

Glossary of terms

Duty of Care	Everyone is required to take reasonable care in any situation in which harm to someone else could be foreseen.
Standard of Care	This is judged as the level of competence associated with the proper discharge of one's professional duties.
In Loco Parentis	The standard of care of a teacher for any student (under 18) is set at that of a prudent parent but judged in the context of a school where a teacher has responsibility for more pupils than would a parent at home. This responsibility cannot be delegated and applies to all activities and in all situations organised by the school whether in lesson time or after, on or off the school premises.
Higher Duty of Care	The standard of care expected with increased experience and specialist expertise where, through training or experience, one may be expected to visualise more clearly the results of one's actions in one's area/s of specialism.
Statute	Legislation created by Parliament in which rules of conduct for the protection of society remain in force until repealed. Statute law is binding on all courts and takes precedence over all other sources of law. Cases involving statute establish criminal liability and are usually initiated by the police or by a delegated agency such as a local council on behalf of the Health and Safety Executive. Penalties include fines and imprisonment.
Regulations	Statutory instruments - sometimes called Regulations - provide the administrative detail for statute law. These set out the rules for how the law is to be applied and carry the force of law. Parliament delegates responsibility for devising the detail of Regulations/Statutory Instruments to specific authorities such as Ministers of State or the Health and Safety Executive.
Approved Code of Practice	This is detailed guidance on how to implement legal requirements. ACOPs are advisory and do not have a formal legal standing but are used as benchmarks by the courts.
Common law	General principles based on judges' decisions and historical local customs which have become formalised over the years to provide case law precedent for areas not covered by statute. This is principally concerned with civil liability involving private parties in which damages are sought, usually in the form of financial compensation.
Negligence	Acts or omissions by someone with a duty of care in which this is breached by falling below the standard of care required in the circumstances to protect others from the unreasonable risk of harm. The three concepts of duty, breach and harm are more simply expressed as having a responsibility, being careless which results in injury or death.
European Law	European law impinges on us through membership of the European Union. Directives require member countries to introduce standards which may not be enforced originally in the separate countries - this leads towards progressive harmonisation of laws within the member states. The European Union also has the power to issue regulations which are binding on each member state. The difference is that Regulations automatically become the law in the member states whereas Directives may be brought into effect either by creating new Acts of Parliament or by implementing Statutory Instruments/Regulations. An enabling Act of Parliament (enabling delegated legislation such as

Health & Safety at Work Act 1974	Regulations to be created for particular situations) which focuses on accident prevention by setting out minimum standards which are enforceable by fines or imprisonment. This Act aims to secure the health, safety and welfare of those at work and to protect others not at work against risks to their health and safety arising out of the activities of those at work. Employers must provide safe facilities, equipment, systems and training where necessary.
Occupiers Liability Acts 1975 & 1984	An Act of Parliament but only used in association with civil claims such as negligence. This Act imposes a duty of care on those in control of premises to ensure that visitors are reasonably safe in the premises for the purposes for which they were invited or allowed to be there by the occupier.
Children Act, 1989	A major Act based on protecting the interests of children, particularly those in care. It places particular responsibilities on those with 'substantial access' to children which may provide opportunities for abuse. Those with substantial access need to obtain criminal clearance from the police before working, often independently, with children. This vetting is purely to establish their suitability to work with children.
Activity Centres (Young Persons Safety) Act, 1995	Commercial providers of climbing, watersports, trekking and caving activities in remote or isolated areas for young people under 18 years of age are required to undergo inspection of their safety management systems and become registered as being licensed.
Management of Health & Safety at Work Regulations, 1992	Detailed legal standards which require the planning, organising, controlling, monitoring and reviewing of the arrangements for the management of health and safety. Regulation 3 makes risk assessment and the taking of appropriate action a requirement. The Regulations were introduced as a result of European Directive 89/391/EEC.
The Report of Injuries, Diseases or Dangerous Occurrences Regulations, 1985	Delegated legislation requiring the reporting to the Health and Safety Executive of particular categories of serious injuries.
The Package Travel, Package Holidays & Package Tours Regulations, 1992	These apply to everyone regularly organising packages and are aimed at commercial companies, although they could impinge on everyone. The purpose is to protect customers against tour operators' inaccuracies and insolvency, by making the organiser or retailer strictly liable for the contract details being carried out. They set out what information must be provided about a package in brochures, other advertising material and contracts.
Contract	An agreement recognised in law that shows a legally binding agreement was intended, a firm agreement was read ie. an offer was made and accepted and some specific provision was agreed. Action against a breach of contract is usually to sue for compensation.
The Adventure Activities Licensing Regulations, 1996	A statutory licensing scheme applying to those who offer remote climbing, watersports, trekking and caving activities to young people under the age of 18 years and who operate in a commercial manner. From 1 October 1997, it became a legal requirement that only licensed activity providers will be able to offer such activities on a commercial basis. Licenses are issued upon evidence of adequate safety management.
Guidance to the Licensing Authority on the Adventure Activities Licensing Regulations, 1996	Detailed non-statutory guidance provided by the Health and Safety Executive - £9, tel 01787 881165 - to enable the Adventure Activities Licensing Authority to operate effectively and to help others understand the requirements in relation to the standards for equipment, tuition and management.
Guidance to Local Authorities on the Adventure Activities Licensing Regulations, 1996	Detailed non-statutory guidance provided by the Adventure Activities Licensing Authority to help interpret the 1995 Act for the benefit of Local Authorities - tel 01222 755715.

ASSESSMENT OF HEALTH AND SAFETY

14. Essential features in a positive safety culture.
15. Workplace Health and Safety Inspections and Audits.
16. Five steps to risk assessment.
17. Health and Safety inspection checklist.
18. Office inspection checklist.

1. Essential Features in a Positive Safety Culture

According to the Confederation of British Industry (CBI), who carried out a study into Safety Cultures in various organisations, the following factors are essential if a possible culture is to be developed.

Feature	Tick [✓] if present in your establishment
Senior Management Commitment Manager to health and safety.	
Visible, genuine leadership on health and safety issues.	
Health and Safety being treated as seriously as other aims and being properly resourced.	
Acceptance that health and safety is a Long-term Issue and not merely "flavour-of-the-month".	
A Safety Policy which contains high expectations and optimism about what can be achieved with regard to health and safety.	
Health and Safety being treated as a Line Manager Issue in the school, with all staff being aware of their Personal Responsibilities.	
Realistic and Achievable Targets being set and performance being measured against them, in relation to health and safety.	
Employee Participation in health and safety issues, with ownership of health and safety permeating to all levels in the establishment.	
Ensuring good Safety Behaviour is a condition of employment and that consistency of behaviour is achieved by auditing against agreed standards.	
Staff Training in health and safety.	
All accidents and incidents being thoroughly investigated, with the emphasis being on finding the root causes and introducing the necessary controls to prevent recurrence.	
An adequate Health and Safety Information System which ensures updated information is made available to relevant staff members.	

2. Workplace Health and Safety Inspections and Audits

INTRODUCTION:

Workplace inspections have long been recognised as a valuable tool available to management to monitor the effectiveness of health and safety procedures relating to work processes and practices. Inspection for health and safety purposes often has negative implications associated with fault finding. A positive approach based on fact-finding will produce better results, and co-operation from all those taking part in the process. Some experts believe that “assurance” is a better description of the activity there is a need to assure that the system is working properly (safely). To be effective, inspection of this type needs measurement of how good or bad things are, which can then be compared with standards set either locally, or nationally. Corrective action can then be taken.

The key objectives on inspections are:

- i) To identify hazardous conditions and start the corrective process.
- ii) To improve operations and conditions.

For any inspection to be a success, knowledge of the plant or facility is required, also knowledge of applicable regulations, standards and codes of practice. Some system must be followed to ensure that all relevant matters have been considered, and an adequate reporting system must be in place so that necessary remedial action can be taken and also to ensure that the results of the inspection are available to management.

TYPE:

Safety inspections and audits may take a number of different forms, and in very general terms may be classified as follows:

- SAFETY TOURS
- SAFETY INSPECTIONS
- SAFETY AUDITS

NB: The Health and Safety Commission (HSC) support the view that formal safety inspections should be carried out by the employer and employee representatives. The Safety Representative Regulations 1977 were put in place to ensure that employees are given this opportunity.

Safety Tours

Safety Tours may be seen as the first stage in the inspection process. A “Safety Tour” will normally take the form of a “walk around” the work area(s), taking note of any general observations relating to health and safety matters.

Safety Inspections

Workplace safety inspections are normally undertaken against set objectives. The general overriding objective being to ensure that “hazards are controlled within acceptable risk levels” by maintaining established safety standards.

Inspections normally take the form of the “walk around”, which could include making comments at the time to the persons responsible in the area the hazard is observed, as well as taking notes so that non-compliances can be recorded and processed in accordance with the “safety plan”.

The “inspector” should take a copy of their inspection form with them when they are carrying out the inspection. When a fault or non-compliance is found, the action to be taken, and who this action should be taken by, should be entered on the inspection form. Wherever practicable, immediate corrective action should be taken. The health and safety co-ordinator, or other person carrying out the inspection, will need to check previous inspection reports to ensure that any corrective measure identified as being necessary in the last inspection have been taken. Outstanding items should be recorded on subsequent reports to facilitate such checks.

The health and safety inspection should cover, where applicable, areas of work and hazards such as those listed below in the *Health and Safety Inspection Checklist* (sample contents for an inspection form). The items included in the model are set out as an “inspection checklist” which, though not exhaustive, should enable personnel not experienced in carrying out inspections to fulfil their task. Since no two organisations’ (departments) activities, products and premises are the same, the checklist should be adapted to produce an inspection form relevant to the specific location being audited.

Safety Audits

The word “audit” is used to describe many processes which may be vastly different in their objectives and therefore content. In this publication, “audit” is used in the context of the health and safety plan. The “walk around audit”, or other check whose purpose is to determine whether the health and safety policies of the company are being properly implemented and to identify areas in which policy effectiveness needs to be improved, is described as a health and safety “inspection”.

The term “audit” may be used by other individuals or publications to describe a combination of these two processes, or to describe a process which has an objective or content that is different to either of the above mentioned “audits”. Typically, the objectives of auditing are to inform the organisation (department) how well it is performing in health and safety, whether managers and others are meeting the standards which the company has set itself and whether the organisation (department) is complying with the health and safety laws which affect its operations with the view to the organisation making any improvements identified as necessary from this information. The style and content of a health and safety audit, i.e. how the organisation (department) chooses to break down and deal with these objectives, will depend on the hazards, and therefore the health and safety measures implemented to control the hazards, as well as the management style, within the individual organisation.

As with any system in any area of management, a health and safety audit should be kept relevant, simple and effective to avoid it becoming a burden and falling into disuse. To ensure that the audit is used and is useful, it is important at the outset to clarify the objectives of auditing and to set out in writing the responsibilities, procedures and form.

Audit of the Health and Safety Plan

The purpose of this audit is to establish whether the objectives included in the health and safety plan are realistic and to monitor the progress of the various individuals responsible for carrying out the changes. Not only the progress made in the existing plan can be audited, but also the contents and format of the plan. The more effort that is put into devising an effective plan for the organisation (department), the greater the benefits will be.

After any inspection, a report must be completed for the organisation, department or workplace. Typically, copies of the report will be needed so that action can be taken by relevant departmental managers (HoD), the director responsible for health and safety (Registrar), and the health and safety manager or co-ordinator.

Other Audits

There are numerous different styles of health and safety audit formal which reflect the wide range in current auditing practice. Practice ranges from the very basic "walk around" (described above under *Inspections*), to the use of one of the "rating system" proprietary type of audit which involves the application of letters or numbers to indicate for each audit item the level of compliance being achieved.

FIVE STEPS TO RISK ASSESSMENT

1. This leaflet is intended to help employers and self-employed people to assess risks in the workplace. It is aimed at firms in the commercial, service and light industrial sectors.
2. An assessment of risk is nothing more than a careful examination of what, in your work, could cause harm to people, so that you can weigh up whether you have taken enough precautions or should do more to prevent harm. The aim is to make sure that no one gets hurt or becomes ill. Accidents and ill-health can ruin lives, and affect your business too if output is lost, machinery is damaged, insurance costs increase, or you have to go to court.
3. Don't be put off by some of the words used in this guide.
 - 'Hazard' means anything that can cause harm (e.g. chemicals, electricity, working from ladders, etc.);
 - 'Risk' is the chance, great or small, that someone will be harmed by the hazard.

Step 1

Look for the hazards

- 7 If you are doing the assessment yourself, walk around your workplace and look afresh at what could reasonably be expected to cause harm. Ignore the trivial and concentrate only on significant hazards which could result in serious harm or affect several people. Ask your employees or their representatives what they think. They may have noticed things which are not immediately obvious. Manufacturers' instructions or datasheets can also help you spot hazards and put risks in their true perspective. So can accidents and ill-health records.

Step 2

Decide who might be harmed, and how

- 8 Think about people who may not be in the workplace all the time, e.g. cleaners, visitors, contractors, maintenance personnel, etc. Include members of the public, or people you share your workplace with, if there is a chance they could be hurt by your activities.

Step 3

Evaluate the risks arising from the hazards and decide whether existing precautions are adequate or more should be done

- 9 Even after all precautions have been taken, usually some risk remains. What you have to decide for **each significant hazard** is whether this remaining risk is high, medium or low. First, ask yourself whether you have done all the things that the law says you have got to do. For example, there are legal requirements on prevention of access to dangerous parts of machinery. Then ask yourself whether generally accepted industry standards are in

place. But don't stop there- think for yourself, because the law also says that you must do what is reasonably practicable to keep your workplace safe. Your real aim is to make all risks small by adding to your precautions if necessary. More information about legal requirements and standards can be found in the HSE publications *Management of Health and Safety at Work Approved Code of Practice and Essentials of Health and Safety* details of which are given at the end of this leaflet.

- 10 Improving health and safety need not cost a lot. For instance, placing a mirror on a dangerous blind corner to help prevent vehicle accidents, or putting some non-slip material on slippery steps, are inexpensive precautions considering the risks.
- 11 If you find that something needs to be done, ask yourself:
 - a) Can I **get rid of the hazard** altogether?
 - b) If not, how can I **control the risks** so that harm is unlikely?

Only use personal protective equipment when there is nothing else that you can reasonably do.

- 12 If the work you do tends to vary a lot, or if you or your employees move from one site to another, select those hazards which you can **reasonable foresee** and assess the risks from then. After that, if you spot any unusual hazard when you get a site, get information from others on site, and take what action seems necessary.
- 13 If you share a workplace, tell the other employers and self-employed people there about any risks your work could cause them, and what precautions you are taking. Also think about the risks to your workforce from those who share your workplace.

- 4 The important things you need to decide are whether a hazard is significant, and whether you have it covered by satisfactory precautions so that the risk is small. You need to check this when you assess the risks. For instance, electricity can kill but the risk of it doing so in an office environment is remote, provided that 'live' components are insulated and metal casings properly earthed.

How to assess the risks in the workplace

- 5 Don't be overcomplicated. In most firms in the commercial service and light industrial sector, the hazards are few and simple. Checking them is common sense, but necessary. You may have already assessed some of them – for example, if you use toxic or dangerous chemicals, you should already have made an assessment of the risks to health and precautions you

need to take under the Control of Substances Hazardous to Health Regulations (COSHH). If so, you can consider them 'checked', and write that down if you are making a written assessment. For other hazards, you probably already know whether you have machinery that could cause harm, or if there is an awkward entrance or stair where someone could be hurt. If so, check that you have taken what reasonable precautions you can do to avoid injury.

- 6 If you are a small firm and you are confident you understand the work, you can do the assessment yourself. If you are a larger firm, you could ask a responsible employee, safety representative or safety officer to help you. If you are not confident, get help from a competent source (see paragraph 19). But remember – you are responsible for seeing it is adequately done.

Step 4 Record your findings

- 14 If you have fewer than five employees **you do not need to write anything down**, but if you have five or more employees you must record the significant findings of your assessment. This means (1) writing down the more significant hazards and (2) recording your most important conclusions – for example, "Electrical installations: insulation and earthing checked and found sound", or "Fume from welding: local exhaust ventilation provided and regularly checked". You must also inform your employees about your findings.
- 15 **There is no need to show how you did your assessment**, provided you can show that:
- a proper check was made;
 - you asked **who** might be affected;
 - you dealt with all the obvious significant hazards taking into account the **number** of people who could be involved;
 - the precautions are reasonable, and the remaining risk is low.

Assessments need to be suitable and sufficient, not perfect. The real points are:

- **Are the precautions reasonable, and**
 - **Is there something to show that a proper check was made?**
- 16 Keep the written document for future reference or use; it can help you if an inspector questions your precautions, or if you become involved in any action for civil liability. It can also remind you to keep an eye on particular matters. And it helps to show that you have done what the law requires. There is a form with this guide which you may find helpful but, by all means, produce your own form if it suits you better.

- 17 To make things simpler, you can refer to other documents, such as manuals, the arrangements in your health and safety policy statement, company rules, manufacturers' instructions, and your health and safety procedures. These may already list hazards and precautions. You don't need to repeat all that, and it is up to you whether you combine all the documents, or keep them separately.

Step 5 Review your assessment from time to time and revise it if necessary

- 18 Sooner or later you will bring in new machines, substances and procedures which could lead to new hazards. If there is any significant change, you should add to the assessment to take account of the new hazard. In any case, it is good practice to review your assessment from time to time. Don't amend your assessment for every trivial change, or still more, for each new job, but if a new job introduces significant new hazards of its own, you will want to consider them in their own right and do whatever you need to keep the risks down.

Getting help

- 19 It is a legal requirement to assess risks. In the unlikely event that you get stuck on the assessment, your local health and safety inspector can advise you on what to do. You will find most of what you need to know about legal requirements and standards in:

Essentials of Health and Safety at Work (revision due 1994), ISBN 0 7176 0716X

but you might also find the following useful:

Management of Health and Safety at Work: Approved Code of Practice, L21, 1992, price £5.00. ISBN 0 7176 0412 8

101 Tips to a Safer Business, IND(G)123(L), 1992, free

ASSESSMENT OF RISK FOR

Company Name:

Company Address:

HAZARD

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following examples as a guide: -

- Slipping hazards (e.g. poorly maintained floors or stairs)
- Fire (e.g. from flammable materials)
- Chemicals (e.g. Battery Acid)
- Moving parts of machinery (e.g. blades)
- Work at height (e.g. from mezzanine floors)
- Ejection of material (e.g. from plastic moulding)
- Pressure systems (e.g. steam boilers)
- Vehicles (e.g. fork-lift trucks)
- Electricity (e.g. poor wiring)
- Dust (e.g. from grinding)
- Fume (e.g. welding)
- Manual handling
- Noise
- Poor lighting

WHO MIGHT BE HARMED?

There is no need to list individuals by name – just think about groups of people doing similar work or who may be affected, e.g.:

- Office staff
- Maintenance personnel
- Contractors
- People sharing your workplace
- Operators
- Cleaners
- Members of the public

Pay particular attention to:

- Staff with disabilities
- Visitors
- Inexperienced
- Lone workers

They may be more vulnerable.

List hazards here:

List groups of people who are especially at risk from the significant hazards which you have identified:

Writing your health and safety policy statement, 1989 (rev), price £2.00, ISBN 0 7176 0424 1

Selecting a Health and Safety Consultancy, IND(G)133(L), 1992, free

COSHH: A brief guide for employers, IND(G)136(L), 1993, free

Getting to grips with manual handling: a short guide for employers, IND(G)143(L), 1993 free

Personal Protective Equipment at Work: Guidance on Regulations, L25, 1992, price £5.00, ISBN 0 7176 0415 2

Display Screen Equipment Work: Guidance on Regulations, L26, 1992, price £5.00, ISBN 0 7176 04101

Whose risk is it anyway? (video (includes audio tape and literature) available from CFL Vision, PO Box 35, Wetherby, West Yorkshire LS23 7EX), 1992, price £12.98 while stocks last.

The publications listed above (except the video) may be obtained from:

HSE Books
PO Box 1999
Sudbury
Suffolk CO10 6FS

(Tel: 0787 881165, Fax: 0787 313995)

Alternatively, priced publications may be obtained from Dillons Bookstores, or ordered from branches of Ryman the Stationer or Ryman Computer Stores.

This publication may be freely reproduced, except for advertising, endorsement or sale purposes. The information it contains is current at 1/4. Please acknowledge the source as HSE.

	Assessment undertaken (date)
	Signed
	Date
Post Code	Assessment Review Date

IS THE RISK ADEQUATELY CONTROLLED?

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

- Meet the standards set by a legal requirement?
- Comply with a recognised industry standard?
- Represent good practice?
- Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. You may refer to procedures, manuals, company rules, etc. giving this information.

WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

You will need to give priority to those risks which affect large numbers of people and/or could result in serious harm. Apply the principles below when taking further action, if possible in the following order:-

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first aid)

List existing controls here or note where the information may be found.

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:

List hazards here:

**List groups of people who are especially at risk
from the significant hazards which you have
identified:**

List existing controls here or note where the information may be found:

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:

Is this a risk assessment or guidelines?

WALKING/TREKKING (General Risk Assessment)

References: Hill walking – Steve Long

Mountain Craft & Leadership - Eric Langmuir

Safety in Outdoor Education - Department of Education & Science

Safety on the Mountains – BMC

The Mountain Skills Training Handbook –
Pete Hill & Stuart Johnstone.

Definition: Walking in any area, at any height above sea level, which is more than 30 minutes travelling (on foot) time from an accessible road or refuge.

- **Only persons holding the appropriate National Governing body award or with our Technical advisors certificate of competency will be allowed to lead activities.**
- In addition to the safety sack the minimum equipment that must be carried is as follows; an additional map, compass, whistle, waterproofs adequate warm clothing. When there is a possibility of walking in the dark eg. hill walks in winter, one torch should be carried between two people.
- Appropriate footwear must be worn.
- A rope (minimum 30m of 8.5mm) must be carried on a mountain day if it is identified as necessary in the risk assessment.
- Staff are responsible for ensuring groups are equipped and briefed to cope with obstacles met on route (i.e. river crossings, short pitches).
- Giardiasis is endemic in Britain. Sufficient drinkable water must be carried by participants and staff for the trip. Where this is not possible a method of water purification must be used. This could include a purification tablets, a specialised purification system, or boil the water - a rolling boil - for not less than one minute.

SITE RISK ASSESSMENT (EXAMPLE)

Site: (name) Dollgarog Gorge

Grid reference

Activity: Gorge Walking

Quals (NGB Standard)

or in house validation

Ratios: 2 - 12

Mobile phone strength

Orange 5's

O2 3's

Dangerous conditions

Prolonged heavy rain over two days prior 100mm. (What makes you not use this site)

Other site information (very sheltered From the wind) which will help a competent person with their job

Specific/unique hazards and control/ management measure.

Climbs over spotting height for point 1 & 2 Rope require

Large amounts of water at point 3 avoid by going left around rocks

Jump at finish shelf near falls see photo. (reference near miss 102/2003)

Most common occurrence at site:

Twisted ankles due to slippery rocks at point 2.

Falling items from other users at point 3.

Other Information

Park at cp can get to the top by road tp gorge gets very bust with local providers.

Technical Advisor		Sig.		Date	
Leader Sig	Leader Sig	Leader Sig	Leader Sig	Leader Sig	Leader Sig
date					

Risk Assessment and Risk Management Record			(with additional features)		Off-site activities and educational visits	
Establishment	'Example' Primary School	Location/Purpose	Y6 Stream/River study at a 'named' valley, following a stream to it's source (springs on an upland peat moor)		Date(s)	
Leader	'Name'	Other Staff	1 teaching assistant 1 well known capable mother	Group Size 30 Yr 6 participants	Ratio 1:10 (always at least 2)	

Identifying significant hazards – assessing the risk

Control measures – reducing the risk

Site and it's environment	Risk Rating	outcome	Who needs to be informed/involve
1. Flowing water	Medium	1. Water is only 5cm or 6cm deep increasing to 30cm in plunge pools. In prolonged heavy rain water level does not increase significantly	Parents
2. Slippery or uneven ground	Medium	2. Participants will be briefed not to run (especially downhill) 3. As above	Staff & Participants Staff & Participants
3. Steep ground (including valley sides, very steeply inclined footpaths & a small gorge with 3m high walls)	High	4. Paddling in stream and at ford crossing will be allowed at sites chosen by the Leader. Appropriate footwear will be worn	Staff & Participants
4. Possible discarded rubbish including broken glass.	Medium		
5. Weather conditions, particularly heavy rain or continuous sunshine.	Medium	5. Participants will be required to bring a water or shower proof top, sun protection and sun hat. Forecast will be obtained and weather monitored to decide which of these items will be used or remain on the coach.	Parents, Participants Staff
Group			
6. Generally typical class for age range but one participants has some mobility difficulty and will find terrain difficult.	Medium	6. An appointed assistant leader will particularly support the participant. Consideration will be given to this participant, with an assistant leader taking the short cut and meeting the main party as they descend the hill.	Staff & relevant paren
Leader and activity arrangements			
7. Harmful micro-organisms in the stream.	Medium	7. Participants will wash hands at the public toilet block near the coach park or disposable wipes will be used to clean their hands before eating lunch.	Participants & Staff
8. Transport to location by coach		8. Transport controls – see generic guidance Participants will be supervised at all times Road traffic accident – see generic guidance Location is well known to the leader and has been pre-visited and used on numerous previous occasions	Participants & Staff

SITE RISK ASSESSMENT (Qualative model)

Site: (General location or name)

Grid reference (six figure)

Activity: (self explanatory)

Quals (NGB Standard)

or in house validation

Ratios: (Minimum numbers)

Mobile phone strength

Orange 02 see map overleaf

Comment: If the staff are not competent they do not lead the site they may be able to assist.

Comment: This is the key to the risk assessment. The staff should be competent to run the activity and do not need a lot of information as they are already deemed competent.

Comment: Put the minimum standard

Comment: This is where you can get a signal, so you know where to go if needed. And should be identified on the map scanned in on the back of this document.

Comment: Be specific to stop misinterpretation.

Dangerous conditions

This is where you are autocratic even if you are employing the most competent staff, you still have the say on the limits you wish them to operate.

An example of this is gorge walking where people often say not be undertaken if heavy rain has preceded the activity. Heavy can be interpreted many different ways by many people so a permanent marker is better when articulating this i.e. the large boulder in the middle of the river must not be covered (see map overleaf point a)

Surf for example may say winds offshore 20 mph or above swell generally 1 metre or higher

Other site information

The cave does not flood and can be used in any weather conditions

Specific/unique hazards and control/management measure.

There is a bull in the exit field during the months of May – September do not use this exit at these times.

There may be other information that would help a competent person at this site. i.e. most ML's using the Brecon Beacons never take a rope, however this site risk assessment may say 'take a rope' for the steps at spot 1 & 2 (see map)

Comment: This is information that other leaders would like to pass on to there colleagues when using the site and a recommended control measure that works.

Comment: The only way you could get this information is by having been to this site so a competent person will know what to do with the rope at this spot.

Most common occurrence at site:

There has been three near misses at point x (see overleaf) further information can be gained from the near miss file reference 01-01-2001

There have been several incidents of badly cut hands due to the sharp nature of the limestone all groups are advised to wear neoprene gloves.

Other Information

The car park shuts at 5pm during the summer months park outside at the lay by.
Bring £1 for the toll gate at point z see map overleaf)

Technical Advisor		Sig		Date	
Leader Sig	Leader Sig	Leader Sig	Leader Sig	Leader Sig	Leader Sig
date					

Comment: Some people like there TA to sign this some prefer the lead instructor.

Comment: Get the leader to sign for the site only once all other updates have been done.

SITE RISK ASSESSMENT (BLANK)

Site:

Grid reference

Activity:

Quals (NGB Standard)
or in house validation

Ratios:

Mobile phone strength

Dangerous conditions

Other site information

Specific/unique hazards and control/ management measure.

