



FEATURE 10, Summer 2007

AA Utility Arboriculture Group Quarterly Update

Small Trees - Rope Assisted Felling (R.A.F.)

By David Walker

As part of the AA Utility Arboriculture Group's Core Group meetings, under the auspicious title "Safety", members discuss accidents and incidents which have occurred within our industry with a view to identifying the *how* and *why* on the grounds that knowledge is at least half way to prevention. This information is disseminated via the AA's regular members' Newsletter and also posted on the AA website under Utility Arboriculture (see www.trees.org.uk/uag.php).

In December last year I mentioned an incident which had been brought to my attention where a rope assisted fell went wrong. Luckily no-one was hurt.

The tree being felled (*an Acer pseudoplatanus*) was under guide bar length (*45 centimetres*) and approximately 9 meters high. The tree had a straight trunk and a well balanced crown, there was no wind. A climber had attached the rope approximately two-thirds of the way up the trunk. A young assistant was given the job of manually pulling the tree over away from the building. No obvious signs of concern were evident. The chainsaw operator was both competent and experienced. The chainsaw operator was confident the tree would require only a little pull from the assistant to get it started on the fell. The assistant was a safe distance away from the tree and had been told not to pull on the rope until the chainsaw operator had given the signal to do so. As the chainsaw operator started the back cut the tree snapped off sideways partially dragging the assistant with it. The assistant did have gloves on and had the sense to let go. The tree being felled got hung up in an adjacent tree, thus preventing it falling on to the building.

After the initial shock the tree was dismantled, without causing any damage to the building. The assistant was a little shaken by the event. On inspection afterwards the tree was completely hollow. This sets the scene for the point of this article.

- **How many arborists use Rope Assisted Felling techniques?**
- **Has anything similar happened to you or anyone you know?**
- **If so, what should be done about it?**

R.A.F. is an ideal way to take down small trees - we carry all the basic essentials in our lowering kits - but are practitioners adequately prepared for this common technique by the training and certification currently within the industry? Some points to ponder:

1. For insurance/client/in-house health and safety purposes an auditable training policy would be required. I realise that Utility Arb units (Unit 2) cover assisted felling and the new UA courses from Lantra Awards include this in their course on site operations (*see the diagrams and excerpts kindly supplied by Simon Richmond of Lantra Awards*). Although not everyone has Utility Arb units, I would suggest that most people have NPTC CS31. Lantra Awards are also introducing a course for winch-assisted felling, using hand winches, which should be available later this year.

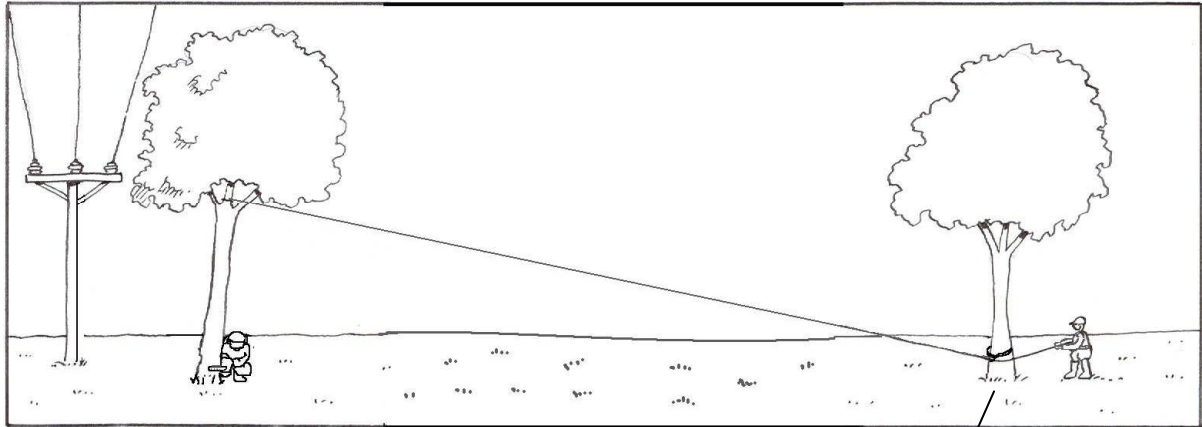
But

2. Do you think Lantra Awards should design a R.A.F. course, be it stand alone or an extra day for the existing small tree course?
3. If so, should NPTC create a stand alone assessment to complement the Lantra Awards course?
4. What techniques are there to prevent the tree going the wrong way other than R.A.F e.g. winches, MEWPs, climb & dismantle (there may be situations where none of these are practical)?
5. If you have a pulling technique that does not include the use of a winch and are willing to share it please contact the UAG (email its secretary halm@btsgroupuk.com)
6. Should R.A.F. be banned?

I believe the main points to consider with such a system are the LOLER/PUWER implications:

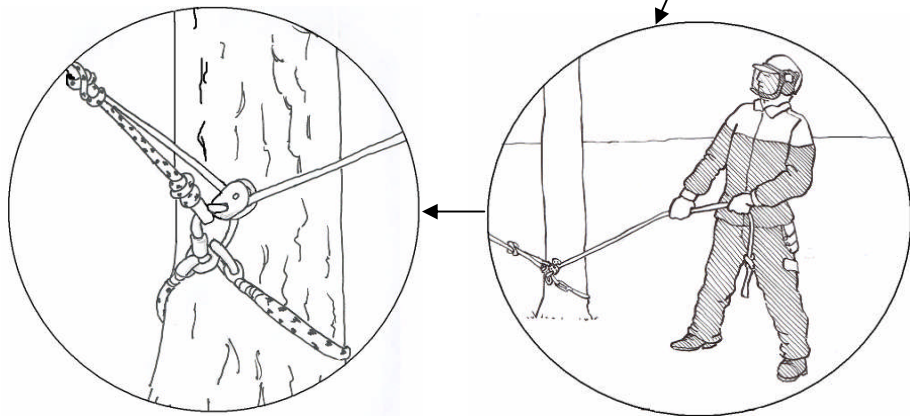
- The system must have a one way pull, i.e. not reliant on human strength and determination should the tree start to fall the wrong way, and
- The rope, pulleys, shackles and friction device (whatever equipment is included in the system) must all be compatible and fit for purpose.

The UAG would appreciate your views on this topic – please email its secretary halm@btsgroupuk.com.



Use of micro pulley and friction hitch: to provide simple locking belay.

Note: a mechanical device could be used and / or additional 'leg' on anchor line to obtain an increased mechanical advantage.



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