

British Kite Flying Association

Risk Assessment

Areas highlighted in light blue changed in this amendment



Version number	Date	Amended by	Changes
1.0	25 August 2005	Jerry Swift & John Dobson	Initial issue following consultation with UK clubs. Full details of consultation contained in minutes of meeting and supporting documents
2.0	30 March 2007	Jerry Swift	Re-numbered (from 4.x.x to x.x). Amended to reflect lessons from Rougham and Bristol 2006 and incorporating hazards relating to disabled persons, young fliers and night flying. Issued for comment
2.1	22 April 2007	Jerry Swift	Comments on 3.1 clarified
2.2	14 October 2013	Jerry Swift	Amended following review of the use of 'road pins' for event perimeter marking
3.0	07 November 2017	Jerry Swift	Sections added on drones and on operation of aircraft at kite events. Revision on the anchoring of very large kites and field safety around large kites

**Section 1 General Kite Risks
(sports and single line kites)**

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
1.1	Kites in contact with aircraft	✓	✓	✓		1	3	4	Aircraft accident leading to loss of life.	Height restriction applied from CAA to ensure Air NOTAM issued. High flying kites should carry line markers in line with Air Navigation Order. A height guidance kite should be considered for practicality at every event. Comply with any instructions in the CAA permission. Event steward to monitor high flying kites and check line lengths if appropriate. Site specific risk assessment to consider this risk.	1	3	4	Event steward for all on site activity. Event organiser to check that CAA height clearance is applied for.
1.2	Display kites break loose and /or impact people, animals or objects or the lines attaching them cause injury	✓	✓	✓	✓	1	3	4	In extreme circumstances, death, serious injury or damage to property.	Designated roped off area to be used as arena with controlled access. Identify control point to enable issues to be reported and action co-ordinated. Event stewards to be identified by tabard, sash or similar to ensure authority is recognised. Kite flyers briefing before start of each day's flying to inform of any site specific risks and of controls in force during the event. Kites to be attended at all times, monitored by event steward. If kites are not attended event steward empowered to take down if this can be done safely. Tethering provision to be fit-for-purpose, responsibility of the kite flyer, monitored by event steward. Weather conditions to be monitored by the kite flyer at all times - to be noted at briefing. Event steward to be empowered to order a 'take down' if conditions become difficult, managed by way of klaxon or similar warning to alert all fliers.	1	2	3	Event steward to ensure briefing. Event steward to monitor kite fliers and bring unsafe acts to the attention of kite flyer. Event steward to have full support of organiser in taking action against unsafe acts. Organiser to provide suitable briefing material. Organiser to promote rules on safe flying.

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1.3	Kites flown by others at the event break loose, and/or impact people, animals or objects, or the lines attaching them cause injury or damage	✓	✓	✓		2	3	5	In extreme circumstances, death, serious injury or damage to property.	Event steward to be identified at all club run events to enforce/encourage safe flying. Club liaison officer to be identified for every third party event to liaise with event organiser to encourage safe flying. Keep a log of any untoward events at the event recording time and details of any event to be considered at review meetings for possible action. Kites to be attended at all times, monitored by the event steward. Liaison officer to advise organiser at third party events if this problem arises. Weather conditions to be monitored. Any deterioration to be advised to event organiser for suggested 'take down'. At club run events, take down to be ordered if weather deteriorates. Public notices warning of the dangers associated with kiteflying.	1	2	3	Event steward Club liaison officer

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1.4	Trips, slips and falls through kite lines, ground anchors or other equipment etc.	✓	✓	✓	✓	2	2	4	Particular attraction to children of grounded equipment such as lines and ground anchors, mishandling of which could cause injury. Grounded equipment not seen by people with sight impairment or people not paying due attention. Could lead to kites becoming loose and blowing around creating a hazard (see Hazard IDs 4.1.2 and 4.1.3).	Ground anchors to be marked visibly and line to be marked at head height and monitored by event steward. Kites to be attended at all times by kite flyers and enforced through club rules. Event steward to be empowered to request a 'take down' and supported by the club's officers. Times that club is controlling the event to be published at the control point. Laid out lines for multi-line kites to be placed directly parallel and next to the barrier rope or attended at all times, kite flyers to be briefed accordingly. Consider whether children may be a problem with respect to the stakes or kites left unattended and specific steps to be taken if necessary. kite flyers to be briefed. Kites not to left out in the middle of the field, to be monitored by event steward.	1	2	3	Event steward Club liaison officer
1.5	Injuries to members or public	✓	✓	✓	✓	1	2	3	Distress, injury and possible loss to the organiser.	Mobile phone communication to emergency services, event steward to check intended communications. Control point identified as contact point to ensure prompt response. Event steward or liaison officer to be aware of the organiser's arrangements and note on the site specific risk assessment, for briefing to kite flyers.	1	1	2	Event steward Club liaison officer

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1.6	Kites tangled with overhead lines, railway overhead power lines or masts	✓	✓	✓	✓	1	3	4	Electrocution or electric shock leading to burns and/or disruption to supply.	Site specific risk assessment to be undertaken and briefed to kite flyers. No flying if wind conditions are incompatible with overhead lines or other susceptible infrastructure. Event organiser to monitor and enforce so far as possible. Event steward to be empowered to request a 'take down' and supported by the clubs officers. Clubs to promote 'safe flying' through promotion such as booklet to schools.	1	2	3	Event steward Club liaison officer
1.7	Kites caught in trees	✓		✓	✓	2	1	3	Possible injury during attempted recovery.	Leave the kite in the tree. Recovery only by people who know what they are doing. Event steward to discourage people from climbing the tree. Don't fly if trees and wind direction are incompatible - event steward to monitor and advise kite flyers.	1	1	2	Event steward Club liaison officer
1.8	Slips, trips and falls from other hazards such as campers, traders, camping stoves etc. Note also risk of fire from camping activities.	✓	✓	✓	✓	1	1	2	Minor injuries, cuts, abrasions, minor burns, broken limbs in extreme circumstances.	Event steward to monitor the site. Site specific risk assessment and kite flyer briefing. Camping only in designated areas. Camping to be monitored by event steward. Parking only in designated areas. Briefing on fire risk.	1	1	2	Event steward Club liaison officer

