



**St Anne's College and St. Peter's College,
University of Oxford**

May Ball 2017

Fire Safety Risk Assessment

Sherbourne Park, Warwickshire, CV358AP

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1. Introduction

1.1 This fire safety risk assessment has been carried out for the triennial black tie Ball held by St. Anne's and St. Peter's Colleges, Oxford University. The event will be held on Saturday, 13th May 2017 at Sherbourne Park in Warwickshire, CV35 8AP.

1.2 There have been 1160 tickets sold for this event. The majority of guests in attendance will be between the ages of 18 and 30, but none will be below the age of 18. The cost of the ticket includes travel to the venue from Oxford, food, drink (both alcoholic and non-alcoholic), live music and performance, a silent disco, fairground rides, fireworks, and the return journey back to Oxford.

1.3 The appointed Fire Safety Manager for the night is James Knox, head of Safe Security Ltd. James has run over 200 college balls in the past 20 years, all of which follow similar formats to this event, in addition to other large scale corporate events. He has prior experience of the role of Fire Safety Manager.

1.4 Safe Security Ltd. will provide the security for the night. Fourteen fully SIA licensed guards will be patrolling the site. Each of these guards will be equipped with a radio, which will be the main communications system in the event of an emergency. They will also each have megaphones, and will be wearing fluorescent jackets. The guards, as well as enforcing security and crowd control, will be in charge of facilitating emergency procedures in the event of a fire, including an evacuation plan.

1.5 Also working on the night will be 11 members of the Ball committee, and 13 further student workers. 20 of these people will also be equipped with radios.

1.6 There will be double fire extinguisher stands, for both powder and water, stationed by every temporary structure and by the power generators. This totals 7 stands, and 14 extinguisher units across the site.

1.7 For coherence, the site has been divided in this assessment into separate areas. These are listed in the following section, and are referred to throughout the document under the names given to them in that initial list.

1.8 This fire safety plan will seek to identify fire hazards across the event and to explain the processes by which the event organisers will reduce the risk of those hazards causing harm. Frances Ball, head of logistics and security for the event, has carried out this assessment.

2. List of Site Areas . Please note, a labelled satellite view of the site is attached as Appendix 1. “FAP” denotes a fire assembly point.

2.1 Main Arena. This is the term for the large field directly opposite the front of the house and the drive, which lies behind a trench called a ha-ha. It will be accessible by a raised walkway

- This area will contain the largest (45m x15m) marquee, housing a stage for live music and dance space for up to 1200 people for the silent disco, which commences at 1am, and will also contain a 40 foot bar.
- The main arena is also where the ferris wheel, the dodgems, the casino, and the catering vans (Taste Tibet, Jamon Jamon, Verrecchia Catering, Wafflesticks, TOST and Barista Baby) will be situated.
- There will also be a separate bar, run by London Mixology, in a saddle tent at the rear of this arena.

2.2 Orchard. This is the term given to the section of garden that contains rows of trees, and a weeping willow. It will not have any structures contained in it, but it acts as a thoroughfare for the following gardens:

2.3 Sunken Garden. This refers to the area behind the pool (which will be fenced off), and divided from the orchard by a row of hedges. It will house a stretch tent intended for seating, and other outdoor seating options.

2.4 Hanging Lanterns Garden. This refers to the enclosed space that is accessible by two gates. One leads into the garden from the orchard, and the other leads out of it to the adjacent secret garden. The space will have no structures, but will be hung with coloured Chinese lanterns throughout.

2.5 Secret Garden. This is a further enclosed space that is accessible from the hanging lanterns garden, and from the sunken garden. It is less enclosed than the hanging lanterns garden, but will be separated from the tennis court area and the tenant's houses area by fencing. This fencing will be removable; in the event of an emergency.

2.6 Second stage garden. This smaller stage is a saddle span tent that faces the side wing of the house, situated at the end of the fireworks avenue but on the near side of the ha-ha. There will also be two bars in place facing this tent, at either side of the garden. This is next to the orchard, and next to the fenced-off pool. It faces the first of the fire assembly points.

