

# Safe Sets

## **SAFETY OVERVIEW ON FILM SETS**

All work places have the potential of being hazardous and because every film set is a temporary work place it has the potential of being more hazardous and therefore suitable care should be taken at all times to reduce or eliminate the possible safety concerns or risks.

### **NO DRUGS OR ALCOHOL ON SET**

As a requirement of the Department of Industrial Relations, the film industry Safety Code and the Film & Television Industry Safety Guidance Notes, at no time during working hours should any cast or crew consume any ALCOHOL or DRUGS (central nervous depressant or stimulants) or arrive on set under the influence of such substances.

If, during the course of filming, a performer is required to appear to consume alcohol these substances must be substituted with non-alcoholic liquids or non-intoxicating, non-toxic placebo. There cannot be any exceptions to this.

NO medications prescribed or otherwise are allowed on set without the written permission of the Executive in charge of Production. (Minor headache pills excepted).

### **FIRST AID OFFICERS & IMMEDIATE MEDICAL ASSISTANCE**

The Australian Film Television & Radio School ensures first aid kits are part of the production package given to all student productions. Each of these kits surpasses the minimum requirement of the Department of Industrial Relations. These kits are carried by the production crew at all times and kept in a safe but accessible position to the set.

Additional first aid kits are carried in the Grip's Truck, Gaffer's Truck and Standby Props Truck. Dependant upon the size of your Production, you should have no less than two qualified first aid officers on set. The names of these staff or students must be on the daily call sheet.

If the production cast and crew exceeds 25 people it is advisable to have a Registered Nurse or even a Paramedic on set. It is a requirement to have a nurse on set for when cast and crew numbers exceed 100 people and/or during the filming of potentially hazardous action sequences such as stunts and/or special effects and also for potentially hazardous location filming. The Office of the Child Guardian may stipulate that a nurse must be on set when children are on set. This is not negotiable.

### **SITE SPECIFIC INDUCTION**

A safety induction is required by law upon arrival at a new location or studio set.

The safety induction is to be delivered by the 1<sup>st</sup> AD, addressed to entire cast and crew at beginning of shooting day, or in the case of Heads of Departments, at beginning of the location survey. This induction should cover the following key issues:

Relevant site layout including the location of:

- Safe access and exit points.
- Facilities and amenities.
- OH&S equipment including personal protective equipment.
- First aid and emergency equipment.
- Material safety data sheets for any relevant hazardous substances
- Emergency and Evacuation procedures and relevant personnel.

The implementation and overseeing of these site control measures is the responsibility of the 1<sup>st</sup> Assistant Director, then the responsibility falls upon all Heads Of Departments to oversee cast and crew.

## **LOCATIONS, STUDIOS & SETS IN GENERAL**

With all sets, locations and studios the entry and exits will need to be pointed out to all cast and crew before shooting commences.

These entry and exit points will need to be clearly lit, marked and kept clear of any obstructions to a minimum distance of three metres at all times. A clear wide passage should be maintained at all times so there will be no impediment to movement in the event of an emergency. Also, because AFTRS is a teaching facility your set may be visited by a multitude of spectators ranging from students to external professionals and/or media. (Note: It is considered good etiquette to ask permission of the 1<sup>st</sup> AD before entering his/her set.)

### **THE HOT WATER URN**

The on set Hot Water Urn is often not foreseen as a potential safety risk and therefore proper care is seldom taken with making sure the urn is suitably stable and safe.

1. The urns should be kept on a table of suitable size, stability and strength (not card tables) and the table will need to be placed in a position where the urn will not be likely to be knocked over if bumped.
2. The positioning of the urns will also need to take into account the fact that they should not be moved while full of hot water.
3. If you need to move the urn it should be emptied first so there cannot be any likelihood of someone straining themselves or being burnt by spilling water.
4. The electrical plug and lead of the urn will need to be kept up and out of the way so there cannot be any likelihood of spilled or dripping water coming into contact with them.

