

## CREVASSE RESCUE 101

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The following is a set of “reminders” to get you thinking about the progression is setting up a crevasse rescue.

As always the best rescue is not to have to do one! Remember these “hard” skills but work on route-finding, navigation, using the terrain and using your common sense. These are the most important tools you carry.



### Step 1

You can't do anything unless you can stop the fall. Your first step should be to self-arrest!



### Step 2 (... and hopefully you never have to go beyond step 2)

Remember the KISS principle. (Keep it simple stupid!) If you have the manpower, use it....

Try to communicate with the person in the crevasse, is he all right? Is he ready for you to try to pull him out? If yes.... proceed

Get other rope parties, or other members on your rope to pull...

Be reasonable but in most cases this is the method of choice.

(Save the technical stuff for small rope parties!)



So... you don't have the manpower?

First hold the climber.

The person directly behind the fallen climber is responsible for building the T-slot.

REMEMBER.... DIG DEEP.... YOUR ENTIRE RESCUE DEPENDS ON THE ANCHOR, BACK IT UP WHEN YOU ARE NOT SURE.

Get the people behind to help pull, take some of the weight off of you! (Like in the picture above)

- ✓ Build the T-slot.
- ✓ Attach 1 10ft sling or prussik to the anchor (axe) using a clove hitch, tie a fig8 on bight near the end heading to the climber, and attach a locking carabiner into that loop
- ✓ Now get ready to transfer the load to the anchor.

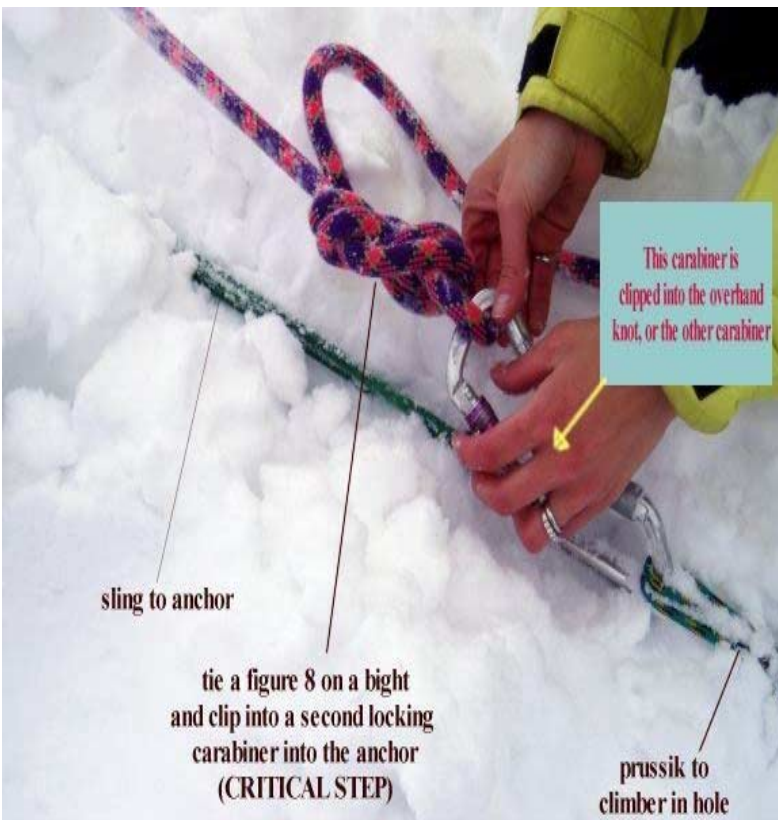


Undo your prussik from harness, (but leave on rope running to person in the crevasse)

1. Tie a figure 8 on a bight into the prussik.
2. Use a locking carabiner to attach this bight into the anchor sling.
3. (With more experience this knot can/should be a tied off munter hitch)
4. Keep this short enough that there is not much slack. Then move forward until the anchor is holding all the weight.
5. This is also known as testing the anchor.
6. **This is probably the most critical step**



