

WORKSHOP

FINE TUNING YOUR SRT RIG

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INTRODUCTION

Almost all cavers have an SRT rig, and we all think that ours is the best. Rather than get involved in any arguments about what is and is not the best, I will just give a quick run down on what I use and why. There are also a few alternatives that I think are worth considering

DETAILS OF MY SRT RIG (Figure 1)

The emphasis of my rig is on simplicity and light weight, usability, efficiency and safety. It is not a rig for maximum speed up any one rope. In a deep cave, a simple, light, usable and efficient rig wins every time by saving me energy on climbs and time passing obstacles. This is a great way of improving my safety. There is a straightforward method for just about any rigging obstacle and I do not need to resort to gorilla tactics to make up for shortcomings in my SRT rig.

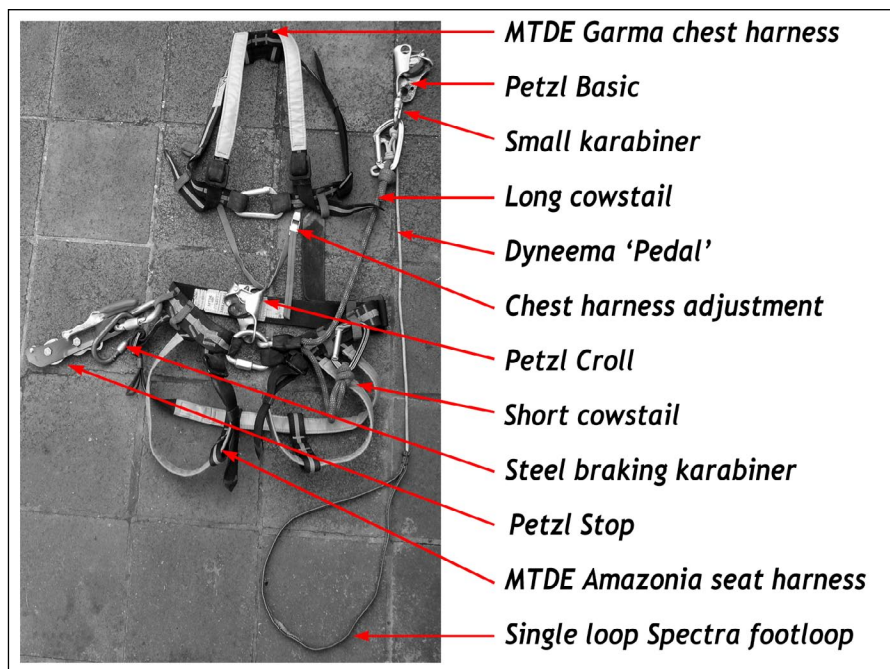


Figure 1

Seat Harness (Figure 2)

I use an MTDE Amazonia. It is light, exceptionally comfortable and has a very low attachment point.

Harnesses like the Petzl Supera-vanti are also good - they are just not as comfortable and their attachment

point is not as low. No doubt there are other efficient harnesses out there in the market place. As long as the harness holds your main attachment maillon flat against your abdomen, your rig will work. However, you may lose efficiency and comfort. Whatever harness you

