

MA1007

Media Production

HEALTH & SAFETY GUIDELINES



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MEDIA ARTS



Royal Holloway
University of London

Safe use of the Media Arts Centre post production facilities

Media Production	MA1007
Directing Screen Fiction	MA2003 MA3003
Screen Documentary	MA2004 MA3004
Studio Drama	MA2011
Producing	MA3006
Contemporary Media Art	MA2020 MA3020
Studio Performance	MA2021 MA3021
Creative Sound Design	MA2022 MA3022
MA Documentary by Practice	
MA Producing Film & Television	

As a student working in Media Arts you are required to take reasonable care for the Health and Safety of yourself, and of other persons whom your acts or omissions may affect. This leaflet offers general guidance and instruction for applying safe working practice when using our media labs, editing rooms, sound design studios and preview room.

Risk Assessment

Risk assessment is essential to effective health and safety management. We have made a general risk assessment of the department's work activities and there are many hazards that need to be controlled when using the post production facilities.

These have been described in detail in our *Safe Systems of Work* document under the following sections:

- Section 1 - Preventing slips and trips
- Section 2 - Lone working
- Section 3 - Fire safety
- Section 4 - Electrical safety
- Section 8 - Using display screens
- Section 11 - Stress at work

Please note that, in general, there is relatively high incidence of staff injury caused through poorly configured computer workstations. All members of College staff who use computers are required to have their workstations assessed by trained assessors so they may be configured to suit individual requirements.

While we have taken on board some guidance for the post production rooms you will be using, by nature of the multiple user provision we are unable to tailor them to suit individual needs. You are therefore advised to read the guidance available at:

<http://www.rhul.ac.uk/Restricted/Health-and-Safety/dse-FAQs.html>

so you are aware of the most likely problems and how to reduce their impact.

The following instructions have been written so you may apply the relevant safe systems of work when using the Media Arts Centre facilities.

Planning

Post production can turn into a frustrating and emotionally demanding activity if you fail to allow adequate time to do the work. Many potential issues can be eliminated if you seek advice from members of the Practice Support Team while you are planning your shoot so that particular post-production techniques can be managed effectively when you are recording your footage. You will also be better able to gauge the proportion of time you will

need to allow for the various stages of post production.

Sometimes, because of the dates allocated for shooting your production and the hand-in deadline, you may have limited control on the time you have available for post-production. Because others will be making demands on the facilities during the same period, your range of choices on session dates may be restricted. You can help reduce the potential pressure by keeping your personal diary as clear as possible during the periods you expect to be in post production and by taking as much opportunity as possible to complete other course work early so you can focus your attention on the work.

As soon as you are clear on the periods when you are likely to be in post production, book your requirements with the Location Services office. You must consider these bookings as firm commitments and record the dates in your own diary.

The length of each session is, to a certain extent, a matter of personal choice. Some prefer to work continually for intensive periods while others like to break the work into stages so they may reflect on a completed session and return to the next session refreshed. Be aware of the advantages and disadvantages of both and try and book a pattern of work that best suits your needs.

Consider also the time of day when you find you are best able to concentrate and try and book times to match.

If the session you have booked is 'out of hours', i.e. occurring during an evening or weekend, you may potentially be working alone. The hazards associated with this are:

- (1) you may suddenly fall ill or have an accident and will be unable to seek immediate assistance;
- (2) there may be an incident or emergency occurring in the building that may put your

personal safety at risk, for example a fire breaking out or a burglary taking place.

You can reduce the level of risk by taking the following actions before you arrive for your session:

- (1) Try and work together with a fellow student on the course – this may also be helpful in sharing ideas and opinions about your work.
- (2) Try and arrange your session to run at the same time as another student so you can work in adjacent areas.
- (3) If you are unable to do either of these, make certain a friend or relative knows your whereabouts and how to contact you. For example, you might ask them to text you at regular intervals to ensure you are still working in the building.
- (4) Make certain you know the layout of the Williams building, in particular where to locate the emergency telephone in the foyer and where the fire alarm call points and emergency exits are located.
- (5) Make certain your mobile phone is fully charged and operational. Also programme in the campus Security number so you may seek urgent assistance in the event of an emergency: 01784 443888.
- (6) Take time to read the guidance on using computer workstations so you know how to reduce the risk of strain injury:

www.rhul.ac.uk/Restricted/Health-and-Safety/dse-FAQs.html
- (7) Plan your sequence of work for the session so it flows in a logical manner. This includes labelling your tapes and making log sheets of your footage.
- (8) Seek advice from Practice Support Staff if you are not confident in what you are planning to do.

- (9) Make certain you know the opening times of any campus catering facilities so you can take breaks at regular intervals and obtain refreshments.
- (10) Ensure you have had a recent eye test and, if you need to wear spectacles, a current prescription which is appropriate for using computers. Remember to bring them with you when you come to edit.
- (11) Be aware of any high risk situations arising from travelling home from the Media Arts Centre during the hours of darkness and make appropriate arrangements, for example asking some friends to meet you at the end of the session.

During your post production session

When you arrive and enter the building, make certain nothing unusual has occurred, such as signs of doors or windows having being forced open, items or debris left in the corridors, alarm signals sounding, etc. Report any such issues to Security immediately.

Take a few minutes to do a brief tour of the building to find out if anyone else is working in any of the rooms. If so, it may be helpful to be sociable and share information on the times you will be working in the building.

Do not let anyone else into the building if they have not booked a key or do not know the access code.

When you start work, take a few moments to ensure the layout of your workstation is properly set up, in accordance with the College guidance. Remember you may be working for a number of hours and you will be at risk of physical strain, including eyestrain, if you are sitting incorrectly.

