

# Brenin Adventures

## Powerkites – Operational procedures



### **Staffing & Ratios**

Appropriate qualifications:

- There is currently no NGB for Powerkiting, and no recognised training and assessment scheme.
- Instructor Sign off by Management

Ratio 1 instructor : 12 clients - supervising 4 or less kites, dependent on available flying area

Instructors working alone must have an effective way of communicating with the centre base.

### **Weather limitations**

Site specific risk assessments must identify limits to flying areas, uneven or difficult terrain, obstructions and entanglement hazards.

The suitable 'wind window' will depend on the age and competence of pilots, the wind direction, and the restrictions of the operating area. Favoured conditions are around F3-4.

Powerkites should not be flown when there is the possibility of an electrical storm, and must never be flown within 200m of overhead lines or electrical installations.

### **Venues**

Any suitable area of even ground free of obstructions and entanglement hazards

### **General Procedures**

Before the start of any session, instructors must be fully aware of any medical conditions that may affect participation, and any specific requirements of the group.

Instructors must set strict limits on the operational area to ensure that a 30m buffer zone is retained.

Ensure you brief the group fully. Your briefing must include;

- Activity description / goals
- Safety rules
- Limits of flying area
- Detail of the flight envelope / exclusion zone

Kites must be matched to participant size and wind conditions.

The flight envelope is a 30m, 180 degree arc downwind of the pilot. This area must be kept clear of all bystanders, and the pilot must not move to a position where any obstructions or entanglement hazard enter the flight envelope.

Pilots must be taught to 'park' their kite overhead to move within the operational area or allow bystanders to clear the flight envelope.

Due regard must be given to livestock in the vicinity of the operational area, which may be frightened by flying powerkites.

Powerkites must not be flown on high ground where low flying aircraft may be encountered. If there is any doubt the RAF flight corridors must be consulted.

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Group control is very important. Any supporting adult needs to understand the site specific risks and their role & responsibilities.

The wind strength & direction must be monitored throughout the activity.

**The risk assessment must be reviewed on arrival on site to take into account prevailing conditions and recent changes, and monitored throughout the activity session.**

Risk factor	Control
Bystanders / participant hit by kites	Briefing & monitoring operation Clear flight envelope Extensive operational area allowing space for downwind [in strong winds] or upwind [in light winds] movement Launch procedure with the pilot 'parking' the kite overhead until the launcher clears the flight envelope
Overpowering – dragged by kite	Kites matched to pilots body weight & strength, and wind strength
Entanglement in lines	Correct stance taught
Slips & trips	Suitable operational area Suitable footwear Even ground
Electrocution	No flying within 200m of overhead lines or electrical installations No flying when there is a possibility of electrical storms
Entanglement of kites / lines	Suitable operational area / clear flight envelope No obstructions / entanglement hazards / overhead lines / masts / sports equipment
Equipment failure	Maintenance and care of equipment
Injury jumping with kites	Briefing & monitoring operation Jumping not encouraged Low breaking strain lines