## **STUDIOS AT AFTRS SAFETY GUIDE**

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### **AUDIENCE AND GENERAL, PUBLIC MANAGEMENT**

The AFTRS owes a duty of care to all persons who may be at a film or television set including invitees, spectators, audiences, guests and members of the general public. A risk assessment/s must be undertaken to identify, assess and minimise any foreseeable risk/s which could have an adverse impact on the health and safety of such persons and should address issues such as:

1. Potential overcrowding in studios and other internal venues.
2. Crowd control at exterior sites.
3. Satisfactory seating arrangements.
4. Distance between filming activity and members of the general public.
5. Access and exit.
6. Security.
7. Evacuation and emergency management.

### **WHEN IN STUDIO USING SMOKE OR MIST**

When filming sequences that require visual atmosphere or smoking effects within the School's three studios, you will be a need to make sure that the building supervisor and security are advised of the use of the effects so the smoke detectors can be isolated. You will also need to wait until any residual smoke is cleared from the studios before the smoke detectors can be rearmed.

When using smoke effects always ensure that only non-toxic and non allergenic smoke products are used and that the effects coordinator is asked to provide the materials data sheets on the smoke products that are to be used to make sure that they are safe to use in enclosed areas.

As smoke has a tendency to accumulate within enclosed areas you will need to closely monitor the build up of smoke. If there is a build up within the set then you will need to ventilate the area to expel the built up smoke and this should happen each time the smoke levels reach a prearranged level that is well within safe limits.

As the use of smoke can affect different people in different ways concerned members of the cast and crew will need to be given the opportunity to use face masks, suitable to be used with smoke and/or dust particles, and they should also be allowed to take regular breaks where they can leave the set and get away from any adverse

affects the smoke may have upon them.

## LOCATION

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### LOCATION SURVEYS

Once it has been established how sequences are to be filmed, and before filming, all locations should be visited by the producer, director, heads of department and the safety report writer. For stunts and/or special effects and/or hazardous filming sequences, the stunt and/or special effects supervisor and the screen nurse must also attend the survey. The screen nurse should also attend surveys for remote location filming.

### FILMING PERMISSIONS

1. Filming permissions - appropriate permission must be received from any involved owners (in addition to the occupiers) and/or authorities, including police and councils.
2. Permissions to erect signs and direct and/or control traffic must be obtained from the RTA before crew members, appropriately trained and, where relevant, certificated, in traffic control, are assigned to the task.
3. Crowds - if filming is to take place where crowds do not generally congregate but might be attracted by the filming, the police should be informed.
4. Permission to film on public roads must be gained from the appropriate police and/or council authorities and the relevant state roads authority. Owner permission is required for private roads.
5. Local fire brigade - should be advised of filming in bush areas, especially where a fire risk exists even on moderate fire alerts.
6. Isolated location - in isolated locations, local authorities and police should be kept informed of crew movement plans, specific locations, surveys, aerials, etc, and any comments about weather, road conditions or other factors noted.

### LOCATION SCOUTING

If you should choose locations like warehouses, old buildings or other man-made structures that have been unoccupied for long periods of time for your productions, AFTRS may have some concerns as these sites may be hazardous to work in. Locations such as these frequently have faulty electrical systems, structural problems, and major health concerns that will either need to be rectified, avoided or if neither is possible another location should be considered.

The electrical concerns to watch out for in these sites could be with power being supplied to partially dismantled systems or faulty circuits, exposed wiring and live systems such as crane bus bars and these need to be avoided or rectified by a licensed electrician.

The structural problems to watch for are the strength and stability of the floors. In a brick and wood structure the floors will usually fall apart first. You need to also consider the weight involved in construction and film equipment such as camera cranes as well as the number of personnel necessary on site.

The stability of the walls and roof will need to be checked if there is any concern and this will need to take into account the possibility of various weather conditions such as wind and rain or if the walls or roof are to be used to support equipment or sets.

Health concerns arise from the possibility of asbestos and/or potentially hazardous dust residue that may be left by previous work practices being present at these sites.

**NB:** If you have any of these concerns then the potential location should be inspected by suitably experienced and qualified persons to make sure that they are in fact safe for all aspects of filming from set construction through to the end of principal photography.

