

WORKING PROCEDURE FOR FIREWORK DISPLAYS

Risk Assessment

Firework displays and bonfires are occasional events which can be run safely provided that the event is carefully planned and controlled. Serious injuries can result from people being hit by live or spent fireworks, unless simple precautions are followed.

Regulations

The Event Organiser and or Display Safety Representative must complete Appendix 1 and a firework risk assessment 28 days prior to the event, in order to determine whether the event is satisfactory, or whether further control measures are required and can be implemented to ensure the safe running of the event.

Once all sections of the risk assessment have been completed a copy of it should be sent to Walesby Forest to be retained on site for audit purposes by any of the relevant authorities, if required. The risk assessment should, if completed correctly, highlight to the Event Organiser/Display Representative any areas of non-compliance or concern which should be catered for by additional control measures prior to the event proceeding.

If there are any requirements/areas of concern that cannot adequately be catered for by the inclusion of further control measures, then consideration should be given by the Event Organiser/Display Representative to the cancellation or amending the event accordingly i.e. by downsizing or removing any aerial display.

If the Event Organiser/Display Representative decides to proceed with the event, they should then inform the Fire Service, Local Authority and Police. The Display Safety Representative must check the details again on the day, prior to the event. Check boxes must be filled in or ticked to indicate compliance, with the Event Organiser and the Display Safety Representative signing appendix 2, to confirm that all appropriate controls have been met.

The completed document must be kept at the display site. The document should be available for inspection on site, by any of the relevant authorities and Walesby Forest.

Note* Satisfactory completion of all sections of the risk assessment should make for a safe display but does not remove the onus of safety from the Organisers of the event, nor does it mean that accidents will not happen.

The risk assessment and display criteria must also be amended on site and through-out the display, in response to any unseen circumstances i.e. unexpectedly large crowds or severe sudden adverse weather conditions.

**REMEMBER EVENT SAFETY IS IN YOUR HANDS.
AND
IF ANY OF THE FOLLOWING CONTROLS CANNOT BE MET THE EVENT MUST
NOT BE HELD.**

FIREWORK RISK ASSESSMENT

Appendix 1:

Confirmation of Completion of Firework Risk Assessment

This section should be completed at least 28 days prior to the event.

We confirm that the Firework Risk Assessment has been completed and that all the appropriate controls can/will be implemented at:

Premises:
.....
.....
.....

Time of display:

Duration of display:

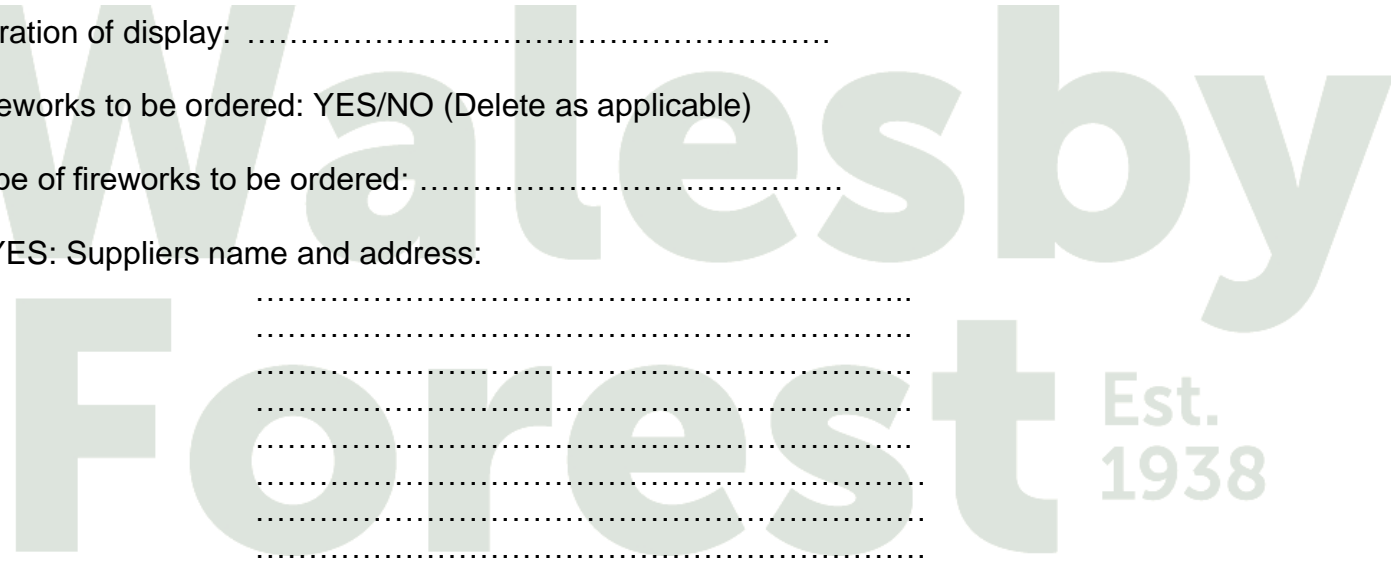
Fireworks to be ordered: YES/NO (Delete as applicable)