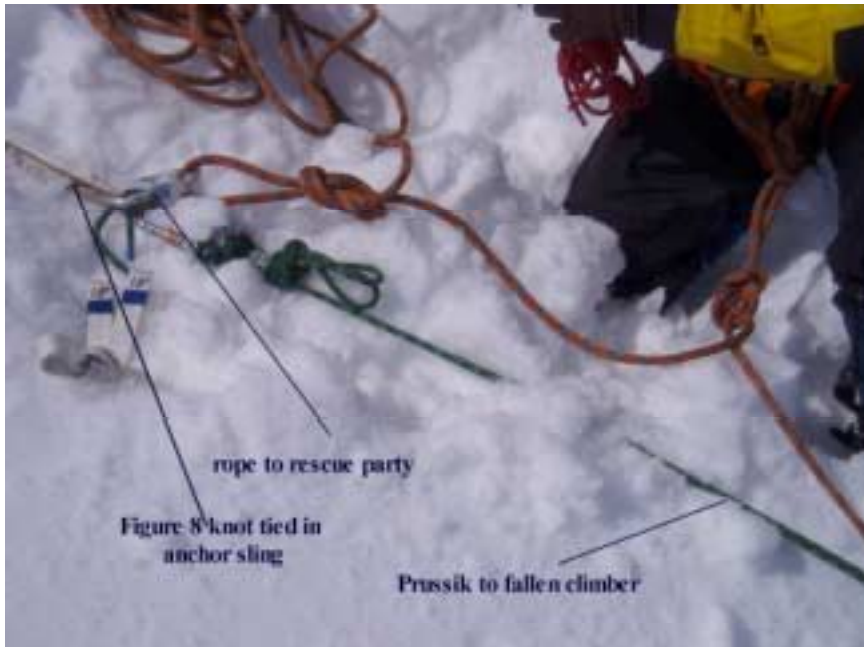
- It is important that the climbers coming up from behind are retied into their harnesses with their prussiks.
- This is the only way you are actually attached to the rope
- The prussic is removed from the leg loops, tied with figure 8 on a bight and clipped into a locking biner in a load bearing spot on the harness.
- The climbers from behind move forward enough for the anchorman to clip their rope into the anchor, as shown in the picture.



- The green sling should have a figure 8 on a bight tied into the end where the biner and prussik attach.
- All biners on anchor should be locking!

**NOTE**

- If you forgot to tie the figure 8 into the green sling, clip the second biner into the main locking. This may also happen with ice screw anchors where the eye will not accept 2 separate biners.
- You must be aware of this situation and not unlock any biners under load



### Overview of anchor station

Here are the key points summarized at the anchor station

1. Both the prussik and the main climbing rope have “separate locking biners”
2. Prussik is tied off with fig8 on a bight, or munter hitch “tied off” (see fig1)
3. Main climbing rope tied off with fig8 on bight. This leads back to climbers behind

**All biners are locked!**

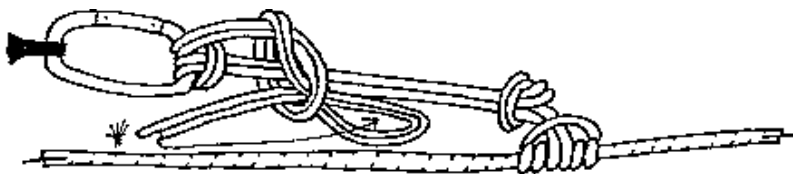


Fig1 shows munter hitch tied off with a slipknot. Note the end must be passed through the loop to lock the bight.

### Bringing the Rescue team to the anchor. (Pictures on next page)

Once the anchor is set, the fig8 on bight is tied in, and the load has been transferred to the anchor, the rest of the rope team can move up the rope to help with the next stages of the rescue. These steps include, in this order:

1. Retie the prussik directly in to the harness. The simplest way is to tie a fig8 on bight into the prussik, and clip into a locking biner in a “hard” point in the harness. (In most harnesses this would be the belay loop) FigA
2. Untie from climbing rope, and use the prussik to move up the rope to the anchor. FigB
3. NOTE: **The end person should not untie from the climbing rope!** The prussik could slip off the end! If you must untie, tie a big fat fig8 on a bight on the end.
4. Starting behind the anchorperson, and one at a time, each person moves up the rope to the anchor.