In the interests of cast and crew safety and their wellbeing, any recommendations that come from the above inspections of these locations will need to be followed.

### FILMING WITH THE GENERAL PUBLIC

Liability for the safety of the general public is the responsibility of the producer. Therefore, the safety of the

general public must be considered in the choice of locations and all appropriate steps taken to minimise or eliminate risks to the general public arising from filming activities. Safe crowd control measures are essential and local authorities must be informed of filming activities.

## **HIGH TRAFFIC & PUBLIC AREAS**

When filming on or near public roadways, especially at night, or if there is a need to divert the passing pedestrians onto the roadway you will need to make sure that a suitable number of qualified and experienced Traffic Controllers are employed to protect the cast and crew and control pedestrian and/or vehicular traffic.

It is a requirement of the film industry Safety Code, and various other statutory regulations, that when filming is to take place in public areas you will need to make sure that there will not be any possibility of members of the public being put at risk by either the performances or from the film crew or equipment being in the area.

If filming is to take place in public areas you will need to remind the cast and crew of the need to keep the public thoroughfares clear of equipment and personnel so there will not be any impediment to passing pedestrians and/or vehicles.

If you do need to position or store equipment on the pathways this equipment will need to be kept tidy and possible trip hazards, such as cables etc, will need to be covered or removed as per the relevant regulations. You will also need to keep a clear pathway. The general rule is approximately 1.5 metres wide, to allow the pedestrians easy access past the equipment and this access way should not be likely to push the pedestrians along the edges of train platforms or road ways.

To help ensure the wellbeing of the pedestrians there could be a need to have crew members positioned on either side of the work areas to make sure that the cast and crew keep the access ways clear and that the pedestrians are aware of the path through the equipment and to make sure that the public don't use the edge of the train platforms or go onto the train tracks to get past.

## **TRAFFIC MANAGEMENT - FILMING ON ROADWAYS**

1. Letterbox drops must occur during the week before filming, in accordance with police and council requirements.
2. A Safety Supervisor shall be engaged or, where that is not considered necessary in the Safety Report, a crew member/s assigned, so long as s/he has no other duties to perform while filming on the road is taking place.
3. All persons working on roads must wear fluorescent reflector vests including cast members other than when in costume.
4. The filming site must be clearly signposted. Witches hats, barricades, warning signs, 'stop' and 'go' signs are necessary and, at night, flashing warning lights.
5. Only essential crew are to be on the road. Where filming activities obstruct the footpath, proper alternative arrangements must be made for members of the public.

## **TRAFFIC CONTROL**

1. Persons required to supervise/direct traffic shall be suitably experienced and hold the relevant certificate of competency from the relevant state authority.
2. Adequate personnel shall be allocated to operate stop/go signs. They must be equipped with walkie-talkies with sufficient range and must receive full briefing on the sequence to be rehearsed/filmed. They must be able to advise the need to halt filming.
3. Traffic stopping can be a frustrating job made difficult by the occasional irritable motorist. It is advisable for handouts to be available for motorists, for the crew to be rotated and for rest/break periods to be planned.
4. Camera cut must be conveyed as quickly as possible to avoid traffic congestion and driver antagonism.
5. Stop points must be carefully located to give approaching vehicles plenty of time to stop. On country roads, extra stopping distance should be allowed for large trucks and semi-trailers.
6. Police should be in attendance if traffic is to be held on busy streets or highways.
7. Traffic stoppers are required for any road which runs directly into the area where filming is to occur. Careful consideration should be given to driveways or other sources of unexpected traffic and sufficient traffic stoppers must be available to cover such situations.