Most common occurrence at site:

Other Information

Technical Advisor		Sig.		Date	
Leader Sig	Leader Sig	Leader Sig	Leader Sig	Leader Sig	Leader Sig
date					

Risk Assessment and Risk Management Record			Off-site activities and educational visits	
Establishment	Location/Purpose		Date(s)	
Group Leader	Other Staff		No. Pupils	Year Group(s)

Identifying significant hazards – assessing the risk		Control measures – reducing the risk		
Site and it's environment	Risk Rating		Outcome	Who needs to be informed/involve
1. 2. 3. 4. 5.		• • • • •		
Group				
Activity Arrangements				
Transport				

List the generic risk assessments applied to this visit:

1. Generic risk assessments applied
2. Establishment risk assessments applied

Alternative Plans (Plan B/Plan C)

Ongoing risk assessment – the most essential element – NOTE THE FOLLOWING:

1. Apply the control measures
2. Monitor how effective they are
3. Change, adapt, revise as required

Emergency contacts and procedures

Review comments

Completed:	Date.....	Group Leader.....
------------	-----------	-------------------

APTA:

ASSESSED BY:

[illegible]

POTENTIAL HARM	FREQUENCY OF EXPOSURE	SEVERITY	LIKELIHOOD
Scratch/bruise	I – Infrequently	5 – Very High	5 – Almost Certain
Laceration/Mild Ill Effect	A – Annually	4 – High	4 – Likely
Break – Minor Bone or Minor Illness (temporary)	M – Monthly	3 – Moderate	3 – Even Chance
Break – Major Bone or Major Illness (Permanent)	W – Weekly	2 – Slight	2 – Unlikely
Loss of 1 limb/Eye or Serious Illness (Temporary)	D – Daily	1 – Negligible	
Loss of 2 Limbs/Eyes or Serious Illness (permanent)	H – Hourly		
Fatality	C – Continuous		
	V – Variable		

RISK ANALYSIS AND MANAGEMENT SYSTEM

NAME: _____

DATE: _____

ACTIVITY/SITUATION: _____

Analysis

Description

RISK MANAGEMENT STRATEGIES		CAUSAL FACTORS Hazards, perils, dangers	RISKS Accident, injury other forms loss		
			People	Equipment	Environment
Emergency	Normal Operation				

RELEVANT INDUSTRY STANDARDS APPLICABLE			
POLICIES AND GUIDELINES RECOMMENDED			
SKILLS REQUIRED BY STAFF			
FINAL DECISION ON IMPLEMENTING ACTIVITY	Choose one		
	Accept ✓		Reject
	Comments:		

Climbing and Abseiling Risk Assessment

Hazard	Who might be harmed	Existing Controls	Risks not adequately controlled

Ongoing Risk Assessments and Reassessments.

1. The group leader, or other adults with responsibility, should reassess risks while the visit is taking place. Ongoing risk assessments normally consist of judgements and decisions made as the need arises. They should be informed by the generic and visit or site specific risk assessments and take account of local expertise on e.g. tides, potential for flooding etc. They are not usually recorded until after the visit and should be reviewed to inform future planning. Examples of the need for ongoing risk assessment:

- changing weather, tiredness or illness within the group, behaviour, issues with other groups at same venue etc. Control measures would often include deciding to change to the pre-assessed plan B or swapping activities on the itinerary so that the activity can be carried out on a different day;
- emergencies. Control measures would include establishing the nature and extent of the emergency as quickly as possible; ensuring that all the group are safe and looked after; establishing whether anyone has been hurt and getting immediate medical attention for them; ensuring that all group members who need to know are aware of the incident and that all group members are following the emergency procedures; ensuring that if a teacher accompanies casualties to hospital, the rest of the group are adequately supervised at all times and kept together; and informing the emergency contact in the school;
- group leaders are always in charge. They should trust their own knowledge of the young people and use their own professional judgement. This may include challenging an activity leader where the group leader's knowledge of the group is superior, or intervening to prompt a change of plan, including stopping an activity if it has become too hazardous.

Risk Assessment Form

Activity to be Assessed		Assessment Number					
Duke of Edinburgh's Award Expedition and Training							
Persons undertaking or affected by the activity							
☒ Employees ☐ Contractor ☐ Public ☐ Pupil ☐ Service User ☐ Other							
Assessment of Activity Hazards Uncontrolled		Severity	Likelihood				
1	Accident in minibus/coach	5	2				
2	Hypothermia	5	2				
3	Heatstroke / sunburn	3	3				
4	Previous/Current medical condition	5	3				
5	Blisters	2	5				
6	Lower limb injury, twisted ankle etc	3	3				
Control Measures Required							
Prioritise Controls By Risk Level Activity Hazard Number	1	Drivers to be MIDAS trained. All young people to wear seatbelts. Safety checks to be carried out. Drivers to adhere to NPTCBC minibus driving regulations. Extra staff used to supervise behaviour of young people if required.					
	2	Young people to carry waterproof clothing, spare warm clothing and survival bags. Leaders to carry bothies if available. Weather forecast obtained and considered. Escape routes built into route plan. Expedition to take place between the end of March and beginning of November. Young people trained in the dangers of hyperthermia and emergency action plans, including group safety management. Trained in EAP's					
	3	Young people to carry sunscreen and wear hats and carry plenty of water. Leaders to keep water topped up. Participants to be trained in the dangers and prevention of sunstroke. Trained in EAP's					
	4	Information to be gathered concerning participants medical conditions on parental consent forms. Appropriate action to be taken including risk assessment.					
	5	Young people to be trained on the importance of 'wearing in' footwear and wearing proper socks and trained in the recognition and treatment of 'hotspots' before they become blisters. Trained in EAP's					
	6	Young people to wear appropriate footwear. Young people not to carry excessive weight. Participants to be trained in the importance of not 'messing around' and looking where they are going. Trained in EAP's					
Reassessment of Activity Hazards Controlled		Severity	Likelihood				
1	Accident in minibus/coach	5	1				
2	Hypothermia	5	1				
3	Heatstroke / sunburn	3	2				
4	Previous/Current medical condition	5	1				
5	Blisters	2	3				
6	Lower limb injury, twisted ankle etc	3	2				
Name: Neil Hapgood Position: D of E Development Officer		Signed _____ Date Complied 04/12/06					
Reviews	Key	Risk Level Table					
Review date:	1 = Very Unlikely	Severity of Injury	Nuisance	Medical Treatment	Minor	Major	Fatality
Reviewed by:	2 = Unlikely		5	5Y			
Review date:	3 = Likely		4	4	8		
Reviewed by:	4 = Very Likely		3	3	6G	9	
Review date:	5 = Certainty		2	2	4	6Y	8
Reviewed by:	(Green) Low Risk		1	1	2	3	4
Review date:	Yellow Medium Risk		0	1	2	3	4
Reviewed by:	High Risk	Likelihood of Injury					

- to ensure that lifting equipment (hoists, lifts, chains, ropes, cranes and lifting tackle) and steam boilers, steam receivers and air receivers are well constructed, well maintained and examined at specified intervals,
- to give employees suitable eye protection or protective equipment for certain jobs;
- to take proper precautions to prevent employees being exposed to substances which may damage their health;
- to take precautions against danger from electrical equipment and radiation.

As an employee, you have legal duties too. They include:

- taking reasonable care for your own health and safety and that of others who may be affected by what you do or do not do;
- cooperating with your employer on health and safety;
- not interfering with or misusing anything provided for your health, safety or welfare.

If you think there is a health and safety problem in your workplace you should first discuss it with your employer, supervisor or manager. You may also wish to discuss it with your safety representative, if there is one.

If the problem remains or you need more help, health and safety inspectors can give advice on how to comply with the law. They also have powers to enforce it. The Health and Safety Executives (HSEs) Employment Medical Advisory Service can give advice on health at work and first-aid. Your employer can give you their names and address.

You can get advice on general fire precautions etc from the Fire Brigade or your fire officer.

The main Act of Parliament is the Health and Safety at Work etc Act 1974, but for particular purposes the Factories Act 1961, the Mines and Quarries Act 1954, the Offices, Shops and Railway Premises Act 1963, the Nuclear Installations Act 1965, the Agriculture (Safety, Health and Welfare Provisions) Act 1956, the Fire Precautions Act 1971 and other Acts and Regulations made under any of these may be equally relevant.

Useful HSE publications:

A Guide to the Health and Safety at Work etc Act 1974 (HS(R)6);

A guide to the Offices, Shops and Railway Premises Act 1963 (HS(R)4);

A guide to agricultural legislation (HS(R)2);

The Factories Act 1961 - A short guide;

The Essentials of Health and Safety at Work - A booklet for small firms;

Safety Representatives and Safety Committees.

Your employer may have copies which you can inspect. They are also available from HMSO and Government bookshops and booksellers.

Health and Safety

Law

**What you
should know**

© Crown copyright 1989
First published 1989
Seventh impression 1989

0 11 701425 7

1 pack (50 copies) £3.50 net per pack
2 packs or over £2.50 net per pack

Printed in the UK for HMSO Dd, 292562 C200 11/89

What you should know

Your health, safety and welfare at work are protected by law. Your employer has a duty to protect you and to keep you informed about health and safety. You have a responsibility to look after yourself and others. If there is a problem, discuss it with your employer or your safety representative, if there is one.

This leaflet is a brief guide to health and safety law. It does not describe the law in detail, but it does list the key points.

Your employer has a duty under the law to ensure so far as is reasonably practicable, your health, safety and welfare at work.

In general, your employer's duties include:

- making your workplace safe and without risks to health;
- keeping dust, fume and noise under control;
- ensuring plant and machinery are safe and that safe systems of work are set and followed;
- ensuring articles and substances are moved, stored and used safely;
- providing adequate welfare facilities;
- giving you the information, instruction, training and supervision necessary for your health and safety.

Your employer must also:

- draw up a health and safety policy statement if there are 5 or more employees, including the health and safety organisation and arrangements in force, and bring it to your attention;
- provide free, any protective clothing or equipment specifically required by health and safety law;
- report certain injuries, diseases and dangerous occurrences to the enforcing authority;
- provide adequate first-aid facilities;
- consult a safety representative, if one is appointed by a recognised trade union, about matters affecting your health and safety;
- set up a safety committee if asked in writing by 2 or more safety representatives.

Employers also have duties to take precautions against fire, provide adequate means of escape and means for fighting fire.

In many workplaces employers may have other specific duties:

- to take adequate precautions against explosions of flammable dust or gas and when welding and soldering containers which have held an explosive or flammable substance;
- to maintain a workroom temperature of at least 16°C after the first hour of work where employees do most of their work sitting down;
- to keep the workplace clean;
- to provide, maintain and keep clean washing and toilet facilities and accommodation for clothing and to supply drinking water;
- to see that workrooms are not overcrowded and that they are well ventilated and lit;
- to ensure that floors, steps, stairs, ladders, passages and gangways are well constructed and maintained, and not obstructed;
- to take special precautions before allowing employees to enter and work in a confined space;
- to ensure that employees do not have to lift, carry or move any load so heavy that it is likely to injure them;
- to guard securely all dangerous parts of machines;
- to see that employees, especially young people, are properly trained or under adequate supervision before using dangerous machines;

The RHP (Russell House Publishing) Companion

The RHP Companion was written by Peter Barnes in 2004 and is the first comprehensive text book written about outdoor education clarifying the aims and objectives of outdoor education and the short and long term benefits of participating in outdoor education. It is aimed at students, academics and practitioners within the UK. The RHP Companion to Outdoor Education is "a lucid and helpful assessment of the state of outdoor education today, with an important focus on how differing individuals and groups may learn from outdoor experience... a summary of the differing approaches... a catalyst for further experiment and innovation..." (R, Putnam, 2004).

As many people still question the purpose of outdoor education and the meaning behind it this book has been written to identify and establish why outdoor education is an important aspect of social and personal development and environmental awareness, as well as reinforcing good practise and basic principles within the spectrum.

It is essential that those instructing or leading outdoor education know why they are doing it and can identify and enhance the benefits of participating. If an individual is ignorant of good practise and basic principles outdoor education can become a danger and a chore to both the instructor and the participants.

Loco Parentis

Usually 'In Loco Parentis', translating from Latin meaning "In place of the parent" or "Instead of parent"

Describes a relationship similar to that between a parent and child

It refers to an individual who assumes parental status and responsibility for another individual, usually a young person, without formally adopting them

The most common usage or example where it can be seen is with teachers and students

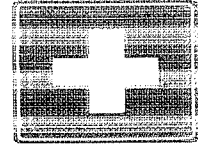
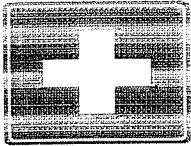
The act was changed from the English common-law in the late 19th Century so schools (teachers) would develop an emotional and moral responsibility for the students

An advantage of this is that it allows the teachers/ parental roles to act in the best interest of the students as they see fit, although not allowing what would be violation of the students 'civil liberties'

Another advantage is that the parental role can have the legal rights that a biological parent would have. For example if on a school trip in another country the teacher will have full control over the actions of the students under their supervision

The parental role should not only be there to act on behalf of a parent but 'to be there' for them also, so they feel safe and secure in situations where their biological parents are not present

<http://legal-dictionary.thefreedictionary.com/In+loco+parentis>
www.tes.co.uk/article.aspx?storycode=370916



First Aid At Work Legislation

In the event of injury or sudden illness, failure to provide first aid could result in a casualty's death. The employer should ensure that an employee who is injured or taken ill at work receives immediate attention.

Regulations (1981) require employers to provide adequate and appropriate equipment, facilities and personnel to ensure their employees receive immediate attention if they are injured or taken ill at work.

Self Employed First-Aid Regulations 1981

You should make an assessment of the hazards and risks in your workplace and establish an appropriate level of first-aid provision. If you carry out activities involving low hazards (eg clerical work) in your own home, you would not be expected to provide first-aid equipment beyond your normal domestic needs. If your work involves driving long distances or you are continuously on the road, the assessment may identify the need to keep a personal first-aid kit in your vehicle.

Offshore Employment Regulations

Industry specific legislation exists for the offshore industry that aims to take account of the remoteness and difficulties of access to medical and health care expertise. The Offshore Installations and Pipeline Works (First-Aid) Regulations came into force in 1989. The Regulations require the person in control (the duty holder) to provide suitable first aid and medical facilities, as well as sufficiently trained and competent first aiders and medics. The duty holder has to ensure that adequate basic health care and first aid is provided for everyone on the installation, including visitors and contractors. This requirement extends to people working on vessels connected to the installation and pipeline works. The duty holder also has to make arrangements for a registered medical practitioner to give advice if necessary. This practitioner is usually based onshore. The medic would normally have responsibility for the sickbay. The size, layout and facilities of the sickbay should be sufficient to provide accommodation and medical support for an ill or injured person for up to 48 hours.

Diving special regulations

Under the Diving at Work Regulations 1997 the diving contractor is required to provide first aid and medical equipment during a diving project. In the event of a diving medical incident, the diving supervisor remains in control of any action to be taken. Although diving emergencies are outside the scope of the Offshore Installations and Pipeline Works (First-Aid) Regulations 1989, an offshore medic should be able to offer help and assistance, where appropriate.

RISK ANALYSIS AND MANAGEMENT SYSTEM

Example

Compiled By: _____

Name of School: _____

Date: _____

Class(es): _____

Activity: _____

Analysis

CAUSAL FACTORS			*Hypothermia, sunburn, heat exposure*Other injuries – especially feet *Missing group members *Hunger *Water accidents – fast current, deepwater	*Equipment breakage, loss, malfunction *Damage to environment – sewage, garbage, vandalism
CAUSAL FACTORS	People	Equipment	Environment	
	Undisclosed medical conditions Poor supervision of students Unfamiliar settings Unable to use equipment Inappropriate behaviour, especially at risk behaviour, during visit	Inadequate stream study equipment Inadequate clothing Lack of food Inadequate toilet facilities	Low temperatures – High temperatures Rain Wind River levels inappropriate Unstable river banks	
RISK MANAGEMENT STRATEGIES				
	Normal Operation			
	Use medical forms Ensure each task group has a supervisor that is responsible for a group of students Ensure supervisors have visited setting (at least main teachers) Ensure, through training, that supervisors are competent with allocated tasks Ensure students are clearly informed of guidelines for behaviour boundaries	Ensure, by using gear checklist, all equipment required is operable and available Ensure supervisors know how to operate equipment they are responsible for Check student clothing before leaving school Check student food and water requirements Monitor student health & safety during day through regular group/full class "meetings"	Visit site prior to outing to familiarise supervisors with 'at risk' aspects of environment – unstable banks, deep/fast water, toilet facilities Obtain weather reports prior to field day visit and monitor stream flows and general weather conditions	
	Emergency			
	1. Carry spare equipment, food, drink and clothing 2. Leave detailed daily activity plan/class list with school office 3. Carry cell phone & establish prior contact with nearby home/farm in case of emergency 4. Ensure if travelling by bus that a further vehicle is available if need arises 5. Ensure staff members (supervisor) are appropriately trained in first aid and emergency water techniques			

Relevant Industry Standards Applicable		
Policies and Guidelines Recommended		
Skills Required by Staff		
Final Decision on Implementing Activity	<u>Choose One</u>	
	ACCEPT:	REJECT:
	Comments:	

Carrying out a risk assessment is something ever activity center or expedition leader in the outdoor industry must do by law. This risk assessment will identify all the risks and identify all the hazards that will cause these risk in three main groups; environment, human and equipment. It then shows all the methods in monitoring, minimizing severity and likelihood of these hazards and an emergency action plan to be carried out if any of the major risk takes place. It then goes onto looking at all the policies, qualification and regulations which must be kept whilst performing the activity. An example of this is sticking to ratios which the National Governing Body has stated for their sport/activity. Then it goes on to deciding if the activity should be carried out and if it is safe enough now you have introduced all the safety measures. There are many different types of risk assessments all offering different advantages and disadvantages. Some have severity/likelihood grids which makes it easier to assess each risk by itself however an advantage to this assessment is that you categorise the hazards and to deal with them as groups as well as looking at staff, policies and industry standards.

PUWER

The Regulations require risks to people's health and safety, from equipment that they use at work, to be prevented or controlled. In addition to the requirements of PUWER, lifting equipment is also subject to the requirements of the Lifting Operations and Lifting Equipment Regulations 1998.

In general terms, the Regulations require that equipment provided for use at work is:

- suitable for the intended use;
- safe for use, maintained in a safe condition and, in certain circumstances, inspected to ensure this remains the case;
- used only by people who have received adequate information, instruction and training; and
- accompanied by suitable safety measures, eg protective devices, markings, warnings.

Generally, **any equipment** which is **used by an employee at work** is covered, for example hammers, knives, ladders, drilling machines, power presses, circular saws, photocopiers, lifting equipment (including lifts), dumper trucks and motor vehicles. Similarly, if you allow employees to provide their own equipment, it too will be covered by PUWER and you will need to make sure it complies.

Examples of uses of equipment which are covered by the Regulations include starting or stopping the equipment, repairing, modifying, maintaining, servicing, cleaning and transporting.

This will affect us in the outdoors with any equipment used such as harnesses, helmets, ropes, buoyancy aids, head torches, camping stoves and pretty much any equipment used by workers and the public. The equipment must be in safe working order, maintained, serviced and cleaned correctly and repaired or replaced when necessary. The regulations apply to employers of self employed people who provide equipment for use at work.

<http://www.hse.gov.uk/pubns/indg291.pdf>

A summary of the CRoW and countryside acts

The Countryside and Rights of Way Act 2000 (sometimes called the CRoW Act) is a UK Act of Parliament which came into force on 30 November 2000.

As of September 2007, not all sections of the Countryside and Rights of Way Act have yet come into force. This means that only parts of the Act are currently valid in law.

The Act implements the so-called 'Right to Roam' (also known as *Jus Spatiendi*) long sought by the Ramblers' Association and its predecessors, on certain upland and uncultivated areas of England and Wales. The act is being implemented in stages as definitive maps of the areas are produced. Not all uncultivated land is covered — for instance in the southern area the guidelines are such that the land must almost always be heath or calcareous downland to qualify.

A staged review of footpaths, including limited rights to create new paths where needed, is being conducted under the Act. Again, this is being conducted in a staged manner, which can produce anomalies. (Of the two parts of the old Gloucestershire county, South Gloucestershire was revised in the Southern area and the rest of Gloucestershire in the Midlands).

Some long-standing areas of dispute became accessible under the Act — these include Chrome Hill and Parkhouse Hill in the Peak District.

The Countryside and Rights of Way Act also made some changes in respect of nature conservation, in particular to Part I of the Wildlife and Countryside Act 1981. These three main changes are: the maximum penalty is now a term of imprisonment instead of a fine; the Secretary of State can designate "wildlife inspectors" who have a range of powers under the Act; offences of disturbing certain birds and animals are extended so as to cover reckless as well as intentional acts.

The act gave power to create local access forums (lafs), comprising a balance of user and land-owner interests, to give advice on development of access land and of the footpath network; the policy of footpath improvement would be set out in a Rights of Way Improvement Plan (RoWIP).

The Wildlife and Countryside Act 1981 is an Act of Parliament in the United Kingdom which aims to protect the wildlife and countryside of the United Kingdom. The Act is split into 4 parts covering 74 sections, it also includes 17 schedules.

[edit]Part I: Wildlife

Part I includes sections 1 to 27 of the Act. The legislation contained in these sections covers:

- Protection of wild birds, their eggs and nests
- Protection of other animals
- Protection of plants
- Miscellaneous

Introduction into the wild of species that are not native to Great Britain or are otherwise banned
The import or export of endangered species.

[edit]Part II: Nature Conservation, Countryside & National Parks

Part II includes sections 28 to 52 of the Act. The legislation contained in these sections covers:

- Nature conservation

Areas of Special Scientific Interest

Limestone Pavements

National Nature Reserves

Marine Nature Reserves

- Countryside
- National Parks

[edit]Part III: Public Rights of Way

Part III includes sections 53 to 66 of the Act. The legislation contained in these sections covers:

- Ascertainment of public rights of way

(The duties of government bodies to identify and maintain records about Public Rights of Way)

- Miscellaneous & Supplemental

Some responsibilities of owners of land crossed by a Public Right of Way

Regulation of traffic on Public Rights of Way

[edit]Part IV: Miscellaneous & General

Part IV includes sections 67 to 74 of the Act. The legislation contained in these sections covers:

- Application of the Act to Crown land
- Application of the Act to the Isles of Scilly
- Offences by 'bodies corporate'
- Financial provisions

[edit]Schedules

The Act contains 17 schedules. Schedules 1 to 10 relate to powers under the "Wildlife" part of the Act. Schedule 1 Lists over forty species of birds that are protected by special penalties. Schedule 2 lists Hunnable birds and their close seasons.

Schedules 11 to 13 relate to powers under Part II of the Act

Schedules 14 to 16 relate to powers under Part III of the Act

Schedule 17 lists previous legislation that was repealed in favour of this Act.

Provided below is a list - probably incomplete - of documents modifying the W&C Act 1981.

- Statutory Instrument 1988 No. 288: The Wildlife and Countryside Act 1981 (Variation of Schedules) Order 1988 S.I. 1981/288
- Statutory Instrument 1994 No. 1151: Wildlife and Countryside Act 1981 (Variation of Schedule 4) Order 1994 S.I. 1994/1151

Reference:

http://www.opsi.gov.uk/Acts/acts2000/PDF/ukpga_20000037_en.pdf for the full CRoW legislation

http://www.jncc.gov.uk/PDF/waca1981_schedule1.pdf for the full 1981 countryside act

The following is a copy of a paper sent to the Sustainability Committee of the National Assembly for Wales by the Rev'd Douglas Caffyn from which the endnotes have been deleted:-

The historic law relating to the right of navigation.

A riparian owner of a non-tidal river (the owner of the bank) owns the bed as far as the middle line. If he owns both banks he owns all the bed of the river. He has the right to fish in his section of the river, to take small amounts of water and to use the river to power his mills. It will be shown that if the river is physically navigable then there is a public right of navigation on the river.

In the most recent treatise on the Law of Waters Bates wrote:

It is suggested that in early medieval England, following Roman law, a permanently flowing non-tidal river was regarded as public property (*res publicae*) except so far as its banks were concerned. Thus, any member of the public who could navigate the river had the right to do so. By the time of Henry VI riparian owners had come to own the bed of the river but, it is submitted, those owners took their new property subject to the public right of navigation over it that had existed from time immemorial.

Roger de Hoveden wrote in about 1180 that the lesser rivers which were used for transport were to be cared for in the same way as the roads. In 1190 a writ of *Ad quod Damnum* was issued for the river Lee which shows that there was by then a well established structure to the law relating to the use of rivers. In 1215 Magna Carta declared that all *kydells* were to be utterly put down on all rivers. This meant that boats always had, and always would have, the right to pass along rivers. In about 1260 Bracton wrote that navigation on perennial rivers is common to all people. In the 13th century the Court of Eyre visited each county in England every seven years and was required to ensure that all rivers were kept clear. From 1350 to 1531 numerous Acts were passed requiring that the rivers were to be kept clear for navigation. None of these Acts created a new right of navigation. They all referred to established rights.

Edwards studied the State Records for the period 1066 to 1400 and collected 650 records relating to 137 rivers in England and Wales for which there is documentary evidence of navigation. Included among these is the use of the Usk to Usk, Neath to Aberdulais, Teifi to Cernarh, Conwy to Llanrwst, Dee to Overton. The State records do not give a complete list of all the rivers which were used. They record the occasional dispute and the transport of goods for the king. Absent from them is the normal everyday traffic on the rivers transporting food, firewood and timber. Thus they do not record the stone wharf and slipway built at Skenfrith on the Monnow in about 1190 on the border of Wales and England where the river is relatively small.

In England the use of the rivers was so common that between 1271 and 1286 twenty two people drowned in the county of Huntingdonshire who had fallen from boats or were in boats which overturned or sank. The Fenland, a mixture of land and water, has been described as the motorway of the medieval period.

A fuller account is given in my book *The Right of Navigation on Non-tidal Rivers and the Common Law* printed in October 2004 which has, as yet, not been challenged.

Once a right of navigation, always a right of navigation.

All rivers were public during the medieval period. No court record and no book has been found, from before 1750, that gives any indication that passage on a river could be trespass. Thus on all rivers which were physically navigable there was a public right of navigation whether that right was exercised by the public or not.

The laws for highways and rivers are different. A highway did not exist unless people used it. A river existed whether people went on it or not. The right to pass and repass on some rivers has been challenged. But the courts have always held that public rights can only be extinguished by statute or statutory authority. Mr Justice Williams said 'The public cannot release their rights and there is no extinctive presumption or prescription.' No case has been found where a court accepted that there used to be a public right of navigation on a river and that the right has been lost. Thus the medieval right of navigation on all physically navigable rivers still exists today. There cannot be a right of navigation on a river which is not physically usable.

How the misunderstanding of the law arose.

In 1789 there was a case relating to the use of the bank of the Great Ouse. Counsel for the plaintiff said 'Few of our rivers beside the Thames and Severn were naturally navigable'. This statement was wrong.

1830 Woolrych wrote the first text about the 'Law of Waters'. This was an era when the rights of landowners were considered to be paramount. Woolrych based his text on the contents of the Law Books, not the History Books. By that date many rivers had been modified for use by barges and people had forgotten that before modification the rivers had been used by

smaller boats. In his book Woolrych wrote 'In general the public have no right at common law to navigate on rivers but a right to do so may be acquired by immemorial usage by the public or dedication by riparian owners.'

Woolrych made several mistakes. He did not realise that the word 'navigable' had two different meanings in the books from which he quoted - 'tidal' and 'where there is a public right of navigation'. Secondly he assumed that 'Few of our rivers were naturally navigable'. In fact there is evidence that over a hundred and fifty rivers and tributaries in England and Wales were used by boats between 1189 and 1600. Thirdly Woolrych claimed that attempts had been made to find other reasons for rivers being legally navigable but that attempts had failed. He gives no references and none have been found. Fourthly he accepted without question the statement of Bayley J that there is no right of navigation on tidal channels which are navigable only by small boats for a very short time. This statement has subsequently been rejected in at least eleven cases. Finally Woolrych considered that a river is a common highway. The House of Lords has decided that this is not so. It is not surprising that the 'Woolrych Rule' was wrong. It is surprising that it was not challenged for 161 years.

The authors of subsequent books on the 'Law of Waters' read Woolrych's book and copied his errors.

In 1991 the House of Lords was asked to decide whether the Rights of Way Act 1932 applied to rivers. They decided that it did not because:

1. The words of the Act did not imply that the Act applied to rivers. This reason is binding on all other courts.
2. The law relating to highways, rights of way over land, is different from the law relating to navigation, rights of way over water. This reason was expressed so clearly, and at such length, that it seems that all other courts will reject any argument based on the equivalence of the two laws. This has the effect of nullifying previous cases based on the equivalence of the two sets of laws, eg. *Bourke v Davis*.

This decision of the House of Lords denies the validity of the commentaries on the Law relating to the public right of navigation along rivers.

The working of the 'Woolrych Rule'.

Since the 'Woolrych Rule' was assumed to be the law for 161 years it may be asked whether it was good law:- clear, certain and unbiased.

In Wales it was known from statute that there was a public right of navigation on the Wye and its tributaries. On no other river was it generally agreed that there was access for boaters. Some said that barges were only used on the Lower Wye. Others said that all the rivers were used by coracles and for floating timber and that there was a public right on all rivers which were physically usable. Thus Lord Fraser said of Scottish rivers 'It seems most unlikely that any river ... would not have been used by now.' No one knew what amount of historic use was needed to establish that a public right of navigation existed on a particular river. The 'Woolrych rule' did not provide law which was clear.

Between 1830 and 1991 there were three cases in England relating to access on non-tidal rivers where appeals were made. In every case and at every stage the decision of the lower court was either reversed or varied. The 'Woolrych Rule' did not provide a law which was certain.

Between 1830 and 1991 many people assumed that a land-owner could sue a person found on his river for trespass. A person who found a river obstructed by a land-owner could not sue the land-owner without first getting permission from the law-officers. They would only grant permission if they thought it was in the public interest. The 'Woolrych Rule' did not provide a law which was unbiased.

Confirming the Law.