If you prefer to work in a darkened room, be aware of the increased risk of tripping on unseen objects. This can be reduced by storing bags under the workstation in such a

way as to allow sufficient legroom, and making certain any cables are arranged so they are clear of any walkways.

There are certain risks in using headphones to monitor sound:

- (1) Hearing loss by sound monitoring at a loud level over a period of time;
- (2) Hearing loss caused by accidental exposure to loud noise. A typical incident is when you can't hear a known signal source (i.e. you can see it on a VU meter) and you push up the volume levels in an attempt to 'find' it. Then you discover a 'switch' that has muted the signal and when you activate it the sound comes through at the loud volume setting you have just made.
- (3) Being exposed to a dangerous situation because you are unable to hear an alarm or other form of warning.

You can reduce these risks by getting used to monitoring sound at a relatively low level and by ensuring level controls are returned to a low setting when testing signals.

You must respect the needs of other media lab users by refraining from excessive chatter. If you want to talk socially to friends or on your mobile phone, do this elsewhere so those working on sound design don't have to raise their headphone monitoring level unnecessarily.

Organise your work effectively by using suitable file names for your clips and designing a suitable structure for your work folders. This will reduce the risk of material being mislaid, overwritten or deleted and avoid consequent anxiety.

Take regular breaks away from the workstation, say ten minutes in every hour, so you may walk, have a stretch, give your eyes something different to do and rest your ears.

You may for example take an opportunity to get refreshments.

Do not eat or drink in any of the post production areas, including the media labs.

Do not lock the door while you are inside any of the post production areas, including the media labs. This will set off the burglar alarm. Because false alarms undermine the effectiveness of security support, we impose a £25 fine each time anyone causes a false activation.

If you fall ill or become aware of an emergency situation such as an intrusion, burglary or disturbance, call Security immediately on 01784 443888 or key 444 if you are using the emergency phone provided in the foyer. They will provide immediate support and, if necessary, contact the relevant emergency services.

If you discover a fire, raise the alarm at the nearest call point, leave the building immediately and go to Assembly Point 9 in front of the Moore Building.

Reporting of accidents and incidents

In compliance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR), and the associated College policy and procedure, all accidents, or any incident that could have resulted in an accident, must be reported as soon as possible using the relevant procedure and report form available from the Department Office.

Further information

RHUL 'Lone Working' Policy and Procedure

RHUL Health & Safety FAQs – Computers
www.rhul.ac.uk/Restricted/Health-and-Safety/dse-FAQs.html

KB September2008

Safe use of film and television grip equipment

Media Production	MA1007
Directing Screen Fiction	MA2003 MA3003
Screen Documentary	MA2004 MA3004
Studio Drama	MA2011
Contemporary Media Art	MA2020 MA3020
Studio Performance	MA2021 MA2022
Creative Sound Design	MA2022 MA3022
MA Documentary by Practice	
MA Producing Film & Television	

As a student working in Media Arts you are required to take reasonable care for the Health and Safety of yourself, and of other persons whom your acts or omissions may affect. This leaflet offers general guidance and instruction for applying safe working practice while using the department's grip equipment which, for the purposes of safe working practice and common operating principles, includes:

- All forms of camera, lighting, reflector and microphone tripods, mounts and stands
- TV Studio pedestals and Dolphin arms
- Track and dolly systems
- Jib arms

Risk Assessment

Risk assessment is essential to effective health and safety management. We have made a general risk assessment of the department's work activity and there are many hazards that need to be controlled during the setting up, operation and breakdown of grip equipment. These have been considered in detail in our *Safe Systems of Work* document under the following sections:

- Section 1 - Preventing slips and trips
- Section 5 - Working at height
- Section 7 - Manual handling
- Section 10 - Recordings involving stunts, visual effects, fights and weapons
- Section 12 - Using vehicles

The following instructions have been written so you may apply the relevant safe systems of work in the sequence typically required for grip operations. You should also refer to the guidance contained in other recommended Media Arts guides for your course.

Planning

Your production must have a designated person who is responsible for the management of health & safety. You are responsible for following the control measures that have been communicated to you and for drawing this person's attention to any anticipated issues during planning, set up and shooting.

The need to use grip equipment normally arises from a creative intention to achieve a particular 'shot', which may also require controlled and, in many instances, repeatable and consistent movements. The nature of the shot will determine the position & height at which the camera will be placed, and the rate at which it may need to travel between positions during the shot.

When developing a blocking plan for any sequence of shots, i.e. drawing or floor plan

which shows the placement and moves of any actors (or other participants) and cameras, you will need to consider how to achieve the required shot in the most effective and efficient way. Routes between start and finish points must be kept clear and only crossed by other moves in exceptional circumstances.

Remember the camera lens conveys a different reading of the physical space to your own reading in the environment you are working in. Using this to best effect is a skill that can only be developed through practical experience. In terms of safety management, your plan will need to anticipate the requirement to make adjustments on set, which may include elevating actors or the camera and operating team to achieve the required framing. Such techniques will need to be noted in your scheme of work for the shoot day.

If a shot requires a track system to be laid on the floor, this should be included in your drawing together with any barriers required to prevent people inadvertently entering the tracked space and tripping over.

The camera operators and any 'grips' (i.e. those crew members handling any supporting structures and systems) must work together in a coordinated fashion to achieve the shot in the safest way possible.

You must be trained in the use of any grip equipment as part of your course before attempting to handle it. This may require a session to be scheduled with the practice support staff in advance of the planned shoot in consultation with your practice tutor.

