

# HOLYBOURNE

THEATRE

## HEALTH & SAFETY POLICY AND PROCEDURES REVISED MARCH 2021

### 1) INTRODUCTION

- 1.1 Holybourne Theatre is a licensed venue for plays and music. The theatre is owned (in trust) and run by the members of the society. The theatre has a bar for the use of members of the society and the public who are attending public performances of plays and other theatrical events.
- 1.2 The Theatre has undertaken a comprehensive 'hazard and risk assessment' of the facilities and activities occurring within the theatre. From this assessment, a "Health and Safety" policy has been agreed and 'procedures' identified that shall be followed by all members.
- 1.3 This policy is achieved, in part, by encouraging all members to take an informed, common sense and responsible attitude towards safety issues.
- 1.4 The latest revision of this document can be viewed and downloaded from the members area of the Holybourne Theatre website. Printed copies may be obtained from the Society's Secretary on request.
- 1.5 The document shall be reviewed for continued applicability at least every three years.
- 1.6 This document takes into account the publication "Technical Standards for Places of Entertainment 2015", known as "The Yellow Book".

### 2. STATEMENT OF AIMS

- 2.1 Health, safety and the security of our members and the public are at the forefront of the society's considerations.

- 2.2** It is our duty to minimise risks and educate members as to proper practice, according to current safety legislation.
- 2.3** All people within the theatre (members and visitors) have a duty of care for each other and a responsibility to prevent potentially dangerous situations occurring.
- 2.4** In all the assessments undertaken and throughout this document the assumption is one of reasonable common sense rather than prescriptive policies and procedures. If it seems unsafe then 'don't do it' is the overriding principle.

### **3. RECORDS AND GENERAL INFORMATION**

- 3.1** Electricity incoming supply and meters are in the Electrical Box on stage (Off prompt corner).
- 3.2** Gas incoming supply is in the kitchen and the meter is outside the building near London Road.
- 3.3** Electrical installation periodical test certificates are on file in the Box Office.
- 3.4** Portable Appliance Test results are in a file in the Box Office.
- 3.5** Gas boiler servicing and Gas Safe certificates are in a file in the Box Office.
- 3.6** Fire Extinguisher annual test certificates are in a file in the Box Office.
- 3.7** Emergency lighting, fire and smoke alarm test results are in a file in the Box Office.

### **4. HEALTH AND SAFETY RISK ASSESSMENT**

- 4.1** In making this risk assessment two groups of people have been identified and considered.
- Members of the Society
  - Members of the Public
- 4.2** For the purposes of this risk assessment the theatre was split into five physical areas.
- Stage and Auditorium
  - Back Stage Area including Green Room and under-stage
  - Dressing Room areas
  - Foyer, corridors and toilets
  - Sound and lighting tower
- 4.3** Each of the following hazards and the associated risks were considered in relation to the above defined people and areas. In practice, it was found that many hazards and associated risks were common to many areas.
- Trips, slipping and falls
  - Falls from height

- Electrocutation
- Cuts and bruises, burns and scalds
- Moving and lifting
- Damage to hearing
- Theatrical activities and special effects
- Fire
- Food and Drink Hygiene

**4.4** Because the above hazards can occur in most if not all areas of the theatre and affect most people, they have been identified as individual risks where sensible or have been treated as a general risk and in each case a policy has been set out in the section entitled 'Specific Hazards & Risk assessment'.

**4.5** 'Fire' and how to deal with it is addressed in a separate document "Fire Safety Policy". In addition, Holybourne Theatre has carried out a separate Fire Safety Review according to the "Regulatory Reform (Fire Safety) Order 2005; this is the subject of a separate document and is updated at up to three-year intervals.

#### **4.6 Health and Safety talks to the Cast of a Production**

When the cast includes young people under the age of 18, the Director shall arrange for them to have a briefing on backstage health and safety by a suitably experienced Society member agreed with the Stage Manager. This briefing shall include the location of their outside Assembly Point in the event of evacuation of the Theatre. It is discretionary whether this is extended to guest cast members over the age of 18, depending on their experience.

### **5 GENERAL SAFETY**

**5.1** Where an issue regarding health and safety arises as part of a production, the Stage Manager or Director shall be consulted. If it is unclear what action would be appropriate, or if the member in charge of a project or other members involved are unhappy with the safety procedures implemented, the matter should be referred to any of the Officers of the Executive i.e. The Chairman, Treasurer or Secretary. The Officers are responsible for ensuring the issue is resolved and communicating this.

**5.2** It is the responsibility of all members to ensure that you report any possible special effects or other potential hazards that relate to a theatrical performance to the Stage Committee as soon as possible.

