

## **Operational Procedures Abseiling and Climbing**

### **Description**

Abseiling takes place on the rear of the Venture Centre building and from a tree platform on the assault course.

These range in height from 10 feet to approximately 40 feet.

An off-site abseil pitch is available at Maughold Head

Climbing takes place on a small artificial climbing wall at the rear of the centre and off-site at the large slabs at Dhoon Glen, or at the Chasms, or Aldrick, or Laxey point.

***Under no circumstances whatsoever are clients to be taken climbing at the Primates area crags – the difficulties of rescue are considerable and beyond the scope and remit of the SPA syllabus.***

Our Technical Advisor for this activity is Pete Stacey MIA

### **Training/Qualifications**

#### **Off Site**

Instructors must hold SPA or equivalent or higher or have undergone site specific training and assessment by a MIA qualified trainer, currently Pete Stacey. Valid first aid certificate required. Assistants to be trained by appropriate person in the use and maintenance of equipment. This must cover basic climbing / abseiling skills rope work, knot tying and emergency procedures.

#### **On site**

As above but instructor not holding a qualification as outlined above will have been subject to in-house training and assessment from the Technical Advisor, and be approved by centre management.

#### **Instructor Ratio**

1 instructor: 6 students (children)

1 instructor: 12 students (adults)

1 instructor and an assistant for up to 12 children.

#### **Equipment**

Harnesses fully adjustable. Range of sizes available.

At present we use camp group sit harnesses

Chest harnesses are available where considered appropriate by the instructor (primarily for very heavy adults).

Descenders Fig 8

Karabiners UIAA approved D shaped and HMS for use on Italian Hitches and belay plates

Safety Ropes UIAA minimum 10mm

Abseil ropes minimum 10mm

Helmets to UIAA standard

Grigri, slings and karabiners for rescue kit

Instructors to carry knife for emergency use

Gloves

Most equipment should be available 1 set for each person.

All ropes replaced on an annual basis and checked each time used

All harnesses checked and logged at least twice a year and checked each time used.

All karabiners, belay devices etc checked during use.

Anchors at the cliff abseil were checked on 7/3/2014. One post was removed and visually inspected for corrosion below ground. This post was found to be satisfactory for use as a main anchor.

### Sample session structure

Assemble group

Explain nature of the session expectations etc

Issue and demonstrate kit (see picture below)



Safety rope connected using a figure 8 on bight and stopper knot. Belayer to use an Italian Hitch on a figure 8 for increased friction.

Abseiler connected to separate karabiner and figure 8 for abseiling. Gates in opposition to each other on the central belay loop.

Safety stop attached to tree – to be removed just before the customer leaves the platform and commences abseiling.

Group should put kit on with assistance if required (be aware of child protection issues)

Before any person leaves the area to begin the abseil all equipment **MUST BE CHECKED BY AN INSTRUCTOR.**

Instructor demonstrates abseil paying attention to following:

- Use of cows tail - only to be removed by instructor (children only)
- Hand position whilst abseiling to avoid rope burn
- Body posture
- How to remove fig 8 and use karabiners
- Demonstration abseil needs to be protected

At tree give good clear demonstration of how to use fail safe safety rope on ladder

## SAFETY AND RESCUES PROCEDURES

**Avoiding the problem** – it might be preferable on some occasions with people who are very heavy (over 18 stones) for them not to use the fall-arrest 'ALF' unit but to be top-roped up by the Instructor working from the top of the platform. The instructor then connects them to the safety stop at the platform on arrival and carry's on with the abseil in the normal manner.

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There are only two probable types of rescue, that of an abseiler who has jammed or is stuck hanging on the abseil rope and someone who has fallen off the ladder and is hanging conscious or unconscious.

### 1. Ladder rescue.

#### Kit required – grigri, sling, two karabiners.

If the person is conscious, can they pull themselves back round and onto the ladder, if so this saves much time and trouble.

If they are conscious or are unconscious or are too weak or unable to pull themselves round, the following is the preferred way of rescuing.

- A) STOP AND THINK BEFORE ACTING. GET HELP FROM OTHER INSTRUCTORS IF POSSIBLE.
- B) UNCLIP THE BOTTOM PULLEY FROM THE GROUND ANCHOR. (Picture 1)



Picture 1



Picture 2

- C) USING A SLING AND KARABINER CLIP INTO THE SECOND RUNG OF THE LADDER, THEN CONNECT YOURSELF INTO THIS SLING TO PREVENT YOU BEING LIFTED OFF THE FLOOR. (Picture 2)



Rope to ALF unit at top of ladder.

Rope to casualty.

Picture 3.

- D) Hold the Grigri with the black handle nearest the ground and the top side open. Attach the Grigri to the rope on the opposite side to the casualty – this rope goes direct to the 'ALF' unit at the top of the ladder. Picture 3 above.



Grigri connected to central harness loop and all slack taken in.

Picture 4

E) CLOSE THE GRIGRI, CONNECT TO YOUR SIT HARNESS CENTRAL LOOP AND TAKE IN ALL SLACK ROPE, MOVING THE GRIGRI AS HIGH AS POSSIBLE. (Picture 4)

F) GET OTHERS TO HELP YOU HOIST THE CASUALTY UNTIL THE PLATFORM YOU RELEASE THE ALF UNIT AND YOU HEAR THE UNIT RELEASE WITH AN AUDIBLE CLICK. (Picture 5)



Picture 5

G) ONCE THIS IS DONE, THE CASUALTY WEIGHT SHOULD NOW BE ON THE GRIGRI AND YOU CAN LOWER THEM SLOWLY AND SAFELY TO THE GROUND. (Picture 6)



Casualty being pulled clear of the tree.  
Belayer lowering the casualty to the ground using the grigri.