Type of fireworks to be ordered:

If YES: Suppliers name and address:
.....
.....
.....
.....
.....
.....
.....
.....

Signed: Date:

Signed Date:



FIREWORKS SAFE WORKING PROCEDURE

1. EVENT PLANNING

a) Site Layout

	Check (Tick to indicate compliance)
Ensure that you have sufficient space to run the event safely (Refer to the attached Site Layout diagram) The firing area, from which fireworks are set off, should be 25m x 50m. Access to this area must be restricted to only those setting off the fireworks.	
The distance between the firing area and the spectators (the safety area) must be at least 100m.	
The spectator area must be large enough to prevent overcrowding and must be physically separated from the safety area using barriers or ropes. An assessment of the expected number of spectators and spectator profile attending the event must be undertaken. Numbers of spectators anticipated:	
The fall out area or dropping zone, where spent fireworks will fall, must be free of all people and be at least 50m (preferably 100m for larger displays) in the direction of the prevailing winds. Confirm direction of prevailing wind in relation to site layout: Is it satisfactory? YES/NO. If NO can site layout be amended? YES/NO. If NO CANCEL OR AMEND TYPE OF DISPLAY. The fall out area must not cover any land where people or animals may be, including: roads, footpaths, gardens or neighbouring premises. The fall out area to be under display organiser control.	Length of fall out zone:m.
Overhead obstructions must be avoided, e.g. keep clear of trees, adjoining buildings and overhead power cables etc.	
The site must be free from dry, cut grass and other combustibles, all rubbish to be cleared off site. All long grass to be cut prior to display.	
Bonfires must be at least 15m away from the fireworks, buildings, roads, railways and public rights of way. If this cannot be achieved do not have a bonfire.	If no bonfire, please state this.
There must be access to the site for Emergency Services. This access to be maintained at all times during display. (Wherever possible, access for Emergency Services should be provided, separate from spectator access/egress).	

