

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

SITE SPECIFIC RISK ASSESSMENT FOR [REDACTED]

[REDACTED]
1

[REDACTED]

[REDACTED]

1 [REDACTED]

[REDACTED]

[REDACTED]

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

DISPLAY DETAILS

ASSESSOR NAME:

Glenn Plume

CLIENT:

[REDACTED]

JOB TITLE:

Displays/Company Director

EVENT:

[REDACTED]

ASSESSMENT DATE:

Tuesday 19th July 2011

EVENT DATE:

[REDACTED]

REVIEW DATE:

Saturday 30th July 2011

FIRING TIME:

2230hrs approx

DURATION:

3-4 minutes

VENUE:

[REDACTED]

FIRING SITE:

The firing site is to the North East of [REDACTED] House. It is grassed and mainly flat.

SAFETY DISTANCE:

The distance between the aerial shells and the nearest spectators will be approx 180 metres. We are also firing close proximity stage/arena material raised on cherry pickers either side of and behind the stage. These will be approx 5-10 metres horizontally to the audience.

SAFETY ZONE:

The fallout area will be secured and stewarded by the client. The anticipated fallout area is shown on the site diagram below.

WIND STRENGTH/
DIRECTION:

When the site was visited the wind was light and variable.

NEAREST AIRPORT:

The CAA have been told about the display and will take the necessary actions to inform interested parties.

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Hazard: Localised fire of display equipment, caused by firework malfunction, with associated risk of unintentional ignition of firework effects.

Risk Groups: Display Operators

Uncontrolled Risk: Likelihood 3, Severity 3, Risk Index 9 – Med/High

Control Measures: Fire extinguishers held at firing area.
Operators to wear Personal Protective Equipment
Firing area clear of flammable materials, debris, etc

Additional Control Measures: Observations by operators throughout display.
Display to be curtailed until fire extinguished if necessary.

Controlled Risk: Likelihood 3, Severity 1, Risk Index 3 – Low

Hazard: Damage to property/equipment caused by falling firework debris.

Risk Groups: Buildings, structures, parked vehicles, road traffic, contractor equipment

Uncontrolled Risk: Likelihood 4, Severity 3, Risk Index 12 – High

Control Measures: Identify, isolate and secure area for controlled fallout of debris (fallout area).
Establish likely wind direction and strength.
Material selected to suit site.

Additional Control Measures: Establish actual wind conditions prior to display.
Consider suitability of fallout area, and consider test firing.
Monitor fall of debris during display.

Controlled Risk: Likelihood 1, Severity 3, Risk Index 3 – Low

Hazard: Injury from firework debris

Risk Groups: Display Operators, spectators, stewards, contractors

Uncontrolled Risk: Likelihood 4, Severity 4, Risk Index 16 – High

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Control Measures: Firing staff to wear Personal Protective Equipment.
Identify, isolate and secure area for controlled fallout of debris (fallout area).
Establish likely wind direction and strength.
Material selected to suit site.

Additional Control Measures: Establish actual wind conditions prior to display.
Consider suitability of fallout area, and consider test firing.
Monitor fall of debris during display.

Controlled Risk: Likelihood 1, Severity 4, Risk Index 4 – Low

Hazard: Nuisance and distraction caused by noise.

Risk Groups: Local residents, domestic animals and livestock.

Uncontrolled Risk: Likelihood 4, Severity 1, Risk Index 4 – Low

Control Measures: Event Organiser responsible for arranging notification of local residents.
Assessment of acceptable noise limits on site visit.

Additional Control Measures: Demo of quiet fireworks if requested.

Controlled Risk: Likelihood 3, Severity 1, Risk Index 3 – Low

Hazard: Nuisance and distraction to road traffic.

Risk Groups: Motorists, Pedestrians

Uncontrolled Risk: Likelihood 3, Severity 3, Risk Index 9 – Med/High

Control Measures: Liaison with police/local authority if display in built-up area or within 200m of motorway

Additional Control Measures: Action as advised by police/local authority.

Controlled Risk: Likelihood 2, Severity 2, Risk Index 4 – Low

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Hazard: Additional hazards relating to other contractors on site.

Risk Groups: Display operators, contractors, performers, stewards, spectators.

Uncontrolled Risk: Likelihood 3, Severity 4, Risk Index 12 – High

Control Measures:

- Assess risks on site visit.
- Liaison with client and contractors to agree de-confliction.
- Provide and obtain operating procedures where doubt exists.

Additional Control Measures: Senior Firer on site acts as liaison with client and contractors.