**5.3 Keep Informed** - If you are in charge of an area (e.g. Stage Manager) make sure you keep informed of current safe working practices and that you know the emergency procedures. If you are unsure whether an activity is safe, stop and check with the member who is in charge (Stage Manager, Director, F.O.H co-ordinator) before proceeding.

**5.4 Be Tidy** - ensure that the theatre is always kept tidy - this is very important for maintaining general safety. Tidiness of a particular area may be the responsibility of a Sub-Committee Secretary or Stage Manager; however, members are reminded that the tidiness of the Theatre is the responsibility of everyone who uses it. Keep doorways, gangways and corridors clear at all times.

**5.5 Alcohol and Illegal Drugs** - Any member who has been drinking alcohol or is under the influence of illegal drugs is not allowed to work at heights, operate any equipment, or handle live electrical gear. No member shall carry or use illegal drugs on the theatre's premises at any time.

**5.6 Staff Training** – Members, who act as Front of House staff, should be trained in the areas required by the Premises Licence. This includes Fire Training and Evacuation procedures but does not include First Aid.

**5.7 First Aid** - During this assessment we looked at the likely reasons that first aid would need to be given at the theatre. Having looked at the accident book for the last few years it has been decided that there is no requirement for trained first aid persons to be present during any of the operations of the society – if there is a specific problem the emergency services should be called. The nearest defibrillator is on the wall of the White Hart Pub in Holybourne. First aid boxes for the use of members and the public for minor problems, as they individually see fit, are located in the kitchen.

If anyone uses anything from either first aid box, or there is an accident where someone is hurt, the incident shall be recorded in the accident book which is in the Box Office.

## **6. SPECIFIC HAZARDS AND RISK ASSESSMENTS**

### **6.1 Trips, slipping and falls**

There are a number of ways that people can trip. By keeping all passageways clear this will be minimised/ eliminated.

Care should be taken when washing floor areas to ensure that excess liquids are removed, and also removing spills of liquid upon which people could slip.

### **6.2 Falls from height**

Safety barriers and hand rails shall be used where appropriate. Care shall be exercised when actors and stage crew are working near to the edge of a stage or blocks.

### **6.3 Electrocutation**

Electrical equipment shall never be left switched on or unattended. Care shall be taken not to leave electrical leads where someone could trip-over it. Kettles shall not be used near to other electrical apparatus or mirrors.

### **6.4 Cuts and bruises**

Cuts are most commonly caused by broken glass, saws, craft knives or paper packaging. Care shall be taken with saws and knives and you should always cut away from yourself. Only competent people or those under supervision should be using saws and knives. Broken glass shall be wrapped in newspaper paper and disposed of into the skip.

Care should be taken when opening packaging to minimise cuts.

Bruises are caused by bumping into things or by being struck by moving objects. Keep gangways clear and look before moving a heavy object.

### **6.5 Burns**

Burns are most likely be caused by STAGE LIGHTS or other activities to do with the construction of sets in the theatre. Take care.

## **6.6 Scalding**

This is only likely to occur when using the beverage hot water dispensers in the Dressing Room Corridor and the Kitchen. Take care and use common sense.

## **6.7 Moving and lifting**

Make sure that you are careful when lifting heavy items – always keep your back straight and lift with your legs. If the object is too heavy don't struggle put it down and ask for help.

## **6.8 Sound and Lighting tower**

Only authorised persons are permitted in the lighting tower. Under 18s are only permitted in the tower when accompanied by an authorised adult.

## **6.9 Damage to hearing**

The hazard may arise from (too) loud music, tools used in set construction (power saws etc.) and special effects used on stage. We should aim to minimise any problems with sound by reducing it to acceptable levels or wearing appropriate protection.

## **6.10 Personal Protection Equipment**

Personal Protection equipment (PPE) including safety helmets, ear muffs, gloves and goggles are available in the PPE store in the Kitchen and members may use these as they feel appropriate to guard their own safety. Safety footwear is not provided, members wear their own footwear.

## **6.11 Audience Health and Safety**

A member of the Front of House team will be present in the auditorium throughout every performance, seated in the location designated for the purpose. This will allow a clear view of the audience so that assistance can be offered to any audience member in difficulty.

## **6.12 Food and Drink** -The bar area should be kept clean and tidy at all times.

Glasses shall not be reused and must be washed in the glass-washing machine and air dried the right way up. Care must be taken with preparing hot drinks in the kitchen to ensure that members are not scalded and that electricity points are not over loaded.

Dishcloths shall be disposable J-cloths and shall not be washed for re-use.

## **6.13 Ice Creams**

The ice creams served to the public shall be provided in individual cartons and stored in the freezer. Any ice creams taken out of the freezer for sale in the auditorium from an insulated box must not be returned to the freezer; they must be sold or disposed of.