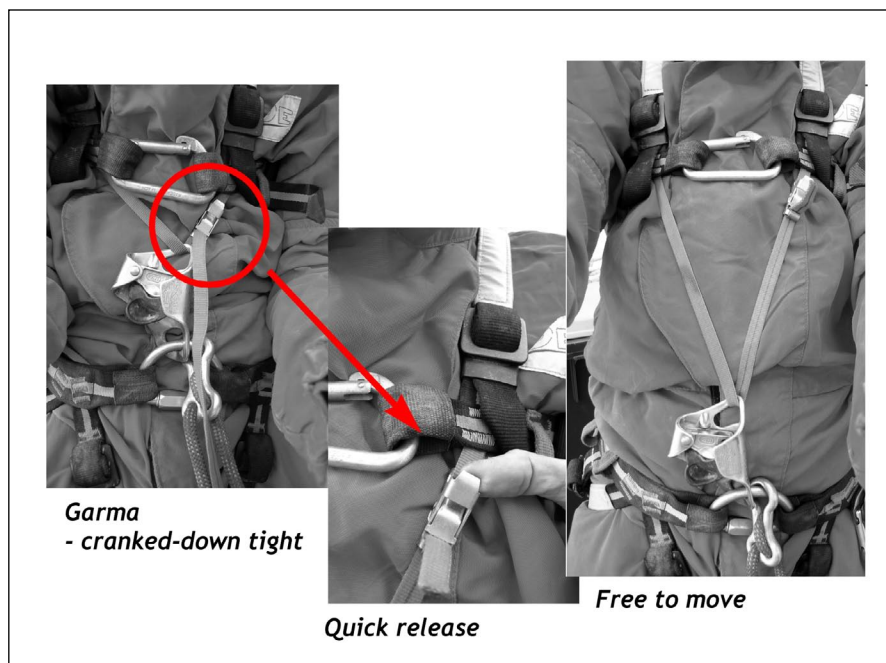


Figure 2

decide to use, wear it as tight as you can get it.

Chest Harness

I use an MTDE Garma. It is a traditional 'bra style' chest harness with one important difference: it supports my Croll with an ingenious tape and bicycle toe-strap buckle arrangement. It is faster and easier to adjust than any other chest harness by a long way. It also has handy attachment loops from which to hang your goodies. If your major concern is to save money and weight, you still cannot beat a figure-8 harness with a krab that is fairly easy to release from a Croll.

Ascenders (Figure 3)

I prefer a Petzl Croll on my chest. A Bonatti copy would do. It's almost as good, possibly wears better, but is not quite as smooth to release or handle. For a hand ascender, I use a Petzl Basic for several reasons. It is small, compact, light, versatile and lasts well. It is also a comfortable shape to hold on to when I am climbing. I have not used a handle ascender for years. They are much bigger and a little heavier. The handle is useless when climbing a vertical

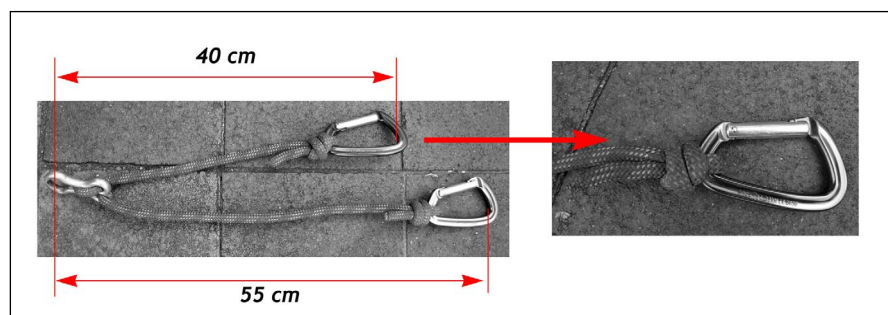


Figure 3

rope - but is nice to use on slopes and handlines.

When I push a handle ascender up the rope I tend to push the handle slightly to one side and this wears out the lower edge of the ascender's running surface. When I look at other people's handle ascenders from time to time, I do not think I am the only one with this problem.

Material for Cowstails

Mine is made of 9 mm dynamic rope. I use a double one with a cute metal eye at the bottom that I bought from Expe. It locks the rope without a knot so I do not have a bulky knot at my main maillon, or a knot that gets abraded. But the rope still does get abraded - which is one reason why I use rope instead of tape. When the sheath wears out I can change it. With tape I just cannot tell when it is worn out. Tape is not normally as dynamic either.

At the other ends I attach my cowtail karabiners. I use good quality, straight gated small non-locking D's - Petzl Spirit is good - in two different colours if I can get them. I put the pale one on my long

cowtail. I attach the rope with half a double fisherman's knot (that is a half double fisherman's knot, not a single fisherman's!).

They are strong, neat and tighten onto the karabiner so I do not have to mess around with rubber bands or little metal bits to keep my cowtail tied to the correct end of its krab.

Length of Cowstails

My long cowtail also doubles as a safety for my hand ascender, so it is just long enough so that, when I push up that hand ascender, I have just enough rope, but no spare - if I am hanging from it, I still need to be able to reach it.