## LOCATIONS - A BASIC SAFETY CHECKLIST

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### INTERIORS

1. Entry and exit - all points of entry and exit must be safe by day and night and kept well lit.
2. Fire escapes - must be adequate, unobstructed, clearly marked and noted on call sheets, together with evacuation plans and procedures.
3. Fire detection - the position and operational status of any sprinkler or smoke detection systems should be established and the necessary steps taken to avoid the systems being activated by filming lights or smoke effects.
4. Fire extinguishers - those already on the location must be checked for appropriateness and currency. Depending on the filming, additional and/or different types of extinguishers may be required and, if so, must be acquired and positioned appropriately.
5. Traffic areas - the general "traffic" areas of building areas such as passageways, stairwells and exits must be well lit and enhanced where necessary and kept clear of crew equipment.
6. Ventilation - the ventilation capacity of the building or particular area being used must be known and whether it would be adversely affected by blackout or similar occurrence.
7. Building structure - the basic structure should be established as safe, including the flooring and roofing and whether or not asbestos has been used in the structure.
8. Older buildings - such as factories or warehouses – should be checked for hazardous storage items, chemicals, dust residues etc and made clean. Older lifts should be certified or serviced.
9. Hazardous substances must be removed or safely disposed of if not in use. Information about the use, handling, storage and transport of hazardous material must be made accessible along with suitable personal protection equipment.
10. Plant and equipment must be securely guarded and in safe working order.
11. Construction sites - on construction and building sites, hazards such as incomplete floors, unsound support members, stacked materials, uneven footings, chemicals and power tools in use must be checked.
12. Access road - must be well sign-posted, safe and wide enough for unit vehicles. Parking must be adequate and safe.

### EXTERIORS

Having regard to the requirements of the particular sequences and the location/s concerned, consideration must be given to the following:

1. Anticipated temperature ranges.
2. Types of land terrain to be encountered.
3. Prevailing water conditions including tidal extremes, current direction, strength and temperature.
4. Drainage capacity of the location must be checked if filming involves water effects of any kind.
5. Prevailing wind directions, their strengths and the possible effect on temporary structures, sand, soil, etc.
6. The nature and possible hazards posed by the animal life both on land and water, especially with regard to mosquitoes, spiders, snakes, wasps, sea lice, sharks, stingers and crocodiles.
7. The nature and possible hazards posed by plant life both on land and in water, especially with regard to palms with sharp fronds, stinging nettles, falling branches, etc.
8. The current bushfire status of the area and any existing rules. Escape routes must be marked clearly on maps.
9. The potential for flash flooding even after relatively light rain.
10. The potential for cyclones.
11. The level of use of chemicals for pest control, and whether aerial or ground spraying of insecticides is due to occur or has occurred recently.
12. The quality of the roads in and out of the locations considering the variety of unit vehicles using them, including emergency use. Allowances may need to be made for maintenance of roads and access routes.
13. The location of local emergency medical facilities must be established and noted on the call sheet with rapid transportation plans and evacuation plans to the nearest major hospital. This information shall be provided to local police.

### GENERAL

The following apply in most situations:

- Adequate lighting.

- Toilets - clean operational toilets must be available in reasonable proximity to the shooting areas. They should be serviced as necessary and sanitary disposal bins provided.
- Hygiene facilities - in all cases, simple hand washing facilities, including fresh water, soap and towels, must be available prior to meal breaks. In some unusual conditions, more elaborate measures may be required to maintain hygiene to a suitable standard.
- Water supply - an adequate supply of clean drinking water must always be available, regardless of location.
- Road access - safe and all weather roads or tracks must be provided for those driving to and from the shooting area.
- Access by foot - safe and all weather paths must be provided for those walking to and from the shooting area. Scrambling lines may be required in some cases. Additional labour may be required and/or equipment, to transport filming gear into remote sites - flying foxes, cranes, etc.
- Emergency care - access to first aid and to emergency care on remote locations needs to be considered including plans for transport to immediate care, establishing the hours of operation of local hospitals and facilities and their range and transport to care at major centres.
- Emergency services - access to emergency services on remote locations, such as bush fire brigades, needs to be considered in pre-production, including establishing the hours of operation of all local facilities and the range and standard of services available.
- Radio communication - in extremely remote locations, radio communication to police, local authorities and other emergency services should be established and maintained on a regular basis.
- Accommodation - in remote locations where temporary accommodation is to be provided by the producer, basic standards of fire safety, access safety, clean water, hygiene, electricity, etc, must be included in all plans.
- Back-up power - in extremely remote locations, back-up emergency power should be maintained for radio and emergency care.
- First aid - adequate first aid services and facilities must be provided.

