

Risk Assessment – Hoist Operation

Notes:

1. The people that might be harmed: BBC Studioworks employees, contractors, public, artists.
2. This risk assessment should be used in conjunction with the following BBC Studioworks documents:
 - **Arrangement Hoist Operation**
 - **Safe System of Work – Grids and Gantry Ceiling Walkways**

HAZARD	CONTROL
Objects falling from a height	• All crew undertaking hoist operation have received instruction on use of the hoist system, be competent to carry out that activity and have had their roles and responsibilities clearly explained to them • PPE should be worn if identified as a requirement by a specific task risk assessment undertaken by rigging personnel/company. In this circumstance use of PPE by those working in the area is mandatory and must be rigidly enforced. • Lifting weight must not exceed the SWL of the individual hoist • The rigging crew should ensure all the lifting tackle selected is suitable for the task, is compliant with the requirements of LOLER including having the correct colour code to indicate they have been inspected within the designated period • All rigging tackle must be inspected before use and secured firmly when rigged • The Studio is to be controlled and areas zoned off by physical barriers if required. The area below must be policed and other people working in the area made aware a hoist operation is in progress. • Trained and competent Personnel only to undertake the rigging of items onto the hoists.

HAZARD	CONTROL
Objects falling from a height (cont.)	• The wire rope used to suspend items from the hoist must be in good condition and in date. It must be inspected and colour coded every six months. If in doubt this in-date colour can be cross referenced with the coloured tagged system (seek advice from the lighting workshop supervisor if you are unclear of the current colour code) • When clamps are used both thumbscrews must be hand tightened and the split pin (also bonded to the clamp) passed through lamp spigot is facing the rear of clamp to ensure it cannot work free. • Where multiple hoists are linked together and need to be moved in unison then the 'group' functionality should be used on the hoist system (using D, E and F groups) to indicate that is the case to anyone operating the hoist system
Crush injuries / Risk of injury from moving objects	• When not in use the hoist panel must be locked off to prevent unauthorised use. • The area under the hoist must be kept clear during its operation of the hoist with the area controlled, zoned off by physical barriers if required and policed. • Hoist loads are kept in line of sight at all times during operation of the hoists with the use of a nominated 'spotter' when required and only raised or lowered when it is safe to do so • Where multiple hoists are linked together a spotter must be aware of the whole grid to check no hoists have been accidentally selected and are being lowered/raised

HAZARD	CONTROL
Crush injuries / Risk of injury from moving objects (cont.)	• The hoist operator and spotter must stay in constant contact during operation of the hoist system. Where communication is difficult due to ambient noise or obstructions in the line of sight the use of a radio comms system must be used. Any interference on the radio system is to be notified to the appointed person as soon as possible. • Once the hoist operator has started to raise or lower the hoist, they must not leave it unattended until the operation / task has been fully completed. • Spotters must be used any time a hoist is operated
Entanglement with other equipment	• Hoist loads are kept in line of sight at all times during operation of the hoists with the use of a nominated 'spotter' when required and only raised or lowered when it is safe to do so • Only after it has been ascertained that there will be no infringement of neighboring equipment, should hoists be lowered/raised. • Before a lighting rig is undertaken in Television Centre, the AV hoists must be raised to grid level they will only be returned to working height during the fine light on a studio day • The hoist operator and spotter must stay in constant contact during operation of the hoist system and if an entanglement occurs the hoist operation should be stopped immediately. • If any hoist comes into contact with other equipment or parts of the studio infrastructure during its operation it must be reported to the lighting workshop (LightingWorkshop@bbcstudioworks.com) • All excess cable must be gathered and coiled, and safely held within the lamp's bond, as to allow free movement but with no drooping cable seen below.

HAZARD	CONTROL
Faulty and Damaged Equipment/Scenery	• All bonds are to be visually inspected for damage i.e. no kinks or damaged strands. • All rigging equipment such as clamps, hanging irons, d-shackles, drop arms and karabiner must visually inspected for damage before being rigged. • Visually check the lamp for damage e.g. large dent's, bent stirrups, loose parts hanging off, cracked Len's, safety meshes in-tact and cups or pins missing. • Any damage to scenery items must be reported to the Logistics Coordinator or Studio Manager (Kelvin Hall), if there is any concern the damage might undermine the safe rigging of the item it must NOT be rigged. • Always visually check the plug and cable for signs of cracks and damage. There should be no cable cores protruding from cable glands. • Always ensure that the lamp has been electrically tested with a clearly marked label that is currently in date. • Report signs of damage and out of date lights to the Gaffer immediately. • With power turned off, plug the lamp into socket and then ask the Gaffer to flash the lamp to check it is working. • Check the operation of all cups to ensure the lamp can be freely panned, tilted, spot and flooded and that the power switch correctly works.
Cuts and abrasions from frayed bonds and split pins	• All Secondary Ropes when used are to be visually inspected before use and any that are damaged must be removed from the Grid. • All bonds are to be visually inspected for damage i.e. no kinks or damaged strands.

HAZARD	CONTROL
Manual Handling Injuries	• Relevant PPE to be worn, Protective footwear, High Visibility Vests and Gloves as required. • Correct manual handling and lifting techniques to be employed. • Ensure the selected lighting Monopole is at a safe working height before lifting the rigging of basic studio lamps onto Monopole.