Risk Profile

The following risks have been identified through PGL's risk assessment process:

a. Extreme Weather
b. Injury from participation/physical exertion
c. Fatigue/exhaustion/dehydration
d. Injury due to incorrect set-up and operation/ belaying
e. Collision/entanglement with elements / structures / equipment/ people
f. Entrapment of hair, fingers, loose clothing, etc. in element or operating structure
g. Splinter injury from pole.
h. Injury from cables & cable clamps
i. Tear/ de-gloving injuries from rings and other jewellery
j. Danger of ground fall from
    i. Intentional misuse of equipment and systems
    ii. Incorrect attachment
    iii. Poor fitting of harnesses
    iv. Equipment Failure
k. Rope burn injury
l. Slips/Trips/low to ground falls
m. Injury due to object / person in path of swinging participants
n. Risk of descent and sudden stop due to failure of pro traction pulley
o. Injury by the pro traxion pulley
p. Instructor /participant injury due to slowing the swing
q. Instructors damaging fingers in 3-ring circus

Implementation of the following operating procedures reduces the residual risk to a level as low as reasonably practicable given the intended purpose of the activity.

Control Measures

Deployment Requirements

Instructor Qualifications:	Centre based training by Approved Ropes Trainer and assessment by PGL Approved Assessor
Instructor – Participant ratio:	1:1
Total group size:	15
Active participation:	All participants should be active hoisting or on the swing

Equipment Requirements

Per Activity Base:
1 x Protective tube for Pro-traxion with two attachment strings
1 x Static haul rope – (11mm, Type A Semi-Static)
1 x Static extender rope– (11mm, Type A Semi-Static)
1 x Dynamic down haul rope - (10mm-11mm, UIAA Single rope)
1 x Sit Strop
6 x Triplock Steel Karabiners
4 x Triplock Alloy Karabiners
1 x PETZL Pro-Traxion
1 x Swivel
1 x 3 Ring Circus & Quick release system with trigger cord (long enough and stiffened to be unable to strike a guest on the head, labelled to each swing)

Participant & Instructor equipment requirements

Per Participant

1 x Full body Harness

1. Specific Clothing Requirements

- Trousers or shorts that prevent harness contact onto skin
- Flat soled shoes or boots unable to slip off
- Long hair tied back and made safe
- Jewellery removed where possible, or made safe.
- Top or t-shirt must be worn that covers the individuals shoulders
- Loose items removed from pockets
- Any items constituting a risk of entanglement removed

2. Session Preparation

a. Instructor to carry out a routine visually inspection of the element and activity area, checking the integrity of the whole element (to include poles, ladders, anchor points and guys, etc as per Daily rope inspection Checks ACOP) .
b. Off Ground activities must not be operated in wind conditions above Force 5,(29-38kmh) or during any storm that breaches the 30/30 rule in respect of lightening.
c. If the Instructor has any concerns about the integrity and safe use of the element and activity area, then they should raise this with the appropriate Senior Staff Member, prior to any activity taking place.
d. All set-ups must be rigged in accordance with PGL Technical Advisor approved methods/policy.
e. Instructor to visually & physically check the integrity and setup of all PPE to be used, including twists in any straps and amount of PPE for the group.
f. Instructors should prepare themselves for the session ahead by ensuring they are aware of relevant group information, and have a broad session plan which can be finalised when meeting the group.
g. An extension of static rope must be positioned between the hoisting system and the three ring circus to prevent the swing being hoisted above 80 degrees (10 degrees below horizontal).

h. An approved tube must be threaded in place over the hauling rope to minimise the chance of any participants getting their hands and fingers into the entrapment area on the pro-traxion.
i. When the participant is being attached to the swing, the ladder must be orientated between the participants and haul system so that it is impossible to hoist with the ladder still in place
j. The ladder for mounting and dismounting, must have a defined safe place where it is always positioned other than when it is used for mounting and dismounting.

3. Session Instruction

a) The Instructor must deliver and intro and safety brief as per the ACOP
b) All participants not actively involved should be in an area easily supervised by the instructor.
c) All Participants must be attached to the sit strop using the approved method.
d) The Instructor must ensure participant is able to operate quick release before hoisting commences.
e) Participants must be instructed and reminded to keep both hands holding the strop above their head to protect from inversion and collisions with the release system. Whilst releasing they may use one arm to do this and then quickly replace the hand whilst swinging.
f) The dynamic down haul rope must be held clear of the participant on the swing before and during hauling; during and after release and swinging. It should be held loosely in two hands at arm's length.
g) The instructor must continually monitor the participant holding the dynamic down haul rope throughout the dispatch
h) Final departure checks prior to being hauled (see Off Ground FDC ACOP) must additionally include foot clearance, Pro-traxion, dynamic down haul rope, obstacles in path of swing and the haul rope going up and down from the top pulley.
i) No obstructions must be left in the path of the swing.
j) Hauling must not commence until the instructor has completed a function check of the pro-traxion and is sure that it is set to on.
k) Throughout hauling the instructor must equally monitor:
    i. the participant on the swing
    ii. the participants hauling
    iii. the dynamic down haul rope
    iv. The pulleys.
l) If an obstruction is noticed in the path of the swing once hauling has begun, hauling should cease immediately and a controlled lower should be carried out immediately using the approved method (see ACOP). Under no circumstances should any person step into the swing path to move the obstruction.
m) If at any time the participants holding the dynamic down haul rope lets go of it, the Instructor should stop hauling, tie off the hoisting rope and return the dynamic down haul rope to a safe position.
n) If the dynamic downhaul rope cannot be retrieved safely (it has gone into the swing area) then a controlled lower should be performed.
o) Hauling participants must be supervised and encouraged to work as a team.
p) The hauling rope must be held tightly by the instructor standing at a 90 degree angle from the end pole karabiner prior to the participant releasing the swing
q) Instructors should not re-enter swing area and must not slow down/stop the swing until the pendulums have reduced to a size that the instructor can stop the swing without risk of injury to themselves.

r) Nobody is to re-enter swing area until ok given by the instructor.

4. Rescue

a) Using the haul rope already through the end pole karabiner, the instructor ties an Italian Hitch onto the karabiner which is then tied off with a slippery hitch and 2 half hitches.
b) Whilst tying the Italian hitch, all participants on the hauling rope should carry on holding on until stated otherwise by the instructor.
c) On command from instructor, the hauling team pull the haul rope towards the end pole to release tension on the pro-traxion which the instructor can then release the pro-traxion cam.
d) The instructor then moves the hauling team to a safe area.
e) The instructor then 'claws' the Italian hitch, releases the half hitches and slippery hitch which allows the instructor to lower the participant on the swing to a suitable height using the Italian hitch.

Light Lower –
f) In the event a participant is too light to lower on an Italian Hitch, the hitch can be removed and the instructor lowers the participant using the end pole karabiner