IF THE SPACE REQUIREMENTS CANNOT BE MET DO NOT HOLD THE DISPLAY

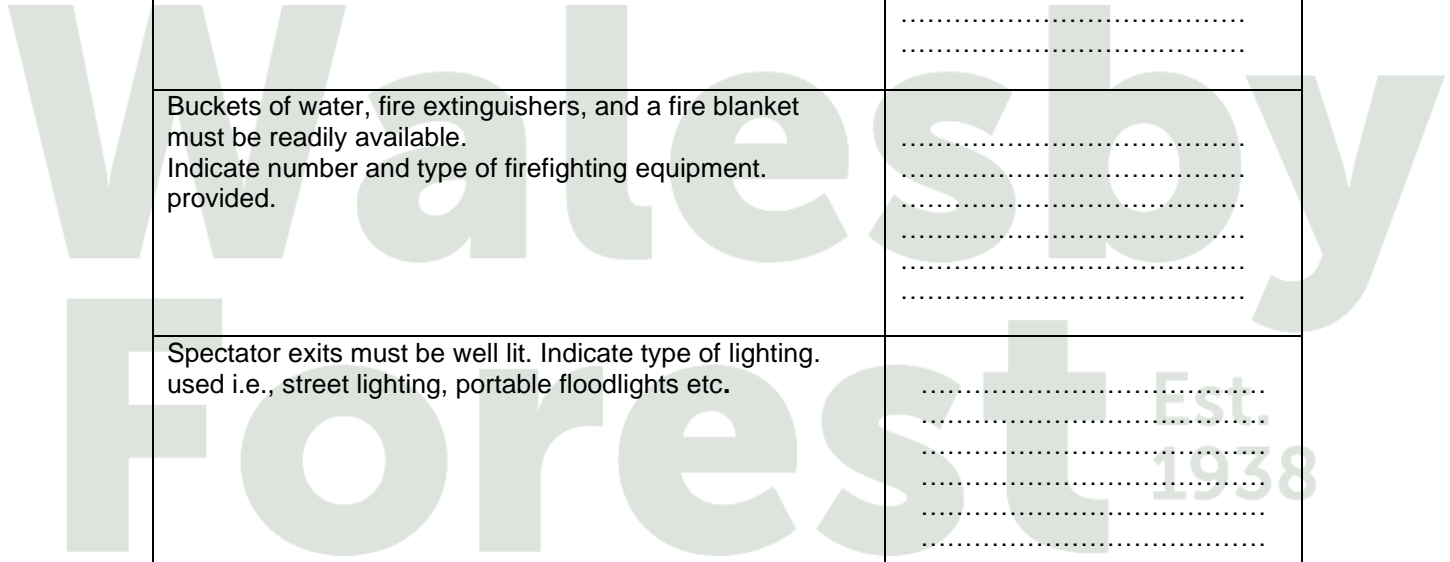
b) Contacts

	Indicate if agency contacted. Contact persons name and date of contact, to be recorded:
<p>Consider your neighbours, and adjacent risks, give prior notice of the event to avoid possible complaints. Consideration to be given to the proximity of:</p> <ul style="list-style-type: none"> • Hospitals: • Aged Persons Homes: • Animal Shelters i.e. Stables: • Standing crops • Adjacent farms with fields containing cattle: <p>In relation to the above, consideration to be given to the time of staging the event.</p>	
<p>Contact the:</p> <ul style="list-style-type: none"> • Police • Fire Service • Local Authority. <p>28 days prior to the event</p>	
<p>If near an aerodrome contact the Airport Authority or Civil Aviation Authority a week prior to the even. Give information on time of display, location, height of aerial pyrotechnics, duration of display.</p>	



c) **Emergency Procedures**

<p>An emergency action plan must be established and known by firers and Marshalls, e.g., in the event of an injury or dangerous situation – stop firing, call emergency services and suspend the display. Consider complete cessation of the display if required by the circumstances. These to include:</p> <ul style="list-style-type: none"> • Sudden change of wind direction: • Sudden increase in wind velocity: • Sudden worsening of weather conditions: • Spectator overcrowding: • Spectator disturbance (due to alcohol): • Any emergency incident requiring the attendance of any of the emergency services: • At any time, the Display Safety Representative or any Marshall deems necessary: 	
<p>Medical cover must be in accordance with the Event Purple guide.</p>	<p>Name of Medical Staff or company.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>Buckets of water, fire extinguishers, and a fire blanket must be readily available. Indicate number and type of firefighting equipment provided.</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>Spectator exits must be well lit. Indicate type of lighting used i.e., street lighting, portable floodlights etc.</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>Evacuation procedures to be made known to all Marshalls and Stewards. Stewards/Marshalls to be provided with high visibility clothing i.e., surcoats or jackets.</p>	
<p>Communications:</p> <ul style="list-style-type: none"> • Marshalls must be appointed to direct customers and traffic on the premises and to prevent overcrowding. • Indicate number and location of Marshalls: • Communication between Marshalls/Stewards to be provided. • Indicate type of communication: • Indicate numbers of communication devices provided: • Confirm method of summoning the Emergency Services: 	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>



2. FIREWORK CONTROLS

Check (Tick to Indicate Compliance)

Fireworks must be stored in their original packaging in a cool, dry place, for no more than 14 days prior to the event.	
Fireworks must be set up in the firing zone, following the manufacturer's instructions for the different types.	
During the event, fireworks must be kept in a safe place in a building nearby or closed metal or wooden container until required. Ensure there is no public access to the fireworks and remove them for firing as required in a planned sequence.	
A torch must be available for use by the firers during the event.	
The number of firers must be kept to a minimum and they must wear suitable clothing e.g.: stout boots and outer clothing of wool or other fire-resistant material. (Lightweight or flammable clothing must be avoided).	
Safety goggles and gloves must be worn by all firers. Sleeves must be tucked into gloves.	
There must be no smoking whilst handling any fireworks.	
Slow burning wicks must be used to light fireworks. (Do not use matches).	
Check each firework for any signs of damage immediately before use. Do not use damaged fireworks or attempt to repair them.	
Fuses must be correctly lit, in accordance with the manufacturer's instructions.	
Firers must stand well back and ensure fireworks are always pointing away from the face and body.	
Misfires must not be relit. Leave for 30 minutes and then place them in a bucket of water. Wear goggles and gloves and point fireworks away from face and body.	