## **7.0 FIRE SAFETY 7.1 Hazard & Risk Evaluation**

The risk of fire breaking out in the theatre comes from stage lighting, pyrotechnics, electrical appliances and electrical short circuits, ceiling lights & mirror lights and naked flames. This risk is further defined in the separate Fire Risk Assessment document.

### **7.1 Risk Reduction**

It is the first duty of all persons in the theatre to prevent injury or loss of life in the event of a fire. For this purpose, all members must ensure that they are familiar with all the Fire Exits and what action to take in the event of a fire.

Fire doors must be kept closed and under no circumstances propped or tied open' except for times when equipment is being transported through them and then they must be attended until they are properly closed.

Smoking is strictly prohibited in the entire building except on stage when smoking is necessary to the performance; in which case ashtrays must be provided, and any stubs should be checked and disposed of in a sand bucket when the actor comes off stage.

Any intention to use naked flames, pyrotechnics or other heat sources during a performance must be very carefully considered. Suitable fire extinguishers must be on-hand at all times.

The theatre is equipped with emergency lights. These must always be active during performances where the public is present.

## **8. HOUSE MANAGER AND FRONT OF HOUSE**

Front of House staff play a vital part in ensuring the safety, security and comfort of the public and front of house areas before, during and after performances. There are often two Front of House staff and two Kitchen/Bar staff. The role of House Manager must be designated for each performance from either the Front of House staff or Kitchen/Bar Staff; the House Manager need not be the same person for all performances.

A Front of House member will be sat in the Auditorium during every performance in the designated aisle seat.

The general duties of the House Manager & Front of House staff are detailed below

### **HOUSE MANAGER & FRONT OF HOUSE GENERAL DUTIES**

**Please remember that you are the public face of Holybourne Theatre and that you are responsible for the safety, security and comfort of all areas except the Stage, Green Room and Dressing Rooms, which are the responsibility of the Stage Manager. In the event of an Incident or fire, the House Manager is in charge and must follow the procedures in the Fire Safety Policy, which you need to be familiar with.**

- 1) Arrive 15 minutes before opening time e.g. 6.45 pm. Instructions below can be followed in order, starting from the Bar. Some things may have been done by Bar or Stage staff.
- 2) Ensure all doors are open and lights are on
- 3) Check the toilets for supply of toilet rolls and towels and replenish as necessary from the cupboard in the kitchen.
- 4) Check tickets and greet and assist public to find seats, Bar and toilets.
- 5) Ten minutes prior to performance, close both sets of doors from Foyer to Auditorium and from Foyer to outside door.
- 6) Notify stage staff the performance can start.
- 7) A member of the Front of House team to be present in the auditorium throughout every performance with the two-way radio, seated in the location designated for the purpose.

This will allow a clear view of the audience so that assistance can be offered to any audience member in difficulty. The other FoH staff member to wait in the Bar.

**Front of House must remember they are responsible for what goes on in public areas until the public has left the building and must be ready to respond to any emergencies. You will be informed via radio and you should go to Auditorium or Foyer to deal with the problem, unless the emergency is obvious.**

- 8) At the Interval, open both sets of doors between foyer and auditorium.
- 9) After interval, close both sets of doors leading to Auditorium and advise the stage staff the show can continue.
- 10) When house lights are up at end of show, both sets of doors are opened and fastened back. Then open the door to car park for additional ways to exit. Stay by doors until everyone has left.
- 11) When auditorium is empty the outer door to Foyer should be closed. Confirm who will be locking up the building. You may then leave. Very many thanks for your assistance. Dress is smart casual with a steward lanyard.
- 12) In the event of an incident of suspected fire, the House Manager is responsible for deciding if the production needs only to be paused, for example for a medical or technical incident (audience remain in seats) or stopped and the building evacuated, consulting with the Stage Manager as appropriate.
- 13) The House Manager is responsible for establishing whether the Emergency Services need to be called and is responsible for calling them or delegating someone else to call them. The House Manager will advise Light & Sound crew whether production can carry on or needs to be paused. Not all incidents require the emergency services to be called or the production stopped.
- 14) In the event of fire, the Fire Safety Policy will be followed.

## **TECHNICAL HEALTH AND SAFETY GUIDELINES**

This section addresses the more technical areas of stage and production and should be read by members who work in these areas. The stage working environment is inherently dangerous. Use of electricity, power tools, working at heights and special effects are day-to-day practices within the theatre.

### **1 SET CONSTRUCTION**

#### **1.1 GENERAL SAFETY**

##### **1.1.1 Risk evaluation**

A serious, but temporary risk is perceived.

### **1.1.2 Risk reduction**

Ensure excellent housekeeping, employ safety checks and train members about the hazards and use of good working practice.