It might be thought that after 161 years the law, despite its lack of clarity and certainty and its bias, should be considered to be fixed. However Lord Denman when Lord Chancellor said 'When, in pursuit of truth, we are obliged to investigate the grounds of law, it is plain, and has often been proved by recent experience, that the mere statement and re-statement of a doctrine, - the mere repetition of the *cantilena* of lawyers, cannot make it law, unless it can be traced to some competent authority.' The authors of the commentaries do not make the law.

The National Assembly of Wales is requested to confirm the traditional rights of public of access along all rivers rather than allowing the present state of confusion to continue.

Rev'd Douglas Caffyn
255 Kings Drive
Eastbourne
East Sussex BN21 2UR

Introduction of New Kit and Disposal

New Kit

Development of outdoor activities such as climbing has resulted in the invention of new safety gear to ensure the safety of the participants of outdoor adventurous activities. E.g. with the introduction of indoor walls, rock climbing techniques can now be practiced without venturing into the hostile terrain outside.

The introduction of new safety kit means new law and regulations has been put in place.

When new kit is purchased it has to conform to standards which cover it's supply as a new or second-hand piece of equipment and it's use in the workplace. This involves

- It's initial integrity
- The place where it will be used
- The purpose for which it will be used

Before buying new equipment the buyer will need to think about.

- Where and how it was used
- What it will be used for
- Who will use it
- What risks to health and safety might result
- How well health and safety risks are controlled by different manufactures

Most new equipment has 'CE' markings on them. This 'CE' marking is only a claim by the manufactures that the equipment is safe and has met the relevant supply law.

'CE' Marking



Disposal

Repairing or reusing items means that they will last longer and won't need replacing with new items so soon. Even when you have finished with something, someone else will often be able to use it.

Why not sell it, give it to charity or pass it on via sharing schemes like Free cycle or Local Exchange Trading Systems (LETS).



THREE SIGMA RATING SYSTEM

Make it a point to know as much as possible about your equipment. The strength ratings on climbing gear are there to give you clear and conservative information, but the meanings of ratings given by different companies can vary depending on how manufacturers interpret their data. To rate our climbing gear with a meticulous degree of accuracy, Black Diamond uses a rigorous rating standard called Three Sigma. Here's how Three Sigma works.

Example: Carabiner Ratings

Engineers test a random sample of carabiners under international standards using a machine called a tensile tester, which literally stretches the carabiners until they break. They determine the average, or mean, breaking strength of the batch. From this data they also calculate the average deviation from the mean, called the "standard deviation," symbolized by the Greek letter sigma. The standard deviation represents the variation of breaking strengths within a given group of samples. If the biners are rated three standard deviations less than the average breaking strength, 99.87% of the biners will be stronger than the rating.

So let's say we break 20 biners with an average strength of 6000 lb, and with a standard deviation of 100 lb. The Three Sigma rating would be $6000 - (3 \times 100)$, or 5700 lb. The Three Sigma standard tells us that only 2 in a batch of 1000 biners might not meet the 5700 lb rating.

What Is a Kilonewton?

When you check BD biners for their rated strength you will find it expressed in metric units of force called kilonewtons (kN).

Force (N) = Mass (kg) x Acceleration (m/sec²) $1000 \text{ N} = 1 \text{ kN}$ $1 \text{ kN} = 224.8 \text{ lb force}$

The kN rating measures the amount of force it would take to break a piece of equipment, as opposed to a static weight. A biner rated at 25kN (5620 lbf) could be expected to break if the load of a fall equaled this value. All BD biners are stamped with closed, open-gate and minor axis strengths.

Please note: Black Diamond's Three Sigma ratings are the forces the product is expected to break at or above, *NOT* the safe working load.

BLACK DIAMOND

P.P.E

Personal protective equipment regulations 1992.

The Regulations require PPE; for example, safety helmets, gloves, eye protection and high-visibility clothing, to be supplied and used at work wherever there are risks to workers' health and safety that cannot be adequately controlled in other ways.

Employers have basic duties concerning the provision and use of personal protective equipment. This includes **,maintaining, training, assessing suitable p.p.e.**

PPE is defined in the Regulations as 'all equipment (including clothing affording protection against the weather) which is intended to be worn or held by a person at work and which protects them against one or more risks to their health or safety', eg safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses.

An example of this would be to provide a kayak instructor in an outdoor centre a buoyancy aid and a helmet at the minimum.

It has the same effect on all industries, if the P.P.E is provided then it your duty to wear it, or you are not covered by insurance if anything goes wrong. It is the duty of the manager to ensure you are wearing the P.P.E provided

<http://www.hse.gov.uk/PUBNS/indg174.pdf>

<http://www.hse.gov.uk/press/2005/e05116.htm>

The deaths of the four teenagers in the Lyme Bay canoeing tragedy in March 1993 will be remembered for a very long time by many people, not only family and friends, but also those involved in the outdoor activity community.

The canoeing tragedy itself was the result of a series of errors and circumstances, which the Devon County Council report states "quite simply, should not have happened." This report goes on to say that "the immediate cause of the tragedy was, however, the lamentable failure of the St Alban's Centre to organise and supervise the canoeing activity, to employ suitable staff and to have prepared and operated sensible and pre-determined procedures when difficulties arose." The successful prosecution of the parent company, OLL and the managing director, Peter Kite, was based around these issues.

The Adventure Activities Licensing Scheme is a Government sponsored scheme, which was introduced in 1996 under the Adventure Activities Licensing Regulations. The scheme ensures that those who provide certain adventure activities to young people under the age of 18 years will have their safety management systems inspected. Where appropriate, a licence is then issued.

www.aals.org

RIDDOR

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995, often known by the acronym RIDDOR is a 1995 Statutory Instrument of the Parliament of the United Kingdom. It regulates the statutory obligation to report deaths, injuries, diseases and "dangerous occurrences" that take place at work or in connection with work.

Background

The reporting of accidents and ill health at work enables the Health and Safety Executive (HSE) and local government authorities to identify where and how risks arise, and to investigate serious accidents", as before, a lot of employers were not reporting or keeping records of injuries and accidents.

Major injuries are defined as (reg.2(1)/ Sch.1):

Fracture, other than to fingers, thumbs or toes	Amputation
Dislocation of the shoulder, hip, knee or spine	Loss of sight, temporary or permanent
Chemical or hot metal burn to, or penetrating injury of, the eye	Injury from electric shock or burn leading to unconsciousness or requiring resuscitation or more than 24 hours in hospital
Injury leading to hypothermia, heat-induced illness or to unconsciousness	Injury requiring resuscitation
Injury requiring admittance to hospital for more than 24 hours	Loss of consciousness through asphyxia or exposure to a harmful substance or biological agent
Acute illness requiring medical treatment or loss of consciousness, resulting from the absorption of any substance by inhalation, ingestion or through the skin	Acute illness requiring medical treatment where there is reason to believe that it resulted from exposure to a biological agent or its toxins or infected material.

How does RIDDOR effect outdoors?

If an incident were to occur, this would be put in an accident report book. If there was a common / re-occurring incident then steps should be put in place to lower the chance of this occurrence in the future.

The following website is from the health and safety executive and contains a lot more information on RIDDOR. <http://www.hse.gov.uk/riddor/riddor.htm>

COSHH in the Outdoors

Each outdoor pursuit centre is required to obide by the coshh legislation. Exposure to these hazardous substances can be minimised however it is impossible to reduce every form of risk. In an outdoor centre the centre manager will consider Access control of the exposed area or limited access to the substances that may be harmful. I.e. cleaning aids, chemicals etc.

To avoid these scenarios the centre manager may implement strategies such as

- a) restricted access to competent personnel only
- b) special containment facility in an event of an emergency

Special procedures such as Standard Operating Procedure (SOP) and issuing codes of practice and local rules whilst exposed to any Coshh listed substances.

The Work at Height Regulations 2005

Made – 16th March 2005

Laid before Parliament – 16th March 2005

Coming into force – 6th April 2005

The Regulations apply to all work at height where there is a risk of a fall liable to cause personal injury.

They place duties on employers, the self-employed, and any person that controls the work of others (for example facilities managers or building owners who may contract others to work at height).

The Work at Height (Amendment) Regulations 2007

Made – 23rd January 2007

Laid before Parliament – 26th January 2007

Coming into force – 6th April 2007

The Work at Height (Amendment) Regulations 2007^[2] which came into force on 6 April 2007 apply to those who work at height providing instruction or leadership to one or more people engaged in caving or climbing by way of sport, recreation, team building or similar activities in Great Britain.

As part of the Regulations, duty holders must ensure:

- all work at height is properly planned and organised;
- those involved in work at height are competent;
- the risks from work at height are assessed and appropriate work equipment is selected and used;
- the risks from fragile surfaces are properly controlled; and
- equipment for work at height is properly inspected and maintained.

There is a simple hierarchy for managing and selecting equipment for work at height. Duty holders must:

- avoid work at height where they can;
- use work equipment or other measures to prevent falls where they cannot avoid working at height; and
- where they cannot eliminate the risk of a fall, use work equipment or other measures to minimise the distance and consequences of a fall should one occur.

The Regulations include schedules giving requirements for existing places of work and means of access for work at height, collective fall prevention (eg guardrails and working platforms), collective fall arrest (eg nets, airbags etc), personal fall protection (e.g work restraints, fall arrest and rope access) and ladders.



What is COSHH?

COSHH is the law that requires employers to control substances that are hazardous to health. You can prevent or reduce workers' exposure to hazardous substances by:

- finding out what the health hazards are;
- deciding how to prevent harm to health (risk assessment);
- providing control measures to reduce harm to health;
- making sure they are used ;
- keeping all control measures in good working order;
- providing information, instruction and training for employees and others;
- providing monitoring and health surveillance in appropriate cases;
- planning for emergencies.

Most businesses use substances, or products that are mixtures of substances. Some processes create substances. These could cause harm to employees, contractors and other people.

Sometimes substances are easily recognised as harmful. Common substances such as paint, bleach or dust from natural materials may also be harmful.

What is a substance hazardous to Health?

COSHH covers **chemicals, products containing chemicals, fumes, dusts, vapours, mists and gases**, and **biological agents** (germs). If the packaging has any of the hazard symbols then it is classed as a hazardous substance.

COSHH also covers **asphyxiating gases**.

COSHH covers **germs that cause diseases such as leptospirosis or legionnaires' disease**: and **germs used in laboratories**.

COSHH **doesn't cover** lead, asbestos or radioactive substances because these have their own specific regulations.

PAT

PAT testing or portable appliance testing is where The Electricity at Work Regulations place a legal responsibility on employers, employees and self-employed persons to comply with the provisions of the regulations and take reasonably practicable steps to ensure that no danger results from the use of electric equipment. The Health and Safety at Work Act (1974) places such an obligation in the following circumstances:

- 1. Where appliances are used by employees.
- 2. Where the public may use appliances in establishments such as hospitals, schools, hotels, shops etc.
- 3. Where appliances are supplied or hired.
- 4. Where appliances are repaired or serviced.

This could affect us in the outdoors whilst working at a residential centre where visitors may have access to use electrical items such as kettles or televisions. It would be the centres requirement to ensure that the electric appliances are all in working order and not a danger to visitors and employees. It is the duty of the employer and self employed people to comply with regulations and provisions as far as they can in their control.

<http://www.pat-testing.info/>

RISK ANALYSIS AND MANAGEMENT SYSTEM

Example

Compiled By: _____

Name of School: _____

Date: _____

Class(es): _____

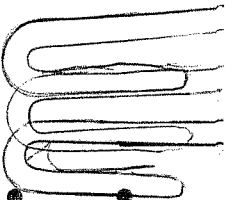
Activity: _____

Analysis

CAUSAL FACTORS			*Hypothermia, sunburn, heat exposure*Other injuries – especially feet *Missing group members *Water accidents – fast current, deepwater *Hunger *Damage to environment – sewage, garbage, vandalism *Equipment breakage, loss, malfunction			
CAUSAL FACTORS	People	Undisclosed medical conditions Poor supervision of students Unfamiliar settings Unable to use equipment Inappropriate behaviour, especially at risk behaviour, during visit	Equipment	Inadequate stream study equipment Inadequate clothing Lack of food Inadequate toilet facilities	Environment	Low temperatures – High temperatures Rain Wind River levels inappropriate Unstable river banks
	Normal Operation	Use medical forms Ensure each task group has a supervisor that is responsible for a group of students Ensure supervisors have visited setting (at least main teachers) Ensure, through training, that supervisors are competent with allocated tasks Ensure students are clearly informed of guidelines for behaviour boundaries		Ensure, by using gear checklist, all equipment required is operable and available Ensure supervisors know how to operate equipment they are responsible for Check student clothing before leaving school Check student food and water requirements Monitor student health & safety during day through regular group/full class "meetings"		Visit site prior to outing to familiarise supervisors with 'at risk' aspects of environment – unstable banks, deep/fast water, toilet facilities Obtain weather reports prior to field day visit and monitor stream flows and general weather conditions
Emergency		1. Carry spare equipment, food, drink and clothing 2. Leave detailed daily activity plan/class list with school office 3. Carry cell phone & establish prior contact with nearby home/farm in case of emergency 4. Ensure if travelling by bus that a further vehicle is available if need arises 5. Ensure staff members (supervisor) are appropriately trained in first aid and emergency water techn ^{9S}				
RISK MANAGEMENT STRATEGIES						

Relevant Industry Standards Applicable								
Policies and Guidelines Recommended								
Skills Required by Staff								
Final Decision on Implementing Activity	<table border="1"> <tr> <td data-bbox="722 633 791 1032"> ACCEPT: </td> <td data-bbox="722 1032 791 1659" style="text-align: center;"> <u>Choose One</u> </td> <td data-bbox="722 1659 791 2045"> REJECT: </td> </tr> <tr> <td colspan="3" data-bbox="529 1032 722 2045"> Comments: </td> </tr> </table>		ACCEPT:	<u>Choose One</u>	REJECT:	Comments:		
ACCEPT:	<u>Choose One</u>	REJECT:						
Comments:								

Carrying out a risk assessment is something ever activity center or expedition leader in the outdoor industry must do by law. This risk assessment will identify all the risks and identify all the hazards that will cause these risk in three main groups, environment, human and equipment. It then shows all the methods in monitoring, minimizing severity and likelihood of these hazards and an emergency action plan to be carried out if any of the major risk takes place. It then goes onto looking at all the policies, qualification and regulations which must be kept whilst performing the activity. An example of this is sticking to ratios which the National Governing Body has stated for their sport/activity. Then it goes on to deciding if the activity should be carried out and if it is safe enough now you have introduced all the safety measures. There are many different types of risk assessments all offering different advantages and disadvantages. Some have severity/likelihood grids which makes it easier to assess each risk by itself however an advantage to this assessment is that you categorises the hazards and to deal with them as groups as well as looking at staff, policies and industry standards.



- **DUTY OF CARE**

- **HIGHER** (when you charge or if you have more experience)
- **VICARIOUS Liability** (it goes up the chain of command)
- **Statute v's common law** (criminal civil cps self) (jail v's fine)
- **Negligence** (beyond reasonable doubt v's balance of probable-s)
- **H & S at work Act** (employers and employees responsibility)
- **Occupiers Liability** (A safe environment)
- **Children Act 89** (Access to criminal clearance)
- **Management of H & S Regs 92** (risk assessment)
- **RIDDOR** (reporting of incidents diseases and dangerous occurrences.)
- **AALA** (Adventurous activities licence authorities.)
- **CRB** (Criminal Records Bureau)

- a few cheap or easy improvements that can be done quickly, perhaps as a temporary solution until more reliable controls are in place;
- long-term solutions to those risks most likely to cause accidents or ill health;
- long-term solutions to those risks with the worst potential consequences;
- arrangements for training club members on the main risks that remain and how they are to be controlled;
- regular checks to make sure that the control measures stay in place; and
- clear responsibilities – who will lead on what action, and by when.

Remember, prioritise and tackle the most important things first. As you complete each action, tick it off your plan.

Step 5: Review your risk assessment and update if necessary

Few clubs stay the same. Sooner or later, you will bring in new equipment; operate in different areas that may involve new hazards. It makes sense therefore, to review what you are doing on an ongoing basis. Every year or so formally review where you are to make sure you are still improving, or at least not sliding back. Look at your risk assessment again. Have there been any changes? Are there improvements you still need to make? Have your members spotted a problem? Have you learnt anything from accidents or near misses? Make sure your risk assessment stays up to date.

It's all too easy to forget about reviewing your risk assessment – until something has gone wrong and it's too late. Why not set a review date for this risk assessment now? Write it down and note it in your diary as an annual event. During the year, if there is a significant change, don't wait: check your risk assessment and where necessary, amend it. If possible, it is best to think about the risk assessment when you're planning your change – that way you leave yourself more flexibility.

What if our club visits new paddling venues?

Identify the hazards you can reasonably expect and assess the risks for them. This general assessment should stand you in good stead for the majority of your paddling. Where you do paddle at a new venue that is different, cover any new or different hazards with a specific assessment. You do not have to start from scratch each time.

Generic: This is the hazards that are present every time we partake in an activity in paddling the first one that usually comes to mind is drowning very rare as it is well controlled.

Site specific: This is a hazard not covered in the generic but one specific to that venue or environment

Dynamic: This is an on going risk assessment, the wind picks up and as paddling becomes more difficult we shepherd our group home and get them off the water

Further Reading; A document providing further information on Risk Assessment and Risk Management is available here; <http://www.bcu.org.uk/files/Risk%20Assessment.pdf> - **Andy Davey, Canoe England Paddlesport Development Officer.**

England Local Coaching Organiser – Positions Vacant!

We have been working hard to ensure that all of our Local Coaching Organisers (LCOs) are elected into their positions, as representatives of the coaches within their area this is obviously important!

Vacancies:

We are inviting individuals interested in taking on this role within the following areas to put themselves forward:

- London West • East Cornwall • Somerset

We want your nominations! If you know someone who you think would be good at this job, we need their nomination! The nominations should be sent to Simon Hitchcox at Canoe England, 18 Market Place, Bingham, Nottm NG13 8AP, by Friday 12th March 2010. (simon.hitchcox@canoe-england.org.uk). The nomination must include the details and signatures of two updated and active Coaches from within the area who propose and second the nominee.

Nominations are considered from any BCU qualified Coach who is updated, within current membership, and whose membership address is normally within the specific area. Where there is only one nomination, that person will be deemed to be elected unopposed. Where there are two or more nominations the election process will take place via a postal vote subsequent to the closing date.

If you wish to discuss the LCO position further please contact either the Regional Coaching Organiser (RCO) or Paddlesport Development Officer (PDO) for the area concerned.

Contact Your LCO: All contact details regarding LCOs are available on the Canoe England Website.

Go to the Coaching Tab; and click on 'English Coaching Network, Including RCOs & LCOs'

Or

<http://www.canoe-england.org.uk/coaching/english-coaching-network-including-rcos-lcos/local-coaching-organisers/>



TALES OF THE UNEXPECTED.

TEN KEY POINTS FOR DEALING WITH UNFORESEEN EVENTS.

1. Ensure that sound procedures are in place before you leave home.
2. Make sure a home contact will be accessible at all times.
3. Identify “what if” situations in advance.
4. Ensure adequate staffing and that all understand their role.
5. Plan and brief staff and participants on each phase of the trip.
6. Make sure all staff are working to the same contingency plan.
7. Keep spare cash and credit card available.
8. Plan for specific medical situations.
9. Ensure spare kit is available.
10. Re-confirm all bookings and reservations.

and remember.... A mobile phone, a Mars bar and a roll of gaffer tape are not always the answer.

POST – EVENT EVALUATION.

Why?

What?

When?

Who?

How?

Where?

LONG – TERM CRISIS MANAGEMENT PLAN.

TASK	TIMESCALE
• Obtain factual information at start of crisis	Within hours
• Senior management meet with support personnel	Within hours
• Establish an intervention team	Within hours
• Contact families until all informed	Within hours
• Call a staff meeting to give information	Same day
• Inform pupils/students in small groups	Same day
• Debriefing for staff involved in disaster	Same day
• Debriefing for pupils/students involved in disaster	ASAP
• Identify high-risk staff and students	Next few days
• Promote discussion in class/meetings	Next few days
• Identify need for group/ individual treatment	Days/weeks
• Organise treatment etc	Days/weeks

Tech Skills: Abseil stations by Dan Middleton

What goes up must come down. And for longer routes this often involves using fixed abseil points - or 'stations'. A familiar sight on alpine routes, their safe use is an essential alpine skill. But back home many otherwise experienced climbers are less sure when it comes to using, and trusting, in-situ equipment. This is probably because British ethics have precluded their use for many years, but now they're becoming increasingly prevalent - you need to know how to use them.

What do they look like?

Abseil stations can be concocted from a wildly varying mix of components. A station might be anything from a twin bolt and chain lower off, to a piece of rope tied around a tree. Equipment used may be familiar to the climber (e.g. pegs, slings and wires), come from the industrial world (e.g. heavy-duty chains and wire strops) or even be homemade. To help decide if any of these are safe to use, apply some general principles.

Metallic components

Metallic components such as pegs, wire strops, chains and bolts are generally the most durable choice for permanent stations. Checking these components is usually a case of looking for evidence of corrosion.

Chains and strops are fairly easy to inspect, as you can normally see the whole item. Pegs and bolts are more difficult, as most of the anchor is hidden. But if the part you can see is corroded then assume that the part you can't see is a lot worse.

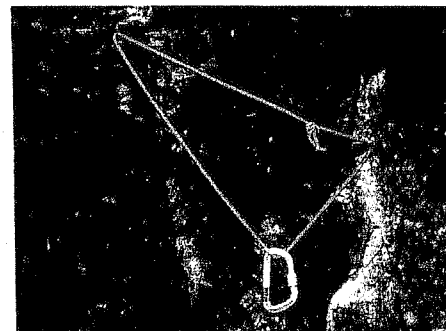
Textile components

Tape, cord and rope are often used to link several anchors together, or tied around big features such as chock-stones and trees. Whilst mostly less durable than metallic components, these are often the only option, particularly if the station has been established in an emergency. It's not possible to give definitive guidance on the effective lifetimes of various types of cord or tape in such situations, but treat them all with caution. The main degradation mechanisms are friction melting, abrasion, UV light, weathering and chemical attack.

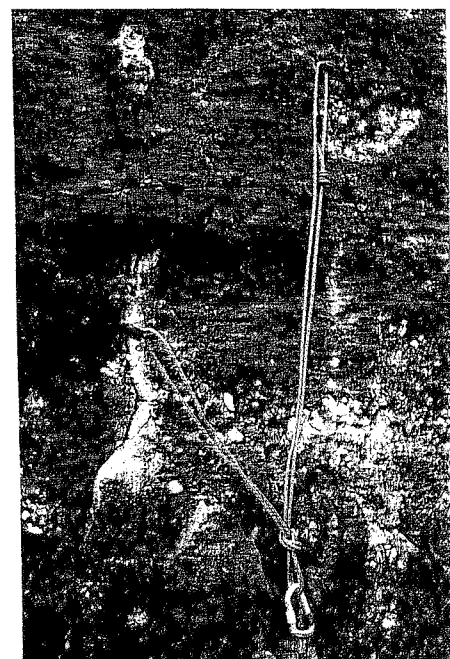
Making an informed decision

You'll never know the history of an abseil station, but an experienced climber should be able to use a systematic approach to form a judgement over whether they're happy to use it:

- Are the anchor points sound and in good rock? Use a 10-point scoring system, with 10 points and above adequate to abseil off. A huge tree or large rock spike with chain might be worth 10 points, a slightly rusty peg in good rock worth 6, a



WRONG: The 'Death Triangle' puts big forces on the anchors. Photo: Adrian Jebb.



RIGHT: Anchors are independent and equalised. Photo: Adrian Jebb.

Expert Q&A



This issue's expert is Steve Long. Steve is the Chief Officer of MLTUK, producer of the Self Rescue DVD, author of Hillwalking by MLTUK and The Climbing Handbook, and no stranger to abseiling.

Q. What's the best knot to join two abseil ropes?

A. The one that doesn't creep undone! There are plenty of choices but for security it's hard to beat a reef knot with double stoppers on each end. However, this knot is likely to jam on any projecting rock ledges or cracks when pulled. An alternative is the overhand knot, which is less inclined to jam - just make sure you leave tails of about 50cm to account for any slippage.

Q. Help. My rope is stuck - what are my options?

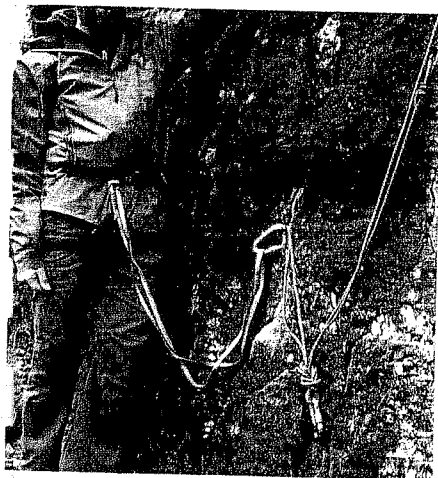
A. Bad luck! This can usually be avoided by careful planning - looking out for and avoiding snags and tree routes etc. Pull the rope down with a slow and steady motion, and if you have to pull down hard on the rope make sure that you are firmly secured in case it releases suddenly. If it's jammed move away from the crag base to reduce friction, unravel any twists, stretch then release to 'ping' the rope and try a prusik or ropeman as a handle to pull harder. If these all fail then you could leave it (and come back in daylight...), lead back up on the spare end, or prusik back up it.

Q. Can I abseil off a tree?

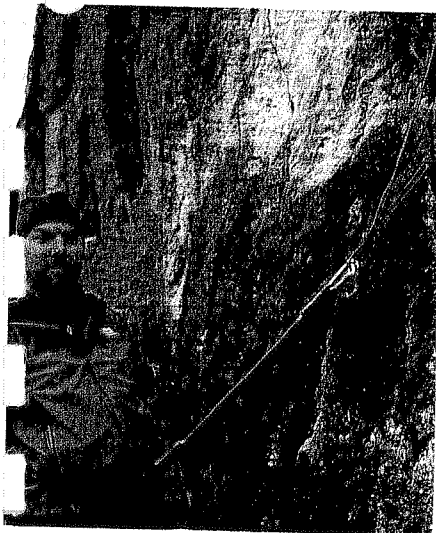
A. Yes, if it's big and solidly rooted! But always use a sling - repeated abseiling without protecting the tree damages the bark and will eventually kill it.

Q. Any tips for safer abseiling?

A. Double check everything before you commit fully to the rope. Clear loose debris from the top of the abseil so it doesn't get knocked down on you. Beware sharp edges and avoid shock-loading anchors. Use a back up prusik or device wherever the consequences of letting go would be serious (i.e. usually!).



WRONG: Above the anchor, with a static sling.
Photo: Adrian Jebb.



RIGHT: Tight on the anchors, a dynamic rope lanyard
ves a safety. Photo: Adrian Jebb.

small jammed nut in slightly shattered rock possibly only worth 3. Add together all the anchor points for a total score.

- Are any knots well tied, the anchors correctly equalised and the load shared equally? Ideally all the anchors will be connected to create a central abseil point. Using a maillon or other metal connector at this central point will greatly increase the lifespan of any tape or cord used, since pulling the ropes down after abseiling can generate friction damage.
- Consider the original strength of any cord or tape. Account for whether it's doubled or not.
- Check the physical condition of any tape or cord. Look for cuts, abrasion and melting.
- Look for signs of weathering, chemical attack and aging. Is the tape or cord bleached, discoloured or stained? Turn it over or pull it through to see how much it has faded.
- Carry some tat to replace any suspicious tape or cord. What you use will depend on your situation but 5mm cord may be considered the minimum. If removing existing tat, take great care when cutting anything...

Attachment to the station

If you're setting up an abseil, or awaiting your turn on a multi-pitch descent, you'll need to safely attach yourself to the station without using the rope. It's normal to use a sling, but be beware that any sort of slip or

fall, even one that seems trivial, can have serious consequences. Tragic accidents have occurred when climbers have slipped onto their static sling. Even if the station is bombproof, it's possible to generate very high forces, breaking the attachment sling or causing serious injury. So stay low and tight on the belay, and clip into the strong central point of the station rather than just one of the anchors. Avoid standing above the belay at all costs - if short of room, hang off the belay. If it's good enough to abseil off, it's good enough to hang from.

Dubious stations

Sometimes the station doesn't add up to the 10 point minimum and you'll be unhappy. Consider adding some of your rack to the station (money well spent if it means staying alive) or, if on a long descent, backing up the station with another temporary anchor left slightly slack. The idea is to test the station by sending the heaviest climber down first (with the packs). If the station passes the test the last person down then removes the loose backup and carefully abseils down. Although a popular trick amongst skinflint alpinists, this method is not without risk. Remember that your gear can be replaced, but you can't. ■

Dan Middleton is the BMC Technical Officer. Contact him at dan@thebmc.co.uk with your technical questions.

FURTHER INFORMATION

rock climbing

ESSENTIAL SKILLS & TECHNIQUES

The official handbook of the Mountain Instructor and Single Pitch Award schemes.