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1.9	Movement of motor vehicles on site causing injury or damage	✓	✓	✓	✓	1	2	3	Injuries will generally not be life threatening as speeds will be low. Loss of property and possible loss to the organiser.	Movements controlled by event steward. Movement only with hazard warning lights. Limit movements to appropriate times. Monitor behaviour on site and act on unsafe acts. Review any site conditions from the landowner, any controls they have and so far as possible work to achieve adherence. Include in briefings. Notice warning of dangers of vehicle movement near the vehicle entrance and 5 mph limit where appropriate. Parking only in designated areas. Re-iterate rules in the club newsletter.	1	1	2	Event steward Club liaison officer
1.10	Ground display, e.g. flags, balls, banners etc, present slip, trip or fall hazard	✓	✓	✓	✓	1	2	3	Minor injuries, cuts, abrasions, broken limbs in extreme circumstances.	Balls kept in an enclosed area and supervised at all times. Review type of barrier. Guy ropes marked. In the event of visually impaired people or children on site, consider whether items with guy ropes need to be moved inside barrier.	1	1	2	Event steward Club liaison officer
1.11	Hearing impaired people are unaware of any announcement or alert made in response to an incident	✓	✓	✓	✓	1	1	2	Risk that person does not respond to an alert that could impact their safety. Likelihood reduced as any members of the public with special needs are unlikely to be alone.	Club membership form to invite members to identify any impairments that we should be aware of to assist the maintenance of their safety. Event steward to monitor attendance for any people with special needs and consider whether to offer help, noting need to respect peoples individual circumstances.	1	1	2	Event steward Club liaison officer
1.12	Traders and paid demonstrations introduce hazards outside the control of club and outside the cover afforded by insurance	✓	✓	✓		1	2	3	Risk of personal injury that is outside the organiser's control but for which they are held accountable.	Event organiser to check traders insurance, risk assessment, method statements etc. Training of the public by traders as part of their promotional activity to be checked for insurance position, appropriateness and competence on the day.	1	2	3	Event steward Club liaison officer

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1.13	Inexperienced fliers flying kites beyond their experience or competence	√	√	√	√	3	2	5	Injury to kite flyers and others; damage to kites and property.	Club members awareness, advice, demonstration and supervision. Separation of inexperienced fliers into safe place. Nomination of event stewards.	1	2	3	kite flyers and event stewards
1.14	Pressure (even on experienced fliers) to fulfil real or perceived obligation to fly in inappropriate conditions	√	√	√	√	3	2	5	Injury to kite flyers and others; damage to kites and property.	Fliers meeting to agree action and discussion with organisers.	1	2	3	kite flyers
1.15	Kite unexpectedly out of control	√	√	√		2	2	4	Injury to kite flyers and others; damage to kites and property.	Education about emergency handling. Event steward with appropriate equipment (e.g. PA system).	1	2	3	kite flyers
1.16	Interaction with animals (e.g. frightened horses)			√	√	1	2	3	Injury to animal and rider.	Event stewards to give advance warning. Publicity to inform animal controllers about hazards. Seek information from animal controllers or local council.	1	2	3	kite flyers and event stewards
1.17	Flying over road causes driver distraction or accident	√	√	√	√	1	3	4	Injury and possibly death of car driver, passengers and spectators.	Briefing about site specific hazards. Awareness of accident black spots. Fly safe distance from road. Event steward to monitor where people are flying and alert them when they are moving into danger to themselves or others.	1	3	4	kite flyers

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1.18	Flying kites at night or poor visibility results in loss or injury through impact	√	√	√	√	2	2	4	Loss or injury and possibly death through impact with lines, kite or ground equipment during a night flying display.	Kite lines to be marked in accordance with Air Navigation Order as a minimum. Briefing about site specific hazards. Adequate separation between spectators and participants. Experienced kite flyers only to take part where space is confined or where number of people present represents a significant risk. Adequate and well briefed event stewards to tell spectators or other members of the public if they are moving into potential danger. Event stewards to monitor where people are flying and alert them when they are moving into danger to themselves or others. Lighting provided where assessment indicates risk is unacceptable. Event stewards to have suitable torches with back-ups available N.B. All other daytime risks still exist and must be	1	2	3	kite flyers and event stewards

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1.19	Kite flyers with physical or mental impairment unable to control kite adequately	√	√	√	√	3	2	5	Loss or injury and possibly death to either the kite flyer or another person through impact with lines, kite or ground equipment. For persons with physical or mental impairment, the categories of hazard are the same as for an able bodied flier. However, the impact may be greater since the flier's ability to correct or curtail a developing situation, or indeed to recognise that a risk is increasing, may be curtailed.	Controls are as for an able bodied flier - in all categories of this risk assessment. Additionally: kite flyer (and carer where present) to ensure other fliers are aware of their limitations and be prepared to request assistance as and when required. Event steward to discuss needs with kite flyer (and carer where present) in advance of flying. In consultation with kite flyer (and carer where present) to brief other kite flyers on any specific requests that the kite flyer with physical or mental impairment may make to make their flying experience more enjoyable and safer for all. All fliers to be aware of others present on the flying site and to make it their responsibility to fly clear of the flier(s) with physical or mental impairment. All involved to take note that equipment may not perform in the same manner when flying and to assess those risks: e.g. wheelchair additional risk of tipping over, hearing aids less effective in high winds, less ability/opportunity to release tension on flying lines rapidly to reduce speed or power of kite.	2	2	4	kite flyers, both able bodied and those with physical or mental impairment, and where appropriate their carers, and event stewards
1.20	Interaction with non-kite flyers with mental or physical impairment	√	√	√	√	2	3	5	Hazards are the same as for able bodied people who are around kites, but impact may be greater as people with mobility limitations, hearing or sight limitations or those with mental impairment may be less able to protect themselves in the event that a risk arises.	Controls are as for an able bodied flier - in all categories of this risk assessment. Additionally: Site specific briefing to identify if there is a greater likelihood that people with such impairments will be present. Event steward to monitor situation and take specific steps to provide suitable advice and assistance to people with impairments and their carers. Site identification and design should consider the needs of people with physical or mental impairment	2	2	4	kite flyers and event stewards