Equipment should be used in accordance with the safety instructions for its use.

Appropriate Personal Protective Equipment is made available for all construction equipment and tasks; the Stage Co-ordinator is responsible for maintaining a store of this equipment.

Paint and liquid containers have safety instructions for use on the label, which should be read and adhered to by the stage crew.

Junior and student members should always be supervised by an experienced adult member when working on stage.

### **1.1.3 General safety procedures to be used during set construction**

Always use fireproofed materials (curtains, props, sets and costumes) wherever possible, especially those which may be used in situations which may constitute a fire risk. It is accepted that timber used in set construction is impractical to fireproof.

Make sure you know how to use any tools safely. Members should never use any power tools that they are not familiar with; seek advice.

Keep working area TIDY at all times: Never leave objects lying around where they can trip people up or jam doors. Check and ensure that the set is safely secured. Check and ensure that relevant props are safely secured. Make sure that the stage floor is swept, and if necessary, mopped to keep it dry and free from slippery materials. Check and ensure that the stage floor is free of splinters, screws and nails.

Check and ensure that all Stage Drops, and other over-stage equipment is safely secured, using safety bonds/chains.

Check and ensure that all temporary power, control and sound cables are secured to the floor/walls using gaffer tape (or other appropriate means). Alternatively, make use of cable trays, electrical trunking or existing cable runs where appropriate.

## **1.2 TRIP HAZARDS**

### **1.2.1 Risk evaluation**

The hazard has the potential to cause accidents - particularly from cables and materials on the floor.

### **1.2.2 Risk reduction**

Ensure excellent housekeeping and safety checks.

Train members about the hazard and good working practice.

### **1.2.3 Specific procedures to be used to avoid trip hazards**

Mark obstructions in dark areas with white or similar visible paint or tapes.

Check and ensure that all power, control and sound cables are secured to floor / walls using gaffer tape (or other appropriate means). Alternatively, make use of data trays/electrical guttering where appropriate.

Ensure that stairs and steps are clearly marked on edges.

## **1.3 WORKING AT HEIGHT AND WITH LADDERS**

### **1.3.1 Risk evaluation**

Stage crew do regularly work from ladders and stepladders. There is a risk of either persons falling from a height or of dropping things on to people below. The chances of persons falling from more than two metres in the theatre are quite small. There is little practical opportunity to rig safety harnesses.

### **1.3.2 Risk reduction** For the purpose of this document, the term “ladders” includes “stepladders”. All stage crew should read HSE document “**Safe use of ladders and stepladders**” ref **INDG455** available online.

Employ good working practice for working at heights: Two people should always be involved with the use of ladders and scaffold.

**Stage crew age under 18** will only use ladders with the supervision of an experienced member. If there is any doubt about their suitability, they shall not be allowed to use a ladder.

Ladders should always be footed to prevent slipping and checked for security before use.

Step ladders should **ONLY** be used fully opened and never too close to the edge of staging or rostra.

Never lean out or over-stretch from a ladder - **MOVE THE LADDER!**

**NEVER** leave objects on top of ladders,

Hard hats are available for any stage crew that want to use them. However as there are rarely times when people are working above others the stage area is not considered a mandatory hard hat area.

If persons are working above head height, those on stage below should stay clear of the area in case anything is accidentally dropped.

If you are dropping anything from above head height, or if anything such as a cable is likely to swing near anyone's head, you should always shout 'HEADS' and, if time allows, check that all is clear before letting go. (The object should be designed to withstand being dropped!).

## **1.4 SCENERY AND THE STAGE REVOLVE**

### **1.4.1 Risk evaluation**

There is a risk of scenery falling from a height on to people below. There are risks of persons and materials falling over where the revolve is rotated.

### **1.4.2 Risk reduction**

Employ good working practice for securing scenery and use of the revolve:

ALWAYS secure unused scenery drops with a safety chain or appropriate restraint.

During set construction when lowering or raising a scenery drop, ALWAYS check that other stage crew are aware and are standing clear of the drop.

Always secure scenery flats to each other and to permanent structures, e.g. the stage walls or floor. If securing scenery flats to the floor with a brace and stage weight, to avoid anyone tripping over them, always mark both the brace and the stage weight with fluorescent / reflective tape and ensure there is adequate back stage lighting.

Only operate the 'revolve' when in visual or audible communication with someone sited on the stage. When operating the 'revolve', ALWAYS ensure the stage is completely clear of obstructions both on the stage and above the stage. Ensure that all items on the 'revolve' are secured and will not fall over when the 'revolve' is moved.

ALWAYS ensure that nobody is either on the 'revolve' or near the edge of the 'revolve' before operating. If there is anybody either on or near to the 'revolve', ensure they are aware of its imminent operation by calling "STAND CLEAR - REVOLVE GOING".

