



SCOTTISH POWER KITE ASSOCIATION

Power & Traction Kiting Risk Assessment

Kite Flying/Power Kiting

Kites have been around for thousands of years and have been actively used as a means of power. When flying a kite, whether 2-line or 4-line, and the pilot is dragged or pulled by the force of the kite, this is Power Kiting. Power kiting kites can be simple delta/sport kites or a specific traction kite used for kite buggying, kite land boarding or even kite surfing.

1. Method

We all make risk assessments throughout every day of our lives, but we don't write them down. When you decide that an activity is too dangerous for your level of knowledge/ability/equipment you make the decision to avoid that particular hazard.

When we make a formal risk assessment we:

- Decide the nature of the hazard
- Estimate the likelihood of the hazard
- Estimate how serious such an accident would be
- Judge the acceptability of using the substance or technique
- Accept the risk or apply control measures

A hazard is anything that could cause an accident. All you need to do is write down exactly what you think is hazardous.

For each hazard you should decide on the likelihood of an accident.

Likelihood:

- 5: Very Likely - If nothing is done, an accident will almost certainly occur
- 4: Likely - will happen if external factors take effect
- 3: Quite Possible - An accident may happen if pushed by other factors
- 2: Possible - may happen if external factors take effect, but unlikely
- 1: Not Likely - No real likelihood of an accident occurring and the severity of the injury it may cause.

Severity:

- 5: Very High - Multiple death or widespread injury
- 4: High - Serious injury or death to an individual
- 3: Moderate - Causing injury that could keep individuals away from normal activities
- 2: Slight - minor injury
- 1: Nil - No risk of injury

The combination of these two scales determines the level of risk: The higher the total, the higher the risk:

15 - 25 High, 7 - 14 Medium, 1 - 6 Low.

		Likelihood				
		5	4	3	2	1
Severity	5	25	20	15	10	5
	4	20	16	12	8	4
	3	15	12	9	6	3
	2	10	8	6	4	2
	1	5	4	3	2	1

2. Assessment

Perceived Hazard	Associated Risks	Controlled Y/N	Likelihood	Severity	Risk before control measure Low/Med/High	Control measures to minimize risk
General Activities						
Stormy Weather.	Possible lightning strike.	N	4	4	High	Don't fly.
Power lines.	Electric Shock.	N	4	4	High	Don't fly near power lines.
Launching a power/traction kite.	Being pulled over.	Y	2	2	Low	Launch at the edge of the window. Seek tuition from qualified instructors.
Flying a power/traction kite.	Kite too big for level of experience leading to being dragged into member of the public, property or traffic.	Y	2	4	Med	Fly in open areas. Do not fly over members of the public. Leave 3 line lengths downwind of you and any obstacle/traffic. Use suitably sized kite for conditions/experience. Seek tuition from qualified instructors.
Letting go of a power/traction kite.	Kite hitting a member of the public, property or traffic.	Y	2	4	Med	Fly in open areas. Do not fly over members of the public. Leave 3 line lengths downwind of you and any obstacle/traffic. Use suitably sized kite for conditions/experience. Use safety system e.g. kite killers.
Flying lines braking.	Kite hitting a member of the public, property or traffic.	N	2	4	Med	Fly in open areas. Do not fly over members of the public. Leave 3 line lengths downwind of you and any obstacle/traffic.
Crashing a power/traction kite.	Kite hitting a member of the public, property or traffic.	N	2	4	Med	Fly in open areas. Do not fly over members of the public. Leave 3 line lengths downwind of you and any obstacle/traffic.
Landing a power/traction kite.	Kite hitting a member of the public, property or traffic.	Y	2	4	Med	Fly in open areas. Do not fly over members of the public. Leave 3 line lengths downwind of you and any obstacle/traffic. Seek tuition from qualified instructors.
Staked out kite.	Trip hazards Kite becoming loose.	Y	2	2	Low	Put unused kites away. Use sand/weight to hold down kite. Secure lines as low to the ground as possible. Do not leave equipment unattended.
Kite Stakes.	Trip hazard. Crash hazard to buggers and boarders.	Y	2	3	Low	Identify all stakes by attaching a brightly coloured ribbon. Remove any unused stakes from the ground. Cover with a kite bag.

Perceived Hazard	Associated Risks	Controlled Y/N	Likelihood	Severity	Risk before control measure Low/Med/High	Control measures to minimize risk
Traction Activities						
Scudding.	Changeable ground conditions leading to various injuries or being pulled over.	Y	2	3	Low	Assess the ground conditions for obstacles. Wear appropriate footwear with ankle support and appropriate protective equipment. Seek tuition from qualified instructors.
Jumping.	Changeable ground conditions leading to various injuries or being pulled over. Collision with members of the public.	Y	2	3	Low	Assess the ground conditions for obstacles. Wear appropriate footwear with ankle support and appropriate protective equipment. Ensure clear down-wind area. Seek tuition from qualified instructors.
Pilot becoming detached from buggy/board/kitesurf board.	Pilot injury. Buggy/board collision with member of the public.	N	3	4	Med	Wear appropriate protective equipment. Give right of way to members of the public and keep a safe distance. Seek tuition from qualified instructors.
Buggy/board/kitesurf pilot crash into member of the public.	Pilot injury. Member of the public injury.	Y	3	4	Med	Wear appropriate protective equipment. Give right of way to members of the public and keep a safe distance. Seek tuition from qualified instructors.
Buggy/board/kitesurf pilot crash into another buggy/board/kitesurf pilot.	Pilot injury.	Y	3	4	Med	Wear appropriate protective equipment. Keep a safe distance from other pilots. Adhere to passing and turning rules. If unsure seek tuition from other users. Seek tuition from qualified instructors.
Buggy/board/kitesurf pilot crash into property.	Pilot injury. Damage to property.	Y	3	3	Med	Wear appropriate protective equipment. Keep a safe distance from any obstacles. Seek tuition from qualified instructors.
Ground based free style buggying/boarding. Pilot becoming detached from buggy/board.	Pilot injury. Buggy/board/kite collision with member of the public.	Y	3	4	Med	Wear appropriate protective equipment. Give right of way to members of the public. Keep a safe distance from the public. Use quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.
Riding a kite buggy in reverse.	Restricted field of vision. Pilot injury. Damage to public or property.	Y	3	3	Med	Wear appropriate protective equipment. Pilot to remain continually aware of weather conditions, changing equipment appropriately or stopping the activity. Give right of way to members of the public. Keep a safe distance from any obstacles & other site users. Use quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.