## **WORKING IN THE VICINITY OF POWER LINES**

There must always be sufficient clearance for safety when equipment is being assembled or used near overhead power lines, electrical lighting grids and/or non-insulated electrical equipment. The recognised safe distances are:

up to 132,000 volts:	4 metres minimum distance;
132,000 - 330,000 volts:	6 metres minimum distance;
over 330,000 volts:	8 metres minimum distance.

**NB:** Greater distances may need to be maintained depending on other extenuating circumstances.

## **PROCEDURES TO ELIMINATE SAFETY RISKS**

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### **ELECTRICAL SAFETY**

In all film-related work areas, whether on location, in a studio or on set, all electrical equipment that is to be used must be connected to systems with RESIDUAL CURRENT DEVICES (earth leakage devices) or safety switches. This applies to all areas of the production including equipment used in areas such as the Production Office, Construction, Unit, Make-up and Hair, Catering, and Wardrobe departments. There are various other requirements governing the safe use of electrical equipment in the film and television industry such as regular testing (every 6 months) and tagging of all electrical equipment including props and power cables.

The WorkCover Authority has produced an electrical safety booklet and there is also an Australian Standard (AS 4249) concerning the safe use of electrical equipment in the film & television industry. These can be obtained by contacting WorkCover or the Standards Association.

Electrical cables and/or cords across walkways and open areas that may have vehicles or other traffic (such as horses and heavy equipment) should be covered with cable ramps or rubber mats. If it is not practical to cover the cables then they should be supported overhead or buried in the ground and this applies to all areas such as the unit, catering as well as the set and public access areas.

## **ELECTRICAL SAFETY & WATER / RAIN EFFECTS**

If rain or water effects are used you will need to make sure that all electrical equipment and leads are properly protected from the adverse affects the water may have. You will need to include all areas of the set in the above protection in case the water runs along or gathers in low areas of the floor or there is a leak from the water system and/or the holding tanks.

## **SHOOTING IN SUBURBAN HOUSES / OFFICE BLOCKS**

If filming within private houses and/or residences then you will need to make sure that the exit points including corridors and doorways are kept clear of equipment and people at all times. When filming in large buildings you will need to make sure that fire doors and stairwells are kept clear at all times. It is often tempting to store equipment or to position lights in these areas but this is not allowed as no one can predict when these areas will be needed for emergency exit.

## **BUSH LOCATIONS**

When filming in bush locations you will need to take care with regard to the local weather conditions and the terrain on set. You will need to find out if there is the likelihood of hazardous insects being in the area and what these are expected to be in case of possible bites. (Different measures may need to be taken regarding 1<sup>st</sup> Aid kits e.g. Snake bite kits).

Cast and crew should be advised of the likely conditions and to wear suitable clothing and footwear dependent upon these conditions.

Considering the climate and location conditions, adequate shelter and drinking water will need to be supplied for all cast and crew members and readily available at all times. During filming on hot days shelter and drinking water will help prevent heat stroke and on those wet and not so warm days shelter will help to protect against the cold.

## **WORKING IN DARKNESS OR DIMINISHED LIGHTING CONDITIONS**

Working in darkness or diminished lighting conditions is a hazard that cannot be avoided in some productions. Risk assessments must identify procedures to reduce the associated risks.

Consideration must be given to the use of blues and other work lights and use of fluorescent tape markings on floors, steps and edges, etc.

Consideration must be given to those who need to move from areas of bright lighting to low lighting, including appropriate access and exit.

Appropriate warnings must be provided prior to light levels being reduced.

Consideration should be given to the fact that darkened environments can inhibit communication, especially for those with hearing impairments.

Exit and safety lighting must be maintained and visible at all times.

Good housekeeping is essential and trip hazards must be eliminated.

When working outside at night, consideration must be given to the use of practical work lights and safe pathways must be established.

## **ULTRAVIOLET (UV) RADIATION IN SUNLIGHT**

Australia has the highest rate of skin cancer in the world. Two out of three people will develop skin cancer. 1,200 Australians die annually from skin cancer related causes. UV radiation is potentially harmful, even on cloudy days.