Your work plan must also consider how any grip equipment will be transported to a location. Relatively 'lightweight' systems can be heavy or bulky and you must ensure there are a sufficient number of people to transport the equipment, especially when using public transport, or to transfer it to a vehicle for transportation.

You must allow adequate time during the shoot day to set up and break down any grip equipment you plan to use.

For any shoot, the designated person responsible for health & safety will do a risk assessment, using the Media Arts Location Safety Form, to ensure consideration of any hazards associated with using grip equipment. This must be approved by your practice course tutor before attempting to book any equipment.

Occasionally, it may be necessary to devise specialist means of mounting and operating the camera. If so you must consult with a member of the practice support staff and ensure the operation of the equipment can be conducted safely.

In addition to suitable clothing and footwear, as advised in our Guide to Safe Location Recording Practice, you are advised to wear suitable non-slip gloves that offer a degree of protection but which also allow sufficient dexterity for operating the equipment. There are some thick gloves available to borrow from the Location Store, but you may prefer to buy your own personal pair.

Avoid wearing items of clothing that can get caught up in the equipment.

Collecting and transporting grip equipment

When the equipment is issued to you, check it is appropriate for the task and in good order. Take care when removing any items from its bag or case and seek assistance if the item is unwieldy.

Components such as mounting plates and locking levers go missing relatively frequently and failure to check all of these can render the unit completely useless or unsafe if an attempt is made to lash-up a temporary fix.

Check that any telescopic parts can be easily extended and firmly locked. Report any

defects to the member of staff issuing the equipment.

If no carrying case is supplied with the item, ensure you are able to transport it safely so your fingers don't get caught between components, and so there is little risk of dropping it onto anyone's feet. Identify any projecting parts that may cause injury and ensure you handle the equipment to minimise the possibility of poking someone in the face, for example if carrying a tripod over your shoulder.

If you are loading heavy equipment from the Location Store to a car parked in the loading area outside Williams, ask if you can use a trolley to reduce the amount of carrying involved.

Setting up and operating equipment

Studio operations are normally closely supervised, but be aware accidents may still occur when eyes are 'off the ball'. Always ensure the camera head's tilt brake (also referred to as a tilt lock) is set before freeing hands from the camera. Take extreme care when putting the 'dolphin arms' into the required position. Always ensure any umbilical cables are kept free from moving parts, where they may become jammed or severed, and effectively managed to prevent people tripping over.

Before setting up any grip equipment for a location shoot, you will find it useful to walk through the sequence of shots with a hand-held camera to assist in gauging the positions, movements and heights at which you will need to set the equipment. Refer to your floor plan and also take into consideration the stand-off distance you need to achieve the angle of view and depth of field you are seeking for each shot.

For a studio recording, the scenery and main props should be put in place before moving camera pedestals into starting positions.

Check you have a sufficient number of people assigned in your crew for grip operations, including any 'cable bashers' that may be required to ensure umbilical cables are safely handled during camera moves.

You will normally require two people when setting up and adjusting a tripod & camera, one to hold the camera & head in position while the other makes the required adjustments to the legs and spreaders. Arrange one leg so it points in the same direction as the camera lens as this will allow the operator to stand close-in, between the other two legs.

Take care not to catch your fingers in any telescopic sections or on sharp components. Ensure all sections are locked, including the tilt lock lever, before standing back from the tripod.

Be aware that certain telescopic structures such as lighting or microphone boom stands can collapse suddenly if inadequately supported during adjustment. This can result in a caught hand or even a blow to the head. Ensure any heavy sections are supported by another person and advise other crew (and cast) members to stand clear and until after the section has been adjusted and securely locked in place.

Normally, you will aim to provide the maximum base of support, i.e. increasing the spread of the tripod legs relative to its height, so that the assembled structure is as stable as possible. There may be some circumstances where this is difficult to achieve in practice due to restricted floor space, in which case additional precautions need to be implemented to prevent the structure from falling over, such as tying it to an immovable object with a proprietary tie.

Use white camera tape to mark the ends of any microphone stands, flag stands and similar pointed objects so they are made visible when working lights are dimmed.

Ensure all cables drop vertically within the footprint of the tripod or light stand, and also use this dead space to take up any slack so the cables to run directly between connection points across the floor.

If the camera or any actors need to be elevated to achieve the required shot framing, you will need to use a stable and solid platform. One of the crew should be on hand to assist in preventing an actor or operator accidentally stepping back off the platform. If you are using a track & dolly system, and/or the location jib arm, you must have received prior specialist training in preparing, assembling and operating the equipment. The floor area should be flat and level. It may be necessary to use boards and wedges to achieve this on certain surfaces, but this should already have been taken into account during your location recce and equipment planning.

Once tracks have been laid, mark off the operating area wherever possible using tape to restrict others from entering the space. Ensure there is a clearly designated passage to allow actors and crew to walk around the tracked area. Use Italian clamps or similar devices at the ends of the tracks to prevent the camera dolly from rolling off.

The jib arm is a heavy item of equipment and must be lifted into position by two people, one at each end, while a third person guides the mounting fixture into place, taking care to avoid getting their fingers caught. Similar care must be taken when attaching and removing both the camera and, at the opposite end of the structure, the balancing weights.

Breakdown

After you have recorded your final take, it is very likely most of the cast and crew, including yourself, will be in a rush to leave. This puts everyone involved at greater risk and you must give proper consideration to striking any set safely.

Start by ensuring potential trip hazards are removed before transporting heavy objects. This will normally require all cameras, mic booms and associated cables, including talkback system units, to be put to bed before moving any laid tracks, furniture props, rostra, etc.

Reporting of accidents and incidents

In compliance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR), and the associated College policy and procedure, all accidents, or any incident that could have resulted in an accident, must be reported immediately using the relevant procedure and report form available from the Department Office.