3. BONFIRE CONTROLS

If not applicable, please state this

The bonfire must be at least 15m away from the fireworks site. Suitable firefighting equipment to be provided at the bonfire site.	
The bonfire must be checked prior to lighting. (Animals or children may have crawled inside the bonfire).	
Paper and solid firelighters in several pieces, must be used to light the bonfire to ensure an even burn. (Do not use petrol or paraffin on bonfires).	
Dangerous rubbish, e.g., foam filled furniture, rubber, aerosols, tins of paint, pressurised gas cylinders, tyres or bottles must not be burnt on the bonfire.	
Fireworks, even if fully spent, must not be put on the bonfire.	

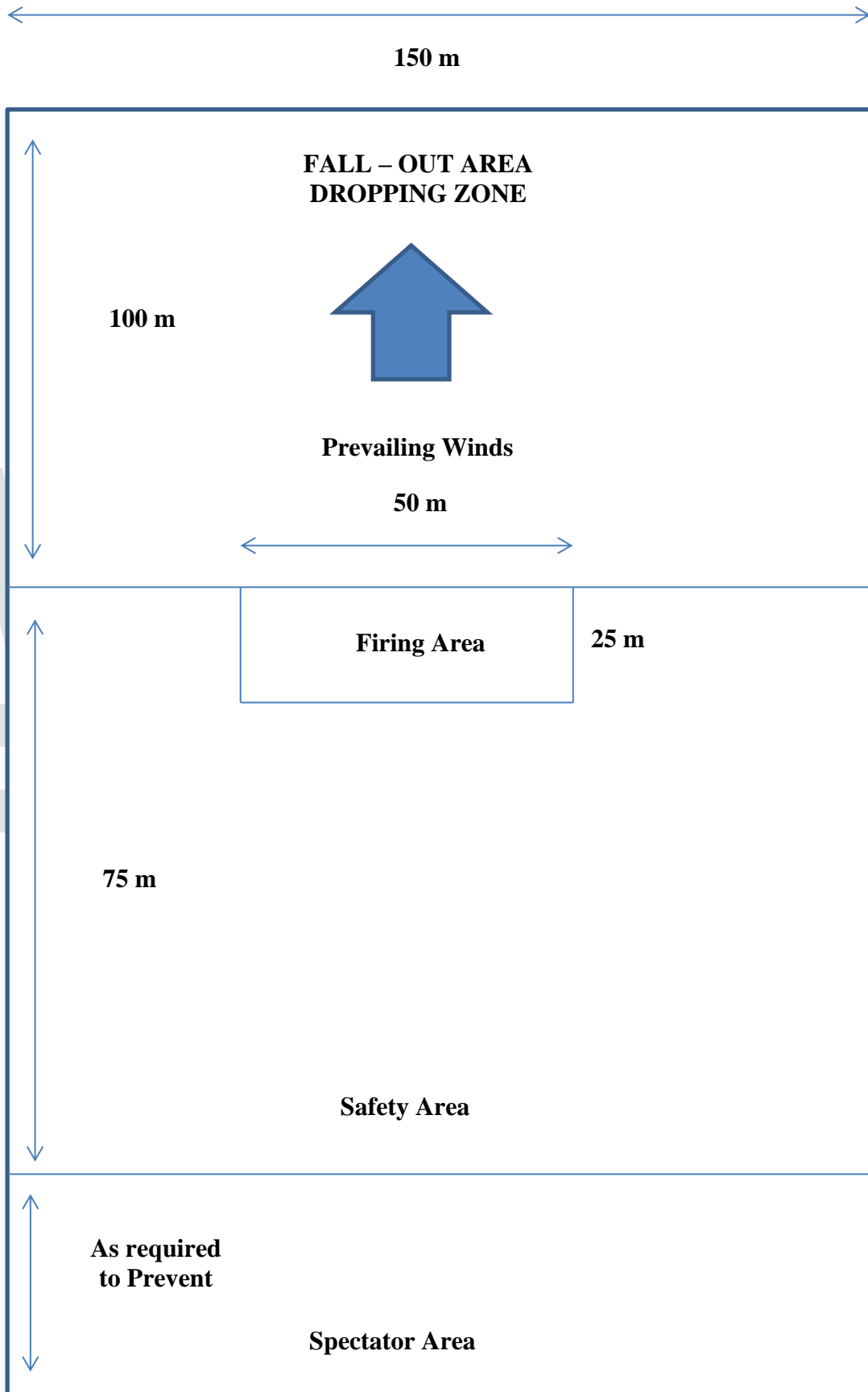
4. AFTER THE EVENT

Check (Tick to Indicate Compliance)

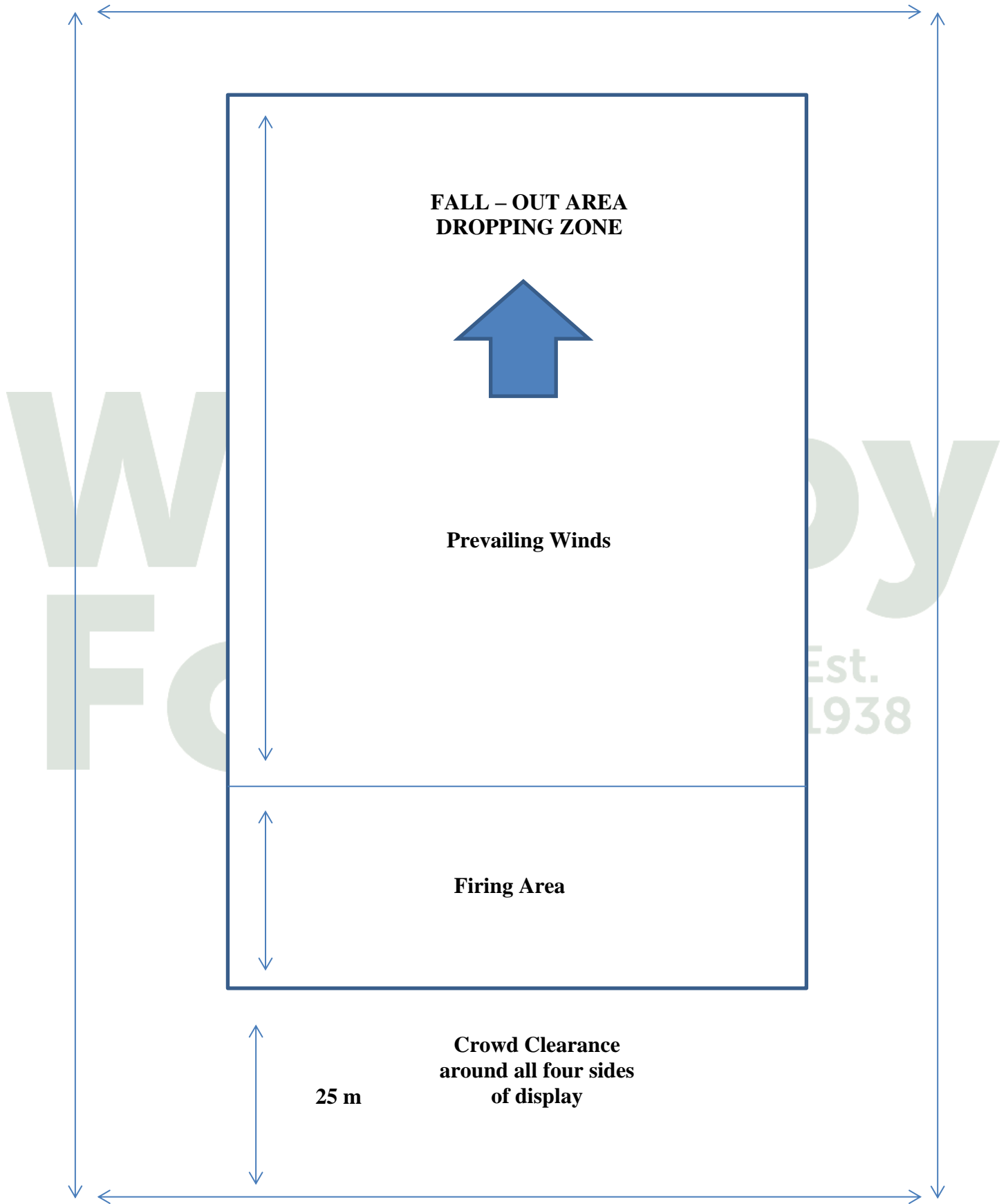
Locate and deal with any misfires. (See Firework Controls).	
Extinguish the bonfire before leaving the site.	
Re-check the site in the morning.	
Arrangements must be made for any remaining, unused fireworks to be uplifted as soon as possible.	

