
Belay and Descending devices

Posted by cambium - 04/04/2008 09:22am

Lately, I've been reading a lot about belaying and descending and the devices used to accomplish such things. For those of you who are familiar with On Rope, you will know that the authors aren't fond of figure 8 devices because they twist the rope. Apparently, that is the same case with the use of a Munter hitch on a figure 8 or a biner. That is reason enough for me to consider other options, but not sufficient reason to consider something as expensive as a Petzl I'D. While the prospect of slowly returning to the ground with the use of Prusik hitches is very appealing, there may be occasions when a faster descent is required. I'm curious about what others have chosen as their method of quick descent. One very inexpensive option covered in the Smith/Padgett book is a device they call an Air Traffic Control (ATC). In the On Rope catalog, the same device seems to be referred to as a Kong Chuy. Does anybody have any experience with this device? I'll try to paste an image (courtesy of OnRope.com), but in case that doesn't work, you can try this link. <http://www.onrope1.com/store/images/products/preview/432464.jpg>

P.S. For those of you who weighed in on the discussion concerning floating D type saddles, you may be interested to know that I went with the NT Tengu. Thanks for all your input!

cambium http://www.treeclimbing.com/images/fbfiles/images/Kong_Chuy.jpg

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Re:Belay and Descending devices

Posted by oldtimer - 04/04/2008 10:36am

I have not used the ATC but it looks like a simple tool. Others with personal experience will share theirs soon. I gave my Figure-8 away a while back because of the Twisting of the ropes problem. I have a Grigri and that tool works well for many uses not just as a descending device. Read some of the reviews in the Gear Review section of this site.

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Re:Belay and Descending devices

Posted by dannyc - 04/04/2008 04:59pm

I have recently used the atc. I started with a crabiner for rappelling and still use them occasionally. I don't think most people remember how to use them for rappel and belay. When 8's came out i didn't like them. After gaining experience i really liked them. I still have several, some with ears some without, i still use them. I didn't like the atc when i fist started using it. Now that i have been using it for a while , I like it , easy to hook up and great for control. I have probably a couple hundred raps on an atc and i like it a lot now. My latest has been the id and the gri-gri and i didnt like them the first few times, but the more i use them the better i like them. I guess the point is, not in a few words, get to know your gear, and know it well. Have several ways to do the same thing so you can get out of a jam. I was pruning a maple yesterday and dropped a carabiner, not the first time by far. Don't let dropped gear be your downfall, know your gear. ATC is very good for ease of hook up and excellent for control and you don't get the twists in the rope that everyone talks about.

Climb safe, Dan

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Re:Belay and Descending devices

Posted by emr - 04/05/2008 07:50am

have two F8s that I use regularly and I am not a big fan, but I am too cheap to get a Grigri. One use for the F8 that I love is to anchor my ascent line at the base of a tree for SRT. It works well for this purpose and I think using a more expensive tool for this application is not necessary. Some times cheap is good. I really dont like the F8s for decending because of how difficult it is to control the friction. It is just not a comfortable decent because I always have to hold the rope so hard. Maybe I am doing something wrong. If I add a second wrap on the F8 there is way too much friction.

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Re:Belay and Descending devices

Posted by michaeljspraggon - 04/05/2008 09:55am

That blue device at the bottom of your initial post is what I use : a Belay Plate or Sticht Plate. Most rock climbers/mountaineers I've come across use these. There is no twist in the rope and the rope is more likely to burn your hand before it overheats through the device. I can get from a branch 70ft up to ground in about 10 seconds, no problem. (Although a pair of leather gloves might be useful if you're going to go THAT fast!)

Michael

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Re:Belay and Descending devices

Posted by cambium - 04/05/2008 11:12am

The set up and use of the gri-gri, the I'D, and the Petzl stop are relatively easy to understand. Unless I'm mistaken, they can all be installed on a rope without much fuss. Is the same true for the ATC? It looks like a solid block with holes in it. Does it come apart to allow easy application to the rope mid-line? Or, is it a device that one puts on while on the ground and employs when needed? In any case, it is certainly affordable and light weight, but I have also been looking at the Simple Petzl Stop (as opposed to the automatic version). I wonder if anyone has had experience with that product.

cambium

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Re:Belay and Descending devices

Posted by Baker - 04/05/2008 11:25am

Every one has their preferences, and the debate over descending devices will go on unending.

My \$.02...

I was a volunteer on the rope team at a very famous adventure race in Utah in 06. www.ecoprimalquest.com The canyon ascents and rappels at that race were not 60 feet or 160 feet, but rather 600-800 feet, some higher including a zip line almost 1600 feet off the desert floor. The ONLY rappel device the racers (all 360+ of them) were allowed to use was an 8, sometimes reversed. That is, clipped into the harness at the large end and rope running through the smaller hole. As I remember, there wasn't all that much rope twisting. Some, but not THAT much.

There were some sections on that course where I would have given almost anything I had for just one branch to hold on to!