Further information

Media Arts guide to safe location recording practice

Media Arts guide to safe studio operations and scene construction

HSE information Sheet No17 – Stunts fights and other potentially hazardous production activities

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Safe location recording practice

Media Production	MA1007
Directing Screen Fiction	MA2003 MA3003
Screen Documentary	MA2004 MA3004
Producing	MA3006
Contemporary Media Art	MA2020 MA3020
Creative Sound Design	MA2022 MA3022
MA Documentary by Practice	
MA Producing Film & Television	

As a student working in Media Arts you are required to take reasonable care for the Health and Safety of yourself, and of other persons whom your acts or omissions may affect. This leaflet offers general guidance and instruction for applying safe working practices in relation to location recording work, including 'filming', sound recording and photography.

Risk Assessment

Risk assessment is essential to effective health and safety management. We have made a general risk assessment of the department's work activity and have made a policy decision that every recording activity and working environment needs to be specifically risk assessed owing to the diverse nature of location recording work. While hazards that may be encountered are many and varied, depending on each situation, some may already be covered in our departmental General Risk Assessment and

management standards and arrangements set out in our *Safe Systems of Work* document.

Each location recording must be specifically risk assessed using the Media Arts Location Safety Form template published at:

www.rhul.ac.uk/Media-Arts/facilities/SafetyFormweb.doc

The following instructions have been written to offer general guidance in relation to frequently occurring situations so you may apply the relevant safe systems of work in the sequence typically required for location recordings. Whether or not you have specific responsibility for health & safety for any production, you must read and apply the following general guidance in any production work.

It is essential that you attend any sessions that cover location safety and fully understand the process of location assessment before you embark on any location recording work. If you have not attended such a session, or are not confident in undertaking the necessary location assessment, including health & safety risk assessment, then you must contact the departmental Health & Safety Coordinator to arrange further training before planning any location work.

Planning

Effective and timely planning is essential to enabling safe working on location. If you are working in a production team, one person must be identified as being responsible for sourcing and visiting locations, for risk assessing any filming work being planned, and for ensuring the planned control measures are applied during the shoot.

If you are working as a member of a production crew, you are required to follow the health & safety procedures devised for the particular location recording and report any

issues to the person with designated responsibility for health & safety.

For certain recording activities, which will often include some forms of documentary production, some work for Contemporary Media Art, and also some Creative Sound Design work, you may be required to work alone and will effectively be the person responsible for health & safety.

You will normally be expected to visit and do a 'recce' of all of the locations you are considering well in advance of any planned recording so you may assess their suitability and identify any hazards associated with the particular work environment. You should use the Location Safety Form template as a checklist during your visit.

As well as the actual recording space, you should also view any parking, loading and transporting areas, dressing room space, access to WCs, access to food and drink (and a suitable place to consume them) and any secure storage requirements that may be needed, including personal belongings.

In exceptional cases, you may need to plan the shoot without first visiting the location, in which case you must seek as much detail as possible from a suitable location contact so an adequate level of risk assessment can be conducted.

It is essential you liaise closely with a local contact for your location. This person should be clearly identified and their name and contact details included on page 1 of your Location Safety Form.

If it is a public facility such as a railway station, airport, museum or anywhere 'out on the street' or public highway, you must contact the relevant authority, seek any necessary permissions and ensure you understand and observe the local contact's safety management requirements, which will normally include seeing copies of risk

assessments, College public liability insurance, etc.

Your local contact should also brief you on fire evacuation and other operational procedures, etc. If you are unable to find readily available information about who to contact, then ask at the Media Arts Location Services desk.

Please note that for any filming in the street or public highway, you must contact the relevant local authority department to obtain permission. You must also notify the relevant local Police station, giving operational details about the activity, and observe any advice given. Organisations such as Film London publish information on local authority and police contacts (www.filmlondon.org.uk).

If you are recording in a private dwelling, pay particular attention to potential hazards occurring frequently in domestic environments, such as steep staircases, unmarked steps, low beams and doorways, slippery surfaces, tripping on loose floor coverings, toys and other loose articles, kitchen hazards such as hot liquids, glassware, knives, etc., unruly children or pets, and substandard electrical mains installations.

You will also need to identify suitable exit routes that can be used if an emergency such as a house fire occurs. You must agree with the local contact suitable means of keeping these routes free from obstruction during the shoot and arrange for any doors or windows serving as emergency exits to be readily usable to allow unimpeded exit.

If your shoot is complex in terms of needing to use specialist lighting equipment, tracks & dollies, etc. you will find it helpful to draw a scale floor plan of the location so you can plan blocking of shots (i.e. positions and moves of cameras and actors) and any required control areas for safe operation of equipment, storage of cases, designated safe walkways and emergency exits, cable runs

including those to local mains power supplies, etc.

You may need to hire or borrow additional items of equipment, particularly if you need to restrict access to the set and work area if it is normally used by members of the public and suchlike. Ask your local contact if any barriers are readily available.

The Location Safety Form will also prompt you to seek useful information in terms of proximity to local public transport facilities, local accident and emergency department, parking and access arrangements, where to obtain food and drink, etc.

Make a note of any operating conditions that may vary from those encountered during your 'recce', for example changes in traffic or parking, lighting conditions, weather, etc.

The key section of the Location Safety Form is the risk assessment section on page 3. This comprises a checklist of generic hazards to assist you with identifying the ones most likely to occur during your shoot.

Please note the purpose of the risk assessment is to enable you to safeguard the wellbeing of all participants in the location recording event and of anyone who may incidentally be affected by the work, such as a member of the public or bystander who works in an adjacent area.