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1.21	Young people taking part in kiteflying <ul style="list-style-type: none"> • Limitations in the ability of the young person to control the kite 	√	√	√	√	2	2	4	Loss or injury and possibly death to either the young kite flyer or another person through impact with lines, kite or ground equipment. For young kite flyers the categories of hazard are the same as for an adult or experienced young flier. However, the impact may be greater since the flier's ability to correct or curtail a developing situation, or indeed to recognise that a risk is increasing, may be limited. Indeed young people have a propensity towards greater risk taking.	Controls are as for an experience or adult fliers - in all categories of this risk assessment. Additionally: Competent supervision to be provided for young kite flyer Supervisor to ensure other fliers are aware of the young kite flyers limitations and can provide assistance as and when required. Supervisor to discuss needs with kite flyer and where appropriate event steward in advance of flying. In consultation with young kite flyer, supervisor to brief other kite flyers on any specific requests that the young kite flyer may make to make their flying experience more enjoyable and safer for all. All fliers to be aware of others present on the flying site and to make it their responsibility to fly clear of the young flier(s). All involved to take note that equipment may not perform in the same manner when young people are flying and to assess those risks: e.g. young person may be physically less strong or lighter, reducing the ability to control a kite in a strong wind.	2	2	4	Young kite flyer, supervisor, kite flyers and event steward
1.22	Young people taking part in kiteflying <ul style="list-style-type: none"> • Inappropriate behaviour towards the young person 	√	√	√	√	2	2	4	Injury (physical or emotional) to young person.	Event organisers and clubs to consider a suitable child protection policy. Event organisers and clubs to work with children only when parents, guardians or appropriate school staff are present.	2	2	4	Club committees and event organisers

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1.23	Use of inappropriate boundary markers at public events to denote edge of arena or similar. Use of steel 'road pins' may present a particular risk of injury to young children (pin is at eye height) or a more general risk if lofted by a kite and subsequently falling to earth.	√	√	√	√	1	2	3	Injury or damage to kite or property	Event organisers should consider carefully the type of event, the requirement for appropriate segregation of members of the public from kite fliers, and the location of the anchors for large kites. Where there is a risk that a large kite could dip, care should be taken that under such circumstances the kite or its flying line will not pick up road pins marking an arena or other objects from the ground. Where road pins are in use event organisers should use an alternative where possible. Plastic pigtail electric fence posts or similar may be a suitable alternative if the use of crowd barriers is unaffordable within the context of the event.	1	2	3	Club committees and event organisers

Section 2 Dropped Objects

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High	1 Low 2 Med 3 High	2 Low 4 Med 6 High			Residual risk Likelihood	Residual risk Severity	Residual risk Impact	
NOTE VERY WELL that the Air Navigation Order specifically bans the dropping of most objects from kites, balloons or other aircraft, but permission can be sought for this to be done														
2.1	TRIANGULAR LINE RIG													
2.1.1	Line moves and can cause abrasion	√	√			3	2	5	Rope burns and other injuries, and damage to clothing etc.	Rope off ground area of drop rig.	1	2	3	kite flyers
2.1.2	Horizontal line - trip hazard and tangle hazard	√	√			3	2	5	Injury to fliers and members of public	Rope off ground area of drop rig.	1	2	3	kite flyers
2.1.3	Triangle top pulley - danger from falling quickly	√	√	√		1	2	3	Injury to fliers and members of public	Consider weight and strength of top pulley. Ensure pulley would fall in drop zone.	1	2	3	kite flyers
2.1.4	Increased risk of line failure due to line abrasion	√	√	√		1	1	2	Injury to fliers and members of public	Regular inspection of line and rig.	1	1	2	kite flyers
2.1.5	Pulleys - risk of finger trapping	√	√			1	2	3	Injury to fliers and members of public	Rope off ground area of drop rig.	1	1	2	kite flyers
2.1.6	Risk of pulley failure	√	√			1	1	2	Injury to fliers and members of public	Regular inspection of line and rig.	1	1	2	kite flyers
2.1.7	Risk of being caught by release mechanism	√	√			1	1	2	Injury to fliers and members of public	Rope off ground area of drop rig.	1	1	2	kite flyers
2.2	KITE DROP DUE TO WIND DROP													
2.2.1	Harder to bring down kite on a triangular rig	√				1	1	2	Injury to fliers	Always operate with at least two people.	1	1	2	kite flyers
2.2.2	Fliers watching dropped object not kite	√	√			2	1	3	Injury to fliers or members of public from low flying kite	Always operate with at least two people.	1	1	2	kite flyers
2.3	USE OF WIND-POWERED LINE FERRIES													

