

Let's get Climbing

2
Climber in the tree canopy using an SRT system with basal tie-off.



LAND BASED TRAINING'S DAVE VICKERS, A CITY & GUILDS NPTC TRAINER, ASSESSOR AND LOLER EXAMINER, CONTINUES IN THIS REGULAR SERIES LOOKING AT CLIMBING TECHNIQUES, TAKING US FROM THE BASICS THROUGH TO MORE ADVANCED FEATURES DEALING WITH RIGGING.

INTRODUCTION

In the last article we started to build ourselves a more efficient system for ascending a single line, at least something better than just a Prusik and traditional footlocking.

A triple-attachment point pulley, aka the Hitchclimber, formed the core of this system; this leaves us with a method of getting up the line but we have yet to secure the climbing line in the tree.

SECURING THE CLIMBING LINE

Over the next few articles, we will cover various anchor tie-offs, starting with the basal tie-off and then progressing on to the canopy tie-off. We'll also mention some of the things that you might want to consider before opting for one method over the other - it's something that climbers often find useful when we run refresher courses.

THE BASAL TIE-OFF

This method of securing the line can be as simple or as complex as you want - but it is imperative that you understand the limitations of the various ways of completing a basal tie-off. Whichever option you go for, you'll need to start by throwing the climbing line over a suitable branch (in most instances this will form the top anchor point); there's no need to isolate the branch either, which is one of the major benefits to using a basal tie-off. Bear in mind too, that it's often easier to leave the end of the line you will be climbing away from the stem of the tree.

The simplest way of creating a basal tie-off is to literally tie the other end of the line round the stem using a running bowline, making sure that you don't tie it where there is any pronounced basal flare as this will cause the rope to rise up the stem as you start climbing the other end.

1 As quick and easy as this way is, it's not without some fairly important and fundamentally risky issues. First off is the rope-against-rope created by the running bowline that leads to an area of higher wear, although at least where this contact is, the rope is not actually moving. The other temptation would be to hook a karabiner through the eye-splice end and then clip that over the line going up to the branch... even quicker and easier than having to tie a knot but potentially more dangerous due to incorrect loading of the karabiner and having the single gate rubbing against the tree as you work. Personally, I'd strongly suggest that this method is not used.

The other issue is with aerial rescue; with the line tied around the base of the tree and a climber hanging off the other end, how are you going to rescue the casualty if it came to it? Remember that you need to consider these factors as part of your risk assessment in accordance with the Work at Height Regulations. We will come back to dealing with aerial rescues later, but for now let's just overcome the first issue regarding potential points of high wear due to one rope rubbing against another when under tension.

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The easiest way to form the basal tie-off is to use a running bowline.

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One of the easiest ways of doing this is to use an 'arb ring' by throwing the line over the branch then slipping the ring over the rope before tying it off, but in this case we'll tie that free end back on to the ring. This provides a nicer bend radius to the rope, avoids rope-against-rope and remains a self-tightening system just as the running bowline did. It doesn't solve the aerial rescue issue but at least it's kinder to the rope!

AERIAL RESCUE ISSUES

This is possibly a good time to introduce aerial rescues; I feel that how to deal with an aerial rescue is one of the most overlooked parts of using an SRT system in the industry.



3

Casualty being lowered from an SRT system using a basal tie-off.

In the rush to use the latest, greatest and shiniest pieces of technological advancement that we have, we've forgotten to think through the whole thing. What if it goes wrong and there is an accident? Just how are you going to deal with a climber dangling 10-15 m in the air, who also happens to be 3-4 m away from the stem of the tree?

This will be a recurring theme throughout these articles on SRT tie-offs; we understand that SRT provides us with a more efficient and ergonomically improved means of accessing the tree, but when it comes to aerial rescue we need to give it a little more thought as to how we overcome some of the inherent problems.

With our basic basal tie-off we have a means of securing the climbing line with a single knot - although that really should be

two as we'll have the running bowline and a stopper knot - as well as the simplicity of not having to isolate a branch as we would have to when using a DRT system. What we haven't got, though, is an easy means of lowering the climber if something untoward should occur.

One of the advantages of using a basal tie-off is that we can build a system that would allow us to lower a casualty to the ground, from the ground. No climbing involved for the rescuer... that means that you could train ground crew to operate the system. So, for this little mini-series within a series, our holy grail is going to be to create a lowerable system, but we're some way off that yet. In the next article we'll continue this theme and start improving our basic tie-off.

DISCLAIMER:

The usual disclaimer applies... you would be well advised to seek out training and advice from an experienced person before trying out any of the methods discussed in these articles. Try out any new method by starting low to the ground initially and then moving higher. The magazine, Land Based Training or I cannot accept any liability for any injuries howsoever caused by trying out methods shown in these articles.

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