



Giving Your Own Firework Display

Organisation

Sufficient numbers of people should be available. One person will need to be in overall control, with the following duties allocated to others:

- Ordering, Storing and firing the fireworks
- Site facilities, eg catering, toilets
- Crowd safety and control

Site Selection

Space is the crucial factor. Appendix 1 identifies the space requirements for differing types of display. The display site is made up of:

- Spectator Area – Spectator viewing area
- Safety Area – Area between the spectators and the firing area
- Firing Area – Firing area for the fireworks
- Fall out area – Area where the debris from spent fireworks will land
- Bonfire area – Area for the bonfire

Size

This will be depend on

- Types (Class) of fireworks to be used
- Expected number of spectators

Other considerations

- The site should be free of dry cut grass or other combustible material
- The area should be free of overhead obstructions such as trees, powerlines and scaffolding

Liaison

Dependent on the scale of the display the following persons should be notified

- Police
- Devon Fire and Rescue Service
- Plymouth City Council, Environmental Health for safety advise
- Plymouth City Council, Legal Department for an Entertainment Licence where music, singing or dancing is to occur indoors
- Local Airport
- Coastguard



Safety Rules Checklist

Site

- ❑ The site should be inspected during daylight
- ❑ Ground should be of suitable for stakes but also soft enough to bury tubes
- ❑ Ensure access for emergency vehicles
- ❑ Ensure the site conforms to Appendix 1 for size and layout
- ❑ The prevailing wind should be behind the spectators blowing towards the display area
- ❑ Avoid overhead obstructions such as powerlines, trees, scaffolding
- ❑ Grass should be cut short, but avoid loose dry grass
- ❑ Using a hard surface is not ideal. Troughs or buckets containing sand should be used for any fireworks that should have been buried or require fixing to stakes

Display Preparation

- ❑ Ensure adequate first aid cover
- ❑ Clearly mark entrances and exits which must be kept free from obstruction
- ❑ Inform the relevant authorities
- ❑ Use physical barriers to ensure good crowd control
- ❑ Provide water fire extinguishers, buckets of water and sand
- ❑ Ensure adequate numbers of stewards, one per 250 spectators is generally acceptable
- ❑ Ensure an adequate public address system or loud hailer
- ❑ Never smoke when handling fireworks
- ❑ Unpack the fireworks in a safe place away from open fires
- ❑ Familiarise yourself with the firework instructions well before the event
- ❑ Follow the safety instructions for setting up each firework
- ❑ Keep fireworks in a closed box or spark proof sheet during site preparations
- ❑ Never put fireworks in pockets
- ❑ Use the already prepared site plan to layout the fireworks
- ❑ Place each firework at least 3m apart in the display area
- ❑ Protect fireworks from rain by using bags
- ❑ Rehearse the firing order

Display Firing

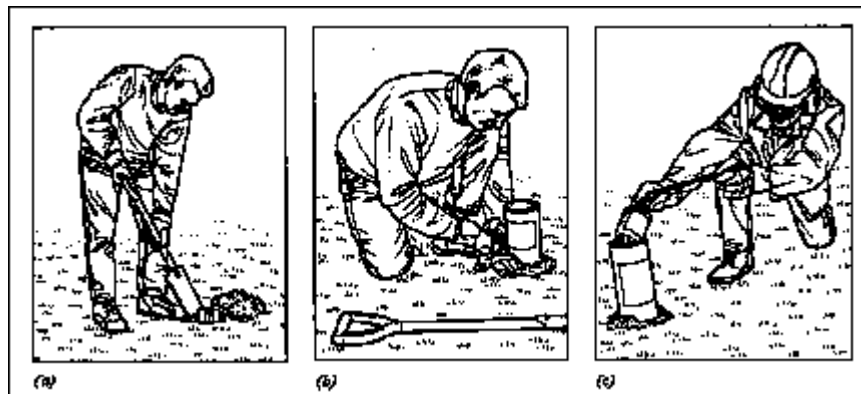
- ❑ Ensure no one enters the display area
- ❑ Once in place the fireworks must not be left unattended

- ❑ Stop the show immediately for any safety reasons
- ❑ Carry electric torches
- ❑ Wear suitable clothing, ie covering the full length of the arms and legs, close fitting. Gloves and stout boots must be worn
- ❑ Always light fireworks with a portfire held at arms length
- ❑ Should a firework fail to light do not attempt to relight
- ❑ Never fire across or over spectators
- ❑ Rockets fly into the wind. Aim them 5 degrees into the wind.
- ❑ Keep all reloads in a box to protect from stray sparks

After the Display

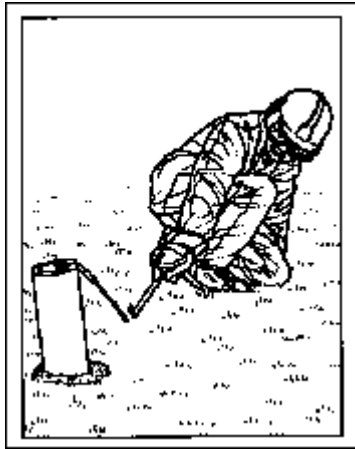
- ❑ Do not attempt to start the clean up for at least 30 minutes. This allows cooling time and for slow ignition fuses to burn
- ❑ Dispose of misfired fireworks carefully with gloves and at arms length. Place in a container of water for at least 24 hours
- ❑ Collect as much debris as possible and reinspect the site during daylight

Buried Fireworks



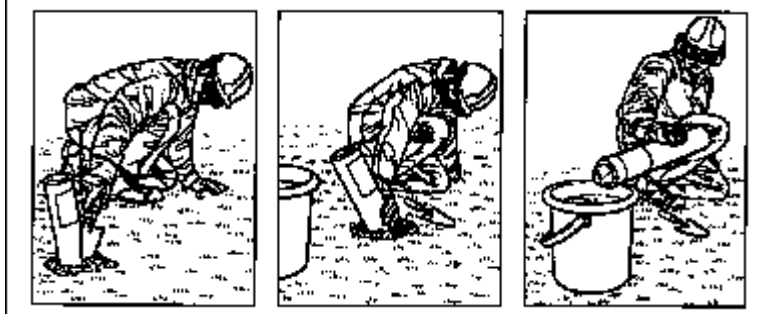
- a) Dig a hole slightly larger than the tube
- b) Pack earth around the tube after burying
- c) Make sure that it is not angled towards the spectators

Lighting Fireworks



- a) Remove any protective cover from the fuse
- b) Straighten the fuse
- c) The firers body must be away from the firework and turned slightly sideways
- d) light at arms length
- e) as soon as the fuse is alight, turn away and move back

Misfired Fireworks



- a) Loosen the earth around the firework
- b) Ease the tube out of the ground
- a) Tip the firework into the bucket of water

Bonfires

- They should be sited in a clear open space, preferably not less than 18 metres from buildings, trees, overhead cables
- The position of the prevailing wind should be noted to ensure that sparks are taken away from the public



- In dry weather the undergrowth should be cleared and the surrounding area dampened
- Attempts should be made to ensure that potentially hazardous materials which may explode or give off toxic fumes are not within the bonfire. These materials would include:
 - Aerosols
 - Batteries
 - Bottles
 - Foam filled items
 - Tins of paint
 - Tyres
- The bonfire should be kept to a manageable size with a maximum height of 3 metres and be cordoned off to at least 1.5 times the height of the bonfire
- The bonfire must be checked for animals, children and hazardous items
- Never light the bonfire using petrol and other highly flammable materials
- The bonfire must be supervised whilst lit
- At the end of the event the bonfire should be extinguished using water and should be supervised until completely extinguished