## **1.5 STAGE MANOEUVRING**

### **1.5.1 Risk evaluation**

Presents a serious hazard, especially for stage crew and construction teams. The potential hazards include: back strains from lifting, pinching fingers or receiving splinters when moving blocks or flats into place, bumping head when working under stage.

### **1.5.2 Risk reduction**

Stage crew to receive instruction and should not exceed their capabilities. Teach techniques to new stage crew.

Sufficient numbers of people shall participate in lifting heavy objects to reduce personal strain

Gloves should be available for stage crew to wear.

Sufficient lighting – portable light should be available.

## **1.6 LIFTING INCLUDING LIGHTING BARS AND DROPS ON STAGE**

### **1.6.1 Risk evaluation**

Presents a serious hazard, especially for stage crew and construction teams. Potential hazards include back Injury, rope burns and potential risk to those on stage from a falling bar or drop.

### **1.6.2 Risk reduction**

Teach members about the hazard and use of good working practice.

Consider using lightweight staging and blocks.

The lighting bars and stage drops are all triple hung, such that if one suspension point fails the other two will keep the bar or drop supported.

Never lift heavy weights unaided. Remember, when lifting, bend your legs and keep your back straight. Ensure there are sufficient numbers of people for lifting heavier items.

Lifter of lighting bars or drops to check the lifting area is clear before starting the manoeuvre. Give a clear call 'Bar Coming In' – or 'Bar Going Out'. Only trained stage crew to secure bars and drops. Stage crew should ensure the control of people entering the lifting space during the lifting operation.

It is recommended to use gloves when using hemp ropes to avoid rope burns or splinters.

When flying/lifting lanterns and special effects equipment up to working height, check that everything on them including the safety chain, is secure before it is hauled up. Be careful when flying lanterns with gel frames or barn doors attached - they have a nasty habit of failing out.

## **1.7 POWER TOOLS**

### **1.7.1 Risk evaluation**

Use of power tools by members presents an ever-present hazard from contact with electricity, dust and shards.

### **1.7.2 Risk reduction**

Power tools should only be used by competent members. Training is done through teaching and mentoring by experienced members during set building.

Battery operated tools should be used wherever possible.

**Stage crew age under 18** will only use power tools with the supervision of an experienced member. If there is any doubt about their suitability, they shall not be allowed to use a power tool.

### **1.7.3 Specific procedures to be used to avoid hazards from use of power tools**

Power tools connected to mains electricity should be visually checked before use and not used if damaged.

Mains voltage electricity supply should come via RCD protection.

When using power saws, eye protection should be used. Goggles are available in the tool room.

When cutting hazardous dust producing materials (e.g. MDF) breathing masks should be worn. Breathing masks are available in the tool room.

## **1.8 USE OF PAINT AND GLUES**

### **1.8.1 Risk evaluation**

They are a minor fire hazard. Paints and glues used are normally for household use and are not a danger when handling. Only water-based emulsion or stage paints are used.

### **1.8.2 Risk reduction**

Employ excellent housekeeping. Teach members about the hazard and good working practice.

**1.8.3 Specific procedures to be used to avoid hazards from paints and glues** All paints, including gloss paints, used should be water based. Solvent based paints and glues should be avoided where possible.

Follow the instructions on any material being used. Solvent based varnishes, paints or glues are not used.

If paint gets in an eye seek medical help rather than washing with water.

## **2 ELECTRICITY GUIDELINES**

These guidelines refer to Temporary installations created for specific productions only. Permanent installations in any part of the building must be installed in full compliance with current regulations.

Electricity is extremely dangerous, and it is VITALLY IMPORTANT that adequate precautions are taken at all times.

### **2.0.1 Risk evaluation**

Use of high voltage electricity presents an obvious danger.

### **2.0.2 Risk reduction**

Electrical equipment shall be used only by responsible technicians. Ensure proper maintenance and inspection of equipment by responsible technicians.

The use of electrical equipment brought in from outside (other than from specialised hire companies) shall be discouraged; it must be checked for safety before use.

## **2.1 Specific procedures to be used to avoid hazards from electricity**

**2.1.1 Electrical Safety:** Whenever possible, work with the power supply switched off and make sure that everything is in good condition. In any doubt DO NOT use it, get it checked by a qualified person.

Sensitive circuit breakers and fuses will reduce the incidence of short circuits. Common sense should be applied where ever electrical equipment is used.

**2.1.2 Phases & Electrical Capacity:** The Theatre requires a large amount of power, which is supplied in two phases. These phases are used for different purposes one phase for all the stage lighting, and the second for the auditorium and public areas. Each phase is equivalent to normal mains; a two-phase supply is potentially more dangerous; an electric shock would almost certainly be fatal.

