

All Hampstead Hill School Policies are always to be read and considered in conjunction with Equal Opportunities, Race Equality and Inclusion Policies. This Policy of Hampstead Hill School applies to all sections of the school including the Early Years Foundation Stage.



Hampstead Hill School

Drama and Performance Policy

Introduction

The purpose of this section is to provide information relevant to Drama and Public Performances.

This should ensure so far as is reasonably practicable, that whenever and wherever these activities take place everything possible is done to ensure the safety of pupils, staff and audiences.

The information applies to all dramatic activities on any site. In this context 'site' may include potential venues other than school or centre eg a shopping precinct.

The head of the school centre should appoint one member of staff to take charge of the drama and theatre equipment. The person appointed must familiarise themselves with the equipment provided, rooms or area(s) used and the likely risks involved. This will include being aware of their own, and others, limitations and knowledge. They should seek assistance of others more knowledgeable or experienced when they encounter the unfamiliar.

Risk assessment procedures should be used prior to any new activities are undertaken.

Previous assessments should be checked regularly.

Before any lesson or rehearsal a member of staff should

- View the Studio/Theatre/Classroom and carry out safety checks. Flooring (check for drawing pins, nails, screws, loose carpets, surface (slippery) make sure correct footwear is used by the Students. Where possible ask students to remove daily footwear (shoes); trainers or plimsolls or other footwear appropriate to the surface should be worn (fashion boots/shoes should be removed as these could be dangerous to others as well as themselves). Suitable clothing should be worn for all active Drama lessons.
- Check equipment intended for use, particularly portable electrical appliances (plugs, loose wires, check batteries are inserted correctly and make regular checks for possible leakage's).
- Check light switches, lighting, wall sockets in rooms on a regular basis and report breakage's or damaged items to whoever is identified within the Health and Safety arrangements.
- Be aware who is using equipment in lessons (including props) and their whereabouts. Avoid students bringing props into school.
- Know when to use particular facilities and equipment and keep a regular check on items that are to be used by teachers and students. If 'pushing back' the tables and chairs in the classroom to allow more space, be careful to stack chairs properly and remind students to avoid sharp corners on tables. Never allow students to stand on tables and chairs unsupervised. Purpose built drama blocks should be used in the appropriate manner, avoid dangerous stacking. Teachers must make a judgement on the types of activity appropriate to the working available.

- Identify possible hazards.
- These can be routine, e.g. cutting paper with scissors or bending a piece of wire clearly carry some element of risk. If the activity is well managed and the students concerned are carefully supervised, then the element of risk will be minimised.
- Look at cause and effect, e.g. a large class size may adversely affect the safety of the people in the room/studio/theatre/school hall/stage area) and may be difficult to supervise each working area. Bags, shoes, coats, money valuables (coins), keys (especially those on chains in pockets) should be stored away from the working areas; if possible avoid their use as props.
- Sharp items, pins, school ties, prominent jewellery, large buckled belts should be removed before the lesson.
- Be well aware and familiar with ALL students with medical conditions (most commonly those at risk from epilepsy, diabetes, asthma, allergies. All drama teachers and those engaged in theatre performances should make sure they are well informed of the procedures to be taken should medical attention be required.
- It is important to note some students particularly during school productions may be allergic to make up, artificial fibres, soaps, detergents, food (nuts) rubber, balloons, glue, paint etc. Particular attention should be taken when making masks.
- A general letter home may be sent informing parents of forthcoming productions and seeking information on any further unknown medical information that the school may not have.
- In case of emergency staff should be aware of:
 - Evacuation procedures in case of fire or other emergency.
 - Know the location, and how to use appropriate fire fighting equipment.
 - Know the location, telephone number and identity of the person trained in emergency first aid.
- Make all pupils/staff/volunteers aware of the Drama Safety Code a copy of which is shown at Appendix (i).
 - N.B. This should be prominently displayed in the area where the lesson/performance is taking place.

Technical Issues

This part covers the technical issues which may be applicable to drama and musical productions, although not all issues will be relevant to all productions.

If any of these issues are involved with a production it is vitally important to:

- Produce a plan of all of the issues and timescales
- Undertake risk assessments as necessary
- Tell all involved of the hazards, risks and control measures.
- Manage the plan effectively and efficiently
- Regularly monitor and review the plan.

- Never take short cuts. All equipment, materials and substances, and the activities undertaken carry a high degree of potential hazard. Therefore all involved should be adequately instructed, trained and supervised by competent people - at all times.

