



Tie-In Technique Too Troublesome to Title

by Mark Chisholm

The arboricultural industry has been advancing at such a rapid pace in the past decade that it has arborists scampering around from convention to convention in a never ending quest for better methods of attacking their everyday tasks. While these meetings are great opportunities for exchanging ideas, the part that sometimes gets lost in all of the excitement is how to adapt new techniques to your own personal climbing system without compromising safety or efficiency.

I am constantly asked when combining two of the more widespread innovations, the split-tail system and the arborist rigging block, "How do I tie in safely when rigging wood into a block?" The best way to answer this question is to closely examine the choices the climber faces in this situation, and the consequences of making the wrong choice.

My first preference in any rigging situation is to tie in to another lead, such as a tree, a crane or a false crotch suspended between any two of these, rather than the rigging point. If, however, the only plausible solution is to tie in where the block is being anchored, as is so often the case in wood blocking or butt hitching the top over, the climber then faces several options. Do you tie in above or below the rigging block? Let's say you decide to tie in below the rigging block. Your decision now puts you at a greater risk for one or more of the following to occur:

Editor's Note: When presented with an article about placing your split tail above your false crotch rigging before butt hitching, it is difficult to come up with a title that will survive the censorship gauntlet. Double entendres aside, this technique is one answer to a safety dilemma encountered by all climbers.

1. The lowering line or rigging block could lock down on your climbing line and/or lanyard, preventing your descent to the ground in the event of an emergency.
2. A sudden jolt could knock your gaffs out from under you, sending you skidding down the trunk and leaving large amounts of flesh behind, until your line catches on a nub or you reach the ground.
3. The lowering line could burn through your climbing line and/or lanyard, hurling you down into the ground.
4. The rigging block, when loaded, could chop through your climbing line and/or lanyard, again leaving you to the merciless laws of gravity.

All of these scenarios are potentially life threatening and have happened to some very experienced climbers all across the country. The only positive result is that the rest of us can learn from their misfortune, and prevent the repetition of that same sequence of mistakes.

Now, if you decide to tie in above the block, you still have certain risks to consider:

1. A violent jolt could flip your lanyard off of the trunk after the piece is cut.
2. If you lose track of where your lanyard and climbing line are, you could easily cut through them with the saw.

If your solution to these hazards is to simply replace your standard lanyard with a steel core flip line, without

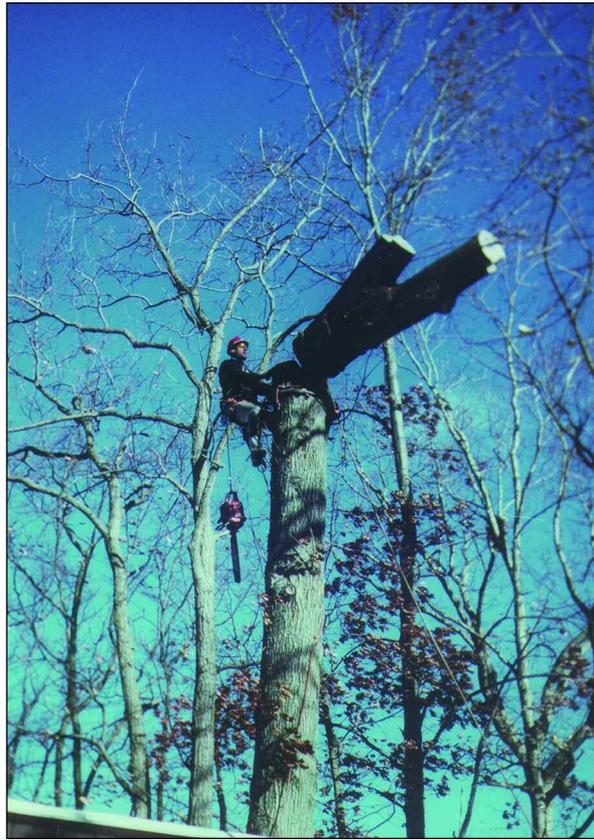


using a climbing line, then I have only one question. Have you ever tried to perform a successful aerial rescue of an unconscious climber whose weight is solely placed on a lanyard? It's almost impossible even with the aid of an aerial lift. That is, of course, assuming that the lanyard actually kept the climber from falling to the ground. It is also a fact that it takes the average saw about three seconds to cut through a steel core lanyard. As an educated professional climber, you must always prepare for the worst and have a suitable emergency escape plan.