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NOTE VERY WELL that the Air Navigation Order specifically bans the dropping of most objects from kites, balloons or other aircraft, but permission can be sought for this to be done														
2.3.1	High speed return of ferry	√	√			3	2	5	Injury to fliers and members of public	Rope off ground area of drop rig. Use a braking mechanism.	1	2	3	kite flyers
2.3.2	Free fall if kite line breaks	√	√			1	2	3	Injury to fliers and members of public	Always operate within defined area	1	2	3	kite flyers
2.4	RISKS ASSOCIATED WITH DROPPED OBJECTS													
2.4.1	Parachute fails to open	√	√			2	1	3	Injury to fliers and members of public	Always operate within defined area. Four-eyes inspection of parachute packing.	1	1	2	kite flyers
2.4.2	Object falls outside designated area	√	√	√		2	1	3	Injury to fliers and members of public	Test drop conditions beforehand. Use appropriate size parachute. Use of human catchers.	1	1	2	kite flyers
2.4.3	Child injury when chasing dropped object		√	√		2	2	4	Injury to child	No (or supervised) retrieval of object. Verbal or other warning signs. Ensure drop zone is clear of kites and lines.	1	2	3	kite flyers and event steward
2.4.4	Trauma if bear is lost or stolen		√	√		1	1	2	Emotional impact on child	Verbal warning to carers. Additional safety line.	1	1	2	kite flyers
2.4.5	Thermals taking objects away and causing damage		√	√		3	1	4	Damage to property and teddy bears	Test drop conditions beforehand. Use appropriate size parachute. Use of human catchers.	2	1	3	kite flyers
2.5	RISKS ASSOCIATED WITH DROP ZONE													
2.5.1	Drop zone covers roads, power lines, sea, buildings etc.	√	√	√		2	2	4	Damage to property	Mark off drop zone.	1	1	2	kite flyers and event steward

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NOTE VERY WELL that the Air Navigation Order specifically bans the dropping of most objects from kites, balloons or other aircraft, but permission can be sought for this to be done														
2.5.2	Children in or around drop zone		√			2	2	4	Injury to children	Verbal warnings to parents/guardians. Mark off drop zone.	1	1	2	kite flyers and event steward
2.6	RISKS ASSOCIATED WITH MOTOR-DRIVEN RIGS													
2.6.1	Batteries - acid spill	√				1	2	3	Injury to kite flyers	Regular inspection of equipment.	1	2	3	kite flyers
2.6.2	Motorised pulley traps fingers	√				1	2	3	Injury to kite flyers	Rope off ground area of drop rig.	1	2	3	kite flyers
2.6.3	Flash or fire from short circuit	√	√	√		1	1	2	Injury to kite flyers and damage to property	Regular inspection of equipment.	1	1	2	kite flyers
2.6.4	Motor overheating					1	1	2	Damage to property	Regular inspection of equipment.	1	1	2	kite flyers
2.7	DROPPING FROM FIXED MASTS, TOWERS etc.													
2.7.1	Tower or mast collapse	√	√	√		1	3	4	Injury to kite flyers and damage to property	Mast serviced and safety certificate obtained.	1	3	4	kite flyers
2.7.2	Tripping over tower/mast guy ropes	√	√	√		1	2	3	Injury to people and damage to property	Markers on guy ropes. Rope off ground area.	1	1	2	kite flyers

Section 3 Large Kites

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		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
3.1	Anchor failure	√	√	√		2	2	4	Injury/damage to people or property from kite, line, or anchor (if still attached to line)	Use of appropriate anchor for ground conditions. Continual assessment of anchor point by experienced large kite flier. Use of backup anchor points. If using heavy objects (sand bags, concrete blocks, cars etc), keep on level ground. Do not bury as this increases power if the anchor fails. Close supervision of kite by experienced large kite flier. Seek to have bridles/flying line weaker than anchor. Restraining line to rear of kite such that if main anchor fails, kite de-powers. Use the smallest possible pilot to minimise lift on failure: failure of the main kite, line or anchor will cause the main kite to act as the anchor for the pilot. Agree the circumstances under which it would be unsafe to continue flying with the event organiser. Consider issues such as lack of crowd control, incoming thunderstorm, increasing wind strength or shift of wind direction, rain (which can weaken lines) etc.. This is not an exhaustive list and must be specific to the location and event.	1	2	3	kite flyers
3.2	Line failure	√	√	√		2	2	4	Injury/damage to people or property from remaining line/kite/bridles	Consider all points listed under anchor failure. Close supervision of kite by experienced large kite flier. Continual assessment of line by experienced large kite flier. Check all knots - must be appropriate for line in use. Monitoring of other nearby kites/lines. Use of over-strength line. Fly on shorter lines to reduce the area likely to be impacted by a failure and keep the kite out of the stronger wind.	1	2	3	kite flyers

Section 3 Large Kites

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
3.3	Kite failure	√	√	√		2	2	4	Injury/damage to people or property from remaining line/kite/bridles	Fly in a supervised area, the stewards to keep people clear from lines, anchor point, kites. Fly in a fenced or roped area. Keep kite in good repair. Awareness of safe wind range of kite. Continual assessment of weather conditions. Close supervision of kite by experienced large kite flier.	1	2	3	kite flyers
3.4	Launching of kite	√	√	√	√	2	2	4	Injury/damage to people or property from line/kite/bridles	Fly in a supervised area, the stewards to keep people clear from lines, anchor point, kites. Fly in a fenced or roped area. Awareness of safe wind range of kite. Launching team to be made up of experienced large kite fliers or under supervision of one experienced large kite flier who makes launch decisions.	1	1	2	kite flyers
3.5	Uncontrolled landing, kite descends in area occupied by other kite flyers or general public	√	√	√		2	2	4	Injury/damage to people or property from line/kite/bridles	Fly in a supervised area, the stewards to keep people clear from lines, anchor point, kites. Fly in a fenced or roped area. Awareness of safe wind range of kite. Continual assessment of weather conditions. Close supervision of kite by experienced large kite flier. Controlled area adequately sized to allow for uncontrolled landing. Stewards briefed to move public back if the kite flyer is concerned about changing conditions. Agree methods of communication with stewards in advance of event.	1	1	2	kite flyers