2.7 Fire Assembly Points. The first of these will be in the second stage garden. This will be used in the event of a fire on the main area – guests will cross the walkway and come into the garden area that is separated from the main area by the ha-ha, the drive, a brick wall and rows of hedges. The second will be located in the main area. This will be used in the event of a fire in the gardens; guests can leave the gardens either past the second stage tent or round the back of the property by the tennis courts, should the fire be in one of the smaller gardens. In the event of the need to evacuate the whole area quickly, for example should a fire break out in both the main area and the garden area, then the field to the left of the entry road is a suitable evacuation point for the entire contingency of guests and staff.

3. Fire safety risk assessments for main arena;

MAIN ARENA; subsection	Potential hazards	Extent of risk in the area	Measures taken to reduce risk
3.1 Main marquee. 45mx15m clearspan marquee, with 8x6m stage structure.	Electric systems for sound, and for lighting will be suspended over the stage on a truss structure. There will be black backing material behind the stage to enhance the effect of the lighting system. Throughout the tent, further lighting will be hung on additional trusses to provide dancefloor lighting.	This is an enclosed area that has the capacity to hold up to 1200 people. The risk of arson at this kind of event is low (based on the findings of our security company, who have worked at over 200 events of the same format), but the risk of accidental fire by (for	All materials used by the production company are NDFR, and are checked regularly. Both the marquee and the backing material have been treated in this way. There will be emergency exit signs above all exits to the marquee and

Structure provided by Origin Technical Productions	The main sources of fuel for a potential fire would be the marquee itself, and the backing material behind the stage. It is an enclosed space and would therefore trap smoke within it, raising the temperature and the risk of fire by convection as well as conduction.	<p>example) careless disposal of cigarettes is greater.</p> <p>Exits must be clearly marked, and emergency illumination in place in order to facilitate rapid evacuation of a large crowd in an emergency.</p>	<p>emergency illumination provided throughout the marquee.</p> <p>A powder fire extinguisher for electrical fires will be provided for the main marquee, as well as water extinguishers for fires started within the marquee but not by electrics; there will be no smoking signs throughout the marquee, and outside it. As this tent will be well stewarded, manual call points will be avoided due to the risk of malicious use. Security guards in the marquee will have radios to call for the music to be stopped, and megaphones to control crowd movement.</p>
<p>3.2 Catering vans</p> <p>Veracchia Catering Taste Tibet TOST Jamon Jamon Barista Baby Wafflesticks</p>	Cooking hazards apply to the vans producing hot food. Hot surfaces left unattended, close to loose flammable material, are a potential hazard.	The vans will be open for serving food to customers throughout the night, and are expected to be regularly attended. The risk to guests is not great as guests will never be in an enclosed space, but the risk to workers is greater as they will be in constant close proximity to hot surfaces and inside the enclosed space.	<p>Catering vans will be providing their own fire blankets for fires created in food preparation, or in workspaces.</p> <p>The manager of each respective van will ensure that no unauthorised persons will enter the van, and that no overcrowding inside it will take place. Fire extinguishers will be placed in the area of the main arena that is reserved for catering vans. They will not be in excess of 200m from any given catering van. Additionally, vans will not be parked in close proximity to each other, to minimise risk of spreading fire.</p>

<p>3.3 Bar tent</p> <p>S500 Saddlespan tent structure containing 20' wide bar.</p> <p>Structure provided by Origin Technical Productions, bar stocked and staffed by London Mixology</p>	<p>This open plan structure will be lit by LED flood lights.</p> <p>Alcohol is flammable, and if spilled on the bar surface could pose a risk.</p>	<p>As a service bar, guests will not be able to wait for extended periods of time at the bar – ie. they will not be able to smoke at the bar. However, this in itself does not eliminate the risk of cigarettes coming into contact with alcohol.</p> <p>The bar acts as a roofing structure only; it is not an enclosed space and does not pose significant risk to guests as a fire or smoke trap.</p>	<p>Smoking will not be permitted at the bar, and cigarette bins will be provided at a short distance from the marquee itself. The material of the marquee is NDFR.</p>
<p>3.4 Fairground</p> <p>Ferris wheel Dodgems Casino</p>	<p>The fire risks posed by the fairground rides are largely based on the risk of electrical failures in the machines. Any drink spillage on the electrics could also cause a hazard.</p> <p>Escape from the rides in the event of a fire could be slow, in the case of the Ferris wheel.</p>	<p>The rides are properly maintained and assessed for structural soundness and safety, and so should not pose a great risk of fire when properly used.</p> <p>The dodgems and the casino should not have a longer than average escape time. However, the Ferris wheel will be escapable only at a speed that is safe to turn the wheel.</p>	<p>No drinks of any kind will be permitted on the rides. Smoking will likewise be banned from the rides and around the perimeter of the rides.</p> <p>All rides will be placed at a short distance from each other. This is to minimise risk of fire by conduction. The Ferris wheel will be placed the closest of the three to the Fire Assembly Point of the main arena in order to minimise travel distance.</p>

