

Wilton Square

If you were going to fall from a tree, what would be high on the list of things you would rather not land on? Most people will have iron railings well up on that list, but for one climber last year that was precisely what he plummeted 52 feet on to, picking up two puncture wounds in his back, one inch away from his spine. He was more than a little lucky, discounting the falling in the first place, as his harness absorbed the worst of his fall and stopped the spikes from ripping deeper. Remarkably, he is back at work and climbing again.

Now that I am sure I have your attention, you probably have a few questions to ask: "How did he fall?" "What, if anything, did he do wrong?" "What broke?" Before I tell you, remember the sick feeling in your stomach looking at the photo of the harness on the fence and learn from someone else's lucky escape.

He was foot locking into the tree using the double rope technique (DRT) with mechanical ascenders. When he reached the top, about three feet under his anchor point, with the ropes pulled together with an alpine butterfly, he reached out to his side about an arm's length to take hold of a branch to pull himself in to stem and lanyard in. One of the ropes in his ascenders popped out and he fell. Turning, trying in vain to grab the ropes in front of him, he saw the ground and railings come towards him. He could not quite believe what was happening; he thought for sure he was going die, then bang! A sudden stop. He hit the railings, feeling them punch in to his body, he was winded, conscious but alive.

How could this happen? Good question. Well it happened and the companies that make such devices are aware of the potential for it to happen because clearly marked on all devices is the maximum and (more importantly) the minimum diameter of the rope that they can be used with. Also stated in the instructions are the directions and limitation of use, they are for one directional use, to be loaded only from below the device, they are not designed for lateral movement. It has been known for a while that this could happen and climbers have had moments where it nearly did.

The findings of the HSE investigation held no one at fault. All actions had been following the current best practice, so what should we do to stop this until someone builds us a new device for tree access alone?

What now? A better question. First, the "Guide to Good Climbing Practice" is currently under review prior to a second edition and DRT is one of the areas being worked on. In the meantime, if you are using such devices, what you must do is put in a fail to safety, a back up or safeguard of some sort that will hold you if one of

the cams should fail or, as in the case above, the rope should work free of the device altogether.

There are many and various ways of backing up the DRT system utilising ascenders, but what needs to be made clear is that just adding a prussic loop on both lines (as you would if you were foot locking with a prussic) will not be backed up. This is because if one side of the ascenders fails, the ropes will move in opposite directions and the prussic will not grip. What you must do is treat double ascenders as two separate ascenders that just happen to be joined together. Each side must be backed up.

To that end, a friction hitch, prussic lets say for simplicity, is installed one above each cam, one on each line and then connected to the karabiner attaching the ascenders to your strop (Fig I) or linked into the system on your harness. You will need to take care when choosing your karabiner, so as not to overcrowd or load it incorrectly. Another method would be to use a second cam on each line; doing this will isolate each line. A second set of ascenders up the ropes to the top (Fig II), set the correct distance away from your anchored limb to allow for the spread ratio, or up to a butterfly knot and bring the ropes together under the anchor point.

There are many other ways to back up DRT utilising ascenders but I have insufficient space to mention them all here. If you want to find more ways to back up your system, check out arbtalk.co.uk or treebuzz.com, come and have a chat at one of the many events this year at the tree climbers' forum or just chat to some of the climbers competing or judging at a TCC event. Above all climb safe and keep your system simple, so you and your groundy can fully understand what is going on. If you are not sure, go back to a simple prussic loop for foot locking. Think about reaching out a little and get online, or book some update training.

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Fig 1 ...a friction hitch above each cam, lines connected to karabiner...



Fig II ...second set of ascenders up ropes to the top...

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