

Two ropes in Work at Height

Technical Guides update –
TG1: *Tree Climbing and
Aerial Rescue*

“Climbing and working with a single rope has remained the custom and practice in the industry for too long and been a factor in many falls from height. Recognising this, some clients in the utility sector have shown the way forward by ensuring their contractors use two ropes. HSE strongly support efforts by the AA to promote this system of work through its publications so that more climbers and businesses understand it is necessary to reduce risk and comply with the law.”

Stuart Parry, HM Inspector of Health and Safety

Climbers demonstrating moving and stationary rope systems for HSE in June. (Photo: D. Wooley, HSE)

Simon Richmond, Senior Technical Officer

The issue of when we should use two separate and independently anchored lines in tree work has been the cause of controversy since the introduction of the Work at Height Regulations (WaHR) in 2005, in particular Schedule 5, parts 2 and 3. Our current work on AA Technical Guide 1: *Tree Climbing and Aerial Rescue* (TG1) has brought it into focus once again.

As we stated in the last *ARB Magazine* (issue 185, page 24), we met with representatives of the Health and Safety Executive (HSE) in June, to demonstrate different tree climbing scenarios and the techniques suitable for each. The following people were present:

Simon Richmond, Senior Technical Officer, AA

Chris Cooper-Abbs, lead author for TG1

Matt Brooker, author for TG1 and demonstration climber

Ben Rose, demonstration climber and stationary rope technique (SRT) expert

Jo Hedger, demonstration climber and World tree climbing champion

John Trenchard, tree climbing trainer/assessor and representative for Lantra Awards

Rob Blake, tree climbing trainer/assessor and representative for C&G NPTC

Dr Andrew Turner, HSE

Stuart Parry, Lead for Arboriculture, HSE

Paul McGann, WAH specialist, HSE

David Wooley, HSE Photographer

The HSE specialists from the arboriculture and work at height sectors observed the

demonstrations and were able to ask questions about the planning, choice of equipment and techniques used. We also demonstrated the use of two separate and independently anchored lines and discussed how and when these are currently employed – and when they may not be. (A similar demonstration exercise was conducted in 2004 to address the issues of twin-rope working, and the subsequent HSE report *Determination of rope access and work positioning techniques in arboriculture* and the industry guidance in *A Guide to Good Climbing Practice* became the standard which has applied for the last 15 years.)

The increasing use of stationary rope technique (SRT) over recent years, both as an access technique and as a work positioning system, has the potential to improve ergonomics and efficiency, while reducing the number of disconnections and reconnections, thereby decreasing opportunities for human error.

However, SRT is categorised as ‘rope access’ which, under Schedule 5, Part 3 of the WaHR, requires a higher level of compliance in terms of the legal requirement to have a back-up or safety line. It is worth

pointing out that under Schedule 5, Part 2, doubled rope technique (DRT), categorised as ‘work positioning’, has been subject to the basic level of compliance since 2005.

Having once again presented the evidence and organised the demonstrations, the AA requested that the HSE consider whether a change in its definitions for ‘work positioning’ and ‘rope access’ could provide a solution to the higher level of compliance when setting the new guidance standards in the forthcoming Technical Guide 1: *Tree Climbing and Aerial Rescue*. **Regrettably, the HSE’s answer was ‘No’.**

Accident statistics for arboriculture

Currently, there is no SIC (Standard Industrial Classification) code for accidents specifically in arboriculture, and despite prolonged lobbying from the AA and other sector representatives, the HSE claims it is unable to introduce this because the codes are tied to international standards. This means that while it is relatively easy to keep records of fatal accidents within the sector, it is much harder to maintain reliable data for the details of injuries.

However, in 2018, the HSE analysed RIDDOR reports for the period April 2017–March 2018 by searching for key words. Although heavily caveated as not being a comprehensive record, the findings were published in an open paper (AFAG 33/02) which was presented at the November 2018 Arboriculture and Forestry

Advisory Group (AFAG) meeting. According to the analysis, there were 117 recorded RIDDOR reportable incidents in arboriculture during that period. Of these, 23 were falls from height, of which one was fatal, 6 resulted in fractured vertebrae, 3 multiple fractures, 5 lower limb fractures and fracture to ankle, ribs and wrist.

At this point there is no comparable set of accident statistics for previous years that might allow us to make a better-informed judgement of whether our safety record has improved, or not. Having said this, there is no doubt that accidents do occur, some of which result in fatal or life-changing injuries. As the lead body for the sector it is our responsibility to do all we can to prevent such accidents.