Written by Liam Peter

Rock Climbing
£16.99

The official handbook of the Mountain Instructor and Single Pitch Award schemes. Packed with essential information and techniques, this is the official handbook of the MIA and SPA schemes. The book is a reference tool for every climber as well as containing specific ideas for anyone wanting to coach and instruct others.

www.thebmc.co.uk/shop

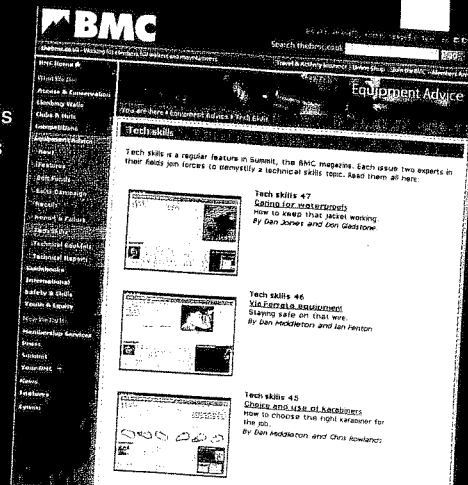
www.thebmc.co.uk/equipment

Read more Tech Skills articles on the BMC website.

Tech Skills

Want definitive technical advice? Read the complete series of Tech Skills articles on the BMC website.

www.thebmc.co.uk/techskills



SPOTTING LEMONS AND BEING A SWAN, RATHER THAN A TURKEY, IN CLIMBING RELATED ACTIVITIES

David Crossland, Anne Salisbury & Marcus Bailie

In theory, climbing wall and high ropes sessions should be the safest of all 'adventurous' activities. There should be no uncertainty of outcome beyond how far an individual will be able to climb. The environment is artificial and controlled, the equipment is well engineered for the job and there are tried and tested systems available to protect all involved.

In reality, based on the evidence of recent accidents and the regular observations of the Adventure Activities Licensing Service, this is not the case.

While we would like to stress that accidents on climbing related outdoor sessions are rare, there is a steady trickle of them, involving both instructor belayed sessions and peer belayed sessions. Although we believe it is not possible to prevent all accidents, we do believe there is clear benefit in seeking, and implementing, simple measures to stack the odds more in your favour and to deal with the easily preventable 'silly' accidents.

THE LEMON THEORY

There is a very fine line between near accident and actual accident and often the difference comes down to lemons. The 'lemon' theory of accidents has been written about in New Zealand and North America. According to the lemon theory, accidents are not necessarily the result of a 'chain reaction' or 'domino effect', where one thing leads to another until the accident happens. Rather, accidents happen when several unrelated factors occur at the same time or, like a casino style fruit machine, when the lemons all line up.

A lemon then, is any factor that could lead to an accident, given the presence of other contributory factors (other lemons).

A useful practical aspect of the Lemon Theory is that you can encourage your students and staff to 'look for lemons' without being accused of being a scaremonger.

We could categorise lemons into three main types:-

a) Unavoidable and, given the adventurous and educational nature of our activities, bound to happen. eg. a climber falling off; a novice

belayer making a mistake; an instructor being distracted. If ALL these happen at the same time an accident is likely. Hopefully, however, the supervision system ensures that they do not.

b) Avoidable and unnecessary. eg. belayer not being taught properly, or allowed enough time to learn the technique; equipment not correctly checked before someone climbs; inappropriate technique or incorrect use of belay devices (ie. belay plates used in a way that cannot be correctly locked off).

c) Rare and unusual but serious if they happen. eg. uncharacteristic error by an experienced instructor; equipment malfunction or failure; environmental (eg. bough of tree falls off, bolt of lightning); sudden medical emergency (student collapses).

Let's look at an example. On a peer belayed climbing session we could identify the following lemons:-

The climber falling off.

The belayers fumbling the rope so as to be unable to hold a fall.

The instructor looking up at the climber, not at the belayers.

No one tailing the rope for an inexperienced belayer.

We see all of these happen frequently on climbing and high ropes sessions but they rarely result in accidents. This is because an accident requires the lemons to line up - all four of the above need to happen at the same time. Thankfully this is rare but, like the winning jackpot payout on the fruit machine, it is inevitable sooner or later - it will (and does) happen.

HUMAN FACTORS

Human factors are of major importance in effective outdoor leadership, in risk management and in accidents. Two factors in particular stand out, which are relevant here. It

is our view that the rarity of accidents has led to a culture where the following appear too often to play a role:-

Peer, client, time pressure

Sessions are often of extremely short duration so you are under time pressure from the start. All the clients want to complete the activity and you are keen to achieve this. Moreover, other instructors manage to get all the clients through in the time allowed so you feel you have to do it as well. In this heady mix, the safety of the clients needs to remain paramount.

Incorrect assumptions

Often these are classic examples of dangerous 'learned behaviour through negative reinforcement'. In other words you haven't had an accident doing things this way and, because you haven't had an accident, it reinforces your behaviour and the behaviour becomes the norm - this is an incorrect assumption because it falls into the 'turkey trap'

THE TURKEY TRAP OR HOW TO MISINTERPRET PRIOR EXPERIENCE

The turkey bases its understanding of the way the world behaves on its own past experience. It has shelter and warmth, and everyday it gets food and water at around the same time. Day after day, nothing happens to threaten an interruption of peaceful existence, or even warns of it. Using this experience to look forward to what any given new day will bring, leaves the turkey sadly unprepared for the moment when, dramatically, everything changes and it becomes someone's Sunday roast.

Just because things have always worked in a particular way in the past does not necessarily provide confidence that they always will. It is important to temper past experience with critical thinking and awareness of the possible if we are to avoid being the turkey!

INSTRUCTOR FALLIBILITY

In addition to incidents where the client(s) made a mistake with peer belaying the following have all occurred in the past two years:-

a) A teacher seriously injured because an instructor didn't connect the safety rope before the client jumped from a tree.

b) An eleven year old girl seriously hurt because an instructor didn't correctly screw up a maillon and the safety rope came out when the child fell.

c) A Year Four primary pupil fell from a wall and was injured because the instructor had not connected the safety rope properly.

d) An instructor threaded a grigri the wrong way; the climber fell from the top of the wall and was injured.

e) A client injured by hitting a lower element on a ropes course because the instructor belaying them lowered too quickly.

The common denominator in the vast majority of these is 'the instructor didn't...'. We really must dispel the myth of instructor infallibility and accept that qualifications and experience do not remove human frailty and that instructors will make mistakes. This is true for all instructors irrespective of experience and qualification. We are all human and, therefore, capable of error - especially when engaged in routine and repetitive tasks which do not provide sufficient stimulation to keep us alert. Consider how many outstanding climbers



have died doing simple things, well within their capabilities. The secret is to ensure that these mistakes do not lead inevitably and irretrievably to an accident.

In addition to serious accidents (which we have already stressed are rare) we regularly see easily avoidable lemons including:-

- Instructors focusing their attention in the wrong place (usually up at the climbers who are safely tied on).

- Instructors standing where they cannot see all the belayers at all times.

- Large amounts of slack on the 'live' side of bell-ringing belay systems.

- Instructors not using their voice well to control individuals or groups or using confusing words/phrases. An example would be the instruction to 'keep the rope tight' when bell ringing. The child pulling down on the live rope pulls for all they're worth to keep the rope tight but does not realise they are creating slack between them and the belay device. What you want is no slack rope in the belay system.

- Instructors appearing to trust that the 'system' is safe - misplaced faith in 'self-locking' belay devices for instance.

- Instructors automatically supervising three or four ropes - because this is 'normal' regardless of the age and ability of the clients or the experience of the instructor.

Systems reliant totally on instructors always doing the right thing and not involving clients in creating a 'double check system'. The 'Principle of Duality' is not the same as duplication. For example having TWO instructors checking every karabiner would be disproportionate to the scale of the problem, but having the client doing it up and the instructor then checking

is simple and proportionate. It is also more educational!

An overly narrow focus on the causes of accidents. For example, there sometimes appears to be an assumption that mechanical or technical failure is more common and more serious than human error. The opposite is in fact true - accidents in adventure activities are far more likely to be due to human error than mechanical failure. Therefore, in designing systems or choosing equipment, we need to focus primarily on reducing possible negative impacts of human factors rather than making our prime focus the risks due to potential mechanical failure.

A WAY FORWARD

We do not pretend to have the answers to these problems but here are some suggested pointers and trigger questions to provoke your

thinking whether you are a manager, technical adviser or instructor.

Some key issues to consider or have a view on:-

- At what age/stage of development can a young person understand what they are doing when they are asked to belay in a conventional way? We believe somewhere in the secondary school, which tends to suggest that children younger than this can only belay with direct supervision (ie. a competent person tailing the rope) or with a failsafe system (NB. We do not consider that a grigri is a failsafe system).

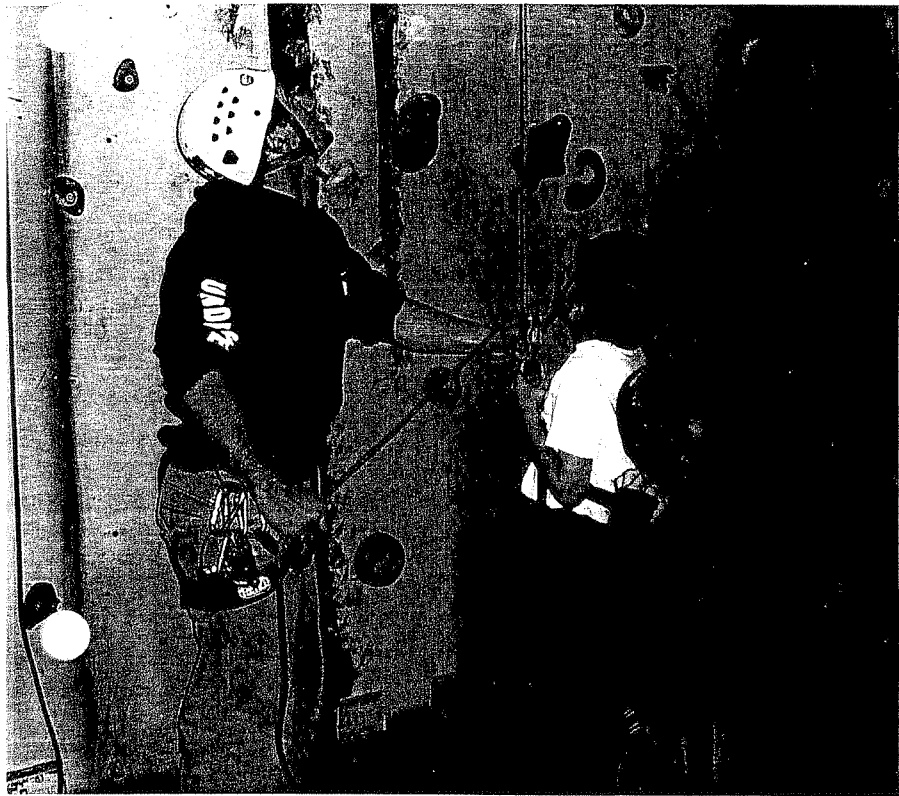
- What is the default number of ropes an instructor can supervise? We would suggest one. One instructor can coach one belayer or belay team at a time. Each additional rope requires a positive decision by the instructor that the previous team is competent. Which in turn requires a level of instructor experience,

which is likely to be beyond the abilities of a newly assessed climbing instructor.

- What is an appropriate staff student ratio for climbing sessions? Perhaps the ideal is 1:2 and go climbing! In the real world careful decisions need to be made about what is viable. When did you last give serious thought to the aims and structure of your climbing sessions and the appropriate ratios for these?

- How long should a climbing session be or what can you realistically include in the time available? (eg. how much time is spent learning how to belay compared with learning how to climb?)

- The teaching of peer belaying is a learned skill, which takes time and expertise. How much training do you give your climbing instructors,



who are trained and assessed in-

experience most children are visual learners. Do you give them sufficient information that they are being asked to do and understand the system before they start for

difference between deploying a system to teach climbing, and another with no experience of the activity or preparation for that specific job?

How do instructors maintain freshness? Consider areas: keeping variety in the job, using different types of group, how much time an instructor spends on one specific course or one job on the wall; and how to bring by management.

A SWAN BELAYER TECHNIQUE AND GOLDEN RULE

Climbing sessions should be planned to avoid the consequences of a momentary slip. Our aim must be to appear calm to the climber, focused and concentrating hard on the task. Aim to be a swan – serene and calm but legs paddling madly. The moment you find yourself out of breath, be an alarm call to stop.

Do you know if a belayer or belay team is providing adequate supervision ask yourself this – 'per group of people to belay, can they all jump up and jump off?' If the answer is no, should not let go of the tail of the rope.

Keep your attention away from a single climber (or group of belayers) FOR

A GOLDEN RULE FOR MANAGERS

Wherever possible, ensure your operating procedure takes account of human factors and do not rely SOLELY on one instructor's ability to carry out routine and repetitive tasks.

In truly adventurous settings in the natural environment there are many occasions when safety relies purely on the instructor's ability and judgement, but working on climbing walls, high ropes courses, and similar is to operate in an artificial, man-made environment carrying out routine and repetitive tasks.

In such cases, human beings are more prone to make mistakes and so it is important that, wherever possible, at every crucial point in the system, there is some form of a double check. At its simplest, this may mean the client does the action and the instructor checks, or the other way round. Either way, clients need to be involved and, therefore, given sufficient information to be actively engaged in checking and confirming their own safety.

Perhaps a sign should be placed at the bottom of every climbing wall and high ropes course reading, 'Your instructor is human and can, therefore, make mistakes. You should be wary of devolving all responsibility for your own safety but should stay alert and, if in doubt, stop and check with the instructor'.

Remember that accidents are rare, but on climbing walls and ropes courses they should not really happen at all. Look out for lemons, be wary of turkeys and take account of human factors and instructor error. Involve clients in decisions, don't remove all responsibility from them and build double checks into your systems.

WALES

Plas Pencelli Courses 2009

Adult Paddle Sports

3* Canoe & Kayak Training
26/27 September £150

4* Canoe & Kayak Training
14/15 November £150

Climbing

Single Pitch Award
Training/Assessment
26/27 September £150

Caving

Assessment 'days'
by arrangement
£75-£150 per day

Hill Walking

ML Award (Summer)
Training/Assessment
25 - 30 October £365
Walking Group Leader
Training/Assessment (3 day)
13 - 15 November £210

plaspencelli.co.uk
(01874)
665 241

SCOTLAND

BASP



First Aid
for all outdoor
activities

01855 811443
info@basp.org.uk
www.basp.org.uk

taysideTREKKING

www.taysidetrekking.com

Professional Guiding Service

Day Walks/Short Breaks

Mumro Specialists

phone: 07968 979931
e-mail: taysidetrekking@hotmail.co.uk
web: www.taysidetrekking.com

'...better a bad day on the hill, than a good day at the office'



who are trained and assessed in-

at a most children are visual or
ers. Do you give them sufficient
they are being asked to do and
a system before they start for

fference between deploying a
teach climbing, and an
r experience of the activity
or that specific job?

structors maintain freshness?
it keeping variety in the job
activities, different types of group
any instructor spends on one
s course or one job on the wall;
by management.

SWAN ER N AND EN RULE

imbing sessions should be
quences of a momentary slip
aim must be to appear calm to
ocused and concentrating hard
aim. Aim to be a swan – serene
but legs paddling madly
moment you find yourself
an alarm call to stop.

ow if a belayer or belay team
st provision ask yourself this –
group of people to belay
and jump off? If the answer
ould not let go of the tail of the

y ur attention away from a

A GOLDEN RULE FOR MANAGERS

Wherever possible, ensure your operating procedure takes account of human factors and do not rely SOLELY on one instructor's ability to carry out routine and repetitive tasks.

In truly adventurous settings in the natural environment there are many occasions when safety relies purely on the instructor's ability and judgement, but working on climbing walls, high ropes courses, and similar is to operate in an artificial, man-made environment carrying out routine and repetitive tasks.

In such cases, human beings are more prone to make mistakes and so it is important that, wherever possible, at every crucial point in the system, there is some form of a double check. At its simplest, this may mean the client does the action and the instructor checks, or the other way round. Either way, clients need to be involved and, therefore, given sufficient information to be actively engaged in checking and confirming their own safety.

Perhaps a sign should be placed at the bottom of every climbing wall and high ropes course reading, 'Your instructor is human and can, therefore, make mistakes. You should be wary of devolving all responsibility for your own safety but should stay alert and, if in doubt, stop and check with the instructor'.

Remember that accidents are rare, but on climbing walls and ropes courses they should not really happen at all. Look out for lemons, be wary of turkeys and take account of human factors and instructor error. Involve clients in decisions, don't remove all responsibility from them and build double checks into your systems.

WALES

Plas Pencelli Courses 2009

Adult Paddle Sports

3* Canoe & Kayak Training
26/27 September **£150**

4* Canoe & Kayak Training
14/15 November **£150**

Climbing

Single Pitch Award
Training/Assessment
26/27 September **£150**

Caving

Assessment 'days'
by arrangement
£75-£150 per day

Hill Walking

ML Award (Summer)
Training/Assessment
25 – 30 October **£365**
Walking Group Leader
Training/Assessment (3 day)
13 – 15 November **£210**

plaspencelli.co.uk
(01874)
665 241

SCOTLAND

BASP

First Aid
for all outdoor
activities

01855 811443
info@basp.org.uk
basp.org.uk

taysideTREKKING
www.taysidetrekking.com

Professional Guiding Service

Day Walks/Short Breaks

Munro Specialists

phone: 07968 979931
e-mail: taysidetrekking@hotmail.co.uk
web: www.taysidetrekking.com

...betterabad day on the hill, than a good day at the office.

flecting on his climbing career and, perhaps especially, the tragedy on his first ascent of the Matterhorn, Whymper wrote:

I will, but remember that courage and naught without prudence, and that a negligence may destroy the happiness of nothing in haste; look well to each step; beginning think what may be the end."

ent accidents and the regular observations of Adventure Activities Licensing Service would seem appropriate to all those who work on climbing and high ropes. Anyone engaged in this type of activity should "look well to each step" because the chances of error or misjudgement may be a great one but alternatively it may be a seriously preventable one and, for the instructor, what Whymper described as "a grief upon which I have not dared

climbing wall and high ropes sessions should be the best of all 'adventurous' activities. There is no uncertainty of outcome beyond how far the climber will be able to climb. The environment is safe and controlled, the equipment is well maintained for the job and there are tried and tested measures available to protect all involved.

this is not the case.

we would like to stress that accidents on all related outdoor sessions are rare we have seen a 'cluster' of similar accidents involving both belayed sessions and peer belayed sessions. we believe it is not possible to prevent all accidents but we do believe that there is clear benefit in implementing, simple measures to stack the odds more in your favour and to deal with the inevitable 'silly' accidents.

Lemon Theory

There is a fine line between near accident and accident and often the difference comes down to a single factor. The 'lemon' theory of accidents has been developed in New Zealand and North America.

A lemon then, is any factor that could lead to an accident, given the presence of other contributory factors (other lemons).

A useful practical aspect of the Lemon Theory is that you can encourage your students and staff to "look for lemons" without being accused of being a scaremonger.

We could categorise lemons into three main types:

- Unavoidable and, given the adventurous and educational nature of our activities, bound to happen: e.g. a climber falling off; a novice belayer making a mistake; an instructor being distracted. If ALL these happen at the same time an accident is likely. Hopefully, however, the supervision system ensures that they do not.
- Avoidable and unnecessary: e.g. belayer not being taught properly, or allowed enough time to learn the technique; equipment not correctly checked before someone climbs; inappropriate technique or incorrect use of belay devices (i.e. belay plates used in a way that cannot be correctly locked off).
- Rare and unusual but serious if they happen: e.g. uncharacteristic error by an experienced instructor; equipment malfunction or failure; environmental (e.g. bough of tree falls off, bolt of lightning); sudden medical emergency (student collapses).



Example: on a peer belayed climbing
could identify the following lemons:
peer falling off
fumbling the rope so as to be unable
fall
instructor looking up at the climber, not at
ropes
tailing the rope for an inexperienced

These happening frequently on climbing and
sessions but they rarely result in accidents.
se an accident requires all the lemons to
four of the above need to happen at the
hard. Usually this is rare but, like the winning
on the fruit machine, it is inevitable
it will (and does) happen.

Factors

are of major importance in effective
leadership, in risk management and in
factors in particular stand out, which are
It is our view that the rarity of accidents
culture where the following appear too
role:

Time pressure

Often of extremely short duration so
time pressure from the start. All the
complete the activity and you are keen
to finish. Moreover, other instructors seem to
push all the clients through in the time allowed
or have to do it as well. In this heady mix,
the clients needs to remain paramount.

Assumptions (often based on negative

instructors appear to act as if they assume
system is 'safe'. They appear to act as though
safety and competence of the clients is not
do the same thing with every group. The
assumption seems to be that it is normal
instructor to supervise numerous ropes with

These are examples of dangerous 'learned behaviour
through negative reinforcement'. In other words you haven't
had an accident doing things this way, and because you
haven't had an accident it reinforces your behaviour and
the behaviour becomes the norm – this is an incorrect
assumption because it falls into the 'turkey trap'.

How to Misinterpret Prior Experience - The Turkey Trap

The turkey bases its understanding of the way the world
behaves on its own past experience. It has shelter, warmth,
and everyday it gets food and water at around the same
time. Day after day, nothing happens to threaten an
interruption of peaceful existence, or even warns of it.
Using this experience to look forward to what any given
new day will bring, leaves the turkey sadly unprepared for
the moment when, dramatically, everything changes and
it becomes someone's Sunday roast. Just because things
have always worked in a particular way in the past does not
necessarily provide confidence that they always will. It is
important to temper past experience with critical thinking
and awareness of the possible if we are to avoid being the
turkey!

Instructors are not Infallible

In addition to accidents where the client(s) made a mistake
with peer belaying the following have all occurred in the
past two years:

- a. a teacher seriously injured because an instructor didn't
connect the safety rope before the client jumped from
a high ropes course.
- b. an 11 year old girl seriously hurt because an instructor
didn't correctly screw up a maillon and the safety rope
came out when the child fell.
- c. A year four primary pupil fell from a wall and was
injured because the instructor had not connected the
safety rope properly.
- d. An instructor threaded a grigri the wrong way;
the climber fell from the top of the wall and was
injured.
- e. A client injured when they hit a lower element on a
ropes course because the instructor belaying them
lowered too quickly.

The common denominator in the vast majority of these



next page



ctive of experience and qualification. We are
an and, therefore, capable of error – especially
engaged in routine and repetitive tasks which
proc e sufficient stimulation to keep us alert.
er how many outstanding climbers have died
imple things, well within their capabilities. The
is to ensure that these mistakes do not lead
bly and irretrievably to an accident.

ition to serious accidents (which we have
/ stressed are rare) we regularly see easily
ole lemons including:

structors focusing their attention in the wrong
lace (usually up at the climbers who are safely
ed on).

structors standing where they cannot see all
he belayers at all times.

argr mounts of slack on the 'live' side of bell-
nging belay systems

structors not using their voice well to control
ividuals or groups or using confusing words
phrases. (An example would be the instruction

- Instructors appearing to trust that the 'system' is safe – misplaced faith in 'self-locking' belay devices for instance.
- Instructors automatically supervising three or four ropes - because this is 'normal' regardless of the age and ability of the clients or the experience of the instructor.
- Systems reliant totally on instructors always doing the right thing and not involving clients in creating a 'double check system'. The 'Principle of Duality' is not the same as duplication. For example having TWO instructors checking every karabiner would be disproportionate to the scale of the problem, but having the young person doing it up and the instructor then checking is simple and proportionate. It is also more educational!
- An overly narrow focus on the causes of accidents. For example, there sometimes appears to be an assumption that mechanical or technical failure is more common and more serious than human error. The opposite is in fact true – accidents in adventure activities are far more likely to be due to

word

pretend to have all
to these problems
re some suggested
trigger questions to
thinking, whether
manager, a technical
instructor.

issues to consider
on:

age / stage of
ent can a young
understand what
re doing when
asked to belay
ventional way?
e somewhere in
ary school, which
suggest that children
an this can only

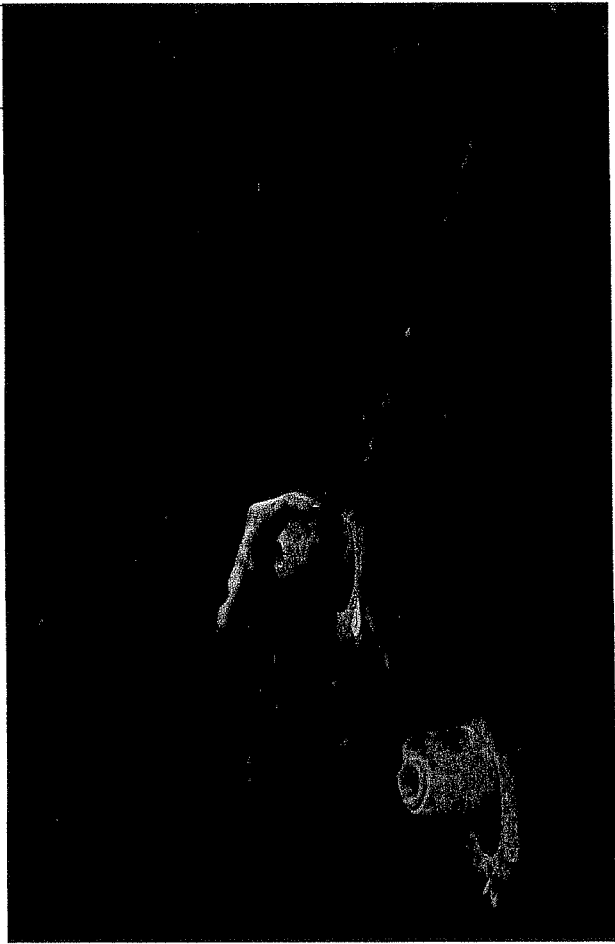
h direct supervision (i.e. a competent person
rope) or with a failsafe system (NB we do
ur that a grigri is a failsafe system).

he default number of ropes an instructor
ise? We would suggest one. One instructor
n one belayer or belay team at a time. Each
rc requires a positive decision by the
hat the previous team is competent. Which
quires a level of instructor experience, which
be beyond the abilities of a newly assessed
instructor.

n appropriate staff student ratio for
sessions? Perhaps the ideal is 1:2 and
nq! In the real world careful decisions need
e about what is viable. When did you last
ous thought to the aims and structure of
ing sessions and the appropriate ratios for

n should a climbing session be or what
alistically include in the time available?
w rch time is spent learning how to
pared with learning how to climb?)

ning of peer belaying is a learned skill,
res time and expertise. How much training
your climbing instructors, especially those



- ▼ Is there a difference between deploying an experienced climber, trained to teach climbing, and an 'instructor' with no experience of the activity beyond being trained how to run a high ropes course session?
- ▼ How do instructors maintain freshness? Things to consider are: keeping variety in the job (instruct different activities, different types of group etc); limit the time any instructor spends on one element of a ropes course or one job on the wall; frequent monitoring by management.

Being a Swan

Supervising climbing-related sessions should be stressful; the consequences of a momentary slip are appalling. Your aim must be to appear calm to clients but alert, focused and concentrating hard with 360° awareness. Aim to be a Swan – serene on the surface but legs paddling madly underneath. The moment you find yourself relaxing should be an alarm call to stop.

A Golden Rule and Trigger Question for Instructors

If you want to know if a belayer or belay team needs your direct supervision ask yourself this: **'do I trust this person/group of people to belay me while I climb up and jump off?'** If the answer is 'no' then you should not let go of the tail of the rope.

NEVER take your attention away from a novice belayer (or group of belayers) **FOR EVEN A MOMENT** unless:

- you are holding the tail of the rope
- you have 'tied off' the ropes, or similarly locked the system, to allow the belayers to let go
- you have total confidence in the competence, maturity and

Rule for Managers

possible ensure your operating procedure
int of human factors and do not rely
one instructor's ability to carry out
repetitive tasks.

nturous settings in the natural environment
ny occasions when safety relies purely on
r's ability and judgement, but working on
ls, high ropes courses, and similar is to
artificial, man-made environment carrying
and repetitive tasks. In such cases human
nore prone to make mistakes and so it is
at wherever possible, at every crucial point
n, there is some form of a double check. At
this may mean the young person does the
ie instructor checks, or the other way round.
lients need to be involved and, therefore,
ent information to be involved in checking
ing their own safety.

gn should be placed at the bottom of every
ll and high ropes course reading something

NOTICE TO CLIENTS

Your instructor is human
and can, therefore, make
mistakes. You should be wary
of devolving all responsibility for
your own safety but should stay
alert and, if in doubt, stop and check
with the instructor.

