

Mulu Caves 2009 Strategic Rescue Plan

Introduction

This document has been prepared to assist expedition team members in the planning procedures that shall be implemented in the unlikely event of an accident.

All team members shall be inducted in the detail of this policy at the commencement of their stay at Camp 5.

Accident Prevention

Expedition team members have been chosen, based on their caving ability and previous track record in the exploration of both vertical and horizontal cave systems in the worlds most remote locations.

All team members, whilst underground, shall adopt recognised, safe techniques. Specific methods shall include (but not be limited to) the following:

- Suitable footwear shall be worn by all team members
- Safety helmets shall be worn at all times, with the chinstrap fastened
- Emergency lighting and/or spare batteries shall be carried at all times
- Where there is a perceived risk of a fall on a regular access route through a cave, then safety lines shall be installed to cater for the weakest members of the party
- Where safety lines have been installed these shall be used by all team members
- Where harness and lanyard attachments are deemed necessary, these shall be worn and used by all team members
- Where climbing operations are taking place, these shall be carried out by the most able climbers in the party ensuring that, where reasonably practicable, safe climbing techniques are being utilised for each particular climb
- All team members shall, at all times, 'look out' for their fellow team members safety
- Where sharp rocks are present, team members should consider wearing suitable hand protection
- Where loose rocks are present, team members shall exercise additional caution
- During long exploratory sorties into the caves, team members shall consider the effects of fatigue and be aware of the condition of the weakest members of the exploratory team
- Caving teams should normally consist of at least 3 members
- Where available, exploration teams shall carry a detailed survey of the cave being explored showing the safest routes back to any underground camps and the cave entrance

Communications

A cave 'entry and exit' log will be maintained throughout the expedition. Where day trips from Camp 5 are carried out, the name of the cave and area within the cave being explored shall be detailed in the expedition log book. When all team members have returned to Camp 5, this shall be detailed in the log book.

Should a teams' objectives change during the course of the sortie, a marker tag shall be placed in an obvious location in the main passage detailing where the party have gone to.

Where teams are embarking on an overnight camp in the caves, this shall be detailed in the expedition log book.

When all team members have returned to Camp 5, this shall be detailed in the log book.

Should a teams' objectives change during the course of a multi day sortie, a marker tag shall be placed in an obvious location at the designated underground camp detailing where the party have gone to.

Communications between Camp 5 and Park Headquarters shall be maintained by way of radios which are held by the National Park Camp 5 Duty Manager.

A Satellite phone shall be kept at Camp 5 for emergency purposes however due to poor signal strength because of the geology of the Melinau Gorge these cannot be relied upon as an immediate communication solution.

First Aid & Self Rescue

Located at Camp 5 will be a comprehensive First Aid kit, the contents of which all teams members shall have made themselves familiar. Also at Camp 5 shall be a SKED drag stretcher, neck splint and comprehensive rope rescue kit. All team members shall be familiar with the methods of use.

Instructions for using all of the above shall be made available at Camp 5 and all team members shall ensure that they have read and understood the instructions.

All exploratory teams shall take a comprehensive 'Remote' First Aid Kit and have this with them at all times.

Based on the accident statistics of expeditions to this region over the last 10 years the most likely cause of accident whilst in the caves is by small slips or trips, generally requiring little or no first aid treatment.

Whilst travelling between Camp 5 and the cave entrance it is again small slips and trips on the wet steep ground that causes most accidents. Again these generally require little or no first aid treatment.

Wherever practicable, teams should endeavour to assist an injured caver back to Camp 5.

Temporary Jungle Hospitalisation

In the unlikely event of an injured person not being able to move from the location of a jungle accident the other team members shall treat the injuries with the first aid equipment available and make the casualty as comfortable as possible until such time as they can be transported back to Camp 5.

An assessment shall be made by the most competent team member as to whether additional help would be required from Camp 5. This should be communicated by a team member returning to Camp 5.

Temporary Underground Hospitalisation

In the unlikely event of an injured caver not being able to move from the location of an underground accident the other team members shall treat the injuries with the first aid equipment available and make the casualty as comfortable as possible until such time as the casualty can be removed from the cave. This would be considered as requiring a 'Major Underground Rescue'

Major Underground Rescue

In the unlikely event of requiring a Major Underground Rescue the following procedures shall be adopted:

- The condition of the casualty is determined
- First Aid treatment is administered to the casualty
- The casualty is made as comfortable as possible
- At least 1 competent person shall remain with the casualty
- At least 1 competent team member shall first return to the surface and then return to Camp 5 with all the information required concerning the condition of the casualty, time of accident, first aid and rescue equipment requirements and whether an emergency helicopter should be put on standby
- If other exploration teams are operating in the same cave system then a decision shall be taken by the team members present on the practicalities and consequent safety implications of a team member attempting to find others within the cave for help.
- After returning to Camp 5 a competent Rescue Co-ordinator shall be appointed and he/she shall inform National Park Headquarters of the situation by National Park radio
- The necessary first aid and rescue equipment shall be packed
- A suitably competent rescue team shall be briefed on the required techniques to be used and they shall then depart for the cave entrance
- Where insufficient rescue personnel can be acquired from expedition members in Camp 5, the Rescue Co-ordinator shall select a suitably competent person/s from expedition or National Park staff to assist in any underground operations. It is most likely that the most competent non Expedition members shall be acquired from National Park Headquarters

- The Rescue Co-ordinator shall be responsible for ensuring all rescue teams are logged in and out of the cave in the expedition log book
- Where deemed necessary a surface carrying team shall be selected from the most competent expedition and National Park staff members

Camp 5 Helicopter Evacuation

In the unlikely event of requiring the use of a helicopter to extricate a casualty from Camp 5, this shall be sanctioned by the Rescue Co-ordinator. A suitably competent person shall be dispatched to Park Headquarters to handle the logistics and insurance implications.

The expected arrival time of the helicopter shall be relayed to Camp 5 and the Rescue Co-ordinator, who shall ensure that the casualty can be transferred to the helipad for immediate evacuation.

A suitably competent person shall accompany the casualty to the nearest suitable hospital. This person shall be responsible for ensuring all required insurances and passports etc. are available.

The results of the hospital examination shall determine the next course of action. Communications from the hospital shall firstly be by landline/mobile to Mulu Park Headquarters. This shall then be relayed via radio to Camp 5 and the expedition leader.

Additional Notes

Whilst every effort has been made to cover most foreseeable eventualities, the decision making process during any rescue will be based on the information received from within the cave. Many of these decisions will be taken after careful consideration of the condition of the casualty, location within the cave, easiest and safest routes to the surface, other easily available rescue team members, to name but a few.

There are sufficient expedition members present who have considerable experience in dealing with such emergencies, both the above ground rescue control and management responsibilities and the underground rescue controller and rescue technician.

A number of our team have considerable experience within the UK's Cave Rescue Organisations and a large number of our team are experienced and qualified under the Industrial Rope Access Trade Association (IRATA) certification scheme.

Most are qualified to IRATA Level 3 which is the Safety Supervisor standard. The techniques covered under this qualification are regarded as the highest standards for rope rescue situations. It will generally be these team members who assume the technical roles during a rescue.