Stage Lighting

Stage lighting equipment's encompass the whole range of lighting units, spots, floods, foot lighting, back or up lighting and special lighting effects ie strobes with their control units and dimmer boxes or resistor banks and all their wires and cabling whether fixed or mobile.

General safety:

- Stage lighting must conform to the requirements of the County Council and meet the conditions set out in the current IEE Wiring Regulations, Health and Safety at Work Act, Electricity at Work Regulations and Work Equipment Regulations.
- Work on installation, repair and maintenance must only be carried out by a qualified electrician. It cannot be too strongly emphasised that although a good level of safety can be achieved through care in the selection and installation of equipment this will be of little use unless the equipment is utilised correctly and kept properly services:
 - Ensure that all mountings, suspensions and equipment are correctly earthed.
 - Curtains and scenery must be fire proofed.
 - Always keep lighting equipment out of reach whenever practicable.
 - Use separate power supplies for audio equipment from that used for lighting.
 - Ensure that appropriate first aid and suitable immediate use first fighting equipment is to hand.
 - Ensure good ventilation. Lights and their control units will get hot.
 - Fixed and permanently wired installations will be inspected and tested as part of the 5 year electrical installation check. Schools must maintain an inventory and record of equipment for these installations and ensure it is made available to the contractors engineers when they visit and is kept up-dated.
 - Some specialist wiring in lighting installations contain insulation materials that need specific handling techniques explicit in regulations such as those contained in the Asbestos Regulations etc. Unauthorised work by unregistered and inexpert contractors must not take place. Your Liaison Surveyor should be asked to advise.

Planning

- Ensure as early as possible that any requirements arising out of licence application approval are known and improvements or corrective action fully implemented (see Part B Section A or B as appropriate).
- Consult with everyone involved and decide what equipment is required, where it will be installed, how it will be used and by whom.
- Plan cable runs carefully to avoid door and access ways. Ensure minimum safety exclusion zones are reserved and marked.
- Plan how you will use and control house and auditorium lighting.
- Ensure house and emergency lighting needs are not compromised.
- Ensure all equipment is fully serviceable and any inspection/testing as required by Electrical Safety at Work/Work Equipment Regulations is routinely carried out and is current. This should include incidental equipment such as stage props, table lamps. These items should be presented for testing as part of the annual check of all Portable Electrical Equipment.

Rigging

- Take time when rigging equipment, always use two people minimum. Do not cut corners with misplaced 'the show must go on' priorities.
- Following appropriate safety regulations with regard to the use of ladders and scaffold towers e.g. footing and two person working. Scaffold towers must only be erected and used by certified competent persons.
- Make sure when rigging lanterns that their bracket yokes (stirrups) are always vertically aligned with vent aperture uppermost.
- Ensure that lighting stands are securely stabilised.
- Keep cable runs tidy and securely bunched and properly routed.
- Where lighting equipment is suspended over open spaces they and the power cables which are connected to them must be correctly supported on approved rigging wires, chains or properly constructed gantries. Power cables must be adequately secured and supported throughout their lengths by cleats or, if taped to wires or chains, with fire retardant tape.
- Ensure rigging wires and chains have a maximum safe working load capable of bearing all the loads to which they are going to be subjected, ie equipment plus handling/operation loads and that all supports and anchors have the same or greater maximum safety limit.
- Telescopic lighting stands (Tallerscopes)
 - The use of telescopic or cantilever lighting stands must be restricted to trained personnel who are familiar with their use and operation. The Manufacturer's handbook and instructions must be available to the operators who must follow the instructions and recommendations fully.
 - Fully laden units are potentially unstable and must be operated within the manufacturer's limits. Great care is required when lowering raised telescopic struts or cantilever arms. Lowering mechanisms must be properly engaged and manned before locking devices are released.
 - Stands **must not** be used unless they are fully serviceable. Special regard should be given to locking devices on struts and arms.
 - Stands **must never** be mounted on temporary structures i.e. rostrum, tables or scaffolds.