Controlled Risk: Likelihood 2, Severity 2, Risk Index 4 – Low

Hazard: Any hazard requiring delay or immediate cessation of the display

Risk Groups: As relevant

Uncontrolled Risk: Likelihood 3, Severity 3, Risk Index 9 – Med/High

Control Measures: Communication between client/event organiser and Senior Firer to be agreed prior to the display.

- Visual and radio communication between members of firing team.
- Monitoring of risk areas and conditions by firing team.

Additional Control Measures: Additional stewards may be recommended for individual sites to cover unobserved approaches to firing/ fallout area, or other areas of specific risk.

Controlled Risk: Likelihood 1, Severity 3, Risk Index 3 – Low

Hazard: Unauthorised use of fireworks by spectators causing injury/damage or unintended ignition of display fireworks.

Risk Groups: Display operators, contractors, performers, spectators, stewards, buildings, structures and equipment.

Uncontrolled Risk: Likelihood 3, Severity 4, Risk Index 12 – Med/High

Control Measures:

- No unauthorised fireworks other than sparklers permitted on site.
- Firing area and safety distances to spectators secured.
- Client/event organiser to arrange adequate stewarding.

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Additional Control Measures: Immediate cessation of display if required.

Controlled Risk: Likelihood 1, Severity 4, Risk Index 4 – Low

Hazard: Ground burst or failure to function caused by firework malfunction.

Risk Groups: Display operators, contractors, performers, stewards, buildings, structures and equipment.

Uncontrolled Risk: Likelihood 2, Severity 4, Risk Index 8 – Low/Med

Control Measures: Assessment made during site visit of available safety distances to all hazards, and firework material and size selected accordingly.

Firing staff to wear appropriate Personal Protective Equipment.
Only protected personnel within safety distance.

Additional Control Measures: Senior Firer to check safety distance prior to firing.
Senior Firer retains authority to postpone/curtail display.
All live material to be made safe prior to removal from site.

Controlled Risk: Likelihood 2, Severity 2, Risk Index 4 – Low

Hazard: Unauthorised access to fireworks during set-up.

Risk Groups: Any personnel as relevant, buildings, structures and equipment

Uncontrolled Risk: Likelihood 4, Severity 4, Risk Index 16 – High

Control Measures: Secure safety area marked around firing area during set-up.

No unauthorised personnel within 10m.
Firing site manned or secured at all times until all fireworks cleared.

Additional Control Measures: Additional security may be required.
No public access allowed until all live materials removed from site.
Senior Firer to declare site clear after firing.

Controlled Risk: Likelihood 1, Severity 4, Risk Index 4 – Low

Hazard: Hazards resulting from proximity to flight lines.

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Risk Groups: Air traffic

Uncontrolled Risk: Likelihood 2, Severity 5, Risk Index 10 – Med/High

Control Measures: CAA to be informed of any display within 2 miles of aerodrome.
CAA to be informed of any display within 5 miles of an extended runway centre line.
Maximum altitude to be assessed prior to event.

Additional Control Measures: Action as advised by CAA.

Controlled Risk: Likelihood 1, Severity 5, Risk Index 5 – Low

Hazard: Risk of fire from hot ash and debris within designated fallout area.

Risk Groups: Spectators, crops, other property

Uncontrolled Risk: Likelihood 2, Severity 4, Risk Index 8 – Low/Med

Control Measures: Fireworks selected to minimise risk of hot debris reaching ground level.
Senior Firer to consider protecting or damping down immediate firing area.
Event organiser to consider damping down high risk areas.

Additional Control Measures: Event organiser to make fire services aware of display.
Event organiser to appoint firewatchers and advise Senior Firer to stop display if fire develops.
Senior Firer may curtail display if risk increases further.

Controlled Risk: Likelihood 1, Severity 3, Risk Index 3 – Low

Hazard: Theft, unauthorised use or vandalism of explosive materials.

Risk Groups: As relevant.

Uncontrolled Risk: Likelihood 3, Severity 5, Risk Index 15 – High

Control Measures: Fireworks arrive on site with operators.
Secure area marked around firing point during set-up.
No unauthorised personnel within 10m.

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Firing site manned or secured until all fireworks are cleared.

Additional Control Measures: Additional security/stewarding may be requested.

Controlled Risk: Likelihood 1, Severity 5, Risk Index 5 – Low

Hazard: Unintentional ignition of fireworks by RF radiation or static.

Risk Groups: Display operators, contractors, performers, spectators, stewards, buildings, structures and equipment.

Uncontrolled Risk: Likelihood 2, Severity 4, Risk Index 8 – Med/High

Control Measures: Mobile phones and radios banned from firing area during wiring.

No personnel within firing area during circuit testing.

No unprotected firing cables to cross other conduits/power supplies.

Additional Control Measures: All rigging to cease during thunderstorms.

Only protected personnel in firing area after system is armed.

Senior Firer controls arming key.

Controlled Risk: Likelihood 1, Severity 4, Risk Index 4 – Low

Hazard: Injury or shock caused to performers, artistes, players or contractors on site.

Risk Groups: Non-spectator personnel (or any other group within spectator safety distance)

Uncontrolled Risk: Likelihood 3, Severity 4, Risk Index 12 – High

Control Measures: Assessment made of hazard during site visit.

Fireworks selected to minimize risks.

Exact location and design of effects agreed prior to design.

Exact location of performers etc agreed prior to design.

Additional Control Measures: Senior Firer to provide on-site brief as required.

Consider demonstration/rehearsal of effects.

Senior Firer will not fire if performers etc take up a higher risk location.

Controlled Risk: Likelihood 1, Severity 4, Risk Index 4 – Low

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Hazard: Any hazard relating to overhead obstructions.

Risk Groups: Overhead obstruction, display operators.

Uncontrolled Risk: Likelihood 3, Severity 3, Risk Index 9 – Med/High

Control Measures: No displays within 100m of high voltage overhead power lines.
No aerial fireworks within 50m of any other overhead power lines.

Additional Control Measures: Senior Firer to determine orientation of fireworks on site.

Controlled Risk: Likelihood 1, Severity 3, Risk Index 3 – Low

Hazard: Risk of nuisance or damage caused by proximity to coast or inland waterway

Risk Groups: Crew, passengers, vessels.

Uncontrolled Risk: Likelihood 2, Severity 3, Risk Index 6 – Low/Med

Control Measures: Inform coastguard if display within 3 miles of coast
Inform environment agency if coast is within spectator safety distance.
Inform local River/Waterway Authority if on or near navigable river or waterway.

Additional Control Measures: Action as advised.

Controlled Risk: Likelihood 1, Severity 3, Risk Index 3 – Low

Hazard: Risk of nuisance or damage caused by proximity to railway line.

Risk Groups: Rail staff, rail passengers, trains, carriages and equipment.

Uncontrolled Risk: Likelihood 2, Severity 3, Risk Index 6 – Low/Med

Control Measures: Liaison with local rail authority if within 50m.
No use of rockets.

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EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Additional Control Measures: Action as advised.

Controlled Risk: Likelihood 1, Severity 3, Risk Index 3 – Low

Hazard: Damage to temporary structures, staging etc.

Risk Groups: Temporary structures etc.

Uncontrolled Risk: Likelihood 4, Severity 3, Risk Index 12 – High

Control Measures:

- Prior assessment to be made of the position and risk of each structure.
- Fireworks selected to minimise risk of hot ash reaching them.
- Senior Firer may remove items which pose a greater risk.
- Event organiser to consider damping down/protecting high risk areas.
- Event organiser may wish to provide extra firewatchers and firefighting equipment.

Additional Control Measures: Senior Firer may curtail display if risk increases further.

Controlled Risk: Likelihood 1, Severity 3, Risk Index 3 – Low

ALCHEMY FIREWORKS LTD. – SITE SPECIFIC RISK ASSESSMENT

EVENT NAME: [REDACTED]

EVENT VENUE: [REDACTED]

EVENT DATE: [REDACTED]

Likelihood:

The chance that an activity may result in an accident / incident

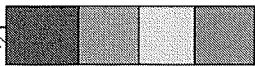
1. Very unlikely
2. Unlikely
3. Likely
4. Very Likely
5. Certain

Severity:

The outcome likely if any activity results in an accident

1. Minor injury requiring basic treatment, no further effects or time lost/ No damage, possible surface debris.
2. Injury/ illness liable to result in absence of 1 – 3 days/ Superficial damage.
3. Injury/ illness liable to result in absence of greater than 3 days/ Minor damage eg. surface marking, pitting or scorching
4. Chronic/permanent injury or illness/ Major Damage eg. surface scorching, burns or minor surface penetration.
5. Fatal/Terminal illness/ Structural damage, major surface penetration or destruction.

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



1-5 = Low Risk - ALARP (no actions required)

6-8 = Low-Medium Risk – Further action required

9-10 = Med-High Risk – Further action required

12-25 = High Risk – Immediate action, task suspended until action complete