Section 3 Large Kites

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
3.6	Controlled landing	√	√	√	√	1	2	3	Injury/damage to people or property from line/kite/bridles	Fly in a supervised area, the stewards to keep people clear from lines, anchor point, kites. Fly in a fenced or roped area. Awareness of safe wind range of kite. Continual assessment of weather conditions. Landing team to be made up of experienced large kite fliers or under supervision of one experienced large kite flier who makes landing decisions.	1	1	2	kite flyers
3.7	Slipping on large kites on the ground	√	√			1	2	3	Slippery fabric could lead to injury to people	Kites on the ground in a supervised area, the stewards to keep people clear from lines, anchor point, kites. Kites on the ground in a fenced or roped area. Awareness of where kites are lying, pack them away. Landing team to be made up of experienced large kite fliers or under supervision of one experienced large kite flier who supervises the area.	1	2	3	kite flyers Stewards
3.8	Inability to recover kite if the wind lifts during flight	√	√	√		2	2	4	Increasing hazard of uncontrolled landing and/or anchor failure	Consider use of a Safety Vehicle equipped to recover the kite. Have the Safety Vehicle suitably marked and with suitable hazard beacons in use. Agree recovery protocols with event organisers prior to launch.	1	2	3	kite flyers Event organiser
3.9	Lifting of packed kite and equipment	√			√	2	2	4	Injury due to lifting of heavy equipment	See HSE advice on heavy lifting. Use more people to lift.	1	1	2	kite flyers

Section 4 Power Kiting

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
4.1	Grabbing flying lines	√	√			2	2	4	Can cause lacerations if grabbed	Wear gloves. Use sleeved lines in areas where lines may be handled.	1	1	2	kite flyer
4.2	Being hit by flying lines	√	√			1	2	3	Can cause lacerations if hit	Fly in open areas. Do not fly over members of public.	1	1	2	kite flyer event steward to ensure adequate space
4.3	Flying line breaking	√	√	√		1	2	3	Kite hitting member of public or property	Fly in open areas. Do not fly over members of public.	1	1	2	kite flyer event steward to ensure adequate space
4.4	Unsecured kite	√	√	√	√	1	1	2	Kite being blown into member of public or property causing injury or damage	Use ground suitable ground-stake when setting up. Secure kite sail with suitable heavy object.	1	1	2	kite flyer event steward to ensure adequate space
4.5	Secured/staked flying lines	√	√		√	2	1	3	Member of public tripping over lines.	Secure flying lines as close as possible to ground. Do not leave kites unattended.	1	1	2	kite flyer event steward to warn public and kite flyers about unattended kites
4.6	Launching kite	√	√		√	2	2	4	Being pulled over	Launch on edge of wind window. Start with suitable size to determine wind strength.	1	1	2	kite flyer
4.7	Flying a power kite – unharnessed.	√	√	√		1	1	2	Being dragged into member of public or hitting property	Fly in open areas. Do not fly over members of public.	1	1	2	kite flyer
4.8	Flying a power kite – harnessed	√	√	√		2	2	4	Too big a kite or too windy conditions leading to being dragged into member of public or hitting property	Only fly harnessed when fully experienced. Always fly in open areas. Do not fly over members of public. Always use a safety release system.	1	1	2	kite flyer
4.9	Landing a power kite	√	√	√		1	1	2	Hitting a member of public or property	Land on edge of wind window. Do not fly over members of public.	1	1	2	kite flyer event steward to ensure adequate space
4.10	Crashing a power kite	√	√	√		2	1	3	Kite hitting member of public or property	Fly in open areas. Do not fly over members of public.	1	1	2	kite flyer event steward to ensure adequate space

Section 4 Power Kiting

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
4.11	Letting go of a power kite	√	√	√		2	1	3	Kite hitting member of public or property	Use of kite safety device. Fly in open areas. Do not fly over members of public.	1	1	2	kite flyer event steward to ensure adequate space
4.12	Sudden changes in weather conditions	√	√	√		2	2	4	Kites becoming too powerful for wind conditions and causing all above risks	Use of kite safety device. Continual monitoring of weather conditions and advance warnings (e.g. local weather forecasts). Training on types of weather patterns.	1	2	3	kite flyer event steward

Section 5 Kite Buggying

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
5.1	Falling out of buggy	√				2	2	4	Pilot fallen out onto hard ground leading to injury from ground or buggy	Wearing of appropriate safety equipment. Seek professional tuition.	2	1	3	Pilot
5.2	Being pulled out a buggy	√				2	2	4	Kite lifting pilot out of buggy, leading to pilot injury	Wearing of appropriate safety equipment. Seek professional tuition.	1	2	3	Pilot
5.3	Buggy breaking or failure	√				1	2	3	Failure of buggy part causing crash leading to injury	Regular inspection of equipment. Use of safe equipment and repair of damaged parts before use. Wearing of appropriate safety equipment.	1	1	2	Pilot
5.4	Collision of buggy with member of public	√	√	√		1	2	3	Buggy speed and weight causing injury to public	Give right of way to members of public. Keep a safe distance from other land users. Seek professional tuition.	1	2	3	Pilot
5.5	Collision of buggy with property	√	√	√		1	2	3	Losing control and running into and causing damage to property	Keep a safe distance from all obstacles and property. Seek professional tuition.	1	2	3	Pilot
5.6	Collision of pilot with another buggy or kite	√	√			2	2	4	Personal injury or damage to equipment	Understanding full rules of passing, to pay due care and attention to each other and environment. Seek professional tuition. Keep a safe distance from other pilots and kites. Use of adequate safety equipment.	1	2	3	Pilot
5.7	Sudden changes in weather conditions.	√	√	√		2	2	4	Kites becoming too powerful for wind conditions and causing all above risks	Use of kite safety device. Continual monitoring of weather conditions and advance warnings (e.g. local weather forecasts). Training on types of weather patterns.	1	2	3	Pilot Event steward (if applicable)

