# Rope Access Maneuvers 3

# (IRATA/SPRAT)

## 3.1 Rescue Through Knots

- Perform rescue pick
- Descend with the casualty
- Approach the knots to knee height for the backup knot or 1+M for the ID side knot. Be aware that with large amounts of rope above this distance will need to be greater.
- Pay careful attention to the backup device height above the knots with a two person load
- Tie a butterfly in the loaded rope with the isolation butterfly in the loop. Move this up to eye height
- Rig the 2nd ID to the backup rope and clip pic sling to casualty's sternal D ring
- Move the backup device to the rope above the rescuers initial ID
- Transfer from the first to the second ID (no added friction necessary)
- Continue descent to lower knot 1:1 with added friction
- Pass backup device by lower knot. Be aware of backup device height above lower knot
- Descend to ground

## 3.2 Large Rebelay Rescue

- Pre-rig doubled carabiner on to ID for rescue pick
- Climb to the first anchor, and switch to descent
- Separate ropes and ascend the casualty's backup rope
- Keep all exiting ropes to the right of the body
- Perform rescue pick
- Descend minding the backup device
- Descend to 20 degrees below anchor point
- Rig 2nd ID and backup device to other side of the loop
- Change 1st ID rope to 2nd backup rope (this creates more effective rope length)
- Pull over and rad if there is a need
- Transfer over minding the backup device
- Transfer to last set of ropes and descend to ground

## 3.3 Large Rebelay Loop-caught (Travelling back)

**Extra Equipment:**1 steel carabiner (large gate opening)

- Pre-rig doubled carabiner on to ID for rescue pick
- Climb to the first anchor, and switch to descent on the standing ropes
- This method uses the standing ropes and does not matter which rope the casualty has for load or belay
- Clip the steel carabiner in to both ropes and use as a track rope
- Descend until the casualty's head is at ID level
- Leg-lock the casualty and pull in tight. Use casualty's handled ascender to help
- Attach the pick sling to the casualty's sternal point (leg lock and pick sling will usually release tension on chest ascender)
- Remove the casualty's backup device and place their spare lanyard on your central D
- Release casualty from their chest ascender
- Rig 2nd backup device to far side of loop, or casualties may be used
- Use casualty's ID to lower out
- Check loop length and RAD up standing ropes if more is needed
- Complete transfer to last set of ropes and descend to ground

## 3.4 Large Rebelay Loop-caught (Travelling out) (lvl 3 IRATA)

**Extra Equipment**: 1 steel carabiner (large gate opening)

- Pre-rig doubled carabiner on to ID for rescue pick
- Climb to the first anchor, and switch to descent on the standing ropes
- This system does not matter which rope the casualty has for load or belay
- Clip the steel carabiner in to both ropes and use as a track rope
- Descend until the casualty's head is at ID level
- Open the casualty's ID and pull rope through until they are as close as you can pull
- Attach the pick sling to the casualty's sternal point
- Remove the casualty's backup device and place their spare lanyard on your central D
- Release casualty from their ID
- Rig 2nd ID from casualty's sternal D to travelling out backup rope
- Rescuers 2nd backup device goes above casualty's handled ascender, or casualties may be used
- Remove casualty's handled ascender
- Use ID from rescuers sternal point to RAD up until it is possible to release the casualties chest ascender
- Use casualties ID to descend
- Check loop length and RAD up standing ropes if more is needed.
- Complete transfer to last set of ropes and descend to ground

## 3.5 Exiting to Anchor Points

This manuever is not the same as going in to an aid traverse. Its purpose is to exit the ropes to anchors to break in to tensioned ropes or to become a casualty for the aid pick-off rescue.

- Ascend to anchor points.
- Attach 2nd backup lanyard to backup anchor
- Take backup device off rope and attach 1st backup lanyard to main anchor
- Stand and transfer chest ascender from main rope to backup lanyard.
- Clean up system.

## 3.6 Aid Traverse Rescue (soft linked)

Casualtys should align themselves so that their load point is closest to the direction that the rescuer will come from.

**Extra Equipment:** 2 spare rescue ropes (with carabiners attached via Barrel knots).

- Ascend to anchor points
- Begin aid traverse
- Attach standing ropes to harness and trail across (for rope to rope transfer)
- Get to anchor nearest the casualty's load rope and make this the main anchor for rescue
- ABC and get spare rescue kit from casualty
- Attach the rescue ropes to anchors
- Switch to descent on the rescue ropes
- Attach the pic sling (shortened) and rescuers backup leash
- Detatch the casualtys backup leash
- Use the rescuers foot loop to perform the 2:1 pic through the anchor and lower.
- Extend footloop with second pick sling or footloop (girth hitched)
- Clear all anchor points and descend
- Switch to the second set of ropes (rope to rope rescue 2.19) and continue to ground

## 3.7 Aid Traverse Rescue (hard linked variation) (lvl 3 IRATA)

Casualtys should clip a large single action twist lock carabiner from chest to the anchor.