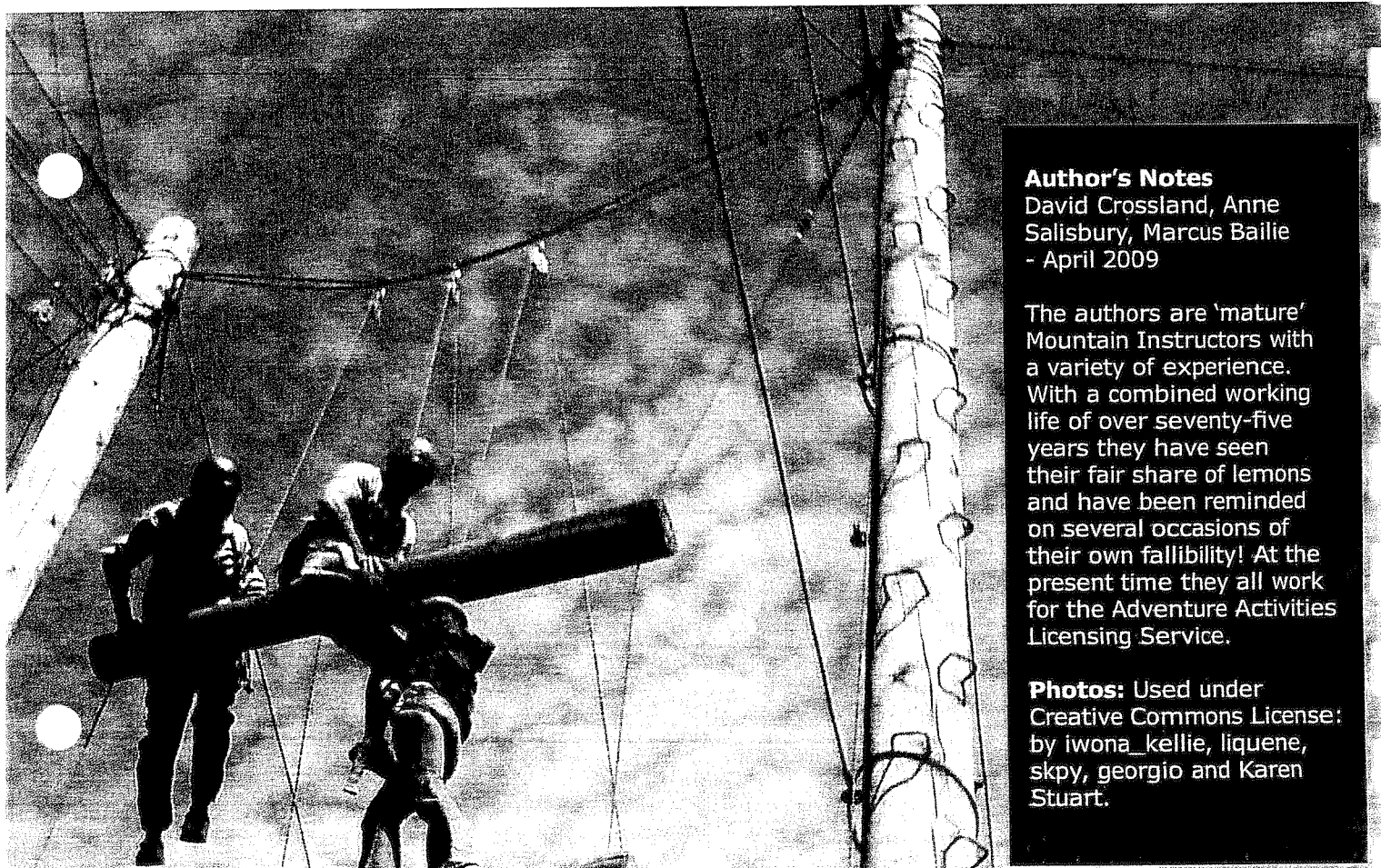
Remember that accidents are rare but on climbing
walls and ropes courses they should not really happen
at all. Look out for lemons, be wary of turkeys and take
account of human factors and instructor error. Involve
clients in decisions, don't remove all responsibility
from them and build double checks into your systems.
Most important, remember Whympers and "look well
to each step..." ■

Author's Notes

David Crossland, Anne
Salisbury, Marcus Bailie
- April 2009

The authors are 'mature'
Mountain Instructors with
a variety of experience.
With a combined working
life of over seventy-five
years they have seen
their fair share of lemons
and have been reminded
on several occasions of
their own fallibility! At the
present time they all work
for the Adventure Activities
Licensing Service.

Photos: Used under
Creative Commons License:
by iwona_kellie, liquene,
skpy, georgio and Karen
Stuart.





Lessons Learned - from two managed incidents in Long Churn

by the Lessons Learned Group

In 2008, a group of young people and adults from an outdoor centre had to wait out a flood in Long Churn Cave, a popular 'beginners' cave system in the Yorkshire Dales. In October 2008 another group from another centre, quite some distance away, had the same ordeal in the same cave.

On the occasion thunderstorms had been forecast on two preceding days but nothing happened. The weather forecast was similar on the morning of the day of the incident. The leader had been caving with another group elsewhere in the Dales and chose to take this second group to Long Churn in the afternoon.

Up to the leader, the weather forecast had changed during the morning and severe weather warning for the Ingleborough area.

The group were beginning their route out of the cave system and had just done Double Shuffle when noise upstream alerted the leader. They retraced their route past Plank Pool and it was while they were doing this that a foot of water came down what is normally a dry 'fossil' passage. The leader knew the cave system well and the group was able to get to a link passage where they were away from the flood. In this passage water was estimated to be 45cms deep. In the main 'fossil' passage the water was a 55cm deep torrent. The leader considered an alternative route out but saw that this was impossible.

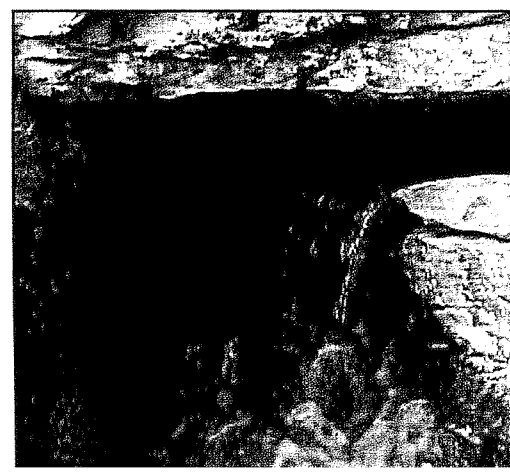
The Cave Rescue Organisation (CRO) had been called out to some walkers on the Ingleborough summit ridge who were scared by the severe thunderstorm and a great amount of water around them. These walkers were led off the hill. Rain fell in the area around 14:45 hrs with some large hail and around 45 minutes of torrential rain. About 15:30 hrs a large number of surface streams and landslips were visible in the catchment area of the Alum Pot and Long Churn cave systems. A pulse hit Dr Bannisters an hour after first rain, with a flood at around 16:40 hrs. The Cave Rescue Organisation (CRO) was alerted that a minibus was still at the normal parking place (in dry conditions) and went up to the cave system to effect a rescue. They waited some time for the flood to subside before entering the cave and finding the group safe and well in the link passage.

For 2008

In the second incident a weather forecast had been obtained in the morning, the impact assessed throughout the journey to the Dales, based on what had been seen and the leader's knowledge of Long Churn. At the entrance



Alum Pot



Lessons Learned

good practice, in any activity, to monitor weather conditions over the days (and, in some cases, weeks) leading up to the event. This can be included in the educational experience for the participants – as part of their planning – and enables a picture of developing conditions to be seen. In some cases programme modification may result.

The importance of monitoring the weather forecast at key times during the day, whenever possible, and especially noting potential storm forecasts, cannot be over-emphasised. If travelling to the cave from a distance, or staying for the day and caving in the afternoon, there will be a benefit in having some mechanism for checking weather forecasts – updates locally or for phoning back to the base/campsite. Returning to base at lunch time also provides an important opportunity to re-check on weather forecast updates before caving in the afternoon.

Staff should know the flooding mechanisms and potential severity of floods in all caves used. That is, know which parts flood first, what the first signs will be, what is likely to happen next. If in any doubt leaders should clearly err on the side of caution.

Staff should know the cave systems well, to ensure knowledge of 'safe' areas and alternative exits in the event of flooding. Knowledge of which parts of the cave system would be difficult to exit in the event of flooding is also crucially important.

Evacuation procedures should be standard for this type of activity, although in both cases here Cave Rescue was notified by other means. In cases of a prolonged delay before returning to base a 'safely' call to base would cause the procedure to be completed more quickly.

A prepared and practised action plan in the event of flooding, based at least in part on 1. and 2. above, may prove invaluable.

Equipment worn by the group, such as one-piece wetsuits under proper caving overalls will make planned delays underground more tolerable.

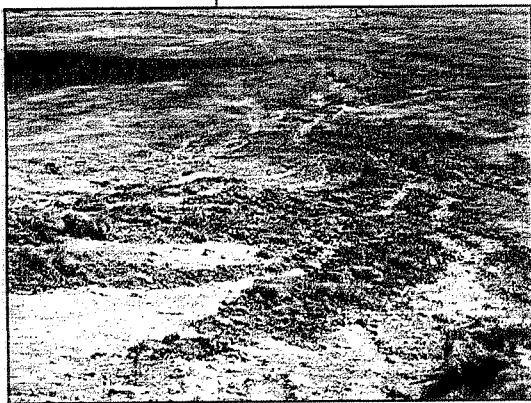
Always have a plan B rather than reduce safety



Upper Entrance



Tide Mark



View Towards Caves

The Lessons Learned Group

is a small group of professionals and enthusiasts in adventure activities, brought together by a common aim to incorporate any lessons that can be learned from accidents into ongoing good practice.

Our intention is to present an objective summary of an incident together with possible lessons. We do not aim to allocate blame or responsibility and our report represents the views of the individual members of LLG and not of any official body.

Information not currently available to us may render our comments inaccurate

Peer Belaying

for instructors – cut out, laminate and keep handy!

ing a peer belaying session should be stressful – the consequences of a mistake
ble and things can go wrong almost instantly. On the other hand peer belaying
r more educationally beneficial than the instructor doing all the belaying.

may find the following checklist useful as an aid to keeping focused.

Remember no system is inherently safe – only your vigilance, competence,
ment and awareness will keep participants safe.

participants in their own safety – make them aware of how the safety
m works and exactly what their role is.

double checks – one person does a task and someone else
ks it (e.g. the student clips on and you check it).

two types of supervision:

Hands-on – you are part of the system, holding the rope

Hands-off – the moment you let go of a rope you can no longer
physically prevent an accident.

ng from Hands-on supervision to Hands-off supervision requires a
ous decision. The only controls you have once you let
the rope are your judgement of the participants' maturity/
tence and the use of your voice.

v sufficient time for participants to master any skill before the
to perform it becomes critical.

rief participants about their roles and responsibilities –
check they have understood.

the decision that participants are sufficiently mature to
pt responsibility you give them.

'Swan' - calm and serene on the surface but working
underneath.

pp an instructor 'twitch' – 360 degrees awareness
hat is going on around you.

in the position of maximum usefulness – i.e. in the
place to be able to see all the activity and all the
people and to be able to intervene if necessary.
as your attention in the right place – usually at the
er(s) not at the climber(s).

your voice well to give instructions – use names,

Tools of the Trade

By David Crossland

1 ROPES COURSES

Photos: Dave Smith

Work on high ropes courses is at the periphery of the mountain instructor's remit. The question to fellow freelance instructors, 'Do you work on high ropes?' often produces the response, 'Me! I don't do it!' as though it were some form of affliction. Having worked fairly well in the first half of the year, I decided to ease back a little and better myself with this expanding area of work during late June.

I have been undertaking more work as a technical adviser (TA) on high ropes for several sites in my area. I entered ropes courses in the mid-60s while working briefly as a temp at Devon Outward Bound where there was built by the Royal Marines, and was a replica of the assault course at their base at Boveas Mouth. A rope and timber structure, it could best be described as 'challenging'! After the demise of Outward Bound, I gather it was modified and continued in use in the Dartmoor Country Park for some decades, I delivered occasional sessions as part of my work. As more sites built climbing and ropes courses became further developed to incorporate rope course elements. The step towards undertaking high ropes developed naturally out of the other more mainstream work I was doing. At first there was a core of experienced staff in place, and the operational systems already in place. I did additional 'cow's tail' courses with the type of elements I already knew well. This work involved no accreditation courses for new staff or additional training top-ups as new elements were added gradually.

One way for a new MI to move to work with high ropes is to assist an experienced and established instructor to work on a range of sites and courses. My induction worked well enough, as it took place over a period of time and I stayed within the limits of my experience – initially on fairly simple ropes courses and where there were already very competent staff. On such courses many MIs could cover the required safety aspects, but training the soft skills needs something beyond the skills taught through MIA. A session under the guidance of a TA must be safe, but a good session requires that the staff running the session can exploit this. I have learned so much from individuals who hold no NGB award, but have developed as first class instructors over time. Whilst working as a trainer and TA it is essential to stay within your area of competence. Most AMI members, do not have expertise as a designer or constructor of ropes courses. This is not my ball game and I will not offer opinion or advise on constructional matters. The simple, centre-built ropes courses of the 60s and 70s are far removed from the complex, elaborate structures built today by civil engineers. So, I have visited a number of sites where I saw very different ropes courses. I wondered if any of these were where ropes courses are in place. How many had an over view of what is out there, and the operational practice that is in use?

As I am aware of fall into three types:-

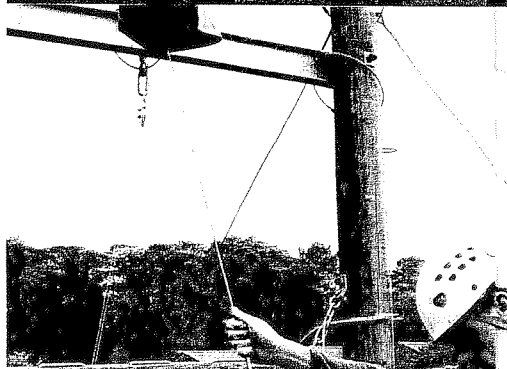
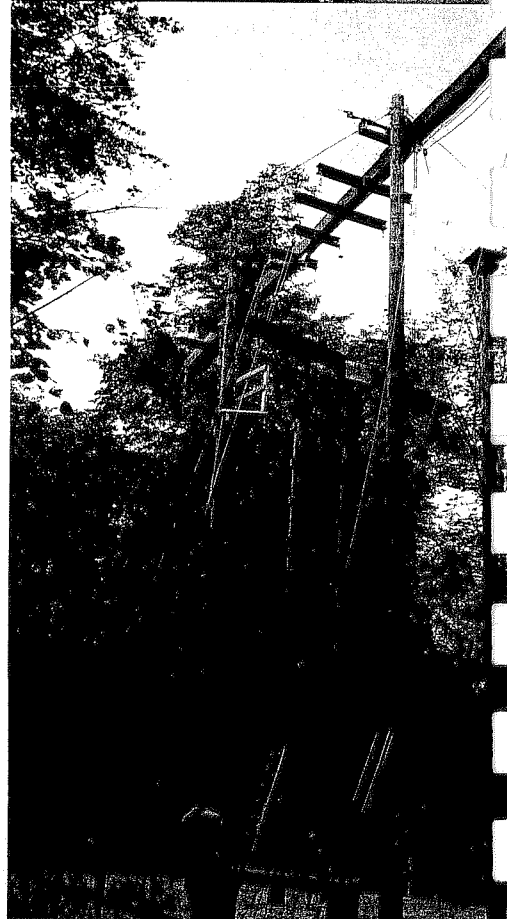
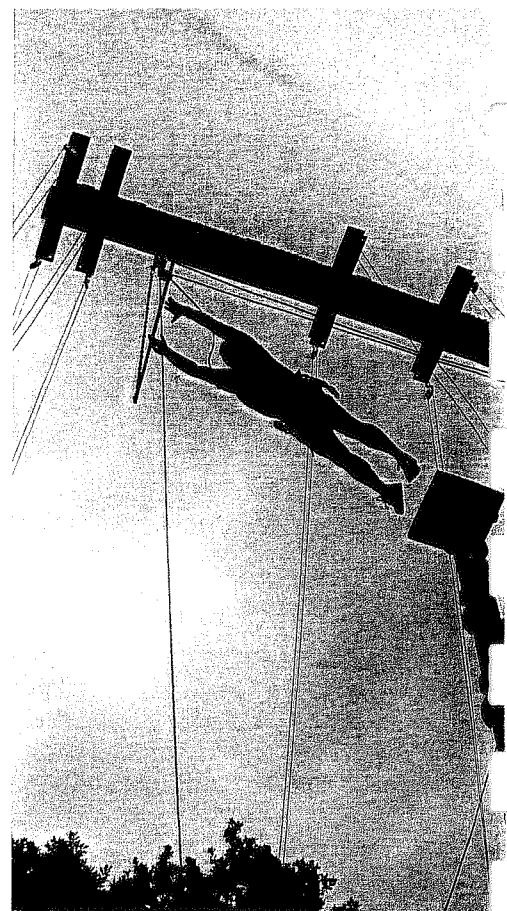
1. 'Cow's tail' courses, rather like a via ferrata. A pair of cow's tails are used, which must be clipped alternatively. These, I suppose, must be placed at the more 'adventurous' end of the spectrum. I have learned a lot from those who deliver sessions (and write the risk assessment!)

2. 'Continuous rail' courses. The user is clipped onto a rail and remains attached throughout the course, without the need to clip in and out. At least one company 'sells' these in part as requiring no maintenance to operate.

3. 'Elements' courses which are often set in a line, and where ground belays are used on each element. These are the most common ropes courses with the most elaborate elements. They may operate with a number of independent sections. Each student is attached to a safety line from leaving the ground and remains on that line until they return to the ground.

Over the years we have developed operational systems to suit their course and their user groups. They were developed over time, having often gone through changes and improvements to what was originally a very basic system. The worst scenarios the staff were trained to deal with naturally varied to reflect the courses in use. Managers often wonder what other people do on their ropes courses and whether their systems are the best. We frequently come together at workshops to review the delivery of MLTE aspects of our work as professionals in the field of climbing and mountaineering. This both raises standards and assures us we are working in line with others in our industry – something many have not done before. There is no NGB, and this is at the limit of the remit for MIs.

Issues like the harness used can produce a lot of debate. Do we use a simple sit harness or a full body harness? Do we move to full body harnesses because these are presented by some as the only safe way? How do we create a cow's tail of the optimum length for all students, and how do we manage the 'crane' element? Have we been too focused on the latest high tech element of our course whilst staff have forgotten that it's the old crate stacking element that is producing incidents? When it comes to ropes courses for the first time there are some hard lessons to be learned unless you have used them before. Even then it's not like buying a new car where you might expect everything to be in place and ready to go. Teething problems and elements sometimes need tweaking. One thing is for sure, when you



THOUGHTS ON FALLING

an Liverpool John Moores University

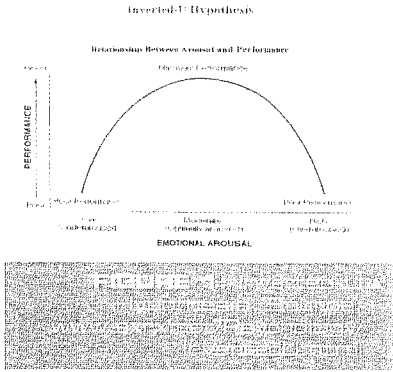
ve all experienced 'the fear': why shouldn't you climb above that
ner? It's bombproof! Why be anxious? The rope's new, knot and
less checked, belayer awake, nothing to hit - just a short flight, it
un.

ed Steve Parry, a
Outdoor
MU. Inspired by the
article in 'Climb'
McClure, 2005)
on this topic for his
done my best to
overview of his
many of Steve's
tly. Any errors you
t mine. For those
st I've including

d
e et al (2003)
ce climbers feel
higher routes and
their movement
(2003) proposes
most difficult mental
be overcome in
e fear of falling.
sal and mental
gies are available to
us; many are
sed to reduce
during and after
(we've seen and
ew of these!)
strategies are self-
g, meditation,
cessive muscular
-Ch yoga,
N psycho-
tc. (Bollen, 1994,
02, Goddard and
Hardy et al 1996,
lherger 1989, Hurni
Richardson 2001,

(physical symptoms) and how they
affect performance are well-
researched topics (eg. Hackford &
Spielberger 1989, Hardy et al 1996,
Jarvis 1999). Many psychologists
believe high arousal can maintain or
enhance performance. Uni-
dimensional theories such as the
'drive theory' (explained in Bunker et
al 1985, Weinberger & Gould 1995)
hypothesise that the greater the
arousal the greater the performance,
whereas more complex theories
such as the 'Inverted-U' hypothesis
(Figure 1) and the 'Multi-Dimensional
Anxiety Theory' postulate that
athletes can become under as well
as over-aroused, that there is an
optimum level of arousal for different
people and different activities, and
that we need to distinguish between
and take account of both 'state' and
'trait' cognitive and somatic anxiety.
Hardy et al (1996) developed these
ideas further, proposing a 'cusp
catastrophe' model of anxiety and
performance'.
'The model predicts that increases
in cognitive anxiety will have a
beneficial effect upon performance at
low levels of physiological arousal,
but have a detrimental effect upon
performance at high levels...' and
also '...that at low levels of cognitive
anxiety, changes in physiological
arousal should have relatively small
effects upon performance... however,
at high levels of cognitive anxiety, the
effects of physiological arousal can
be either positive or negative relative
to baseline performance, depending
on exactly how high physiological
arousal is.' The 'catastrophe' bit of
the theory is observed when
continual increases in physiological

the performer a considerable time to
calm down and be able to continue
with the activity at a suitable level.
Steve's research attempts to
measure anxiety levels and their
affect on performance, hoping to
clarify whether a lead climb fall
exercise in a controlled situation
could help desensitise the climber
and thus reduce anxiety and its many
manifestations.
Fawcett et al (1986) believe fear is a
necessary element to climbing and
without it there would be many more
accidents and deaths. But if we are
going to make progress as climbers
we need to find ways to control
excessive levels of fear which may
hinder performance. In 'Fear of
Flying', Binney and McClure suggest
training schemes for beginner,
intermediate and advanced climbers,
aiming to help them overcome the
'falling' fear. This study used their
'Intermediate' scheme as a basis for
experiments with volunteer climbers.
The Research Project
The aim was to determine whether
such a training programme could
reduce somatic and cognitive anxiety
in intermediate climbers. Steve
planned to:-
Test the subjects' somatic anxiety
using heart rate and blood pressure
monitors.
Test cognitive anxiety using the
Spielburger et al (1968) State-Trait
Anxiety Inventory (STAI)
questionnaire.
Carry out structured interviews
aiming to highlight any post training
changes in participant climbing
performance.
Experiment design
The experiment took place at



was a straightforward but fairly
overhanging corner: thus no physical
obstacles, just the psychological
ones. Two competent belayers were
roped in. Each climbing volunteer
was asked to take a series of nine
leader falls at the seventh quickdraw,
starting with the draw at head height
then with it progressively lower until it
was just below the feet.
Unfortunately, due to equipment
and design difficulties, all results
from somatic anxiety tests had to be
discounted. However, each individual
did complete the cognitive based
STAI X-1 questionnaire eleven times:
before the warm-up, before each
lead/fall sequence and at the end of
the experiment. This questionnaire
has been assessed for reliability and
validity and is one of the most widely
used instruments for measuring
anxiety. Participants are briefed to
answer openly and honestly
otherwise results could be unreliable.
Participants must use 20
statements to describe themselves
'at a given moment'. To do this they
circle one only from the numbers
1-4, where 1 means 'Not at all', 2
means 'Somewhat', 3 means
'Moderately so' and 4 means 'Very
much so'. For example:-
* I feel calm 1 (2) 3 4
* I am tense 1 2 3 (4)
* I feel self-confident (1) 2 3 4

a about participant
er to provide further
! participants later
climbing with the
llov by semi-
views designed to
data on participant
to be discussed
tantative results from
e.

ed discussion

participant STAI test
a general decrease in
50% throughout the
se, although there
eases before most
falls at navel height
in height. The most
in anxiety was on the
en minutes after the
iment – relief that the
afely? A paired t-test
omp the 'before'
ts, indicating with a
significance that the
ed cognitive anxiety
out the experiment.
e material collected
interviews helped to
validity of those
n questions asked to
were:-

u think your anxiety
n a line graph?
u think your anxiety,
the STAI results,
eased between the
last?
e training affect your
d why?
ning have a negative
ct c ur psyche for

ng question 1, six of
ipants thought their
slowly decreased
e training, whilst
ed their anxiety level
g this period. This
of the group whose
d dramatically as the
re realistic.

d drop in most
could be explained
–

ining, the route used
the participants so
a 'higher perceived
& Munroe, 2003).
d as the climbers
mil ith the route.
to Kerr's (1985)
athletes are able to
retation of feelings
t to pleasant. Boyd
(2003) state that rock

feeling of 'enjoyment' as the training progressed.

* Freischlag & Frieschlag (1993) in Boyd and Munroe (2003) found that individuals who participated in climbing often reported reduced anxiety whilst climbing, but they weren't being asked to jump off!

When answering question 2, four of the subjects believed their cognitive state anxiety decreased because they 'got used to the falls'. Steve Long (*pers. com. 2006*) explains that getting used to falling in climbing could be labelled as a process of 'progressive desensitisation'. He advises 'tackling fears by dividing them into manageable chunks' and overcoming each one at a time. According to Goddard and Neumann (1993) 'progressive desensitisation involves gradually exposing yourself to more intimidating situations in order to reach a goal that may initially seem inconceivable.' Young Jack Osborne illustrates this in the TV documentary 'Adrenaline Junkies', when he's encouraged to take bigger and bigger lead falls in the Verdon Gorge. Parnell (2005) interviews Jack, who reveals he was absolutely 'freaked out' by the experience, but was able to persevere and eventually overcome his fear of falling.

Although all participants in this research were aware of the capabilities of the climbing equipment and systems before this experiment, four of them felt that some of their decrease in anxiety throughout the training was due to an increase in confidence in the system. Hardy (*in Fyffe and Peter 1997*) states, 'perhaps the best inoculation against over-anxiety is self-confidence.' He feels confidence will not necessarily help you cope with anxiety if you are suffering from it, but rather will tend to reduce the possibility of being anxious in the first place eg. you trust your judgement – that really is a bombproof runner and you know it will hold you – have faith! Three of the participants had never taken a lead fall indoors or out. Participant 7 had, in the past, taken a serious outdoor fall – 25 feet to the deck.

Replies to question 3 indicate all participants felt the training had influenced their performance. Five felt that fear of falling was not now as much of a concern, all reported enhancement in later performance and four noted they now felt more 'daring' whilst climbing indoors. Such progress is explained by Evsenck

According to Bunker et al (1985) 'The relationship of arousal and athletic performance is an excellent example of the hypothesised inverted-U relationship. This concept implies that for optimal performance each individual must attain an intermediate or moderate level of arousal. At the two extremes, either very low or high arousal levels, the performance or behaviour may appear quite similar.' Thus it could be argued that we shouldn't desensitise ourselves too much with regard to fearing the fall, we need the excitement in order to keep our attention, keep us alive and help us to put in a good performance.

One of the flaws in this piece of research is that although participant 'state anxiety' was measured, 'trait anxiety' was not. It may well be that person 6, who showed the least anxiety during the experiment and also reported little change in attitude, is by nature laid back, displaying generally low trait anxiety. Hackfort & Spielberger (1989) stress the importance in this sort of research of pre-testing of trait anxiety. To perform to their optimum, Hanin (2003) explains that some performers can be high in anxiety, have self-confidence and feel relaxed at the same time, whereas others can feel low in anxiety, have self-confidence and also be relaxed. Steve Parry suggests that participant 6 would need to be more aroused before performing at optimum level, whereas participant 7 (the one who had taken a previous ground fall) needed to lower anxiety levels before performing well. Participant 7 reported that before the training she didn't believe she was capable of completing the tasks and, although she notes no real increase in performance, she now feels less anxious and more confident when tackling overhanging rock. This could indicate some degree of desensitisation as a result of the training. Ideas from Hardy et al (1996) may explain her poor performance, suggesting that over-arousal of the mind can cause a 'tunnelling' effect that eliminates relevant cues, resulting in low achievement. Hardy (*in Fyffe and Peter 1997*) explains 'when anyone gets anxious, there is a tendency for them to attend only to those aspects of the environment which they consider to be important'. In this case that could mean just the consequences of falling off instead of

ignoring irrelevant stimuli like excess fear, you should be able to perform optimally (Marten, 1987). Post training, participants 1 and 2 believed they were thinking less about falling and that performance was enhanced by a decrease in anxiety and negative thoughts.

To have any long-term affect on the fear of falling, Long suggests 'it probably needs hundreds of repeats' in order to ingrain the results effectively. Question 4 asked the participants if the training had a negative or positive affect on their 'psyche' for climbing. Steve Parry suggests a preferable question may have been 'Did you notice any change after the training?' In hindsight, it would probably have been better to employ a 'performance profile' (eg. Sellars 1997) to establish any long term affect of the training on the seven participants. However, the data indicated that all felt the training had been a positive experience. As Long explains, the 'fear of flying' training method must have positive results every time if it is to have a productive effect eg. no injuries, major mental traumas etc, although it is hard to assess if such a brief training session could be credited with having long lasting results.

