

SINGLE ROPE TECHNIQUE- Work Positioning: A View from the Ground

By Sylvia McNeill

The professional tree worker is in a physically demanding vocation. It requires strength, dexterity, an aptitude for working at height and a certain amount of fearlessness to climb and work on a structure that is biological in nature. Because of this, the ability to not only plan and perform a strategy for the job, but also to adjust that plan as circumstances dictate, is necessary.

This article isn't a "how to" climb feature, rather it is intended to impart how single rope technique-work positioning (SRT-WP) has affected our business. And I emphasize "work positioning." This utilizes one of the newer, multi-directional tools that allow ascent, descent and lateral movement without changing systems or tools. These tools were designed and made specifically for tree work by tree workers rather than tools adopted from other industries.

Climbing innovations in the tree care industry in the last decade have been phenomenal. If my husband, David McNeill, had not investigated and embraced some of these innovations, he would not still be climbing. He is now 60 and still climbing professionally. What has allowed this longevity in our business? Single rope technique-work positioning.

We are a small, two-person company and for close to 30 years I have crewed for and watched David climb. He started out on doubled rope technique (DdRT) 44 years ago and only in the last few years switched to SRT-WP.

It wasn't until David tried one of the multi-directional tools that he became truly convinced that this was the wave of the future in tree climbing. He realized the potential of these tools to reduce wear and tear on the human body, and (to allow the climber to) be efficient in productivity with many aspects that are actually safer than methods he had traditionally employed.



Using arm strength to climb can be fatiguing.

For decades trees were accessed by a doubled rope climbing technique, where a single line is thrown over a crotch or branch and tied back to the climber. Body thrusting was a common means to both ascend the rope and work the tree. This proved safe and did not require a changeover, but was physically demanding on the upper body, often contributing to overuse injuries and early, forced retirement.

What I have observed

Throughout his climbing career, David has sustained many overuse injuries that will never go away. Many of these are inevitable in our line of work, but many could have been eliminated almost entirely if SRT-WP had been available from the start.

Since David's personal choice in an SRT-WP climbing system incorporates the ergonomically correct use of the large leg muscles, the ascent effort is minimized to the point of being able to talk while going up the tree. When a great many trees in your area are comprised of strong, upright laterals with few horizontal limbs, and your policy is to not use spurs on trim jobs, the effort involved in multiple ascents becomes a substantial factor in your decision to take the job.

As our preferred anchor choice is basal, I see the climber using SRT-WP as being able to select secure suspension points, often with multiple redundancies and the

ability to redistribute loads that allow a safer work positioning. The set-up time for this system has also proven, on average, to be substantially quicker than a DdRT system with friction savers, cambium savers or other hardware required to reduce friction for the ascent and smooth functioning during the work phase.

With the use of the new multi-directional tools, many safety concerns expressed by those not familiar with SRT-WP in general are already dealt with. They do not have the inherent potential of shredding the rope as cammed ascenders do. They also are secure on the rope and, therefore, do not require a second attachment point to prohibit them from "popping" off the rope, as the cammed ascenders do.

Anyone watching climbers perform the work they do day in and day out can appreciate how dangerous their job is. But thought also needs to go into the day-to-day wear and tear that predisposes these climbers to forced early retirement; similar to being aware of acute pesticide toxicity while ignoring the negative, chronic effects.

Retirement should be a choice, not mandated by preventable injuries. It is not uncommon to hear young climbers state they like the physical aspect and challenge of body thrusting and foot locking. But this can be short-sighted. Using a system proven hard on the body does not make sense when a less physically demanding and efficient method is at hand.

My recommendation to anyone in the business who desires to keep climbing? Review the system you are using, the energy it demands and the wear and tear on your body it creates to see if improvements or adjustments can be made to enhance your performance and prolong your productive climbing life.

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