To reduce the risk of skin cancer:

- where practical, work shall be carried out in shade or partial shade; apply sun screens which are obtained from a reputable supplier, eg Cancer Council;
- wear a hat;
- wear other loose fitting clothing to reduce the amount of skin exposed to the sun;
- wear sunglasses which comply with AS 1337;
- use lip and nose protection.

## **FIRE RISKS AND PREVENTATIVE MEASURES**

**Potential causes of fire include:**

- smoking in non-smoking areas;
- poorly managed "hotwork" such as welding, brazing or soldering;
- poorly managed special effects involving the use of pyrotechnics and explosives;
- proximity of props/costumes/sets/drapes, etc. to heat from lights and/or other ignition sources;
- faulty electrical equipment;
- poorly constructed equipment used to create special effects, eg. gas equipment;
- misuse of electrical equipment;
- incorrect or inappropriate storage, handling and use of flammable liquids and gases;
- lack of planning to manage a fire emergency; poor housekeeping.

**Fire emergencies can be avoided by ensuring that:**

- materials that could start, accelerate or maintain a fire are kept to the absolute minimum in the workplace;
- hazardous substances are stored and handled in accordance with relevant regulations and codes of practice;
- adequate measures are taken to manage potential fire hazards including fire retarding of fabrics, curtains, props, costumes, wigs and flammable elements of sets;
- ensuring items capable of combustion are kept at appropriate distances from lights, heat sources, etc.;
- serviceable fixed and portable fire fighting appliances (eg. fire extinguishers, sprinkler systems, fire blankets) are located in the workplace to deal with potential emergencies;
- employees are suitably trained to respond to a fire emergency and use fire fighting equipment if required;
- all employees accept a degree of responsibility for ensuring that potential fire hazards are rectified;
- all employees keep the workplace clean and free of combustible materials;
- regular inspections are conducted of the workplace to identify and rectify sources of a fire;
- a fire emergency evacuation plan is developed, implemented, and tested on a regular basis.

**SMOKING**

Smoking must not be allowed in workshops, where hazardous substances and/or dangerous goods are being utilised and/or stored or where dust is being created.

Where performers are required to smoke as part of their performance, risk assessment shall take account of costumes, props and sets and ensure appropriate controls are implemented to eliminate the risk of fire. Suitable means of extinguishing cigarettes/cigars must be provided (eg. ashtrays and sandboxes) in positions in a manner accessible to the performer.

In all other circumstances, smoking can only occur if designated areas have been identified and specified in the risk assessment.

On the advice of the Stunt Coordinator and/or Special Effects Coordinator and/or Safety Officer, smoking may be banned during the setting up and/or execution of a stunt or special effect.

**FIRE EQUIPMENT ON LOCATION.**

As a requirement of the safety code the following fire extinguishers are required to be carried by the crew at all times, kept in a safe but accessible position to the set and any crew member required to know of their location should be advised of this immediately.

THEY ARE:

2x5 kg stored water, FOR WOOD, PAPER, ETC. FIRES.

1 x5 kg CO<sub>2</sub>, FOR ELECTRICAL FIRES.

1 x5 kg AB: (E) dry chemical, FOR LARGER FIRES AND FLAMMABLE LIQUIDS.

These extinguishers constitute a minimum requirement and should not be moved without first notifying all members of the crew that are concerned with them and need to know of their position. When filming is to take place within buildings or studios the above extinguishers will need to be in addition to those that should already be on site. If there is not an adequate supply of fire extinguishers and fire hoses already on site within the above buildings then this will need to be rectified as soon as possible and should take into account the time spent in the

buildings prior to the shooting crew arriving such as during set construction. It should be noted that most fire extinguishers leave a residue and if it is SAFE to do so, cameras and other sensitive equipment should be removed from the set in the case of small fires.

If there is a fire the first priority will need to be to get all cast and crew members to safety and to notify the fire brigade before attempting to fight the fire and then only if the fire is small and easily controlled. The fighting of fires should be avoided if the sets have been constructed of any materials that may become toxic if burned such as polystyrene and/or light timber.