So what now?

Following the demonstration day in June we met with the HSE in early July; at that meeting we pursued our arguments for taking a realistic, risk-based approach to the use of twin-rope working. Once again, however, our proposals were not accepted.

In order to demonstrate full compliance with the Work at Height Regulations, climbers will now need to reconsider their approach when climbing trees (where climbing has been assessed as the most appropriate method) and should incorporate, as a principle, the use of two separate and independently anchored lines in most situations. The potential failure of an anchor point, cutting a rope, or failure to connect systems correctly can all occur with any climbing system; a correctly placed second line could prevent potentially fatal falls in all those circumstances. On balance, it is hard to argue that applying the Regulations will not reduce accidents, which is in everyone's interest.

Of course, technical guidance has always encouraged the use of supplementary anchors, whether by a lanyard or second

line, and there are plenty of situations where competent arborists will employ a second line for support or for safety. So, the shift in recommended practice is subtle, but distinct: the law says we should use two lines as the norm. Although using two ropes purely as a backup against human error will be an additional burden, the technique should not be used where it could legitimately increase risk, so the mitigating circumstances that can be applied under Schedule 5 of the Regulations, where use of two ropes is really not possible or imposes further risk, remain applicable.

There will inevitably still be situations where, because of the conditions and the structure of the tree, it is really not possible to have two separate and independently anchored lines at all times, and robust risk assessments will be required to justify this situation. Some clients in the Utility Arboriculture (UA) sector have taken a fully compliant approach. While UA work is different to general tree work in a number of ways, UA climbers on these contracts have found this to be workable and can still use a single attachment in certain circumstances.

Implementation

This will be a change that will take time to implement and filter through our varied workforce; it will add time and cost to tree climbing operations but will also demonstrate the increasing professionalism and drive to maintain compliance in our sector. The decision to fully adopt the two-rope approach will also have a significant effect not only on current practitioners but also on the training and assessment network related to these activities. As a result of this shift in approach we will also be revising the *Industry Code of Practice for Tree Work at Height* (ICoP).

The imminent publication of the Technical Guides and subsequent revision of the ICoP represent an opportunity to provide industry

standards that will reduce the risk of accidents and promote safe working and compliance with the law. We are putting plans in place to revise the wording in the current draft of TG1 and also identifying areas in the ICoP that may need to be revised in light of these decisions.

The Arboricultural Association is committed to helping our industry achieve an improved safe working environment. We are therefore keen to work with all stakeholders in a positive, constructive and collaborative approach to making this change, which can only be positive if the outcome is to reduce the number of accidents.

We are also arranging further meetings with HSE to press for more detailed information on accident statistics and to request support for better recognition of the professionalism of our industry. We will also work with the HSE to agree parameters and provide guidance on the mitigating circumstances where it might be appropriate to conclude in a risk assessment to use a single rope.

A more detailed background paper to this issue is available on our website: www.trees.org.uk/2ropes

Update on other Technical Guides

TG2: *Use of Tools in the Tree* is progressing through the design phase and TG3: *Rigging* is waiting for a photo shoot to compile the necessary images. TG4: *Crane Use in Tree Work* is nearing completion – see Paul Elcoat's article on pages 84–88. TG5: *MEWP Use in Tree Work* is currently out with peer reviewers. We are still intending to get all five technical guides published this year.



Switch to Ecosia – the search engine that plants trees

Out of all the various methods to reduce your carbon footprint, ever imagined using a search engine to reduce pollution?

Well it turns out you can. This eco-friendly internet venture is known as Ecosia. It's a search engine based in Berlin, Germany, that plants trees by donating 80% or more of its surplus income to non-profit organisations that focus on reforestation and conservationism. So far Ecosia has helped plant 61 million trees!

www.ecosia.org/?c=en

Sustainable wrap update

As you'll have seen, this issue of the *ARB Magazine* was delivered to you in a paper envelope.

Following readers' suggestions, our research and the response published in the spring edition (issue 184, page 90), we are still working on finding an environmentally sustainable and practical solution to the covering of your favourite quarterly magazine. We are taking this seriously because we don't want to jump on a bandwagon that ticks a box but continues to litter the seabed with microplastics.

However, we are now looking at a corn starch option for bio-wrap that will work in the printer's machine and will compost (really, not theoretically) which we hope to start experimenting with soon. In the meantime, we have reverted to good old paper, which, while consuming trees, is at least fully recyclable.

We will keep you updated.