**Extra Equipment:**

1 steel carabiner with large gate opening (for casualty)
2 spare rescue ropes (with carabiners attached via Barrel knots).
1 5mm x 4 m cord

- Ascend to anchor points
- Begin aid traverse
- Attach standing ropes to harness and trail across (for rope to rope transfer)
- Get to anchor nearest the casualty's load rope and make this the main anchor for rescue
- ABC and get spare rescue kit from casualty
- Attach the rescue ropes to anchors
- Switch to descent on the rescue ropes
- Attach the pic sling (shortened) and rescuers backup leash
- Detatch the casualtys backup leash
- Use the casualtys foot loop to perform a 1:1 pic and lower. The footloop is girth hitched through the casualtys chest loop. Extend footloop with second pick sling or footloop (girth hitched)
- Pinch the strands together and use the foot to lower casualty to the ID. This will be a long distance.
- Alternately may be done with a 5m x 5mm cord
- Clear all anchor points and continue lower
- Switch to the second set of ropes and continue down to ground

## 3.8 Tight Rope Rescue

**Extra Equipment:**

1 or 2 spare rescue ropes (with carabiner attached via Barrel knots)
1 Rescuecender (or handled ascender)
1 Heavy steel carabiner
2 large master point carabiners
** new anchor slings may be helpful in this rescue**

- Ascend past casualty to anchor points (ascending casualty's load rope will position rescuer better for the raise)
- Set casualty's backup device as necessary
- Use ASAP as rescuer backup device for the climb when past the casualty
- Attach spare lanyard to backup anchor
- Attach sternal lanyard to main anchor
- Stand and transfer chest ascender from main (climbing) rope to backup lanyard
- Detach ASAP from rescuers sternal and attach to backup anchor. Reverse the ASAP on the rope (this becomes the casualty's belay)
- Rig the ID in to the load anchor
- Attach the rescue rope in to the ID
- Attach Rescucender and steel carabiner to rescue rope and assemble on the main rope
- Extent the Rescucender down to casualty
- Create haul system using the ID as a haul point. Use the croll-haul technique to pull and the handled ascender as a haul point

## 3.9 Tight Rope Rescue to full length lower out

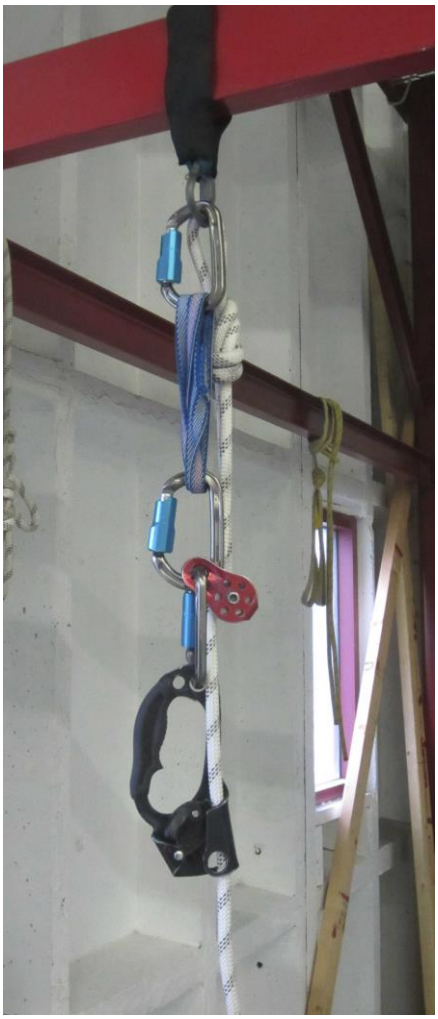
- Haul casualty to maximum possible height
- Attach a new rescue belay rope (this may be the tail of the main rescue rope) to casualty sternal. Tie this off with a releasable Munter and transfer ASAP to this rope
- Attach casualty's second lanyard to main anchor point (loosely, this lanyard should not be loaded)
- Lower out on ID to tension casualty's backup rope
- Clean up the casualty's working attachments. ID or croll and backup device
- Transfer the new rescue rope from the Rescucender attachment to the casualty's sternal
- Clean off the casualty's lanyard
- Use the Munter to release the load back on to the ID
- Redirect the ID and ASAP ropes and lower out

## 3.10 Tight Rope Rescue

**No added equipment**

- Ascend past casualty to anchor points (ascending casualty's load rope will position rescuer better for the raise)
- Set casualty's backup device as necessary
- Use ASAP as rescuer backup device for the climb when past the casualty
- Attach spare lanyard to backup anchor
- Attach sternal lanyard to main anchor
- Stand and transfer chest ascender from main (climbing) rope to backup lanyard
- Detach ASAP from rescuers sternal and attach to backup anchor. Reverse the ASAP on the rope (this becomes the casualty's belay)
- Rig the pulley setup (photo at right)
- Attach a carabiner from waist D ring to the tensioned rope
- Pull a loop as needed
- Use the Croll to create a larger loop
- Rig the ID in to the slack rope
- Load the ID and remove handled ascender
- Detatch the knot (if possible) and tie a barrel knot in to the end (this creates more working rope)
- Build the hauling system and continue haul

*To lower out use the tails of the existing ropes and follow 3.9*



## 3.10 Team Rescues

Most of the team rescue scenarios will be a prepared rescue system. This is in situations where a typical RA rescue cannot be performed. These systems should be set up and tested/tweaked until the team is satisfied with their performance.

### The Big Picture

What do we need to achieve
What is our time-line
Looking at Critical Factors
Hazards of the task

### Anchor points

### The Rule of 3's

Think through three different methodologies
Consider this from an anchoring perspective
Outside Assistance
Consider what type of outside assistance may be needed and where it comes from
Consider how this will interact with the whole work flow

### Personnel

What personnel do I need?
Who do I have at my disposal?
What are their capabilities?

### Equipment

What Equipment do I need?
Where do I need it?
How do I organize and allocate it?

### Operation

Stages
Where do personnel and equipment need to be at each phase?
Where does the Team Lead/2IC need to be at each phase?
Where are critical points that need eyes on?

### Breakdown

Orderly breakdown of equipment and personnel
Critical hazards
Safe egress of personnel
Equipment transport

### Develop and deliver JHA

Briefing format:
Here is our task
Here is how I see we should approach it (and this is why)
Here are the things we need to watch out for
Talk to me