Training Aerial Away from the National Centre

Policy
The National Centre for Circus Arts does not encourage students and participants (adult recreational / youth / degree) to train aerial disciplines other than in formally established circus aerial studios, or under the appropriate supervision of a competent circus rigger and / or aerial teacher / practitioner.

The risks inherent in training aerial are well controlled at the National Centre. Structures, rigging and equipment are certified and regularly inspected by professional competent* persons. Activities are controlled and supervised. Student progression is monitored and supervision levels are maintained appropriate to the experience level of the student.

Guidance
We recognise that despite this advice people will still want to practice aerial disciplines away from this setting. Before deciding whether or not to this, these are the things you should consider:

Training / Practice
- What level of teacher supervision do you usually have when you are training?
  (All non-degree activities at the National Centre are teacher supervised at all times)
- Do you predominantly train in a supervised class and are you ready to train on your own?
- What does your teacher think?
- What access do you have to teachers for support / advice around what you are training?
- Are you happy to train only tricks you are comfortable / competent in rather than attempting progression that you would normally only undertake with a teacher?
- Do you have the space and conditions required to train safely?
- Do you have the right equipment including appropriate mats?
- Will you be training alone? Do others know how to help you if you get stuck or injured?
- Are there alternatives to training in the air?

Rigging
The National Centre does not advise students to devise their own rigging solutions.
- Equipment for aerial work should only be suspended from points / structures for which you know the AVAILABLE load-bearing capacity.
- Only use equipment designed and sold specifically for aerial circus, specified and installed by a COMPETENT PERSON* with experience of aerial rigging.
- Do you know the available load bearing capacity of what you are rigging from?
  - Unless you have ratings, the only way to ascertain this is to engage a structural engineer.
- Do you have an understanding of the loads aerial work impose on rigging and structures?
  - Even a beginner can generate loads up to five times their body weight.
  - Including a Safety Factor, you may require a Minimum Breaking Load around 1.5 tonnes.

*Competent Person is defined as someone who has the necessary skills, knowledge, experience and training to carry out the work safely.

Rigging equipment, points etc should be specified, installed and examined by someone who understands and has experience of the dynamic forces being applied to them by a circus performer.

You should ensure that the person carrying out installation and examinations has such appropriate practical and theoretical knowledge and experience of the lifting equipment, and its use, as will enable them to detect defects or weaknesses and to assess their importance in relation to the safety and continued use of the lifting equipment.
• Do you have the experience and knowledge to safely rig your aerial equipment?
• How will you control the use of any rigging to ensure it is not damaged by others, or that others do not injure themselves or overload it?
• You should consider how your rigging point and equipment will be maintained and inspected to ensure they stay safe.

**Freestanding Aerial Rigs**

Purpose built freestanding rigs reduce some of the risks above but have other issues. You should carefully consider their appropriateness for your use and the loads you will be applying. There are rigs on the market that are clearly unsuitable. You will still need to ensure your rigging equipment is appropriate and used correctly. (see note on equipment purchase below)

**Rigging / Suspending From Trees**

There are multiple reasons why this is not a good idea. Assessing the suitability of a tree, or a particular branch, is a complicated process that should only be undertaken by a professional arborist in consultation with a circus rigger. They will consider:

• The type of tree.
• It’s overall health from the root structure and ground conditions right up to the top.
• Is there internal rot you cannot see?
• Is it about to shed a branch due to water stress or some other reason?
• How are you going to attach to the tree?

There are other issues, including:

• If a branch fails there is a good chance it will land on you, your spotter or a passer by
• Working at height – how are you going to safely access the tree?
• The long term effect on the tree. Damage to the bark and underlying cambium from ropes and slings can lead to the tree shedding a branch later in life, or worse to the death of the entire tree.

**Door Bars / Home Pull Up**

• Designed for controlled vertical movement and should never be inverted on.
• Swinging / side loading can easily dislodge them (see YouTube for evidence).
• Are only as strong as your door frame.

**Further Reading**

• Firetoys have a good Aerial Safety section on their website: https://www.firetoys.co.uk/aerial-safety
• Home Rigging - https://www.firetoys.co.uk/blogs/installing-aerial-equipment-at-home
• Rigging from Trees - https://www.firetoys.co.uk/blogs/can-i-rig-aerial-circus-apparatus-from-a-tree/
Equipment Purchase

- Equipment should be fit for purpose. i.e. designed specifically for aerial performance and specified by a competent person with experience of aerial performance and/or rigging.
- You should ensure anything you purchase is suitably rated for the activity you intend to use it for, including a safety factor.
- You should only purchase equipment from reputable suppliers who have an understanding of its use and may be able to advise you.
- You should purchase reputable, known brands. Cheap equipment is cheap for a reason.
- Purchasing online from Amazon, eBay and similar sites is not recommended due to the large amount of counterfeit equipment found on these sites and the lack of accountability.
- If in doubt, please ask for advice from your teacher or course manager before making purchases.
- A note on fixing into ceilings - any rigging solution which involves screwing vertically into a wooden beam or plasterboard ceiling is inappropriate. Fixings into concrete/masonry should be professionally installed using a chemical anchor and pull tested to a suitable load before use.

Suppliers

Rigging Equipment (Petzl, Beal, Lyon and others) is usually available to purchase from Reception at the NCCA. Please ask if we do not have what you want. We are happy to advise.

Other suppliers:

- Firetoys (http://www.firetoys.co.uk) is a good one stop shop for most things circus and have rigging equipment as well. Good for silks, hoops and static trapezes.
- Alexander Aerial Acrobatics (http://www.trapeze-shop.com) are our current favourite for straps and single point/weighted trapezes. He’s in Germany but will deliver.
- Leo Hedman (http://www.leoropes.com/) makes lovely, rated, covered ropes.
- Oddballs (https://www.oddballs.co.uk) sell all things juggling, balance and manipulation.
- Flints Hire and Supply (http://www.flints.co.uk) sell theatrical chandlery, including a range of rigging equipment and rope. Lots of good advice in their catalogue pages.
- Nissen (https://www.nissen.uk.com/) sell a range of mats for different purposes. The standard mat we use at the National Centre is their Gymnastic Landing Mattress.