My short cowtail has grown a little over recent years as rigging styles have changed. It is just long enough so that I can use it for crossing rebelay on the way up, while not too long to prevent me from crossing them on the way down.

So, when I climb up to a rebelay and have both my ascenders as high as they will go without jamming them into the knot, I can just clip my short cowtail into the rebelay karabiner.

All that works out to an in-

side top of karabiner to maillon attachment eye distance of 55 cm for one and 40 cm for the other.

Safety of Cowstails (Figure 4)

It is the cowstails that hold the whole thing together and provide much of the safety for my SRT rig. Long ago I got rid of the extra safety cord to my top ascender - it only got in the way, got tangled around things and was more weight and bulk to carry.

Whenever I was prussiking, my long cowtail was just hanging there doing nothing anyway, so I replaced it with a 'removable' safety, a.k.a. long cowtail. This of course means that I have to take care to always use it and not unclip it at the wrong time and accidentally trust my Croll as my only attachment point. Yes, it is physically possible to prussik the rope with no cowtail and the top ascender not attached at all. Would I do or recommend such a thing, even for a little pitch? - no! Get in the habit of always doing it right. Treat every pitch as a 100 m pitch.

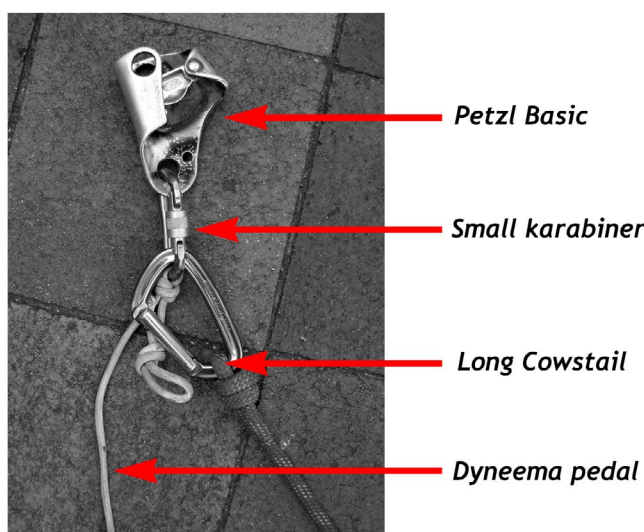
Footloop/Legloop (Figure 5)

Perhaps the French-Spanish 'pedal' is a better word for this thing. Mine is made of 5.5 mm dyneema (also goes by the name 'Spectra'. Get it from MTDE or Expe), and is made specially for caving by Beal. It does not take a dye, so you buy it white and it becomes dirty white in no time. It has a real advantage that it wears and stretches like wire cable - that is, not at all. The lack of stretch makes for a more efficient stand motion. The lack of water absorption and bulk are unbeatable.

Unlike wire cable though, it is soft to touch, flexible and light. For the footloop itself I prefer a single large loop about 40 cm in circumference so I can get both feet in to hold the rope, and pop one or other foot out easily.

Get a spectra quickdraw of the length you like and tie an overhand loop around it with the end of the dyneema. If you have got tough feet, just tie a loop in the end of the dyneema, or alternatively, you can buy ready made pedals. Do not get an adjustable one, except perhaps for training people, just experiment a bit to get the length right. At the top of the pedal, I use a half double fisherman's knot to attach it to a small, life support karabiner.

I then clip my pedal to the bottom of my hand ascender. This way I can use the ascender and pedal together (normal



It's also quite reasonable to clip your cowtail into the Basic, then clip your pedal to that

Figure 4



Figure 5

use) or as separate items on traverses and slopes where I may not want the pedal getting in the way. A variation on this is to clip your cowstail into your top ascender and your pedal into your cowstail karabiner.

Pedal length

My pedal is surprisingly short – 106 cm from the bottom of the footloop to the attachment eye of my ascender. When I put both feet in the loop and stand up straight, the ascender barely reaches the bottom of my Croll. However, once I am hanging on a rope, my pedal is short enough so that when I push my hand ascender up as far as I can reach, my feet cannot come up any further anyway, and of course, my cowstail is just about to pull tight. If I take out one foot, I can step higher and

reach higher, but I have less power climbing with one leg. When I stand as high as I can with both feet in the loop of the pedal my Croll almost hits my hand ascender.