Conclusions

Results suggest that such a Fear of Flying training course can decrease cognitive state anxiety in a climber. However, such limited testing with small numbers of participants lacks real clout and the omission of trait anxiety tests further limits the validity of this research. It appears it would be hard to test levels of somatic anxiety in a meaningful way but with detailed planning and sophisticated equipment this should be possible. The research confirms the training appears to have had a positive influence on the performance levels of the participants, reducing cognitive anxiety in most participants and, in all cases, increasing confidence in the equipment, the belay system and the belayer.

So, hope I've not lowered your anxiety levels to a state of slumber; it's off to the climbing wall now to start taking those whippers. Anyone want to belay?

References

Email me for a full reference list –
a.boorman@ljmu.ac.uk

Acknowledgments

Thanks are due to Dave Hardy.

Dyneema® Slings and Some Climbers Urban Myths

In the past few years dyneema (note Dyneema is the trade name for a superstrong polyethylene fibre made by a firm called DSM) slings appear to have picked up a bit of bad press in the general climbing public from unsubstantiated stories about dyneema slings allegedly failing at lower than expected loads. Other attitudes about dyneema slings appear to have come from individuals misinterpreting the results of tests.

With the advent of skinnier slings such as the Mammut Contact slings made out of 8mm Dyneema, then more urban myths appear to have popped up that the slings are not strong enough (even although they are rated to 22Kn the CE minimum requirement).

Dyneema and Spectra are high strength polyethylene fibres which have a tensile strength about 15 times greater than steel. The fibres have a long life span and a high resistance to abrasion, moisture, UV rays and most chemicals. Dyneema is also 'hard and sharp' under load which means it can increase the risk of it cutting when directly attached to other slings. (Try wrapping thin twine around your finger then pulling, it'll cut deep – that's what 8mm Dyneema does to other wider diameter slings. Now wrap another finger around your finger and pull – far more comfortable).

During the Lyon testing day, two tests were carried out on a 10mm Dyneema sling rated at 22Kn (or 2200kg). The first involved a static pull test on the sling where it failed at 2814Kg. The next used another 10mm Dyneema sling that was mildly abraded along approximately 40cm (so it looked like an old used sling ie. one of these hairy things everyone has on their rack!). This abraded sling failed at 1485Kg. The third and last test was on a 10mm Dyneema sling that had a nick out of one side of it's axis (done using a very sharp knife) this sling failed at 2336Kg. This pronounced difference is due to the fact that the fibres in the sling are woven together. By abrading the sling you weaken the longitudinal fibres hugely affecting the sling strength. Whereas cutting the sling will only affect the fibres you cut eg. cut half the sling affects half the fibres. So watch out for furry slings!

So here are some of the urban myths I've picked up on...

Myth No 1 – Dyneema slings when knotted break at really low loads.

Myth No 2 – Never join two dyneema slings together using a larks foot (head) as they can fail at very low loads.

I'm sure you've got all your variations on the above. What I'll do here is provide the FACTS about Dyneema slings and their uses so you as instructors and climbers can make your own decisions about how to use them, and hopefully educate the wider climbing public to the real usefulness of these slings. I've summarised a test report from Mammut which provides evidence that can be used to prove or disprove the above myths.

Breaking of a Girth Hitched Sling (Larks Foot or Larks Head)

On the 22 October 2006, John Sherman, a well known Colorado climber broke a Mammut 8mm Dyneema Contact sling. The slings had been part of an anchor used to fix a rope so he could clean a climb. It would appear that the way the anchor was set up was such that the girth hitched 8mm Contact sling was taking the majority of the load. The rope was directly attached to what appears, from the photos, to be a thread, whilst the two girth hitched slings (one 8mm diameter and the other 15mm diameter) were attached to another thread and then attached to the rope using a krab and clove hitch. After the incident John forwarded an email to many of his friends warning them not to girth hitch (Note: we would call this a larks foot or head) skinny slings together. This email very quickly found its way worldwide to many internet forums and chat rooms. One major UK website even ran it as a story. About two weeks later, John sent the still girth hitched slings to Mammut for further analysis.

From industry testing (Alpin-Lehrplan 6, Alpenverein/BLV – 'Gergrettung' by Toni Freudig and Adalbert Martin; and informal tests done by Kolin Powick at Black Diamond*) it's well known that knotted slings lose a significant amount of their strength – a strength loss of 50% is the generally accepted ball park figure. Mammut themselves did tests in 2004 and 2006 measuring the tensile strength

of slings girth hitched together which confirmed this. Black Diamond's own informal tests also gave back a figure of around 50%.

According to Sherman's statement the girth hitched slings had not sustained any dynamic falls and had been subject only to the sort of forces normally associated with someone hanging on a rope doing some cleaning of a climb.

Mammut did extensive tests on the two slings which were girth hitched together. One a Misty Mountain 15mm Spectra sling, the other the Mammut 8mm Contact sling. These tests echoed what earlier tests had found, that the strength of the girth hitched slings was reduced by about 50%. In the context of Sherman's incident this reduced strength was still within acceptable safety parameters. So Mammut then took the broken Sherman sling along with the broken test samples to a textile proofing company called Testex. After exhaustive testing they concluded that Sherman's sling had been cut with a very sharp object. The only difference between Sherman's cut sling and a tested sling that was cut was Sherman's sling had a pulled thread. The theory being that this thread was enough to hold the anchor in place so it appeared intact and then finally pulled under a low load.

Observations

Mammut and Black Diamond both came to very similar conclusions. In both tensile strength tests (static pull) and drop tests (Fall factor 2 with 80Kg mass) joining two slings together reduces the ultimate strength by up to and in some cases over 50%. Although with dynamic loading in all cases it took more than one severe drop to induce failure.

Note: CE requirement is a minimum breaking strength of 22Kn (2200Kg) so this 50% reduction gives an average strength of around 1100Kg.

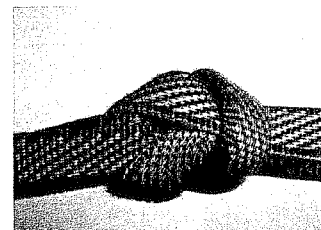
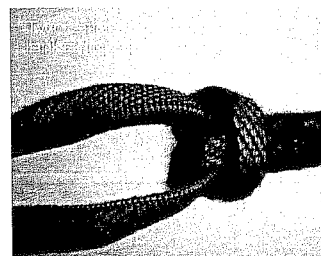
Joining a narrow sling to a wider sling results in slightly greater reduction in strength (approx over

57%). So based on the CE minimum strength of 22Kn (2200Kg) an average strength of 8.8Kn (880Kg).

In both these situations these strengths would still be enough to cope with the loads anticipated in a STATIC situation such as a bottom roping, self lining etc. HOWEVER, add a dynamic element to that, which would generate an increased load eg. when self lining you manage to get some slack into the system then slip and fall shock loading the system, and it could cause the girth hitched slings to fail.

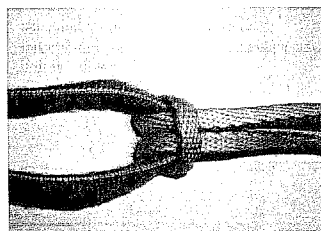
Both Mammut and Black Diamond recommend that you use a longer sling which negates the need to join slings together (or a rigging rope?) and if you need to join slings together, using a karabiner is stronger.

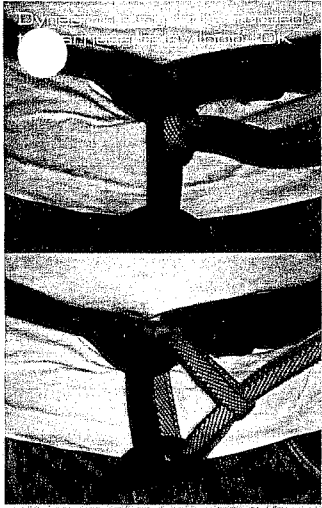
In the Black Diamond tests a couple of conclusions are worth noting. If you must join two slings together then it is better to use slings of the same material and width.



Use a symmetrical knot such as the Strop Bend. In Black Diamond's testing they appeared to perform better than a standard Girth Hitch (or Larks foot/head) when joining two slings together. The qualifying factor is that you have to take into account that the overall reduction in strength is still in the order of 50%.

So, looking at our urban myths we can see that in Myth No1, where the Dyneema slings break at very low loads is a fallacy. Used correctly they are as strong as the manufacturer says they are. Myth No2 on the other hand has some truth in it. However, although there is some additional strength loss when connecting skinny slings to





wider slings all slings joined together using girth hitches should be treated with caution, in that they all weaken the slings by at least 50%.

Implications

So in what situations do we connect slings to other slings or webbing and do we need to change our thoughts or practice? Well the obvious one is when setting up a cows tail using a long sling. This is a method commonly used when setting up clients on a stacked abseil. I've seen this done several ways. One way is to girth hitch or larks foot the sling through the harness (belay) loop, as shown below. The other is to girth hitch the sling through both sections of the harness as shown.

In the Mammut tests two experiments using dynamic loads in a drop tower were done to evaluate slings loosely knotted, and then tightly knotted. The forces involved were those equivalent to that associated with bouncing on a rope whilst ascending or descending. In the first cycle no failure was experienced. In the second cycle using a larger force on untightened girth hitches, they saw that the knot slipped under load, and generated higher temperatures through friction finally leading to superficial burning of the slings. It was noted this only had a small effect on the strength of the slings. This would suggest there is little to choose between having the slings girth hitched tightly or loosely.

Of far more concern is that joining slings to other slings (the harness loop is effectively a sling) weakens

the slings by 50% giving us safe working loads of around 1100Kg, or if we join a skinny sling (in comparison) to the harness loop of 880Kg, then it would be possible in our abseil situation to generate forces that would exceed this. For example, when setting up your stacked abseil if for any reason someone climbs level with or above the anchor then falls onto it, you can generate substantially greater forces due to lack of elasticity in the sling. There was an accident on Ben Nevis a year or so back where I believe a similar event happened leading to one fatality. I know of another accident where two climbers were rappelling down the Voie des Suisses route on the Grand Capucin (Mont Blanc range, France). The climber who sadly was killed in this incident was at an anchor, awaiting his partner to finish a rappel. He was attached by a static sling around 100cm in length to one of the two anchor components – an in situ (and possible old) sling in turn attached to a piton. He was standing around 50cm above the anchor. Apparently he slipped from his stance, causing a shock load onto his personal sling and in turn onto the sling anchor component, which failed.

So if you are going to use a sling in such a manner, it would be wise to ensure all parties are tight on the anchors in between abseils and never in a situation where they are above the anchor(s) when clipped in (good practice on any stance in any situation I would suggest). As to how you larks foot the sling through the harness I'd go for the sling larks footed through the harness belay loop. Why? What concerns me is that with the other method, through both parts of the harness the sling is not tight, and there is a lot of movement of the sling should it be shock loaded. This could be sufficient to generate enough heat to compromise the Dyneema sling (Dyneema has a low melting point around 144 to 152 degrees C°). Due to the above, many manufacturers now make slings that are specifically designed for use in situations where being clipped into anchors using a cows tail arrangement is common practice eg. caving, via ferratas etc.

Fall Arrest Impact Forces and Friction

Okay, back to the Lyon Equipment tests. The next section takes a brief look what happens when we fall off when climbing and the impact this can have on the safety chain.

Two schools of thought about rope design:-

• Keep rope stretch to a minimum.

Pro: In the event of a fall there is a decreased chance of hitting something as you are travelling ('falling!') for longer in the slowing down phase.

Con: This creates potentially high impact forces the safety chain will have to absorb, especially the belayer where there is the risk of them letting go of the breaking rope due to high impact force), or runners etc failing due to high impact force.

• More rope stretch

Pro: More rope stretch therefore reducing impact force on safety chain and chances of belayer/gear failure.

Con: Increased chance of hitting something as you are travelling for longer in the slowing down phase.

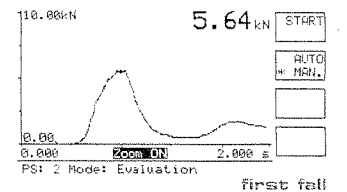
What effect does friction through runners have on impact forces?

The load cell is measuring the force at the runner and not at the climber (dummy) or belay device.

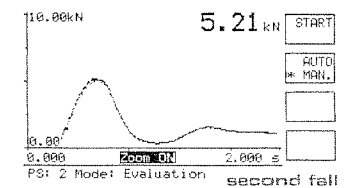
Test 4. Falling Climber

10m of Beal 10.5mm rope was anchored to a GriGri on the ground, run up through a runner, and attached to the dummy with a figure 8 knot into the harness. There was a small amount of slack in front of the GriGri. The runner was at 5.5m above the ground and was level with the dummy's feet.

• First fall. Dummy fell off and touched the ground with its feet – although looking at it you would have guessed the dummy would have stopped short of the deck, the

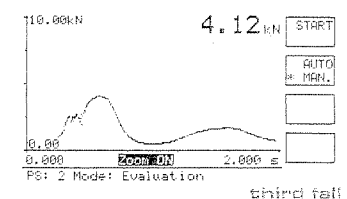


reality was the amount of give in the system was in excess of what the audience anticipated – in this case roughly about four times what the audience expected (Lyon staff expected this to happen, touching down was a good way of highlighting the demonstration).



• Second fall. Same length and type of rope attached to climber via harness and anchored through Gri Gri. This time the rope ran through two runners in a zig zag, dummy's feet again level with the same top runner at 5.5m above the ground.

Note: Increasing the friction on the rope, by it going through runners beneath the dummy, was expected to cause a higher impact force at the top runner. This demonstration shows a lower impact force at the runner, not in line with expectations. The dummy didn't hit the ground, so fall distance has also reduced.



• Third fall. Same set up as second fall except top runner was extended with a low absorption Nitro 6790 (20cm) shock absorbing extender.

MOUNTAINEERING INSTRUCTORS, SUB-CONTRACTING AND THE LAW

Glyn Mitchell

The following is an extract from a wider insurance article which appeared in the AMI Newsletter in 1997. It has been updated by the original author, Glyn Mitchell and the accuracy cleared for publication by Perkins Slade.

Please note that this article only gives an indication of the legal issues involved. It is not exhaustive and is only intended for guidance, as each case must be considered individually. It is hoped that it will give you an idea of the sort of questions you should ask your own legal adviser.

FREELANCE WORK

This is an issue that affects many of us, either as employers or as freelance instructors. The usual arrangement is that an instructor has too much work and asks another instructor to take the clients out for the day. This is usually an informal arrangement, with money changing hands at the end of the day, but no written agreement. Great, until one of the clients has an accident whilst in care of the freelance instructor. The question is, who gets sued? The short answer is – QUITE POSSIBLY, BOTH OF THEM.

Back to the beginning. A client asks me to provide a day of multi-pitch climbing. I'm too busy and ask instructor J to take the client out. The client pays me, I pay J.

J could either be employed by me (a contract of service) or could be an independent contractor (a contract for services). Which applies depends on the circumstances. If J works mostly for me and I pay him a regular wage, pay his National Insurance and tax and give him paid holiday, then he would be an employee. If, however, I only use J's services on an occasional basis, let him sort out his own tax etc., then he is probably an independent contractor.

However, if I am supervising J and directing and controlling what he does, then it may be considered to

be employment, even if I am paying on a daily basis. So, it is unlikely that a trainee instructor who is gaining experience with a qualified instructor could be regarded in law as an independent contractor, whatever the payment arrangements.

If J is an employee and his negligence led to an accident, then both he and I, as the employer, would be sued because the law says that I am (vicariously) liable for my employee's negligence.

Provided that I was properly insured (ie. my insurers knew I had an employee and my policy expressly covers the actions of my employees) then my insurers would pay up.

If J is an independent contractor, the situation is rather more complicated. The client has two possible courses of action; tort and contract.

TORT

In tort the client can sue for damages for negligence if it can be proved that the defendant (the instructor) owed a duty of care, that there was a breach of that duty and that reasonably foreseeable damage resulted from the breach. We are assuming that J was negligent in this case.

I am not, in law generally liable for the negligent acts of my subcontractor, so the client can sue J in tort for his negligence but not me.

CONTRACT

There is a contract between myself and the client to provide a service. A court would find that there was an implied term in the contract that the service would be of an appropriate standard in all the circumstances. There is a sub-contract between

myself and J to provide the service, but there is no contract between the client and J.

If J failed to deliver the service at an appropriate standard (more than likely if he damaged the client) then the client could sue me for breach of contract, as I would have failed to ensure instruction of the required standard. I, in turn could sue J for breach of our contract, but I would have to pay the client in the first instance. So there it is, the client can sue both of us.

This is rather academic. In reality, the client will look at who is most likely to be able to pay the damages. If J is a properly insured AMI member, then the client will probably just sue J as this would be simpler. On the other hand, if J is a penniless instructor with no assets or insurance, then I will become the target. I will, of course, have checked with my insurers that they will meet such claims before I started using freelance instructors. If I didn't do so, I could be waving goodbye to my house, car, savings, children, etc.

The question of what, if any, qualification J holds is of little relevance to any legal claim. If J was negligent his qualifications won't save him.

If I employed J without taking care to check that he had a relevant qualification or was competent to do the work, then I could possibly be sued for negligence for failing to check up on J. If, however, I had seen J's MIA and checked that his logbook experience was current, I would probably have a good defence to a claim for damages for negligence, but I would still be liable on the contract. If J is unqualified, I could also have a defence if I could show that I knew that, although

unqualified, J had appropriate skills and experience for the work. A court would look at the appropriate qualification and use that as a standard against which to measure J's competence.

The moral is to check that your insurers will cover any claims arising out of your use of freelance instructors.

Perkins Slade have always said that claims arising out of the actions of sub-contractors are NOT covered by the standard policy. Nor are employees covered. This means that if just you are insured, the actions of your sub-contractor/employee won't be.

The AMI member's insurance policy is intended to provide cover for you as an individual only and every instructor should have insurance cover in their own right – both the lead instructor and the sub-contracted instructor. So, remember that if you do sub-contracted work for other AMI members you will not be insured on their policies (unless they have extended cover) and must have your own insurance.

If you are employing the services of a sub-contracted instructor, Perkins Slade now advise that the policy will provide contingent liability cover for the lead instructor (ie. provides cover if a client sues both the freelance instructor AND the lead instructor over the sub-contracted worker's actions), but only if both of you are insured and it is paramount you make sure that the freelance instructor has insurance that provides at least the same level of cover as you have yourself. (Contingent liability cover basically saves going through the process of the client suing you and you suing J). But remember that Employers Liability Insurance is not included



under the AMI members' insurance policy.

Employers Liability Insurance, as required by the Employers Liability (Compulsory Insurance) Act 1969, protects your liability in respect of claims made against you by employees for injuries they suffer in the course of their employment. If you have employees, it is a statutory requirement.

When establishing whether you are an employer, the courts will look at the extent to which you direct the actions of the other instructor and it is not simply a case of how they are paid and what the tax arrangements are. (Because of the nature of the relationship between a qualified instructor and a trainee – the first is expected to be directing the actions of the second – the courts are likely to regard freelance trainees as employees and Employers Liability insurance will be required.)

Similarly volunteers can be considered as employees, depending upon your working relationship with them. An Employers Liability Insurance policy does not cover damage caused to your clients by your employees, despite the name!

From this year, if you are working/mentoring within published guidelines with a single trainee, Employers Liability can be arranged at a reduced premium via AMI. Under other circumstances separate Employers Liability cover can be arranged via Perkins Slade.

If you form a Limited Company, no cover can be provided under the AMI members' insurance policy and separate cover must be arranged with Perkins Slade.

INSPIRING YOUNG PEOPLE IN THE MOUNTAINS – CAN YOU HELP?

Mat Galvin

My sister, a hard working child protection social worker, always says that when we are both in the nursing home as gibbering old bods, I'll be the one with the interesting stories of derring-do in the mountains. Most of these stories are funny now but probably less so at the time!!

I'm absolutely sure my stories and photographs are quite bland compared with most members of AMI. I'm not really one for sticking my neck out too far. However, this got me thinking. Could we harness our members' experiences to inspire young people into the mountains and adventurous activities which stimulate and excite us so greatly?

From past experience, this doesn't require a huge amount of effort. A PowerPoint presentation with good snaps, forty minutes worth of good stories to accompany them, and possibly some ending music has been enough to entertain groups of pupils at my school.

The way I'd like to get this started is by the following steps:-

1. Ask AMI members to reply to the AMI forum with their location, title of their talk and when they would be available to give their lecture.
2. Publicise the AMI talks through the Times Educational Supplement (TES), asking school staff to email me with their location and dates requested.
3. I would then email local AMI members with the

contact details of the school so that contact can be made and times/dates worked out.

In terms of benefits, the talks could:-

- Inspire young people into getting into the hills and mountains
- Increase public awareness of AMI
- Create new contacts between instructors and schools, youth groups etc.

With all of this in mind, the talks would obviously need to be appropriate, good quality and members' behaviour/punctuality etc up to our normal high standards. I will come up with some guidelines and post them on the forum.

This project is obviously only a starter if we can get enough AMI members to put their heads above the parapet and have a go at giving these talks. In all of my experience of doing them, as long as the material is entertaining, young people will really enjoy and appreciate the experience.

This is a great chance for you to give something back to the wider world. I'm sure you were originally inspired by the words or deeds of someone to initially get you into the mountains.

If you would like to sign up, please email me for a form at mjogalvin@gmail.com. If there are enough replies by 4 December, I'll be in touch with further information.

THE LAW, RISK AND COMPENSATION IN THE ADVENTURE ACTIVITY SECTOR

with thanks to Jon Garside at the British Mountaineering Council

This is a summary of a presentation given by Roy Amlot QC to the Water Recreation and Outdoor. Roy is a past Chair of the Bar Council but with regards adventurous activities has been involved with the Campaign for Adventure (CfA) since their formation.

Ten years ago a case came to court involving a young child who had died on a school caving trip. The school party had arrived at the cave in the evening, and the teacher supervising the trip had informed the children that they could not go down the cave until the next day. One of the children then asked their parent, who was on the trip as well, if they could go into the cave. The parent consented and the child was killed in an accident. A court found the teacher in breach of their duty of care.

That incident was one of the factors leading to Julian Brazier MP and Ian Lewis creating the CfA, which now has support from members of both Houses.

The CfA felt that the courts were going in the wrong direction where the management of risk is a factor when dealing with cases involving claims of negligence or breach of statutory duty. There was a real concern that the courts were becoming too 'Americanised'.

Julian Brazier MP, a founding member of the CfA, was instrumental in drafting wording relating to the standard of care, which appears in Part 1 of the Compensation Act, as follows:

PART 1 STANDARD OF CARE

1 Deterrent effect of potential liability

A court considering a claim in negligence or breach of statutory duty may, in determining whether the defendant should have taken particular steps to meet a standard of care (whether by taking precautions against a risk or otherwise), have regard to whether a requirement to

take those steps might—

- (a) prevent a desirable activity from being undertaken at all, to a particular extent or in a particular way, or*
- (b) discourage persons from undertaking functions in connection with a desirable activity.*

These provisions make clear that courts considering what standard of care is reasonable in a claim for negligence or breach of statutory duty can take into account the nature of an activity, and the extent to which it is possible to mitigate risk without either cancelling the activity altogether or rendering it pointless. In other words courts may accept that some activities carry with them an inherent level of risk.

This should help to ensure that normal activities are not prevented because of a fear of litigation and excessively risk adverse behaviour. There is also a provision to the effect that in claims for negligence or breach of statutory duty, an apology, offer of treatment or other redress shall not of itself amount to an admission of liability.¹

Whilst a 'desirable activity' is not defined in the Act, Roy Amlot believed that WR and OPD members represented organisations involved in such activities.

Roy then summarised three recent cases.

BOUNCY CASTLE - 2008

A mother hired a bouncy castle and a bungee run for a children's party, she then supervised both activities at the same time. A bungee run involves a child attached to a bungee cord who then runs as far as possible before the cord pulls them back.

Whilst the mother was dealing with children on the bungee run, a child on the bouncy castle doing somersaults kicked a younger child in the forehead, leaving this child with permanent injuries.

When the case came to court, the judge said that the mother should have provided uninterrupted supervision to the bouncy castle. This was written in the hire agreement that she had signed and was also stated in health and safety paperwork which she had not seen.

The court of appeal then overturned the original judgement. Lord Phillips, now a senior Judge in the Supreme Court, thought that the original Judge had imposed an unreasonably high standard of care upon the mother and that she had acted reasonably in her supervision.

Furthermore, he noted that it is normal for children sometimes to play unsupervised and that there will always be risks associated with such play. He felt that it was not in the public interest for the law to proscribe the acceptance of such risks.

INDOOR BOULDERING ACCIDENT (2008)

An adult, with some friends was bouldering at a wall he had visited a number of times before. Beams crossed the top of the wall and one of his friends jumped from the top of the wall, caught a beam and then dropped to the ground. The adult then attempted to do the same, but instead landed on his head and is now a tetraplegic.

The court found the climbing wall 25% responsible for the accident for the following reasons:

1. The registration process was inadequate in assessing users' competence.

2. There was inadequate floor walking in operation.

3. The 12" matting provided meant that the owners should have made the risks of jumping from height apparent to the claimant.

The Court of Appeal reversed this decision, making the claimant 100% responsible. The Court of Appeal felt that as there were inherent and obvious risks, the law did not require training and supervision. Three Lord Justices felt that bouldering was not alone as an activity with inherent and obvious risks. Many others exist such as swimming in the sea.

DIVING ACCIDENT (2007)

A seventeen year old adolescent on holiday in Corfu dived into the shallow end of a swimming pool at night, broke his neck, and is now an incomplete tetraplegic.

In court, Cosmar, the holiday company, were found to have breached their duty of care in not providing enough signs relating to pool depth and in not providing more prominent 'no diving' signs.

The Court of Appeal reversed this decision on the basis that a seventeen year old adolescent is able to make a judgment on the risks involved in diving into a swimming pool. The essence of their judgment was that the risks were obvious to an able bodied seventeen year old adolescent, such that the presence of signs was not a factor to consider.

The Tomlinson case was also mentioned in which an adult entered an urban park out of hours and in

¹ www.dca.gov.uk/regist/compensation.htm

INSURANCE FOR LIMITED COMPANIES

Tony Halliwell

There would appear to be an increasing number of 'one man bands' out there who are being advised by their accountants that limited company status has a considerable number of advantage - and it does. There is however one downside (which may not outweigh the benefits) that you need to be aware of so that the cost does not come as a nasty surprise.

If you form a limited company you create a separate legal entity - and that entity isn't a member of AMI and you won't be able to insure it via the AMI group policy. (This isn't peculiar to AMI by the way; group policies in general usually exclude limited liability companies because the legal complexities are different, as are the insurance liabilities). So there is a financial cost in terms of more expensive insurance, that you need to put in the mix in deciding on limited liability status or not.

Members who create limited companies would normally need to approach insurance companies themselves (can be Perkins Slade; can be A N Other insurance company) and normally have to fill in a fairly detailed insurance application form, which then gets examined by the insurance company's risk assessors, who would normally then come up with an insurance premium for that particular business. Very few limited companies would get much change out of £1,000 and for many the cost will be even more.

We've pointed out to Perkins Slade that many of our members have formed their own company and, other than the different legal entity are effectively the same as other instructors running their own small business. Perkins Slade have responded to this and have come

up with a simplified application process and a lower premium for such members.

This option is open to individuals who fulfil all of the other group policy criteria; no direct employees other than themselves (with the exception of a spouse/partner who carries out an admin or company secretary role) and a turnover limit of £50,000. The cost of this insurance is £475, but this is better than £1,000 and the premium INCLUDES the top-up premium of £100 for another acceptable sport (provided that qualifications are held). See the list of excluded sports on the AMI insurance page. The application form should be an easy-to-complete two page affair, rather than the usual, much more complex one.

Any members going for this option may do so by direct application to Perkins Slade Sports Department. Mention that you're an AMI member and a limited company, but with no employees.

Perkins Slade Sports Schemes Department, Perkins Slade Limited, 3 Broadway, Broad Street, Birmingham B15 1BQ. Telephone 0121 698 8050. Fax 0121 625 9000.

attempting to dive into it from a standing position in the water, broke his neck. The council owning the pond was at first found to be liable, but this decision was then reversed by the Court of Appeal.

SUMMARY

Roy felt that recent decisions by the Court of Appeal have been promising in the way in which they have interpreted the management of risk in cases involving claims of negligence and breaches of statutory duty of care.

The second two cases demonstrated how the courts felt that healthy adolescents and adults are often able to make an assessment of the inherent and obvious risks associated with activities they choose to undertake.

Whilst all three of the cases reached the court after the Compensation Act had come into force, section 1 of the act had not been mentioned in any of the rulings. Roy felt that this may be because in each of the cases counsel had not directed the court to that section of the act.

Roy said that the CFA has liaised with insurers with regard to occupiers' liability and individuals making informed choices about the activities they undertake, but that in his view, insurers often settled a case too willingly before it reaches court.

REPORT TO AMI - AAIAC MEETING GLENMORE LODGE 6/7 SEPTEMBER

Pete Stacey

This meeting was held over two days, with the first part being a number of presentations from: Bob Kinnaird from Glenmore Lodge; Murray Ferguson, Head of Visitor Services, Cairngorm National Park; and from Iain Peter and Bob Barton of Adventure Activity Associates.