Section 6 Kite Landboarding

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
6.1	Falling off kite landboard	√				2	2	4	Pilot falling off onto hard ground leading to injury from ground or board	Wearing of appropriate safety equipment. Seek professional tuition	2	1	3	Pilot
6.2	Being pulled off kite landboard	√				2	2	4	Kite lifting pilot off kite landboard, leading to pilot injury	Wearing of appropriate safety equipment. Seek professional tuition.	2	1	3	Pilot
6.3	Kite landboard breaking or failure	√				1	2	3	Failure of kite landboard part causing crash leading to injury	Regular inspection of equipment. Use of safe equipment and repair of damaged parts before use. Wearing of appropriate safety equipment.	1	1	2	Pilot
6.4	Collision of kite landboard with member of public	√	√	√		1	1	2	Uncontrolled kite landboard causing injury to public	Give right of way to members of public. Keep a safe distance from other land users. Seek professional tuition.	1	1	2	Pilot
6.5	Collision of kite landboard with property	√	√	√		1	1	2	Losing control and running into and causing damage to property	Keep a safe distance from all obstacles and property. Seek professional tuition.	1	1	2	Pilot
6.6	Collision of pilot with another kite landboard or kite	√	√			2	2	4	Personal injury or damage to equipment	Understanding full rules of passing, to pay due care and attention to each other and environment. Seek professional tuition. Keep a safe distance from other pilots and kites. Use of adequate safety equipment.	1	2	3	Pilot
6.7	Sudden changes in weather conditions	√	√	√		3	2	5	Kites becoming too powerful for wind conditions and causing all above risks	Use of kite safety device. Continual monitoring of weather conditions and advance warnings (e.g. local weather forecasts). Training on types of weather patterns.	2	2	4	Pilot Event steward (if applicable)

Section 7 Kite Boarding (Surfing)

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
7.1	Falling off kite board	√				1	2	3	Pilot falling off leading to injury or drowning	Wearing of appropriate safety equipment. Use of kite safety device. Seek professional tuition.	1	1	2	Pilot
7.2	Falling off kite board	√				1	2	3	Board hitting pilot leading to injury or death	Wearing of appropriate safety equipment. Use of kite safety device. Seek professional tuition.	1	1	2	Pilot
7.3	Kite breaking or failure	√				1	1	2	Failure of kite or lines causing crash leading to injury to pilot	Use of safe equipment. Repair of damaged parts before use. Wearing of appropriate safety equipment. Use of kite safety device.	1	1	2	Pilot
7.4	Kite breaking or failure	√		√		1	2	3	Failure of kite or lines causing crash, leading to injury to member of public	Use of safe equipment. Repair of damaged parts before use. Wearing of appropriate safety equipment. Use of kite safety device.	1	2	3	Pilot
7.5	Kiteboard breaking or failure	√				1	1	2	Failure of kiteboard causing being stranded out at sea or drowning	Use of kite to control return to shore. Inform other beach users and officials of loss of equipment at sea.	1	1	2	Pilot Event steward (if applicable)
7.6	Collision of kite board with member of public	√		√		2	2	4	Uncontrolled kite board hitting another water user causing injury	Give right of way to members of public. Keep a safe distance from other water users.	1	2	3	Pilot
7.7	Collision of kite board with property	√		√		1	1	2	Insufficient control of kiteboard causing sailing into and damage to property	Keep a safe distance from all obstacles and property.	1	1	2	Pilot
7.8	Collision of pilot with another kite boarder or kite	√		√		2	2	4	Personal injury or death to pilot or another kite boarder, or damage to either pilot's equipment	Understanding full rules of navigation, to pay due care and attention to each other and environment. Seek professional tuition. Keep a safe distance from other pilots and kites. Use of appropriate safety equipment.	1	2	3	Pilot
7.9	Sudden changes in weather conditions.	√	√	√		3	3	6	Kites becoming too powerful for wind conditions and causing all above risks	Use of kite safety device. Better training on types of weather patterns. Continual monitoring of weather conditions and advance warnings (e.g. local weather forecasts).	2	2	4	Pilot Event steward (if applicable)

Section 8 Kite Snowboarding (or Skiing)

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kite flyers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
8.1	Falling off snow board or skis	√				1	2	3	Pilot falling off leading to injury or death	Wearing of appropriate safety equipment. Use of kite safety device. Seek professional tuition.	1	1	2	Pilot
8.2	Kite breaking or failure	√				1	2	3	Failure of kite or lines causing crash leading to injury to pilot	Use of safe equipment. Repair of damaged parts before use. Wearing of appropriate safety equipment. Use of kite safety device.	1	1	2	Pilot
8.3	Kite breaking or failure	√		√		1	2	3	Failure of kite or lines causing crash, leading to injury to member of public	Use of safe equipment. Repair of damaged parts before use. Wearing of appropriate safety equipment. Use of kite safety device.	1	2	3	Pilot
8.4	Collision of kite snowboard with member of public	√	√	√		2	2	4	Uncontrolled snow board or skis hitting another person causing injury	Give right of way to members of public. Keep a safe distance from other snowboard users or skiers.	1	2	3	Pilot
8.5	Collision of kite snowboard with property	√	√	√		1	1	2	Insufficient control of snowboard causing skiing into and damage to property	Keep a safe distance from all obstacles and property.	1	1	2	Pilot
8.6	Collision of pilot with another kite snowboarder or skier	√		√		2	2	4	Personal injury to pilot or another snowboarder, or damage to either pilot's equipment	Understanding full rules of ski navigation, to pay due care and attention to each other and environment. Seek professional tuition. Keep a safe distance from other pilots and kites. Use of appropriate safety equipment.	1	2	3	Pilot
8.7	Sudden changes in weather conditions.	√	√	√		3	3	6	Kites becoming too powerful for wind conditions and causing all above risks	Use of kite safety device. Continual monitoring of weather conditions and advance warnings (e.g. local weather forecasts). Training on types of weather patterns.	2	2	4	Pilot Event steward (if applicable)