Do Not

- **Do not** mount or suspend equipment on PE wall bars, conduits, gas pipes, beams and curtain tracks. Some beams and PE wall climbing top bars may be suitable; seek qualified advice from your Liaison Surveyor or Education Workshop Services as appropriate.
- **Do not** use products easily weakened or inflamed by heat to suspend or secure any items or equipment.
- **Do not** block entrances/exits and access ways with anything.
- **Do not** use any special effects such as pyros, explosives, firearms, smoke, lasers, strobes, etc, until the requirements of the appropriate licensing authority have been met in full. Make sure you have planned for whatever could result or go wrong in each circumstance and that contingency plans and procedures are made and understood by all to copy with all

complications. Will smoke for example cause fire alarms to activate automatically where smoke detectors are fitted in the building? Will strobes or laser affect any member of your audience, who may be sensitive to such effects? Make clear any necessary warnings.

- **Do not** assume that what has 'always been done in the past' is necessarily the best or even the correct way to do a thing.
- **Do not** use power extension leads that have plugs at both ends.
- **Do not** upgrade fuse ratings to prevent failure. If a fuse blows it is a sign that something is wrong. Get it checked by a competent electrician.
- **Do not** use cable reel extension leads with the cable wound onto the reel. Make sure the cable is always fully unwound from the reel to avoid the coil of cable causing 'reactive inductance' overheating and the risk of fire.
- **Do not** work on any item of equipment whilst it is 'live'. Ensure equipment is first switched off **and** disconnected before any work commences.

Before switching on:

- Ensure that everyone is properly briefed, suitably competent, understands the limit of their task and to whom to report faults and concerns to. Arrange two person working, whenever necessary to ensure safety.
- Before switching on:
 - Ensure that all lighting control rack dimmer switches are set to zero.
 - Ensure that power supplies at remote lighting control desks are set to 'off'. (It is possible for remote memories to malfunction if powered up with a control signal selected).
 - Check for any damage or displacement of equipment.
- After switching on:
 - Check for blown bulbs and replace as necessary. Replace any blown fuses (see paragraph 5.7 first).
 - Confirm positioning of equipment and lighting effect.
 - 'Dim up' stage working lights.
- Before the performance
 - 'Dim up' auditorium lights.
 - Dim up tab (curtain) warmers.
 - Switch off main house lights.
 - Switch off normal stage working lights.
 - Dim down the auditorium lights.
- During the performance
 - Ensure the main lighting controller is staffed at all times.
 - Ensure 'front of house' staff are trained and competent, and aware of emergency procedures.
 - Ensure stage staff are aware of position of equipment and take care not to damage lighting equipment during scenery movement in dim 'black out' conditions of scene changes.

- After each performance
 - Dim up auditorium lighting.
 - Reinstate normal stage working light as soon as practical.
 - Reintroduce normal house lighting as soon as possible.
- Before going home
 - Dim out all stage and auditorium lights. Ensure all dimmer controls are reset to zero. Switch off remote lighting desks and remove power supplies.
 - Switch off and then unplug lighting controls.
 - Switch off and unplug all other electrical supplies eg communication and audit special effects equipment.
 - Switch off house lighting when safe to do so.

Safe Working at Heights

Supervision

When anybody is working at height there should be a member of staff supervising and exercising local ground control to ensure that no-one is standing underneath. Pupils must not be permitted to erect tower-scaffolds without direct supervision.

Hand Tools

Great care must be taken if hand tools are being used overhead. When not in use they should never be left on the floor of the platform unless it is fully enclosed by a kickboard (which must be fitted when the platform is over 2 metres). A simple tool holster attached to the top rail of the platform is an aid to safety.

- Where the design of the hand tool permits a short wrist loop may reduce the chances of it being dropped.
- Tools such as scissors or 'Stanley' knives should always have a safety line attached to the top rail.
- Tools should never be carried in pockets or tucked into belts, especially when gaining access to the working platform.

Lifting Equipment to Platform Height

- Safety is enhanced by the use of a simple basket system of lifting equipment and this system should be used to lift luminaires to the platform height. They should never be carried or passed up the tower unless than can be done easily by passing up through the centre of the tower.
- Items required should never be 'tossed' or thrown to someone on the platform but should always be hauled up.

Moving Tower Scaffolds

- It is appreciated that in rigging for a particular production considerable movement of the tower scaffold or step ladder is unavoidable. Because of the frequency of the manoeuvre concentration may be lost. When a tower scaffold is used equipped with wheels then the floor must be kept clear of all obstructions. The wheels should be locked when the tower is in position. When moving the tower care should be taken to avoid overhead obstructions e.g. hanging cables. This is especially important when the platform rail height closely matches ceiling height, as is sometimes unavoidable.
- Although it is appreciated that there are specific tasks in theatre work which call for a great deal of tower movement the practice of moving a tower ladder whilst someone is on the platform is dangerous and is illegal.
- The tower must never be moved by someone on the platform i.e. by pulling him/herself along using a fixed suspension.
- Where moving a tower scaffold from one height to another e.g. moving it from the stage to the hall floor it should always be dismantled. A team should never try to lift it down when it is fully or partially erected.

