

SHROPSHIRE FIRE AND RESCUE SERVICE

FIRE SAFETY ADVICE SHEET

FIREWORK DISPLAYS

A GUIDE TO SAFE AND SUCCESSFUL FIREWORK DISPLAYS

Firework displays, whether private or public should be enjoyable occasions, and if organisers take the necessary precautions and assess the possible risks they should also be safe occasions.

This advice sheet gives guidance on how to run an outdoor firework display safely. Examples of the type of display covered are those put on by organisations such as public houses for their customers, sports clubs, youth groups and parent teacher associations, which typically attract around 100 spectators.

For larger displays it is strongly recommended that the purchase and firing of the fireworks should be left to a specialist display operator.

Fireworks marked with “Complies with BS 7114 part 2 1988” are classified as suitable for use by members of the public. Those fireworks that are not so marked (usually indicated as ‘type 4’ fireworks) are for professional use only. In addition, aerial maroons and shells fired from mortars are only suitable for professional use.

Further information on the siting and supervision of bonfires can be found in our Advice Sheet AS9/2007.

PLANNING AHEAD

Running a display takes a lot of work, so try to share the load by planning ahead. Set up a committee whose members can each take responsibility for a particular task, including one Responsible Person to be in charge of all safety arrangements.

1. Be clear on who will do what and when.
2. Be sure each member has a copy of this guide and follows its advice.
3. If possible, try to recruit at least one individual with previous experience of working with fireworks.
4. Carry out a risk assessment.
5. Have a clear emergency plan in place, and ensure everyone is aware of its contents.

CONTACTING THE RIGHT PEOPLE

Depending upon the scale of the event, you should consider informing one or more of the following authorities.

- Shropshire Fire and Rescue Service.
- The Police.
- First aid providers e.g. ambulance, Red Cross, St John's Ambulance etc.
- Your Local Authority.

Further details can be found in Advice Sheet AS9/2007 on bonfire safety.

BE PREPARED

Most accidents at fireworks displays arise from poor planning and safety arrangements, therefore it is essential that all persons involved in the display are properly trained and understand the measures that need to be in place. These will include:

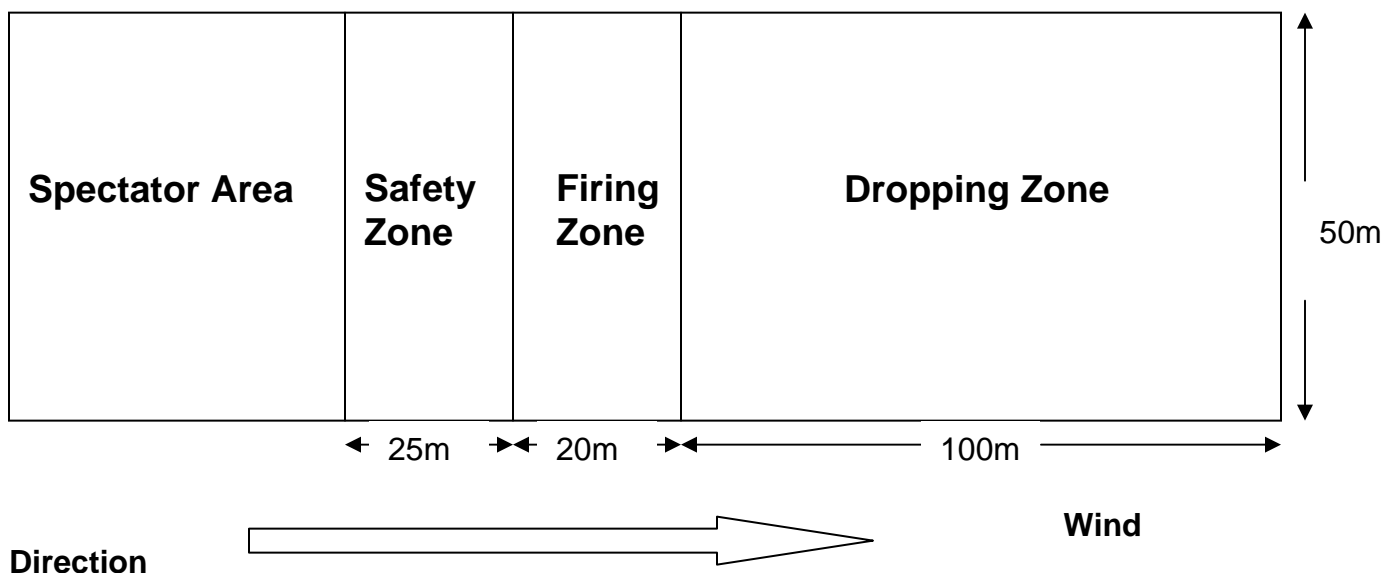
1. Arrange for fireworks to be delivered and stored securely and circulate the manufacturer's instructions to your team. Spectators, who attend with their own fireworks, including sparklers, should be refused admission, and such restrictions should be published before the display and again on the night, at all entrances.
2. Animals can be terrified of fireworks. Warn your neighbours and any local farmers in advance so they can take pets indoors, and take any other necessary precautions.
3. Arrange training for you and your team on all emergency drills for the night.
4. Arrange for first aid posts to be staffed by qualified people.
5. All team members should be readily identifiable at night, usually by means of fluorescent jackets or surcoats.
6. Arrange some form of public address system for emergencies e.g. a loud hailer.
7. Ensure that first aid firefighting equipment is available, such as buckets of water or portable fire extinguishers, and that team members are fully trained in their use.
8. Ensure all team members are equipped with electric torches.
9. Identify and clearly signpost designated car parking areas. These should be up-wind of the display and clear of the display area and dropping zone.
10. Check you are adequately insured to cover any firework related injuries or damage.
11. Vet any traders you intend to admit to the site.