<http://www.ecoprimalquest.com/coppermine/albums/pq-2006-best-of/tony-dizinno-pq-2006-0070.jpg>

<http://www.ecoprimalquest.com/coppermine/albums/pq-2006-best-of/tim-holmstrom-pq-2006-0044.JPG>

<http://www.ecoprimalquest.com/coppermine/albums/pq-2006-best-of/corey-rich-pq-2006-0065.JPG>

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Re:Belay and Descending devices

Posted by moss - 04/06/2008 12:46pm

cambium wrote:

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cambium

I've used an ATC for SRT descent. The way they work is feed a loop of rope down through the opening and put a locking carabiner through the loop. Attach the carabiner to your harness anchor (Google ATC rappel and you'll find complete instructions). ATC's are jerky for a single rope descent. They're optimal for a doubled rope descent. I like a hands off stop, ATC doesn't provide that. For tree climbing it's a good idea to extend your ATC/carabiner out on a short sling and attach the sling to your harness. This will give you enough room to install a prusik/autoblock below the device so you can have a safer ride down. It's more convenient too because you can stop during decent and free up both hands without having to lanyard in.

For tree climbing the Grigri is my favorite SRT descent, it's compact and does the job, no nonsense. The I'D is bulky and overkill for me. Grigri, I'D or Eddy are great tools to have because they are multi-purpose, specifically they are perfect for setting up an SRT RADS or Yo-Yo system. They are well worth the investment.

Here's a climber about to rappel out of a tree on a doubled rope using a tethered ATC with prusik back-up. This is a safer way to utilize an ATC in tree climbing, as mentioned earlier I'm uncomfortable with the idea of descending out of a tree on a system that doesn't have hands off stop. For instance if you collided with a limb during descent you could become disabled enough that you might end up with uncontrolled drop to the ground.

Test and learn all static or SRT descending techniques and gear close to the ground, don't test when you're up high! (mandatory disclaimer)

ATC rappel (view the large size for detail)
http://farm1.static.flickr.com/106/291224622_12a25fdd5f.jpg
-moss

Re:Belay and Descending devices

Posted by Baker - 04/06/2008 05:17pm

The same setup can be employed with an 8 on a single rope. Attach the 8 with a daisy chain or cord, and attach a prusik to the main D between you and the 8. This is a much better way than attaching the 8 directly to the main D and putting the prusik above it. The prusik can really jam tight like that, and it's a real bear to get loose if your not versed in self rescue.

http://i254.photobucket.com/albums/hh93/f_klock/DSCF0111.jpg
Regular 8

http://i254.photobucket.com/albums/hh93/f_klock/DSCF0110.jpg
Rescue 8

http://i254.photobucket.com/albums/hh93/f_klock/DSCF0119.jpg
Not wrong, but this can sometimes get you into trouble.

http://i254.photobucket.com/albums/hh93/f_klock/DSCF0118.jpg
Double rope w/ belay device

Re:Belay and Descending devices

Posted by moss - 04/06/2008 07:04pm

Looking good there Baker. My only comment for tree climbing is to cinch the tether on the anchor biner so the gate doesn't get loaded if you stop on the way down on a limb and unload and reload the system. Agreed that it's a bad idea to put the prusik above the descender since the descender takes some load off and makes a hitch below much more usable.

There's a way to tie a sling/tether using a double fisherman's that cinches a noose on one end to solve the gate loading problem, it's in the Tree Climber's Companion (which I lent out). Can't find an example of this knot online. I think the way it works is just capture the other side of the sling with one of the double overhand knots.
-moss

Re:Belay and Descending devices

Posted by Baker - 04/06/2008 09:24pm

Wow, that's a blast from the past! I forgot all about that knot.

http://i254.photobucket.com/albums/hh93/f_klock/DSCF0032.jpg

http://s254.photobucket.com/albums/hh93/f_klock/th_DSCF0036.jpg

Some good information can be found in the following safety report presented by our arboriculture friends over the pond. There are some photos of the captive loop or sliding prusik as well.

http://www.hse.gov.uk/research/hsl_pdf/2003/hsl03-18.pdf

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Re:Belay and Descending devices

Posted by moss - 04/06/2008 11:14pm

Forgot too that you can girth the open loop end on the biner if the cord has a high enough rating to make up for the percentage (whatever it is) strength loss of the girth hitch. You might need to invert an HMS biner to get enough room for the girthed cord and the anchor for the descender on the same biner. I've seen some eyebrows raised at two rope anchor/ends attached to one biner. Seems ok as long as they're not wandering around on the biner.

But you can see why an all-in-one hands off descent device is popular, less parts to the system, quick on and off.
-moss

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Re:Belay and Descending devices

Posted by Tom Dunlap - 04/07/2008 12:23am

For more information about rope tools take the time to read all of Gary's site.

<http://storricksnchost.com/VerticalDevicesPage/VerticalHome.shtml>

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Re:Belay and Descending devices

Posted by cambium - 04/08/2008 09:28am

Wow! Gary's site is amazing. Who would have thought there would be so many products designed to accomplish the same thing? I can now see why descending devices arouse a good deal of passionate discussion. With all the different systems available and such a range of sizes, weights, and other specifications, I'm sure some devices work better than others for each individual. In the course of finding the best match, it makes sense that one might acquire a collection of devices. I wonder if Gary has an absolute favorite. The fact that he is still adding to his collection suggests that he may still be looking for the perfect fit. :-) In any case, many thanks to all of you for helping me understand some of the setups and for including the details of safety backups.

cambium

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Re:Belay and Descending devices

Posted by Baker - 04/09/2008 09:33pm

http://i254.photobucket.com/albums/hh93/f_klock/DSCF0032.jpg

http://s254.photobucket.com/albums/hh93/f_klock/th_DSCF0036.jpg

Moss,

I tied this wrong. If you bring the two sides of the loop together while tying a standard double fisherman's knot around them you can capture both legs instead of just one, making the ends identical AND adjustable. That way it doesn't matter which loop you use at the biner or as the hitch.

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