

Biner Blocks, Pull Cords, and All That Stuff

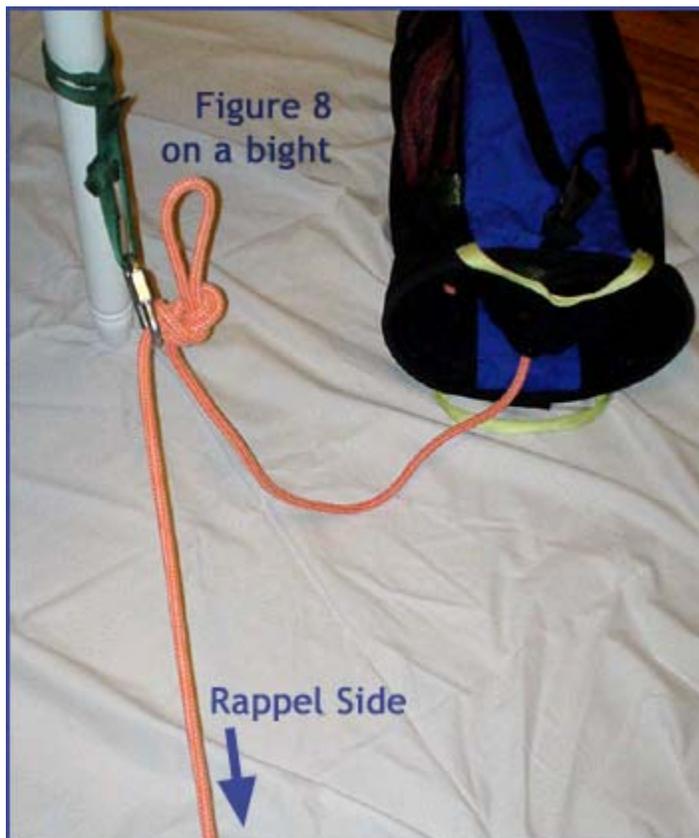
by Tom Jones

A **BLOCK** is a way of attaching the rope to an anchor so it can be retrieved.

The normal "climber" method of setting up a rappel is to thread the rope through the anchor and rappel on both strands. This is a simple, straightforward method, and works in a lot of cases.

Using a block, the canyoneer can rappel single strand on the rope, then pull using a lighter line, such as a 6mm pull cord. This saves weight and adds flexibility. Combined with use of a rope bag, this method can be quite a bit quicker than the "trad" method.

There are two normal ways to block the rope for rappelling - the knot block, and the biner block. In both cases, a block is placed against a metal ring, either a rappel ring or a rapid link. Many canyoneers carry a few rapid links (also known as "Rapides") to place on anchors as they descend canyons.



A Knot Block Against a Rapide.

Caution must be taken that:

- A. the knot cannot pull through the rapid link or ring; and
- B. the knot does not pull into the rapid link or ring and jam.