Any hazards unlikely to occur should be marked 'N/A' to show you have considered them and believe they do not apply to the particular shoot.

For each hazard that does apply, you should enter the following details:

- (1) a brief description of the nature of the hazard and how its likely to occur;
- (2) your assessment as to the probability of the hazard occurring, expressed in terms of 'Low', 'Medium' and 'High' probability;

- (3) your assessment of the consequence of an injury occurring, expressed in terms of 'Low', 'Medium' and 'High' impact;

- (4) a brief description of the control measures you intend to put in place to eliminate the hazard or reduce the level of risk involved.

You may need to seek specialist advice from your course tutor, the relevant local contact, the departmental Health & Safety Coordinator, the College Health & Safety Advisers, or a specialist adviser.

In the case of certain production activities, such as those covered in the *Media Arts Safe Systems at Work Section 10: Recordings involving stunts, visual effects, fights and weapons*, or where they involve work at height, children and young persons, vehicles and other high risk activities or operating environments, you will need to discuss with your course tutor the necessity of including them in your production. This must be considered in the context of your coursework assessment and will normally require the Head of Department's agreement before doing any further planning work to manage the high risk activity.

If the Head of Department has given approval for further work in relation to a high risk activity, you will need to conduct a more detailed risk assessment to consider fully the relevant standards and systems of control, with the assistance of the relevant specialist advisers. In some cases, you may be required to sign a duty of care declaration.

Before submitting your Location Safety Form, it is important to read and understand the declaration on page 4 where, by sending an electronic version of the form to your course tutor from your College email account, you accept full responsibility for implementing the health & safety arrangements for the shoot. You are required to submit your form no less than two working days before the planned shoot. This is to provide sufficient opportunity for the course tutor to discuss any operational

aspects with you, and to allow time to seek any further advice needed and process the form.

If your course tutor, after considering the contents of the form, is willing to agree to you borrowing the requested equipment, they will forward it to the Location Services desk to confirm it may be booked for the planned shoot, subject to availability.

When booking the equipment, seek advice from the practice support staff on choosing the most appropriate equipment to use for the task. This may assist in eliminating the need for unnecessary lifting and carrying.

Preparing for the shoot day

Any scripted pieces must be rehearsed in advance of the shoot to ensure actors and presenters are fully prepared and have walked through any planned actions. This will assist with planning the layout of the set, and adjacent work areas and blocking of actors and cameras. Effective preparation at this stage will avoid having to manage problems on location with the associated time pressures normally imposed by the recording process.

Before collecting the equipment, you must ensure your crew, cast or other participants are fully briefed on the operational requirements for the shoot. This will include circulating copies of the relevant health & safety risk assessments and communicating associated details in relation to any control measures that must be implemented.

You should draw up an itinerary for the shoot, including cast and crew call times, return travel arrangements, shooting schedule, break times, etc. Arrangements should allow realistic times for travel (taking into account the need to avoid people having to drive home fatigued after a long shoot day) and to set up and break down equipment.

You must ensure there is a sufficient number of people to fulfil all tasks in the time available and a clear understanding of their respective responsibilities, particularly concerning the health & safety controls you intend to implement during the shoot. This includes having an appropriate number of people available at the time of both collection and return to lift and carry any items of equipment you intend to use.

If you intend to use your own vehicle to transport members of cast, crew and/or equipment for the shoot, you should make certain it is suitable for the task, is in road worthy condition and that you have the correct driving licence classifications and level of motor insurance cover to allow you to drive the vehicle for the purpose.

Monitor the weather forecasts, particularly if adverse conditions are likely increase safety risks. If it is an interior shoot, remember adverse weather conditions are likely to affect any loading or transporting work.

Examples of relevant hazards include rain, which will increase the incidence of slips or exposure to electric shock, gusts of wind blowing equipment over or causing debris to fall from any structures above the work area, exposure to sun, heat or cold over a period of several hours. You may need to make special arrangements for shelter, protective clothing, sun cream, etc.

These considerations must be managed and clear directions given to minimise tensions between achieving creative aims and ensuring safe working. There are also a number of personal preparations you need to make.

Wear appropriate footwear for the task. The exact nature will depend on the terrain you are planning to work on, but shoes offering some overall protection with flexible soles and good grip, such as trainers, will suit the more usual applications. Bear in mind you will need to wear them for several hours at a time so

they need to be comfortable and worn-in, and ensure they don't cause unwanted noise if you are required to walk during a take.

For recording purposes it is desirable for crew members to wear dark clothing to avoid causing reflections, made from fabric that doesn't generate noise when moving. However, there may be overriding safety requirements to consider, such as the need for waterproof clothing (which is often quite noisy), light clothing to reduce heat absorption and hi viz clothing in areas where there may be moving vehicles.

Make certain you take with you a practical quantity of drinking water and any healthy snacks to maintain energy levels, especially if catering facilities are unlikely to be readily accessible.

Ensure your mobile phone is fully charged and your account has sufficient credit to make any required calls. Programme in any relevant numbers, as identified in your Location Safety Form, so you can make rapid contact in the event of an emergency.

Personal contacts need to be made aware you have to switch your phone off during recording and it is helpful to indicate a time when you may next be able to respond to any messages in order to avoid causing unnecessary concern.

Collecting the equipment

If you are using your own vehicle to collect equipment from the Media Arts Centre, you must park temporarily in the area designated for loading. Keep building exits free from obstruction and any emergency vehicle access routes clear at all times.

When the equipment is being set aside for issue, you need to check it is consistent with your booking request.

You must inspect the equipment, particularly all electrical cables and connectors, to make

certain it is free from any signs of damage or disrepair. You also need to test the equipment to make certain it is fully operational.