Sensitive circuit breakers and RCDs reduce the incidence of electric shock due to faulty equipment or mistakes. Common sense should be applied wherever electrical equipment is used.

**2.1.3 Electrical Cables:** Firmly tape down all cables, especially if they are across doorways or gangways. Where possible, run cables over the tops of doors, or use heavy duty cable covers. Uncoil cables COMPLETELY before using - running current through a coil of cable generates heat, creating an obvious fire risk.

### 2.1.4 Inspection and PAT Testing

Authoritative, practical and straightforward guidance on this subject can be found online at the HSE website in their **publication “Maintaining Portable Electric Equipment In Low Risk Environments” ref INDG236**. It is impractical to have hard and fixed rules for inspection and PAT testing and this is recognised in the HSE document. Common sense needs to be applied.

Mains (240V) electrical equipment should be inspected for damage and PAT-tested on the following basis:

Equipment that is regularly plugged and unplugged from the mains and moved around is more vulnerable to damage than equipment that is permanently plugged in. Portable equipment should always be subject to a quick visual check for loose plug wiring or physical damage before use.

Double insulated general theatre equipment (i.e. does not have an earth wire in the mains cable, such as some hairdryers and vacuum cleaners) – PAT test every 4 years plus visual inspection for damage.

Single insulated general theatre equipment (i.e. three wires in the mains cable) – PAT test every 2 years plus visual inspection for damage. **This includes extension cables used for set construction work.**

Patch cables and extension cables used for Stage Lighting – PAT test every two years plus visual inspection for damage and loose wiring. Because of the force sometimes applied in plugging and unplugging, such cables should always have a quick visual inspection for loose wiring at each end before use.

Lanterns used for Stage Lighting which are permanently mounted – PAT test and inspection every four years.

Lanterns used for Stage Lighting which are taken up and down – PAT test and inspection every 2 years. Note that this can be done on an ad-hoc basis as lanterns are brought back into service.

It is intended that a labelling system is developed so that the inspection status of all items is easily, visually ascertained.

## 3. LIGHTING EQUIPMENT GUIDELINES

### 3.1 Specific procedures to be used to avoid hazards from lighting equipment

#### 3.1.1 Lighting Equipment

The luminaires (lanterns) are a mixture of tungsten lamp powered units and L.E.D. powered units.

The lighting plan should be devised according to the general rules:

- The dimmers are rated at 10 Amps – this is about 2kW of light.
- Some equipment is not suitable for running on dimmers
- Never change the 15 amp round pin plug on a lantern. Lanterns are not intended to be plugged in to 13 amp ring main sockets and 15 amp plugs do not have an internal fuse. The fuses/circuit breakers are accessible in the dimmer racks.

- Ensure there is adequate lighting backstage.

### **3.1.2 Hanging a lantern**

The procedure is the same wherever you are hanging the lantern of whatever type:

- Hang each lantern in place correctly (make sure it is not upside down!), lock the clamp hook, and secure the safety chain (except lighting stands or booms – see below).
- Point the lantern roughly in the right direction. This helps with focusing and may show up problems such as overcrowding or bad sight lines. Insert the gel frame (colour frame).
- Plug the lantern in, making sure you check the socket numbers with the lighting plan. AVOID plugging in or unplugging a lantern or cable while the circuit is live.
- Ensure that you do not knot or tie the lantern's power lead to the bar. The cable should be hanging loosely between the lantern and socket to allow movement during focusing.

### **3.1.3 Cabling**

- Cable runs shall be neat and tidy. The cabling procedure is as follows:
- Make sure the cable is long enough. Cables can be joined together, but this can make fault-finding harder.
- Clove-hitch the socket end of the cable to the bar beside the lantern. Make sure you leave some slack for focusing.
- Run the cable along the bar, coiling it loosely to take up the slack.

### **3.1.4 Rigging, Equipment, Lighting Bars and Grids**

- Stage lighting is very hot; check that all lanterns are properly focused, angled and located, and not too close to drapes or gauzes.
- Movable lighting bars will have cable running from them back to the dimmers (known as tripe). Be sure that the tripe (cable) from a bar being moved (i.e. dropped down to stage level) is free to manoeuvre safely.

#### **3.1.4.1 Lighting Stands**

- Lanterns can also be supported on lighting stands, attached by spigots instead of clamps. A T-bar allows more than one lantern to be supported on a stand. Make sure that any stand is on a level surface; and on a tripod stand, ensure that the legs are as wide apart as possible. Make sure that any adjustable sections are locked off.
- If the stand is somewhere where it might be knocked, use stage-weights to reinforce it.
- Lanterns attached to stands using spigots do not require safety chains. Lanterns attached to a T-bar using hook clamps should be chained - preferably to each other as well as to the bar. Make sure that lanterns transferred to stands are not rigged upside-down.