The bodies of the ascenders do overlap, but the wrap around sections do not actually touch. To get the pedal length right, just shorten it bit by bit until your ascenders touch, then lengthen it a little.

Descender

Zipping down a rope on a non-stop descender is like riding a bicycle without brakes...

I use a Petzl Stop. I attach it with a locking karabiner. No need for any fancy twist-lock, rapid on-off mechanisms. I also always use a steel

braking karabiner. Steel may be heavy, but anything else wears out rapidly, even Russian titanium karabiners. I picked up two really nice steel ovals with smooth pin and slot latches on the gate, which makes them really user-friendly. Most steel krabs, if you can get them, have really nasty claw latches and there is only so much you can do with a file. If you cannot get steel, or titanium, you may have enough aluminium karabiners to grind to dust.

Try to find a Raumer 'Handy', a special stainless karabiner-like 'brake-krab' which should last you forever. As a rule my ascender is either on my seat maillon for descending or on my belt/harness loop in an easy to get position when I am ascending.

Just as my 'up' gear goes down a cave attached to me and ready to go, my Stop is always handy when I am climbing and never in a pack that may get left behind or carried-off by someone else.

Foot Ascenders/Pantin

European cavers have discovered the foot ascender. Ask any French caver and he will tell you that the Pantin is 'zee best'.

A Pantin pulls the rope tight for your Croll so that you can effectively prussik up a tight rope.

It also allows you to use a walking motion on slopes, and if you are a gorilla, on freehangs as well. It may also save you some energy and certainly make you feel like you are climbing better, but there is a price.

Your Croll will wear out perhaps twice as fast, and you have a third ascender to attach to the rope, which you usually have to put on a few metres up as they do not necessarily run right from the bottom.

There is no need to wear your Pantin all the way down the cave. You do not 'need' it in order to climb.

What I have described is SRT gear that works for me. Everyone is a different height, has different proportions and different flexibility, so you may need to set up your equipment slightly differently.

Having said all that, none of this gear, or the techniques for using it, are fool-proof and things can go wrong.

If you don't like it, or don't feel safe, don't do it!

Places to look for those special goodies that you cannot buy just anywhere at the following web sites: www.mtde.net, www.expe.fr ■

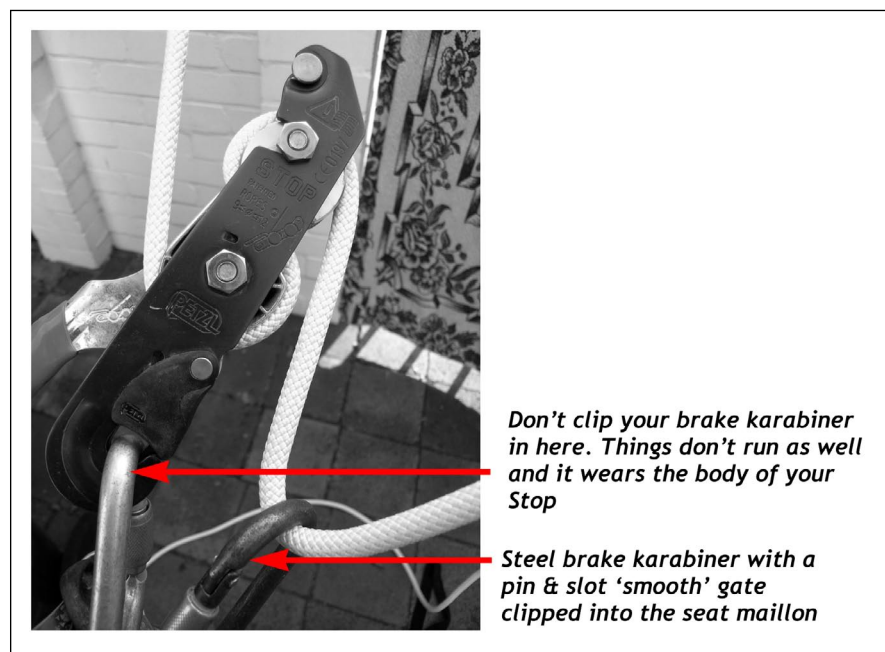


Figure 6