Minimum Numbers

No-one should attempt to work overhead without at least two ground crew. One of the team must be the supervising member of staff.

Dress

Loose clothing, ties, long hair etc. liable to be caught on projections should be secured and loose jewellery, rings and watches removed.

Access

Access to the working platform should normally be only gained by climbing up the centre of the tower. No-one should climb or swing onto the outside edge.

Scenery

For the purpose of this section the term scenery is used to define any temporary structure erected for the purpose of a performance. This section does not deal with the actual construction of scenery (see Workshop Section).

Lifting

Students should be given the following general guidance for lifting:

- Never attempt to lift a load beyond your physical capabilities.
- Stand with your feet apart (but not wider than the hips) and positioned so that one foot is behind and the other alongside the object, pointing in the direction of movement after lifting.
- Bend your knees, not your back.
- Get a firm grip using the whole hand and not just the fingertips.

- Keep you back straight, your chin tucked in and lift by straightening your legs.
- Keep the weight close to your body.
- Always be able to see over the top of your load.
- Get help to open doors. Before lifting plan route.
- Avoid pinching your fingers when releasing the load.

Moving 'Flats'

Lightweight flats should be 'run' into position rather than carried i.e. the rail leading edge should be lifted just clear of the ground and the flat dragged into position with one hand as high up the flat as possible.

Getting a Flat Upright

With one person 'footing' the flat walk it upright.

Lowering a Flat

Lightweight flats can be 'floated' to the ground. Check the floor area is clear. Loosely foot the bottom rail and allow the flat to gently fall away. Heavyweight flats have to be 'walked' down.

The Fixing of Flats

Professional methods of fixing flats together using loose-pin hinge, lash-line/cleat or stage brace and weight are only suitable on canvas flats or similar lightweight flats. The heavier the flat the more substantial the fixing should be and a combination of the above may be needed.

Inherent stability should be a consideration in the original design.

It is not sufficient to regard two flats forming a right angle as being stable. There should always be a secondary fixing to prevent toppling.

Storage of Flats

Flats should be stored back to back and face to face. This prevents the face of a flat being damaged by the ironmongery on the reverse of another.

Rostra and Platforms

Whether rostra needs to be clipped or fastened together will largely depend on the nature of the activity, the type of floor surface and whether the base of the rostrum has a non-slip surface. Whenever energetic movement is planned then rostra can slide apart.

If the design demands that rostra be built up on top of each other to increase the height then they should always be battened together.

There are several proprietary makes of folding rostra. It is essential that all personnel are trained and that the manufacturer's instructions are strictly adhered to.

Scaffolding Structures

Many schools are making increasing use of scaffolding structures, often to make raised platforms. The following points should be observed:

It is difficult to legislate but safety rails should be incorporated into the stage design at the front and back of the platform.

- wherever the platform is to carry a large number of cast;
- Entrances and exits are made in blackouts;
- The platform height exceeds 1.20 metres;

N.B. the age and experience of the children should be taken into account.

It is important to appreciate the destructive potential of a live load whenever weight bearing structures are being designed.

When using scaffolding it is important to consider at the preparatory design stage the nature and type of flooring to be used;

Scaffold boards can separate unless they are 'tied in' to the structure and each other. How that is to be achieved without damage to the board requires early discussion if the scaffolding is being hired;

Additional cross struts may be required if it is planned to use other materials;

- Whenever 'amateur' labour has been used to erect a scaffolding structure it should always be checked by a professional rigger from a reputable scaffolding firm;
- A regular check should be made on the structure throughout the run of the performances;

Great care should be taken when taking down a scaffolding structure and it should only be undertaken under strict supervision;

All offstage scaffolding tubes should be picked out with white paint or tape and if necessary padded. This is particularly important on all horizontal tubes.

Access to High Platforms

Backstage access to high platforms should be considered at the design stage. It is a dangerous practice to utilise all purpose built units on stage relying on improvised steps and structures backstage.

Steps should be firmly fastened into position, the edge of the tread marked with white paint or tape. Handrails should always be fitted. The potential danger of emerging from bright light into total dark must always be considered.