With the above in mind you will need to make sure that where possible only safe materials are used in constructing the sets and if possible toxic materials are to be used then this use will need to be pointed out to all members of the crew concerned. As a majority of the set construction in the film and television industry uses polystyrene, which although being a useful product is very hazardous if it is burnt or adversely affected by heat (toxic fumes are given off), you will need to make sure that the polystyrene and other flammable materials used on the sets are properly protected from heat and/or fire.

## **TEMPERATURE**

Risk assessments shall analyse appropriate working environment temperatures for all aspects of the production to ensure potential exposure to extremes of heat and cold are avoided. Where sites are not air conditioned, other means of heating/cooling shall be provided and may require monitoring on a daily basis. Acceptable performance temperatures will vary according to the activity undertaken.

Some working environments involve working in heat. Precautions need to be taken to reduce the risk of exposures, especially in relation to design of costumes, choice of fabrics and the likely activity to be performed during the performance to avoid overheating. In any event, it is essential that there is appropriate water available and any clothing does not create problems of overheating. When working outdoors, adequate shade must be provided. Risk assessments shall take account of any necessary temperature controls that may be required, including scheduling for cooler parts of the day.

## **OTHER AREAS OF CONCERN TO THE SAFETY OF THE PRODUCTION**

The following areas of the production will also need to be checked for any possible safety hazards or concerns that may involve fire and general safety precautions:

- Wardrobe dept.
- Make-up & Hair
- Catering
- Production facilities.

Other things to watch for will be access to and from the toilets, general and emergency lighting requirements (other than for filming), adequate ventilation and protection from the unintentional intrusion from the public.

## **AREAS THAT REQUIRE THE EMPLOYMENT OF A SPECIALIST**

When filming on or near public roadways, especially at night, you will need to make sure that a suitable number of qualified and experienced Traffic Controllers are employed to control pedestrian and/or vehicular traffic.

There are also people regularly employed by the art department as well as by other departments that are required to be licensed and/or experienced such as Riggers, Boom & Scissor Lift Operators, Forklift Drivers, Carpenters and many others. Specialists employed in the film and television industry can come from many and varied fields of expertise and some of the more commonly used specialists are: Suitably trained or qualified adults to supervise children, Riggers, Surf Life Savers, Scuba Divers, Boat Handlers, Electricians, Armourers, Animal Handlers, Structural Engineers, Mechanics, Fire Brigade Officers, Veterinarians, Registered Nurses, Paramedics, etc.

The licences or qualifications of the above specialists should be sighted to ensure that the relevant licensing requirements are met and that only suitably licensed and experienced persons are employed to perform the restricted duties. The responsibility for checking the relevant experience of the specialists should fall to the heads of each department or a designated person.

## **CHANGES TO SCRIPT AFTER A SAFETY REPORT HAS BEEN ACHIEVED**

If there are significant changes to the script, other than dialogue, either prior to or during principal photography then these changes will need to be discussed with the safety report writer so the changes can be properly assessed and the appropriate recommendations and precautions be put in place so as to avoid any risk to the cast, crew and/or public.

## **DIGITAL EFFECTS**

Digital effects staff are particularly vulnerable to overuse injuries and workstations should be designed to prevent the incidence of such injuries. In particular, ergonomic chairs, workbenches and wrist supports must be provided. Care must also be given to design and installation of lighting for computer based work. In establishing a digital effects workshop, productions should consult the appropriate WorkCover/ WorkSafe Australia publications to ensure that workstations provided meet and are maintained to the recommended standards.

Digital effects staff must be aware of safe work practices and understand that risk of Repetitive Strain Injury (RSI) can be minimised by:

- good posture, correct height of chair and workbench, keyboard, etc.;
- taking frequent short breaks from computer based work;
- varying tasks frequently.

Manufacturers' guidelines for monitor calibration and maintenance must be followed and regular inspections of computer areas should be undertaken by appropriate safety inspectors. Design and construction of computer workstations must strictly adhere to regulations for electrical power loadings and safety inspections should be undertaken to ensure that proper cable and power connections are in place.