The only way I see to avoid all of these risks and still remain a practicing arborist is to secure yourself to the trunk with both your climbing line and lanyard. In this instance, securing doesn't mean simply draping your climbing line around the trunk, but choking it off so that you are secured from a fall in any direction. With the split-tail system, this is easily done by first using the lanyard to support your weight and disconnecting the terminating end of your climbing line. Next, take the same end and tie a running bowline or equivalent around the trunk and advance your friction knot (Machard, Blake's hitch, Prusik, etc.) as far as possible. Be sure that the running bowline is tightening against the bight as you put your weight onto the rope. This way, in the event of a fall, the running bowline and friction knot will keep you secured to the tree.

Finally, place a small figure eight rappelling device directly below your friction knot and connect it to your harness. The figure eight device will take the brunt of the strain and heat when rappelling, providing an additional safety factor and prolonging the life of your split-tail. The important issue here is the difference between placing your weight on a knot that is attached to a line running through a crotch, and placing your weight on a knot attached to a static line. When tied in through a crotch in the traditional, dynamic system, only half of your weight is on your friction hitch. With a static system, all of your weight is on the knot. During an aerial rescue, it could make all the difference in the world.

When rigging wood into a block, once the steps listed above are properly completed, attach the rigging block directly below your choked-off climbing line. After the block is in place, carefully cut the notch just above



your lanyard and cut out the corners if necessary. After you tie the piece off and get it safely to the ground, remove the block and release your friction knot so that you are able to spread the running bowline and walk down the trunk with the aid of your lanyard to your next work position. When you reach your destination, advance, dress and set the friction knot snug to the tree, and repeat the described steps again. What you will find is that the climbing line and figure eight serve only as a direct line to the ground and as a back up in the event of a failure in the lanyard. This inexpensive, yet highly effective system has very few limitations and can easily be adapted to any split-tail system.

If this system does not fully meet your needs, try incorporating other hardware or using different techniques to better suit you. You might choose a different rappelling device such as the Petzl Stop or Gri-Gri. Another handy tip shared by Ken Palmer is to tie the running bowline, or equivalent, with a long tail so that you may rappel to your next work position, and attach the rigging while hanging in your harness. Then simply tug on the tail of the running bowline and it should slide down so that you may readjust

it at your new position. Also, try adjusting the running bowline so that it is offset to the side when making your back cut. This will allow you to keep some of your weight in your harness and also pre-load the knot to be in perfect alignment should you need it.

The most important thing to understand here is that these are just more options for you to draw on if the challenge should arise. Tree climbing has to be custom fit to your style and abilities in order for it to be successful. It is quite possible that you will not be able to adapt to this method, however, it may still be worth knowing.

There's an old saying, "A little knowledge can be a dangerous thing." To be a successful practicing arborist and an educated professional climber, knowing "a little bit" about working high aloft in a tree top is like knowing nothing at all—what you don't know can hurt you, and often does. This system, as in any new operation, should first be performed and mastered safely on the ground before using it in a life-supporting manner in the air.

I also strongly urge all climbers, new or experienced, to attend as many seminars and get as much training as possible. Membership in organizations such as ISA or NAA can also be a great benefit, informing you of chapter or regional classes, seminars and competitions. Invest some time and effort into your most important asset—YOU. The more you know, the safer you'll be. I would like to leave off with one more thought to consider. Every arborist makes mistakes. Those who have the habit of noting and then correcting the little mistakes they've just made live to perfect their skills. Those who regularly ignore their errors will sooner or later pay for their carelessness—maybe even with their lives. **ATN**

This feature has been adapted with permission from articles that appeared in the New Jersey Chapter newsletter, The Canopy, and Tree Care Industry Magazine.

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