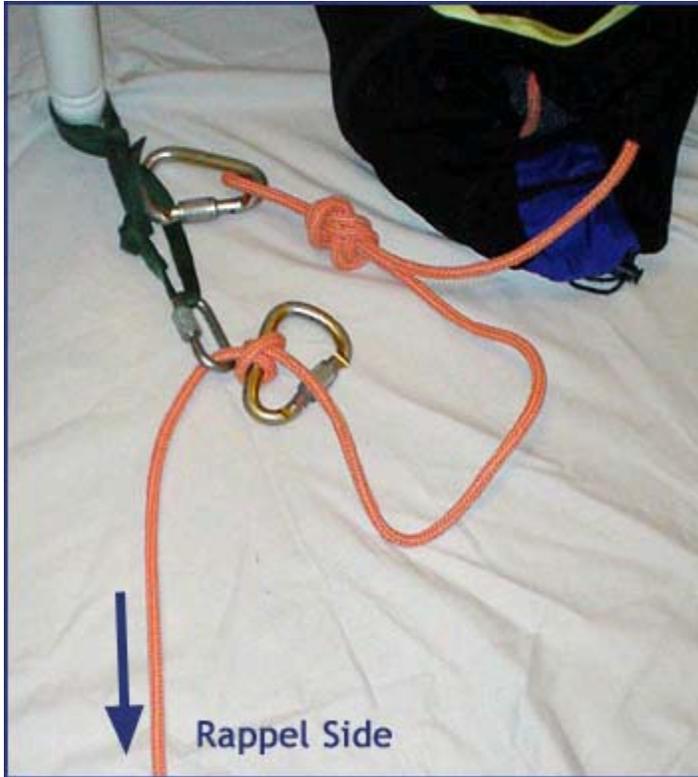


**A Knot Block Against a Rapide,
with the knot safetied off (clipped)
to the anchor.**

IF your group has more than a few people, or includes beginners, it is a good idea to clip the knot loop to the anchor, to **safety it off**. Sometimes in the confusion of getting people on rappel, beginners will hook up their rappel to the "wrong" side of the block, and try to rappel the un-blocked side. Sometimes experts will try the same trick.

To prevent this from being catastrophic, safety off the knot (for every person but the last). It also helps to NOT toss the rope bag down until the end, so there is only one strand of rope heading downward.

Because a knot block can be hard to untie after significant loading, I use a carabiner block more often. Tie a clove hitch around the spine of a locking carabiner as shown.



A Biner Block Against a Rapide

Again on this one, the ropebag side of the rope is safetied off to the anchor.

Using a Biner or Knot Block

How are these used? Here's a few examples.

A short rappel is any rappel that uses less than half the length of the rope. Let's say the rappel is 40 feet, and the bottom of the rappel can be seen.

Short Rappel Sequence:

1. Thread the rope through the rapid link.
2. Pull rope through the link until the rope hits the bottom of the rappel.
3. Block the rope against the Rapide. This is called **Setting the Rope Length**.
4. Safety off the other side of the rope.
5. Folks rappel. With the rope length set correctly, folks can rappel to the bottom, then pull the end of the rope through their device and walk or swim away.
6. Last person: clean (unclip) the safety. Toss the ropebag down, holding onto the rope so it cannot get away. Rappel single or double strand. (If the pull looks dodgy, clean the biner block and rappel double strand). Pull the rope, and stack it into the bag.

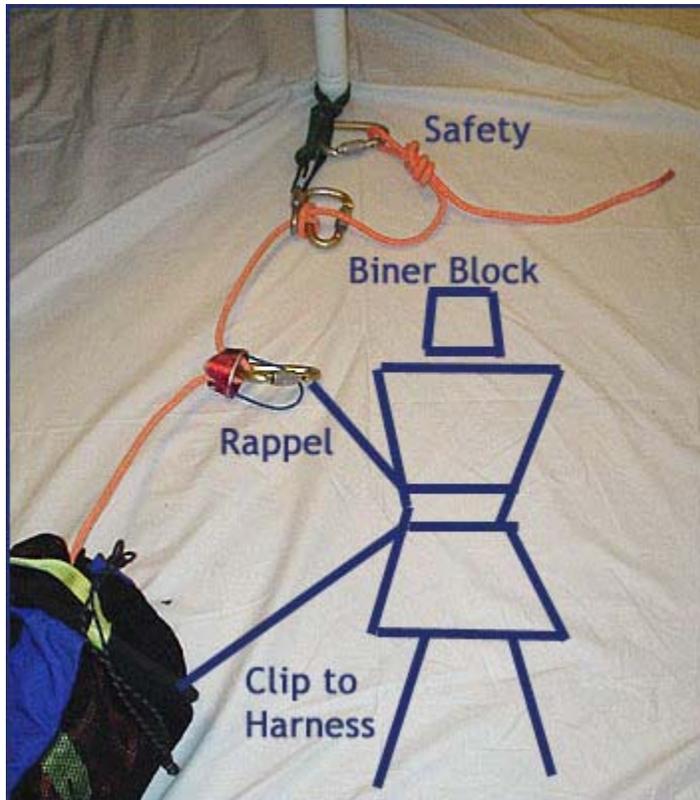
Two-Stage Short Rappel Sequence:

In this example, the rappel is done in two stages. Like the first rappel in Zion's Pine Creek, a two-stage rappel descends two drops that are close together off a single anchor. In Pine Creek, the first rappel is about 20 feet into a shallow pothole. Then the canyoneer walks 10 feet to the brink of the second rappel, goes back onto the rope and rappels 15 feet to the bottom of a second drop.