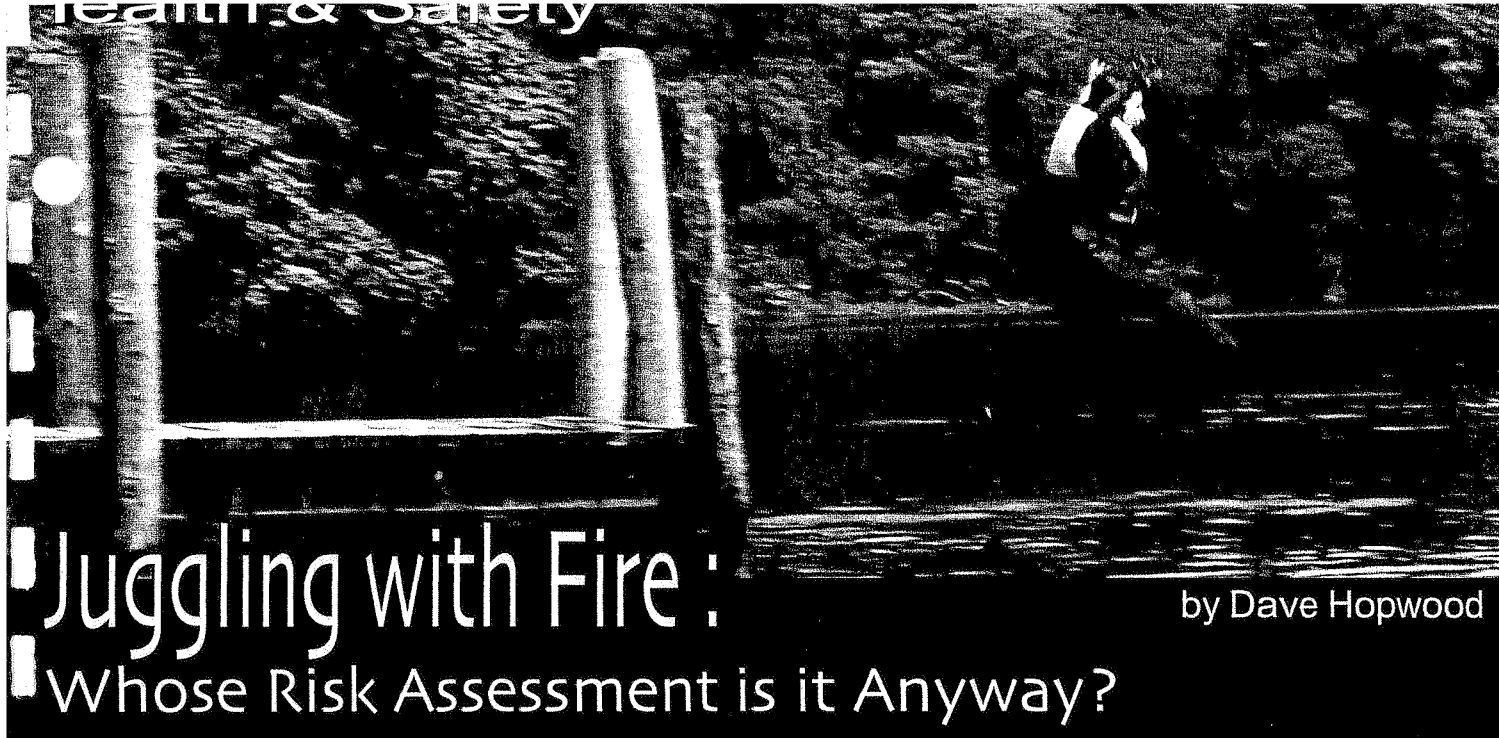
The main meeting considered the progress made to date on the non-statutory accreditation scheme (Adventuremark) and the Learning Outside the Classroom Badging Scheme. Since its launch in February, there have been 46 LOTC badges awarded with another fifteen ongoing, with 36 also being awarded the Adventuremark. A number of schemes have been approved or are in the process of gaining approval to carry out their own inspections (with a sampling process by 3A's inspectors). Future plans were discussed relating the two schemes and the option for sole traders to be able to gain either award is currently being considered.

The meeting then heard from David Walker of ROSPA on the work being carried out by their working groups on the different but (to the media) joined issues of tombstoning and coasteering. The recent media hype over accidents and deaths from tombstoning or cliff-jumping was a factor in ROSPA having a look at the concerns and trying to provide some influence and support to interested parties such as local authorities and businesses that offer coasteering activities, as well as the MCA, lifeguards and so on. This summer, there has been a well planned and co-ordinated media approach to encourage those individuals at greatest risk of injury (male, aged 35+ years, and often after a pub session) as well as having local knowledge available to try and encourage them to stop and think about what they might be about to do.

David then briefly outlined the work being carried out with a large stakeholder group to explore the issues related to coasteering groups, that often have been on the receiving end of a visit from the SAR helicopters or lifeboats usually after a member of the public observed a large number of people in the water and contacted the emergency services, thus initiating a false alarm, and all the costs and disruption that such a callout can create. It was noted that ROSPA has constantly said there is no intention to consider the creation of a new national governing body, and that the stakeholders see themselves as training and activity providers.

SkillsActive reported that National Occupational Standards for Expedition Leadership and Outdoor Management have now been placed on the database. These can be viewed at: <http://tinyurl.com/ybyru6x>. Another item from SkillsActive of interest is the continuing work on the European Outdoors Animators Project - this is focused on trying to balancing the various levels of training and awards and matching them to the European Qualifications Framework. It is of note that the outdoor sector across the whole of Europe is growing and a common approach across all states has huge potential and benefits for clients, instructors, leaders/animators etc.

HSE gave a short overview on some accidents and inquiries currently underway. Colleagues will shortly find that information is being moved from the AALS website to the new AALA site hosted through the HSE - this is in line with the HSE assuming responsibility for licensing. Collective Interpretation documents will also be moved across and updated as necessary. The next meeting is on 9 January 2010, in London.



Juggling with Fire : Whose Risk Assessment is it Anyway?

by Dave Hopwood

After more years than I care to think about in outdoor education, I have finally decided to put pen to paper and talk about risk assessments. I want to look at 2 key issues; these are the dangers of using someone else's risk assessment, (or having yours used by someone else!) and the hazards of repetitive documents.

I would at this point expect that you skim straight to the bottom of the article and move on. This is exactly what happens to many risk assessments. Why? Because they are desperately boring and repetitive. It is this core factor that means the important stuff is at risk of being missed as instructors skim read millions of literature that they believe they have seen before.

I bet you did not expect to be reading an article about risk assessing risk assessments..., and be reading the third paragraph! If I have got you this far I will press on. Here is an example. Do you have separate risk assessments for sailing, canoeing, kayaking; do they all have almost the same water hazards? Repeated? What about land activities? etc.

If all activities that happen in the same environment are subject to the same environmental hazards, for example we play darts, dominoes and pool in the Dukes Head, all 3 share the common Dukes Head (Saturday night) risk assessment, then the activity specific assessments informed by the National Governing Bodies do not need to repeat this information.

As an example how many times does your organisations risk assessment/policies mention deep water? Is the action or control measure different each time?

I am assuming at this point that people can accept that risk assessment is a process through which we get statements of policy leading to best practice. It is also important to understand the level of expertise required to read and understand these documents. A risk assessment may include technical detail or industry jargon that requires expertise to understand, a policy should be in plain English and understandable by a 'lay person'. Look at the AALA collective interpretations and compare these with the example of a safety statement.

I would also argue about the need to state the obvious. We do need to refer to the obvious but it may be stated somewhere else, e.g. 'Use relevant local climbing guidebook' is a control measure, by having this book on your shelf you may not need to describe local hazards, list each route or rock climb. The same applies to the BCU handbook and Ordnance survey maps.

This makes the process of risk assessment look more like a family tree, or flow chart, starting with the wider issues, (Trekking, Watersports, etc) at the top then 'drop down' boxes to the 'places used' and 'activities delivered' adding on just the new or extra bits that have not already been mentioned.

As an example we developed a single risk assessment for all hill and mountain walking. This means we did not need to go to the level of separate sites and routes other than through a 'sites book and route card process'

I have found that by eliminating repetition and referring to published best practice materials I have cut my risk assessment writing and reduced the reading for new staff at induction.

This moves me on to my second issue about creation and ownership of these documents. We shall return briefly to the Dukes Head where after a nasty domino incident you end up in court. You are asked 'where is your risk assessment' and your answer is 'I got this one from the Dukes Head'. The man in the wig then says 'that is the Dukes Heads risk assessment, where is yours?' (Oh dear!) Or you could say 'my risk assessment for dominoes is here sir. It clearly states we have no qualified dominoes staff and would not be qualified to understand one so our policy is to contract the activity with a licensed premises for the delivery of this activity and the Dukes Head has such a licence and sent me their dominoes policy'. This means I reasonably believed all risks were covered'.

This switch from risk to policy statement has a major impact on how trip leaders. (Teachers, Youth workers, Visits Coordinators) and others responsible for planning and contracting services approach their own risk assessments. When contracting for a product or service it is the policy that is required. These policies should form the underpinning research document for the specific risk assessment for their trip.

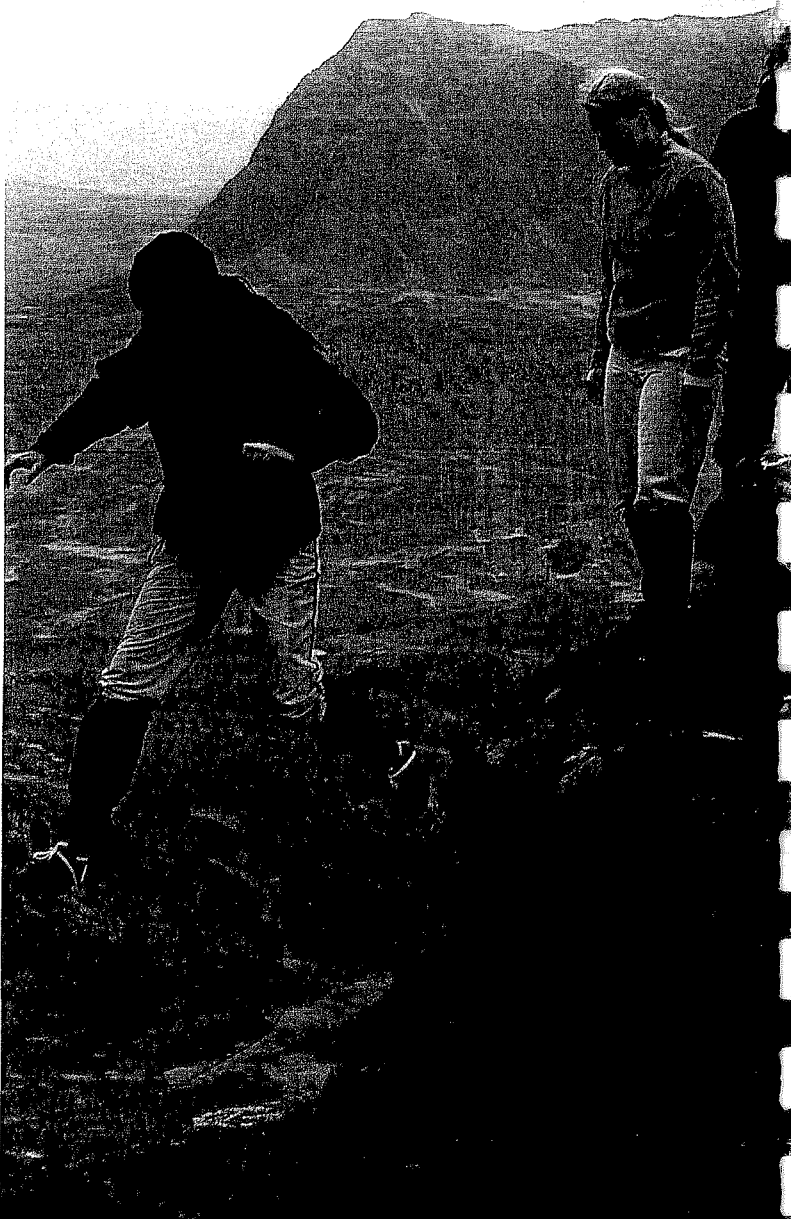
To highlight this, any children's trip needs a risk assessment from gate to gate. It will include transport, accommodation, activity, (and behaviour). Many of these include reams of risk assessments from providers mixed in with risk assessments from the trip leader (school). This led to complex and difficult situations which created contradictory positions. As an example at an Educational Visits Panel we found that one school stated children will not enter the water on the gorge walk but in the same pack of information the provider used the word 'wading' in their risk assessment!

I believe that clear statements need to be in place to show who is controlling various aspect of a trip and therefore who is undertaking the risk assessment process and what the policy for the activity is. Trip leaders need to show they can state this clearly. For example 'all activity hazards are managed by an LOTC quality mark provider' as a control measure. Or 'transport is provided by a local authority approved contractor'. These kind of statements show that the person planning the trip has checked that these aspects of their trip have been inspected and approved by people qualified to

do so. This will leave the teaching staff to risk assess those aspects of the trip they are directly in control of (evening supervision, meals etc) and from those risk assessments produce a policy and plan.

This will mean that the risk assessments produced are owned by the writer or writer's employer and are not those of a third party just copied, cut and pasted. For centres and providers it may be prudent to ensure that each risk assessment produced is clearly marked for ownership and carries a clear statement of copyright not for 3rd party use as you could be implicated if someone downloads and uses your risk assessments in a situation you have no control over.

As for me I'm off to the Dukes Head! (Who, by the way, copied all their risk assessments from the Red Lion!) ■



Author's Notes

David Hopwood is a qualified youth worker, with over 20 years experience leading and managing outdoor education projects. His interests include working to develop funding packages to support those least able to access community services, children's or youth activities, outdoor activity and sport.

Photographs – both by Peter Barnes

<< COMMENT on the 'The Thrill of Adventure: Worth a few Calculated Risks?' article by Bruce Barcott which appears on the previous pages.

By Marcus Bailie
Head of Inspection Services, AALA

Many adventure activities providers will have noticed a large increase in premium when they renewed their insurance recently. Some were asked for a massive increase (i.e. 10 fold) and others were refused altogether. So what is going on.

Well, it seems we are not alone, and not being victimised. What follows is MY understanding of the situation, based on information from the upper echelons of the insurance industry.

There are several main causes.

1. **For several years insurers have not made a profit out of insuring!** (i.e. they pay out in claims more than they take in in premiums.) They have made their profit in investing your hard earned premiums on the Stock Exchange. What makes this possible is that you pay them a premium at the start of your cover, but claims (if they arise) are paid later (and sometimes much later). This provides a (theoretical) time period to invest YOUR money. Even when they 'deduct' their losses, they come out ahead over-all. At the moment, post 11th September 2001 the stock exchange is far too volatile for reliable profits.

2. **Re-insurance.** Insurers don't carry all the risks themselves. In motor insurance for example, the insurer will cover normal damage but if you run over a bus queue (i.e. a big claim) then that will be picked up by the re-insurers and THEY are not too concerned about the subtleties of good risk management in Adventure Activities. Besides, any of us could end up in Jeff Lowe's un-enviable shoes, and the re-insurers know that. It is the unpredictability of these liability claims which makes them difficult to plan for. (Building insurance, for example, is much easier - you know how much the claim will be for, and have a fairly good idea (on average) how often they burn down etc. Employer's Liability and Public Liability know no such bounds!)

3. **Civil Litigation.** Without doubt this is making everything much worse for (almost) everyone. There is clear logic in ensuring that the guilty pay for their negligence. However, of late, the number of opportunistic, frivolous, and downright malicious claims goes up and up. (No win, no fee, which was supposed to see solicitors filtering out the frivolous, now seem to take on only those cases they can WIN, irrespective of its merits).

So what can providers do?

A. **Bite the bullet for a while.** Insurance is very cyclic. However, the pendulum (to mix my metaphors) WILL swing back. However, it will never return to previous levels. Some commentators say that the current massive premium increases will start to turn a profit for insurers early next year. That will bring the investment capitalists back to the re-insurance business thus allowing the insurers to increase their 'capacity'. Competition should return sometime during 2003, and with it premiums should start to fall back to more tolerable levels.

B. **Be safe!** We are already making the point strongly to the insurers that this is a VERY safe sector, in spite of the very small number of high profile accidents. However, continued diligence will be crucial in the long run. Besides it is a moral imperative as well as a financial one to keep people safe.

C. **Discuss 'packages of insurance' with your broker.** e.g. if your clients all have personal accident insurance they are less likely to sue you following an accident. A bird in the hand is worth two in the tediously slow and vexatious bush they call civil litigation. And, if it's the same insurer as your public liability insurance they are less likely to try to recoup if back off themselves!

D. **Make sure your clients and customers know what they are letting themselves in for. DISCUSS the risks with them, don't hide them.** Don't tell them how safe it's all going to be; you will end up in court sooner or later. Tell them how dangerous it could be. Acknowledgement of Risk is just one phrase which is used to describe this. It doesn't remove ANY of the duty of care on the provider, nor ANY of the rights of the client/customer. I see this as an entirely ethical approach because the number of accidents really is that low, so we can be honest without being alarmist!

Marcus Bailie, Head of Inspection Services

POST SCRIPT

OURAY ICE PARK ICE CLIMBING GUIDING FATALITY

This notice was found on the internet today, 26th September 2002. See <http://iceaccident.ocatch.com>

7/8/02 - ORDER by Judge Wiley Y. Daniel denying San Juan Mt. Guides and Jeff Lowes motion for summary judgment. This is contrary to the disturbing article written by Bruce Barcott in the July 2002 issue of Outside Magazine that suggests that guides are not responsible for a clients safety. Why else do clients hire guides? True 'Local Experts' do those clients on single pitched top roped climbs less than a mile from town. Experts should have some accountability for their clients well being whether it be a doctor or climbing guide. After all, isn't that what they are paid for?

Check your skin

The first warning sign is often a small scabby spot which does not clear after a few weeks. Look for changed or newly formed moles or any skin discolouration. It is normal for moles to grow until you are about 18 years old, but as an adult you should show your doctor any moles which grow or change.

If you notice any of these signs consult your own doctor, or your works medical department if you have one. Show them this leaflet and explain that you have an outdoor job.

Unfortunately most of these signs will be harmless, but medical checks may be needed to be sure. Even if a spot is cancerous, simple modern treatments can usually cure it and most don't spread to other parts of the body. The smaller the spot the easier it is to cure. So don't put off going to the doctor when you know you should.

If you have any kind of medical check-up tell the doctor that you have an outdoor job and ask if there are any suspicious signs on your skin.

Don't delay.

If you think something might be wrong get it looked at quickly.

Further information

General enquiries about this or any other HSE publication should be sent to:

HSE Information Centre
Broad Lane
Sheffield S3 7HQ
Tel: 0742 892345
Fax: 0742 892333
Freeleaflet line: 0742 892346

KEEP YOUR TOP

HEALTH RISKS FROM WORKING IN THE SUN

This publication may be freely reproduced, except for advertising, endorsement or sale purposes. The information it contains is current at 05/93. Please acknowledge the source as HSE.



Printed and published by the Health and Safety Executive
IND(G)147(L) C1500 05/93

KEEP YOUR TOP ON!

A sunny day makes most of us feel good, but too much strong sunlight can be hard on the skin.

The problem is caused by the ultraviolet - UV - rays in strong sunlight. People whose job keeps them outdoors for a long time, such as farm or building site workers, may get more sun on their skin than is healthy for them, and should read this leaflet.

What are the dangers?

In the short term ...

we all know that sunburn can blister your skin and make it peel. In summer, even on cloudy days, enough UV can filter through to cause burning.

In the long term ...

the most serious effect is an increased chance of skin cancer later in life. It is almost always easy to cure but it should be caught early. Too much sun will also speed up the ageing of your skin, making it leathery, mottled and wrinkled.

Some medicines, and contact with some chemicals used at work (such as dyes, wood preservatives, coal-tar and pitch products), can make your skin more sensitive to sunlight. Your works doctor or family doctor should be able to advise you further. Take this leaflet with you.

Who is at risk of skin cancer?

Some people are more liable to skin cancers than others.

People with white skin are at most risk but vary a lot. Take particular care if you have:

- fair or freckled skin that doesn't tan, or burns before it tans;
- red or fair hair and light coloured eyes;
- a large number of moles - over 100 in young people, or over 50 in older people.

Workers of Asian or Afro-Caribbean origin are at almost no risk of skin cancer from sunlight.

Can I protect myself?

Yes. But you may need to make a few changes now. You should be particularly careful while you are working out of doors in the summer in the three or four hours around the middle of the day. The sun is most intense at these times.

Don't get burned

Get to know how your skin reacts to sunlight. This will help you decide what precautions to take. Getting burned now may increase your chances of skin cancer many years later. Try to avoid the reddening that is the first sign of burning.

The best protection is to shade your skin from the direct sunlight.

A suntan may give some protection against burning but does not eliminate the long term cancer risk; nor will it protect against premature ageing.

When you go on holiday take care not to get burned - your skin remembers every exposure.

Clothing

Ordinary clothing made from close-woven fabric, such as a long-sleeved workshirt and jeans, will stop most of the UV.

Get a hat. A wide brimmed hat will shade your face and head, the areas which suffer most from sunlight. A hanging flap can protect the back of your neck if you work leaning forward.

Keep your shirt on, especially while you are working around the middle of the day. Don't be tempted to leave off your shirt - skin that hasn't seen the sun for months burns easily.

Sunscreens

Hats and other clothing are the best form of protection, but sunscreen creams and lotions can add useful protection for parts of your body that are not easy to shade from the sun. Look for a sun protection factor (SPF) rating of 10 or more.

Read the supplier's instructions on how it should be applied. Don't forget the backs of your hands.

Risk assessment

5.1 Introduction

Risk assessment is an essential part of the planning stage of any health and safety management system. HSE, in the publication HSG(65) *Successful Health and Safety Management*, states that the aim of the planning process is to minimize risks.

Risk assessment methods are used to decide on priorities and to set objectives for eliminating hazards and reducing risks. Wherever possible, risks are eliminated through selection and design of facilities, equipment and processes. If risks cannot be eliminated, they are minimized by the use of physical controls or, as a last resort, through systems of work and personal protective equipment.

5.2 Legal aspects of risk assessment

The general duties of employers to their employees in section 2 of the Health and Safety at Work Act 1974 imply the need for risk assessment. This duty was also extended by section 3 of the Act to anybody else affected by activities of the employer – contractors, visitors, customers or members of the public. However, the Management of Health and Safety at Work Regulations 1999 are much more specific concerning the need for risk assessment. The following requirements are laid down in those regulations:

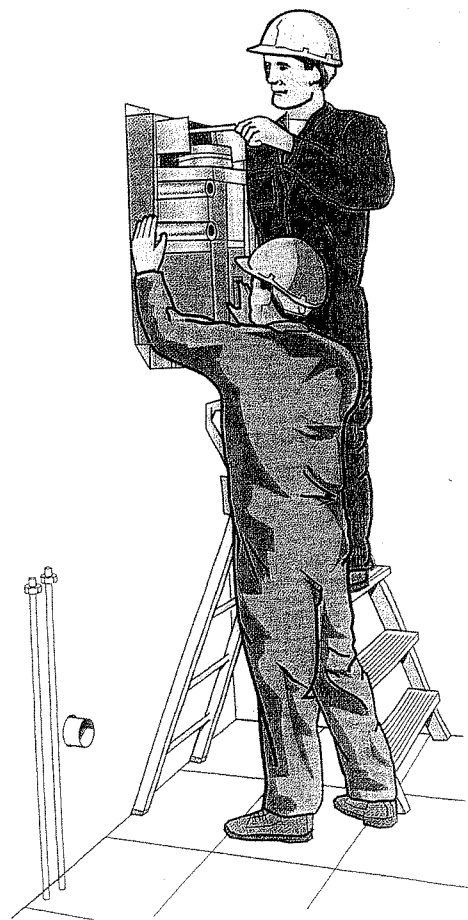


Figure 5.1 Reducing the risk – finding an alternative approach to fitting a wall-mounted boiler. Source HSE. Crown copyright material is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.

the risk assessment shall be 'suitable and sufficient' and cover both employees and non-employees affected by the employer's undertaking (e.g. contractors, members of the public, students, patients, customers etc.);

every self-employed person shall make a 'suitable and sufficient' assessment of the risks to which they or those affected by the undertaking may be exposed;

any risk assessment shall be reviewed if there is reason to suspect that it is no longer valid or if a significant change has taken place;

where there are more than 4 employees, the significant findings of the assessment shall be recorded and any specially at risk group of employees identified. (This does not mean that employers with 4 or less employees need not undertake risk assessments.)

The term 'suitable and sufficient' is important since it defines the limits to the risk assessment process. A suitable and sufficient risk assessment should:

- identify the significant risks and ignore the trivial ones;
- identify and prioritize the measures required to comply with any relevant statutory provisions;
- remain appropriate to the nature of the work and valid over a reasonable period of time.

Several other regulations require a specific risk assessment to be made. These include:

- Ionizing Radiation Regulations 1999
- Control of Asbestos at Work Regulations 2002
- Noise at Work Regulations 1989
- Manual Handling Operations Regulations 1992
- Health and Safety (Display Screen Equipment) Regulations 1992
- Fire Precautions (Workplace) Regulations 1997
- Control of Lead at Work Regulations 2002
- Control of Substances Hazardous to Health Regulations 2002.

5.3 Forms of risk assessment

There are two basic forms of risk assessment.

A quantitative risk assessment attempts to measure the risk by relating the probability of the risk occurring to the possible severity of the outcome and then giving the risk a numerical value. This method of risk assessment is used in situations where a malfunction could be very serious (e.g. aircraft design and maintenance or the petrochemical industry).

The more common form of risk assessment is the qualitative assessment, which is based purely on personal judgement and is normally defined as high, medium or low. Qualitative risk assessments are usually satisfactory since the definition (high, medium or low) is normally used to determine the time frame in which further action is to be taken.

The term 'generic' risk assessment is sometimes used and describes a risk assessment which covers similar activities or work equipment in different departments, sites or companies. Such assessments are often produced by specialist bodies, such as trade associations. If used, they must be appropriate to the particular job and they may need to be extended to cover additional hazards or risks.

5.4 Some definitions

Some basic definitions were introduced in Chapter 1 and those relevant to risk assessment are reproduced here.

Electricity is an example of a high hazard since it has the potential to kill a person. The risk associated with electricity – the likelihood of being killed on coming into contact with an electrical device – is, hopefully, low.

5.4.1 Hazard and risk

A hazard is the *potential* of a substance, activity or process to cause harm. Hazards take many forms including, for example, chemicals, electricity and the use of a ladder. A hazard can be ranked relative to other hazards or to a possible level of danger.

A risk is the *likelihood* of a substance, activity or process to cause harm. Risk (or strictly the level of risk) is also linked to the severity of its consequences. A risk can be reduced and the hazard controlled by good management.

It is very important to distinguish between a hazard and a risk – the two terms are often confused and activities often called high risk are in fact high hazard. There should only be high residual risk where there is poor health and safety management and inadequate control measures.

5.4.2 Occupational or work-related ill-health

This is concerned with those illnesses or physical and mental disorders that are either caused or triggered by workplace activities. Such conditions may be induced by the particular work activity of the individual or by activities of others in the workplace. The time interval between exposure and the onset of the illness may be short (e.g. asthma attacks) or long (e.g. deafness or cancer).

5.4.3 Accident

This is defined by the Health and Safety Executive as 'any unplanned event that results in injury or ill-health of people, or damage or loss to property, plant, materials or the environment or a loss of a business opportunity'. Other authorities define an accident more narrowly by excluding events that do not involve injury or ill-health. This book will always use the Health and Safety Executive definition.

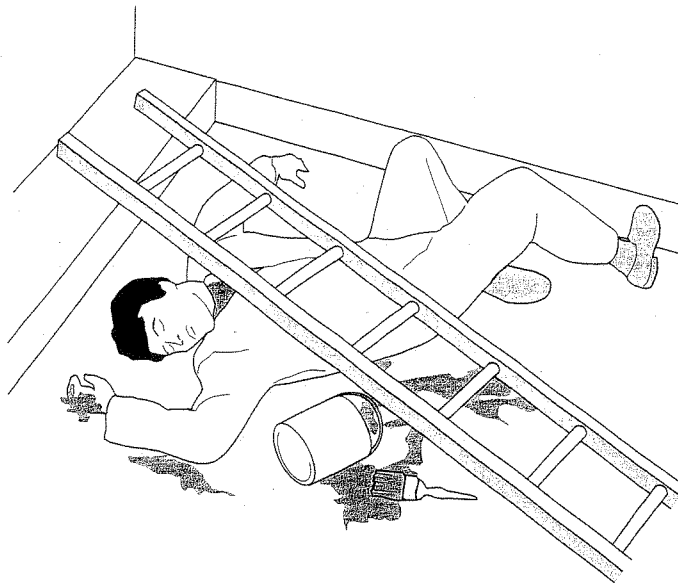


Figure 5.2 Accident at work.