## **ON SET ISSUES – FOR DIGI SHOTS – WITH LIVE ACTION COMPONENT**

Where blue/green screen environments are being used, safety markers and barriers must be utilised to limit visual disorientation. Any props, raised areas or suspended objects must be clearly visible and/or guarded during set preparation and rehearsals.

Where actors are called upon to perform in rigs or harnesses, safety supervision and on set support must be provided to ensure the actor is comfortable and familiar with the equipment. Productions should be guided by the advice of a stunt coordinator. Appropriate rehearsal time must be allowed for sequences requiring an actor to perform in a rig or harness. Time, facilities, and appropriate tutoring/instruction must be allocated for warm-up and preparation for any strenuous performances in rigs, harnesses and similar blue/green screen action sequences. Only licensed riggers shall set up any flying or elevated rigs to be used on set. All rigs and harnesses must comply with relevant Australian Standards.

Appropriate mats, padding and safety costuming must be used wherever an actor is undertaking actions that might involve contact with props, platforms or other elements in blue/green screen sets.

All computer equipment on set must be run through appropriate cables and the Gaffer must be consulted regarding power requirements, power distribution and power safety.

## **COMMON ERGONOMIC PROBLEMS GUIDE**

*Prolonged abnormal postures involving the back, neck, shoulders and/or upper arms:* often involve excessive flexing or twisting of the neck or back to one side and/or the excessive raising of the upper arms and/or shoulders; often due to a work surface that is too high or a work surface that does not allow enough clearance for the legs to facilitate easy swivelling of the body; commonly encountered in production offices, construction workshops, editing and postproduction facilities and also encountered in on set tasks such as handheld camera work and animatronics.

*Excessive extension of angles of joints particularly if associated movements are sharp or against a force:* can occur as the result of prolonged keyboard work, hammering above shoulder height or too far from the object. The maximum angle of extension should be around 60 degrees but this may vary depending on the individual.

*Excessive twisting of wrists or maintaining wrists for prolonged periods in a static position.* Extreme ulnar deviation can occur when packages have to be picked up, turned through 90 degrees in order to repack or store them elsewhere; and can be associated with the use of hand tools, particularly pliers, screwdrivers, soldering

irons, file handles and knives.

*Motions which require repetitive actions of the forearm:* usually arises when the forearm is required to adopt a static position away from the side of the body for an extended period of time in a "static load" position, eg. using hand tools to carry out work in awkward positions for a sustained period of time.

*Repetitive manual activities requiring excessive force by squeezing the hand:* eg. cutting heavy wires with pliers, cutting heavy materials with scissors, for instance making costumes, using a chalking gun, removing materials from boxes by gripping and lifting a leading edge, etc. This problem can be exacerbated when a "pinch grip" rather than a "power grip" has to be used ie. using the tips of the fingers as opposed to the entire hand.

*Repeated "shock loading" to the hand, wrist and arm:* eg. repetitive use of hammers, tugging at cloth or threads, using jerky motions or sustaining sharp reactions from hand held power tools. The repetition of shock over a substantial period of time can lead to cumulative damage of the hand, wrist or arm, eg. use of vibrating tools such as mechanical sanders can lead to "white finger" as a result of poor blood flow.

*Repetitive actions involving picking up small heavy objects by hand:* eg. laying bricks or any activity requiring excessive effort to pick up an object. These types of activities are performed mainly by elbow flexion but the wrist extensors are also put into considerable static tension to help maintain the wrist position.

*Using devices which place excessive stress on the hand:* eg. tool handles, etc. which do not allow hands of various sizes to take up an optimum position; input devices (eg. computer mouse) that are too small or cannot be used in both hands.

THESE NOTES ARE A GUIDE TO FURTHER EDUCATE  
STAFF & STUDENTS IN A SAFER ON SET PRACTICE

Reference Source:

DRAFT NATIONAL CODE OF PRACTICE

OCCUPATIONAL RISK MANAGEMENT IN THE

AUSTRALIAN FILM AND TELEVISION INDUSTRY WAYNE PLEACE & TONY BOSCH SAFETY NOTES