Section 9 Operation of drones at a kite event

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kitefliers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
NOTE Drones are regulated by the CAA through the Air Navigation Order. This Risk Assessment ONLY relates to the use of drones in proximity to kites and/or at kite events. It does NOT consider all risks associated with drones. See also risk assessment for operation of helicopters at kite events														
9.1	Drone pilot loses control.	√	√	√	√	1	3	4	Uncontrolled impact with people or property with consequent risk of injury or loss	Request drone pilots not to fly when kites are being flown. Provide separated areas for drone and kite flight. Brief drone pilots and kite flyers on their respective areas for flight. Check drone pilot is complying with the drone code. Drones to be flown minimum 50m from people and property, 150m from crowds and built up areas. When introduced, check registration of any drone weighing more than 250 g If drones are being operated, organiser to check professional competency to operate a drone e.g. licensed media operator. Drones not to be operated over people or property except as operated in accordance with an exemption issued by CAA. Controls also to incorporate those under general kites 1.2.	1	2	3	Organiser Drone pilot Kite flyer

Section 9 Operation of drones at a kite event

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kitefliers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
9.2	Drone collides with kite or kite line.	√	√			1	3	4	Damage to kite and/or line. Kite cut free with consequent impact with people or property. In extreme circumstances, death, serious injury or damage to property.	Request drone pilots not to fly when kites are being flown. Brief drone pilots and kite flyers on their respective areas of flight. Brief on adequate separation of kites and drone. Check drone pilot is complying with the drone code. Drones to be flown minimum 50m from people and property, 150m from crowds and built up areas. When introduced, check registration of any drone weighing more than 250 g If drones are being operated, organiser to check professional competency to operate a drone e.g. licensed media operator. Drones not to be operated over people or property except as operated in accordance with an exemption issued by CAA. Controls also to incorporate those under general kites 1.2.	1	2	3	Organiser Drone pilot Kite flyer
9.3	Drone lands in an uncontrolled manner.	√	√	√		1	3	4	In extreme circumstances, death, serious injury or damage to property.	Brief drone pilots and kite flyers on their respective areas of flight. Brief on adequate separation of kites and drone. Check drone pilot is complying with the drone code. Drones to be flown minimum 50m from people and property, 150m from crowds and built up areas. When introduced, check registration of any drone weighing more than 250 g If drones are being operated, organiser to check professional competency to operate a drone e.g. licensed media operator. Drones not to be operated over people or property except as operated in accordance with an exemption issued by CAA. Controls also to incorporate those under general kites 1.2.	1	2	3	Organiser Drone pilot Kite flyer

Section 10 Operation of aircraft (helicopters) at a kite event

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kitefliers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
10.1	Management of aircraft in flight transit route towards event	✓	✓	✓		1	3	6	Arrival of aircraft over event site without warning. Aircraft accident leading to loss of life.	Outside of Event control. Height restriction applied from CAA to ensure Air NOTAM issued. High flying kites should carry line markers in line with CAA permissions. A height guidance kite should be considered for practicality at every event. Comply with any instructions in the CAA permission. Event steward to monitor high flying kites and check line lengths if appropriate.	1	3	6	Responsibility for aircraft subject to Pilot/MOD/Police/ Coastguard/CAA control. On-site Event stewards for all on site activity. Event organiser to check that CAA height clearance is applied for.
10.2	Management of on-site public and organised kite flying displays during approach time to event.	✓	✓	✓	✓	1	3	6	In extreme circumstances, death, serious injury or damage to property. Kites and persons within aircrafts operating/flying/landing window and zone	Designated roped off area to be used as landing zone with controlled access. Identify control point to enable all action to be co-ordinated. Event stewards to be identified by tabard, sash or similar to ensure authority is recognised. Kite flyers briefing/public address/notices in plain sight before start of each day's flying to inform of site specific risks and of controls in force during the event. Kites to be attended at all times, monitored by event steward. If kites are not attended event steward empowered to take down if this can be done safely. Event steward to be empowered to order a 'take down' if conditions become difficult, managed by way of klaxon or similar warning to alert all fliers.	1	2	5	On-site Event organiser and event stewards for all on site activity.

Section 10 Operation of aircraft (helicopters) at a kite event

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kitefliers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
10.3	Lack of initial crowd and kite control or notification within a specified time limit from being told/notified of impending arrival.	✓	✓	✓		2	3	5	In extreme circumstances, death, serious injury or damage to property.	Event stewards/organiser to be easily identified and contacted throughout the event. Kites and event activities to be monitored by the event stewards. Weather conditions (wind direction) to be monitored. Public notices warning of the possible dangers. Use of Public Address (PA) with 'Air Horns' to make all aware of impending danger.	1	2	4	Event Organiser. Event steward, attending Police and specific designated kite fliers and liasons.
10.4	Landing procedure/action. Debris/equipment/kites/personal belongings being blown about by down-draft of rotors.	✓	✓	✓	✓	2	2	5	Injury sustained by debris and materials striking bystanders. Damage to adjacent vehicles, marquees, buildings and equipment by 'flying' debris. Ground level equipment not secured correctly becoming unstable and possibly free to move. Grounded kites becoming loose and blowing around creating a hazard.	Notice of actions to be enforced in the event of a proposed landing to be published at the control point. Event stewards to be empowered to request a 'take down' and supported by the Event Organiser and Police. Laid out lines for multi-line kites to be placed directly parallel and next to the barrier rope or attended at all times, kitefliers to be briefed accordingly. Grounded kites to be attended at all times by kitefliers and enforced by event stewards. Consider whether children may be a problem with respect to the stakes or kites left unattended and specific steps to be taken if necessary. Kites not to left unattended, to be monitored by event stewards. All adjacent structures and equipment to be closely monitored throughout landing actions by event stewards and additional secure measures taken as required.	1	2	4	Event Organiser. Event steward, attending Police and specific designated kite fliers and liasons.