1. Thread the rope through the rapid link.
2. Pull rope through until you can see the rope hit the bottom of the rappel.
3. Block the rope against the Rapide, setting the rope length for the first stage.
4. The first person rappels into the first pothole, and walks to the edge of the second drop.
5. The rigger removes the biner block at the anchor, feeds through enough rope to set the length for the second drop (with the help of the first rappeller), and re-sets the biner block at the new length. Safety off the other side of the rope if appropriate.
6. Folks rappel. Into the first pothole, walk across, rap the second drop and pull the rope through the device.
6. Last person: clean the safety. Grab the rope, then toss the ropebag down (first and/or second drop). Rappel single or double strand. Pull the rope, stack into the bag.

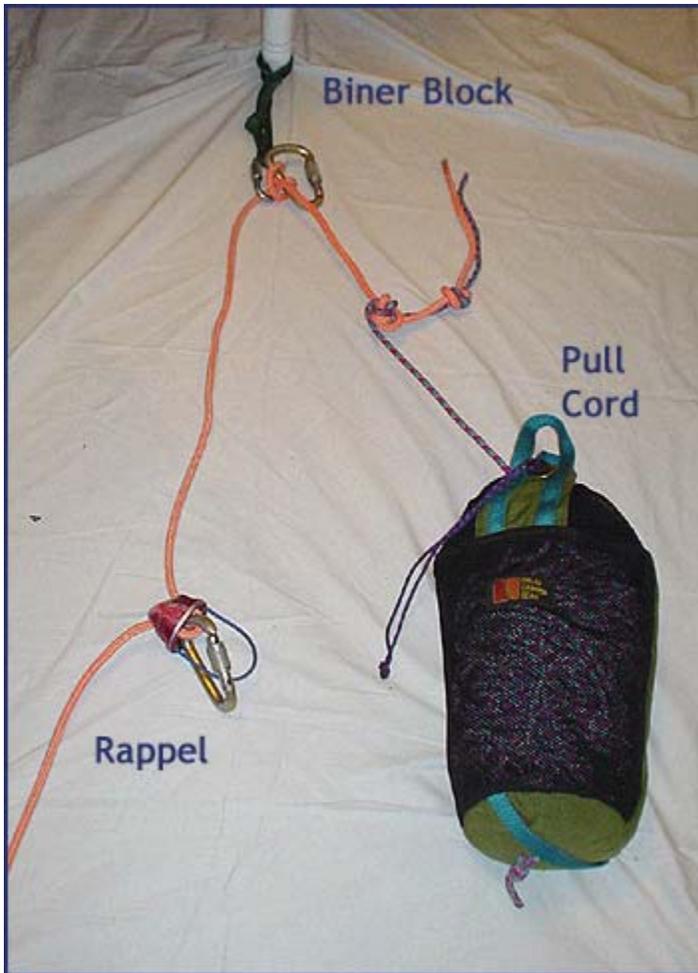
Long Rappel

In this example, the rappel is long, and maybe goes through brush or trees. We will keep the ropebag with us, and use a pull cord to retrieve the rope.



Long Rappel Sequence

1. Thread the rope through the rapid link.
2. Pull through 3 or 4 feet of rope and block the rope against the anchor. Safety off the short end.
3. Clip the ropebag to the side of your harness with a sling. Rappel, feeding rope out of the bag, through your device.
4. Send the other folks down.



5. Last Person: clean the safety. Tie the end of the pull cord to the end of the main rope. Clip the pull cord bag to your harness. Rappel, letting the pull cord deploy as you go. Pull on the pull cord to clean the rappel.

Comments: rappelling with the bag clipped to you is a pain. Kinks come out of the bag and try to hop out of your hand. **Be careful.** Once you get a clean shot to the bottom of the rappel, drop the bag, allowing the rope to deploy as it falls.

Same applies to the pull cord. Once you are in a position to get a clean drop, chuck it.

Tom's Utah Canyoneering Guide
<http://canyoneeringusa.com/utah/tech/>