## **4. SPECIAL EFFECTS GUIDELINES**

The use of special effects equipment requires special care.

### **4.1 Risk evaluation**

An occasional - but obvious risk. Use may be governed by Health & Safety requirements.

### **4.2 Risk reduction**

- To be operated only by experienced members.
- Practice with actors before the production.
- Advise the audience of special effects being used where necessary.

### **4.3 Specific procedures to be used to avoid hazards from special effects**

#### **4.3.1 Lasers**

Lasers require a qualified operator and special permission may be required. Anyone thinking of using lasers must seek approval from the Stage Committee.

#### **4.3.2 Strobe lighting**

- Strobe lighting can make many people feel ill and in some cases can trigger epileptic fits - Use sparingly. Strobes should never be used at frequencies above 8Hz.
- Strobes shall not be used for more than 20 seconds at a time.
- If several strobes are used they should be synchronised together.
- Warning notices **MUST** be displayed in the programme and at the entrance to the theatre (Ensure audiences know not to look directly at the sources.)

#### **4.3.3 Smoke**

- Theatrical smoke is non-toxic and non-irritant; however it should still be used with care. (Audiences can still imagine it is harmful – cough inducing!).
- Read and follow the manufacturer's instructions before using the equipment.
- Don't attempt to release smoke before the machine has heated up - this can result in slippery oil being released onto the stage.
- Smoke machines have parts that get very hot when in use, wait for them to cool down before storing.
- Do not leave a smoke machine switched on for long periods unattended and **NEVER** cover the smoke machine with anything that could impede ventilation.
- Avoid firing smoke directly at people, fabrics or equipment. The operator should always have a clear view of the area around the smoke machine.
- Never use more smoke than necessary, and in particular avoid dense clouds over the audience.
- Anything that cuts down visibility is potentially dangerous. The use of small and frequent puffs, which allows time for dispersal, works best.

- When using smoke on stage, make sure that everyone knows it's coming.

#### **4.3.4 Dry Ice**

- Dry ice is a hazardous substance. Dry ice (solid carbon dioxide) releases a cloud of dense white vapour when heated by placing it in boiling water (in a kettle designed for the purpose).
- Dry ice is extremely cold and will produce burns. Gloves **MUST** be worn whenever handling dry ice.
- Dry ice must be stored in a made-for-purpose container and kept in a safe place.
- **NEVER** use dry ice in tight, enclosed spaces. Care should be taken to ensure ventilation of the surrounding area to prevent a build-up of gas. Dry ice vaporises rapidly, so only small quantities should be removed from storage at a time.
- Before filling the special kettle with water, ensure that it is disconnected from the mains - unplug it, don't rely on a switch. Make sure the machine doesn't leak. Once boiling, add dry ice as and when necessary to achieve the desired effect. In use, remember that the machine contains boiling water.
- If you have to add more water to the special kettle, allow it to cool before adding the water.

#### **4.3.5 Naked flames**

Any intention to use naked flames during a performance must be very carefully considered by the stage crew and the stage committee. Fire extinguishers must be on hand at all times.

#### **4.3.6 Firearms and Weapons**

##### 4.3.6.1 Risk evaluation

Firearms and stage weapons using blank ammunition present danger to people from noise and flash.

##### 4.3.6.2 Risk reduction

- There should be adequate training and procedures for those using firearms.
- Use governed by police and Health & Safety requirements
- Specific procedures to be used to avoid hazards from firearms and weapons
- Firearms only to be used by trained stage crew and actors on stage and only firearms firing blank ammunition shall be used.
- Care to be taken in staging to minimise risk to actors
- Earmuffs and eye protection to be available for wearing when fired in the wings.
- Firearms and ammunition to be securely locked away by stage crew after use.

#### **4.3.7 Pyrotechnics**

##### 4.3.7.1 Risk evaluation

Pyrotechnics of any type are potentially dangerous and a fire risk. Our insurance forbids the use of pyrotechnics, so explicit Committee approval must be sought.