4. Fire safety risk assessment for the second stage area

Structure	Potential hazards	Extent of risk in the area	Measures taken to reduce risk
<p>4.1 Second stage</p> <p>S2000 Saddlespan structure, covering a 4x3m stage. Basic stage lighting to be mounted on truss framework. Note; no backing material for the</p>	<p>Electrical faults could cause a fire in the vicinity. As an open structure, there is more wind flow through the tent than there will be in the larger but enclosed marquee.</p>	<p>As the audience will be controlled in this area and kept away from electrics, there should be very little issue with malicious interference. As the tent is fire retardant, it should provide a safe</p>	<p>The tent material is NDFR. There will be no smoking signs around the tent, and the audience will be kept at a distance from the stage and the electrical equipment even should they smoke inside it.</p>

stage. The hedgerows on either side of the tent will be illuminated by LED battens.		barrier against, for example, careless use of cigarettes. All electrical systems throughout the site are being installed by a professional company; but should something go wrong, the appropriate fire extinguishers will be located at a suitable distance.	Fire extinguishers will be located in the garden area to the side of the second stage.
4.2 Bar tents Two “Chinese hat” marquees, each 6mx3m.	Alcohol is flammable, and if spilled on either of the bar surfaces could pose a risk.	As service bars, guests will not be able to wait for extended periods of time at either bar – ie. they will not be able to smoke at the bar. However, this in itself does not eliminate the risk of cigarettes coming into contact with alcohol within the tent structure.	Smoking will not be permitted underneath the bar tents, and cigarette bins will be provided at a short distance – within the gardens of the second stage. The material of both marquees is NDFR.

5. Fire safety risk assessment for the secret garden, the sunken garden, the hanging lanterns garden, and the fireworks avenue

Area	Potential hazards	Extent of risk in the area	Measures taken to reduce risk
5.1 Sunken garden Stretch tent with stage for acoustic and spoken word poetry Seating areas	The stretch tent is the only marquee on site to be furnished with soft furnishings; these are a hazard as they are closely packed and would act as fuel for a fire. The tent is	The soft furnishings pose a risk for fire safety as they would act as fuel and would facilitate the rapid spread of a fire should it occur. Cigarettes are likely to be a main potential	Smoking will be prohibited in the tent area. Signs will be put in place to inform guests of this, as it may appear ambiguous since it is an open air tent. There will be alternative outdoor

	<p>open at the sides, which means that wind flow through the tent may be significant.</p> <p>The tent covers a small stage with small scale electric systems for decorative lighting and a microphone.</p>	<p>cause of fire in this situation.</p> <p>The electrics will be under cover and away from guests, but pose the same level of risk as all other electrics on site.</p>	<p>seating provided, as a smoking point.</p> <p>Fire extinguishers will be placed near the perimeter of the tent and will be clearly marked by a fire safety point sign.</p>
5.2 Secret garden	<p>There are no structures in this area, but it is mentioned here because it is a potential escape route should a fire take place in the neighbouring gardens, rendering the normal escape route inaccessible. This is unlikely, but should it occur, then the fencing that bars the exit past the tenants' housing will be moved by the security guard on duty in the garden. The fencing will be easily removable.</p>	<p>Guests are allowed into this area, but there are no structures in it. Should guests want to smoke in this area they would be allowed to do so – this could cause a risk in this more remote part of the site.</p>	<p>Cigarette bins to be provided in this area.</p> <p>There will be a security guard patrolling this garden, so should a fire start even in this more remote part of the site there would still be a rapid response. Fire extinguishers that are located in the sunken garden are accessible from the secret garden.</p>
5.3 Hanging lanterns garden	<p>The hanging Chinese lanterns are powered by electric cables that form a trellis over the garden. The lanterns hang from this trellis. This garden is an enclosed space designed to create a den of coloured light.</p>	<p>As a cluster of electrical items in an enclosed space, the lights present a risk. Two exits are built into the walls of the garden. Should a fire occur here, it is likely that guests would need to split and leave via both exits in order to make the escape time as efficient as possible, as the lights would spread fire rapidly should an electrical fault occur.</p>	<p>A fire extinguisher for electrical fires will be located in the orchard area just outside the hanging lanterns garden. The priority would be to get guests out of the area as fast as possible; a security guard equipped with a megaphone will be on duty in this area, with the duty of crowd control.</p>

