

## **Risk Assessment: Rigging Stages 1,2 and 3**

### **Scope:**

This document outlines the details and procedures and assessment of risk for safely rigging at Elstree Studio Stages 1,2 and 3, BBC Studioworks.

### **The Grid:**

The grids in the studios are maintained by a third-party contractor. The stages have a fixed grid system, with lighting rigged directly onto fixed beams. Monopoles are used for focusing. Only persons deemed by the RM as competent in the safe use and operation of the monopole or rigging are permitted to carry out such work.

### **Information from Production**

Visiting productions must provide BBC Studioworks with rigging information at least 1 week prior to use. This enables studio management to review plans and hanging points to ensure weight loads, lighting locations and operations have been adequately planned. Apart from the submission of ground plans, the visiting production will provide information on the following:

#### ***Personnel***

The person that production intends to use as their competent rigger (if any) and associated risk assessment should be provided to the studio management.

#### ***Equipment (including secondary arrangements)***

- All hanging arrangements should be identified to the Resource Manager, including set load points, hanging irons and any additional rigging equipment used (truss, Span Sets and / or chain blocks)
- Any lifting equipment brought into the studio must comply with LOLER regulations and be fit for purpose
- Rigging of certain equipment including chain blocks, must be disclosed to the studio management, and together with the disclosure of any proposed secondary bonding arrangements that may be required for your equipment.
- Any rigging of equipment to the rig that is not included in the general studio set up must be double checked and signed off by the studio resource manager, with correct safety bonding in place after installation

#### ***Plans***

All plans should be provided at least 1 week prior to production. Plans should outline potential loads and for set and equipment suspension. If additional lighting is required to be rigged onto lighting bars, then this must be identified on lighting plans and submitted together with the set ground plans

## **Studio Arrangements and Procedures**

To ensure that the use of rigging equipment and operations are carried out in controlled and safe environments, every visiting production company and persons required to work at height or rig in the stage(s) must follow the studio procedures that have been put into place.

### ***Induction/briefing***

Personnel must be briefed on the working arrangements within the studio with regards to the rig. The briefing must be completed prior to rigging work taking place. A record of who has received the briefing will be kept and retained.

### ***Production Rigging Risk Assessment***

The studio will require a copy of your rigging risk assessment and any specific flying assessment, including (but not limited to) Jerk rigs, flying ballet and flown set operated during production

### ***Limitation of Access***

Access to the rig is restricted. Any visiting production that requires their own staff /contractors to work on the rig must provide an assessment that covers the activity, and details on training and competence of staff to work in this area. This must be agreed with the Resource Manager in advance. BBCSW staff shall work to the safe system of work and controls as outlined in this document.

Whilst persons are working overhead a suitable exclusion zone must be in place beneath the work area.

### ***Overhead Work during Studio Occupancy***

During studio occupancy, including the presence of a studio audience, any work at height is restricted. If access is required during occupancy below, an adequate risk assessment must be completed, which takes into account persons below, the type of work being carried out in the studio and the tools to be used before the work can be authorised.

The people that might be harmed: Studioworks employees, contractors, public, artists

HAZARD	CONTROL
<p><b>Falls from height</b></p>	<ul style="list-style-type: none"> <li>• Rigging activities only to be carried out by suitably competent and experienced personnel</li> <li>• Specific risk assessment to be provided by rigging contractor prior to any work commencing</li> <li>• All rigging personnel to receive inductions and be briefed on studio/location procedures prior to work commencing.</li> <li>• Harnesses shall be worn where appropriate – i.e. harnesses are not required when working on scissor lifts however they are required when working from boom lifts.</li> <li>• Platforms / scaffold towers should only be erected by persons competent to do so and should not be moved with tools or personnel on them.</li> <li>• Access equipment should only be used by competent persons and should not be moved with personnel on them.</li> <li>• Emergency rescue procedures shall be in place and communicated to all relevant parties prior to any work at height commencing.</li> </ul>
<p><b>Objects falling from height</b></p>	<ul style="list-style-type: none"> <li>• Suitable and sufficient safety arrangements should be in place to protect personnel on the ground when working overhead i.e. exclusion zones, designated hard hat areas.</li> <li>• Tools and communication equipment e.g. radios should be tethered, and pockets clear of objects which may fall and cause injury to persons below.</li> <li>• Safe Working Loads (SWL) of grid, platforms and all lifting equipment will be observed and adhered to at all times</li> <li>• Equipment rigged overhead should be safety bonded. Bonds must be maintained in a safe condition with their Safe Working Load (SWL) clearly</li> </ul>

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	<p>displayed. Safety bonds must be regularly tested, inspected and certificated between manufacture and use. Bonds must be visually checked each time they are used.</p> <ul style="list-style-type: none"> <li>• Bonds must be appropriate and strong enough for their purpose allowing a free drop of no more than 150mm. The bonds should be strong enough to support the weight of the equipment, including all accessories, and to take the shock load produced should the main fitting fail.</li> <li>• Checks must be made to fasteners for radio holders in the grid, as overtime these can come loose enabling the radio to drop out of the holder</li> </ul>
<p><b>Structural collapse</b></p>	<ul style="list-style-type: none"> <li>• All structures which could injure persons should they collapse (e.g. scaffolding, temporary structures, scenery, etc.) will be designed, built and maintained by competent people to ensure they remain structurally stable.</li> <li>• The skills, knowledge and experience required to build structures will depend upon the nature of the structure concerned and its intended use.</li> <li>• Greater care will be required in the case of structures that will support people (especially members of the public) than those that support only material, e.g. scenery.</li> <li>• Whenever a structure is built to support people or where collapse would endanger people it will be inspected by a competent person before being put into use. There will be further inspections on a regular basis and if the structure is significantly altered.</li> <li>• Competence in terms of health &amp; safety means a person with the appropriate qualifications, knowledge and experience to identify any defects likely to cause an increased risk.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Regulation 9 (designer’s duties and roles) of the Construction (Design and Management) Regulations 2015 (CDM) applies whether or not the rest of the Regulations apply. The skills, knowledge and experience required of the designer will depend upon the nature of the structure concerned and the use or uses to which it is put. See HSE publications GS28/2 and GS28/3 on the safe erection of structures.</li> <li>• A competent person will inspect the structure before it is put into use for the first time – if satisfied that it is structurally sound, they will attach a notice/certificate to the structure to indicate it is safe to use. Further inspections are required on a regular basis (at least weekly) or if the structure is significantly altered.</li> </ul>
<p><b>Mechanical failure e.g. of lifting equipment</b></p>	<ul style="list-style-type: none"> <li>• All lifting equipment brought used must comply with Lifting Operation and Lifting Equipment Regulation (LOLER) i.e. it must have evidence of regular maintenance and have received a thorough examination within the last 6 months.</li> <li>• Lifting equipment shall only be operated by persons competent to do so.</li> </ul>
<p><b>Manual handling injuries</b></p>	<ul style="list-style-type: none"> <li>• Manual handling should be avoided and lifting aids used as an alternative wherever possible. Where manual lifting is necessary, correct lifting techniques should be used and heavy loads should only be moved by the appropriate number of people for the load</li> <li>• All equipment rigged must suitably double bonded. Double bonding must be suitable and capable of carrying any loads expected.</li> <li>• All items rigged in the grid must be inspected by a member of the studio management team and signed off.</li> </ul>