Ensure you have been issued with any additional safety items required for the shoot, for examples RCDs to use with lighting kits, thick gloves for adjusting lighting equipment, hi viz jackets for working near moving vehicles, etc.

If you identify any issues with the condition of the equipment you should report it to the member of staff who is assisting you so it may be set aside for repair or replacement. While we will attempt to replace any item of equipment you have reported as being in a state of disrepair, realistically we operate with a narrow margin of error and ultimately we may be unable to fulfil the full booking requirement. In such cases, we can discuss the difficulty with your course tutor to assess the consequences in the context of your coursework.

You must exercise due care when lifting and carrying equipment, taking into consideration the weight and size of any items or combination of items, the position of any carrying straps or handles, and any hard corners or projections.

There are trolleys available to assist in transporting heavy items of equipment to the loading area so please ask for help when you need to use them.

If you are carrying equipment on public transport, ensure you have an adequate number of people to share the load and avoid causing injury to other passengers when moving and stowing any items. Keep alert for any suspicious activity that may pose a threat to your personal well being and that of your crew members. Always keep any items of baggage attended and in view, and comply with any directions given by official transport personnel, especially if they advise your baggage handling arrangements are deemed to be causing safety or security issues.

Setting up

On arrival at the location, check the layout and operation of the work environment to ensure there are no unexpected conditions that will affect the health & safety controls you intend to operate.

For scripted productions, your check will include any dressing room facilities being provided by the location.

Ensure the work area is clear of any slip or trip hazards and any people who are not directly involved in setting up equipment, scene dressing and props.

The work area must be evenly lit to a suitable level to allow effective working. Prepare any supplementary lighting that may be required off-set to illuminate work areas that will become dark when the general lighting is extinguished for rehearsal and recording.

For more complex productions, mark out spaces that will be used for specific functions, in particular the film set itself, off-set work areas where equipment stands may be set up, tracks laid, etc., other work areas where cases and other non-operational items can be stored without causing trips, and safe interconnecting walkways that will be used when entering or leaving the set.

Ensure that any lighting positions are well clear of any adjacent surfaces, structures and in particular soft furnishings such as curtains or drapes. This will allow the heat from lighting equipment to dissipate freely and minimise the risk of a fire being caused by igniting any fabrics or other flammable materials.

Take care when erecting stands, taking into consideration that telescopic systems can collapse if left improperly secured and stand legs can cause trips if poorly positioned. Also be aware the higher you extend a stand, the less stable the structure becomes. This is a particular risk with lighting units, which often

have to be set above head height. Risks can be reduced by weighing the stand legs down with sand bags, ensuring cables are kept free from tripping, and securing stands or light units to firm structures using proprietary ties. Use white camera tape to mark the ends of any microphone stands, flag stands and similar pointed objects so they are still visible after working lights are dimmed.

Cables should be routed so there are vertical drops to the floor from any connecting points, then run flat across the floor, preferably running between points in straight lines. Any excess lengths should be coiled up and stowed under the base of an equipment stand or similar dead space to avoid causing trips. All cables running across or along any walkways must be secured to the floor using gaffer tape.

If you are using mains power extensions, make certain they are of the appropriate rating for the load you intend to use. You can do this by assessing the total power output (in watts) required of any equipment items you plan to supply, then divide this by the supply voltage (UK consumer supply is 240 volts AC). For example, an extension block rated at 6 Amps, when connected to a conventional 13 Amp power socket in the UK, will allow a maximum total of 1,440 Watts. If you exceed this loading by connecting to many appliances, you are at risk of overloading the circuit, which has associated fire and electrical safety hazards. It is wise to allow a reasonable margin of error rather than work to the maximum limit.

You need to ensure any mains extension reels are fully extended to prevent the cable from overheating. This however increases the potential for trips, so you must ensure any excess cable is laid out in a safe area.

You must prevent any electrical cables or connectors from being exposed to water, which includes puddles, risk of spilled liquids, etc. It is useful to supply some paper towels

and bin bags to clear spillages as soon as they occur.

Be aware that you may need to light the set using stand-ins for actors, presenters or guest participants to reduce their exposure to adverse conditions (i.e. glare of lights, heat, etc.). This may take crew members away from other tasks, so you need to ensure there are arrangements to maintain continuity of safety monitoring where work activities are left uncovered.

Rehearsal and recording

During any location recording, there is a high risk of becoming preoccupied with the demands of getting a good take and this is when there is a greater chance of an accident occurring. Your shooting schedule should provide a clear sequence of work so that everyone involved can operate efficiently and there are effective contingency measures if work falls behind schedule.

All crew members should apply the relevant control measures put in place for the shoot and monitor safety arrangements continually for changing conditions. For example, when shooting outdoors you need to be aware of over exposure to sun, cold and heat over a period of time.

Work areas will often be dark in relation to any set where film lighting is in use. This makes trip hazards less visible so check the floor frequently and remove any items that may have been placed in work areas to a suitable safe place.

Rehearsals on set will normally consist of run-throughs to check that planned actions work at the location and to adjust lighting, camera framing and sound recording levels. It may be necessary to simulate some actions that will be included in the performance to reduce exposure to hazards. For example, if a scene includes performed smoking (which will have been risk-assessed in advance using the Location Safety Form) then cigarettes must

only be lit for the actual recording and not the rehearsal.

All mobile phones must be switched off during recording to avoid interference with sound recording equipment and to ensure work progress is not disrupted. You should refrain from unnecessary chatter, laughter, etc. as this can be very disruptive and, as a consequence, stressful when the production director, performers, and fully-occupied crew members are trying to focus on their work. Be aware of where microphones and cables are placed and avoid making any sudden or loud noises. This includes accidentally knocking a boom pole or a lapel microphone you may be wearing, and pulling or treading on signal cables.