Section 10 Operation of aircraft (helicopters) at a kite event

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kitefliers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
10.5	Injuries to members or public	✓	✓	✓	✓	1	2	4	Distress, injury and possible legal actions on the event or organisation.	Mobile phone communication to all emergency services, CAA and local airport or controlling authority. Event Organiser/ stewards to check intended communications and availability of required numbers for all concerned. Control point identified as contact point to ensure prompt response. Event steward or liaison officer to be aware of the organiser's arrangements and note on the site specific risks, for briefing to kitefliers and public as required.	1	1	2	Event Organiser. Event stewards.
10.6	Management of arriving Emergency Service vehicles/staff. Movement of motor vehicles on site causing injury or damage.	✓	✓	✓	✓	1	3	4	Distress, injury and possible legal actions on the event or organisation.	Mobile phone communication to all emergency services, CAA and local airport or controlling authority. Event Organiser/ stewards to check intended communications and availability of required numbers for all concerned. Event stewards/organiser to be easily identified and contacted throughout the event. Access route(s) to be kept clear and under Event Steward control as required.	1	2	3	Event Organiser. Event steward. Security/Police available on site.
10.7	Management of crowd/public control, especially for young persons and possible partially disabled visitors.	✓		✓	✓	2	1	4	Distress, injury and possible legal actions on the event or organisation.	Event stewards/organiser to be easily identified and contacted throughout the event. Access route(s) to be kept clear and under Event Steward control as required.	1	1	2	Event Organiser. Event steward. Security/Police available on site
10.8	Hearing impaired people are unaware of any announcement or alert made in response to an incident	✓	✓	✓	✓	1	1	2	Risk that person does not respond to an alert that could impact their safety. Likelihood reduced as any members of the public with special needs are unlikely to be alone.	Event steward to monitor attendance for any people with special needs and consider whether to offer help, noting need to respect peoples individual circumstances.	1	1	2	Event Organiser. Event steward. Security/Police available on site

Section 10 Operation of aircraft (helicopters) at a kite event

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kitefliers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
10.9	Interaction with animals (e.g. dogs/animals at the event)			√	√	1	2	3	Injury to animal and owner.	Event stewards to give advance warning. Publicity to inform animal controllers about hazards.	1	2	3	Event Organiser. Event steward. Security/Police available on site
10.10.	Aircraft flying low over road causes driver distraction or accident	√	√	√	√	1	3	4	Injury and possibly death of car driver, passengers and spectators.	Outside of Event control although local Police may have control of adjacent access roads.	1	3	4	Outside of Event Control.Police available on site
10.11	Leaving/take-off procedure/action. Debris/equipment/kites/personal belongings being blown about by down-draft of rotors.	√	√	√	√	2	2	5	Injury sustained by debris and materials striking bystanders. Damage to adjacent vehicles, marquees, buildings and equipment by 'flying' debris. Ground level equipment not secured correctly becoming unstable and possibly free to move. Grounded kites becoming loose and blowing around creating a hazard.	Notice of actions to be broadcast prior to proposed take-off from the PA/Control point. Event stewards to be empowered to request movement of public/equipment as required. Grounded kites to be attended at all times by kitefliers and enforced by event stewards. Consider whether children may be a problem with respect to the stakes or kites left unattended and specific steps to be taken if necessary. Kites not to left unattended, to be monitored by event stewards.All adjacent structures and equipment to be closely monitored throughout take-off actions by event stewards and additional secure measures taken as required.	1	2	4	Event Organiser. Event steward, attending Police and specific designated kite fliers and liasons.
10.12	Management of aircraft in flight leaving event	√	√	√		1	3	5	Aircraft accident leading to loss of life.	Outside of Event control. Event steward to monitor aircraft leaving. No permission to fly until 'all-clear' PA announcement given.	1	3	5	Responsibility for aircraft subject to Pilot/MOD/Police/ Coastguard/CAA control. On-site Event stewards for all on site activity. Event organiser to give 'all clear' PA permission out to public.

Section 10 Operation of aircraft (helicopters) at a kite event

Hazard ID	Hazard	Category				Before Controls			Consequence	Control	After Controls			Responsibility
		Impacts kitefliers	Impacts people at event	Impact outside control area	Under organiser control	1 Low 2 Med 3 High Likelihood	1 Low 2 Med 3 High Severity	2 Low 4 Med 6 High Impact			1 Low 2 Med 3 High Residual risk Likelihood	1 Low 2 Med 3 High Residual risk Severity	2 Low 4 Med 6 High Residual risk Impact	
10.13	Management of leaving Emergency Service vehicles/staff. Movement of motor vehicles on site causing injury or damage.	✓	✓	✓	✓	1	3	4	Distress, injury and possible legal actions on the event or organisation.	Mobile phone communication to all emergency services, CAA and local airport or controlling authority. Event Organiser/ stewards to check intended communications and availability of required numbers for all concerned. Event stewards/organiser to be easily identified and contacted throughout the event. Access route(s) to be kept clear and under Event Steward control as required.	1	2	3	Event Organiser. Event steward. Security/Police available on site.