Perceived Hazard	Associated Risks	Controlled Y/N	Likelihood	Severity	Risk before control measure Low/Med/High	Control measures to minimize risk
Traction activities cont'd.						
Ground based free style buggying/boarding. Pilot becoming detached from buggy/board.	Pilot injury Damage to property.	Y	3	3	Med	Wear appropriate protective equipment. Keep a safe distance from any obstacles & other site users. Use quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.
Aerial & ground based free style buggying/boarding. Pilot injured whilst remaining attached to buggy/board.	Pilot injury. Pilot wears a seat belt. Buggy/board/kite collision with member of the public.	Y	3	4	Med	Wear appropriate protective equipment. Give right of way to members of the public. Keep a safe distance from the public & other site users. Use quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.
Aerial & ground based free style buggying/boarding. Pilot injured whilst remaining attached to buggy/board.	Pilot injury. Pilot wears a seat belt. Damage to property.	Y	3	3	Med	Wear appropriate protective equipment. Give right of way to members of the public. Keep a safe distance from any obstacles & other site users. Use quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.
Aerial & ground based free style buggying/boarding. Equipment failure.	Pilot injury. Damage to public or property.	Y	3	4	Med	Wear appropriate protective equipment. Pilot to inspect all equipment for signs of damage & repair or replace if needed. Do not take part in buggying/boarding with faulty equipment. Give right of way to members of the public. Keep a safe distance from any obstacles & other site users. Use quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.
Sudden changes in weather conditions.	Pilot injury. Damage to public or property.	N	3	4	Med	Wear appropriate protective equipment. Pilot to remain continually aware of weather conditions, changing equipment appropriately or stopping the activity. Pilot to inspect all equipment for signs of damage & repair or replace if needed. Do not take part in buggying/boarding/ kitesurfing with faulty equipment. Give right of way to members of the public. Keep a safe distance from the obstacles & other site users. Use quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.

Perceived Hazard	Associated Risks	Controlled Y/N	Likelihood	Severity	Risk before control measure Low/Med/High	Control measures to minimize risk
Traction activities contd.						
Flying a power kite harnessed.	Pilot injury. Damage to public or property.	Y	3	3	Med	Wear appropriate protective equipment. Only experienced pilots should use a harness. Pilot to remain continually aware of weather conditions, changing equipment appropriately or stopping the activity. Pilot to inspect all equipment for signs of damage & repair or replace if needed. Do not take part in kite flying/buggying/boarding/kitesurfing with faulty equipment. Give right of way to members of the public. Keep a safe distance from any obstacles & other site users, use of quick release/safety systems including scissors/line cutters (maybe used by fellow users/marshals). Seek tuition from qualified instructors.
Buggy/board/kitesurf pilot crash into wooden posts protruding from sand or water.	Pilot injury.	Y	3	3	Med	Wear appropriate protective equipment. Keep a safe distance from any obstacles. Seek tuition from qualified instructors.
kitesurf pilot crash into underwater obstacles.	Pilot injury.	Y	3	3	Med	Wear appropriate protective equipment. Keep a safe distance from any obstacles. Be aware of local hazards.
Buggy/board/kitesurf pilot crash into stones or rocks along shoreline.	Pilot injury.	Y	3	3	Med	Wear appropriate protective equipment. Keep a safe distance from any obstacles. Seek tuition from qualified instructors.
Encountering varying ground conditions while bugging/boarding.	Changeable ground conditions leading to various injuries or being pulled out/off.	Y	2	3	Low	Assess the ground conditions for obstacles. Wear appropriate protective equipment. Seek tuition from qualified instructors.
Unsecured kite.	Kite collision with person or object.	Y	4	2	Med	Everyone advised to ensure kite is secured while unattended. Flyers of inflatable kites advised to use a safety leash.
Offshore winds when kitesurfing.	Swept offshore.	Y	2	4	Med	Everyone advised to check weather forecasts. Only go out if suitable support craft is available.
Tides when kitesurfing.	Swept offshore.	Y	2	4	Med	Everyone advised to check tide times in advance, and investigate if currents are strong in the locality of kitesurfing.
Water.	Drowning. Hypothermia.	Y	2	4	Med	Everyone advised to wear appropriate clothing and safety equipment.