6. Fire safety risk assessment for the rest of the site

Area	Potential hazards	Extent of risk in the area	Measures taken to reduce risk
6.1 Generators	As the main source of power for the large structures on site, this is the site of a huge amount of electricity.	Should an electrical fault occur there is the possibility of a fire being sparked and fed by oxygen in the air. The generators cannot be placed close to any flammable material.	The generators will be strictly cordoned off from guests and positioned at a distance from any flammable material. A powder fire extinguisher for electrical fires will be placed in proximity to the generators, for use solely for the generators. They will be regularly checked through the night by the security team and by the Fire Safety Manager.
6.2 Entry road	This is where coaches will come into the site. It is also a road that would need to be crossed in the unlikely event of a whole site evacuation, and the road down which fire engines would enter the venue if they were called. It is a private road with access to the venue and is only wide enough for one vehicle.	There will be lighting positioned beneath the trees on this avenue. It is highly unlikely that these lights will fail, but should they do so they would pose a risk on this road and would in that case hinder one of the possible escape routes.	The lights will be checked by the production company before the start of the event. If a fire were to start at any point on the entry road, then guests would be prevented from walking down it by security guards. The fire services would be called.
6.3 Driveway	There are no major structures here bar fencing, which protects the owner's croquet lawn at the front of the house. However, it is where the gardens area and the main arena meet, and is likely to have people crossing it at any given point during the course of the night.	There is little risk of a fire here beyond the possibility of accidental fire by cigarettes or lighters.	Bins will be provided for cigarettes in this area. Security guards will also be around this area regularly to ensure that no intruders come in through the back entrance.

6.4 Cloakroom marquee	Tightly packed, enclosed marquee with coats and other belongings acting as potential fuel.	This is a relatively high risk area due to the nature of the potential fuel inside the tent.	Cloakroom will only be accessible by marshals and student workers – guests will hand their coats over to be stored. Cloakroom marquee material will be NDFR.
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7. Clarification of escape routes

7.1; To the Fire Assembly Point on the main arena.

This is the initial congregation point for any incident on the main arena in either the main marquee, the fairground rides, or the bar structure.

Guests will be directed here using the security communications structure as defined in our Event Management Plan. From this point, guests will either be held while the incident is being dealt with, or they will be transferred across the walkway and through the driveway to the fire assembly point in the gardens.

It will also be the fire assembly point that guests will be directed to in the event that there is a fire in one of the enclosed gardens which has blocked their route to the F.A.P. mentioned in section 7.2. If this is the case they will be escorted to the main arena fire assembly point via the back route, past the tennis courts.

7.2 F. A. P. in front of the second stage

As indicated in section 7.1 this is the area that will be used for guests being evacuated from an incident in the main arena. It is also the first point of call for guests to reach should there be an incident in the enclosed gardens.

If the risk in the gardens is too great to keep guests at this F.A.P. then they will be transferred to the main arena.

7.3 Emergency site for total site evacuation

The field to the left of the entry road is the designated site should the entire main event site need to be evacuated quickly – ie. If there is a fire in both the gardens and in the main arena. It has been selected as it is a large open space with the capacity to hold every person on site, away from imminent danger.

Appendix 1: satellite view of site

