce the chance of overnight access. Construction Manager check. Duty Manager daily check.</li> <li>• A door closing mechanism is fitted to stockade doors so that children do not access the course without the correct safety equipment and supervision. SB. Site Teams audit check.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Any tasks being undertaken apart from the normal day to day running of the course (opening, closing) must be / are carried out by a minimum of two people; this includes any work involving moving obstacles or moving off the normal route of the course (platforms and wires) including changing the Tarzan net. Method statements.</li> <li>• Instructors patrol the course regularly and are available to assist course users where necessary.</li> <li>• Changes made to the course to improve safety against falls from height include:             <ol style="list-style-type: none"> <li>1. All Bosuns chair hand rope have been increased in size so that course users do not inadvertently attach to it as it is not load tested and is not part of the safety system of the course and may break if loaded by a person. The rope diameter must not allow a karabiner to be easily attached to it. Knots in the Bosuns rope can also be used to achieve this.</li> <li>2. All Tractel Blocfor's used as a backup for climbing ladders when changing height on the course were replaced with Cabloc for the 2006 season and then by Protectman in 2007. ALFs were introduced from 2011.</li> </ol> </li> <li>• Tarzan assists are completed from the ground rather than by accessing the course wherever possible. All customer assists are initially from the ground, then the platform prior to rescuing from obstacles, unless an instructor is already at height. WAH Regs.</li> <li>• Lone Working Radio Procedures (OD) during opening and closing of the course so instructors' locations are known.</li> <li>• There is to be no racing around the course due to the possibility of mistakes and shortcuts being made at changeovers. A challenge can be introduced whereby people are fully attached to the safety system and then are timed from leaving one platform to arriving at another (but no manipulation of the karabiners is required).</li> <li>• Whistles are supplied on harnesses to allow customers to alert instructors if there are problems. SB.</li> <li>• First aid supplies are available and there is a minimum of 1 First Aid qualified member of staff on duty each day. First Aid Regs. First Aid Policy.</li> <li>• Emergency evacuation procedure are produced by Site Managers for each course and included in the training to ensure safe course evacuation should it be required.</li> <li>• Guidelines are available for organisations wishing to conduct filming at height. Filming Guidelines OD.</li> <li>• Area Managers introduced in 2009 to standardise operating procedures, conduct site audits and checks and to advise Site Managers to ensure high levels of compliance to training and operating procedures.</li> </ul>
1009	<p style="text-align: center;"><b>Trees/Poles</b></p> <ul style="list-style-type: none"> <li>• Prior to a new course opening all trees that form part of the course must be / are inspected for stability and disease by an independent qualified arboriculture expert and a report submitted. EN(1).</li> <li>• All trees are inspected annually by an independent qualified arboriculture expert and a written report of these inspections is to be kept. EN(1).</li> <li>• System for monitoring trees where a potential problem has been identified by the arboriculturalist, including a photographic record where necessary. Tree Monitoring and Reporting OD.</li> <li>• Measures are taken to protect tree roots from compaction (e.g. using woodchip or fencing off). EN(1).</li> <li>• Wooden and metal poles used as part of the safety system are inspected as part of the periodic site inspections (2 monthly) and also annually by an appropriately qualified inspection body (ISO 17020). EN(1)</li> </ul>
1010	<p style="text-align: center;"><b>Working on the course</b></p> <ul style="list-style-type: none"> <li>• When maintenance is taking place on the course either by Altus or Go Ape personnel the relevant training documents for the maintenance being undertaken must be adhered to. Altus Health and Safety Guidebook. Go Ape CDM. OD.</li> <li>• When work is taking place on the course, the area below must be / is cordoned off, including provision of danger and exclusion zones, so that onlookers do not stray into the area. EN(2).</li> <li>• Managers and instructors working on the course from time to time, either carrying out maintenance or inspections are to follow the correct procedures and method statements, including during the following tasks: inspecting the Tarzan wire, changing Tarzan pulley, changing the bungee on the Tarzan net, flipping the Tarzan net or making changes to other obstacles. At all times to remain attached to the safety system. A short or dynamic risk assessment to be carried out prior to completing the task. Go Ape Short Risk Assessment OD.</li> <li>• Where repairs are carried out at height, there is to be no lone working and each job should be risk assessed including the correct use of PPE and attachment of tools.</li> </ul>

References: HSW Act 1974, MHSW Regs amended 1999, WAH Regs 2005, PUWER 1992, LOLER 1998, PPE Regs 1992, Workplace HSW Regs 1992, H&S (Safety Signs) Regs 1996, First Aid Regs 1981, Occupiers Liability Act 1984, HSE 5 Steps to Risk assessment INDG 163(rev3), HSE A Guide to Risk Assessment requirements INDG 218

## RISK ASSESSMENT FOR GO APE, ADVENTURE FOREST LIMITED

(discontinued), European Standard for ropes courses EN 15567 Part 1 and Part 2, HSL “Guide to good practice in safety management of aerial ropes courses March 2010. AAIAC “UK Ropes Course Guide” (3<sup>rd</sup> edition) March 2011. HSE Information Sheet Entertainment Sheet No 14 & 15 (withdrawn 2009), Go Ape GAD, OD, TM.

**<sup>1</sup> Go Ape operational and training systems.** These include the following: Go Ape Operations manual(OD) and Appendices on how to run a Go Ape course, Go Ape Training Manual including training and assessment policy, online training, training objectives, generic PowerPoint presentations and training videos, Go Ape Duty Manager Training (DMT), Go Ape Rescue Package (RP), Go Ape Company Handbook and further library documents listed on the Document Library (OD).

**<sup>2</sup> 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.)

**<sup>3</sup> Instructors Training.** Go Ape instructors must pass through a full training and assessment programme before they can instruct on Go Ape. They undergo training in accordance with the Go Ape Online Training / Manual, training and assessment policy and training objectives which includes the delivery of safety instruction, operational limits on the use of the course, course inspections during daily course opening and closing, supervision and patrolling techniques, personal protective equipment, harness fitting and inspection, emergency operations, health and safety and customer care. Instructors are First Aid trained. Only instructors with the correct aptitude are selected for additional training in rope rescue techniques. Go Ape’s rescue procedures have been developed in conjunction with an external specialist technical advisor who holds the Mountaineering Instructors Certificate and the European Mountain Leader Award (rescue procedures updated in 2005 by Berwyn Evans MIC). Training and assessment of rescue trained instructors is only carried out by our trained and qualified persons, who have been formally assessed as competent to do so by the Operations Manager responsible for training. Duty Managers complete an additional Duty Manager Training package. Site Managers attend annual Managers Training and quarterly Managers Meetings where they are updated on any operational changes including training requirements.

### Abbreviations:

AM = Go Ape Area Manager

BTC = Go Ape Booking Terms and Conditions

DMT = Duty Manager Training

EN(1), EN(2) = European Standard Part 1 (Construction and safety requirements), Part 2 (Operation requirements)

GAD = Go Ape Company Handbook and further library documents listed on the Document Library

OD = Go Ape operational Documents (including Operations Manual; exact titles of documents may change from time to time)

RAD = Risk Acknowledgement and Disclaimer

RP = Go Ape Rescue Package

SB = Safety Brief

SR = Safety Rules

TM = Go Ape Training Manual including training and assessment policy, online training, training objectives, generic PowerPoint presentations and training videos

The EN Standard / EN (1) / EN (2) = The European Standard “Sports and recreational facilities – Ropes courses” comes in two parts: EN 15567-1:2015 (Construction and safety requirements) and EN 15567-2:2015 (Operation requirements)