#### 4.3.7.2 Risk reduction

- There must be adequate training and procedures for those using pyrotechnics.
- Always follow the manufacturer's/supplier's instructions for use.
- Use governed by Health & Safety requirements. The statutory requirements must be followed.
- Practice with actors & stage crew when using pyrotechnics on stage. Stop an appropriate rehearsal at the required time, explain the effect and then fire it with everyone out of the way.
- Specific procedures to be used to avoid hazards from pyrotechnics.
- To be operated only by responsible & experienced stage crew. One experienced person in a production must have sole responsibility for all handling, loading and firing of pyrotechnics.
- Pyrotechnics should be detonated in metal flash pods, or in the case of maroons, in a metal bomb tank. All flash pods & bomb tanks must be clean and in good condition.
- The person detonating a pyrotechnic must have a clear view of the device.
- Follow the manufacturer's instructions for the minimum clearance to scenery and people and for any required non-combustible protection to its location.
- If at all possible, maroons should be sited off-stage. Bomb tanks should be clearly labelled DANGER - EXPLOSIVES - KEEP CLEAR.
- Maroons can damage sound equipment. Check with the Stage Committee before using them.
- Whenever pyrotechnics are fired, someone MUST be standing by with a fire extinguisher.
- Anyone handling pyrotechnics must NOT smoke while doing so.
- Always allow flash pods to cool for at least 15 minutes before reloading.
- Hearing protection should be available for protection against noise, (e.g. firearms or explosions).
- Once fired, waste pyrotechnic devices should be disposed of carefully and safely.

#### 4.3.7.3 Specification for pyrotechnic devices

- The supplier's health & safety datasheet must be available and followed! All pyrotechnic equipment used MUST conform to the ABTT guidelines. Only use professional equipment. Never attempt to use home-made firing devices or cartridges. Never mix pyrotechnic or explosive powders together.
- Firing boxes must have two switches, one lockable. The person loading the pyrotechnics should ensure that the device is switched OFF and must have the key while loading. The key should only be inserted just before firing.
- Where possible, indicator lamps should show where a power supply is present. Where possible, all switches should be of the biased type (i.e. they are only engaged while they are being pressed).
- Each device should be controlled and detonated separately.

#### 4.3.7.4 Storage of pyrotechnic devices

- Pyrotechnics must be kept in a locked metal cabinet and stored materials should be kept to a minimum. Ideally, the amount of stored material should not exceed 2.3kg. The cabinet should be marked 'DANGER - NO SMOKING - NO NAKED FLAME'.
- No combustible materials should be stored near pyrotechnic devices.

#### 4.3.7.5 Failed devices

- In the event of a pyrotechnic device failing to fire, switch OFF and isolate power supply to all pyrotechnic devices, remove fuses and unplug the cable from the firing device.
- DO NOT attempt to approach the device until the power supply has been switched OFF.
- Try to determine the fault and fire the pyrotechnic under safe conditions. This ensures that the device is safe for the next performance.
- NEVER return a failed pyrotechnic device to the store. If it cannot be detonated in a test firing it should be destroyed safely or returned to the supplier.

## 5 Sound Equipment

### 5.1 Risk evaluation

There are few hazards associated with sound equipment other than those identified under general electrical hazards.

### 5.2 Risk reduction

All sound equipment brought into the theatre for connection to the theatre PA system MUST be checked and approved by competent member nominate by the Stage Coordinator prior to being installed and used.

## 6 Theatrical Performance

### 6.1 Risk evaluation

Normally a low risk but some situations can be problematical.

### 6.2 Risk reduction

- There should be adequate training and rehearsal time.
- All members must report any unsafe performance situations (e.g. involving special effects or other potential hazards) to the Stage Committee as soon as they are seen.
- Specific procedures to be used to avoid hazards during theatrical performance
- On-stage movements, entrances and exits should be well choreographed and rehearsed, **especially any taking place during blackouts.**
- Stunts and combat should be carefully choreographed and planned by qualified personnel.
- Padded landing areas should be provided for jumps over 6 feet [or for other designed falls].

- The set and props should be safely secured.
- The stage floor should be swept (free of splinters and nails), and if necessary, mopped before each performance and keep it clean, dry and free from hazards.
- All corridors, stairways and rooms shall be kept clear of obstacles at all times.

### **6.3 Flying of Actors (the raising of a person on a rope or cable above the stage)**

#### 6.3.1 Risk evaluation

A serious hazard – but sometimes artistically desirable.

#### 6.3.2 Risk reduction

- Procedure designed using knowledge from experienced members or others and supervised accordingly by experienced persons (even hiring specialist expertise if needed).
- Procedures shall include the use of a suitable and approved harness.
- Prior to any use by an actor in rehearsal or production, both the harness and the supports it is hung from shall be load tested together and certified safe by a specialist contractor.

## **7 Wardrobe and Dressing room**

### 7.1 Risk evaluation

Few hazards other than those already identified. Fire safety is the major risk.

### 7.2 Risk reduction

Costumes shall not be left on or near a heater or radiator. NEVER leave costumes near light bulbs and certainly DO NOT drape costumes over the light bulbs or around the dressing mirrors.

## **8 Working alone in the theatre**

- Working alone in the theatre is only to be carried out by key-holders provided:
- they are not climbing, not using ladders, not using mains-powered tools and not working on electrical circuits and
- they have arranged for another member to join them.