5.4.4 Near miss

This is any incident that could have resulted in an accident. Knowledge of near misses is very important since research has shown that, approximately, for every 10 'near miss' events at a particular location in the workplace, a minor accident will occur.

5.4.5 Dangerous occurrence

This is a 'near miss' which could have led to serious injury or loss of life. Dangerous occurrences are defined in the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (often known as RIDDOR) and are always reportable to the Enforcement Authorities. Examples include the collapse of a scaffold or a crane or the failure of any passenger carrying equipment.

In 1969, F E Bird collected a large quantity of accident data and produced a well-known triangle (Figure 5.3).

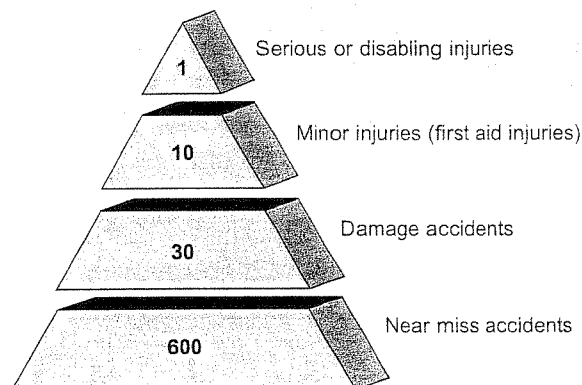


Figure 5.3 F E Bird's well-known accident triangle.

Ionising radiation occurs?

DOES THIS CONCERN ME?

business
working



comment which
let radiation eg
or inks?

lasers?

an area
don are higher

sources used
brought in by
ctor, or do
n?

t used?

Our bodies can be affected by various kinds of radiation. Some occur naturally and others tend to be used for specialised purposes in business. The public as well as operators can be affected.

used in radiography or in thickness measuring gauges: this can cause burns, sickness and cancer.

WHAT LAW APPLIES?

Non-ionising radiation:

Ionising Radiations Regulations 1985

■ ultraviolet radiation can damage the skin and lead to skin cancer: the main source is the sun;
■ lasers can cause burns and damage the eye.

There are no specific regulations for non-ionising radiation. It is covered by the general requirements of:

Ionising radiation:

■ naturally occurring radon gas can come from the ground;
■ radiation from sources

Health and Safety at Work etc Act 1974

Management of Health and Safety at Work Regulations 1992

HOW AND WHERE YOU CAN GET MORE HELP

Controlling the radiation safety of display laser installations INDG224

Radon in the workplace INDG210 **FREE**

Keep your top on INDG147
FREE (available in packs of 20)
ISBN 0 7176 0988 X **£5.00**

To order any of these titles, call
01787 881165
or use the order form at the back of this book

an accident at work:

DOES THIS CONCERN ME?

Do you have the minimum first-aid provision at your workplace? This is a suitably stocked first-aid box and a person appointed to take charge of first-aid arrangements.

Do you know whether you might need to provide more than the minimum? Read INDG214.

Do you know which accidents and ill health cases to report, including who should do it, when and how? Employers, the self-employed and people in control of work premises all have duties – read HSE31.

Do you know what accidents cost – and that insurance policies do not cover all the costs?



This booklet has been all about prevention. But sometimes things do go wrong. If someone has been hurt or fallen ill at work it's important to take care of them straight away, and make any dangerous conditions safe.

First-aid means treating minor injuries at work and giving immediate attention to more serious casualties until medical help is available. It can save lives and prevent minor injuries becoming major ones.

WHAT LAW APPLIES?

Health and Safety (First-Aid) Regulations 1981

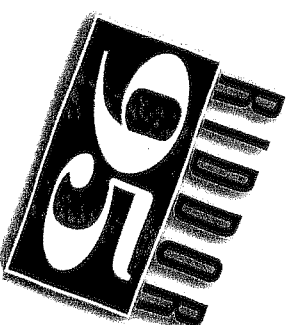
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

HOW AND WHERE YOU CAN GET MORE HELP

First-aid at work: Your questions answered INDG214
FREE (available in packs of 15)
ISBN 0 7176 1074 8 **£5.00**

First-aid: Basic advice on first aid at work INDG215
FREE (available in packs of 20)
ISBN 0 7176 1070 5 **£5.00**

To order any of these titles, call
01787 881165
or use the order form at the back of this book



What's the problem?

More than a third of all over-three-day injuries reported each year to HSE and local authorities arise from manual handling - the transporting or supporting of loads by hand or by bodily force.

Most of the reported accidents cause back injury, though hands, arms and feet are also vulnerable. The pie chart shows the pattern for over-three-day injuries reported in 1990/91. On average, each injury results in 20 days off work. The cost is enormous. And sometimes the victim never fully recovers.

Many manual handling injuries build up over a period rather than being caused by a single handling incident. These injuries occur wherever people are at work - on farms and building sites, in factories, offices, warehouses, hospitals, banks, laboratories, and while making deliveries.

What should I do about it?

Consider the risks from manual handling to the health and safety of your employees - the rest of this booklet will help. If risks exist, the Manual Handling Operations Regulations 1992 apply.

What are my duties?

The employer should:

the need for hazardous manual handling, as far as reasonably practicable

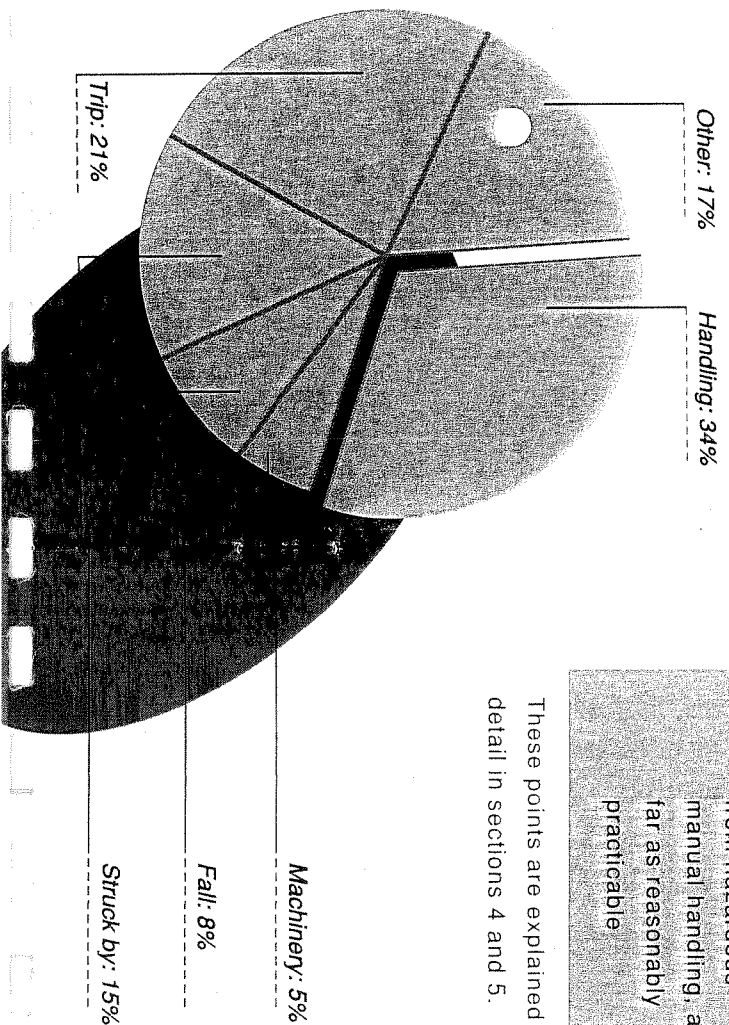
the risk of injury from any hazardous manual handling that can't be avoided, and

reducing the risk of injury from hazardous manual handling, as far as reasonably practicable

Employees have duties too. They should:

- follow appropriate systems of work and follow for their safety
- make proper use of equipment provided for their safety
- co-operate with their employer on health and safety matters

These points are explained in detail in sections 4 and 5.



In practice, these two things go together, since it is likely that a system that is out of date will not be fully implemented by the people who are intended to operate it.

All organizations are responsible for ensuring that their safe systems of work are reviewed and revised as appropriate. Monitoring of implementation is part of all line managers' normal operating responsibilities, and should also take place during health and safety audits.

6.6 Lone workers

People who work by themselves without close or direct supervision are found in many work situations. In some cases they are the sole occupant of small workshops or warehouses; they may work in remote sections of a large site; they may work out of normal hours, like cleaners or security personnel; they may be working away from their main base as installers, or maintenance people; they could be people giving a service, like social workers, home helps, drivers and estate agents.

There is no general legal reason why people should not work alone but there may be special risks which require two or more people to be present, for example, during entry into a confined space in order to effect a rescue. It is important to ensure that a lone worker is not put at any higher risk than other workers. This is achieved by carrying out a specific risk assessment and introducing special protection arrangements for their safety. People particularly at risk, like young people or women, should also be considered. People's overall health and suitability to work alone should be taken into account.

Procedures may include:

- periodic visits from the supervisor to observe what is happening
- regular voice contact between the lone worker and the supervisor
- automatic warning devices to alert others if a specific signal is not received from the lone worker
- other devices to raise the alarm, which are activated by the absence of some specific action
- checks that the lone worker has returned safely home or to their base
- special arrangements for first aid to deal with minor injuries, this may include mobile first aid kits
- arrangements for emergencies should be established and employees trained.

6.7 Permits to work

6.7.1 Introduction

Safe systems of work are crucial in work such as the maintenance of chemical plant where the potential risks are high and the careful coordination of activities and precautions is essential to safe working. In this situation and others of similar risk potential, the safe system of work is likely to take the form of a permit to work procedure.

When risks have been analysed and assessed, decisions can be made about workplace precautions.

All final decisions about risk control methods must take into account the relevant legal requirements, which establish minimum levels of risk prevention or control. Some of the duties imposed by the HSW Act and the relevant statutory provisions are **absolute** and must be complied with. Many requirements are, however, qualified by the words, **so far as is reasonably practicable**, or **so far as is practicable**. These require an assessment of cost, along with information about relative costs, effectiveness and reliability of different control measures. Further guidance on the meaning of these three expressions is provided in Chapter 1.

6.2 Principles of prevention

The MHSW Regulations 1999 Schedule 1 specifies the general principles of prevention which are set out in article 6(2) of the European Council Directive 89/391/EEC. For the first time the principles have been enshrined directly in regulations which state, at Regulation 4, that *Where an employer implements any preventative measures he shall do so on the basis of the principles specified in Schedule 1*. These principles are:

- 1 Avoiding risks
This means, for example, trying to stop doing the task or use different processes or doing the work in a different safer way.
- 2 Evaluating the risks which cannot be avoided
This requires a risk assessment to be carried out.
- 3 Combating the risks at source
This means that risks, such as a dusty work atmosphere, are controlled by removing the cause of the dust rather than providing special protection; or slippery floors are treated or replaced rather than putting up a sign.
- 4 Adapting the work to the individual, especially as regards the design of the workplace, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work-rate and to reducing their effect on health
This will involve consulting those who will be affected when workplaces, methods of work and safety procedures are designed. The control individuals have over their work should be increased, and time spent working at predetermined speeds and in monotonous work should be reduced where it is reasonable to do so.
- 5 Adapting to technical progress
It is important to take advantage of technological and technical progress, which often gives designers and employers the chance to improve both safety and working methods. With the Internet and other international information sources available a very wide knowledge, going beyond what is happening in the UK or Europe, will be expected by the enforcing authorities and the courts.

- 6 Replacing the dangerous by the non-dangerous or the less dangerous
This involves substituting, for example, equipment or substances with non-hazardous or less hazardous substances.
- 7 Developing a coherent overall prevention policy which covers technology, organization of work, working conditions, social relationships and the influence of factors relating to the working environment
Health and safety policies should be prepared and applied by reference to these principles.
- 8 Giving collective protective measures priority over individual protective measures
This means giving priority to control measures which make the workplace safe for everyone working there so giving the greatest benefit, for example, removing hazardous dust by exhaust ventilation rather than providing a filtering respirator to an individual worker. This is sometimes known as a 'Safe Place' approach to controlling risks.
- 9 Giving appropriate instruction to employees
This involves making sure that employees are fully aware of company policy, safety procedures, good practice, official guidance, any test results and legal requirements. This is sometimes known as a 'Safe Person' approach to controlling risks where the focus is on individuals. A properly set up health and safety management system should cover and balance both a Safe Place and Safe Person approach.

16/3

Hierarchy of risk control

When assessing the adequacy of existing controls or introducing new controls, a hierarchy of risk controls should be considered. The principles of prevention in the MHSW Regulations 1999 are not exactly a hierarchy, but must be considered alongside the usual hierarchy of risk controls, which is as follows:

- elimination
- substitution
- changing work methods/patterns
- reduced or limited time exposure
- engineering controls (e.g. isolation, insulation and ventilation)
- good housekeeping
- safe systems of work
- training and information
- personal protective equipment
- welfare
- monitoring and supervision
- review.

6.3.1 Elimination or substitution

This is the best and most effective way of avoiding a severe hazard and its associated risks. Elimination occurs when a process or activity is totally abandoned because the associated risk is too high. Substitution describes the use of a less hazardous form of



Moderate Water Endorsement - Assessment:

Canoe	16th April 2010	Cumbria	Ashley St. John-Claire (ashley@outdoor-resources.co.uk)
Whitewater	9th May 2010	Wakefield Yorkshire	Kim Bull (kim@adventurousminds.co.uk)
Canoe	16th May 2010	Wakefield, Yorkshire	Kim Bull (kim@adventurousminds.co.uk)
Canoe	22nd Aug 2010	Wakefield, Yorkshire	Kim Bull (kim@adventurousminds.co.uk)
Whitewater	26th Sept 2010	Wakefield, Yorkshire	Kim Bull (kim@adventurousminds.co.uk)

4 Star Leader Training - Whitewater Kayak:

13th Feb 2010	Cumbria	Sean McGrath (www.wildriver.co.uk)
13th Feb 2010	Llangollen, Wales	Ashley St. John-Claire (ashley@outdoor-resources.co.uk)
27th Feb 2010	South West Wales	Joe Jordan (joejordan599@blueyonder.co.uk)
6th March 2010	North West	Andy Noblett (a.noblett@tiscali.co.uk)
13th March 2010	Cumbria	Ashley St. John-Claire (ashley@outdoor-resources.co.uk)
13th March 2010	Cumbria	Sean McGrath (www.wildriver.co.uk)
14th March 2010	Plas Y Brenin	Wales (www.pyb.co.uk) *5 day course
20th March 2010	North Yorkshire	Mark Pugh (mrmrmarkpugh@aol.com)
3rd April 2010	North Wales	Richard Watson (canoerichie@tesco.net)
11th April 2010	Plas Y Brenin	Wales (www.pyb.co.uk) *5 day course
17th April 2010	Northumberland	Kim Bull (kim@adventurousminds.co.uk)
15th May 2010	North West	Andy Noblett (a.noblett@tiscali.co.uk)
15th May 2010	North Wales	Richard Watson (canoerichie@tesco.net)
1st Oct 2010	Plas Y Brenin	Wales (www.pyb.co.uk)
1st Nov 2010	Devon	Simon Westgarth (www.gene17.com/kayaking)
19th Nov 2010	Plas Y Brenin	Wales (www.pyb.co.uk)
26th Nov 2010	Plas Y Brenin	Wales (www.pyb.co.uk)
29th Jan 2011	Devon	Simon Westgarth (www.gene17.com/kayaking)

**L1 / L2
Training
Directors
and
Tutors
CPD Day**

6th April 2010

Level 5 Assessments 2010

If you are an aspirant Level 5 coach, planning to put yourself forward for assessment please be advised that we have the following dates scheduled:

Date	Venue	Director	Disciplines	Registration Closing Date
10/11 April 2010	Scotland	Gordon Brown	Sea, Surf, Inland & Canoe	16th Jan 2010
26/27 June 2010	North Wales	Dean Sinfield	Sea	March 2010
Oct. 2010 (exact date TBC)	Devon/Cornwall	Lara Tipper	Sea, Surf, Inland & Canoe	July 2010
Nov. 2010 (exact date TBC)	Scotland	Gordon Brown	Sea, Surf, Inland & Canoe	Aug. 2010
26/27 Feb. 2011	North Wales	Dean Sinfield	Inland & Canoe	Nov. 2010

Registration:

In order to register for one of these dates you will need to send the following to the BCU before the Registration Closing Date:

- A letter of support from your tutor, making a recommendation that you are ready for an assessment
- Your Level 5 project; the marking process may result in further actions required prior to Certification.
- Any aspirant Level 5 can send their project to the BCU for marking – the earlier you start this process the better!
- A copy of your completed action plan with a self declared statement completion
- Your C1 form stamped for assessment
- A £50 deposit (Cheques made payable to the BCU)

Please register with BCU: 18 Market Place, Bingham, Nottingham, NG12 8AP.

If you wish to discuss your assessment further, please contact the Course Director, or your Home Nation Assessment

Co-ordinator;

• Canoe Wales	Dean Sinfield	sid.sinfield@pyb.co.uk
• SCA	Gordon Brown	gordon@skyakadventures.com
• Canoe England	Lara Tipper	lara.tipper@canoe-england.org.uk
• CANI	Oisín Hallissey	oisin.hallissey@sportni.net

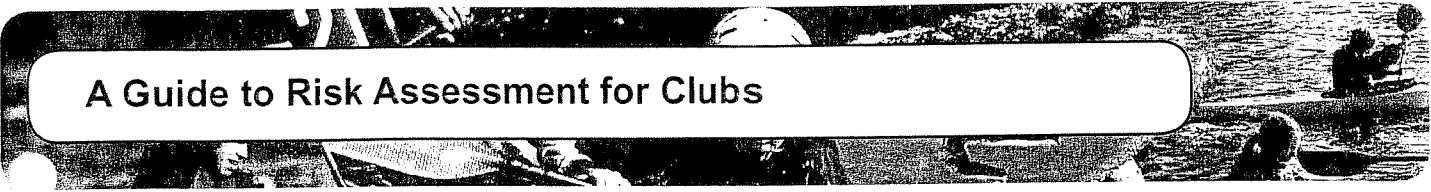


inspiring adventure

**FULL RANGE OF BCU COURSES
RIVER • SEA • SURF • OPEN**

For more details contact 01479 861256

www.glenmorelodge.org.uk



A Guide to Risk Assessment for Clubs

A risk assessment is an important step in protecting your members and your club, as well as complying with the law. It helps you focus on the risks that matter in your environment. In many instances, straightforward measures can readily control risks, for example ensuring that clear instructions and briefings are given, that the equipment used is appropriate. Most measures can be put in place with little effort and are simple and effective and allows you to safeguard your most valuable asset - your members.

The law does not expect you to eliminate all risk, but you are required to protect people as far as 'reasonably practicable'. This guide will help you achieve that with a minimum of fuss.

All Coaches and Leaders should be familiar with the written risk assessments for the Club they are working within. With the winter coming upon us now is a good time to see if your club has one, if it is appropriate, and if everyone familiar with it? You might feel that it needs to be updated, that you need to provide some training to club members, or that you need to go back to the drawing board and start again! Here is some useful information to help you go through that process.....

What is risk assessment?

A risk assessment is simply a careful examination of what, in your club, could cause harm to your members, so that you can weigh up whether you have taken enough precautions or should do more to prevent harm. Members and others have a right to be protected from harm caused by a failure to take reasonable control measures. Accidents and ill health can ruin lives and affect your club too, insurance costs increase or you may even end up in court. You are legally required to assess the risks in your club/organisation so that you put in place a plan to control the risks.

How to assess the risks;

The 'Five Steps to Risk Assessment, is one tool to help you assess health and safety risks; there are other methods that work well, however, we believe this is the most straightforward method for most clubs.

Follow the five steps.

1. Identify the hazards
2. Decide who might be harmed and how
3. Evaluate the risks and decide on precaution
4. Record your findings and implement them
5. Review your assessment and update if necessary

Coaching UK equivalence

- What are the hazards
- To who
- Is the risk adequately controlled and how?
- What further action is necessary?
- Review comments/dates

Don't overcomplicate the process. In many clubs, the risks are well known and the necessary control measures are easy to apply. You probably already know whether, for example, if there is a potential hazard when moving boats with the inherent risk of back injury, or where people are most likely to slip or trip. If so, check that you have taken reasonable precautions to avoid injury. In most clubs you can do the assessment yourself provided you are confident you understand what's involved. You don't have to be a health and safety expert. If you are not confident, get help from someone who is competent. In all cases, you should make sure that you involve your members in the process as they may be able to identify hazards you had overlooked. But remember, you are responsible for seeing that the assessment is carried out properly.

When thinking about your risk assessment, remember:

- a hazard is anything that may cause harm, such slipping on a steep bank, immersion in cold water, weirs etc;
- the risk is the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be.

Step 1: Identify the hazards

First you need to work out how people could be harmed. When you are familiar with an area/environment it is easy to overlook some hazards, so here are some tips to help you identify the ones that matter:

- Walk around your clubs/organisations site and look at what could reasonably be expected to cause harm. Paddle your local water with a critical eye.
- Ask your members what they think. They may have noticed things that are not immediately obvious to you.
- Be familiar with your clubs equipment and its use.
- Have a look back at your accident book (has your club got one?) these often help to identify the less obvious hazards.
- Remember to think about long-term hazards to health (eg repetitive strain injury rescues lifting etc).

Step 2: Decide who might be harmed and how

For each hazard you need to be clear about who might be harmed; it will help you identify the best way of managing the risk. That doesn't mean listing everyone by name, but rather identifying groups of people (e.g. coaches, paddlers, helpers or parents). Remember:

- Some groups may have particular requirements, e.g. new members young people, people with disabilities. Extra thought will be needed for some hazards;
- Members of the public, if they could be hurt by your activities;
- If you share your club, you will need to think about how your activities affects others present, as well as how their activities affects your members – talk to them; and
- Ask your members if they can think of anyone you may have missed.

In each case, identify how they might be harmed, i.e. what type of injury or ill health might occur. For example, a coach who is always demonstrating rolling may suffer surfer's ear.

Step 3: Evaluate the risks and decide on precautions

Having spotted the hazards, you then have to decide what to do about them. The law requires you to do everything 'reasonably practicable' to protect people from harm. You can work this out for yourself, but the easiest way is to compare what you are doing with good practice.

So first, look at what you're already doing; think about what controls you have in place and how the club is organised. Then compare this with the good practice and see if there's more you should be doing to bring yourself up to standard. In asking yourself this, consider:

- Can I get rid of the hazard altogether?
- If not, how can I control the risks so that harm is unlikely?

When controlling risks, apply the principles below, if possible in the following order:

- try a less risky option (e.g. use the steps instead of the steep slippery bank);
- prevent access to the hazard (e.g. good group control no unsupervised paddling);
- organise work to reduce exposure to the hazard (e.g. wear helmets when there is a likely hood of head injury);
- personal protective equipment (e.g. wind/water proof clothing, buoyancy aid, footwear, helmets etc);
- provide welfare facilities (e.g. first aid and washing facilities for removal of contamination).

Improving health and safety need not to cost a lot. Failure to take simple precautions can cost you a lot more if an accident does happen. Involve club members, so that you can be sure that what you propose to do will work in practice and won't introduce any new hazards.

Step 4: Record your findings and implement them

Putting the results of your risk assessment into practice will make a difference when looking after people and your club.

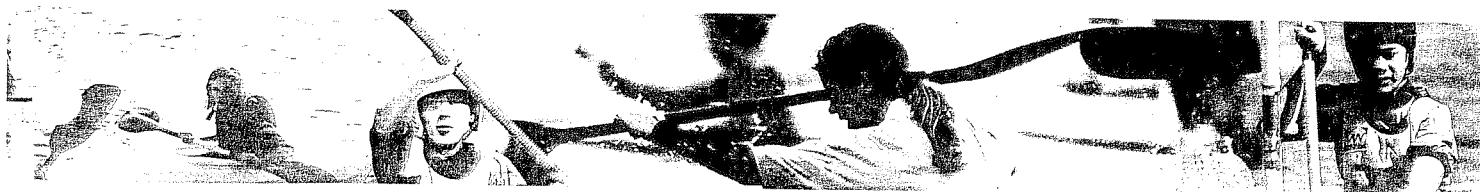
Writing down the results of your risk assessment, and sharing them with your members, encourages you to do this. When writing down your results, keep it simple, for example 'Tripping over rubbish: bins provided, members instructed, weekly housekeeping checks', or 'Lifting and launching kayaks, all involved to have manual handling brief, remind at each session'. We do not expect a risk assessment to be perfect – but it must be suitable and sufficient.

You need to be able to show that:

- A proper check was made;
- You asked who might be affected;
- You dealt with all the obvious significant hazards, taking into account the number of people who could be involved;
- The precautions are reasonable, and the remaining risk is low; and
- You involved your staff or their representatives in the process.

If, like many clubs, you find that there are quite a lot of improvements that you could make, big and small, don't try to do everything at once. Make a plan of action to deal with the most important things first.

Continued on page 13



OFFICE INSPECTION CHECKLIST

	Fault or non-compliance	Action to be taken/by whom/when
General		
a) Are specific responsibilities defined?		
b) Is there a formal system for reporting defects?		
Space		
a) Does each employee have adequate space in which to work?		
b) Do any activities interfere with the work of another person?		
Temperature		
a) Is the temperature greater than 16°C?		
b) Can the temperature be controlled?		
c) Is humidity monitored?		
Noise		
a) Is the noise level below 70dBA?		
Floors/Passages/Stairs		
a) Are they of sound construction?		
b) Are they regularly maintained?		
c) Are they free of trailing cables?		
d) Are they free of spillages?		
e) Are they free of obstructions?		
f) Are they adequately lit?		
g) Are there any blind spots?		
h) Are handrails on stairs secure?		
i) Are any floor markings clearly visible?		
j) Are exit routes and doors clearly marked?		
k) Are there litter bins?		
Lighting		
Is the light level adequate for the job in hand? Is there adequate emergency lighting, especially on stairs and long corridors.		
Furniture and Fittings		
a) Are work areas planned to take into account - space around them - passages - means of escape - opening of drawers/doors?		
b) Are there any sharp edges or corners?		
c) Are filing cabinets stable?		
d) Are boxes of stationery, etc. properly stored?		
e) Is shelving stable?		
f) Is seating ergonomically designed?		
g) Have employees been trained in posture and ergonomics?		
h) Is there sufficient desk space for all the equipment an employee is required to use on a routine basis?		

Office Equipment			
a)	Have all operators been trained in its use and records kept?		
b)	Are employees under 18 years adequately supervised?		
c)	Have photocopiers been tested? (PAT, ozone)?		
d)	Do guillotines have guards?		
e)	Are knives, scissors, scalpels, etc. used and stored correctly?		
f)	Is appropriate PPE available for handling chemicals?		
g)	Are instruction booklets for each item of machinery available?		
Manual Handling			
a)	Has a risk assessment of manual handling procedures been carried out?		
b)	Have all staff been taught the principles of good manual handling techniques?		
c)	Are appropriate handling aids available?		
d)	Is appropriate PPE available?		
Fire			
a)	Are fire exits free from obstruction and easily opened?		
b)	Are internal fire doors kept shut?		
c)	Are appropriate extinguishers readily available?		
d)	Have staff been instructed in the use of fire extinguishers and a record kept?		
e)	Are there regular fire drills?		
f)	Is the fire alarm regularly tested?		
g)	Have fire wardens been appointed?		
h)	Are there adequate provisions for smokers?		
i)	Are central rubbish areas kept away from potential sources of ignition?		
j)	Is all electrical equipment regularly checked?		
k)	Is there adequate provision for storing clothing, etc. away from a source of heat?		
l)	Are areas to which the public have access checked for incendiary devices?		
m)	Are there smoke detectors, especially on fire escape routes?		
DSE			
a)	Has a risk assessment on DSE equipment been performed?		
b)	Are habitual DSE users aware of their rights concerning eye tests?		
c)	Are records kept of such tests?		
d)	Have users been trained in the safe use, ergonomics and posture at DSE?		
e)	Does the workstation have sufficient space for the work in hand?		
f)	Does the workstation have non-reflective surfaces?		
g)	Can the display screen be tilted and adjusted on the work surface?		
h)	Can the operator adjust the screen for contrast, brightness?		

DSE cont'd..

i)	Is the screen stable and without flicker?		
j)	Can the screen be positioned to eliminate glare?		
k)	Is the screen regularly cleaned?		
l)	Are there adjustable blinds, curtains, etc. at the windows?		
m)	Are the characters on screen easily legible?		
n)	Have adequate restbreaks or periods of other work been built in to DSE work.		
o)	Does the user have access to copy-holders, footrests, wrist rests?		
p)	Can the keyboard be set back from the edge of the desk?		
q)	Can the angle of the keyboard be adjusted?		
r)	Can the place of the work be controlled by the user?		
s)	Is the chair comfortable for each user?		
t)	Can the chair be adjusted for height?		
u)	Can the back rest be adjusted for height?		
v)	Can the back rest be tilted?		
w)	Can the feet be placed flat on the floor while seated at the workstation?		
x)	Is the chair stable?		