

Climbers Club of Tasmania

SAREX 2013 REPORT

Excellent photographs of the exercise and equipment were kindly taken by Richard Bugg and can be viewed of the following link:

<http://richardbugg.zenfolio.com/sarex2013>

Objectives

The original objectives of the exercise involved conducting a rope rescue in winter conditions in the Labyrinth area. As a consequence of a high degree of uncertainty in terms of the helicopter being able to convey us into the area, together with the weather making any training or learning problematic, we decided to move to Coles Bay.

The group determined that it was most productive to work at the type of rescue that could not be achieved by standard approaches. The types of circumstance included:

- Multi pitch cliffs;
- Cliffs where the top is inaccessible or confined (i.e. Northern Buttress, Chancellor, MoonRaker) ;
- Particular consideration was given to the management of the loose 10 - 15m meter hazard zone that exists at the top of most Tasmanian cliffs. This poses a significant risk factor.

Secondly

It was decided that systems should be developed that could be employed by a group that could work in wilderness situations without:

- I. A large space at the top of the cliff;
- II. Easy anchors.
- III. Large numbers of rescuers.

Thirdly

That speed was of paramount importance in terms of "Time Frame For Survival" (TFFS) of a (climber?) victim and that conventional approaches are often too slow and inflexible. The balance between the priorities of response time and patient care should to be considered carefully with Police and TAS (Tasmanian Ambulance Service).

This informed the concept of rapid deployment by helicopter, or on foot, where weight and numbers are minimized. Thus equipment was kept to a minimum, and safety, speed and small numbers of rescuers were paramount.

Equipment

It was found that far less equipment is required than that included in most Vertical Rescue (VR) kits. However kit needs to be carefully chosen. It was found 3 bags plus ropes will suffice. It is presumed that volunteers will come with harness, carabiners and the most basic gear.

At the conclusion of the exercise photographs were taken of the suggested contents for the three response packs. (Main, Belay, Rigging)

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Techniques Tested

- Counter balance lower and raise;
- SARINZ Lower/ Raise system (used by the Antarctic Division and other entities).
- Lower and Raise, two stage over loose zone and vertical cliff with stretcher and rescuer.

FINDINGS

- Counter Balance system is fastest and most versatile(easily).
- SARINZ system works well and is the best for patient care.
- The SARINZ system can be trimmed in terms of gear without compromising safety.
- Patient Care / TFFS/ Risk to rescuers, to be considered in responses - this will be a challenging decision that Police will ultimately have to make.
- Double prussik belays are highly functional;
- Racks (a cavers descending device) have both advantages and disadvantages. No strong opinion was held as to their advantage over IDs (an industrial size Gri Gri) except IDs would be quicker and have a take in capacity - but may not work in ice or mud.

Importantly, it was found that:

1. Three operatives can do both lowers and raises, however it is very thin, difficult and leaves no margin;
2. Four operatives is reasonably functional.
3. Five is ideal, provides better patient care and adds safety and speed.

Recommendation: Five or more operatives form a team if possible.

OUTCOMES

- Participants all learned a great deal;
- After two days the participants worked effectively as a team and have a reasonable confidence that they could adapt to almost any situation;
- Simulated rescues were performed rapidly and safely.
- Climbing techniques were subordinated and became complimentary rather than primary;
- SRT skill is essential - irrespective of method used;
- The techniques and practices tested are readily transferrable to caves;
- Some formal fixed systems are (arguably) of limited utility on larger or more complex cliffs (for reasons of speed, helicopter or foot transport, space, numbers of rescuers required, complexity).
- Systems need to be adapted and therefore a range of techniques is useful;
- The core components of the raise/lower system are very generic and form the basis for the POLICE, Antarctic Division, SARINZ and SES raise/lower. The team used a bare minimum of the equipment involved in these systems but without sacrificing safety.
- The counterbalance is a little different and more specialized, but it is built on the same basic set of kit used in the lower/raise. The key difference is a small change in the configuration. But it still uses a belay line, Central Anchor Point (CAP) etc
- The team should not get bogged down in formal rules and singular fixed techniques as they limit the versatility of response. Rather the following should be the priorities:

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1. SAFETY
2. SPEED -(Patient Care/TFFS/ Risk to rescuers)
3. VERSATILITY
4. LIGHT WEIGHT (to permit rapid deployment by air or on foot).

Minutiae

- Jiggers need 10m more rope (Edge haul after counter balance and other gain issues);
- Third Bag should be a haul type bag;
- Consider survival gear in haul bag;
- Tri Locks (Petzl Tri Lock Carabiners) preferred for speed and safety
- A rigging rack of Camalots and wires is suggested (photo).
- Only one Jigger was used;
- Some system for patient retrieval (Petzl Nappy) other than Sked (the plastic roll up stretcher in the photos) as it is exceptionally hard to put a patient in on cliff without a ledge etc.
- The new nylon edge plates were BRILLIANT and represent a significant advance on rollers or tripod systems!
- Edge kits are good but should not be used on the cliff. This suggests rescuers should have their own kit perhaps??

Systems

In the future it would be useful for police to stipulate what system (in terms of belays, hauling etc) they want to use and the team will adapt to that. No preference was given by the team other than:

- Counterbalance is highly effective;
- Team can adapt to any system quickly - flexibility is the key;
- Racks work, IDs will be easier but may be less reliable in extreme conditions.
- Weight and gear is best kept to a considered minimum;

THE FUTURE?

- A group of about 15 is required to provide coverage as experienced, active climbers with wilderness skills are (by definition) often away;
- Callout system needs to be developed. Police have requested a list of telephone numbers rather than a text group (this will be provided ASAP);
- Strong wilderness skills are essential;
- SRT (Single Rope Technique) skills essential in whatever form;
- Further training would be useful (two weekends and a few evenings per year?) the team expressed willingness to participate and identified others who may be capable and, hopefully, willing.
- Training should include major cliff areas and, as far as practicable, be cliff based rather than indoors and theoretical;
- The group can develop core techniques that can be adapted;
- Successful rescues will require close liaison with police, ambulance and SES.
- CCT need to remain independent to ensure the greatest possible flexibility in terms of our own training and response.
- Should not have fixed systems but be able to adapt to any system.

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Conclusions

The objectives of the exercise were achieved and exceeded with the exception of the Winter Environment and helicopter elements.