It goes without saying that highly flammable materials should not be used to construct scenery. If this is unavoidable the construction material should be sprayed with flame retardant. Candles or naked flame should not be used.

Backstage

Backstage should be kept clear of all unnecessary obstructions. When unavoidable they should be clearly marked and brought to the attention of the company. It is important that routines are established and maintained i.e. all properties are returned to the props table.

Stage exits should be kept clear of obstructions. Any lobbies or corridors where they form part of the way out in an emergency should not be used for storage. If, because of the layout of the building, storage in these areas is genuinely unavoidable then a clear gangway of at least one metre (3'3") must be left. It should not be capable of falling over or slipping.

Any matting/carpeting used backstage should be tacked down.

Costumes should not be stored in the stage wings. If a quick change is planned then discarded clothes should be returned to the storage area as soon as practicable.

Suspension, Flying, Screens

This section is solely concerned with the simple flying facilities that may be found in a school or similar institution. It is not concerned with professional systems.

Maintenance

It is important that all the 'lines' suspension and tie-off points are included on a regular maintenance check. Any signs of insecurity or fraying of the line should be reported to the Divisional Surveyor, AFM.

Loading

It is important that any system should only carry the load for which it is designed. This is especially important on a one line system.

Raising and Lowering

This should only occur under supervision where strict 'ground control' can be exercised. All operators should be trained to lower equipment using the cleat as a 'friction block'. It is good practice to use a crew of two when raising and lowering. One concentrating on raising, the other taking in slack on the cleat. Correct tie-off procedures should be taught. Spare line should be neatly coiled out of the way.

Whenever an abnormal load is attached to the system a notice should be posted by the tie-off point to bring it to the attention of other potential users.

Operators concerned with raising or lowering equipment should always have a clear view of the stage area. Where that is impossible a third member of the team should be so stationed to give a clear view and so instruct the 'flying' team.

Spot Bars (Barrels)

The weight of a fully laden spot bar and the inherent danger needs to be appreciated. Because of this in schools it is normal for these bars to be fixed suspensions.

Any lowerable system requires a winch and cable system and to be specifically designed for the purpose.

Screens

The nylon ropes used on most large projection screens need to be regularly checked.

The screen should be raised and lowered gently and tied up securely. The operator needs to check that the screen is coiling in its own ropes smoothly.

Temporary Partial Flying

Whenever a production calls for the suspension or partial flying of equipment/scenery/ or scene cloths, care should be taken that it does not hang in such a position to cause it or anything else to come into the close proximity of a lighting unit.

The principal danger with temporary flying is the common one of temporary fixings becoming permanent.

It is good practice and vital from a safety point of view, that at the end of the production all temporary structures, suspension and arrangements are removed.

The anchor point of the object to be flown needs to be carefully considered according to its weight and function.

Knots

All operators should have a knowledge of the common knots used in suspending items. The ubiquitous granny knot does not provide a firm enough non-slip fixing.

Domestic Pulleys

Domestic pulleys should be only used on lightweight suspensions. Check that the pulley itself is firmly attached and in good working order.

Clearing a Jammed Line

If a rope line jams in a pulley no attempt should be made to clear it by jerking or hauling on the line.

Curtaining

All stage curtaining must be flame resistant either inherently or having been dipped or sprayed with flame proofing solution.

Whenever curtains are dry cleaned they should in addition be re-flame proofed when necessary.

Curtain Tracks

Curtain tracks should be included on a maintenance schedule. If it is every necessary to move a track great care should be taken that the track does not kink or go out of true.

Curtain Winch

It is good practice to keep the winch chained or otherwise restrict the use of the winch.

In time the cable tends to stretch and over enthusiastic jerky winding can cause the cable to jump from the drum and 'bird nest'.

It is important to maintain cable tensions and to prevent the cable kinking.

Forceful use of the winch should never be used to clear a jammed track.

Pyrotechnics and Other Special Effects Including Stroboscopes General

All pyrotechnics are potentially dangerous unless used strictly in accordance with manufacturer's and supplier's recommendations.

Pyrotechnics or special effects must always be bought or hired from reputable dealers and should always be fixed in accordance with the manufacturer's instructions using properly designed and constructed devices . Under no circumstances should pyrotechnics be 'produced' by schools.

Schools or institutions who use pyrotechnics in their productions should study a copy of ABTT Code of Practice for Pyrotechnics and Strobe Effects (See Appendix 2).