Picture 6

I) WHERE NECESSARY, COMMENCE FIRST AID AND CONTACT THE OFFICE.

## **2. Abseil rescue.**

### **Kit required – only that which is already in use.**

The following procedure is to be used to resolve any abseil problems.

- a) The belayer ON THE TREE PLATFORM should lock off the Italian hitch using the claw method, and then tie off the hitch using at least two hitches round the rope leading to the abseiler.
- b) The platform instructor should then release the abseil rope and either talk the casualty through the process of sorting the problem out. If this is successful, the instructor should then re-tie the abseil rope with an Italian hitch and two hitches with a long tail clipped back with a karabiner. The PLATFORM INSTRUCTOR should then release the safety rope and continue lowering the abseiler.
- c) If the abseiler cannot sort the problem or is unconscious, the platform instructor should drop the abseil rope completely and lower the casualty to the ground, and commence first aid where necessary.

## **Climbing**

### Bouldering on the centre wall.

Group should not climb above red line when bouldering

Helmets must be worn at all times when in the climbing/abseiling area

Keep non climbers away from base of climb except when spotting a climber

### Belaying

Older students may be involved in belaying of climbers, however this must be done under close supervision and where the instructor considers it appropriate. **The intention to allow students to belay must be agreed prior to the session with a senior instructor or manager.**

## **Off-site venues – to be led by SPA/MIA/MIC Award Holders only.**

### **Abseiling at Maughold Head**

Observe country code on way to Headland

- Pitch to be rigged with at least 2 abseil ropes and 1 safety rope.
- Clients Abseil rope must be releasable in case of emergency.
- Consideration should be given to protection of clients on return up the cliff
- This may vary from small groups where the instructor just accompanies them up the path, to larger groups where the normal practice must be to rig a hand line for them to use to assist their return. In the case of minors this should be supervised by an appropriate adult.
- It is normal practice when working with youth groups to use a group cow's tail at the top of the cliff to stop persons wandering about.

### **Chasms** - Only use appropriate areas i.e away from bird nesting areas

This area is not suitable for young persons in large groups

Helmets must be worn at all times in all locations apart from cliff top locations

All persons should be made aware of the unusual nature of this area i.e. large cracks in the ground very steep and craggy terrain.

There should be some attempt to monitor this crag for any signs of collapse or further slippage – it is an unstable crag.

**Laxey** - This is a small area to the north of Laxey harbour. The path down to the crag must be protected by a knotted hand-line which should be fixed to a stake (yet to be installed), down which people can lower themselves onto easier ground below. An Instructor must go down first to spot clients coming down the rope.

The students should wait in a safe area away from the crag edge whilst the ropes are set-up. Once this has happened they should be roped down for their own protection to the bottom of the climbs. Should an abseil be set up, the abseiler should be protected by a safety rope across the bottom to the ascent/descent route or should climb one of the routes on a safety rope back to the top of the crag.

**Aldrick** - There are a number of potential sites here to be developed but the access is simple and easily managed. There are a number of climbs that require some small amounts of cleaning, and anchors confirmed, including some stakes on a slabby area. The range of routes here can provide for a number of sessions being repeated here and progression for students is perfectly feasible. Aldrick if anything should be seen as the preferred venue over the Chasms or Laxey for groups.

### Abseiling/Climbing Risk Assessment

Hazard	Who might be harmed	Severity	Control measures in place at present	Likelihood with current controls in place	Risk Factor	Further action required and time span	Likelihood after further action	Risk factor
Falling off abseil / climbing pitch	Instructors, clients,	H	Cows tails to be used at all times when operating near top of pitches	4	H4			
Falling rocks	Instructors, clients	H	All participants and instructors must wear helmets at all times during abseiling sessions. This reduces the risk of head injury from falling objects. Staff must ensure helmets do not constantly require adjusting.	4	H4			
Failure of equipment	Instructors, client	H	Equipment to be replaced in accordance with manufacturers recommendations In the case of onsite ropes minimum of every season and off site ropes every 2 years. Helmets. Karabiners every 5 years. Fig 8, stitch plates, belay devices etc to be replaced as advised by manufacturers reccs. Gear can fail due to overload – people over 18 stones will need to be carefully managed.	4	H4			
Use of unserviceable equipment	Instructors, clients	H	All unserviceable equipment, which is not repairable, <b>must</b> be destroyed	4	.H4			
Becoming entangled in ropes during Abseil (hair, gloves, chin	Students	L	All long hair must be tied back and tucked inside jackets, as per operational procedures, all abseil pitches should have releasable abseil rope type set up or other proven	3	L3			

straps clothing)			method of getting client out of ropes					
Burns from ropes	All participants	L	All participants must wear a glove on hand controlling rope during abseil, these to be destroyed and disposed of when unserviceable.	3	L3			
Tripping over ropes On floor/damage to Ropes by standing on them	All participants	L	Instructor are taught to store spare rope away from areas where clients are walking The importance of care of ropes is brought to the attention of the group as is the safety implications of standing on ropes.	4	L4			
Slipping on path returning from abseil at Maughold, or when descending at Laxey	All Participants	H	Static safety line to be used depending on participants climbing ability.	4	H4			

During the assessment the **severity** of the hazard was given a rating as follows

H= Could cause Death or major significant injury

M= Could cause and injury likely to last 3 days or more

L= Minor injury

The **likelihood** was also given a rating based on the following

1 = Very likely      2 = Frequent event      3= Unlikely      4 =  
Extremely unlikely