PICKING THE RIGHT LOCATION

Choose a large clear and well mown area, free from obstructions such as buildings, trees and overhead cables. The site must have as many safe entrances and exits away from the firing area and dropping zone as necessary.

Allow at least 50m x 20m for your firing area. Beyond this, you will need a dropping zone for spent aerial fireworks of 100m x 50m in the down wind direction.

Spectators should be kept back on the opposite side to the dropping zone in the up wind direction, at least 25m from the firing area.



FIRING THE DISPLAY

1. Only allow 'firers' in the firing area and restrict their numbers to a minimum.
2. Firers are advised to wear suitable clothing. This should consist of stout footwear, outer clothing of wool or other fire resistant material, a protective hat, goggles, gloves and possibly ear defenders. Each firer should also be provided with an electric torch and whistle for attracting attention.
3. Always set off fireworks in accordance with the manufacturers instructions by means of a slow burning wick or a purpose made slow burning lighter known as a 'portfire'.
4. Always hold the 'portfire' at arms length to light a firework.
5. Never lean over a firework.
6. Leave any firework that fails to go off for at least 30 minutes. **Do not approach it to investigate.**
7. A sudden change of wind direction could cause aerial fireworks to fall dangerously among spectators. If the wind changes during the course of

the display, be prepared to abandon the use of aerial fireworks or even the whole display.

AFTER THE EVENT

The work for organisers does not finish when the last firework goes off. There are a number of measures that still need your attention to ensure a safe end to the display. These include:

- Clearing spectators safely from the site.
- Properly extinguishing any bonfires.
- Do not throw firework cases, whether spent or otherwise, onto the bonfire for disposal. They may still contain traces of their propellant.
- Spent fireworks must be gathered and returned to the supplier or local authority for disposal in their licensed skips. You should identify this during your early planning stages.
- Any firework that failed to go off (after a minimum 30 minute wait) to be soaked in a bucket of water at a place of safety, and the manufacturer or supplier should be contacted for advice on disposal.

Further advice on all matters concerning safe firework use can be found on the Health and Safety Executive web site at:

www.hse.gov.uk/explosives/fireworks/using.htm

and in their publication **HSG 123 – Working together on firework displays.**

For further information on the Regulatory Reform (Fire Safety) Order 2005 please contact:

- Shropshire Fire and Rescue Service - www.shropshirefire.gov.uk
- Department for Communities and Local government - <http://www.communities.gov.uk>

Or for general fire safety matters, Shropshire Fire and Rescue Service can be reached on **01743 260260** or via our web site at **www.shropshirefire.gov.uk**