Many of these effects are potentially dangerous. They should only be handled under strict supervision. A written risk assessment must be undertaken.

Under no circumstances should 'home-made' preparations be used.

The pyrotechnic device should always be sited so that it cannot set fire to adjacent materials and costumes.

Regardless of the centrality of the effect to the action of the performance the effect must never be fired if there is a danger to anyone.

The operator must have a direct view of the device from the firing point. In those cases when the device is on stage the operator should not fire solely on a verbal cue.

Always fire the device from an approved control/firing box.

Ensure that the device is electrically and mechanically safe and in particular that all connections are in good condition.

Ensure that appropriate and adequate fire-fighting equipment is at hand.

Know the procedures for first aid, fire and emergency in the event of an accident.

Ensure that there is no source of ignition or smoking before withdrawing any explosive or pyrotechnic device from the main storage receptacle.

Withdraw from store only sufficient pyrotechnic supplies for one performance. The main storage container should be kept locked. It is important that strict security is maintained.

When loading a device the operator shall have in their possession the means of isolating the firing circuit. In most cases this will be the disconnected extension lead. Never rely on switches in lieu of this cable disconnection.

The device itself should be fitted with a tail of 1.5m which is sufficient to allow the operator to face away from the pyrotechnic device when making the supply cable connection.

In the event of a misfire, switch off or disconnect the circuit and ensure that no further attempt is made to fire the device.

Whenever a pyrotechnic or smoke device is used in a test firing or in performance ensure that other users and caretaking staff are fully informed.

Pyrotechnic devices should not be sited where any entrance to or exit from a setting or any escape route from the stage could be affected.

Ensure that any plugs and sockets used in connection with firing cables are of a type different from others in use throughout the premises or clearly labelled to avoid the possibility of accidental firing.

Ensure that the operator is thoroughly familiar with the firing box. If fitted with firing circuits check that the ON/OFF position is clearly marked. Ideally the device will be fitted with a key and main switch to prevent possible interference. The box should be switched on a short time before the cue. A firing box which is switched on should never be left unattended in order to prevent possible accidental tripping of the firing circuit.

Pyrotechnics are potentially dangerous. They should only be used if there is sufficient rehearsal time, energy and financial resources to ensure they are fired safely.

Maroons

Maroons are designed to produce a very loud report. That said, though very loud is extremely quick in duration - there is no explosive 'rumble'. Users should be very clear as to the intention they wish to communicate. An audience suddenly shocked by a very loud crack often resorts to chatter/laughter in order to restore their equilibrium.

Maroons are available in various sizes. Only theatrical maroons designed to be fired electronically should be used. Only the exact number of maroons required a particular production should be ordered. If for any reason there are maroons over at the end of the production they should be detonated safely.

Bomb Tank

Maroons should only be fired in a bomb tank. The tank should be designed to permit explosion relief in an upwards direction only. The metal should not be less than 2.5 mm(0.1") thick and all joints be welded. Except for the top the tank should form a complete enclosure. The opening at the top should be as large as possible.

The size should be such that any maroon suspended within it is at least 200 mm (8") clear of any internal face.

A stout mesh lid of approximately 12.4 mm (0.5") matrix should be provided so as to cover the opening with arrangements for securely fixing into position when the maroon has been connected.

Siting

If at all practicable the bomb tank should be sited away from the stage level and clear of all personnel. Due regard must be taken of the possible effect on surrounding structure equipment and fittings. Care should be taken to ensure that any fabrics suspended over the tank are not nearer than 4m (13'). The tank should not be sited in a position where it is possible for personnel to suddenly appear (e.g. by turning a corner of an approach corridor).

Rehearsal

A trial firing using a maroon should always take place with all personnel other than the operator well clear of the bomb tank. This is important to ensure that there are no unexpected side effects of firing the device.

Ensure that other users of the building are fully informed.

Loading

Ensure that the firing circuit is isolated. Disconnect the supply cable to the tank and keep the tail to hand whilst connecting up the maroon. Do not rely on switches or removal of fuses in lieu of this cable disconnection.

Standby Maroon

In order to provide a standby maroon in the event of a misfiring it is permissible to arrange a second maroon to be suspended within the same tank arranged in such a way that there is 200mm (8") clearance between maroons and the internal faces of the tank.

Fixing in Position

Combustible materials more than 1mm (0.04") thick should never be used to suspend maroons in their intended firing position.

Debris

The tank should be clear of all debris.