If you are responsible for recording sound, you need to adjust your headphone monitoring level to the minimum required (1) to distinguish between sound the microphone(s) are receiving and any ambient sound heard through the structure of the headphones, and (2) to assess the quality of the sound that will be recorded. Ensure everyone in the recording area is aware of the placement of any microphones being used and zones they need to avoid.

If you are wearing a headset for sound recording, communications, etc., be vigilant in maintaining awareness of warnings you would otherwise normally be able to hear, such as the sound of an approaching vehicle.

Breakdown

After you have recorded your final take, it is very likely most of the cast and crew, including yourself, will be in a rush to leave. This puts everyone involved at greater risk and you must give proper consideration to striking any set safely.

Start by ensuring everyone leaves the set unless they are directly involved in clearing up as this will avoid obstructing the removal of equipment and props. Potential trip hazards,

such as cables and tracks, should be removed before transporting any heavy objects.

Once all equipment, props, cables, etc. have been removed from the set, clear the rest of the location picking up any litter and cleaning up any spillages to prevent endangering subsequent users of the space.

Remember you are likely to be tired after a long day's shoot and must therefore avoid the risk of falling asleep while driving or performing a similar high-risk activity until fully rested.

Reporting of accidents and incidents

In compliance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR), and the associated College policy and procedure, all accidents, or any incident that could have resulted in an accident, must be reported as soon as possible using the relevant procedure and report form available from the Department Office.

Further information

Robin Small 'Production Safety for Film, Television and Video' (Focal Press, 2000)

HSE information Sheet No3 - Smoke and vapour effects used in entertainment

HSE information Sheet No17 – Stunts fights and other potentially hazardous production activities

HSE information Sheet No20 – Management of firearms and other weapons in productions

KB September 2008

Safe working in the Television Studio and Scene Painting areas

Media Production	MA1007
Studio Drama	MA2011
Studio Performance	MA2021 MA3021
MA Producing Film & Television	

As a student working in Media Arts you are required to take reasonable care for the Health and Safety of yourself, and of other persons whom your acts or omissions may affect. This leaflet offers general guidance and instruction for applying safe working practice when planning, preparing and recording studio productions.

Risk Assessment

Risk assessment is essential to effective health and safety management. We have made a general risk assessment of the department's work activity and there are many hazards that need to be controlled during the preparation and breakdown of sets, and during productions. These have been considered in detail in our *Safe Systems of Work* under the following sections:

- Section 1 - Preventing slips and trips
- Section 3 - Fire safety
- Section 4 - Electrical safety
- Section 5 - Working at height
- Section 7 - Manual handling
- Section 9 - Using hazardous substances
- Section 10 - Recordings involving stunts, visual effects, fights and weapons

The following instructions have been written so you may apply the relevant safe systems of work in the sequence typically required for studio productions

Planning

Once the creative idea for a production has been realised in the form of a script and treatment, a production team must be set up with named people designated clear responsibilities in the following areas:

producing, directing, production assistant, art department, floor manager, sound, lighting.

Your team's producer is responsible for conducting the production health & safety risk assessment and for ensuring your team observes the associated control measures. However, all work in the television studio will be supervised by a designated member of staff who will intervene and suspend work if they believe effective control measures are not being applied.

You will need to devise a schedule to plan and prepare the production, working back from the recording date, key milestones being:

- (1) the zero meeting, normally no less than a week before recording date to finalise any remaining issues;
- (2) the final art department meeting with the Art & Design Technician(s) to schedule preparation of scene components and use of the painting room, normally at least two weeks before the zero meeting. This can be developed to incorporate other relevant milestones such as casting, acquisition of props, etc;
- (3) the risk assessment meeting with your course tutor and the Studio Manager.

In preparing for these milestones, your designated art department people will initiate discussions with the Art & Design

Technician(s) and Studio Manager during the process of designing the sets and considering choice of dressing, props, costumes, make-up and any visual and audio effects. At this point it may be possible to identify potential hazards and devise practical approaches that may eliminate a hazard or reduce the level of risk.

You will need to produce a scale floor plan for each set used in the production to establish positioning of scene components, blocking (i.e. actors' moves and relative camera positions) and expected lighting positions. Your floor plan will also ensure all fire exit routes are kept accessible during all stages of the production.

No later than a month before the planned recording, your team's producer will need to have completed a production risk assessment using the department Location Safety Form as a template. This will include activities that require temporary deactivation of the smoke alarm system, high risk performances such as stunts, combat, dance, use of theatrical weapons and performed smoking. You are likely to need specialist advice from the Studio Manager and possibly the Health & Safety Coordinator, the College Health & Safety Advisors or specialist consultants. Your risk assessment must then be presented to your course tutor for discussion during the risk assessment meeting. Its approval will depend on your seeking further specialist advice to enable effective controls to be prepared in time for recording.

Once your risk assessment has been approved, you will need to schedule your formal meeting with Art & Design Technician(s) to plan scene preparation, including sourcing props, dressing, costumes, make up, etc., and to schedule the decoration sequence for any required scene flats.

Your final meeting will be the zero meeting, during which you must resolve any remaining art department issues and conduct a final briefing for the Studio Manager, who will

support technical operations during the recording. You will need to supply your final floor plan and agree the most safe and practical assembly sequence for scene construction.