Walesby
Forest Est. 1938

Larger type of public display



Smaller type of public display



Walesby Forest Est. 1938

Below is an example Risk Assessment that groups can use.
This should not be used straight off and must be edited for groups own displays.

Activity Area:	Risk Matrix	Likelihood			
Minimum Staffing Level	Consequences	Very Likely	Likely	Unlikely	Highly Unlikely
Staff/Pupil Ratio	Fatality	High -16-	High -15-	High -14-	Medium -13-
Staff Qualifications	Major Injuries	High -12-	High -11-	Medium -10-	Medium -9-
Maximum Number of Participants	Minor Injuries	High -8-	Medium -7-	Medium -6-	Low -5-
Role of Accompanying Adult:	Negligible Injuries	Medium -4-	Medium -3-	Low -2-	Low -1-

Hazard	Persons at risk	Prior Risk	Existing Controls	New Risk Factor
Injury caused by fireworks	Staff Pupils Visitors Volunteers Contractor	High 12	50m x 25m space has been allowed for the firing area. A fallout zone for spent fireworks of 100m x 150m is in place in a downwind direction (check weather conditions) Spectators are to be kept back on the opposite side from the dropping zone at least 100m from the firing zone. The area has been checked and is free from obstructions i.e., trees, overhead power cables and well away from buildings. Suitable secure area for firework storage inaccessible to public. Firing area supervised once fireworks set up. Spent firework cases gathered, site also checked at first light for partly spent fireworks.	Medium 10
Use of external companies / contractors	Staff Pupils Visitors Volunteers Contractor	High 12	Vet for competence, operator has considerable experience with fireworks. Risk assessments provided. Clearly defined responsibilities for operator and school (in particular in event of emergency) Appropriate public liability insurance in place (min £5m public liability). Insurer contacted to ensure adequate coverage and that any special conditions are met.	Medium 10
Adverse weather	Staff Pupils Visitors Volunteers Contractor	High 4	Test launch of small firework to gauge effect Increase separation from fireworks and bonfire and relocate safety line / barriers. If safe separation cannot be ensured delay / cancel display	Medium 6
Crowd Control Overcrowding	Staff Pupils Visitors Volunteers Contractor	High 12	Maximum number of attendees established. SAG 4,999 max group size. Adequate numbers of staff / PTA supervising Marshals in place and responsible for crowd control. (Identifiable by wearing fluorescent bibs or jackets) Agreed emergency procedures in place. Megaphone used to communicate with the crowd.	Medium 10

			CB Radio's used by marshals and organiser. Spectators will not be allowed into the display area and signage to this effect in place. Barriers and adequate supervision to prevent unauthorised use and control access and egress	
Surrounding areas /Neighbours	Staff Pupils Visitors Volunteers Contractor	Medium 4	Neighbours have been informed of the proposed display by letter from Walesby Forest office after being notified from the group in question.	Low 1

The above is a guide to a safe display for any group wishing to set a display at Walesby Forest, all groups wishing to set a display at Walesby Forest must have the approval of the CEO or Centre manager 2 months before the display, all SOP's and RA's must be submitted 4 weeks before the display.

Walesby Forest holds the right to cancel any display due to any concerns the Duty manager holds at the time regards the event.

For further guidance groups should refer to HSG 123 <http://www.eig2.org.uk/wp-content/uploads/WTOFD-Blue-Guide.pdf>

Note: This document is of no relation to Walesby Forest Public bonfire event.