Firing

The maroon should only be fired by an operator having a direct view of the bomb tank and its surrounding area.

Ears defenders must be used.

Notices

Clear notices in 50mm (2") letters should be posted in the vicinity of the bomb tank,

“DANGER EXPLOSIVES KEEP CLEAR”

These notices should be removed as soon as practicable after firing.

In the Case of a Misfire

The firing box should be isolated and the supply to the device unplugged as soon as is practicable and take no further action until the end of the performance when the fault can be ascertained and rectified and a trial firing carried out thereby using up the maroon.

Flash Boxes

Flash boxes shall be sited so as to avoid combustion hazards to scenery, hangings or costumes. Where the flash box is sited upon a rostrum it should stand on a panel of non-combustible material not less than 0.6m square (2 foot square).

Priming

Before priming ensure that the flash box is clean and in sound electrical and mechanical condition.

Ensure that the flash box is completely isolated from any source of ignition supply by disconnecting the local cable connector and keeping it to hand whilst priming the flash box. Do not rely on switches or removal of fuses in lieu of this cable disconnection.

The flash box should only be primed in accordance to the manufacturers or suppliers recommendations. (For full details see the ABTT Handbook).

Reloading

Never attempt to reload a flash box until disconnected from the firing supply and always allow at least 15 minutes to elapse between firings to permit complete cooling of the flash box.

Smoke Guns

It is important to ensure that the supplier's instructions are fully carried out. It is vital to use the grade of oil recommended by the manufacturers whenever the oil level needs replenishing. This should only be done when the machine is cold and disconnected from the electrical supply. Care should be exercised to avoid spillage on or around the device. Fitting should not take place in the immediate stage area.

When inserting a gas cylinder do so in accordance with the manufacturer's instructions. Ensure the valve is closed when removing a cylinder.

Allow plenty of time for the gun to heat up before attempting use and ensure that the green temperature indicator lamp is alight showing the gun is ready for operation.

Avoid firing the gun directly at people, fabrics or equipment. It is recommended that the operator has a clear view.

Several rehearsals under performance conditions will be necessary to determine the settings required.

Dry Ice

Dry ice is extremely cold and can cause severe burns. It should not be allowed to come into contact with bare skin and gloves should be worn when handling.

Storage

The storage of dry ice can present problems. It should never be kept in a sealed container. If a deep freeze is not available a refrigerator, disconnected from the electrical supply may provide sufficient thermal insulation for medium term storage. Care must be maintained that the surrounding area is well ventilated to avoid any excess build-up of carbon dioxide.

Dry Ice Machine

The maker's/supplier's instructions should be closely followed when using a machine. During operation the water is boiling and that plus proximity to electricity presents potential dangers. A residual current device (RCD) must always be used.

Care should be taken that no-one is enveloped in vapour for more than a few seconds. Carbon dioxide does not support life. Adequate ventilation must be maintained.

Stroboscopes

Generally strobe lighting is made to create a 'silent film' jerky quality to movement, for example in chase sequences. The total disorientating effect and the potential dangers that this lighting has needs to be fully appreciated, especially if performers are asked to perform complex manoeuvres or move scenery whilst the lighting is in use.

Strobe lighting can cause epileptic fits. To minimise this possibility the British Epilepsy Association recommend that the frequency should not exceed 5 flashes per second.

No more than 1 strobe should be used at a time.

No-one should look directly at the source of light.

FIREARMS

Firearms Certificate

A valid Firearms Certificate issued by the Police may be required if it is intended to use any firearm other than a starting pistol. Certificates are issued only to individuals who will be held responsible for the custody and use of the weapon.

When a firearm other than a starting pistol is required for dramatic purposes it should be hired from a reputable theatrical supplier who will be able to give specific advice on whether the item requires a firearms certificate. These discussions should take place at least eight weeks before the item is needed so that certificates, if required, can be issued.

Schools must not borrow firearms from individuals.

It is recommended that wherever possible 'dummy' firearms are hired i.e. firearms that do not fire blanks.

Firearms should never be pointed or fired towards the public or directly at any person on stage. Aiming slightly to one side of the actor will achieve the effect from the audience's point of view.

Blank ammunition should be strictly limited to the amount required for each performance. The explosive discharge from a blank cartridge can cause injury and great care should always be exercised.