Preparation of props and scene components

During your art department meeting, you will identify the number of scene flats and other components you will need to decorate in the paint room before transporting to the studio. Normally, you will need to supply your own water-based emulsion paints of the required colour, but you must use the product ranges specified by the Art & Design Technician(s) as these have been fully assessed under the COSHH regulations.

You will be unable to book the painting room until you have received a briefing from the Art & Design Technician(s) on the correct procedures for handling the flats, preparing the paints and equipment, cleaning up what you have used and returning it to store. You will also be advised on what to do in case of any spillages, or if you have an accident while using the area.

We can supply basic painting equipment, including overalls, but you need to supply and wear your own old clothing, including trousers and slip resistant footwear such as trainers. You are also advised to wear a suitable pair of gloves when handling flats to prevent injury from splinters and suchlike.

Scene construction

You will already have agreed the sequence of work during your planning meetings and this will include the requirement for an Art & Design Technician or Studio Manager to be present while you assemble the set.

Your crew and any onlookers or observers must wear soft soled shoes, such as trainers, when entering or working on the studio floor. The only exception to this rule applies to any

costume-specific footwear for any actors for the particular scene being shot. For example, it would be acceptable for businessman to have traditional leather shoes, or a ballerina to have ballet shoes. Suitable footwear will afford some measure of safety from hazards such as being hit by the wheels of the camera cranes. Inappropriate footwear includes ballet style fashion shoes, which offer no such protection, and flip flops, which present a very real trip hazard in themselves.

You must also consider the type of clothing you expect the actors to wear, as heavy jumpers and coats can add significantly to the affects of heat generated by the studio lighting. If such clothing is a requirement, your production schedule must allow adequate opportunity to remove the heavy clothing for a suitable period of time or for the actor to retire to a different area to cool off.

You must use the house lighting during all preparation and breakdown activities and it will only be switched off at the instruction of a member of staff or the designated production floor manager when all scenery and equipment is ready to light and rehearse the scene.

For any work at height you must use appropriate access equipment and observe the guidance given by the Studio Manager in accordance with the methods described in *Safe Systems of Work* document.

Your assembly sequence will be devised to facilitate safe and efficient set-up. The sequence will allow temporary positioning of access equipment, such as the tallescope, to set lighting in accordance with your production floor plan, and will normally allow background elements to be set in place before bringing in foreground elements, prior to placing cameras, microphone equipment and floor monitors

Your production schedule will allow adequate time to set up and dismantle equipment and

scene elements safely before and after the recording.

When erecting scene flats, two people should move each flat into position and hold it in place while another person attaches any bracing and clamps. You must take great care when lifting and carrying stage bracing weights (these normally weigh iro 12.5 kg each). Ensure you use a clear and direct route to transport them, carry no more than you can realistically manage and take care not to drop them on anyone's feet or knock anyone as you are passing by.

Care must always be taken when wheeling the camera cranes and pedestal, i.e. 'putting them to bed' after the shoot. Beware of where the arm is swinging on its pivot and of the danger of running over peoples' feet with the wheels.

Setting the floor equipment

Your designated production floor manager has delegated responsibility for implementing standard operating procedures during a production, including operating house lights, ventilation systems, etc., and is the first point of contact for any health & safety concerns notified by cast and crew. The floor manager is responsible for relaying information to the gallery so appropriate action may be taken by the supervising staff member.

The floor equipment will normally be stowed to one side of the studio to allow adequate working space for setting up until required for teaching or production rehearsals.

Rehearsals and recording

During productions, it will be necessary to use dimmed lighting in some work areas that would otherwise be left in the dark.

Camera cranes and pedestals require designated operators ('grips' and 'cable bashers') to ensure safe handling and

operation, including umbilical cable management

Sound monitoring levels, especially on talkback headsets, will be kept to the minimum practical level to avoid damage to the wearer's hearing and sound leakage into the studio microphones. To this end, it is important to use good talkback discipline and not to shout when giving or conveying instructions via the talkback system.

Any special requirements identified in the risk assessment, for example scenes involving smoke effects, will be supervised by the Studio Manager and/or the course tutor.

Breakdown

After you have recorded your final take, it is very likely most of the cast and crew, including yourself, will be in a rush to leave. This puts everyone involved at greater risk and you must give proper consideration to striking any set safely.

Start by ensuring potential trip hazards are removed before transporting heavy objects. This will normally require all cameras, mic booms and associated cables, including talkback system units, to be put to bed before moving any furniture props, rostra, etc.

Where a set is made up in the form of a room, always strike the flats one at a time working from the free ends towards the corner so the structure may hold itself up without bracing. As with setting up, ensure two people hold and transport flats and you have a sufficient number of people to remove the stage weights, braces and clamps safely.

Always stack the stage weights on top of each other in the allotted place in the dimmer room. Do not stack more than ten weights high.

Always stow the braces in the dimmer room too. Do not leave them lying on the studio floor.

Put all the orange 'quick action' clamps back in their plastic container in the dimmer room. Transfer and stow the flats either upright by Wall 4 or take directly to the scene painting room as advised by the Art & Design Technician at the time.

Pay special attention to lifting the door and window flats as they are particularly heavy. Use gaffer tape to secure the door in its closed position and always incline this particular flat backwards to make certain it is not allowed to swing open under its own weight.

Reporting of accidents and incidents

In compliance with the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR), and the associated College policy and procedure, all accidents, or any incident that could have resulted in an accident, must be reported immediately using the relevant procedure and report form available from the Department Office.

Further information

HSE information Sheet No3 - Smoke and vapour effects used in entertainment

HSE information Sheet No17 – Stunts fights and other potentially hazardous production activities

HSE information Sheet No20 – Management of firearms and other weapons in productions

Media Arts Guide to safe use of ladders, stepladders and tallscopes

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