### Gaining the edge of the Crevasse

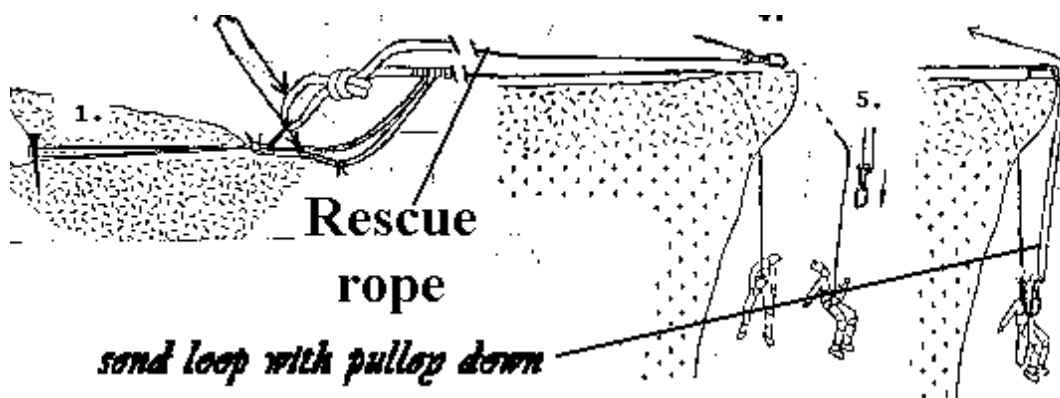
Once all the rescuers arrive at the anchor, the team is reversed so that the last climber is now on the end, and moves carefully towards the crevasse.

Keep the rope straight, directly in line with a pull on the anchor.

The end person moves down towards the edge, probes the area, and using his prussik as a belay.

The rope the team prussiked up to the anchor on now becomes the rescue rope. Once close to the edge he/she will clear the snow from the overhang (if any) and pad the edge of the crevasse with a pack or axe. (Anchor it so it cannot fall into the crevasse)

Next a loop of rope with a biner or pulley is lowered to the person in the hole. (See fig below) Make sure you do not let the end of the rope drop, or you will lose the biner/pulley on the end!



1. The person in the hole will clip the biner/pulley into their harness. (No twists!)
2. Now the rescue team will pull up on the rope.

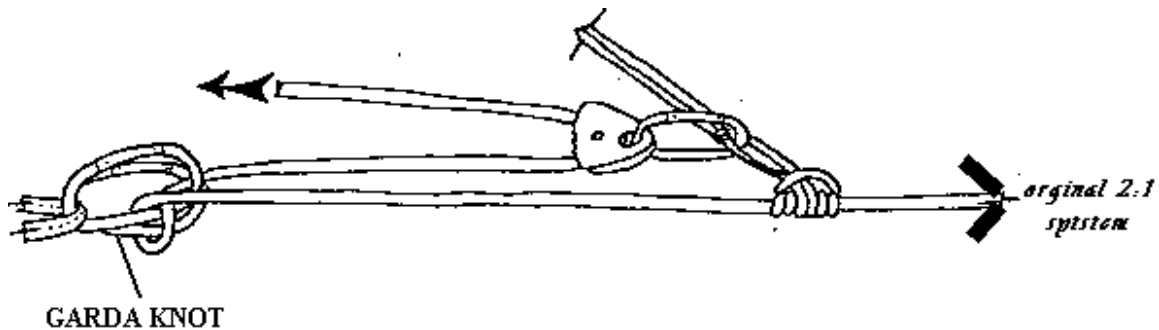
**The mechanical advantage of the previously described system is 2:1**

It is imperative that the anchor person pulls in the rope that the climber originally fell in on. Pulling the slack through the prussic that originally held the climber on the anchor does this.

If you are not practicing this from time to time you will forget it!

**Increasing Mechanical Advantage**

We may or may not have gone to the next stages of increasing mechanical advantages. It really depends on the group, and how fast everyone was learning. The next step in this particular system is to change the 2:1 to a 6:1



**EVERYTHING IS BUILT ON TO THE ORIGINAL ROPE YOU WERE PULLING ON!**

The Garda knot is tied into the rescue rope by extending anchor with a fig8 on a bight. If you can reach the anchor, put it there. Often it will not make it back to the anchor, so that is why we call it “extending the anchor. This is a compound pulley system. This diagram shows a 3:1 system (from prussic back) pulling on the original 2:1 system. (By multiplying we get 6:1) If you have only one pulley, put it closest to where you pull, as shown in the diagram.

**Summary**

This information is meant as an addition to the course that you have completed!

It is not a replacement! As well there is no guarantee that this will help you remember everything you have learned, the only way is to practice.

If this document is useful, great! If you have any ideas on changes in wording please let me know, as this is something new that I have been working on.

Also remember, climbing can be dangerous! It is better to learn good route finding skills than to focus on rescue! I hope from this course that you learned mostly “what you still need to learn” as to “what you now know”

*Take care, be safe, think, and mostly.... enjoy the mountains.*

Peter Amann