Any firearm and blank ammunition when not in use should be kept under lock and key. The firearm should only be handled by trusted personnel. After use it should be returned to a designated member of the stage staff who should return it to the store as soon as practicable e.g. the firearm should not be left on the properties table backstage. Personnel handling the firearm should be given explicit training on safe-handling of the of the firearm. This should include: stressing that the firearm is never pointed at anyone, how to load and unload, the breach to be kept open (broken) and ammunition or magazine to be removed except when in use, the importance of security and a general respect for the firearm potential.

Weapons Other Than Firearms

Personnel should only handle weapons with considerable care both for themselves and others safety. All weapons should be blunted. All handles should be regularly checked to ensure that the blade is firmly held. No weapon should ever be used in a fight that has not been rehearsed.

Stage Fights

Stage fights do present a potential danger. The safety and security of the participants should always be considered the most important element in any effect.

Participants in a stage fight should wear protective clothing wherever practicable and costume designers should take this into account in their designs.

All stage fights should be choreographed and rehearsed. Unrehearsed sequences should never be permitted. All rehearsals should be under supervision and participants must wear appropriate protective clothing e.g. fencing mask.

All rehearsals should be conducted with the weapons that are actually going to be used. Where this is not possible adequate rehearsal time should be set aside to allow for a changeover period.

Participants should run through the fight just before its actual performance or as close to its performance as practicable.

Workshops And Preparation

It is important that the relevant Education Department Codes of Practice for Safety eg. in Workshops and Art and Craft Rooms, are studied. These can be found in the Departmental Health and Safety Policy and Guidance Manual.

The health and safety standards detailed in these codes should always be maintained. Specialist advice should always be sought whenever the use of unfamiliar methods or materials are being contemplated.

Principal Dangers

Often a large amount of construction takes place on site away from specialist workshops. It is good practice to try to pre-fabricate as much as possible in workshops and then assemble the units on site. However it is appreciated that this is often impossible because of the design requirements.

Within these circumstances improvisation often is an essential requirement of successful working but this should never be at the expense of safety standards.

It is good practice to use a mobile tool trolley which houses all the tools in use. These tools should obviously be in a well maintained condition. Tools should be returned to the trolley after use.

Saw benches and modern lightweight mobile work benches are extremely useful in that work can be safely clamped at a safe working height.

Inevitably as the production process draws towards a performance a large number of different teams are at work on the same site, often with clashes of interest. This poses its own problems of supervision and safety. It is essential that there is an overall site supervisor who can ensure that one activity is not endangering another. Pre-planning is a positive aid to safety.

The quantities of materials being used and the scale of working brings its own dangers e.g. proprietary brands of glue are sometimes used not by the tube but by the gallon. Makers recommendations and COSHH assessments must always be followed.

Working environment should always be well ventilated when using any process or material likely to give off fumes. Particular care should be taken in confined spaces.

Work on materials such as plastics and glass reinforced polyester (GRP) should only be undertaken within workshop areas and under direct supervision of qualified members of staff. Expanded polystyrene should not be used.

Good Housekeeping

Good housekeeping is essential in the creation of a safe working environment at all stages and in all departments. Drama/theatre is a highly disciplined activity - this should be reflected in the general organisation.

Sound Equipment

Increasingly schools are using a wide array of electronic equipment in the production of live music. Often this equipment has been borrowed from students, its condition is unknown. Indeed often total reliance is placed upon the student for its correct connection. It should not be used without being efficiently tested.

The use of good quality equipment properly connected to a correctly installed socket should ensure that no risk arises. Even so things can go wrong during a performance, for instance a lead may be strained or a component fail.

The following extra precautions should therefore always be taken.

Use double -insulated equipment wherever possible. This means that all live parts are insulated and additionally are enclosed in an insulating housing. The likelihood of anybody being able to touch a live part after a fault is therefore negligible.

Double-insulated equipment often has no earth-wire because it does not need it but you should not assume that equipment is double-insulated because it has no earth. Always check with the manufacturers or supplier.

Unfortunately, some instruments may not be available double-insulated.

The equipment should be regularly maintained. All broken plugs should be replaced immediately and cables checked for strain and wear.

Do not keep changing plugs. Always carry robust adapter leads to allow for different socket systems.

It is good practice to feed equipment through a Residual Current Device sometimes referred to as an earth leakage circuit breaker.

Choose a kind that can operate at not more than 30 milliseconds. Check that it has a test button. Operate the test button before every performance.

Date adopted: September 2016

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Name: Andrea Taylor

A handwritten signature in black ink, appearing to read 'A Taylor', written in a cursive style.

Signed: