

UNSCRIPTED TELEVISION PRODUCTION SAFETY MANUAL

Injury & Illness Prevention Program (IIPP)

Production Company: _____

Show Name: _____

Office Location

Address 1: _____

Address 2: _____

City: _____

State/Province: _____

Zip Code: _____

Country: _____

For this production, the following people have been identified as the key points of contact with significant environmental, health and safety roles:

Line Producer: _____

Production Manager: _____

**Stage Manager/
1st Assistant Director:** _____

**Staging Supervisor/
Construction Coordinator:** _____

Production Safety Consultant: _____

ANONYMOUS SAFETY HOTLINE: 818.954.2800 or 877.566.8001

This copy of the Television Production Safety Manual is the most current manual as of the revision date listed on the cover. More current safety information, and the latest versions of AMPTP Safety Bulletins, may be available at www.safetyontheset.com.

Revised October 2019

UNSCRIPTED TELEVISION PRODUCTION SAFETY MANUAL

Injury & Illness Prevention Program (IIPP)

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INTRODUCTION TO THIS MANUAL

Please make sure all your employees take special note of the following:

SQUIB USE

All anticipated squib use must be reported to the Production Safety Representative so that proper Fire Marshall permits and safety arrangements can be made. All squibs used in production must be green squibs that do not contain lead.

UNMANNED AERIAL SYSTEM (UAS)/ "DRONES" POLICY

Please be advised that any use of Unmanned Aerial Systems (UAS) requires pre-approval by your Production Safety Representative on a case-by-case basis.

FALL PROTECTION POLICY

You must wear appropriate fall protection whenever ANY of the following conditions exists:

- 1. You are working from a scissor lift, aerial lift, man lift or other elevated work platform;*
- 2. You are exposed to any unprotected fall of 4 feet or more;*
- 3. You are within six feet of the unprotected edge of a building, roof, platform, cliff, or other elevated surface;*
- 4. You are working in the "O" Zones outside of the catwalks in the perms.*

Failure to wear appropriate fall protection will subject you to discipline, up to and including termination. If you have any questions as to when fall protection is required, or what fall protection to wear, call the Production Safety Representative.

When a body harness and lanyard are used, they should be of a type that at a minimum meets the requirements of The Occupational Health & Safety Administration (OSHA) and The American Nation Standards Institute (ANSI).

TABLE SAW POLICY

- 1. Keep guard* in place;*
- 2. Wear safety glasses;*
- 3. Use a push stick;*
- 4. No gloves;*
- 5. No loose-fitting clothing, jewelry or hair that could become entangled in the blade.*

**For certain cuts, temporary removal of the guard may be allowed. Always check with your supervisor before removing guard.*

Failure to follow this Safety Policy will subject you to discipline, up to and including termination. If you have any questions regarding the safe use of table saws, call the Production Safety Representative.

FIREARM POLICY

The Company expressly prohibits weapons, including but not limited to firearms, in the workplace. The workplace includes all property owned, leased, or controlled by the Company. Exceptions will be made for weapons approved for use for filming or with prior written approval by the Company.

For specific Codes of Safe Practice on these subjects, see Form 1 – General Safety Guidelines for Production, or www.safetymontheset.com.

COVID-19

For all COVID-19 Return to Work (RTW) protocols, please refer to the following information:

- [COVID-19 Safer Work Environments](#)
- [Real Estate Guidebook](#)
- [COVID-19 Production Resources](#)

INTRODUCTION

This **Injury and Illness Prevention Program (IIPP) for Feature and Television Production** was developed for use by on-lot and off-lot (local and distant location) productions. Company Management considers a motion picture or television production as a company that is accountable and responsible for safe production. The role of the **Production Safety Representative** is to provide assistance and guidance, NOT to assume or replace the production company's role in safety management.

The Injury and Illness Prevention Program was instituted to promote safe working conditions. The Program documents a Production's safety activities. Willful failure of an employee to follow safety rules and regulations can lead to disciplinary action up to and including discharge; however, no employee shall be discharged or otherwise disciplined for refusing to work on a job that exposes the individual to a clear and present danger to life or limb. No set of safety regulations can comprehensively cover all possible unsafe working practices. Therefore, the production and its employees shall work together to communicate and help prevent accidents.

It is with this purpose in mind that the **Production Safety Manual** was developed. This safety program places particular emphasis on Federal Occupational Safety and Health Administration (OSHA) and California OSHA requirements that pertain to the motion picture and television industry. Though an initial production safety meeting is recommended between the production staff and the Production Safety Representative prior to production or construction, it is most important that production management personnel devote the necessary time and energy to understand and carry out this program. The Production Safety Representative will periodically conduct audits of production company safety activities to determine the effectiveness of their Injury and Illness Prevention Programs. Audit results will be discussed with the Line Producer or Production Executive.

The material in this manual should be used as a guideline for productions to provide a safe and healthful work environment for employees and to reduce losses resulting from accidents and injuries. ***It is not intended as legal interpretation of any federal, state or local standards.***

<i>NOTE: HAVING A WELL-DEFINED AND DOCUMENTED SAFETY PROGRAM WILL HELine Producer REDUCE ACCIDENTS AND INJURIES, AND HELine Producer LIMIT YOUR LIABILTY AND PROVIDE THE BASIS OF A DEFENSE SHOULD ACCIDENTS OR INJURIES OCCUR.</i>

THE DEPARTMENT OF SAFETY & ENVIRONMENTAL AFFAIRS

Anonymous Safety Hotline: (818) 954-2800/ (877) 566-8001.

The WBSO Department of Safety and Environmental Affairs (WB Safety) is the Safety Representative for this Production. WB Safety provides support in three major areas:

1) Occupational Health and Safety, 2) Environmental Affairs, and 3) TV & Feature Production Safety. S&EA works with both in-house and out-of-house employees including: WBSO, WB Pictures, WBTV, Bonanza Productions, WB Animation, Warner Horizon Television, Telepictures, Warner Premier, New Line Productions and various independent production tenants. This department acts as the interface between the studio and governmental agencies representing the enforcement of local, state, provincial and federal codes which regulate the occupational safety and health of employees.

Hours: 6AM-6PM, Monday through Friday (or by arrangement).

WB Safety Phone Numbers:

Main Line: (818) 954-2890 - **Fax:** (818) 954-2805 - **Food Safety Hotline:** (818) 954-2350

Anonymous Safety Hotline: (818) 954-2800 - **(Toll Free):** (877) 566-8001

Personnel Contact List:

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Production Safety Website

A wide variety of safety information can be found at **www.safetyontheset.com**. There you will find a printable version of the **Production Safety Manual**, **Codes of Safe Practices** covering employee safety for both construction and production personnel, **Tool Box Talks**, updated **Safety Bulletins** from the Alliance of Motion Picture and Television Producers (AMPTP), links to OSHA and other governmental organizations, and the **Safety Forms** you will need to complete during the construction, production and strike phases of your show.

THE LAW

The Law

All states have laws governing the safety of employees. While this safety program has been designed to meet the requirements of the California Labor Code, it is intended for use by all productions located in and out of California.

1. **Injury & Illness Prevention Program (IIPP)**

In California every employer is required by law (Labor Code Section) to provide a safe and healthful workplace for his/her employees. Title 8 of the California Code of Regulations, Section 3203 requires every California employer to have, in writing, an effective Injury and Illness Prevention Program, and it must be available to all employees. Your IIPP is included in this **Production Safety Manual**. A copy of this Safety Manual should be kept in the production office and with the 1st AD at all times. It should be made available to any employee who wishes to see it. The Production Safety Manual is also available to any employee at www.safetymontheset.com.

2. **AB 2249 – Corporate Criminal Liability Act of 1989** – (Penal Code Section 387.)

In 1989, California enacted a law under which worksite managers may be imprisoned up to three years for knowingly failing to disclose a serious concealed danger that poses potential harm to an employee under their direction and control at the time of the violation.

- a. **Misdemeanor:** up to one year in jail and \$18,000 fine (for each day of violation.)
- b. **Felony:** up to three years in jail and \$25,000 fine (for each day of violation.)

As a supervisor, DO NOT ask an employee to perform an act you know to be unsafe or to complete a job task for which the employee has not had proper training.

3. **Serious Accidents, Injuries and Mishaps**

Incidents that result in transportation by ambulance, visitation to the hospital by one or more employees, any treatments other than general first aid, or any serious property/asset damage, must be reported according to the **Serious Incident Reporting Procedures** found on Page 5 of this manual. Many jurisdictions, including the State of California, have strict reporting timelines. Regardless of where you are filming, the **Production Safety Representative** will make these notification calls for you.

Cal-OSHA must be notified within 8 hours of any incident in the State of California that results in death or serious injury or illness to an employee. A serious injury or illness is one that requires hospitalization for more than 24 hours for other than medical observation, or in which a part of the body is lost or permanent disfigurement occurs.

In all other U.S. states, Federal OSHA must be notified within 8 hours of a workplace incident that results in a fatality, and within 24 hours of any incident involving inpatient hospitalization, amputation or eye loss.

Your Production Safety Representative will make required notifications to OSHA for you. Notify your Production Safety Representative IMMEDIATELY of any serious incident.

Protect yourself, your employees, and your co-workers.

Following the Safety Program will help minimize accidents, injuries and illnesses.

Protect the Company.

Safe work practices help minimize losses due to injuries, illness, fines and work interruptions due to OSHA investigations.

INJURY & ILLNESS REPORTING PROCEDURES

ALL INJURIES TO CREW OR CAST MEMBERS MUST BE REPORTED TO THE PRODUCTION SAFETY REPRESENTATIVE.

Form 9: Accident Investigation Report should be completed for every injury or illness, no matter the severity.

Serious Incident Reporting Procedures:

A Serious Incident is an injury or illness that results in transportation by ambulance, visitation to the hospital by one or more employees, any treatments other than general first aid, any near miss during stunts or special effects, any injury – even minor – to cast members or stunt performers, or any serious property/asset damage.

Please note: These are SAFETY PROGRAM procedures. Workers Comp requires different documentation. Because sensitive personal medical information is often included, please **DO NOT** send Workers Comp forms or reports to the Production Safety Representative unless specifically requested.

LINE PRODUCER:

- If the injury or illness meets the criteria for a serious incident, IMMEDIATELY notify your **Production Safety Representative**, who will make all necessary notifications.
- **Accident Investigation Report – Form 9.**
 - Every section of this form needs to be completed, including “Steps taken to prevent recurrence.”
 - This form can be completed by the person having the most knowledge of the incident: Medic, Department Head, Production Manager, Line Producer. The Production Safety Representative will assist if requested.
- Some injuries and illnesses require timely **OSHA notification**. The Production Safety Representative will make this notification, based upon information from you.
- **Forward completed Form 9 to Production Manager.**

MEDIC:

- **IMMEDIATELY notify the Line Producer of the injury or illness.**
- Fill out *Employer's Report of Occupational Injury or Illness (Form 5020)* or local equivalent.
- If employee refuses recommended treatment or transportation to the hospital, have employee complete and sign *Right of Refusal of Medical Aid – Form 16*.
- **Forward completed Form 5020 and Form 16 to Production Manager.**

PRODUCTION MANAGER:

- **Forward completed Form 9 and Form 16 to Production Safety Representative.**
- Forward Form 5020 if requested by Production Safety Representative.
- If patient is hospitalized, keep Production Safety Representative updated on status.

PRODUCTION SAFETY REPRESENTATIVE:

- Will notify OSHA if required.
- Will conduct additional investigation if needed.
- Will assist with any OSHA or other agency investigations.

INJURY AND ILLNESS PREVENTION PROGRAM FOR PRODUCTION

INJURY AND ILLNESS PREVENTION PROGRAM FOR PRODUCTION

The following explains the requirements, duties, and documentation procedures of the Injury and Illness Prevention Program for Production:

STATEMENT OF PRODUCTION SAFETY POLICY

It is the policy of this Production that an Injury and Illness Prevention Program will be instituted and administered as a comprehensive and continuous occupational Injury and Illness Prevention Program (IIPP) for all employees. Our goal is to prevent accidents, to reduce personal injury and occupational illness, and to comply with all safety and health standards.

Safety is a priority.

To assist you in meeting the requirements of federal, state, provincial and local agencies, the **Injury and Illness Prevention Program (IIPP) for Production** has been developed. It is designed to help you make Production safe and to document your safety activities.

RESPONSIBILITY

Managers and supervisors are responsible for implementing and maintaining the IIP Program in their work areas and for answering worker questions about the IIP Program. A copy of this IIP Program is available from the Production Office and Department Heads, and is also available **to all employees** at safetyontheset.com.

This Injury and Illness Prevention Program has certain requirements that have been assigned among various positions within the production company. They are fully detailed in Section Three: Position Responsibilities of the *Injury and Illness Prevention Program for Production*. Briefly they are as follows:

Executive Producer/Showrunner - Supports the Line Producer in the administration and implementation of the safety program.

Director - Supports the Line Producer (Line Producer) in the administration and implementation of the safety program and supports the first Assistant Director/Stage Manager in maintaining a safe set.

The Production Safety Representative - Assists productions to resolve safety and environmental issues.

Line Producer - Responsible for the effective administration and implementation of the IIPP. The Line Producer (Line Producer) is to see that the Segment Producer/Field Producer, Stage Manager/1st AD, Construction Coordinator, Stunt/Special Effects Coordinator, Location Manager, and Transportation Coordinator meet their IIPP responsibilities.

Segment Producer/Field Producer - Often will take on production and safety responsibilities of one or more positions outlined below: Stage Manager, Location Manager, Production Manager. May have responsibilities delegated to them by Line Producer for the effective administration and implementation of the IIPP. If so, is to see that the Stage Manager/1st AD, Construction Coordinator, Stunt/Special Effects Coordinator, Location Manager, and Transportation Coordinator meet their IIPP responsibilities.

Stage Manager/1st Assistant Director - Responsible for conveying current safety requirements to production crew members, including holding an **On-Set Safety Meeting for Crew and Cast (Form 3)** and documenting it on the *Daily Production Report*; provides guidance for meeting IIPP goals and for ensuring production department heads/supervisors meet their IIPP responsibilities. Confirms that **Production Stage Hazard Assessment Checklist (Form 5)** is completed on a regular basis.

Construction Coordinator/Staging Supervisor - Responsible for conveying current safety requirements to construction crewmembers, including **Emergency Plan** information; provides guidance for meeting IIPP goals; and supervises, trains and sees to it that construction department heads/supervisors meet their IIPP responsibilities. Conducts and documents a safety **Tool Box Talk** every 10 working days and documents it using the **Tool Box Talk Attendance Form**. Sees that **Mill/Stage/Location Construction Hazard Assessment Checklist (Form 6)** is completed on a regular basis.

Transportation Captain/Coordinator - Responsible for conveying current safety requirements, including **Emergency Plan** information; provides guidance for meeting IIPP goals; and supervises, trains, and sees to it that transportation department heads/supervisors meet their IIPP responsibilities.

Special Effects Coordinator - Responsible for the safe performance and supervision of all special effects. In addition, the Special Effects Coordinator is also responsible for the transportation, storage, and use of all pyrotechnics, and is responsible to effectively coordinate with the Stunt Coordinator and, at pre-stunt/special effects meetings, communicate special effects action to ensure understanding and safety of all cast and crew. This meeting should be documented in the **Daily Production Report**. Consults regularly with the **Production Safety Representative**.

Stunt Coordinator - Responsible for the safe performance of stunts and supervision of all persons involved. Responsible to effectively coordinate with the Special Effects Coordinator and, at Pre-Stunt/FX meeting communicate stunt action to ensure understanding and safety of all involved crew. The meeting should be documented in the **Daily Production Report**. Consults regularly with the **Production Safety Representative**.

Department Heads/Supervisors - Responsible for supervising, training and performing periodic inspections, as well as their crews' compliance with applicable safety rules and regulations.

Location Manager - Responsible for assessing any hazards of a chosen location by completing the **Location Pre-Production Hazard Assessment Checklist (Form 7)**, **Asbestos/Lead/Mold Guidelines (Form 7A)**, **Location Prep/Strike Safety (Form 7B)** and communicating this information to the Line Producer, Stage Manager/1st AD, Construction Coordinator, Transportation Coordinator, and any other departments who may need the information. Location Manager is also responsible for completing **Location On-Production Hazard Assessment Checklist (Form 8)** for every location on the day the crew arrives for filming. Location manager is responsible to call the **Production Safety Representative** with any safety concerns.

2nd Assistant Director/Assistant Stage Manager - Supports the Stage Manager/1st AD in fulfilling the requirements as set forth in the IIPP for Production and maintaining documentation of safety meetings, crew notices, accident reports, and accurate Production Reports, and is responsible for communicating **Safety Guidelines for Extras and Theatrical Day Hires (Form 15)** as part of **Second AD Safety Meeting (Form 15A)**.

Production Manager - Maintains a library of safety information including blank safety forms and copies of completed safety forms and documentation as described in the IIPP and is responsible for contacting the **Production Safety Representative** to arrange for a **Production Safety Orientation** prior to the start of filming or taping.

Crew Members - Responsible for understanding and following the **General Safety Guidelines for Production (Form 1)** and meeting their safety program responsibilities as outlined in the IIPP.

Cast Members – Are responsible for understanding and following the **Position Safety Responsibilities for Cast Members** and meeting their safety program responsibilities as employees as outlined in the IIPP.

COMPLIANCE

All workers, including managers and supervisors, are responsible for complying with safe and healthful work practices. Our system of ensuring that all workers comply with these practices includes the following practices:

- Informing workers of the provisions of our IIP Program.
- Evaluating the safety performance of all workers.
- Recognizing employees who perform safe and healthful work practices.
- Providing training to workers whose safety performance is deficient (see Training section).
- Disciplining workers for failure to comply with safe and healthful work practices.

AN EMPLOYEE FOUND IN VIOLATION OF A SAFETY RULE OR GUIDELINE MAY BE SUBJECT TO DISCIPLINARY ACTION, UP TO AND INCLUDING, TERMINATION OF EMPLOYMENT.

COMMUNICATION

All managers and supervisors are responsible for communicating with all workers about occupational safety and health in a form readily understandable by all workers. Our communication system encourages all workers to inform their managers and supervisors about workplace hazards without fear of reprisal.

Our communication system includes the following items:

- Worker orientation including a discussion of safety and health policies and procedures.
- Review of our IIP Program.
- Training programs.
- Safety meetings.
- Posted or distributed safety information.
- A system for workers to anonymously inform management about workplace hazards.

If the crew has moved to a new location or if there are scenes involving stunts, special effects, aircraft, animals or other potentially hazardous conditions, a short, hazard-specific meeting is to be held with involved employees and documented in the daily *Production Report*.

Department Heads/Supervisors are to hold meetings with their crew members to review general safety issues and discuss any concerns. These meetings are to be noted on the daily *Production Report*. Once per episode, or every 10 working days, the Construction Coordinator should meet with the construction crew, and give an applicable **Tool Box Talk**, (Section 8 of this manual) and document the meeting on the attached **Tool Box Talk Attendance Form**.

Potentially hazardous situations should be clearly identified on the call sheet for the next day's shoot (i.e., explosions, helicopters, fire, etc.). If appropriate, an **AMPTP Industry Wide Labor-Management Safety Committee Safety Bulletin** (Section 7 of this manual) or other special notification addressing the particular hazard is to be referenced on the call sheet and posted on set. In all cases, every attempt is to be made to control recognized hazards and communicate these to affected employees.

Communication from employees to supervisors about unsafe or unhealthy conditions is encouraged and may be made directly to the supervisor either verbally or in writing, as the employee chooses. Cast and crew members may express their concerns regarding health and safety matters without fear of reprisal. If at any time, cast or crewmembers voice a concern about their health, well-being, or about any safety issue, it is to be taken seriously by the supervisor or recipient of the information. Investigate the employee's safety suggestion or report of hazard and/or, if merited, communicate the information to your supervisor and all affected employees. Implement corrective action immediately or handle as soon as possible if it is not an emergency. Post visible warnings if the situation warrants.

NOTE: Employees can express safety concerns by notifying their supervisors or the Production Safety Representative, by calling the Anonymous Safety Hotline: (818) 954-2800/ (877) 566-8001, or by making an anonymous report at safetyontheset.com. No employee shall be retaliated against for reporting hazards or potential hazards, or for making suggestions related to safety.

HAZARD ASSESSMENT

Periodic inspections to identify and evaluate workplace hazards shall be performed by a competent observer in our workplace.

Periodic inspections are performed according to the following schedule:

1. When we initially established our IIP Program;
2. When new substances, processes, procedures or equipment which present potential new hazards are introduced into our workplace;
3. When new, previously unidentified hazards are recognized;
4. When occupational injuries and illnesses occur; and
5. Whenever workplace conditions warrant an inspection.

In order to identify and evaluate potential hazards associated with each production component (including construction phase, locations, rigging, etc.), safety considerations are to be addressed during a script read-through meeting with all appropriate personnel in attendance. During the reading, all foreseeable production hazards and safety issues should be discussed to develop strategies to control or eliminate them. Additional safety discussions should be scheduled as necessitated by any changes in the shooting schedule and/or script and communicated to all affected employees.

Employees may not enter an imminent hazard area without appropriate protective equipment, training, and prior specific approval given by the Line Producer or supervisor.

NOTE: Whenever an unsafe or unhealthful condition, practice or procedure is observed, discovered, or reported, the Line Producer or designee will take appropriate corrective measures in a timely manner based upon the severity of the hazard. Employees will be informed of the hazard, and interim protective measures taken until the hazard is corrected.

To promote a safe work environment and to identify unsafe acts/conditions, periodic inspections should be done. The Line Producer will work with the **Production Safety Representative**, the 1st AD and other key department heads to inspect and identify potential safety concerns, conditions or practices. Inspections should be conducted:

- a. On a regular basis.
- b. Whenever new substances, processes, or procedures, or equipment are introduced into the workplace which may present a new occupational safety and health hazard.
- c. Whenever the Line Producer is made aware of a new or previous unrecognized hazard.

These inspections may be documented using the ***On-Production Hazard Assessment Checklist (Form 5)***, and the ***Stage/Location Construction Hazard Assessment Checklist (Form 6)***.

For location work, the Location Manager or his/her designee will inspect each location site prior to the Production Company's arrival. Inspections are to focus on potential hazards, environmental concerns and other unsafe conditions that may be present at the location. Call the Production Safety Representative if in doubt. The Location Manager will notify the Line Producer regarding the feasibility of using the location for filming using the ***Location Pre-Production Hazard Assessment Checklist (Form 7)***. The Location Manager or Stage Manager/1st AD will also inspect the location on the day the crew arrives and will document this inspection using the ***Location On-Production Hazard Assessment Checklist (Form 8)***.

ACCIDENT/EXPOSURE INVESTIGATIONS

Procedures for investigating workplace accidents and hazardous substance exposures include:

1. Interviewing injured workers and witnesses;
2. Examining the workplace for factors associated with the accident/exposure;
3. Determining the cause of the accident/exposure;
4. Taking corrective action to prevent the accident/exposure from reoccurring; and
5. Recording the findings and actions taken.

All injuries and illnesses should be reported immediately to the employee's direct supervisor and to the medical personnel (First Aid/Medic) on duty.

Occupational injuries and illness will be investigated in accordance with established procedures and documented as detailed on the ***Accident Investigation Report (Form 9)***. During the accident investigation:

1. Find the cause of an accident and prevent further occurrences.
2. Visit the accident scene as soon as possible while the facts are fresh and before witnesses forget important details.
3. Interview the injured.
4. Conduct interviews as privately as possible.
5. Obtain signed statements, when possible.
6. Document details graphically, diagrams, measurements, photos.
7. Determine, without speculating, the cause of the accident, not just the injury.
8. Determine corrective action to be taken to prevent such accidents in the future.
9. If a third party or defective product contributed to the accident, save evidence.

HAZARD CORRECTION

Unsafe or unhealthy work conditions, practices or procedures shall be corrected in a timely manner based on the severity of the hazards. Hazards shall be corrected according to the following procedures:

1. When observed or discovered; and
2. When an imminent hazard exists that cannot be immediately abated without endangering employee(s) and/or property, we will remove all exposed workers from the area except those necessary to correct the existing condition. Workers who are required to correct the hazardous condition shall be provided with the necessary protection.

TRAINING AND INSTRUCTION

All workers, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. Training and instruction are provided:

1. When the IIP Program is first established;
2. To all new workers
3. To all workers given new job assignments for which training has not previously provided;
4. Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard;
5. Whenever the employer is made aware of a new or previously unrecognized hazard;
6. To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed; and
7. To all workers with respect to hazards specific to each employee's job assignment.

General workplace safety and health practices include, but are not limited to, the following:

1. Implementation and maintenance of the IIP Program.
2. Emergency action and fire prevention plan.
3. Provisions for medical services and first aid including emergency procedures.

4. Prevention of musculoskeletal disorders, including proper lifting techniques.
5. Proper housekeeping, such as keeping stairways and aisles clear, work areas neat and orderly, and promptly cleaning up spills.
6. Prohibiting horseplay, scuffling, or other acts that can adversely influence safety.
7. Proper storage to prevent stacking goods in an unstable manner and storing goods against doors, exits, fire extinguishing equipment and electrical panels.
8. Proper reporting of hazards and accidents to supervisors.
9. Hazard communication, including worker awareness of potential chemical hazards, and proper labeling of containers.
10. Proper storage and handling of toxic and hazardous substances including prohibiting eating or storing food and beverages in areas where they can become contaminated.

The Line Producer, supervisor, or designee shall assure that professional staff receives training in order to recognize safety and health hazards to which they may be exposed. This can be accomplished through the Safety Pass Program, safety orientations, tech scouts, or the DGA's AD Training Program.

General Safety Training*

1. Supervisors are responsible for seeing that all of their employees have received general workplace safety training to perform safely tasks they are asked to do. Because there are many different ways proficiency can be documented, employees should be asked to submit evidence of training, demonstrate proficiency, or undergo training. No one may operate any equipment, power tool, heavy equipment etc., unless they have been trained to do so.
2. Employees operating heavy equipment must have Certification for each piece of equipment they will be driving (e.g. Forklift Safety Card; Aerial Platform Training, etc.).
3. All employees shall be given a copy of **General Safety Guidelines for Production (Form 1)** and should understand the parts that are applicable to them. They should sign an **Employee Acknowledgment** indicating that they have read and will abide by these Safety Guidelines.
4. **Tool Box Talks, AMPTP Safety Bulletins and AMPTP Information Sheets** are available in this manual. Additionally, **Codes of Safe Practices**, with specific instructions regarding hazards to most craft-specific job assignments, are available at **safetyontheset.com**. Print out the appropriate safety information, review it with the employee, and document the training.
5. Your employees should also receive site-specific safety training, such as Fall Protection, Hazard Communication, and other worksite-specific guidelines. Contact the Production Safety Representative to arrange for this training.

****For productions employing Safety Pass-trained IATSE crews, most of the training requirements will be satisfied by an employee's completed Safety Pass. You can verify employee Safety Pass training at www.csatf.org. Site-specific safety training should still be given when appropriate.***

Additionally, training will be provided as follows:

1. To employees given new job assignments for which training was not previously received.
2. Whenever new substances, processes, procedures or equipment introduced to the workplace present a new hazard.
3. Whenever the production is made aware of a new or previously unrecognized hazard.

RECORDKEEPING

We have taken the following steps to implement and maintain our IIP Program:

1. Records of hazard assessment inspections, including the person(s) conducting the inspection, the unsafe conditions and work practices that have been identified and the action taken to correct the identified unsafe conditions and work practices, are recorded on a hazard assessment and correction form; and
2. Documentation of safety and health training for each worker, including the worker's name or other identifier, training dates, type(s) of training, and training providers are maintained in the production office.

Inspection records and training documentation will be maintained for three years, except for training records of employees who have worked for less than one year which are provided to the employee upon termination of employment.

Safety Responsibilities

LINE PRODUCER

Safety Program information for the Line Producer (LP)

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Line Producer

The Line Producer has the authority and is responsible for overall management and administration of the Injury & Illness Prevention Program. The LP is responsible for seeing that the Safety Program is in effect, responsibilities are delegated to the appropriate department heads, and the program is properly documented. All staff are responsible for carrying out the IIPP/Safety Program.

As Line Producer, you are to see that your employees are provided with:

1. A safe work environment;
2. Equipment that has been inspected and is in safe working condition;
3. All training and/or personal protective equipment required by the tasks they are asked to perform.

Production Start-Up

1. Instruct your department heads that they may only hire employees who have the proper safety training for, and who understand how to safely perform, any task they are asked to do. *(For IATSE crews in Southern California, this includes completion of all Safety Pass training required by their job classification. See www.csatf.org for more information.)* If you need help arranging training, **call the Production Safety Representative**.
2. Make sure everyone you hire receives a copy of **Form 1 – General Safety Guidelines for Production** and signs an **Acknowledgment Form**. This is most easily accomplished by attaching it to the deal memo.
3. Organize and conduct an IIPP meeting with the **Stage Managers, Construction Coordinator, Transportation Coordinator, Special Effect Coordinator, Stunt Coordinator, Field Producers and Segment Producers**. The above Department Heads are responsible for coordinating the Safety Program within their departments.
 - a Direct everyone to **Section 3: Position Safety Responsibilities**. See that they read them, understand them and follow them.
 - b Empower the appropriate person on your show - **Stage Manager, Segment Producer, Field Producer, etc.** -to be responsible for implementing the Safety Program on the Production side when the cameras are rolling, and the set is active and shooting.
 - c Empower the appropriate person - **Construction Coordinator, Segment Producer, Researcher, etc.** – to be responsible for implementing the Safety Program on the Development/Prep-Production/Construction side.
4. Before you begin set construction, have your **Construction Coordinator** call the **Production Safety Representative** to discuss safety training, fall protection, and other safety issues.
5. Instruct the people choosing filming locations – **Location Manager, Researcher, Field Producer, Segment Producer, etc.** – to inspect for potential hazards such as asbestos, lead paint, visible mold, structural issues, fall protection requirements, etc., and to consult with the **Production Safety Representative** for appropriate remedies before bringing any production employees to a location.
6. As early as possible, you or your **Production Manager** should call the Production Safety Representative to schedule your production's **Safety Orientation**. (This usually takes place immediately before your first production meeting and lasts about 30 minutes.)
7. Visit **www.safetyontheset.com** to familiarize yourself with the safety information available, (AMPTP Safety Bulletins, Tool Box Talks, etc.) and to read the **Production Safety Manual**. Your Production Office Coordinator has been instructed to print out the Safety Manual. *Always keep a copy on set and in the production office.*
8. Hire only **Stunt Coordinators** knowledgeable in the action they will be supervising. Hire stunt players who have the proper training and who understand or have previously demonstrated the similar work they will be asked to do. Stunt Coordinators performing their own stunts need a second stunt person to act as Stunt Coordinator during the sequence.

Safety Responsibilities

LINE PRODUCER

9. Instruct **your Stunt and Special Effects Coordinators** to contact the Production Safety Representative well in advance of any large stunt or special effect.
10. Your **Production Manager** will keep a file of all completed Safety Forms.

On Production

Implement the IIPP:

1. To help keep the safety program consistent, the **Stage Managers, Construction Coordinator, Transportation Coordinator, Special Effect Coordinator, Stunt Coordinator, Field Producers and Segment Producers** are to consult with the LINE PRODUCER/LP on all safety matters.
2. Advise **the Production Safety Representative** (in writing or verbally) of safety concerns and IIPP compliance activities on a regular basis.
3. Communicate with the **Production Safety Representative**, your **Director**, and your **Department Heads** regarding specific script and shooting concerns.
4. Request laboratory testing, engineering services, and/or additional information from **the Production Safety Representative** on potentially unsafe substances or processes. For example:
 - a. Possible asbestos at a location
 - b. Environmental concerns, such as shooting near water, which may pose potential hazards to crew or the environment.
 - c. Use of smokes, fogs and pyrotechnics, etc.
 - d. Unusual applications of equipment manufactured for another purpose.
5. See to it that **Department Heads** are conducting training and performing their IIPP duties. Additional training of these crewmembers may be necessary.
6. Review IIPP documentation regularly for completion and compliance.
7. See to it that the IIPP remains in effect for all second units, re-shoots, and opticals.
8. To avoid fines when shooting on location in the City of Los Angeles, be sure to complete the **Los Angeles Fire Department Film Location Fire Inspection Safety Checklist** daily.

Coordinate Response to Accidents and Emergencies:

1. See to it that emergency procedures are in place for all locations and that the nearest hospital has been identified. This information should be recorded on the **Location Safety Poster** or **Stage Safety Poster**, which are available from the Production Safety Representative. *(The Safety Poster should be posted at the worksite. Emergency numbers are to be posted by all set telephones.)*
2. Maps and directions to the nearest hospital are to be provided by the Location Manager to:
 - a. Field Producer/Segment Producer
 - b. 1st AD/Stage Manager
 - c. Construction Coordinator
 - d. Transportation Coordinator
 - e. Special Effects Coordinator
 - f. Stunt Coordinator
 - g. Production Manager
 - h. Prep/Strike Crews
 - i. First Aid Staff
3. If anyone is injured on the job, immediately send them to First Aid, the Medic or the nearest urgent care clinic for evaluation.

Safety Responsibilities

LINE PRODUCER

Injuries and Illnesses

1. Please read the 2019 revised ***Injury & Illness Reporting Procedures***, which are attached to this document. They include ***Serious Incident Reporting Procedures***, which should be followed for incidents that result in transportation by ambulance, visitation to the hospital by one or more employees, any treatments other than general first aid, or any serious property/asset damage.
2. Instruct your Medics or Production Manager to fill out appropriate paperwork and make notification to the Production's Workers Comp Department. **Your Production Safety representative is NOT to receive Workers Comp forms or any employee's personal Health information.**

CAUTION: Written and/or verbal statements should not be taken unless authorized by the Production Attorney or Studio Legal Department. Speculation regarding the causes(s) of an accident are not to be included as part of any Accident Investigation Report (Form 9). Speak with your Production Safety Representative for direction.

OSHA/Government Inspector/Investigation Activities:

If you are ever visited or contacted by OSHA, or any government agency, contact the **Production Safety Representative** immediately. Also contact the **Production Executive and Production Attorney**.

1. Request the official's credentials and determine their validity.
2. Tell the inspector it is company policy to have the **Production Safety Representative** present for any inspection. Ask them politely to wait, and call the Production Safety Representative immediately.
3. Determine the nature of the visit. Be courteous, quiet, and cautious.
4. If the inspector refuses to wait, accompany the official directly to the site in question. Go straight to the site and try not to let the official wander into other areas.
5. Do not sign anything or provide written documentation. Ask that their request for documentation be placed in writing so it may be responded to in writing.
6. Ask for explanations of the problem and welcome any suggestions for corrective action. If possible, make corrections immediately.
7. If the inspector/investigator wants to take photographs, they may. You should however take your own pictures of any area that they photograph.
8. Answer questions directly; however, do not volunteer information.
9. Make detailed notes immediately after the official has departed. Copies are to be sent to the **Production Attorney** and to the Production Safety Representative.
10. Refer to "OSHA Inspection Guidelines" and "Regulatory Agency Inspection Guidelines" in the **Production Safety Manual** for more information.

Document IIPP Activities:

1. All completed Safety Forms.
2. Any training given to cast or crew.
3. Accident and injury reports.
4. Correspondence with OSHA or other governmental agencies.

Show Wrap:

If necessary, review the Safety Program with the Production Safety Representative for possible improvements and adjustments.

Safety Responsibilities

STAGE MANAGER/FIRST ASSISTANT DIRECTOR

Safety Program information for the Stage Manager/First Assistant Director (1st AD)

The following information is for your specific position and is provided to help you understand your part in your Production's Injury & Illness Prevention Program (IIPP)/Safety Program.

Responsibilities of the Stage Manager/1st AD

As the Stage Manager/1st AD, you are responsible for conveying current safety requirements to all production crew members, for providing guidance for meeting IIPP goals, and for ensuring that key department heads meet their IIPP responsibilities. The Stage Manager/1st AD is the person responsible for implementing the Safety Program on the Production side when the cameras are rolling and the set is active and shooting.

Production Start-Up

1. Visit **www.safetyontheset.com** to familiarize yourself with the safety information available, (AMPTP Safety Bulletins, Tool Box Talks, etc.) and read the **Television Production Safety Manual**. (You should receive a copy of the Safety Manual from your Production Manager.)
2. Review the General Safety Guidelines for Production and sign the acknowledgment form.
3. Attend the DGA General Safety Awareness presentation (strongly recommended.)
4. Please allow about 30 minutes before the start of your first Production Meeting for **the Production Safety Representative** to give the **Safety Orientation** to Department Heads.

On Production

Implement the IIPP:

1. Discuss all potential safety concerns with the Location Manager, Line Producer, Field Producer, Segment Producer, Special Effects/ Stunt/Transportation/Construction Coordinators, and key department heads during the script read through and/or Production Meeting.
2. **Conduct a safety meeting on the first day of production for cast and crew:**
 - a. Briefly explain the safety program.
 - b. Discuss the safety aspects of the week's/day's activities and any potential hazards of the location.
 - c. Discuss elements of the **Emergency Plan**, such as the location of emergency equipment, exits, and telephones on all stage or interior sets and off-lot locations, and explain emergency procedures such as evacuation plans in case of fire. *(The instructions for this meeting are on **Form 3 – On-Set Safety Meeting for Crew and Cast.**)*
 - d. Discuss safety precautions to be followed around any specialized equipment that may present a potential hazard (e.g. insert car, process trailer, cranes, booms, helicopters, etc.)
 - e. **Discuss the Heat Illness Prevention Plan (temps above 80 degrees F), the progression of Heat Illness symptoms, the location of water and other steps to taken to help employees stay cool and safe.**
 - f. Procedures for severe weather if appropriate.
 - g. The name and location of the Set Medic.
3. Conduct additional meetings in the following situations:
 - a. When a stunt or special/mechanical effect is to occur (e.g. pyrotechnics, high-fall, car stunt, etc.). Document stunts and special effect rehearsals on the daily Production Report.
 - b. When there is a substantial change to the stunt or special effect, another rehearsal should be held and documented on the daily **Production Report**.
 - c. Anytime the cast and crew are exposed to potential hazards (e.g. helicopter, exotic animal, water, extreme heat or cold, etc.).
 - d. Anytime new cast or crew joins the production.
 - e. Anytime a new process, substance or procedure is introduced (e.g. firearms, vehicle, gimbals, FX smoke, crane, etc.).
 - f. **At every new stage or location.**

Safety Responsibilities

STAGE MANAGER/FIRST ASSISTANT DIRECTOR

4. **Document all Safety Meetings in the Production Report. Include the following information:**
 - a. Mark the time and location of the safety meeting.
 - b. Bullet point the specific subjects covered.
 - c. Mark who was there if specific departments/people.
 - d. *It is not enough to simply write "Safety Meeting held at call."*
5. See to it that safety literature is properly distributed:
 - a. Distribute the **AMPTP Safety Bulletin** (found at www.safetyontheset.com) covering the specific hazard to cast and crew or attach to the call sheet (e.g. helicopter, firearm, special f/x smoke, etc.) or special/mechanical effect is to occur (e.g. pyrotechnics, high-fall, car stunt, etc.).
 - b. With help from the Production Safety Representative, see to it that special literature, such as **Safety Data Sheets (SDS's)** or industrial hygiene test results are available if requested by any cast or crew member (e.g. assessment of any exposure to products, such as special effects, smokes, fogs, paints, dust, etc.) Post SDS's at the worksite.
6. While on production, confirm that all sets have been inspected and are free from recognized hazards.
 - a. The **Production Stage Hazard Assessment Checklist (Form 5)** should be used to document this inspection while on your permanent stages.
 - b. The **Location On-Production Hazard Assessment Checklist (Form 8)** should be used while on location.

Communicate and Troubleshoot:

1. See to it that appropriate safety equipment is available and is used when needed by cast and crew (*e.g. earplugs, harnesses, safety belts, etc.*).
2. Consult with the Line Producer to resolve script safety concerns (*e.g. special effects, stunts or other special hazards*).
3. Make sure cast and crew safety concerns have been addressed and resolved:
 - a. Correct hazards discovered on the set (e.g. blocked exits, blocked fire lanes, trip and fall hazards, etc.)
 - b. Address cast member concerns until they are resolved.

<i>Instruct your Medics to immediately notify the Line Producer in the event of any serious injury or illness.</i>

Coordinate Response to Serious Accidents and Emergencies:

1. Read the **Injury and Illness Reporting Procedures attached to this document.**
2. Respond to all on-set emergencies and accidents that result in serious injury, death, major property damage, hospitalization or events that create imminent danger.
3. Summon emergency medical assistance immediately (*e.g. paramedics, fire department, police, etc.*)
4. Clear the area and protect cast and crew from further injury.
5. Preserve the evidence for further investigation.

Serious Accidents, Injuries and Mishaps

Serious accidents, injuries and mishaps are incidents that require transportation by ambulance, visitation to the hospital by one or more employees, any treatments greater than general first aid or any serious property/asset damage.

1. For serious accidents as defined above, the Production Safety Representative will direct you to complete an **Accident Investigation Report (Form 9)**. The completed report should be sent to the **Production Safety Representative** and **Risk Management**.
2. Any accident should be noted on the back of the Production Report on the date the accident occurred by identifying only the name of injured employee and classification.
3. Under the guidance of the Studio Legal Department, the Production Safety Representative will conduct any additional accident investigations necessary.

Safety Responsibilities

STAGE MANAGER/FIRST ASSISTANT DIRECTOR

CAUTION: *Written and/or verbal statements should not be taken unless authorized by the Production Attorney or Studio Legal Department. Speculation regarding the causes(s) of an accident are not be included as part of any Accident Investigation Report (Form 9). Speak with your Production Safety Representative for direction.*

OSHA/Government Inspector/Investigation Activities:

If you are ever visited or contacted by **OSHA**, or any government agency, contact the **Line Producer** and the **Production Safety Representative** immediately. Also contact the **Production Executive** and **Production Attorney**.

1. Immediately notify the Line Producer.
2. Request the official's credentials and determine their validity. If unavailable, Stage Manager/1st AD should remain with the inspector for the duration of the visit.
3. Tell the inspector it is company policy to have the **Production Safety Representative** present for any inspection. Ask them politely to wait and call the Production Safety Representative immediately.
4. Determine the nature of the visit. Be courteous, quiet, and cautious.
5. If the inspector refuses to wait, accompany the official directly to the site in question. Go straight to the site and try not to let the official wander into other areas.
6. Do not sign anything or provide written documentation. Ask that their request for documentation be placed in writing so it may be responded to in writing.
7. Ask for explanations of the problem and welcome any suggestions for corrective action. If possible, make corrections immediately.
8. If the inspector/investigator wants to take photographs, they may. You should however take your own pictures of any area that they photograph.
9. Answer questions directly; however, do not volunteer information.
10. Make detailed notes immediately after the official has departed. Copies are to be sent to the **Production Attorney** and to the Production Safety Representative.
11. Refer to "OSHA Inspection Guidelines" and "Regulatory Agency Inspection Guidelines" in the **Production Safety Manual** for more information.

Document IIPP Activities:

1. All completed Safety Forms
2. Any training given to cast or crew
3. Accident and injury reports
4. Correspondence with OSHA or other governmental agencies.

Show Wrap:

If necessary, review the Safety Program with the Line Producer and the Production Safety Representative for possible improvements and adjustments.

Safety Responsibilities

CONSTRUCTION COORDINATOR

Safety Program Information for Construction Coordinator

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Construction Coordinator

The Construction Coordinator is responsible for conveying current safety requirements to all construction crewmembers, provides guidance for meeting IIPP goals and supervises, trains and sees to it that the construction department heads/supervisors meet their IIPP responsibilities. The **Construction Coordinator** is the person responsible for implementing the Safety Program on the Construction side.

Production Start-Up

1. Obtain and read the **IIPP/Television Production Safety Manual** from the **Line Producer** or **safetyontheset.com** the first week of employment and prior to any construction. The manual is meant to provide guidance and clarification to possible questions.
2. Hire only employees who have the proper safety training for, and who understand how to safely perform, any task they are asked to do. (*In Southern California, this includes completion of all Safety Pass training required by their job classification. See www.csatf.org for more information.*) If you need help arranging training, call the **Production Safety Representative**.
3. Make sure everyone you hire receives a copy of **Form 1 – General Safety Guidelines for Production** and signs an **Employee Acknowledgment**.
4. Conduct safety meetings on the first day of construction for your crew:
 - a. Explain the safety program.
 - b. Check the employee's Safety Passport for completeness; visit **www.csatf.org**.
 - c. On productions out of Southern California: Check all equipment operators to see that they carry a Certification for each piece of equipment they will be asked to drive (e.g. Forklift Safety Card, Aerial Platform Training, powder-actuated tool operator's "Hilti Card," etc.) Make a copy of these certifications and keep them on file with the **Production Manager**.
 - d. Discuss the safety aspects of the day's activities and the potential hazards of the location (e.g. overhead power lines, etc.)
 - e. Discuss elements of the **Emergency Plan**, such as the location of emergency equipment, exits, and telephones on stages or interior sets and off-lot locations, and explain emergency procedures, location of fire extinguishers, and evacuation plans in case of fire – including specific directions to a **post-evacuation assembly area**.
 - f. Discuss safety precautions to be followed around any specialized equipment that may pose a potential hazard (e.g. aerial lifts, paints, chemicals, etc.).
5. Conduct or arrange safety training for all crew members:
 - a. Hazard Communication Training for chemical containing products.
 - b. Personal Protective Equipment for eye, ear, respiratory, etc. hazards.
 - c. Fall Protection for workers exposed to heights.
 - d. Special tools, equipment, or vehicles used.
 - e. Use the **Codes of Safe Practices (CSP's)** found at **safetyontheset.com** and a power tool manual to ensure the employee understands safe operation. Have employee demonstrate if in doubt.
 - f. Document all training and forward to the Production Manager.
6. Conduct additional meetings in the following situations:
 - a. Anytime the crew is exposed to a new hazard (e.g. asbestos containing material, new equipment, confined space, high tension wires or any other site concern, etc.)
 - b. Whenever a new crewmember or independent contractor arrives (This may be delegated to the foreperson).

Safety Responsibilities

CONSTRUCTION COORDINATOR

- c. Anytime there is a change in work site or multiple work sites the foreperson at each site should give a safety orientation, including emergency action, and conduct **Tool Box Talks** (available at safetyontheset.com.)
- d. Anytime there is an injury, review with all crew applicable safety rules.

On Production

Implement the IIPP:

1. Conduct a **Tool Box Talk** every 10 working days and have all attending employees sign the **Tool Box Talk Attendance Form**.
2. Conduct an inspection of the construction area of all stages and locations every 10 working days, and document any problems found and corrections made by using **Form 6 – Mill/Stage/Location Construction Hazard Assessment Checklist**.
3. See to it that safety literature is properly distributed.
 - a. Distribute **AMPTP Safety Bulletins** (available at safetyontheset.com) relating to specific hazards as they occur and/or attach to the call sheet (e.g. elevating platforms, etc.).
 - b. With help from the Production Safety Representative see to it special literature, such as **Safety Data Sheets** (SDS) or industrial hygiene test results are available if requested by any crewmember (e.g. analysis for lead / asbestos, paints, dust, etc.)
4. Document all safety training and forward copies to the **Production Manager**.
 - a. Any bulletins or correspondence regarding safety should be forwarded to the Production Manager.
 - b. Document all safety training and forward copies to the Production Manager.
5. See that the **Location Manager** provides you with a **Form 7B – Prep/Strike Location Safety Information** and review the information with your crew.

Communicate and Troubleshoot:

1. See to it that safety equipment is provided and being used (e.g. earplugs, harnesses, eye protection, hard- hats).
2. Confirm that all tools and equipment are inspected and have the proper safety features.
3. All safety guards should be in working order and in place.
4. Verify that the crew has the proper certification for any specialized equipment used, such as, elevated platforms, forklifts, powder-actuated tools, etc. Check their Safety Passports.
5. Enforce General Safety Guidelines for Production. Use the Safety Warning Notice (Form 12) to document verbal warnings, and disciplinary actions.
6. Consult with the **Line Producer** and/or the **Production Safety Representative** to resolve safety concerns; such as, confined space issues, ventilation problems, rigging fall protection for elevated work, or other safety matters.
7. Address crew safety issues until they are resolved.
8. Correct any hazards that have been discovered at the site (e.g. blocked exits, improper material storage, hazardous materials on site, faulty equipment, etc.).

Instruct your Medics to notify the Production Safety Representative of any serious injury or illness.

Coordinate response to serious accidents and emergencies:

Respond to all work site emergencies and accidents that result in death, serious injury, hospitalization, major property damage or events that create imminent danger:

1. Summon emergency medical assistance immediately (911).
2. Clear the area and protect the crew from further injury. (Take equipment out of service or post sign.)
3. Preserve evidence for further investigation.
4. Immediately notify the EIC/LP. If not available, notify the Stage Manager and the Production Safety Representative.

Safety Responsibilities

CONSTRUCTION COORDINATOR

Coordinate OSHA/Government Inspector/Investigator activities:

If visited by OSHA or other governmental agency, take the following actions:

1. Immediately notify the **Line Producer**. If not available contact the Stage Manager and the Production Safety Representative.
2. Request the official's credentials and determine their validity.
3. Tell the inspector it is company policy to have a representative of the Department of Safety & Environmental Affairs present for any inspection. Ask them politely to wait, and contact the Production Safety Representative immediately.
4. Determine the nature of the visit. Be courteous, be quiet and be cautious.
5. If the inspector refuses to wait, accompany the official directly to the site in question. Go straight to the site and try not to let the official wander into other areas.
6. Do not sign anything or provide written documentation. Ask that their request for documentation be placed in writing so it may be responded to in writing.
7. Ask for explanations of the problem and welcome any suggestions for corrective action.
8. If the inspector/investigator wants to take photographs, they may. You should however take your own pictures of any area that they photograph.
9. Answer questions directly; however, do not volunteer information.
10. Make detailed notes immediately after the official has departed. Copies are to be sent to the **Production Attorney** and to the Production Safety Representative.
11. Refer to "OSHA Inspection Guidelines" and "Regulatory Agency Inspection Guidelines" (Section 4 of the IIPP/Safety Manual) for more information.

Show Wrap

Forward all documentation of safety program to the Production Office:

1. Tool Box Talks
2. Inspection Forms
3. Safety training records

Hazardous Waste Disposal

It is Company policy that all chemicals will be disposed of in accordance with the laws of the city, county and state in which they are used. If you need to arrange for the disposal of paint or other chemicals, contact the Production Safety Representative.

Safety Responsibilities

STAGING SUPERVISOR

Safety Program Information for Staging Supervisor

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Staging Supervisor

The Staging Supervisor is responsible for conveying current safety requirements to all construction crewmembers, provides guidance for meeting IIPP goals and supervises, trains and sees to it that the construction department heads/supervisors meet their IIPP responsibilities. The **Staging Supervisor** is the person responsible for implementing the Safety Program on the Construction side.

Production Start-Up

1. Obtain and read the **IIPP/Safety Manual** from the Line Producer or **safetyontheset.com** the first week of employment and prior to any construction. The manual is meant to provide guidance and clarification to possible questions.
2. Hire only employees who have the proper safety training for, and who understand how to safely perform, any task they are asked to do. (*In Southern California, this includes completion of all Safety Pass training required by their job classification. See www.csatf.org for more information.*) If you need help arranging training, call the **Production Safety Consultant**.
3. Make sure everyone you hire receives a copy of **Form 1 – General Safety Guidelines for Production** and signs an **Employee Acknowledgment**.
4. Conduct safety meetings on the first day of construction for your crew:
 - a. Explain the safety program.
 - b. Check the employee's Safety Passport for completeness; visit **www.csatf.org**.
 - c. On productions out of Southern California: Check all equipment operators to see that they carry a Certification for each piece of equipment they will be asked to drive (e.g. Forklift Safety Card, Aerial Platform Training, powder-actuated tool operator's "Hilti Card," etc.) Make a copy of these certifications and keep them on file with the **Production Manager**.
 - d. Discuss the safety aspects of the day's activities and the potential hazards of the location (e.g. overhead power lines, etc.)
 - e. Discuss elements of the **Emergency Plan**, such as the location of emergency equipment, exits, and telephones on stages or interior sets and off-lot locations, and explain emergency procedures, location of fire extinguishers, and evacuation plans in case of fire – including specific directions to a **post-evacuation assembly area**.
 - f. Discuss safety precautions to be followed around any specialized equipment that may pose a potential hazard (e.g. aerial lifts, paints, chemicals, etc.).
5. Conduct or arrange safety training for all crew members:
 - a. Hazard Communication Training for chemical containing products.
 - b. Personal Protective Equipment for eye, ear, respiratory, etc. hazards.
 - c. Fall Protection for workers exposed to heights.
 - d. Special tools, equipment, or vehicles used.
 - e. Use the **Codes of Safe Practices (CSP's)** found at **safetyontheset.com** and a power tool manual to ensure the employee understands safe operation. Have employee demonstrate if in doubt.
 - f. Document all training and forward to the Production Manager.
6. Conduct additional meetings in the following situations:
 - a. Anytime the crew is exposed to a new hazard (e.g. asbestos containing material, new equipment, confined space, high tension wires or any other site concern, etc.)
 - b. Whenever a new crewmember or independent contractor arrives (This may be delegated to the foreperson).

Safety Responsibilities

STAGING SUPERVISOR

- c. Anytime there is a change in work site or multiple work sites the foreperson at each site should give a safety orientation, including emergency action, and conduct **Tool Box Talks** (available at safetyontheset.com.)
- d. Anytime there is an injury, review with all crew applicable safety rules.

On Production

Implement the IIPP:

1. Conduct a **Tool Box Talk** every 10 working days and have all attending employees sign the **Tool Box Talk Attendance Form**.
2. Conduct an inspection of the construction area of all stages and locations every 10 working days, and document any problems found and corrections made by using **Form 6 – Mill/Stage/Location Construction Hazard Assessment Checklist**.
3. See to it that safety literature is properly distributed.
 - a. Distribute **AMPTP Safety Bulletins** (available at safetyontheset.com) relating to specific hazards as they occur and/or attach to the call sheet (e.g. elevating platforms, etc.).
 - b. With help from the Production Safety Consultant see to it special literature, such as **Safety Data Sheets** (SDS) or industrial hygiene test results are available if requested by any crewmember (e.g. analysis for lead / asbestos, paints, dust, etc.)
4. Document all safety training and forward copies to the **Production Manager**.
 - a. Any bulletins or correspondence regarding safety should be forwarded to the Production Manager.
 - b. Document all safety training and forward copies to the Production Manager.
5. See that the **Location Manager** provides you with a **Form 7B – Prep/Strike Location Safety Information** and review the information with your crew.

Communicate and Troubleshoot:

1. See to it that safety equipment is provided and being used (e.g. earplugs, harnesses, eye protection, hard- hats).
2. Confirm that all tools and equipment are inspected and have the proper safety features.
3. All safety guards should be in working order and in place.
4. Verify that the crew has the proper certification for any specialized equipment used, such as, elevated platforms, forklifts, powder-actuated tools, etc. Check their Safety Passports.
5. Enforce General Safety Guidelines for Production. Use the Safety Warning Notice (Form 12) to document verbal warnings, and disciplinary actions.
6. Consult with the **Line Producer** and/or the **Production Safety Consultant** to resolve safety concerns; such as, confined space issues, ventilation problems, rigging fall protection for elevated work, or other safety matters.
7. Address crew safety issues until they are resolved.
8. Correct any hazards that have been discovered at the site (e.g. blocked exits, improper material storage, hazardous materials on site, faulty equipment, etc.).

<i>Instruct your Medics to notify the Production Safety Consultant of any serious injury or illness.</i>

Coordinate response to serious accidents and emergencies:

Respond to all work site emergencies and accidents that result in death, serious injury, hospitalization, major property damage or events that create imminent danger:

1. Summon emergency medical assistance immediately (911).
2. Clear the area and protect the crew from further injury. (Take equipment out of service or post sign.)
3. Preserve evidence for further investigation.
4. Immediately notify the Line Producer. If not available, notify the Stage manager/1st AD and the Production Safety Consultant.

Safety Responsibilities

STAGING SUPERVISOR

Coordinate OSHA/Government Inspector/Investigator activities:

If visited by OSHA or other governmental agency, take the following actions:

1. Immediately notify the Line Producer. If not available contact the Stage Manager/1st AD and the Production Safety Consultant.
2. Request the official's credentials and determine their validity.
3. Tell the inspector it is company policy to have a representative of the Department of Safety & Environmental Affairs present for any inspection. Ask them politely to wait, and contact the Production Safety Consultant immediately.
4. Determine the nature of the visit. Be courteous, be quiet and be cautious.
5. If the inspector refuses to wait, accompany the official directly to the site in question. Go straight to the site and try not to let the official wander into other areas.
6. Do not sign anything or provide written documentation. Ask that their request for documentation be placed in writing so it may be responded to in writing.
7. Ask for explanations of the problem and welcome any suggestions for corrective action.
8. If the inspector/investigator wants to take photographs, they may. You should however take your own pictures of any area that they photograph.
9. Answer questions directly; however, do not volunteer information.
10. Make detailed notes immediately after the official has departed. Copies are to be sent to the **Production Attorney** and to the Production Safety Consultant.
11. Refer to "OSHA Inspection Guidelines" and "Regulatory Agency Inspection Guidelines" (Section 4 of the IIPP/Safety Manual) for more information.

Show Wrap

Forward all documentation of safety program to the Production Office:

1. **Tool Box Talks**
2. Inspection Forms
3. Safety training records

Hazardous Waste Disposal

It is Company policy that all chemicals will be disposed of in accordance with the laws of the city, county and state in which they are used. If you need to arrange for the disposal of paint or other chemicals, contact the Production Safety Consultant.

Safety Responsibilities

TRANSPORTATION CAPTAIN/COORDINATOR

Safety Program Information for Transportation Captain/Coordinator

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Transportation Captain/Coordinator

The Transportation Captain/Coordinator is responsible for conveying current safety requirements to all transportation crewmembers, provides guidance for meeting IIPP goals and supervises, trains and sees to it that the transportation department heads/supervisors meet their IIPP responsibilities.

Production Start-Up

1. Obtain and read the **IIPP/Safety Manual** from the **Line Producer** or **safetyontheset.com** the first week of employment. The manual is meant to provide guidance and clarification of possible questions. It is available for further review from the Line Producer or Production Manager.
2. Attend the mandatory IIPP training meeting.
3. Hire only employees who have the proper safety training for, and who understand how to safely perform, any task they are asked to do. (In Southern California, this includes completion of all Safety Pass training required by their job classification. See www.csatf.org for more information.) If you need help arranging training, call the **Production Safety Representative**.
4. Make sure everyone on your transportation crew is given a copy of **Form 1 – General Safety Guidelines for Production** and signs the accompanying **Employee Acknowledgment**.
5. **U.S. Department of Transportation (DOT)**: Transportation Captain/Coordinator is responsible for arranging all compliance with DOT regulations, including drug testing program, drivers' logs, etc. Call the **Production Safety Representative** for information on compliance vendors.

On Production

Implement the IIPP:

1. Conduct safety meetings on the first day of work for your crew:
 - a. Explain the safety program.
 - b. Check all drivers to see that they carry a Certification for each piece of equipment they will be asked to drive (e.g. forklift drivers have a Forklift Safety card; aerial platform operators have a "Condor Card", etc.) Make a copy of these certifications and keep them on file with the Production Manager. **In Southern California, this training is provided by the Safety Pass Program.*
 - c. Discuss the safety aspects of the week's/day's activities and the potential hazards of the location.
 - d. Discuss safety precautions to be followed around any specialized equipment that may present a potential hazard (e.g. insert car, process trailer, cranes, booms, helicopters, etc.).
 - e. Discuss elements of the **Emergency Plan**, such as the location of emergency equipment, exits, and telephones on all stage or interior sets and off-lot locations, and explain emergency procedures, such as evacuation plans in case of a fire. Drivers should inspect any emergency equipment on vehicles.
2. Conduct or arrange safety training for all transportation crew members
 - a. Any heavy construction equipment they will be expected to operate.
 - b. Tools, equipment, or vehicles.
 - c. Consult with Line Producer or the Production Safety Representative to determine the specific training needs of the production.
 - d. Document all training and forward to the Production Manager.
3. Conduct additional safety meetings in the following situations:
 - a. Anytime the crew is exposed to a new hazard (e.g. driving hazards, new equipment, high tension wires or any other site concern, etc.)

Safety Responsibilities

TRANSPORTATION CAPTAIN/COORDINATOR

- b. Whenever a new crew member or independent contractor arrives (This may be delegated to the foreperson).
- c. Anytime there is a significant change in work site or multiple work sites the foreperson at each site should conduct a Safety Orientation.
- 3. See to it that safety literature is properly distributed:
 - a. Give *General Safety Guidelines for Production*, written, orally or posted, to all those who report directly to the site for hire, such as casual hires and see that they sign an Employee Acknowledgment.
 - b. Return signed Employee Acknowledgments to the Production Manager daily.
 - c. Distribute AMPTP Safety Bulletins (available at safetyontheset.com) relating to specific hazards as they occur and/or attach to the call sheet (e.g. road conditions, extreme weather, etc.).
 - d. With help from the Production Safety Representative, see to it that special literature, such as Safety Data Sheets (SDS) or industrial hygiene test results are available if requested by any crew member.
- 4. Document all safety activities:
 - a. Document all safety training using the daily Production Report.
 - b. Forward copies to the Production Manager.

Communicate and Troubleshoot:

- 1. See to it that all vehicles are inspected daily to be sure they are free from recognized hazards and correct any that are found. This can be done by the operator.
- 2. See to it that safety equipment is provided and being used (e.g. wheel chocks, back up warning signal, deadman switches on elevated truck lifts, etc.).
- 3. Verify, again, that your crew has the proper license(s) to operate assigned equipment and vehicles.
- 4. Consult with the Line Producer and/or the Production Safety Representative to resolve safety concerns.
- 5. Correct any hazards discovered on equipment and vehicles.
- 6. Enforce the ***General Safety Guidelines for Production***. Use the ***Safety Warning Notice (Form 12)*** to document verbal warnings, and disciplinary actions.
- 7. Resolve crew safety issues.

Coordinate response to serious accidents and emergencies:

- 1. Respond to all work site emergencies and accidents affecting the crew.
- 2. Summon emergency medical assistance immediately (911).
- 3. Clear the area and protect the crew from further injury.
- 4. Preserve evidence for further investigation.
- 5. Immediately notify the Line Producer. If not available, notify the 1st AD/Stage Manager and the Production Safety Representative.
- 6. See that the ***Accident Investigation Report (Form 9)*** is completed and submitted to the Production Manager.

Coordinate OSHA/Government Inspector/Investigator activities:

If visited by **OSHA**, or other governmental agency, take the following actions:

- 1. Immediately notify the Line Producer. If not available contact the First AD and the Production Safety Representative.
- 2. Request the official's credentials and determine their validity.
- 3. Determine the nature of the visit. Be courteous, but cautious.
- 4. See to it that all work activity is stopped in the area to be inspected/investigated.
- 5. The Line Producer, 1st AD/Stage Manager or Construction Coordinator will accompany the inspector/investigator on the site survey.
- 6. Refer to "OSHA Inspection Guidelines" and "Regulatory Agency Inspection Guidelines" in the IIPP/Safety Manual for more information.

Safety Responsibilities

FIELD PRODUCER/SEGMENT PRODUCER

Safety Program Information for Field Producer/Segment Producer

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Field Producer/Segment Producer

The Field Producer/Segment Producer often can simultaneously fill several supervisory roles on production: **Director, Stage Manager, Location Manager, Production Manager**. It is important that the Field Producer be familiar with the Safety Responsibilities of all positions he/she will fill, bearing in mind the three basic duties of all Supervisors:

1. See that anyone hired to perform a task has been properly trained to do so safely.
2. Provide employees with the proper personal protective equipment (PPE) to safely do their jobs.
3. See that the stage/location/work area has been inspected and corrections made to any potential hazards found.

Employee Training

1. Productions are required to employ workers knowledgeable in the work they will be asked to do. Because there are many different ways proficiency can be documented, different Department Heads will submit varying evidence of training. All of it is important.
2. Check that Departments operating heavy equipment are turning in copies of Certification for each piece of equipment they will be asked to drive (e.g. Forklift Safety Card, Aerial Platform Training, powder-actuated tool operator's "Hilti Card," etc.) Keep them on file.
3. Some Department Heads will be sending copies of Tool Box Talks they conducted; others will send signed copies of Codes of Safe Practices (CSP's). Keep them on file.
4. Most importantly, make sure a signed **Acknowledgment Form** for receipt of **(Form 1) General Safety Guidelines for Production** is on file for all employees from all departments.
5. If you need help arranging training, call the **Production Safety Consultant**.

Production Start-Up

Implement the IIPP:

1. Obtain and read the **Production Safety Manual** from the **Production Manager, Production Safety Consultant** or **safetyontheset.com** the first week of employment. This manual is meant to provide guidance and clarification of possible questions. A copy should be available at all production locations.
2. Check and document the **Safety Pass Status** of all IATSE crew hired by the production. (Southern California.)

Coordinate the documentation of all safety program activities:

For any crew hired directly by the Field Producer, see to it that the following have been turned into the Production Office, and copies sent to the Production Safety Consultant at the beginning of the production:

1. Employee Acknowledgment of General Safety Guidelines for Production (Form 1)
2. Serious Incident Reporting Procedures (Form 4)

On Production

1. See to it that the following are turned into the Production Office and copies sent to the Production Safety Consultant on a regular basis:
 - a. On-Production Safety Report/Checklist (Form 5)
 - b. Stage/Location Construction Safety Checklist (Form 6)
 - c. Location Pre-Productions Safety Checklist (Form 7)
 - d. Asbestos/Lead/Mold Guidelines (Form 7A)
 - e. Location Prep/Strike Safety Information (Form 7B)

Safety Responsibilities

FIELD PRODUCER/SEGMENT PRODUCER

- f. Location On-Production Safety Checklist (Form 8)
 - g. Safety Guidelines for Extras and Theatrical Day Hires (Form 15)
 - h. Assistant Stage Manager Safety Meeting (Form 15 A)
2. See to it that the following are turned into the Production Office and copies sent to the Production Safety Consultant as they are completed:
 - a. Accident Investigation Report (Form 9)
 - b. Hazard Notification (Form 10)
 - c. Notice of Unsafe Condition and Action Plan (Form 11)
 - d. Safety Warning Notice (Form 12)
 - e. Production Safety Meeting Report (Form 13)
 - f. Request for Employee Safety Training (Form 14)
 - g. Right of Refusal of Medical Aid (Form 16)
 - h. Any special permits, environmental surveys, location safety reports, etc. daily Production Reports listing safety meetings, including key department head and new arrival meetings, stunt and special effects meetings, etc.
3. If your duties include distributing Calls Sheets, always attach any AMPTP Safety Bulletins or other notices deemed appropriate by your Line Producer or Stage Manager.

Injuries and Illnesses

1. Please read the 2019 revised ***Injury & Illness Reporting Procedures***, which are attached to this document. They include ***Serious Incident Reporting Procedures***, which should be followed for incidents that result in transportation by ambulance, visitation to the hospital by one or more employees, any treatments other than general first aid, or any serious property/asset damage.
2. Instruct your Medics or Production Manager to fill out appropriate paperwork and make notification to the Production's Workers Comp Department. **Your Production Safety representative is NOT to receive Workers Comp forms or any employee's personal Health information.**

Serious Accidents, Injuries and Mishaps

Serious accidents, injuries and mishaps are incidents that require transportation by ambulance, visitation to the hospital by one or more employees, any treatments greater than general first aid or any serious property/asset damage.

In the event of a serious accident, injury or mishap, the Line Producer, or in his/her absence, the Stage Manager or Field Producer will follow the instructions on **Form 4 – Serious Incident Reporting Procedures**. It is the Production Manager's responsibility to see that correct reporting instructions are available.

Examine locations for safety concerns:

1. Check all locations for potential safety concerns and hazards:
 - a. Asbestos, chemicals, hazardous waste, paints with lead, blocked or unmarked exits, unprotected elevated areas, improper ventilation, etc.
 - b. This includes all location construction, holding, parking, catering, dressing areas, etc.
2. Fill out the ***Location Pre-Production Safety Checklist (Form 7)***, ***Asbestos/Lead/Mold Guidelines (Form 7A)***, and ***Location Prep/Strike Safety Information (Form 7B)*** for each new location.
 - a. Ask building owner or managers about potential environmental concerns, asbestos reports or prior testing of lead-based paints.
 - b. Obtain proper permits.
 - c. Obtain safety postings from **the Production Safety Consultant**.
 - d. Complete the ***Location Safety Poster*** by filling in nearest hospital and emergency numbers and post.

Safety Responsibilities

FIELD PRODUCER/SEGMENT PRODUCER

3. Call the **Production Safety Consultant** with any questions about lead paint, asbestos, water testing, rooftop fall protection, weight restrictions, etc. (Testing can be lengthy and certified structural engineers are expensive, so a backup location is prudent.)
4. Fill out the **Location On-Production Safety Checklist (Form 8)** to document inspection of each location on the day the crew is scheduled to arrive for work.
5. If filming in the City of Los Angeles, fill out a **Los Angeles Fire Dept. Film Location Fire Safety Inspection Checklist (Spot-Check)**.
6. Turn in all forms to the Production Manager.

Notify the Line Producer and Safety Coordinators (Stage Manager, Construction Coordinator and Transportation Captain/Coordinator) of safety concerns and special hazards:

1. Determine if special hazards exist such as excessive traffic, location hazards associated with airports, marinas, and other water sites.
2. Assist other Department Heads to conduct safety meetings:
 - a. When cast and crews are exposed to a location hazard.
 - b. Anytime there is a change in location.

Monitor all locations:

1. Inspect, on an ongoing basis, for changes that could produce additional hazards (e.g. changing weather conditions, construction changes, etc.)
2. See to it all sets are inspected on a regular basis, so they are free from hazards and correct, or have corrected, any that are found.
3. Consult with the Line Producer and the Production Safety Consultant to resolve location safety concerns (e.g. confined spaces, warehouse adaptation for stage use, etc.)

Develop contacts for emergency services:

1. Assist on-set first aid with emergency information and contacts.
2. Identify the nearest hospital and provide maps and directions for all locations to the Line Producer, Stage Manager, Construction Coordinator, Transportation Coordinator, and First Aid Staff.

Document all safety activities:

In addition to any completed **Location Pre-Production Safety Checklist (Form 7)**, **Location On- Production Safety Checklist (Form 8)**, **Los Angeles Fire Department Film Location Fire Safety Inspection Checklist (Spot-Check Form)**, forward all related paperwork (e.g. safety inspection certificates, test results, environmental surveys, etc.) to the Production Manager.

Show Wrap

1. See to it that all IIPP documents have been collected and forwarded to the Production Manager.
2. See to it that all borrowed safety equipment (harnesses, lanyards, ropes, etc.) has been returned to the Production Safety Consultant.

Hazardous Waste Disposal

It is Company policy that all chemicals will be disposed of in accordance with the laws of the city, county and state in which they are used. If you need to arrange for the disposal of paint or other chemicals, contact the Production Safety Consultant.

Safety Responsibilities

ASSISTANT STAGE MANAGER/SECOND ASSISTANT DIRECTOR

Safety Program Information for Assistant Stage Manager/Second Assistant Director

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Assistant Stage Manager/2nd AD

The 2nd Assistant Director supports the Stage Manager/1st AD in fulfilling the requirements set forth in the IIPP for Production and maintaining documentation of safety meetings, crew notices, accident reports, and accurate *daily Production Reports*.

Production Start-Up

1. Obtain and read the **IIPP/Safety Manual** from the Line Producer or Production Manager the first week of employment. The manual is meant to provide guidance and clarification of possible questions.
2. Attend the mandatory IIPP training meeting.

On Production

Implement the IIPP:

1. See that employees have the proper safety training for and understand how to safely perform any task they are asked to do. (*In Southern California, this includes completion of all Safety Pass training required by their job classification. See www.csatf.org for more information.*) If you need help arranging training, **call the Production Safety Consultant**.
2. Outside of Southern California, consult with the Line Producer or Stage Manager/1st AD to determine any specific training needs of the production, such as:
 - a. Hazard Communication Training for chemical-containing products.
 - b. Personal Protective Equipment for eye, ear, respiratory, etc. hazards.
 - c. Special tools, equipment, or vehicles used. Consult with the Line Producer or Stage Manager/1st AD to determine the specific training needs of the production.
 - d. Document all training and forward to the Production Manager.
3. See to it that safety literature is properly distributed:
 - a. Distribute **AMPTP Safety Bulletins** (available at www.csatf.org) relating to specific hazards as they occur and/or attach to the call sheet (e.g. helicopters, atmospheric smoke, extreme weather, etc.).
 - b. With help from the Production Safety Consultant, see to it that special literature, such as **Safety Data Sheets (SDS)** or industrial hygiene test results are available if requested by any crew member.
4. See that important safety information, such as Emergency Contact telephone numbers, are included on the call sheet.
5. Document all safety activities:
 - a. Document all safety training using the daily Production Report.
 - b. Forward copies to the Production Manager.

Safety Meetings

1. The Assistant Stage Manager/2nd AD should hold a safety meeting with all Extras and Theatrical Day Hires:
 - a. At every stage and location.
 - b. At call.
 - c. Whenever new elements – stunts, FX, weather – are added.

Safety Responsibilities

ASSISTANT STAGE MANAGER/SECOND ASSISTANT DIRECTOR

2. The safety meeting should cover:
 - a. *Form 15 – Safety Guidelines for Extras and Theatrical Day Hires.*
 - b. The day's planned activities.
 - c. Potential hazards of the location.
 - d. Safety precautions to be followed around any specialized equipment that may present a hazard (e.g. insert car, process trailer, cranes, booms, helicopters, etc.).
 - e. **Heat Illness Prevention Plan** if temps are forecast to be 80 or above.
 - f. **Severe Weather** information if appropriate.
 - g. The name and location of the **Set Medic**.
 - h. **EMERGENCY PLAN:**
 - Locations of exits
 - Evacuation route
 - Location of pre-determined assembly area
3. Document the safety meetings using *Form 15A – Second AD Safety Meeting:*
 - a. Mark the time and location of the safety meeting.
 - b. Mark the name of the person conducting the meeting.
 - c. Pass around a clipboard with the *Form 15A - Safety Meeting Attendance Sheet* for all attendees to sign for each stage and location.
 - d. Send the completed Form 15A and Attendance Sheet to your Production Manager.

Call Sheet Information

The 2nd Assistant Director is responsible for seeing that the following Safety Program information is included on every call sheet:

- **Production Safety Consultant** Name and Cell Phone Number.
- **Anonymous Safety Hotline:** 818.954.2800/ 877.566.8001
- **Safety Program Website:** safetyontheset.com
- **Safety Data Sheets (SDS)** for chemical products: **Verisk 3E Company** 800.451.8346
- **Heat Illness Prevention Plan** information – including completed *Location Information* form – if temperatures are forecast to be 80 degrees Fahrenheit or above and employees will be working outside.
- **Severe Weather Information** if appropriate.
- Any **AMPTP Safety Bulletins** that apply to the day's activities. *

* You do not need to print out and attach physical copies of AMPTP Safety Bulletins to the call sheet. Download them as pdf files from safetyontheset.com and attach to the email blast of the call sheet. Reference the activity and the Safety Bulletin in the body of the email and on the call sheet.

Communicate and Troubleshoot

1. Encourage crewmembers to report potential safety hazards.
2. Refer or relay crew safety concerns to the Stage Manager/1st AD or Line Producer.
3. Help the Stage Manager/1st AD to ensure that required safety equipment is used by cast and crew (e.g.: earplugs, harnesses, safety belts, etc.)
4. Help make certain the cast and crew safety concerns have been addressed and resolved.

Safety Responsibilities

ASSISTANT STAGE MANAGER/SECOND ASSISTANT DIRECTOR

Coordinate response to serious accidents and emergencies

Respond to all work site emergencies and accidents (whenever the Stage Manager/1st AD is not present):

1. Summon emergency medical assistance immediately (911).
2. Clear the area and protect the crew from further injury.
3. Preserve evidence for further investigation.
4. Immediately notify the Line Producer. If not available, notify the Stage Manager/1st AD and the Production Safety Consultant.
5. See that an ***Accident Investigation Report (Form 9)*** has been properly completed and sent to the Production Manager.

Coordinate OSHA/Government Inspector/Investigator activities

If visited by **OSHA**, or other governmental agency, take the following actions:

1. Immediately notify the **Line Producer** and the **Stage Manager/1st AD**. If not available, contact the **Production Executive** and the **Production Safety Consultant**.
2. For more information, refer to “OSHA Inspection Guidelines” and “Regulatory Agency Inspection Guidelines” in the ***Television Production Safety Manual***.

Safety Responsibilities

LOCATION MANAGER

Safety Program information for the Location Manager

The following information is for your specific position and is provided to help you understand your part in your Production's Injury & Illness Prevention Program (IIPP)/Safety Program.

Responsibilities of the Location Manager

As the Location Manager, you are responsible for:

- Assessing any hazards of a chosen location by completing the **Location Pre-Production Hazard Assessment Checklist (Form 7)**; **Asbestos/Lead/Mold Guidelines (Form 7A)**; **Prep/Strike Location Safety Information (Form 7B)**; and the **Location On-Production Hazard Assessment Checklist (Form 8)**.
- Communicating the above information to the **Line Producer, Field Producer, Segment Producer, First Assistant Director/Stage Manager, Construction Coordinator, Prep and Strike Crew, Transportation Coordinator** and **Production Safety Representative**.

Production Start-Up

1. Visit **safetyontheset.com** to become familiar with the safety information available (AMPTP Safety Bulletins, Tool Box Talks, etc.) and to read the **Production Safety Manual**.
2. Hire only employees who have the proper safety training and skills to safely perform any task they are asked to do. *(In Southern California, this includes completion of all Safety Pass training required by the job classification. See **csatf.org** for more information.)* If you need help arranging non-Safety Pass training, **call the Production Safety Representative**.
3. Attend the mandatory IIP meeting to become familiar with the program in order to address potential environmental and safety hazards on location.

On Production

Examine locations for safety concerns:

1. Check all locations for potential safety concerns and hazards:
 - a. Asbestos, lead paint, visible mold, chemicals, hazardous waste, blocked or unmarked exits, unprotected elevated areas, improper ventilation, etc.
 - b. This includes all location construction, holding, parking, catering, dressing areas, etc.
2. Fill out the **Location Pre-Production Hazard Assessment Checklist (Form 7)** and **Asbestos/Lead/Mold Guidelines (Form 7A)** for each new location.
 - a. Ask building owner or manager about potential environmental concerns, asbestos reports or prior testing of lead-based paints.
 - b. Obtain proper permits.
 - c. Obtain safety postings from the **Production Safety Representative**.
 - d. Complete the **Location Safety Poster** by filling in the nearest hospital and emergency numbers.
 - e. Post the **Location Safety Poster** and any other required postings, such as permits, inspection certificates, test results and environmental surveys.
3. Call the **Production Safety Representative** with any questions about lead paint, asbestos, water testing, rooftop fall protection, weight restrictions, etc. (Testing can be lengthy and certified structural engineers are expensive, so a backup location is prudent.)
4. Provide **Location Prep/Strike Safety Information (Form 7B)** to all Prep and Strike crews.
5. Fill out the **Location On-Production Hazard Assessment Checklist (Form 8)** to document inspection of each location on the day the crew is scheduled to arrive for work.
6. If filming in the City of Los Angeles, fill out a **Los Angeles Fire Department Film Location Fire Safety Inspection Checklist (Spot-Check)**.
7. Turn in all forms to the **Production Manager**.

Safety Responsibilities

LOCATION MANAGER

Notify the Line Producer and Safety Coordinator (1st AD/Stage Manager, Construction Coordinator and Transportation Captain/Coordinator) of all safety concerns and special hazards:

1. Determine if special hazards exist such as excessive traffic, location hazards associated with airports, railroads, marinas and other water sites.
2. Assist other Department Heads to conduct safety meetings:
 - a. When cast and crews are exposed to a location hazard.
 - b. Anytime there is a change in location.

Monitor all locations:

1. Inspect on an ongoing basis for changes that could produce additional hazards, such as changing weather conditions, construction changes, etc.
2. See to it all sets are inspected on a regular basis, so they are free from hazards and that any hazards found are corrected.
3. Consult with the Line Producer and the Production Safety Representative to resolve location safety concerns (e.g. confined spaces, warehouse adaptation for stage use, etc.)

Develop contacts for emergency services:

1. Assist on-set first aid with emergency information and contacts.
2. Identify the nearest hospital and provide maps and directions for all locations to the Line Producer, 1st AD/Stage Manager, Construction Coordinator, Transportation Coordinator and First Aid staff.

Document all safety activities:

Complete and turn in to the Production Manager:

- *Location Pre-Production Hazard Assessment Checklist (Form 7)*
- *Asbestos/Lead/Mold Guidelines (Form 7A)*
- *Prep/Strike Location Safety Information (Form 7B)*
- *Location On-Production Hazard Assessment Checklist (Form 8)*
- *Los Angeles Fire Department Film Location Fire Safety Inspection Checklist (Spot-Check)*
- Any other related paperwork:
 - Safety inspection certificates
 - Environmental surveys
 - Air and water test results

Safety Responsibilities

SPECIAL EFFECTS COORDINATOR

Safety Program Information for Special Effects Coordinator

The following information is for your specific position and is provided to help you understand your important part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Special Effects Coordinator

The **Special Effects Coordinator** is responsible for the safe performance and supervision of all special effects. In addition, the Special Effects Coordinator is also responsible for the transportation, storage, and use of all pyrotechnics, and is responsible to effectively coordinate with the Stunt Coordinator and, at pre-stunt/special effects meetings, communicate special effects action to ensure understanding and safety of all cast and crew. This meeting should be documented in the **Daily Production Report**.

Production Start-Up

1. Visit **safetyontheset.com** to familiarize yourself with the safety information available, (AMPTP Safety Bulletins, Tool Box Talks, etc.) and to read the **Production Safety Manual**.
2. Hire only employees who have the proper safety training for, and who understand how to safely perform, any task they are asked to do. *(In Southern California, all Special Effects employees must have completed all **Safety Pass** training required by their Local. See www.csatf.org for more information.)* If you need help arranging non- Safety Pass training for productions working outside of Southern California, call the **Production Safety Representative**.

On Production Implement the IIPP:

1. Discuss all potential safety concerns with the Location Manager, UPM, Special Effects, Stunt, Transportation and Construction Coordinators, and key department heads during the script read through.
2. Conduct a safety meeting on the first day of production with your crew:
 - a. Explain the safety program.
 - b. Discuss the safety aspects of the week's/day's activities and the specific and general potential hazards of the location.
 - c. Discuss elements of the **Emergency Plan**, such as the location of emergency equipment, exits, and telephones on all stage or interior sets and off-lot locations, and explain emergency procedures, such as evacuation plans in case of fire.
 - d. Discuss safety precautions to be followed around any specialized equipment that may present a potential hazard (e.g. insert car, process trailer, cranes, booms, helicopters, etc.)
3. For non-Safety Pass trained FX employees working outside of Southern California, conduct or arrange safety training for appropriate cast and crew members:
 - a. Hazard Communication Training for chemical containing products.
 - b. Personal Protective Equipment for eye, ear, respiratory, etc. hazards.
 - c. Fall Protection Training for workers exposed to heights.
 - d. Special tools, equipment, or vehicles used.
 - e. Consult with UPM or the Production Safety Representative to determine the specific training needs of the production.
 - f. Document all training and forward to the Production Office Coordinator. Consult with UPM or the Production Safety Representative to determine the specific training needs of the production.
4. Conduct additional meetings in the following situations:
 - a. When a special/mechanical effect is to occur (e.g. pyrotechnics, etc.). Document special effect rehearsals on the daily Production Report. Conduct an additional rehearsal for any substantial change to the special effects and document it on the **Daily Production Report**. Ensure all involved crew understand the change.
 - b. Call the Production Safety Representative anytime cast and crew are exposed to a hazard (e.g. helicopter, exotic animal, water, extreme heat or cold, etc.).
 - c. Anytime new cast or crew join the production.
 - d. Anytime a new process, substance or procedure is introduced.

Safety Responsibilities

SPECIAL EFFECTS COORDINATOR

5. See to it that safety literature is properly distributed:
 - a. All cast and crew members are to receive the **General Safety Guidelines for Production (Form 1)**, written, orally or posted, and sign an **Employee Acknowledgment**. This includes all those who report directly to the set for hire; such as day players, casual hires, independent contractors, etc. Return signed *Employee Acknowledgments* to the Production Office Coordinator.
 - b. Distribute AMPTP Safety Bulletins (available at safetyontheset.com) relating to specific hazards to cast and crew or attach to the call sheet (e.g. helicopter, firearm, special f/x, etc.)
 - c. With help from the Production Safety Representative, see to it that special literature such as Safety Data Sheets (SDS's) are available if requested by cast or crew.
6. Document all IIPP activities:
 - a. Make sure that all safety meetings held throughout the day are noted on the daily Production Report, including key department head and new arrival meetings, stunt and special effects meetings, etc.
 - b. Any bulletins or special correspondence should also be on file with the Production Office Coordinator.

FIREWORKS AND PYROTECHNICS

All special effect personnel shall wear safety glasses and protective clothing applicable to the hazard associated with the material during preparation and loading of pyrotechnic devices. Protective clothing should include long-sleeved shirts and long pants made of 100 percent cotton, leather, or other materials with equivalent flammability, melting, thermal, or static-reducing protective characteristics.

1. When working with fireworks, flammable or combustible liquids, gases or chemicals on any set, prior notification shall be given to all personnel. Also, wherever practical, the call sheet should state that fireworks are to be used.
2. Before any fireworks or potentially hazardous sequence is to be performed, all persons involved shall be thoroughly briefed at a meeting on the site where the fireworks are to be used. This meeting shall include an "on site walk-through" and/or "dry run" with Special Effects persons and all the persons involved in the event. The Special Effects and licensed Powder person shall plan and provide acceptable avenues of escape.
3. The persons mentioned above shall clearly announce to all persons the location exits, escape routes and alternate routes. The escape route shall provide absolute passage to the exterior of the building, structure or workspace.
4. Each person should check the escape route in order to assure himself/herself that it is and will remain accessible. Any person who is unsure of the designated escape route should check with the 1st Assistant Director and learn of the escape route before entering the work area.
5. Only persons and crew necessary for the purpose of filming will be in the fireworks area. All other personnel will be cleared away from the fireworks area.
6. Before rolling cameras, should any change become necessary, the Director will again call all persons involved in the event to another meeting to confirm everyone's understanding of said change(s).
7. No smoking is permitted in the fireworks area and "No Smoking" signs shall be posted in all areas of the premises or locations where fireworks and/or pyrotechnic devices are stored and handled.
8. After each shoot, no one shall go into the fireworks area other than the Special Effects and/or licensed Powder person, until or unless the Special Effects and/or licensed Powder person deems it safe to do so.
9. No child under the age of 16 shall be near the area where fireworks are used.
10. Transportation of fireworks and/or pyrotechnic devices shall be governed by the provisions of all applicable Federal, State and Local laws, and the proper authorities shall be notified when using fireworks on the set.
11. Make sure all fireworks and fireworks devices are shunted prior to detonation.
12. Make sure fireworks are detonated from a separate DC power source or isolated AC.
13. When preparing pyrotechnics, make sure all radio transmissions in the area are ceased. An exterior shot checklist should be filled out and circulated prior to filming any special effects on exterior sets, pyrotechnics, smoke, open flame etc.

Safety Responsibilities

SPECIAL EFFECTS COORDINATOR

Communicate and Troubleshoot:

1. Confirm that the work site is inspected to see that it is free from recognized hazards. Correct hazards found. (e.g. blocked exits, blocked fire lanes, trip and fall hazards, faulty equipment, etc.). This can be done by an Assistant on a regular basis.
2. See to it that safety equipment is used by cast and crew (*e.g. earplugs, harnesses, safety belts, etc.*).
3. Consult with the UPM to resolve script safety concerns (e.g. special effects, stunts or other special hazards).
4. Make sure cast and crew safety concerns have been addressed and resolved.

Coordinate Response to Serious Accidents and Emergencies:

1. Respond to all on-set emergencies and accidents that result in serious injury, death, major property damage, hospitalization or events that create imminent danger.
2. Summon emergency medical assistance immediately - paramedics, fire department, police, etc. (911 or the local equivalent).
3. Clear the area and protect cast and crew from further injury.
4. Preserve evidence for further investigation.
5. Immediately notify the **UPM**. If not available notify the **Production Executive** and the **Production Safety Representative**.

Coordinate OSHA/Government Inspector/Investigator activities:

1. Immediately notify the **UPM**. If not available, contact the **1st AD** and the **Production Safety Representative**.
2. The UPM or 1st AD will accompany the inspector/investigator on the survey of the site in question.

Safety Responsibilities

STUNT COORDINATOR

Safety Program Information for Stunt Coordinator

The following information is for your specific position and is provided to help you understand your important part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Stunt Coordinator

The **Stunt Coordinator** is responsible for the safe performance of stunts and supervision of all persons involved in the stunt. If the stunt involves special effects, the Stunt Coordinator is responsible for coordinating with the Special Effects Coordinator in a pre-stunt/special effects meeting. The Stunt Coordinator is responsible for communicating stunt action to the 1st AD to ensure the understanding and safety of all crew. This meeting should be documented in the **Daily Production Report**.

Production Start-Up

1. Visit **safetyontheset.com** to familiarize yourself with the safety information available, (AMPTP Safety Bulletins, Tool Box Talks, etc.) and to read the **Production Safety Manual**.
2. Hire only Stunt Coordinators knowledgeable in the action they will be supervising. Hire stunt players who have the proper training and who understand or have previously demonstrated work similar to what they will be asked to do.
3. Stunt Coordinators performing their own stunts need a second stunt person to act as Stunt Coordinator during the sequence.
4. Hire only employees who have the proper safety training for, and who understand how to safely perform, any task they are asked to do.

On Production Implement the IIPP:

1. Discuss all potential safety concerns with the Location Manager, UPM, Stunt, Stunt, Transportation and Construction Coordinators, and key department heads during the script read through.
2. Conduct a safety meeting on the first day of production with your crew:
 - a. Explain the safety program.
 - b. Discuss the safety aspects of the week's/day's activities and the specific and general potential hazards of the location.
 - c. Discuss elements of the **Emergency Plan**, such as the location of emergency equipment, exits, and telephones on all stage or interior sets and off-lot locations, and explain emergency procedures, such as evacuation plans in case of fire.
 - d. Discuss safety precautions to be followed around any specialized equipment that may present a potential hazard (e.g. insert car, process trailer, cranes, booms, helicopters, etc.)
3. For non-Safety Pass trained FX employees working outside of Southern California, conduct or arrange safety training for appropriate cast and crew members:
 - a. Hazard Communication Training for chemical containing products.
 - b. Personal Protective Equipment for eye, ear, respiratory, etc. hazards.
 - c. Fall Protection Training for workers exposed to heights.
 - d. Special tools, equipment, or vehicles used.
 - e. Consult with UPM or the Production Safety Representative to determine the specific training needs of the production.
 - f. Document all training and forward to the Production Office Coordinator. Consult with UPM or the Production Safety Representative to determine the specific training needs of the production.
4. Conduct additional meetings in the following situations:
 - a. When a stunt is to occur (e.g. high fall, car stunt, etc.). Document stunt rehearsals on the daily Production Report. Conduct an additional rehearsal for any substantial change to the stunt and document it on the daily Production Report. Ensure all involved crew understand the change.

Safety Responsibilities

STUNT COORDINATOR

- b. Call the Production Safety Representative anytime cast and crew are exposed to a hazard (e.g. helicopter, exotic animal, water, extreme heat or cold, etc.).
- c. Anytime new cast or crew join the production.
- d. Anytime a new process, substance or procedure is introduced.
- e. Call the Production Safety Representative anytime cast and crew are exposed to a hazard (e.g. helicopter, exotic animal, water, extreme heat or cold, etc.).
- 5. See to it that safety literature is properly distributed:
 - a. All cast and crew members are to receive the **General Safety Guidelines for Production (Form 1)**, written, orally or posted, and sign an **Employee Acknowledgment**. This includes all those who report directly to the set for hire; such as day players, casual hires, independent contractors, etc. Return signed *Employee Acknowledgments* to the Production Office Coordinator.
 - b. Distribute AMPTP Safety Bulletins (available at safetyontheset.com) relating to specific hazards to cast and crew or attach to the call sheet (e.g. helicopter, firearm, special f/x, etc.)
 - c. With help from the Production Safety Representative, see to it that special literature such as Safety Data Sheets (SDS's) are available if requested by cast or crew.
- 6. Document all IIPP activities:
 - a. Make sure that all safety meetings held throughout the day are noted on the daily Production Report, including key department head and new arrival meetings, stunt and special effects meetings, etc.
 - b. Any bulletins or special correspondence should also be on file with the Production Office Coordinator.

Communicate and Troubleshoot:

- 1. Confirm that the work site is inspected to see that it is free from recognized hazards. Correct hazards found. (e.g. blocked exits, blocked fire lanes, trip and fall hazards, faulty equipment, etc.). This can be done by an Assistant on a regular basis.
- 2. See to it that safety equipment is used by cast and crew (e.g. earplugs, harnesses, safety belts, etc.).
- 3. Consult with the UPM to resolve script safety concerns (e.g. special effects, stunts or other special hazards).
- 4. Make sure cast and crew safety concerns have been addressed and resolved:

Coordinate Response to Serious Accidents and Emergencies:

- 1. Respond to all on-set emergencies and accidents that result in serious injury, death, major property damage, hospitalization or events that create imminent danger.
- 2. Summon emergency medical assistance immediately - paramedics, fire department, police, etc. (911 or the local equivalent).
- 3. Clear the area and protect cast and crew from further injury.
- 4. Preserve evidence for further investigation.
- 5. Immediately notify the **UPM**. If not available notify the **Production Executive** and the **Production Safety Representative**.

Coordinate OSHA/Government Inspector/Investigator activities:

- 1. Immediately notify the **UPM**. If not available, contact the **1st AD** and the **Production Safety Representative**.
- 2. The UPM or 1st AD will accompany the inspector/investigator on the survey of the site in question.

Safety Responsibilities

KEY DEPARTMENT HEADS

*Key Grip, Key Gaffer, Property Master, Set Dressing, Greens, Animal Wranglers,
Camera, Sound, Craft Services, Make-up, Hair, Wardrobe*

Safety Program Information for Key Department Heads

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of Key Department Heads

The Department Heads/Supervisors are responsible for supervising, training, performing periodic inspections, and ensuring their crews compliance with all applicable safety rules and regulations.

Production Start-Up

1. Visit **safetyontheset.com** to familiarize yourself with the safety information available, (AMPTP Safety Bulletins, Tool Box Talks, etc.) and to read the **Television Production Safety Manual**.
2. The Safety Pass training deadline for IATSE affiliated employees has passed. Therefore, the only employees eligible for employment by your production must have received basic and specific safety training as evidenced by their fully completed Safety Pass. For information on the Safety Pass Program, visit **www.csatf.org** or call 818.502.9932 ext. 102.
3. If on a non-Southern California production, conduct or arrange safety training for your crew who have not been trained. If you need help arranging non- Safety Pass training, call the **Production Safety Representative**.
4. Conduct safety meetings for your crew on the first day of work:
 - a. Explain the safety program and tell them to visit **www.safetyontheset.com**.
 - b. Discuss the safety aspects of the day's activities and the particular hazards of the site.
 - c. Discuss elements of the **Emergency Plan**, such as the location of emergency equipment, exits and telephones on all stages and interior set and off-lot locations, and explain emergency procedures such as evacuation plans in case of fire (if not covered by the Stage Manager.) The information for this meeting is on **Safety Meeting with Crew and Cast (Form 3)**.
 - d. For every location, be sure to review **Prep/Strike Location Safety Information (Form 7B)**, which you should receive from the Location Manager.
 - e. Discuss safety precautions to be followed around any specialized equipment that may pose a potential hazard (e.g. insert car, process trailer, cranes, booms, specialized rigs, etc.)
5. Conduct or arrange safety training for your crew who have not been trained:
 - a. Hazard Communication Training for chemical containing products.
 - b. Personal Protective Equipment for eye, ear, respiratory, etc. hazards.
 - c. Fall Protection Training for workers exposed to heights.
 - d. Special tools, equipment, or vehicles used.
 - e. Consult with the Executive in Charge of Production/Line Producer to determine the specific training needs of your crew.
 - f. Document all training and forward to the Production Manager.
6. Conduct additional safety meetings in the following situations:
 - a. Prior to rigging or testing of any specialized equipment.
 - b. Anytime crew is exposed to a hazard (e.g. special products, pyrotechnics, etc.).
 - c. Anytime new crewmembers join the department.
 - d. Anytime there is a change in location or work site.
 - e. Anytime a new process is introduced (e.g. special foams, chemicals, tools, etc.)
7. Distribute safety literature:
 - a. Give the **General Safety Guidelines for Production (Form 1)**; written, orally or posted to all those who report directly to the site for hire; such as, casual hires, independent contractors, etc. Have all employees sign the **Employee Acknowledgment** and forward them to the **Production Manager**.

Safety Responsibilities

KEY DEPARTMENT HEADS

- b. Distribute safety literature on specific hazards to your crew (e.g. appropriate clothing and shoes, aerial platforms, etc.).
 - c. Issue special literature if requested by crew members (e.g. material safety data sheets on chemicals, fogs, paints, etc.)
8. Document all IIPP activities:
- a. See to it that all safety meetings held throughout the day with crew are noted on the daily Production Report, including new arrival, rigging, testing and changing work site meetings.
 - b. Any bulletins or special correspondence are to be forwarded to the **Production Manager**.
 - c. Document all safety training using ***Production Safety Meeting Report (Form 13)***. Forward copies to the Production Manager.

Communicate and Troubleshoot:

- 1. Inspect all work sites to be sure they are free from recognized hazards and correct any that are found.
- 2. See to it that appropriate safety equipment has been provided, inspected and is in use by the crew (e.g. *ear plugs, equipment safety guards, harnesses, respirators, safety glasses, etc.*).
- 3. Consult with the Line Producer to resolve safety concerns such as special effects, stunts or other special hazards.
- 4. Enforce safe working procedures.
- 5. Encourage the reporting of hazards by crew members.
- 6. Resolve crew safety issues.
- 7. Correct hazards that have been discovered at the site (e.g. blocked exits, trip and fall hazards, faulty equipment etc.)

Coordinate Response to Accidents and Emergencies:

- 1. Respond to all work site emergencies and accidents affecting the crew.
- 2. Summon emergency medical assistance immediately (Paramedic, Fire Department, Police, etc.)
- 3. Notify the Line Producer, Stage Manager, or Construction Coordinator and the Production Safety Representative.
- 4. See to it that the ***Accident Investigation Report (Form 9)*** has been filled out and submitted to the Production Manager.
- 5. Clear the area and protect the crew from further injury (e.g. remove equipment from service, post warning signs, arrange further training.)
- 6. Preserve evidence for further investigation.

Safety Responsibilities

MEDIC

Safety Program information for the Medic

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

NOTE: These are your Safety Program Responsibilities ONLY. For Workers Comp instructions, contact your Production Manager (PM) or payroll company.

Please DO NOT share Workers Comp forms with your Production Safety Representative, as they contain personal health information.

In addition to their Health and Safety responsibilities, Medics are responsible for gathering and recording injury and illness-related information required by state and federal law and Production company policy. Regardless of payroll company, your Production Manager needs information on every employee who suffers a work-related injury or illness.

Please remember that the forms you are required to fill out are legal documents, so be as accurate and thorough as possible.

When you start work:

1. Obtain Injury and Illness reporting forms and procedures from your Production Coordinator or payroll company.
2. Review the paperwork requirements.

Participate in the Injury & Illness Prevention Program:

1. Read and understand safety literature:
 - a. Obtain and review the **General Safety Guidelines for Production (Form 1)**, sign the **Employee Acknowledgment Form** and turn it in to the PM. Additional information is available from the IIPP Manual, which can be obtained at **www.safetyontheset.com** along with all **AMPTP Safety Bulletins** and other safety info.
 - b. Read the **Injury and Illness Reporting Procedures** attached to this document. Call your Production Coordinator if you have any questions.
 - c. Read the distributed **AMPTP Safety Bulletins** related to the specific hazards that you may encounter on the production (i.e. helicopters, firearms, appropriate clothing, etc.)
2. Attend and participate in safety meetings to review the following:
 - a. Safety aspects of the day's activities and the particular hazards of the location.
 - b. Elements of the **Emergency Plan**, such as the location of emergency equipment, exits and telephones on site, and emergency procedures, such as evacuation plans in case of fire, nearest hospital name, location and phone number, etc.
 - c. Set up your equipment accordingly.

Serious Accidents, Injuries and Mishaps

Serious accidents, injuries and mishaps are incidents that require transportation by ambulance, visitation to the hospital by one or more employees, any treatments greater than general first aid, or any serious property/asset damage.

IF AN INJURY IS SEVERE, DIAL 911 OR YOUR FACILITY'S EMERGENCY RESPONSE NUMBER FOR TREATMENT AND TRANSPORTATION OF THE PATIENT TO A HOSPITAL.

(Ensure the employee's supervisor has arranged for a return ride from the hospital.)

THEN IMMEDIATELY CALL THE EXECUTIVE IN CHARGE OF PRODUCTION/LINE PRODUCER. IF YOU CANNOT REACH THE EIC/LP, CALL THE PRODUCTION MANAGER AND THE PRODUCTION SAFETY REPRESENTATIVE IMMEDIATELY. YOU MAY LEAVE VOICE MESSAGES – BUT YOU MUST CONTINUE TO CALL UNTIL YOU SPEAK TO A LIVE PERSON.

Safety Responsibilities

MEDIC

For every injury or illness:

1. See that the following forms are completed:
 - ***Employer's Report of Occupational Injury or Illness (Form 5020)*** or local equivalent.
 - ***Accident Investigation Report (Form 9)***. (The form can be completed by Medic, Patient, Department Head or PM.)
 - ***Right of Refusal of Medical Aid Form (Form 16)*** if the patient refuses recommended treatment or transportation to the hospital.
2. Forward all completed forms to the **Production Manager**.

When to Call an Ambulance

If a Medic determines that a patient requires EMT assistance and/or transportation to the hospital by ambulance, the Medic should call 911 (or facility Emergency Number) immediately. If the patient refuses the additional medical attention, the patient can argue the case with the EMT's.

As always, any patient refusing medical treatment recommended by the Medic should be asked to sign **Form 16: Right of Refusal of Medical Aid**.

NOTE: This Production has a contract with Verisk 3E for Safety Data Sheets for chemical-containing products. If someone is exposed to a chemical-containing product, dial (800) 451-8346 and give as much information about the product as possible. Verisk 3E will email or fax a copy of the Safety Data Sheet.

INJURY AND ILLNESS REPORTING PROCEDURES

ALL INJURIES TO CREW OR CAST MEMBERS MUST BE REPORTED TO THE PRODUCTION SAFETY CONSULTANT.

Form 9: Accident Investigation Report should be completed for every injury or illness, no matter the severity.

Serious Incident Reporting Procedures:

A Serious Incident is an injury or illness that results in transportation by ambulance, visitation to the hospital by one or more employees, any treatments other than general first aid*, any near miss during stunts or special effects, any injury – even minor – to cast members or stunt performers, or any serious property/asset damage.

**An OSHA chart of treatment that is considered First Aid is attached.*

Please note: These are SAFETY PROGRAM procedures. Workers Comp requires different documentation. Because sensitive personal medical information is often included, please **DO NOT** send Workers Comp forms or reports to the Production Safety Consultant unless specifically requested.

LINE PRODUCER:

- If the injury or illness meets the criteria for a serious incident, **IMMEDIATELY** notify your **Production Safety Consultant**, who will make all necessary notifications.
- **Accident Investigation Report – Form 9.**
 - Every section of this form needs to be completed, including “Steps taken to prevent recurrence.”
 - This form can be completed by the person having the most knowledge of the incident: Medic, Department Head, Production Manager, Line Producer. The Production Safety Consultant will assist if requested.
- Some injuries and illnesses require timely **OSHA notification**. The Production Safety Consultant will make this notification, based upon information from you.
- **Forward completed Form 9 to Production Manager.**

MEDIC:

- **IMMEDIATELY** notify the Line Producer of the injury or illness.
- Fill out ***Employer’s Report of Occupational Injury or Illness (Form 5020)*** or local equivalent.
- If employee refuses recommended treatment or transportation to the hospital, have employee complete and sign ***Right of Refusal of Medical Aid – Form 16.***
- **Forward completed Form 5020 and Form 16 to Production Manager.**

POC:

- **Forward completed Form 9 and Form 16 to Production Safety Consultant.**
- Forward Form 5020 if requested by Production Safety Consultant
- If patient is hospitalized, keep Production Safety Consultant updated on status.

PRODUCTION SAFETY CONSULTANT:

- Will notify OSHA if required.
- Will conduct additional investigation if needed.
- Will assist with any OSHA or other agency investigations.

First Aid List

1904.7 (b)(5)(ii) What is “first aid”?

For the purposes of Part 1904, "first aid" means the following:

(A)	Using a nonprescription medication at nonprescription strength (for medications available in both prescription and non-prescription form, a recommendation by a physician or other licensed health care professional to use a non-prescription medication at prescription strength is considered medical treatment for recordkeeping purposes);
(B)	Administering tetanus immunizations (other immunizations, such as Hepatitis B vaccine or rabies vaccine, are considered medical treatment);
(C)	Cleaning, flushing or soaking wounds on the surface of the skin;
(D)	Using wound coverings such as bandages, Band-Aids™, gauze pads, etc.; or using butterfly bandages or Steri-Strips™ (other wound closing devices such as sutures, staples, etc. are considered medical treatment);
(E)	Using hot or cold therapy;
(F)	Using any non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. (devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for recordkeeping purposes);
(G)	Using temporary immobilization devices while transporting an accident victim (e.g., splints, slings, neck collars, back boards, etc.).
(H)	Drilling of a fingernail or toenail to relieve pressure, or draining fluid from a blister;
(I)	Using eye patches;
(J)	Removing foreign bodies from the eye using only irrigation or a cotton swab;
(K)	Removing splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means;
(L)	Using finger guards;
(M)	Using massages (physical therapy or chiropractic treatment are considered medical treatment for recordkeeping purposes); or
(N)	Drinking fluids for relief of heat stress.

(iii) Are any other procedures included in first aid?

No, this is a complete list of all treatments considered first aid for Part 1904 purposes.

Safety Responsibilities

PRODUCTION MANAGER

Safety Program information for the Production Manager

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Responsibilities of the Production Manager

The **Production Manager** maintains a library of safety information including copies of all safety program documentation as described in the IIPP for Production. It is the Production Manager's responsibility, along with the Line Producer, to see to it that all necessary IIPP documentation (forms, certifications, etc.) are completed in a timely manner and forwarded to the Production Manager, and, when necessary, to the Production Executive, Production Attorney and **the Production Safety Consultant**.

SAFETY PASS (Southern California)

The only employees eligible for employment by your production must have received basic and specific safety training as evidenced by their fully completed Safety Pass. New training requirements are added often, so please check everyone's Safety Pass status every season at **www.csatf.org**.

PRODUCTIONS WORKING OUTSIDE OF SOUTHERN CALIFORNIA

1. Productions working outside of Southern California are required to employ workers knowledgeable in the work they will be asked to do. Because there are many ways proficiency can be documented, different Department Heads will submit varying evidence of training. All of it is important.
2. **Please note: If you are hiring anyone directly from Southern California to work on your production, they must have completed all Safety Pass classes required for their job classification.**
3. **Productions working outside of Southern California may be eligible for free IATSE Training Trust Fund Area Standards Agreement Safety Training. Information is available at www.iatsetrainingtrust.org/asa.**
4. Check that Departments operating heavy equipment are turning in copies of Certification for each piece of equipment they will be asked to drive (e.g. Forklift Safety Card, Aerial Platform Training, powder-actuated tool operator's "Hilti Card," etc.) Keep them on file.
5. Some Department Heads will be sending copies of **Tool Box Talks** they conducted; others will send signed copies of **Codes of Safe Practices (CSP's)**. Keep them on file.
6. Most importantly, make sure a signed **Employee Acknowledgment** for receipt of **(Form 1) General Safety Guidelines for Production** is on file for all employees from all departments.
7. If you need help arranging safety training for a production working outside of Southern California, **call the Production Safety Consultant**.

Production Start-Up

Implement the IIPP:

1. As soon as possible, call the Production Safety Consultant to arrange for a **Production Safety Orientation** for your **Line Producer, 1st AD/Stage Manager, 2nd AD/Assistant Stage Manager, Transportation Coordinator, Construction Coordinator, Location Manager, Special Effects and Stunt Coordinators, and all key Department Heads**. (Immediately prior to your first full production meeting is a good time to hold this orientation.)
2. Obtain and read the **Production Safety Manual** from **www.safetyontheset.com** the first week of employment. This manual is meant to provide guidance and clarification of possible questions.
3. Print at least 3 copies of the Production Safety Manual: One each for the Production Office, the Assistant Directors/Stage Managers, and the Construction Coordinator. A copy should be on all stages and locations as well.

Safety Responsibilities

PRODUCTION MANAGER

Coordinate the documentation of all safety program activities:

See to it that the following have been turned into the Production Office, and copies sent to the Production Safety Consultant at the beginning of the production:

1. Employee Acknowledgment of General Safety Guidelines for Production (Form 1)
2. Employee Acknowledgment of Additional Safety Guidelines for Special Effects (Form 1B)
3. IIPP Contact List (Form 2)
4. Serious Incident Reporting Procedures (Form 4)

On Production

1. See to it that the following are turned into the Production Office and **copies sent to the Production Safety**

Consultant on a regular basis:

- a. Production Stage Hazard Assessment Checklist (Form 5)
 - b. Mill/Stage/Location Construction Hazard Assessment Checklist (Form 6)
 - c. Location Pre-Production Hazard Assessment Checklist (Form 7)
 - d. Asbestos/Lead/Mold Guidelines (Form 7A)
 - e. Prep/Strike Location Safety Information (Form 7B)
 - f. Location On-Production Hazard Assessment Checklist (Form 8)
 - g. Safety Guidelines for Extras and Theatrical Day Hires (Form 15)
2. See to it that the following are turned into the Production Office and copies sent to the Production Safety Consultant as they are completed:
 - a. Accident Investigation Report (Form 9)
 - b. Hazard Notification (Form 10)
 - c. Notice of Unsafe Condition and Action Plan (Form 11)
 - d. Safety Warning Notice (Form 12)
 - e. Production Safety Meeting Report (Form 13)
 - f. Request for Employee Safety Training (Form 14)
 - g. Right of Refusal of Medical Aid (Form 16)
 - h. Any special permits, environmental surveys, location safety reports, etc. daily Production Reports listing safety meetings, including key department head and new arrival meetings, stunt and special effects meetings, etc.
 3. If your duties include distributing Calls Sheets, always attach any *AMPTP Safety Bulletins* or other notices deemed appropriate by your Line Producer or 1st or 2nd AD/Assistant Stage Manager

Injuries and Illnesses

1. Please read the 2019 revised ***Injury & Illness Reporting Procedures***, which are attached to this document. **Your Production Safety Consultant is NOT to receive Workers Comp forms or any employee's personal Health information.**
2. You should receive an **Accident Investigation Form (Form 9)** and a **Form 5020** or local equivalent from your Set Medic for every injured employee. If the patient has refused medical attention, you should also receive a completed **Right of Refusal of Medical Aid Form (Form 16)**. **Please be sure to email or fax these forms to the Production Safety Consultant at (818) 954-2805.**

Serious Accidents, Injuries and Mishaps

Serious accidents, injuries and mishaps are incidents that require transportation by ambulance, visitation to the hospital by one or more employees, any treatments greater than general first aid or any serious property/asset damage.

Safety Responsibilities

PRODUCTION MANAGER

*In the event of a serious accident, injury or mishap, the **Line Producer**, or in his/her absence, the **1st Assistant Director** will follow the instructions on **Form 4 – Serious Incident Reporting Procedures**. It is the Production Manager's responsibility to see that correct reporting instructions are available to the Line Producer and 1st AD/Stage Manager.*

Show Wrap

1. See to it that all IIPP documents have been collected and forwarded to the **Production Safety Consultant** or the **Production Executive** prior to closing the production office.
2. See to it that all borrowed safety equipment (harnesses, lanyards, ropes, etc.) has been returned to the Production Safety Consultant.

Hazardous Waste Disposal

It is Company policy that all chemicals will be disposed of in accordance with the laws of the city, county and state in which they are used. If you need to arrange for the disposal of paint or other chemicals, contact the Production Safety Consultant.

Safety Responsibilities

AUDIENCE COORDINATOR

Safety Program Information for Audience Coordinator

The following information is for your specific position and is provided to help you understand your part in your Production's **Injury & Illness Prevention Program (IIPP)/Safety Program**.

Safety Responsibilities of the Audience Coordinator

The Audience Coordinator is responsible for seeing that procedures are in place to provide for the safety of the audience during all phases of their visit to the Production:

1. Arrival at facility, parking, check-in, etc.
2. Entry to stage and seating area.
3. During the recording of the Production.
4. Exiting the stage.
5. Returning to parking area.
6. In the event of an emergency.

At Production Start-Up

1. Visit **safetyontheset.com** to familiarize yourself with the safety information available and to read the **Television Production Safety Manual**.
2. Read **(Form 1) General Safety Guidelines for Production** and sign the **Employee Acknowledgment**. Form 1 contains Codes of Safe Practices for typical production activities. If you have any questions about activities not covered in Form, or about your safety responsibilities, contact the **Line Producer**, or **Production Safety Representative**.
3. Attend the mandatory safety orientation with the Production Safety Representative at the beginning of production.
4. Determine the evacuation routes and assembly areas for the stage(s) and audience holding area.
5. Review **Emergency Plan** information with all audience assistants/pages:
 - a. Walk the evacuation routes and assembly areas for the stage(s) and audience holding area.
 - b. Ensure that all audience assistants/pages are aware of the location of the Set Medic or other medical personnel
 - c. Discuss procedures for responding to an audience member illness or injury.

Before the Audience Arrives

1. Discuss with staff any unusual activities planned for the production, such as exotic animals, special effects, pyrotechnics, stunts, etc.
2. See that the audience can access the studio from the parking area without being exposed to traffic or other potential hazards.

When the Audience Arrives

1. Determine if any audience members require special accommodations, such as wheelchair access.
2. See that **Emergency Plan** information is reviewed with the audience, by you, someone on your crew, a Fire Safety Officer, Audience Warm-up, or other person with knowledge of the facility and the procedures:
 - a. Instruct audience to duck and cover and remain inside stage or audience holding area in the event of an earthquake, unless an evacuation is ordered by production or emergency personnel.
 - b. Point out evacuation routes, emergency exits, and assembly areas for the stage(s) and audience holding area.
 - c. Point out the person or persons to whom the audience will report in the event of an evacuation.
 - d. Point out the staff person and where that staff person will be stationed during taping to whom an audience member should report an injury or illness.
 - e. Advise the audience if there will be any loud noises, atmospheric smokes, or strobe lighting effects.

Safety Responsibilities

AUDIENCE COORDINATOR

During the Show

1. See that any audience members in need of restroom or other break are escorted from the stage. Do not let audience members wander the premises unaccompanied.
2. Monitor the audience for any signs of distress. For example, if it is hot in the studio and the show is running long, you may need to take a water break.

End of Show

1. See that audience members are escorted safely to the parking area. Do not let audience members linger unaccompanied on studio premises.
2. See that any audience members needing special assistance to the parking area are accommodated.
3. Double-check the stage area to be certain no audience members have remained behind.

In the Event of an Emergency

1. Assist in communicating evacuation order to audience – evacuate immediately, do not wait for confirmation.
2. Direct audience toward exits and assembly area.
3. Assist physically-challenged, injured, or those needing additional help.
4. Account for all audience members in the assembly area. If people are missing, DO NOT return to the evacuated area to search for them. Give their names and other descriptive information to Emergency Personnel.
5. Remain with the audience throughout the evacuation and while in the assembly area.
6. Defer to Emergency Personnel for official communications to audience members at the assembly area.
7. Do not allow audience members to leave the assembly area until Emergency Personnel give the okay.

Position Safety Responsibilities CAST MEMBERS
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Safety Program Information for Cast Members

This Production is committed to maintaining a safe and healthy work environment. The following information is provided to help you to understand your part in the **Injury & Illness Prevention Program (IIPP)/Safety Program**.

All Cast members are responsible for understanding and following the **General Safety Guidelines for Production** and meeting their safety responsibilities as employees, as outlined in the IIPP manual. This information is always available on the web at **www.safetyontheset.com**. Remember, working safely is a condition of employment.

Safety is a priority on this production.

1. The quickest way to have a safety concern addressed is to speak up! If you wish to express your concerns anonymously, use the **Anonymous Safety Hotline** at **(818) 954 2800** or toll-free at **(877) 566-8001**. It, as well as contact information for the **Production Safety Representative (PSR)** for your show, will be listed on the front of the daily Call Sheet. There may also be special safety concerns detailed in the *Notes* section of the Call Sheet. Please pay extra attention to any conditions that will affect your work, and make sure you read any Safety Bulletins that pertain to your work. Do not hesitate to contact the **Assistant Directors** or your Safety Representative, if you have any questions.
2. The Production Safety Representative will be working closely with your production starting with the script breakdown, then during construction, and on through shooting and strike. Most of the planning and inspections that go into ensuring your safety as a performer are completed by the time you are scheduled to begin working.
3. During your employment on this production you may be required to work with a **Stunt Coordinator** or **Special Effects**. All relevant safety information pertaining to the actor's scene(s) will be communicated. Do not hesitate to ask questions or express concerns if you are not sure how to perform safely in any given situation. Make sure you understand all contingencies, and coordinate with your fellow actors.
4. When working on a **Sound Stage** or **Location**, specific safety information will be posted. Remember that set work is going on all the time. All areas under construction, where people are working overhead, or where machinery is being used are off-limits. Please observe any safety signs, barricade tape, etc. on the Stage or Location where you will be working. Look for and avoid any potential trip hazards, such as cables or sandbags. Unless you are otherwise directed, do NOT touch any cables, lights, generators, or other equipment which you may not be familiar with. Know your surroundings. Always be aware of where the exits are and, in case of emergency, where the *designated safe assembly area* is.
5. Report all injuries to Production, no matter how minor. If you have a condition such as allergies, prior injuries, or other concerns that you feel Production should be made aware of because it could affect your ability to work, do not hesitate to notify them as soon as possible.

Remember, if you ever have any questions or concerns about safety, there are many people available to address them. The Assistant Directors, Stunt Coordinator, Special Effects Coordinator, Production Safety Representative, and the Anonymous Safety Hotline are all available to you.

SAFETY HOTLINE
(818) 954-2800 or (877) 566-8001

OSHA INSPECTION GUIDELINES

The Occupational Safety and Health Administration (OSHA) is the United States government agency responsible for enforcement of occupational safety and health standards. To promote worker protection, OSHA conducts periodic inspections of business establishments to ensure that workplaces are generally free from recognized hazards likely to cause death or serious physical harm.

There are several reasons why an OSHA inspector might visit a location or production facility:

1. **An observation or report of imminent danger** – OSHA gives imminent danger situations top priority. An imminent danger is a hazard that could cause death or serious physical harm immediately or before the danger could be eliminated through normal inspection procedures.
2. **Catastrophes and fatal accidents** – High priority is also given to investigation of job fatalities and accidents hospitalizing three or more employees. Such accidents must be verbally reported to Cal and Fed OSHA within 8 hours. In California any employee who is hospitalized for more than 24 hours for reasons other than medical observation or who suffers the loss of any member of the body or any serious degree of permanent disfigurement must also be reported within 8 hours to Cal-OSHA. Reporting requirements may vary from state to state and must be verified for each production location.
3. **Complaints** – OSHA investigates written and verbal complaints by employees or their representatives of hazards that threaten serious physical harm to workers.
4. **Scheduled inspections** – OSHA routinely conducts safety and health inspections in high hazard industries. Though the motion picture and television industry is not considered a “high hazard” industry you should be aware that Cal-OSHA has formed a special Film & TV Investigation Team. This group is made up of some their more experienced investigators.
5. **Programmed inspections** – OSHA has a special program to target safety inspections on the most dangerous individual worksites.
6. **Follow-up inspections** – OSHA may re-inspect locations cited for imminent danger conditions or for willful, repeat or serious violations. Follow-up inspections will also be conducted to check the progress of long-term hazard correction programs.

INSPECTION GUIDELINES

The Line Producer (LP) is the designated production representative in the event of an OSHA inspection. The LP may delegate this responsibility; however, the individual selected must be competent, well-spoken, and exceedingly familiar with production activities.

The following guidelines have been prepared to assist with these inspections.

1. **Immediately notify the Production Safety Representative.**
2. Request the inspector’s U.S. Department of Labor credentials bearing their photo and serial number which can be verified by phoning the nearest OSHA office.
3. Inform the inspector that it is company policy to first notify the Production Executive, Production Attorney, and the Production Safety Representative, and to wait for one of them to arrive before the inspection can proceed. Inform the inspector that the contact has been made.
4. OSHA’s policy is to conduct an opening conference in which the nature of the visit, the scope of the inspection, and the applicable standards are discussed. **The inspector will ask the name of the employer. The employer is your Production Company and the name of your show.**
5. The inspector should furnish copies of applicable OSHA regulations, and (depending on the state), a copy of the employee complaint (if applicable).

6. After the opening conference, accompany the inspector to the areas identified in the opening conference. An authorized representative of the employees (i.e. business agent) also has a right to accompany the inspector on the walk through. If at all possible, dissuade (with diplomacy) the inspector from wandering into other areas. Do so by referring back to the original purpose of the inspection.
7. Under OSHA regulations, an inspector has the right to privately interview crew members. However, the crew member must be informed by the Production that they have the right to have either a union representative or an attorney present during the interview.
8. The inspector has a right to take photographs. If they do, it is important that the Production Company take their own photographs identical to those taken by the inspector.
9. **DO NOT** volunteer information. Provide short, concise answers to questions posed by the inspector. Be courteous, but cautious.
10. The inspector may request to examine documentation such as an *OSHA 300 Log of Occupational Injuries and Illness* or the production company's *Injury and Illness Prevention Program* available at the site. This is acceptable, however do not volunteer documentation. If copies of written materials are required, ask that the request be made in writing so that it may be responded to in writing. Inform the inspector that this is company policy.
11. During the walk through, the inspector will discuss any apparent violations noted and may offer technical information on how to eliminate hazards. Small violations should be fixed by the production as soon as they are pointed out.
12. Take detailed notes on the inspection. Immediately after the inspection, send a fax copy (and hard copy by mail) of the notes and any written material received from the inspector to the Production Attorney and the Production Safety Representative.
13. The inspector is required to conduct a closing conference to review any apparent violations and discuss possible methods and time periods necessary for correction. They will explain that any violations may result in a citation and a proposed financial penalty, describe employer's rights and responsibilities, and answer all questions. Do not sign anything.
14. OSHA is required by law to issue citations for violations of safety and health standards. The agency is not permitted to issue warnings. Citations include:
 - a) A description of the violation
 - b) The proposed penalty, if any
 - c) The date by which the hazard must be corrected

In most cases, citations are prepared at the OSHA Area Office and mailed to the employer. Employers have fifteen (15) working days after receipt to file an intention to contest OSHA citations before the independent Occupational Safety and Health Review Commission. Your Production Safety Representative, with assistance from your Production Attorney, will help you complete any paperwork that is requested of you.

The Production Attorney and the Production Safety Representative must be notified in the event an OSHA citation is received. All OSHA citations and other communications received from federal and state inspectors are to be mailed or sent immediately via fax to the Corporate Attorney and the Production Safety Representative. The Line Producer, Production Company, or whoever is served the citation, is required to seek the assistance, consent and advice of the Production Safety Representative prior to evaluating the feasibility of contesting OSHA citations.

OSHA RECORDKEEPING FOR TELEVISION AND FEATURES

Television and Feature Productions are exempt from OSHA injury and illness reporting in every state of the USA except for California. The following information is for California-based productions with employees who are hired through payroll companies such as Cast & Crew and Entertainment Partners. Contact your Production Safety Representative for clarification.

All distant locations will need to maintain their own OSHA 300, OSHA 300A and OSHA 301 logs. (See next section.)

OSHA RECORD KEEPING GUIDELINES FOR PRODUCTION

Productions with eleven (11) or more part-time or full-time employees within a given calendar year (January 1st to December 31st) are required to maintain the Occupational Safety and Health Administration (OSHA) Log of Occupational Injuries and Illnesses (OSHA No. 300), Summary of Occupational Injuries and Illnesses (OSHA No. 300A), and the Supplementary Record of Occupational Injuries and Illnesses (OSHA No. 301).¹

OSHA Logs are to be maintained by the Production Manager and on file in the production office.

OSHA No. 300 – Log of Occupational Injuries and Illnesses

The OSHA 300 log is used for recording and classifying recordable occupational injuries and illnesses and for noting the extent and outcome of each case. The log shows when the occupational injury or illness occurred, to whom, what the injured or ill person's regular job was at the time of the injury or illness, the department in which the person was employed, the kind of injury or illness, how much time was lost, and whether the case resulted in a fatality.

Generally, recordable cases include work-related deaths, occupational illnesses and occupational injuries which involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid).

The following steps will assist in deciding whether or not a case is recordable:

1. Determine whether a recordable case has occurred. Was there a death, injury or illness?
2. Establish that the case was work related. Did it result from an event or exposure in the work environment?
3. Decide whether the case is an injury or illness.

- **If the case is an illness, record it and check the appropriate category on the log.**
- If the case is an injury, decide if it is recordable based on a finding of medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job.

Each recordable injury and illness must be entered on the Log as early as practical but no later than six (6) working days after the recordable injury or illness has occurred.

OSHA No. 300A - Summary of Occupational Injuries and Illnesses

OSHA Form No. 300A is called the "Summary of Occupational Injuries and Illnesses." It is used to summarize injuries and illnesses for the previous calendar year.

Prepare the annual summary by totaling the column entries on the log and signing and dating the certification portion of the form at the bottom of the page. If no injuries or illnesses occurred in the year, zeros must be entered on the totals line. The summary must be completed by February 1st of each year. It must be posted in a conspicuous place or places

where notices to employees are customarily placed no later than February 1st and shall remain in place until March 1st.

OSHA No. 301- Supplementary Record of Occupational Injuries and Illnesses

For every injury or illness entered on the OSHA Log No. 300, it is necessary to record additional information on the supplementary record, OSHA No. 301. The supplementary record describes how the injury or illness exposure occurred, lists the objectives or substances involved, and indicates the nature of the injury or illness and the part(s) of the body affected. Workers' compensation insurance or other reports are acceptable as alternative records if they contain the same information as required by OSHA form No. 301.

Record Maintenance and Posting

OSHA regulations require that the log, summary, and supplementary records be retained for five calendar years following the end of the year to which they relate. In addition to maintaining the log on a calendar year basis, it must be updated to reflect changes that occur in recorded cases during the five-year retention period. In addition, new entries should be made for previously unrecorded cases that are discovered or for cases that initially weren't recorded but were found to be recordable.

Productions should maintain the log, summary and supplemental forms in the production office. For productions that have wrapped filming and closed their production offices, forward the records to the Production Safety Representative.

Note: These are general recordkeeping instructions only. OSHA Forms No. 300, No. 300A, No. 301 and specific recordkeeping instruction are available at the nearest OSHA agency, and OSHA's website: **www.osha.gov**.

REGULATORY AGENCY INSPECTION GUIDELINES

In addition to the Occupational Safety and Health Administration (OSHA), there are other regulatory agencies that may visit a location or production facility. These agencies may include: health department, fire department, air quality management district, water quality control, building and safety, hazardous waste agencies, etc.

The Unit Production Manager is the designated production representative in the event of a regulatory agency inspection. The UPM may delegate this responsibility; however, the individual selected must be competent, diplomatic, and exceedingly familiar with the production activity in which the agency is interested.

1. Request the representative's credentials and confirm their validity.
2. Inform the representative that it is company policy to first notify the Production Safety Representative and the Production Attorney, and to wait for one of them to arrive, before the inspection can proceed. Inform the inspector that the contact has been made.
3. Determine the nature of the visit, the scope of the inspection, and any applicable regulatory standards that may be in violation.
4. Accompany the inspector to the area in question. If at all possible, dissuade (with diplomacy) the inspector from wandering into other areas. Do so by referring back to the original purpose of the inspection.
5. The inspector may take photographs. However, it is important that the Production Company take its own duplicate photographs of those taken by the inspector.
6. If the inspector points out something wrong and it can be corrected immediately – do so.
7. DO NOT volunteer information. Provide short, concise answers to questions posed by the inspector. Be courteous, but cautious.
8. The inspector may request to examine documentation such as permits, usage records, Safety Data sheets (SDS), etc. He/she may also ask to examine equipment, machinery, building areas, etc. This acceptable, however do not volunteer documentation or information. If copies of written materials are required, ask that the request be made in writing so that it may be responded to in writing. Inform the inspector that this is company policy.
9. Take detailed notes on the inspection. Immediately after the inspection, send a facsimile copy (and hard copy by mail) of your notes and any written materials received from the inspector to the Production Safety Representative and the Production Attorney.
10. The Production Safety Representative and the Production Attorney must be notified in the event citations or violations are received. Copies of the citations/violations are to be mailed or sent immediately via facsimile to the Production Safety Representative and the Production Attorney. The production is required to seek the assistance, consent and advice of the Production Safety Representative and Production Attorney prior to evaluating the feasibility of contesting citations or violations.

REQUIRED POSTINGS

Regulatory requirements mandate the posting of certain documents so they are clearly visible to all cast and crew members. Links to postings for California and several other U.S. States can be found at **safetyontheset.com**. For information on how to obtain required postings, contact the Production Office or Production Safety Representative.

Production Safety Posters should be posted at every stage and location. They are available from the Production Safety Representative.

General Purchasing Practices

Purchase materials, especially chemical products, in the smallest quantity possible. Always ask for a Safety Data Sheet (SDS).

Paint and Painting Materials

Purchase paint and paint-related products that comply with all local or state environmental regulatory agency requirements. When purchasing rags for painting, remember that rags should be used sparingly. Air drying rags or throwing used rags in the trash is illegal.

Compressed Gases

Have all compressed gases delivered by the vendor to your location. Never throw compressed gas cylinders in the trash. Chain all cylinders in upright position with valve covers screwed down. When in use, make sure that they are secured so as to protect the regulator. As required, segregate incompatible gases (i.e. flammables and oxidizers).

Construction Subcontractors

Make it clear to subcontractors that the disposal of any *waste generated by the subcontractor is the responsibility of the subcontractor*. Inspect their worksite frequently and watch for any dumping of waste materials into the waste hopper, storm drains, toilets, or sinks. Regulators will hold you responsible for inappropriate disposal. Ask for proof of disposal at an appropriate site.

Special Effects and Environmental Considerations

Sno Foam and other forms of artificial snow may not be washed down storm drains. Sno Foam should be allowed to dry into a solid and then swept up and disposed of as trash. All products that generate special effect smokes are to be handled as hazardous waste. Special Effects materials should be handled by the FX person in charge as potentially hazardous waste.

Cleaning Up Spills of Hazardous Material

All spills should be cleaned up promptly. The first priority after a spill is the safety of all personnel. Once personnel are safe, and if a qualified person is present, the environment should be protected by stopping the spill from reaching storm drains, sewers, sumps, gutters, soil or bodies of water.

If a spill occurs:

1. Avoid touching it, walking in it or breathing it. Take the following steps immediately: Use sand or spill absorption materials to build a dike well ahead of the course of the spill. Once the flow of material has been stopped, absorb the spill using absorbent or sand.
2. For large spills, call local emergency response personnel (911).
3. Once the spill is absorbed, safely sweep or shovel up the spill-contaminated material. Store this in a labeled container. Do not throw spill debris into the trash; it must be disposed of as hazardous waste.
4. On Location, if it is safe to do so, try to create a dike around the material with sand or kitty litter. If the material is not dangerous, such as latex paint or the like, shovel it into five-gallon buckets, label them appropriately and dispose of utilizing a hazardous waste company.

Hazardous Material Storage

Store and segregate hazardous materials correctly by following the guidelines given on each product's warning label. You are required to have secondary containment. For guidance, contact **the Production Safety Representative**.

PAINT AND HAZARDOUS WASTE DISPOSAL

All hazardous waste generated by this Production is to be disposed of according to the Federal, State, Provincial, or local laws that apply. Examples of materials that are to be handled as hazardous waste include: waste paint, paintbrush rinse water, paint rags, thinners, solvents, oils, empty aerosol cans, adhesives, special effects products, etc.

For further information, contact the **Production Safety Representative**.

Note: *Contact the Operations Department of the stage, location or facility in use to determine any specific waste-handling procedures or requirements.*

GUIDELINES FOR SHIPPING DANGEROUS GOODS

READ THIS PRIOR TO SHIPPING ANYTHING BY AIR.

NOTE: YOU ARE STRONGLY URGED TO HAVE ANY ITEM SUCH AS THOSE LISTED BELOW PACKED AND SHIPPED BY FED-EX OR UPS. FINES OF \$100,000 ARE COMMON AND HAVE BEEN ASSESSED AGAINST SEVERAL STUDIOS.

Who regulates dangerous goods?

The International Air Transport Association (IATA) publishes dangerous goods regulations that are enforced by the Federal Aviation Administration (FAA) and the Department of Homeland Security.

What are Dangerous Goods?

When chemicals or chemical-containing products are shipped by air, they are called “*Dangerous Goods*.”

Many of the products used by consumers in their households would be considered dangerous goods. The same could be said of many of the products shipped by production companies. Some examples of dangerous goods shipped by production companies include:

- Household products such as hair spray, glass cleaner, shaving cream, etc.
- aerosol cans (all types)
- paint thinner
- cleaners
- isopropyl alcohol
- paints
- lubricating oils

Any product or material that contains chemicals should be considered a “dangerous good.”

What are the consequences for failing to comply with the dangerous goods regulations?

The current dangerous goods regulations allow the FAA to impose considerable fines to a shipper for failure to comply with the regulations. Fines can be levied if a shipper fails to properly identify, classify, mark, label and document dangerous goods. Fines and penalties of up to \$100,000.00, and a year in jail can be given to those who ship dangerous goods without declaring them. Individuals who sign the shipping papers can be held personally liable. Civil and criminal penalties could also apply. For example, one production company was recently fined \$72,000.00 when an undeclared bottle of window cleaner started leaking onboard an aircraft during transport.

Shippers of dangerous goods should keep in mind that certain materials, like pressurized cylinders or aerosol cans, could represent a significant risk to an aircraft and its passengers if shipped illegally. A mishap involving such dangerous goods could impart significant liability to the production and Studio.

What are the shipping requirements under dangerous goods shipping regulations?

The current International Air Transport Association regulations handbook on shipping dangerous goods is almost 650 pages long. The process by which products or materials are identified, classified, packaged, marked and labeled in accordance with these regulations is complicated. Unless you have been trained to ship dangerous goods, it is NOT recommended that you do so unless they are packed by professionals.

How can you safely ship dangerous goods?

If you have products or materials that you think might be dangerous goods, you should contact the mail carrier that you plan to ship the product or material with (i.e., Airborne, FedEx, etc.). They can tell you if it is a “dangerous good” and, for a fee, most shipping companies can package and label your shipment for you.

To avoid liability altogether, production companies should not ship by air any product that can easily be purchased while on location, such as paint, hairspray, window cleaner or isopropyl alcohol, or by having the materials “drop shipped” to their final destination by the manufacturer or vendor. Before shipping packages, identify the contents of the package and check for possible dangerous goods. If you are given a package to ship, ask for a detailed list of the contents.

If in doubt, ask.

Remember: *The person who signs the shipping document is the responsible/liable party.*

FLAME RETARDANT REQUIREMENTS

In the State of California, all drapes, hangings, curtains, drops, and all other decorative material, including any cloth sheets used to protect sets between uses, foliage, trees, or other greens that would tend to increase the fire hazard, shall be made from a nonflammable material, or shall be treated and maintained in a flame-retardant condition by means of a flame-retardant solution or process approved by the State Fire Marshall. (Subchapter 8, Chapter 1, Title 19, CCR.)

Additionally flame-retardant solutions must: (a) be approved for use by the local Fire Department, (b) be applied by a person who has passed the examination for the specific application and is registered to do so, and, (c) shall bear the seal and be provided with a certificate of Flame Resistance as required by California Code of Regulations, Title 19, Chapters 2, 7, and 8.

Exits, exit lights, fire alarm sending stations, wet standpipe hose cabinets, and fire extinguisher locations shall not be concealed, in whole or in part, by any decorative material.

In other jurisdictions, the **National Fire Prevention Association standard NFPA 701** is the applicable flame retardant requirement.

Because many jurisdictions have their own flame retardant requirements, contact the **Production Safety Representative**.

The following guidelines and regulations have been developed to help you comply with the regulatory requirements of local, state or federal agencies that oversee air quality.

Visible Emissions

If your production company will be using fires, explosions or large-scale effects involving airborne dust, then you will need to notify the **Production Safety Representative** prior to the effect. Regulations may forbid or limit the airborne release of smoke, dust or other visible emissions. The Production Safety Representative can assist you in complying with this regulation.

Portable Generators

Depending on the production equipment used or the location chosen, your production company may use portable generators. Internal combustion engine-driven portable generators may be regulated because of the exhaust gases that are generated and released into the atmosphere. To comply with any applicable regulations, daily and hourly use records may need to be kept by the portable generator operator. Regulations governing the use of generators can be extensive, but most of them will not impact your production company if you rent the generator from an equipment rental company.

When deciding on the placement of generators, due consideration should be given to the effect of exhaust gases on employees working downwind or in adjacent occupied buildings. Diesel exhaust can be very irritating. Consequently, careful consideration should be given to generator placement in order to avoid re-location of the generators due to health concerns.

Coatings, Paint, and Other Paint-Related Materials

All production companies use paints, stains, primers etc. Your paint foremen should be aware of any limitations imposed by local, state or federal regulations because they govern the chemical content and use of all coatings and paints. Contact the Production Safety Representative if you need help or guidance on the use or selection of coatings.

The equipment used to apply coatings may also be regulated. Limitations may apply to spray guns, which may need a Permit to Operate. Other limitations may apply to the construction and operation of spray booths. A permit may be needed prior to the construction of any (even temporary) spray booth. Finally, remind all workers working with coatings or other chemical-based products to keep the lids tightly on cans when not in use, and to store all rags in closed containers.

WATER QUALITY (RWQCB)

Introduction

If your production company will be utilizing a water set, such as a water tank, pool, or lagoon, you must plan for the draining of water well in advance. Please be aware that federal and state environmental regulations now stipulate how, when and where that water can be discharged. ***Please be aware that the disposal of water used in these types of sets will take additional time and expense to handle in accordance with the regulations. Violations of these regulations can result in significant Agency fines.***

Who Can Help My Production Company Comply With the Regulations?

The **Production Safety Representative** will help you discharge water appropriately and keep the Production in compliance with applicable regulations. Although the Production Safety Representative will guide your production company step-by-step through the process of proper discharge, it is vitally important that all production companies are aware of the affect that compliance with the regulations may have on production, both in terms of cost and potential time delays. *The most problematic restriction to production companies is the possibility of a (minimum) 6-day waiting period, during which time, the water cannot be discharged.*

What are the Requirements to Discharge the Water?

The local, state or federal agency having jurisdiction will proscribe the water discharge requirements. The Production Safety Representative can help you determine what you need to do. Prior to discharge to a stormdrain or sewer system, you will probably need to have the water tested. The sampling and analysis requirements are very specific and differ from one jurisdiction to another. *Getting the laboratory results of the water tests will take approximately 6 days, during which time, you may not discharge the water.* When the analysis is complete, the results are compared to the permit limits. If none of the sample parameters exceed the limit, the water can be discharged.

Why Do Results Take 6 Days?

One of the tests has a full, 5-day incubation requirement, and the results cannot be “rushed.” Factors such as sample collection times, sample preparation, sample result interpretation, and report preparation requirements all add time to the full, five day sample analysis. Under ideal conditions, it may be possible to collect the samples early in the morning, and get results 5½ days later. Later sample collection times, weekends and other delays can make meeting these conditions difficult.

What Happens if We Exceed the Discharge Limits?

If the discharge limits are exceeded, alternatives to discharging to the stormdrain or sewer must be used. Having pumper trucks remove the water is one option. The Production Safety Representative can help you determine the option that will work best for you.

What Do We Do if We Have to Discharge While We’re Still Filming?

Sometimes, there may be a need to empty a tank quickly (i.e., overnight or over a weekend) to make repairs or adjustments to the water set. Time can be of the essence while filming is ongoing; however, some regulatory agencies have no provisions to allow sampling and analysis that takes less than 5 days. It is imperative that production companies are aware of the potential time delays that may result if water discharge of the set is required.

Are There Any Suggestions to Increase the Possibility of Discharging to Stormdrains?

Following are some recommendations to reduce the potential of exceeding the discharge limits and further delaying your water discharge:

- It is highly recommended that the production company hire a water quality consultant to design and maintain a filtration system to keep the water clean or up to water quality standards, especially if anyone has to enter the water.

- Make sure that the water quality consultant is capable of integrating a wide range of filtering media. Regular pool filters only remove particulate matter. Having the capability of filtering out other contaminants like oil and other organics can be quite advantageous if the levels of these exceed the discharge limit.
- When using a large tank or pool, it should be anticipated that a water storage tanker may be required that can be used for filter backwash operations. Pool filtration systems should be plumbed to this tanker and held there until water sampling results indicate that the water can be discharged.
- Dyes cannot be discharged to stormdrains or sewers. If dyes are to be used, they must be the type that can be chemically or mechanically removed prior to discharge.
- Make sure that the tank/pool is thoroughly cleaned prior to being filled.
- Make sure that the water used to fill the tank is clean.
- Make sure that all props and/or equipment placed into the water are clean.
- Metal equipment should be painted to prevent rust from developing and clouding the water.
- Whenever possible, locate hydraulic line connection points out of or away from the water.

Stormdrains

The stormdrain system is designed to take rain runoff and route it, untreated, into a river, lake or ocean. It is the policy of Studio Management and this Production that nothing shall be dumped into or allowed to enter the stormdrain. This includes: chemicals, chemical-containing products of any kind, products labeled “environmentally friendly,” or “biodegradable,” foods or drinks, cleaning supplies, gray water or sewage from trailers, or any chemical-containing product may not enter any stormdrain. Filming waters from pools, tanks and lagoons must be sampled (in collaboration with the Production Safety Representative) prior to discharge. Agency fines for non-compliance can be considerable.

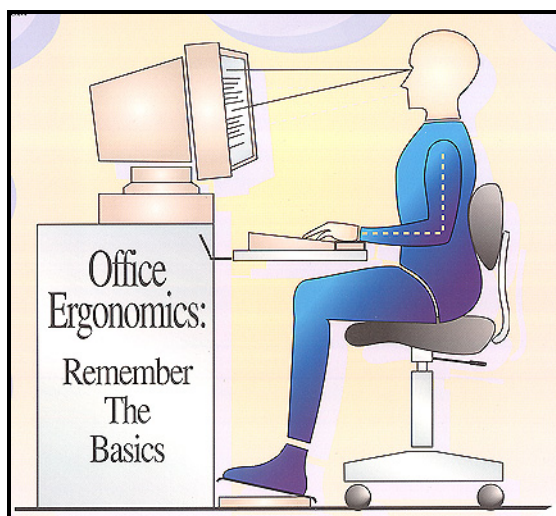
Sinks, Toilets, and Sumps

Sinks, toilets and sumps are designed to take residential, and some commercial waste, and route it to a municipal waste treatment plant. The treatment at the plant is not designed to remove chemical contaminants. It is therefore important that no chemical-containing waste products enter into this system. Painters and other workers cannot use sinks or toilets to wash their equipment or as a disposal site for waste or leftover products. Employees found to have put chemical-containing products into sinks, toilets or sumps will, along with their supervisor, be subject to disciplinary action, up to and including termination.

ERGONOMICS

Ergonomics means adjusting the work to fit the worker. An ergonomic evaluation can help ensure that office workstations are set up in a way that maximizes comfort and safety. If any of your production crew or staff has questions regarding ergonomics, please contact the **Production Safety Representative**.

1. Maintain a proper posture, having a 90 degree or greater angle at the hips and knees, while the feet are supported by the floor or a footrest.
2. Sit with head and neck in upright position, even while on the telephone.
3. Keep shoulders relaxed and elbows close to the body.
4. Select a chair that allows clearance behind knees when seated against the backrest.
5. Use the backrest of the chair to provide full support, particularly for the lower back.
6. Adjust the height of the chair to achieve a proper posture.
7. Adjust the keyboard or chair height to keep forearms, wrists and hands in a straight line while using the keyboard.
8. Allow ample clearance to move knees and legs under the keyboard support.
9. Place the monitor directly in front of you while at the keyboard.
10. Position the top of the monitor screen at or below eye level and about an arm's length away.
11. Tilt or swivel the monitor screen to eliminate reflections on the screen or add an anti-glare filter.
12. Reduce glare on work surfaces by decreasing overhead lighting and using window shades effectively.
13. Add a task light to illuminate documents properly.
14. Place mouse and other input devices next to the keyboard.
15. Use a document holder to place source documents as close to the computer screen as possible, and at the same height and distance.
16. Vary your tasks throughout the day. After 30-45 minutes of computer work switch to a non-computer task for about 10-15 minutes.



AMPTP SAFETY BULLETINS

These Safety Bulletins are the most recent versions as of the revision date on the cover of this manual. Newer editions may be available at www.csatf.org.

- 1 *Recommendations for Safety with Firearms and Use of "Blank Ammunition"*
 - 2 *Special Use of "Live" Ammunition*
 - 3 *Guidelines Regarding the Use of Helicopters in Motion Picture Production*
"Addendum A"- External Loads - Helicopter
 - 4 *Communications Regarding Stunts*
 - 5 *Safety Awareness*
 - 6 *Animal Handling Rules for the Motion Picture Industry*
 - 7 *SCUBA Equipment Recommendations for the Motion Picture Industry*
 - 8 *Guidelines for Insert Camera Cars*
"Addendum A"- Process Trailer/Towed Vehicle
"Addendum B"- Camera Boom Vehicles
"Addendum C"- Power Line Distance
 - 9 *Safety Guidelines for Multiple Dressing Room Units*
 - 10 *Guidelines Regarding Use of Artificially Created Atmospheric Fog & Haze*
"Addendum A"- Atmospheric Fog & Haze Technical Awareness Sheet
 - 11 *Guidelines Regarding the Use of Fixed-Wing Aircraft in Motion Picture Production*
"Addendum A" External Load Guidelines
 - 12 *Guidelines for the Use of Exotic Venomous Reptiles*
 - 13 *Gasoline Operated Equipment*
 - 14 *Code of Safe Practices - Parachuting and Skydiving*
 - 15 *Guidelines for Boating Safety for Film Crews*
 - 16 *Recommended Guidelines for Safety with Pyrotechnic Special Effects*
 - 17 *Water Hazards*
 - 18 *Guidelines for Safe Use of Air Bags*
 - 19 *Guidelines for the Use of Open Flames on Motion Picture Sets*
 - 20 *Guidelines for the Use of Motorcycles*
 - 21 *Guidelines for Appropriate Clothing and Personal Protective Equipment*
 - 22 *Guidelines for the Use of Elevating Work Platforms (Scissor Lifts) and Aerial Extensible Boom Platforms*
"Addendum A"- Power Line Distance Requirements
 - 23 *Guidelines for Working with Lighting Systems and Other Electrical Equipment*
"Addendum A"- Power Line Distance Requirements
"Addendum B"- Basic Electrical Safety Precautions for Motion Picture and Television Off Studio Lot Location Productions
"Addendum C"- Working With 480 Volt Systems
"Addendum D"- Common Motion Picture/Television Tasks and Associated Personal Protective Equipment
"Addendum E"- Guidelines for Meeting NEC Grounding Requirements for Portable Generators Supplying Portable Equipment
 - 24 *Recommended Safety Guidelines for Handling of Blood and Other Potentially Infectious Materials*
 - 25 *Camera Cranes*
"Addendum A"- Power Line Distance Requirements
 - 26 *Preparing Urban Exterior Locations for Filming*
 - 27 *Poisonous Plants*
 - 28 *Guidelines for Safety Around Railroads and Railroad Equipment*
 - 29 *Guidelines for Safe Use of Hot Air Balloons*
"Addendum A"- External Load Guidelines
 - 30 *Recommendations for Safety with Edged and Piercing Props*
 - 31 *Safety Awareness When Working Around Indigenous Critters*
 - 32 *Guidelines for Food Service Providers and Craft Services*
"Addendum A"- Los Angeles County Approved Film Production Food Services
 - 33 *Special Safety Considerations When Employing Infant Actors (15 days to 6 months old)*
 - 34 *Working in Extreme Cold Temperature Conditions*
"Addendum A"- Wind Chill Chart
 - 35 *Working in Extreme Hot Temperature Conditions*
 - 36 *Recommended Guidelines for Working Safely Around Unmanned Aircraft Systems (UAS)*
 - 37 *Vehicle Restraint Systems (Seat Belts and Harnesses)*
 - 38 *Guidelines for Inclement or Severe Weather*
 - 39 *Safety Guidelines for Using Foam(ed) Plastics in Set and Prop Construction*
 - 40 *Guidelines for Non-Camera Utility Vehicles*
 - 41 *Recommended Guidelines for Safely Working On and Around Gimbals*
 - 42 *Guidelines for Alternative Driving Systems*
 - 43 *Recommended Guidelines for Free Driving*
 - 44 *Guidelines for Working Safely with Radiofrequency (RF) Transmitters*
- Procedural Guidelines*
Special Procedures for Minors Performing Physical Activities
- Fact Sheets*
General Code of Safe Practices for Production
Extended or Successive Takes
Guidelines for Handling Freshly Painted or Printed Backdrops and Other Graphic Arts
Photographic Dust Effects
Guidelines for Reducing the Spread of Influenza-Like Illness

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #1

RECOMMENDATIONS FOR SAFETY WITH FIREARMS AND USE OF "BLANK AMMUNITION"

BLANKS CAN KILL. TREAT ALL FIREARMS AS THOUGH THEY ARE LOADED. "LIVE AMMUNITION" IS NEVER TO BE USED NOR BROUGHT ONTO ANY STUDIO LOT OR STAGE.

These guidelines are intended to give recommendations on the safe handling, use, and storage of firearms. Firearms include prop guns, rubber guns, plastic guns, non-guns, flintlock guns, pistols, machine guns, rifles, and shotguns that shoot "**Blank Ammunition.**"

The Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production) will be the individual acting in the interest of the Producer for obtaining, maintaining and handling all firearms for the production. He/she will work in conjunction with the production's designated Safety Representative to assure that the following standards are adhered to.

Before any use of a firearm in a rehearsal and/or on-camera sequence or off-camera use, all persons involved must be thoroughly briefed at an on-site SAFETY MEETING where the firearms will be used. This meeting shall include an "on-site walk through" and/or "dry-run" with the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)**, designated production representative, and anyone that will be using and/or handling a firearm. An understanding of the intended action, possible deviations, plans to abort, emergency procedures, and chain of command should be made clear.

No one shall be issued a firearm until he or she is trained in safe handling, safe use, the safety lock, and proper firing procedures. If there are any questions as to the competency of the person who will use the firearm, **the Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** shall determine if additional training is required.

A **SAFETY MEETING** for the cast and crew shall be conducted. If there are any questions as to the safety of firearms being used in the sequence or if any changes are made from the original sequence, another **SAFETY MEETING** shall be held.

Additionally, this Bulletin should be attached to the call-sheet each day firearms will be used.

GENERAL SAFE USE AND HANDLING OF FIREARMS

1. Refrain from pointing a firearm at anyone, including yourself. If it is absolutely necessary to do so on camera, consult the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** or other safety representative, such as the First A.D./Stage Manager. Remember that any object at which you point a firearm could be destroyed.
2. **NEVER place your finger on the trigger until you're ready to shoot.** Keep your finger alongside the firearm and off the trigger.
3. **KNOW** where and what your intended target is.
4. **DO NOT** engage in horseplay with any firearms.
5. **NEVER** discharge a firearm when the barrel is clogged. The **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** should inspect the firearm and barrel **before and after every** firing sequence.
6. **UTILIZE** all safety devices until the firearm is ready to be used.
7. **NEVER** lay down a firearm or leave it unattended. Unless actively filming or rehearsing, all firearms should be safely secured.
8. **ONLY** a qualified person shall perform hand loading or altering factory loaded blank ammunition to work on firearms (either licensed or experienced). Check with local, state and federal regulations to see if a specific license is required.
9. **NO PERSON** is to be coaxed, coerced, or otherwise forced into handling a firearm.
10. The **jamming of firearms** or any malfunctions must be reported immediately to the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)**. Do not attempt to adjust, modify, repair, or un-jam the firearm. Malfunctioning firearms should be taken out of service until properly repaired by a person qualified to work on firearms.
11. Protective shields, eye, and hearing protection or other appropriate Personal Protective Equipment (PPE) shall be issued and utilized by all personnel in close proximity and/or directly in the line of fire.

12. The Studio Safety and Security Departments are to be notified prior to any firearm use on studio property.
13. All personnel should remain a set safe distance from the weapon firing area (to be determined by the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production), Stunt Coordinator and/or designated Studio Safety Representative**) to ensure personal safety from blank debris and hot ejected blank casings.
14. All local, state and federal laws and regulations are applicable and can override these guidelines if they are more stringent.

The Property Master (or, in his/her absence, a weapons handler and/or other appropriate personnel determined by the locality or the needs of the production) is responsible for the following:

1. Ensuring the control and distribution of all firearms on the set.
2. Ensuring that all firearms which will be used on the production (whether company owned, rented, or privately owned) are given to and are in possession of the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)**.
3. The designation of experienced persons working under his or her immediate supervision to assist as necessary.
4. Their own qualifications for working with the type of firearms being used, the knowledge of their safe handling, use, and safekeeping, and familiarity with the **"BLANK AMMUNITION"** to be utilized.
5. Seeking expert advice if he or she is not familiar with the firearm to be used.
6. Ensuring current licenses and permits have been obtained for the possession and use of production firearms.
7. The knowledge of the applicable laws governing transportation, storage, and use of firearms and be in compliance with those laws.
8. The knowledge of and adherence to all manufacturers' warnings, expiration dates, storage, and handling procedures for **"BLANK AMMUNITION"** and firearms.

9. Ensuring that a sufficient amount of time has been allotted for training and rehearsal.
10. The ability to demonstrate prior knowledge of the safe handling of firearms and **"BLANK AMMUNITION."**
11. The personal loading of firearms or the personal designation of an experienced person working under his or her immediate supervision to load the firearms. Firearms are to be loaded just before they are used in a scene.
12. Ensuring that any actor who is required to stand near the line of fire be allowed to witness the loading of the firearms.
13. Using the lightest load of **"BLANK AMMUNITION"** consistent with the needs of the scene and advising the Director and other involved personnel.
14. The notification to all those present including the Sound Mixer, First Assistant Director and/or Stage Manager prior to any firing of **"BLANK AMMUNITION."**
15. The possession of all firearms except during actual filming or rehearsal. Afterwards, the **Property Master (or, in his/her absence, a weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** will **immediately unload** the **"BLANK AMMUNITION"** from the firearm.
16. Checking all firearms **before each use**. All firearms must be cleaned, checked and inventoried at the close of each day's shooting.
17. **Ensure all firearms have been accounted for before personnel are allowed to leave the area.** The Production Company needs to allow time in its shooting schedule for this procedure.
18. The utilization of replica or rubber prop guns whenever possible.
19. **Ensuring that an inspection is made of the set (location) and all spent "brass casings" and unspent "blank ammo" have been picked up and disposed of properly.**

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #2

SPECIAL USE OF "LIVE AMMUNITION"

THIS BULLETIN SHALL ONLY BE ISSUED IF "LIVE AMMUNITION" WILL BE UTILIZED

These guidelines are intended to give recommendations, special guidelines, and conditions for the safe handling of firearms utilizing **"LIVE AMMUNITION."**

On controlled second units, there may be a very rare occasion when **"LIVE AMMUNITION"** must be used to obtain an effect.

In those very special circumstances, **"LIVE AMMUNITION"** may be used only if the following criteria and special conditions have been met.

The Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production) will be the individual acting in the interest of the producer for obtaining, maintaining and handling all firearms for the production. He/she will work in conjunction with the production's designated Safety Representative to assure that the following standards are adhered to.

1. The Director, Producer, Director of Photography, First Assistant Director, Special Effects Technician and the licensed **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** have jointly determined a situation exists in which there is no other practical alternative but to use **"LIVE AMMUNITION"** to achieve the effect.
2. **"LIVE AMMUNITION"** should not be used under circumstances where a desired special effect can be achieved by using conventional special effects techniques by a qualified and licensed Special Effects Technician and/or by computer generated means (computer generated images ["CGI"]).
3. This special use of **"LIVE AMMUNITION"** shall only be performed at a site that is suitable for the use of **"LIVE AMMUNITION"** (*i.e.*, a military, police, or private gun range, the deck of a vessel, or in an area deemed safe for this procedure).
4. Additionally, the permission and/or a permit shall be obtained from the authority having jurisdiction (AHJ) (sheriff, police, county, city, township, military base, or agency having authority to issue this type of permit).

5. The insurance company providing insurance for the production should be notified of the intention to use **"LIVE AMMUNITION"** and the circumstances surrounding the special use and conditions. Approval must be obtained for the use of **"LIVE AMMUNITION."**
6. The Studio Safety Department and/or Safety Representative shall be notified prior to the use of any **"LIVE AMMUNITION."**
7. Notification of this type of activity shall be made on the call-sheet. If the call-sheet is not available before the date the **"LIVE AMMUNITION"** is to be used, advanced notice is to be given.
8. Before any use of a firearm and the loading of **"LIVE AMMUNITION"** in a rehearsal and/or for an on-camera sequence, all persons involved shall be thoroughly briefed at an on-site **SAFETY MEETING** where the firearms will be used.
9. The **SAFETY MEETING** shall include an "on-site walk through" and/or "dry-run" with the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)**, Range Master (if applicable), designated production representative, and anyone that will be using and/or handling the firearms. An understanding of the intended action, possible deviations, plans to abort, emergency procedures, and chain of command should be made clear.
10. Cast and crew members shall be limited to those members absolutely required to capture the effect. No minor(s) may be present in any scene or in the vicinity when **"LIVE AMMUNITION"** is being fired.
11. The **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** with the appropriate licenses required by the authority having jurisdiction (AHJ), shall procure and maintain the proper firearms to achieve the effect and determine that the firearm is in good and safe working condition. The firearms will be kept in the control of only the Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production). **SUCH FIREARMS WILL NOT BE USED AS PROPS.**

12. On days where the production will be utilizing firearms for **"LIVE AMMUNITION"** firing and have replicas and/or a "prop firearm," the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** shall identify the **"LIVE AMMUNITION"** firearms by color or some other easily recognizable means of identification. **These types of firearms shall never be kept together and/or stored together.**
13. All **"LIVE AMMUNITION"** shall be kept in the control of the licensed **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)**. Additionally, it shall be stored in a manner to keep it safe and secure and in compliance with all applicable local, state, and federal regulations related to the storage and use of **"LIVE AMMUNITION."**
14. **"LIVE AMMUNITION"** will not be kept on the set for any longer than is necessary to complete the scene in which it is being used. **"LIVE AMMUNITION"** shall be secured in a locked box and clearly marked in a manner to differentiate it from blank ammunition.
15. **"LIVE AMMUNITION"** will be transported in compliance with all applicable laws and regulations to and from the set on the day of its use.
16. While on a gun range and/or military base, the **Range Master** shall have overall control and final authority of the range and every person present, including the production cast and crew and the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)**.
17. All safety procedures and requirements shall be strictly followed. There shall be no deviation of the intended sequence without the permission of the **Range Master or Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** depending on who is in charge of the specific location to be utilized.
18. Immediately prior to the firearm discharge, a rehearsal shall be held to ensure that all who will be present know the assigned location, the safe zones that have been identified, and to ensure that no one is down in the range area. Upon completion of the rehearsal, a formal announcement shall be made to all those present that **"LIVE AMMUNITION"** will be fired.

19. Particular attention shall be paid to the line of fire. Ensure the area is clear of all personnel and be aware of possible ricochet hazards and/or the ejection of hot shell casings.

GENERAL SAFE USE AND HANDLING OF FIREARMS

1. **NEVER POINT** a firearm at anyone, including yourself.
2. **NEVER PLACE** your finger on the trigger until you are ready to shoot. Keep your finger alongside the firearm and off the trigger.
3. **KNOW WHERE AND WHAT** your intended target is.
4. **DO NOT** engage in horseplay with any firearms.
5. **NEVER** discharge a firearm when the barrel has become clogged. The Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production) should inspect the firearm and barrel **before and after every firing sequence**.
6. **UTILIZE** all safety devices until the firearm(s) is ready to be used.
7. **NEVER** lay down a firearm or leave it unattended.
8. **ONLY** a person qualified shall perform loading of the "**LIVE AMMUNITION**" (either licensed or experienced). Check with state regulations to see if a specific license is required.
9. **Once the firearm** has been loaded with the "**LIVE AMMUNITION**" the firearm is to be considered "hot."
10. **No person** is to be coaxed, coerced or otherwise forced into handling a firearm.
11. The **jamming or malfunctions** of the firearms must be reported immediately to the attention of the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)**. Do not attempt to adjust, modify, repair or try to un-jam the firearm. Malfunctioning firearms should be taken out of service until properly repaired by a person qualified to work on firearms.

The Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production) is responsible for the following:

1. Ensuring the control of and distribution of all firearms on the set.
2. Ensuring that all firearms which will be used on the production (whether company owned, rented, or privately owned) are given to and are in possession of the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production).**
3. The designation of experienced persons working under his or her immediate supervision to assist as necessary.
4. Their own qualifications for working with the type of firearms being used, the knowledge of their safe handling, use, and safekeeping, and familiarity with the **"LIVE AMMUNITION"** to be utilized.
5. Seeking expert advice if he or she is not familiar with the firearm to be used.
6. Ensuring current licenses and permits have been obtained for the possession and use of production firearms.
7. The knowledge of the applicable laws governing transportation, storage, and use of firearms and be in compliance with those laws.
8. The knowledge of and adherence to all manufacturers' warnings, expiration dates, storage, and handling procedures for **"LIVE AMMUNITION"** and firearms.
9. Ensuring that a sufficient amount of time has been allotted for training and rehearsal.
10. The ability to demonstrate prior knowledge of the safe handling of firearms and **"LIVE AMMUNITION."**
11. The personal loading of firearms or the personal designation of an experienced person working under his or her immediate supervision to load the firearms. Firearms are to be loaded just before they are used in a scene.
12. Ensuring that any actor who is required to stand near the line of fire be allowed to witness the loading of the firearms.

13. The possession of all firearms except during actual filming or rehearsal. Afterward, the **Property Master (or, in his/her absence, the weapons handler and/or other appropriate personnel determined by the locality or the needs of the production)** will immediately unload the **"LIVE AMMUNITION"** from the firearm.
14. Ensuring that all firearms are cleaned and checked at the close of each day's shooting.
15. Ensuring that all firearms and "LIVE AMMUNITION" are accounted for before any personnel is allowed to leave the area.
16. Ensuring that an inspection is made of the set (location) and all spent "brass casings" and unspent "live ammunition" have been picked up and disposed of properly.

NOTE: The Term "LIVE AMMUNITION," as used herein, does not include projectiles (regardless of the material or manufacture), which are intended solely for the purpose of creating bullet-hit type special effects, such as, projectiles fired from Air Rifles, Air Pistols, Air and/or Gas-operated Capsule Guns, Paintball Guns, Blow Guns, Squib-fired Trunion Guns, Crossbows or Crossbow-type devices, Slingshots or any other type of special effects device designed to propel any projectile intended to create a bullet -hit or recoil type special effect. Additionally, any propelled projectile required to be photographed in flight shall likewise not be considered "LIVE AMMUNITION." All such projectiles described are to be supervised and operated under the direction of the licensed Special Effects Technician in charge.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #3

GUIDELINES REGARDING THE USE OF HELICOPTERS IN MOTION PICTURE PRODUCTIONS

(External Load Guidelines are attached to this Bulletin as Addendum "A")

Helicopter flying accuracy may be adversely affected by changing natural conditions such as wind, air density, humidity, and time of day. Manmade conditions such as weight, weight distribution, center of gravity and/or the discharge of pyrotechnics in close proximity disturbing airflow around the tail rotor, can also affect the ability of the helicopter to fly. Special precautions should be taken to ensure safety when working in any extreme temperatures or terrain, e.g., mountains and deserts.

1. **All Aerial Coordinators and/or Pilots in Command should possess a current FAA approved Motion Picture and Television Operations Manual and accompanying Waiver.** The Waiver is specific to those Federal Aviation Regulations specified in the approved manual. Additionally, a copy of the FAA required Plan of Activity and approved Motion Picture and Television Operations Manual will be available to the Production Company prior to all aerial operations.
2. The **Pilot in Command** is at all times the final authority over his/her helicopter and should be in command of his/her flight operations and/or related activities.

The **Pilot in Command and/or Aerial Coordinator** should have the authority to abort any flight operation in the interest of safety. Abort signals should be specified ahead of time.

3. Communications: The **Aerial Coordinator and/or the Pilot in Command** will coordinate with the designated production representative and implement a plan for communications between the participants in the air and on the ground.

The plan will incorporate the following:

- a. Designated ground contact personnel;
 - b. Air to ground radios, VHF or FM;
 - c. Assignment of discreet frequencies (channels);
 - d. Visual signals (flags, specified hand signals, light or flare) should be used to halt filming in the event of lost communications or inability to utilize radios;
 - e. Abort signals, audible and visual to halt filming in the event of unforeseen circumstances or safety hazards.
4. At the start of each day's filming the **Aerial Coordinator and/or Pilot in Command** and the designated production representative will conduct a

BRIEFING/SAFETY MEETING for the production staff and those persons necessary for filming, including emergency, safety and security personnel.

Note: A subsequent **BRIEFING/SAFETY MEETING** should be required as necessary for intended action sequences and/or scenes

All BRIEFINGS/SAFETY MEETINGS should include the following:

- a. Pertinent items and the special provisions of the **Aerial Coordinator and/or Pilot(s) in Command**, Motion Picture and Television Operations Manual and accompanying Waiver, along with any additional provisions issued by the local FAA Flight Standards District Office
 - b. Possible risk to personnel who are involved
 - c. Safeguards to personnel and equipment
 - d. Communications
 - e. Emergency procedures
 - f. Location of boundaries
 - g. Local governmental limitations or restrictions, if any
5. A preplanned stunt and/or special effect sequence will not be changed in any way without the authorization of the **Aerial Coordinator and/or Pilot in Command**. No changes should be made once the helicopter(s) is/are airborne.
 6. The **Aerial Coordinator and/or Pilot in Command** should designate one person as the Ground safety contact with no other responsibilities. The helicopter support truck Operator may be designated as the ground safety contact around the helicopter, if qualified.
 7. If there is a question as to safety of any aerial filming sequence involving low, over-the-camera shots, a **briefing/Safety** Meeting should be held between the **Aerial Coordinator and/or Pilot in Command** and concerned persons as to whether the use of a locked-off camera is necessary.
 8. No smoking within **100 feet** of the helicopter or support fuel truck.
 9. Remain at least **50 feet** away from the helicopter unless directed by the **Aerial Coordinator and/or Pilot in Command or ground safety contact**. Under no circumstances should you approach the helicopter without permission from the ground safety contact or the **Pilot in Command**.

10. Whether the rotors are turning or not, ALWAYS approach and leave the helicopter from the front. **Prior to your approach of the helicopter you should:**
 - a. Make acknowledged eye contact with the pilot;
 - b. Proceed to the helicopter only after the pilot has acknowledged your presence and waves you forward;
 - c. Never run;
 - d. Walk, looking forward at all times;
 - e. Never walk downhill towards a helicopter;
 - f. Never walk uphill away from a helicopter.
11. **Never walk near or around the rear and tail sections of the helicopter, whether it is running or not.**
12. **Never walk under the tail section of the helicopter, whether it is running or not.**
13. Carry all equipment parallel to the ground when within **50** feet of a helicopter. Do not vertically extend any equipment, (*i.e.*, cameras, lights, or sound boom) into rotor blades, whether it is running or not.
14. **Necessary Crew and Persons Authorized**

Flight operations closer than **500** feet of persons will include only those persons consenting to be in close proximity to the aircraft and who are directly involved and necessary for filming.

The **Aerial Coordinator and/or Pilot in Command** and the designated production and security personnel will maintain an area perimeter to insure that no unauthorized persons are allowed within **500** feet of the flight operations.
15. Personal Protective Equipment should be utilized as required.
16. Never under any circumstance throw anything such as grip tape, clothing, paper, etc. around the helicopter, whether it is running or not.
17. The landing area should be cleared of debris and, where necessary, wet down. Ensure all equipment is tied down or stored away from the area.
18. Do not wear any loose clothing that may blow off, such as hats, when operating near a running helicopter. Protect your eyes, as well as your equipment, when helicopter is landing or taking off.

19. Rotor blades and fuselage can be easily damaged while on the ground. Never push, handle, sit on or in, or lay any objects of any kind on an aircraft without the pilot's permission.
20. If a foreign object falls into or against an aircraft, report it immediately to the pilot or aerial coordinator.
21. Never allow cast or crew to occupy an aircraft while engines are running or rotors are turning, unless authorized by the **Pilot in Command**.
22. When working on location or when utilizing Department of Defense aircraft, local agencies, regional police, fire, park department regulations, or military guidelines may vary from this bulletin. The more stringent guidelines will always be in effect. **Additional permits may be required for landing or refueling operations.**
23. The production company must notify all cast and crew members and the front of the studio call sheet should contain a statement to the effect that:

"An aircraft is being used and will be flown in close proximity to crew and equipment. Anyone objecting will notify the production manager or 1st AD prior to any filming."

**A COPY OF THIS BULLETIN SHOULD BE ATTACHED TO THE CALL SHEET ON
DAYS THE AIRCRAFT IS BEING UTILIZED**

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #3

"ADDENDUM A"

EXTERNAL LOADS - HELICOPTER

GUIDELINES FOR ESSENTIAL PERSONNEL OR EQUIPMENT TO FILM OR BE FILMED WHILE ON THE EXTERIOR OF, ENTERING, OR EXITING A HELICOPTER IN FLIGHT

1. Helicopter External Loads

Traditional helicopter motion picture activities include stunt persons transferring, air to air between helicopter and airplane, air to ground between surface vehicles or persons, Rappelling, Fast Roping and many other scenarios where essential personnel and equipment may be required outside the helicopter. Stunt persons and cameramen are often called upon to stand upon or hang from landing gear skids, cargo hooks, trapeze devices, bungee cords, cables, ladders, long-lines, etc.

Safe completion of these operations require the complete understanding and coordination of all parties involved, *i.e.* **the Aerial Coordinator and/or Pilot in Command** **the Designated Production Representative, Stunt Persons, Helicopter Riggers, Special Effects and Grip Riggers and essential ground crew.**

2. Pilot in Command

The **Pilot in Command** is at all times the **final authority over his/her airplane and should** be in command over his/hers **flight operations and/or related activities.**

The **Pilot in Command and/or Aerial Coordinator** should have the authority to abort any flight operation **in the interest of safety.**

3. Personnel Involved

Aerial Coordinator and/or Pilot in Command, essential personnel to be flown, helicopter rigging, safety and production personnel.

4. Briefing

Briefings will be conducted by the **Aerial Coordinator and/or Pilot in Command**, specific to the scheduled helicopter external load operations and in compliance with the **approved** Motion Picture Operations Manual, briefing provisions.

5. Risk Management

Participants will conduct a thorough evaluation of the operations to be conducted and the potential risk to all personnel, if any.

6. Communication

Communication must exist at all times between the pilot, the stunt person(s) and other essential personnel. This can be accomplished utilizing radios, intercoms, or pre-briefed visual signals.

Additionally, the pilot must be able to maintain visual contact with the stunt person(s) and other essential personnel in the event of lost communications. If visual contact cannot be maintained a third party, who can maintain visual contact, will be used. This person may be on board the helicopter, on the ground, or in another aircraft.

7. Attaching Methods and Devices

All personnel must be attached to the aircraft while in flight, unless those persons are performing an essential function outside the aircraft requiring them to depart the aircraft in flight, e.g. parachuting or transfers.

Seat belts, cables and safety lines will be attached to existing helicopter hard points, seat belt attach points, cargo tie down points, airframe bridles, or other suitable airframe locations.

Attaching devices, i.e. cables, carabineers, braided nylon climbing rope, nylon straps, steel clevises, body harnesses, etc., are normally provided by the special effects, grips and stunt personnel. All of the above attaching devices must have load ratings established by the manufacturer in compliance with various industry and government specifications and established Motion Picture safety guidelines.

NOTE: A person will never be attached to a load release device.

8. Parachutes

If parachutes are to be utilized, they must be of an FAA approved type, must have been packed and certified within the preceding 120 days.

While wearing a parachute, the parachutist must not be attached to the aircraft, except during takeoff and landing! An accidental parachute opening while attached to the Helicopter could have a serious negative effect on the aircraft and parachutist.

9. **Rappelling**

A. **Rappelling Pilot Qualifications**

1. Possess a letter of competency or an appropriate logbook entry indicating compliance with the pilot provisions of 14 CFR Part 133; or
2. Be qualified on the basis of previous experience and safety record; or
3. An actual flight, demonstrating the pilot's knowledge and skill regarding repelling operations.

B. **Rappeller Qualifications**

1. Rappellers (Stunt Persons) and Spotters, will be required to demonstrate their rappelling ability during required familiarization flights.
2. The Aerial Coordinator and / or Pilot in Command will have the authority to withhold approval of any rappeller (Stunt Person) or spotter.

10. **Rappelling Special Provisions**

The **Aerial Coordinator or the Pilot in Command** has the authority to cancel or delete any activity or event, if in their opinion, the safety of persons or property on the ground, or in the air, is at risk or if there is a contravention to the provisions of their **Motion Picture Waiver**.

11. **Weight and Balance**

Due to the nature of helicopter, external loads involving essential persons or equipment, diligent review and compliance with the manufacturer's weight and balance data is required.

Prior to the initial flight of a new external load configuration, hovering test should be conducted to verify the lateral and longitudinal centers of gravity and maximum allowable helicopter weight.

12. Rappelling Pilots Check List

A. Aircraft

1. Load bearing capacity and method of securing of all attaching devices related to the external load.
2. Verification of load bearing capacity and anticipated loads on the airframe, attach points to be utilized.
3. Accomplish Weight and Balance of the external load, including, if necessary, the possible release or departure of the external load.
4. Verify operation of load release device, if any.

Note: A person will never be attached to a load release device.

B. Personnel

1. Verify that only essential personnel are onboard the aircraft.
2. Confirm essential personnel specific duties and responsibilities.
3. Communications check, audio, and visual signals.
4. Review emergency procedures specific to the external load operation with all essential personnel.
5. Review potential risk, if any, with the essential personnel.
6. No essential personnel may participate in the helicopter external load operation unless they have read, understood, and agreed to comply with the conditions of the Waiver Holders, Certificate of Waiver and its special provisions, if any.

C. Rappel Equipment

1. Rope size, appropriate to the rappel (friction) device being used, will be required for all Rappel operations.

2. Rope strength, for each specific load, a safety factor of 10:1 between the strength of the weakest piece of attaching equipment and the load to be carried, will be utilized. The absolute minimum tensile strength of any Rappel rope will be 5000 lbs. tested to NFPA and/or other regulatory standards.
3. Ropes will have a rubber jacket or other appropriate edge protection to give protection on door sills and edges when using floor attach points.
4. Carabineers, steel, or aluminum must have a minimum tensile strength of 5000 lbs. be a locking type, and be tested to NFPA and/or other regulatory standards.
5. Cutting devices, knives, cable cutters, etc. sufficient to cut any attaching device will be provided to the spotter or safety persons for use in an emergency.
6. Rappel ropes will have a minimum of two airframe attach points per rope, with test strengths equal to or greater than **5000 lbs.** per rappeller.

13. Fast Roping

A. Fast Roping Pilot Qualifications

1. Possess a letter of competency or an appropriate logbook entry indicating compliance with the pilot provisions of 14 CFR Part 133; or
2. be qualified, based on previous experience and safety record; or
3. an actual flight, demonstrating the pilot's knowledge and basic skills required to conduct Fast Rope vertical reference type operations.

B. Fast Rope Personnel Qualifications:

1. Fast Ropers (Stunt Persons) and Spotters, will be required to demonstrate their ability during required familiarization flights.
2. The **Aerial Coordinator and/or Pilot in Command** will have the authority to withhold approval of any Fast Roper (Stunt Person) or spotter.

C. Fast Roping Special Provisions:

The **Aerial Coordinator or the Pilot in Command** has the authority to cancel or delete any activity or event, if in their opinion, the safety of persons or property on the ground or in the air is at risk, or if there is a contravention to the provisions of their **Motion Picture Waiver**.

D. Fast Rope Equipment:

1. Airframe attach points must be of an FAA approved type, providing sufficient lateral arm to extend beyond the outermost portion of the helicopter airframe and be certified for a **10:1** weight bearing capacity.
2. Rope size, appropriate to the rappel (friction) device being used, will be required for all fast rope operations.
3. Fast Rope strength, for each specific load, a safety factor of **10:1** between the strength of the weakest piece of attaching equipment and the load to be carried, will be utilized. The absolute minimum tensile strength of any Fast Rope will be **9000 lbs.** and have a high melting point as designed for fast rope/rappelling operations.
4. Cutting devices, knives, cable cutters, etc. sufficient to cut any attaching device will be provided to the spotter or safety persons for use in an emergency.
5. Fast Ropes will have a minimum of two airframe attach points per rope and have the appropriate rated strength.

14. Weight and Balance: See Paragraph 11

15. Pilots Check List: See Paragraphs 12. A. B. C.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #4

STUNTS

The following recommendations and guidelines are intended to give general guidance on the preparation, safe set-up, and performance of stunt sequences. You should also refer to the **Safety Bulletins and "General Code of Safe Practices for Production,"** which addresses concerns regarding specific equipment and/or procedures on the various topics listed in the **Safety Bulletin Table of Contents**.

1. A **stunt coordinator and/or qualified individual** is in charge of all aspects of the physical stunt, including script review, planning, site selection, preparation, testing, rehearsal, modification and recommendation of the qualified personnel and equipment to be utilized to perform the stunt.
2. When a Producer requires a performer to perform a scripted or non-scripted stunt or stunt related activity, an individual qualified by training and/or experience in planning, setting up and/or performance of the type of stunt involved shall be engaged and present on the set. No performer without the requisite training and/or experience shall be required to perform a stunt or stunt related activity without an opportunity for prior consultation by the performer with such qualified individual.
3. The performer must consent to participation in the stunt prior to its performance.
4. No individual should be required to work with an animal that a reasonable person would regard as dangerous in the circumstances unless an animal handler or trainer qualified by training and/or experience is present.
5. The qualified **licensed special effects person** who will be rigging and firing an explosive charge (including squibs) on a performer shall be allowed prior consultation with the stunt coordinator and performer.
6. The Producer or Producer's representatives on the set or location should comply with requests and requirements for safety equipment that is generally accepted in the industry for the safe and proper performance with stunts.
7. Equipment provided by the Producer (for example, automobiles, motorcycles, or wagons) shall be in suitable repair for the safe and proper performance of the stunt and presented in time to review such equipment prior to the execution of the stunt (Cal-OSHA, Title 8 requirement).
8. Advance notice is to be given to stunt personnel in order to plan a safe stunt. If changes are made to these plans, the Producer is to provide sufficient time to safely accommodate the changes.

9. An on-site safety meeting, including all participants and others involved, must precede the performance of all stunts. This meeting should include a “walk-through” or “dry-run” with the **stunt coordinator and/or effects people**. An understanding of the intended action, possible deviations, and authority to abort should be made clear. Before rolling cameras, should any substantive change become necessary, the First Assistant Director will again call all persons involved in the stunt to another meeting to confirm everyone's understanding and agreement to said change(s).
10. Wardrobe, prosthetics, wigs, lenses and/or other related equipment required to be worn by the stunt individuals should be presented in sufficient time for evaluation and to determine if such items will impact the execution of the stunt or stunt sequence. Final safety approval rests with the **stunt coordinator and/or qualified individual**.
11. The **stunt coordinator and/or qualified individual** shall determine whether safety requires the exclusion of non-essential crew from the stunt area. Perimeter control should be established and maintained. Traffic control procedures shall be reviewed, and special attention should be paid to driving sequences where unauthorized personnel could enter the area. The **stunt coordinator and/or qualified individual** should be involved in safe placement of cameras, camera operators and all essential crew.
12. **Communications:** The **stunt coordinator and/or qualified individual** will coordinate with the designated production representative and implement a plan for communications between the participants. The chosen methods of communication should reflect the conditions and circumstances at the scene.

Note: It is recognized that there can be unforeseen or unique situations which might require on-site judgment differing from these guidelines. Such judgment should be made in the interests of the safety of cast and crew.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #5

SAFETY AWARENESS

Each studio, facility, and Production Company shall strive for the highest safety standards. Cast and crew must work diligently to maintain a safe and healthful work environment. Communication of information is one of the most effective measures to ensure a safe set. **Safety takes precedence over expediency.**

THE COMPANY SHALL:

1. Identify person(s) with authority and responsibility for implementing and maintaining a safety program.
2. Include a system for ensuring that cast and crew comply with safe and healthy work practices.
3. Maintain a system for communicating with cast and crew in a form readily understandable by all affected cast and crewmembers on matters relating to occupational safety and health. A safety hotline or other means shall be established to encourage anonymous reporting of hazards without fear of reprisal.
4. Establish procedures for identifying and evaluating hazards at all work sites, stages, and locations including scheduled periodic inspections to identify unsafe conditions and work practices. Inspections shall be conducted and documented.
5. Establish a mechanism and/or procedure for correcting unsafe or unhealthy conditions, work practices, and work procedures in a timely manner based on the severity of the hazard.
6. Establish a procedure to investigate occupational injuries or illnesses.
7. Provide training and instruction to all cast and crews as required by the Occupational Safety and Health Administration (OSHA).

SAFETY MEETINGS

In **"On-Production"** situations, safety meetings are strongly recommended to make all involved aware of the apparent and potential hazards in the day's work. For example, safety meetings should be held: (1) when production moves to a new location; (2) when there is a significant change in cast and/or crew; (3) when stunts or special effects are scheduled or have changed; (4) when fatigue may be of concern; or (5) when there are significant changes to the original plan for the day.

Safety meetings should be conducted on the set by the First Assistant Director/Stage Manager and should be attended by all affected cast and crewmembers.

In **"Off-Production"** situations, the Construction Coordinator and/or Department Head should conduct safety meetings (toolbox talks, tailgate meetings, etc.) to address pertinent safety issues, use of specialized equipment, or unusual construction activities and/or rigging. The Construction Department is required to have a *Safety Meeting* at least once every ten (10) days, or when new equipment is introduced and/or when special situations require additional meetings.

The following procedures are recommended:

1. Schedule safety meetings at the earliest time in which the majority of cast and/or crew can be assembled. Convey pertinent information to all personnel unable to attend.
2. All safety meetings should be documented.
3. Identify potential hazards. Department Heads should discuss hazards and establish safe working zones.
4. Discuss emergency procedures, including identifying the location of fire alarms, fire extinguishers, emergency exits, first aid kits and telephones for 911 emergency calls. Additionally, explain studio/location safety program protocol, and identify medical or special emergency personnel (e.g., paramedics, police, and fire personnel).
5. Present an evacuation plan in the event of an emergency. Remind all departments to keep fire lanes, electrical panels and exits clear at all times.
6. Advise the cast and/or crew to notify the First Assistant Director/Stage Manager, Construction Coordinator and/or Department Head of any safety concerns or hazards.

7. Inform cast and/or crew that, in the event of an injury, the set medic and the First Assistant Director/Stage Manager, Construction Coordinator and/or Department Head must be notified immediately. The First Assistant Director/Stage Manager, Construction Coordinator and/or Department Head will assess the situation and notify appropriate personnel, such as the UPM, Director, Producer, or Safety Representative, if applicable.

Note: Check with your Safety Representative (if applicable) regarding additional rules, policies and/or guidelines that may apply to your specific work situation. Attach pertinent Safety Bulletins to the call sheets to deal with specific hazardous work. A complete and up-to-date set of Safety Bulletins may be accessed on the CSATF web-site at www.CSATF.org.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #6

ANIMAL HANDLING RULES FOR THE MOTION PICTURE INDUSTRY

1. The safety of working animals and the persons working on such productions shall be of primary concern.
2. Only qualified professional trainers and/or wranglers should be allowed to work with animals on productions.
3. Notice shall be given prior to shooting, on the call sheet, that animals are working. A "closed set" notice should be posted on all stages where animals are working and every effort should be made to maintain a closed set where animals are working on location.
4. The trainer or person supplying the animal shall be responsible for obtaining all necessary inoculations, permits, applicable licenses and medical safeguards.
5. An easily accessible area shall be available for loading and unloading animals.
6. It is the responsibility of the trainer to convey to the cast and crew specific safety concerns relative to the animals being used. The trainer shall address the cast and crew (including the parent and/or guardian of any children on the set) regarding safety precautions while animals are on the set (e.g., maintain a safe distance from wild and exotic animals, no personal pets, no feeding, no running, escape routes, etc.)
7. The procedures for dealing with live ammunition previously issued by the Industry Wide Labor-Management Safety Committee (Safety Bulletin #1, *"Recommendations for Safety with Firearms"*) shall be observed. The level of ammunition loads and explosives should be determined in consultation with the trainer and/or wrangler and the firearms expert.
8. The American Humane Association (AHA) guidelines on the treatment of animals used in film making state that a tranquilization and/or sedation on set for the sole purpose of film making is prohibited.

As a safety backup, consideration should be given to the availability of tranquilizing equipment. Potentially dangerous or complicated animal action should warrant the presence of a qualified veterinarian.

9. Equipment operated in conjunction with working animals should be in a safe operating condition as determined by the trainer and/or wrangler in conjunction with the property master. Basic animal safety equipment such as fire extinguishers, fire hoses and nets should be readily available.
10. Under no circumstances should horse falls be accomplished by tripping or pitfalls.
11. All hitch rails shall be fastened in the ground in such a manner that the tugging of a frightened horse cannot pull them loose (e.g., sleeve installation). On a stage, hitch rails will be bolted or fastened in a rigid manner. Scenery and props should be secured. Objects (e.g., ladders, pedestals, etc.) that easily tip over can startle the animals.
12. Horses being used on a production shall be properly shod for the working surface (e.g., borium, rubber shoes, etc.).
13. Extreme caution should be taken when using exotic venomous reptiles. The proper antidote (anti-venom) should be selected depending upon the type of reptile. Location of the antidote shall be predetermined and printed on the call sheet.
14. The smell of alcohol has a disquieting effect on animals. All precautions shall be taken in that regard when animals are working.
15. The producer shall notify the American Humane Association prior to the commencement of any work involving an animal or animals; script scenes shall be made available; representatives of the American Humane Association may be present at any time during the filming.
16. There should be two handlers for each large undomesticated animal such as a large cat or carnivore (mountain lion or larger).
17. Depending on the types of animals being used, and the filming location, consideration should be given to providing onsite emergency medical transportation, with qualified medical personnel, up to and including advanced life support, as necessary.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #7

RECOMMENDATIONS FOR DIVING OPERATIONS

The following recommendations apply when diving operations are utilized in production. When applicable, refer to Safety Bulletin #15, "Boating," Safety Bulletin #17, "Water Hazards," and Safety Bulletin #23, "Guidelines for Working with Lighting Systems and Other Electrical Equipment" for additional guidance.

1. The employer or a person appointed by the employer will designate a person-in-charge of dive operations. For the purposes of this bulletin only, this person shall be known as Dive Operations Coordinator ("DOC"). This person shall be in charge of all aspects of the diving operation and shall be at the dive location or on deck at the dive site during diving operations. All diving operations shall conform to all applicable laws, rules and regulations, such as Title 8, Section 6050 *et. seq.* of the California Code of Regulations and Title 29, Section 1910.401 *et seq.* of the Federal Code of Regulations. In the event of a conflict between this bulletin and the applicable law, rule or regulation, such laws, rules or regulations must be followed.
2. The selection of an underwater location shall depend upon the safety and health conditions of the location as determined by the DOC, with input from one or more of the following individuals: the Director, First Assistant Director, Director of Photography, safety professional or stunt coordinator. When appropriate, the DOC and the Chief Lighting Technician shall meet and ensure that all electrical equipment in close proximity to diving operations pose no hazards.
3. The employer is responsible for verifying that dive team members are certified divers who have been trained in the type of diving, equipment used, and in the environment in which they will be working. For purposes of this bulletin, a certified diver is one who holds a current and valid certification card issued by a nationally or internationally recognized certification organization.

There may be an exception where it is necessary to use a non-certified cast or crew member for a particular setup or scene. That cast or crew member must be under the direct underwater supervision of a dive team member with the appropriate experience and qualification (e.g., certified scuba instructor), designated by the DOC. The cast or crew member must have received training sufficient in the opinion of the dive team member and DOC to perform the job required.

4. The DOC shall establish and make available an Emergency Action Plan, including the nearest location of a recompression chamber, proper methods of transportation to that chamber, and emergency contact information.
5. Prior to each day's diving operations, appropriate safeguards should be considered and communicated to all involved in the underwater activities.
6. The DOC shall brief dive team members of dive objectives, hazards, environmental conditions, any modifications to diving or emergency procedures likely to affect the safety of the diving operations, and the necessity of immediately reporting any physical problems or adverse physiological effects, including symptoms of pressure-related injuries.
7. Properly trained and equipped safety diver(s) shall be available as determined by the DOC. For purposes of this bulletin, a safety diver is a diver at the dive location, not in the dive rotation, who is capable of rendering immediate assistance to a diver in the water.
8. The employer shall ensure that adequate quantities of medical oxygen (100% O₂) with appropriate methods of administration, and personnel trained in the use of such oxygen are immediately available during the diving operations.
9. A diver shall be accompanied in the water by another diver throughout the diving operation (a "buddy" system).
10. To avoid decompression illness, divers shall wait the appropriate period of time, as determined by the DOC, between dive operations and travel at altitude (including travel by air and land).
11. The DOC shall maintain a master log, which includes diver name, entry time, dive depth, and exit time. Individual logs shall be kept on behalf of all divers. Individual and master logs shall be reconciled on a dive-by-dive basis.
12. A functional underwater diver recall system shall be made available, tested and demonstrated on site prior to dive operations.
13. All dive equipment shall be inspected prior to each dive.
14. The employer shall have standby breathing equipment and safety diver(s) immediately available underwater when the possibility of trapped divers exists.
15. Each diver shall have a functional depth gauge, an underwater time-keeping device, an alternate air supply, and a pressure gauge for monitoring SCUBA tank

pressure. Each diver shall also have the capability of achieving and maintaining positive buoyancy.

16. Diving tanks, when transported to and from location and when not in use, will be secured in such a manner as to prevent them from rolling or allowing the valves to be struck by other objects. When not in use, diving tanks shall be stored in the shade.
17. All dive team members shall be trained and current in cardiopulmonary resuscitation (CPR), diver rescue techniques, and diving-related first aid.
18. All dive team members must have passed a current (within the preceding twelve months) physical examination, have been declared medically fit to engage in diving operations, and be approved for the dive by the DOC.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #8

GUIDELINES FOR TRADITIONAL CAMERA CARS

Also see: Addendum A – Process Trailers/Towed Vehicles
 Addendum B – Camera/Crane Boom Vehicles
 Addendum C – Power Line Distance Requirements

A Traditional Camera Car (“camera car”) includes any self propelled vehicle specifically engineered for the mounting and manning of cameras and other equipment for the primary purpose of filming from a stationary or moving vehicle. Excluded from these guidelines are specialty tracking vehicles, including but not limited to, motorized process vehicles, and powered camera vehicles (such as ATV, golf carts, snowmobiles, rally cars, camera bikes, side cars and other like vehicles). The addition of a process trailer/towed vehicle to a camera car shall make that vehicle also subject to the provisions of Addendum A of this safety bulletin. The addition of any manned or unmanned camera boom/crane or arm to a camera car shall make that vehicle also subject to the provisions of Addendum B of this safety bulletin. The addition of anything extending beyond the camera car shall make that vehicle also subject to the provisions of Addendum C of this safety bulletin.

NOTE (1): **The driver/operator has the authority to suspend operation of the vehicle for any reason that he or she deems to be unsafe.**

CONSIDERATIONS FOR USING A TRADITIONAL CAMERA CAR/PROCESS TRAILER (SEE ALSO ADDENDUM A):

1. When the action of the performer interferes with their ability to drive.
2. Impaired vision – when the driver's (performer's) vision will be substantially impaired by:
 - (a) Dust
 - (b) Spray (when driving through water, mud, etc.)
 - (c) Blinding lights
 - (d) Restrictive covering over the windshield
 - (e) Smoke
 - (f) Any other conditions which will substantially restrict the driver's normal vision.
3. The speed of the vehicle varies from what is normally safe for the conditions of the driving surface.
4. When other conditions such as obstacles or difficulty of terrain will exist or off-road driving will occur.

5. When any aircraft, fixed-wing or helicopter is flown in close proximity to the vehicle creating a hazardous driving condition for the performer(s).
6. Whenever speed or close proximity of two (2) or more vehicles create conditions dangerous to the drivers, performers, passengers, film crew or vehicles.

The foregoing shall not apply to an on-camera driver qualified as a stunt performer under the Screen Actors Guild Codified Basic Agreement or when a performer has the special expertise to perform the sequence in a safe manner. (See Safety Bulletin #4, "Stunts.")

GUIDELINES PRIOR TO OPERATION:

1. A copy of this bulletin should be kept with the camera car at all times.
2. A camera car must be inspected before and after use, or at a minimum, on a daily basis. Inspection items include, but are not limited to: brakes, tires, steering, engine, drive train, vehicle's electrical system, towing equipment, and all safety equipment. Any items not fully functioning must be repaired by a qualified person before use.
3. All rigging of equipment, including any changes, is to be performed by qualified personnel in an area secured for the purpose of rigging, which is free of known hazards, including other vehicular traffic. The rigging must be discussed with the camera car driver prior to the use of the vehicle. The driver must inspect the vehicle after any rigging changes are made to ensure that they will not adversely affect the safe operation of the vehicle.
4. All personnel riding on the camera car must be provided a safe and secure place to ride to avoid the possibility of a fall hazard. Such safety precautions include, but are not limited to: railings, harnesses, helmets, etc. This may be accomplished either by a safety railing placed at the appropriate height for the layout of the camera car or by a properly secured safety harness.
5. Malfunctioning or broken equipment must be reported immediately, taken out of service, and replaced or repaired prior to use.
6. Maximum passenger allowances -- Operation of Traditional Camera Cars Transporting Production Personnel:

Section 1217 of Title 13 of the California Administrative Code mandates that no driver shall drive a vehicle transporting passengers in violation of the following provision:

"No more passengers shall be transported than the number whose weight, in addition to the weight of any property transported, can be carried without exceeding the manufacturer's maximum gross vehicle weight rating or the combined maximum rating of the tires supporting each axle."

The total weight shall never exceed the manufacturer's Gross Vehicle Weight Rating (G.V.W.R.). Generally, the maximum number of personnel allowed on camera cars should not exceed nine (9), including the driver. However, as vehicles may differ, the manufacturer's guidelines must be followed at all times and in all cases.

Only those persons absolutely required to perform work during the rehearsals and the actual shot sequences shall be allowed on the camera car as determined by the driver/operator in consultation with the 1st A.D. and the Key Grip (if on set or location). To determine the number of on board personnel, the following factors must be considered:

- (a) Weather at the time of the intended shot;
- (b) Surface to be used (e.g., concrete, asphalt, decomposed granite, compacted dirt, etc.);
- (c) Surface condition (e.g., wet, oily, broken, icy, loose debris, washboard, etc.);
- (d) Route configuration (e.g., straight, slightly curved, moderately curved, "S" curved; level or inclined, crown, etc.);
- (e) Topography (e.g., flat, hilly, urban, countryside, mountainous, etc.);
- (f) Speed of the vehicle;
- (g) Visibility (e.g., trees, fog, smoke, lighting, structures, rigging, overhead obstruction, etc.);
- (h) All overhead and side obstructions (e.g., power lines, tree limbs, overpasses, traffic signals, etc.);
- (i) Shot sequence (e.g., following lone vehicle, stunt action with cross-overs/head-on or near misses, high speed chase, proximity of other vehicles, background performers and/or property, etc.);
- (j) Equipment rigging (e.g., multiple cameras, camera lights, etc.); and
- (k) Escape routes and contingency plans.

NOTE (2): The performance, operation and capacity of the camera car will vary when all factors are taken into consideration. The camera car driver has the authority to make the final determination regarding the operation of the camera car.

GUIDELINES WHEN OPERATING THE CAMERA CAR:

1. All items placed on the camera car are to be properly secured. Extra equipment, which is not used for the shot in progress, should be placed in a follow vehicle.
2. A shot specific safety meeting should be held involving all personnel riding on the camera car or in close proximity (e.g., stunt personnel or background performers, etc.). This meeting should include a "walk-through" or "dry-run." An understanding of the intended action, possible changes due to hazards, and authority to abort, including signals to be used, should be made clear. **If for any reason there is a change in the choreography of the camera car, other picture vehicle(s) in the shot, or personnel involved in the shot, a safety meeting must be held with all personnel involved to ensure everyone understands the changes and is in agreement with those changes.**
3. The driver of the camera car must alert personnel of the car's impending movement by making two (2) short "taps" of the car's horn or by using an on-board P.A. system.
4. Personnel are not allowed to walk between the camera car and any vehicle that it is towing while the camera car's engine is running.
5. No personnel are allowed on the tow bar while the camera car is in motion.
6. Personnel are not allowed to get on or off the camera car while it is in motion. If the engine of the camera car is running and the vehicle is stopped, personnel should not enter or exit the vehicle unless instructed to do so by the driver or 1st A.D.
7. Personnel riding on the camera car should protect themselves from changes in speed or direction by:
 - (a) Remaining seated at all times while the car is moving.
 - (b) Placing both feet on the floor, or on a foot rest.
 - (c) Firmly gripping the grab rail (safety railing).
 - (d) Riding only in a protected, safe and secure area on the camera car (refer to item # 4 on page 2 of this bulletin).
 - (e) Staying alert, expecting the unexpected.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #8

GUIDELINES FOR TRADITIONAL CAMERA CARS

ADDENDUM "A" - PROCESS TRAILER/TOWED VEHICLE

These guidelines apply to any towed vehicle or trailer specifically designed to carry personnel, equipment or other vehicles.

Process trailers are towed by a camera car or heavier equipment designed to carry or pull a load of the size required for the shot.

Any vehicle or camera platform towed by a camera car shall be considered to be part of the camera car and subject to all requirements outlined under "Guidelines for Traditional Camera Cars" of Bulletin #8.

Only essential persons required for the shot shall be on the towed vehicle, all other persons shall be on the camera car. Towing combinations does not increase the allowable persons outlined in item 6 and note (1) of the "Guidelines for Traditional Camera Cars" of Bulletin #8.

All equipment, including but not limited to specialized equipment such as camera dollies, boom arms, lighting fixtures, grip equipment or special effects equipment shall be secured to the vehicle or have a safety strap.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #8

GUIDELINES FOR TRADITIONAL CAMERA CARS

ADDENDUM "B" - CAMERA BOOM VEHICLES

All camera boom vehicles shall be subject to all requirements outlined in Safety Bulletin #8, "Guidelines for Traditional Camera Cars."

The speed of the camera boom vehicle shall never exceed the safe operating speed set forth by the individual manufacturer or which may endanger the safe handling of the vehicle or safe operation of the boom arm as determined by the driver/operator.

Any person riding the boom arm shall wear an approved seat belt at all times.

Always rehearse shots under controlled conditions to ascertain safety in movement not only of the vehicle but the boom arm as well.

Camera personnel shall only mount and dismount when given permission by the operator in control of the camera arm. Arm balance must always be maintained.

Always use wheel chocks to prevent crane movement on a sloped surface. Ratchet lock brakes for added temporary security. Never trust hydraulic brakes for permanent hold.

Maximum payload on boom arm nose should never be more than can be balanced by the counter weight system supplied with the crane.

Payloads must be decreased in proportion to length of extensions.

On any extension configuration, check with the manufacturer or qualified operator for allowable load.

The camera boom vehicle and boom arm shall be checked before and after use by a qualified experienced driver/operator, and that operator must be present during any use of the vehicle or boom arm. The driver/operator shall have the authority to make any adjustments that may affect the safe operation of the vehicle and/or boom arm.

When a boom arm is being used, special consideration must be given to Sections 6 (a) and (b) of **"Guidelines for Traditional Camera Cars of Bulletin #8."**

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #8

GUIDELINES FOR TRADITIONAL CAMERA CARS

"ADDENDUM C" – POWER LINE DISTANCE REQUIREMENTS

AVOID POWER LINES. This includes, but is not limited to, the placement of equipment such as ladders, scaffold, booms, forklifts, aerial lifts, sets, cranes or other rigging.

At a minimum, when working in California follow California Code of Regulations, Title 8, Section 2946, and Tables 1 and/or 2 below. Please note the difference of activities allowed in the two tables.

Table 1 - California

General Clearances Required from Energized Overhead High-Voltage Conductors

The operation, erection, handling or transportation of tools, machinery, materials, structures, scaffolds, or any other activity where any parts of the above or any part of an employee's body will come closer than the minimum clearances from energized overhead lines as set forth in Table 1 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	6
over 50,000.....345,000	10
over 345,000.....750,000	16
over 750,000.....1,000,000	20

Table 2 - California

Boom-type Lifting or Hoisting Equipment Clearances Required from Energized Overhead High-Voltage Lines

Boom-type lifting or hoisting equipment: The erection, operation, or dismantling of any boom-type lifting or hoisting equipment, or any part thereof, closer than the minimum clearances from energized overhead high-voltage lines set forth in Table 2 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	10
over 50,000.....75,000	11
over 75,000.....125,000	13
over 125,000.....175,000	15
over 175,000.....250,000	17
over 250,000.....370,000	21
over 370,000.....550,000	27
over 550,000..... 1,000,000	42

When working outside of California in the United States, follow the Code of Federal Regulations, Title 29, Part 1910, Section 333, and follow Table 3 below, unless the state in which you are working has separate standards, which can be accessed on the state's OSHA website. Production should always consult the proper authority (federal and/or state) to ensure compliance with applicable laws and regulations for the jurisdiction in which they are working.

Table 3 – Federal

Federal Clearances Required When Working On or Near Exposed Energized Parts

When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
50,000 or below	10
over 50,000	10 feet plus 4 inches for every 10,000 volts over 50,000 volts

Your employer may choose to set greater clearance requirements than listed above. If there are questions or concerns, consult with your studio safety representative for more information.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #9

SAFETY GUIDELINES FOR MULTIPLE DRESSING ROOM UNITS

1. The driver/operator plays an important role in maintaining a high degree of safety while these units are in use and is expected to meet high standards of competency. A qualified person should be present while such units are in operation.
2. Generator exhausts shall be elevated a minimum of three feet (3') above the floor level and vented to the outside at all times.
3. Skirts or other downward projections encircling the unit shall not be closer than one foot (1') from the ground.
4. All portable electric heaters shall be equipped with safety tip-over switches. Such heaters may be installed only on a temporary basis when extreme cold weather prevails or when the permanently installed heater malfunctions.
5. A single hand rail or grab bar shall be required where the floor is over three feet (3') high.
6. Before fueling vehicle and/or generator, the same shall be shut down. Particular caution shall be exercised when priming a carburetor. Fueling shall be done in a safe manner consistent with all state and local laws.
7. No antifreeze shall be added to the fresh water tanks.
8. All steps shall be stable and constructed securely. Apple and/or orange crates shall not be used as steps.

SAFETY BULLETIN #10

**GUIDELINES REGARDING THE USE OF ARTIFICIALLY CREATED ATMOSPHERIC
FOG & HAZE**

Artificial fog and haze are commonly generated using a machine or generator, which releases a chemical solution as an airborne aerosol to create various atmospheric effects during filming/performing. This bulletin does not address combustion-based smoke effects, such as free burning wood products, diesel fuels, etc.

There are no known long-term effects from exposure to artificial fog or haze. However, it is important to realize that every individual is different and temporary reactions to artificial fog or haze may range from having no effects to:

- Irritation to the eyes
- Dry throat
- Minor respiratory irritation

Control Measures

The Production should implement one or more of the following:

- Limit cast and crew exposure, in both amount and duration, to artificial fog or haze.
 - Keep the area clear of non-essential personnel.
 - Use additional control measures at worksites where workers are exposed to extended durations of artificial fog or haze.
- Ventilate or exhaust interior sets or stages at appropriate intervals.
- Provide breaks to all personnel and animals at appropriate intervals.
- Protection from the cold and asphyxiation risks in low-lying areas when cryogenic liquids or gases are used.
- The Production may monitor airborne levels to ensure they do not exceed Permissible Exposure Limits (PELs).
- Utilize qualified technicians to generate artificial fog or haze.
- Technicians will follow the manufacturer's guidelines in the use and cleaning of equipment and use only fluids and gasses specified by the manufacturer.

Communications

When fog or haze effects are scheduled to be used, the Production should notify all personnel in advance. Regular communications with cast and crew, including background, should also occur to discuss operations and precautions associated with the use of artificial fog or haze.

The following methods may be used to notify the cast and crew when artificial fog or haze will be used:

- Notification on the Call Sheet
- Safety Data Sheets (SDSs)
 - Should be available at the worksite
 - A supervisor or another member of department leadership will help to locate a copy of the SDS.
- Safety Meetings

A safety meeting should be held by the First Assistant Director, and may include the Special Effects Coordinator or qualified technicians, and should address, but not be limited to, the following topics:

- When and where atmospheric effects will be used.
- Ways to limit one's exposure to artificial fog or haze, and options to obtain adequate fresh air.
- Availability and use of respiratory protection if airborne levels are expected to exceed PELs.
- How to seek medical care
- Where to find the SDS

Individuals with Sensitivities

The elderly, children, and people with respiratory conditions or other ailments may have a higher sensitivity to artificial fog or haze. These persons should inform the Production of their sensitivity.

When there is an infant present at a Production using artificial fog or haze, steps should be taken to prevent the infant from being exposed. Please consult Safety Bulletin #33, "Special Safety Considerations When Employing Infant Actors (Fifteen Days to Six Months Old)".

For further information on how to protect workers from overexposure to airborne chemicals generated when using artificial fog or haze, please refer to "**Addendum A**" the "**Atmospheric Fog & Haze – Technical Awareness Sheet**".

SAFETY BULLETIN #10

**GUIDELINES REGARDING THE USE OF ARTIFICIALLY CREATED ATMOSPHERIC
FOG & HAZE**

"ADDENDUM A"

ATMOSPHERIC FOG & HAZE – TECHNICAL AWARENESS SHEET

INTRODUCTION

This document is intended to give recommendations to protect workers from overexposure to artificial fog and haze (e.g. theatrical haze, fogs, mists, etc.). Artificial fog and haze are commonly generated using a machine or generator, which releases a chemical solution as an airborne aerosol to create various atmospheric effects during filming/performing.

DEFINITIONS

- Permissible Exposure Limit (PEL) – The maximum amount or concentration of a chemical that a worker may be exposed to under OSHA regulations.
- Time-Weighted Average (TWA) – The average exposure to a contaminant over a given period of time, typically 8-hours.
- Short Term Exposure Limit (STEL) – The maximum exposure level averaged over a short-term, generally 15 minutes.
- Peak – The maximum amount of safe exposure to a substance.

CHEMICAL PRODUCT GUIDELINES AND REGULATIONS

Various chemical solutions and mixtures are used to generate artificial fog and haze. Some artificial fog or haze components have PELs regulated by Fed/OSHA and/or Cal/OSHA, while others are regulated as simple asphyxiants.

Products containing the following chemicals/substances should **not** be used for atmospheric effects due to their possible health effects:

- Known human carcinogens, including tobacco smoke (except when required to film a scene where such smoke results from an actor smoking tobacco);
- Fumed and hydrolyzed chlorides;
- Ethylene glycol and diethylene glycol;
- Aliphatic and aromatic hydrocarbons including petroleum distillates;
- Hexachloroethane and cyclohexylamine; and
- Butylene glycol 1,4.

The following substances **may** be used:

- Propylene glycol, butylene glycol (1,2 & 1,3), polyethylene glycol, triethylene glycol, and dipropylene glycol;
- Glycerin products;
 - **Caution:** Glycerin and the listed glycol products should not be heated beyond the minimum temperature necessary to aerosolize the fluid. In no event should glycerin or glycol be heated above 700 degrees Fahrenheit.
- Mineral oils (highly refined only); and
- Cryogenic liquids and gases (e.g., carbon dioxide [dry-ice], liquid nitrogen) may be used, but care must be exercised to avoid depleting oxygen levels, especially in confined or low-lying areas. When used, adequate fresh air should be supplied to avoid creating a hazardous atmosphere that may result in asphyxiation. Careless handling of liquid nitrogen may result in cold burns. Use caution to avoid the adverse effects of cryogenic materials on exposed persons.
 - When using asphyxiants, including cryogenic liquids and steam, in confined spaces, monitor the oxygen level. Oxygen levels should stay between **19.5% and 22%.***

*Occupational Safety and Health Administration – 19.12(a)(3)

Airborne Permissible Exposure Limits, as specified in the table below, should not be exceeded unless control measures are in place.

Ingredient	Fed OSHA 8-hour Time Weighted Average (mg/m³)	Short Term Exposure Limit (STEL) (mg/m³)	Peak (mg/m³)‡
Glycerin Mist (total dust)	15*	-	50
Glycerin Mist (respirable fraction)	5	-	50
Glycol	10**	40	40
Mineral Oil	5	10†	25

*Cal OSHA PEL at 10 mg/m³

**Glycol PEL as set by OSHA Standards for particulates not otherwise regulated

† Mineral Oil STEL set by The National Institute for Occupational Safety and Health

‡ Peak Exposure Limits set by ANSI Standard E1.5

Refer to Fed/OSHA and Cal/OSHA Regulations for further information and/or requirements.

CONTROL MEASURES

The following control measures should be performed or implemented when using artificial fog or haze:

- Eliminate the need for artificial fog or haze whenever possible.
- Limit the cast and crew exposure to artificial fog or haze. Keep the area clear of non-essential personnel.
- Use the minimum concentration necessary to achieve the desired effect.
- Ventilate or exhaust interior sets or stages at appropriate intervals.
- Provide breaks away from the set or stage to personnel and animals at appropriate intervals.

- Attach Industry Wide Labor-Management Safety Committee Safety Bulletin #10 “Guidelines Regarding the Use of Artificially Created Atmospheric Fog & Haze” to the call sheet whenever artificial fog or haze is scheduled to be used that day.
- The Production may monitor airborne levels to ensure that they do not exceed Permissible Exposure Limits.
- If airborne levels are anticipated to exceed PELs, appropriate respiratory protection must be provided. Contact your studio safety representative for guidance.
- Ensure that Safety Data Sheets (SDSs) are made readily available.
- If an infant is present on a Production, take the appropriate steps to prevent that infant from being exposed to artificial fog or haze.
 - Consult Safety Bulletin #33, “Special Safety Considerations When Employing Infant Actors (Fifteen Days to Six Months Old)”.
- Ensure that qualified technicians are utilized to generate artificial fog or haze.
- Technicians should follow manufacturer’s guidelines for the use and cleaning of equipment and only use fluids and gasses specified by the manufacturer.

MEASURING AIRBORNE CONCENTRATIONS

Airborne concentrations can be measured using a variety of instruments and by following recognized monitoring methods:

- Various direct-reading instruments that measure airborne aerosol are available for rent or purchase.
- Qualitative and quantitative testing should be conducted by or under the direction of an individual who is knowledgeable about the testing process. A correction factor, which varies with the reading instrument used, the type of fluid used, and the type of machine, must be applied. An industrial hygienist or qualified person can be contacted to discuss measuring airborne concentrations including correction factors and testing.
- If airborne monitoring has not been conducted, then ensure that exposure estimates (based on previous monitoring reports, available literature, or professional health and safety advice) are available.

EXTENDED EXPOSURE

Consider extended work shifts and the consequences of working more than 8 hours per shift, as it relates to time-weighted average (TWA). As exposure time increases, the Permissible Exposure Limit decreases.

Adjust exposure limits for extended work shifts (longer than 8-hours), as follows. Decrease the noted 8-hour TWA PEL by a factor of (8/extended shift length):

- 10 hour adjusted TWA = $(8/10) * 10 \text{ mg/m}^3 = 8.0 \text{ mg/m}^3$
- 12 hour adjusted TWA = $(8/12) * 10 \text{ mg/m}^3 = 6.7 \text{ mg/m}^3$
- 14 hour adjusted TWA = $(8/14) * 10 \text{ mg/m}^3 = 5.7 \text{ mg/m}^3$

For questions on artificial fog or haze, please contact your studio safety representative. Please refer to the Studio Safety Hotlines document for guidance on how to contact the appropriate safety representative.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #11

GUIDELINES REGARDING THE USE OF FIXED-WING AIRCRAFT IN MOTION PICTURE PRODUCTIONS

(Also refer to Safety Bulletin #11, "Addendum A" - External Load Guidelines)

Fixed wing aircraft (*i.e.*, aircraft, gliders, ultra lights) flying may be adversely affected by changing natural conditions such as wind, temperature and time of day. Manmade conditions such as weight, externally mounted equipment and the discharge of pyrotechnics and/or smoke can also affect the pilots ability to fly safely. Special precautions should be taken to ensure safety when working around aircraft that are operating in close proximity to camera, cast and crew, including taxiing, take off and landing.

1. **All Aerial Coordinators and/or Pilots in Command shall possess a current FAA approved Motion Picture and Television Operations Manual and accompanying Waiver.**

The **Waiver** is specific to those Federal Aviation Regulations specified in the approved manual. Additionally, a copy of the **FAA required Plan of Activity** and approved **Motion Picture and Television Operations Manual** will be available to the Production Company prior to all fixed-wing operations.

2. The **Pilot in Command** is at all times the final authority over **his/her airplane** and shall be in command over his/her flight operations and/or related activities.
3. Communications: The **Aerial Coordinator and/or Pilot in Command** will coordinate with the designated production representative and implement a plan for communications between the participants in the air and on the ground.

The plan will incorporate the following:

- a) Designated ground contact personnel.
- b) Air to ground radios, VHF or FM.
- c) Assignment of discreet frequencies (channels).
- d) Visual signals (flags, specified hand signals, light or flare) shall be used to halt filming in the event of lost communications or inability to utilize radios.
- e) Abort signals, audible and visual to halt filming in the event of unforeseen circumstances or safety hazards.

4. Necessary Crew and Persons Authorized

Flight operations closer than **500** feet to persons will include only those persons consenting to be in close proximity to the aircraft and who are directly involved and necessary for the filming.

The **Aerial Coordinator and/or Pilot in Command** and the designated production and security personnel will maintain an area perimeter to insure that no authorized persons are allowed within 500 feet of the flight operations.

5. A preplanned stunt or special effect sequence will not be changed in any way without the authorization of the **Aerial Coordinator and/or Pilot in Command**.

6. At the start of each day's filming the **Aerial Coordinator and/or Pilot in Command** and the designated production representative will conduct a briefing/**SAFETY MEETING** for the production staff of those persons necessary for filming, including emergency, safety and security personnel.

Note: A subsequent briefing/SAFETY MEETING may also be required as necessary for an intended action.

Both meetings shall include the following:

- a) Pertinent items and the special provisions of the Aerial Coordinator and/or Pilot in Command(s) Motion Picture and Television Operations Manual and accompanying Waiver along with any additional provisions issued by the local FAA Flight Standards District Office.
 - b) Possible risk to personnel that are involved.
 - c) Safeguards to personnel and equipment.
 - d) Communications.
 - e) Emergency procedures.
 - f) Location of boundaries.
 - g) Local governmental limitations or restrictions, if any.
7. The **Aerial Coordinator and/or Pilot in Command** shall designate one person as the Ground safety contact with no other responsibilities.
8. If there is a question as to safety of any aerial filming sequence involving low, over-the-camera shots, a briefing/Safety Meeting shall be held between the **Aerial Coordinator and/or Pilot in Command** and concerned persons as to whether the use of a locked-off camera is necessary.

9. Aircraft engines shall not be started and the aircraft shall not be taxied in spectator, cast or crew areas unless appropriate measures are taken to preclude creating a hazard to spectators, cast or crew.
10. Cast, crew and equipment shall be protected from debris thrown back by airplanes taxiing out or taking off.
11. If an aircraft is being filmed with the engine running, adequate safety precautions shall be taken in connection with activity in front of the propeller, which includes designated ground personnel.
12. No smoking is permitted within one hundred feet (100') of the aircraft or fuel support truck.
13. Aircraft structures can be damaged easily while on the ground. Never push, handle, sit on or in, or lay any objects of any kind on an aircraft without the pilot's permission.
14. If a foreign object falls into or against an aircraft, report it immediately to the **Aerial Coordinator and/or Pilot in Command**.
15. Each end of an operational runway or landing area should be cleared during take-off and landing and appropriate safety precautions should be taken as to the placement of camera equipment when filming the take-off or landing.
16. **Low level acrobatic maneuvers** shall be conducted in a direction, which will most nearly parallel the boundaries of the designated crew and equipment area or in a direction away from such areas.
17. When working on location or utilizing Department of Defense aircraft, local agencies, regional police, fire, or park department regulations or military guidelines may vary from this bulletin. The more stringent guidelines will always be in effect. Additionally permits may be required for landing or refueling operations.
18. The production company must notify all cast and crew members and the front of the studio call sheet shall contain a statement to the effect that:

"An aircraft is being used and will be flown in close proximity to crew and equipment. Anyone objecting will notify the production manager or 1st AD prior to any filming."

19. Except where necessary for takeoff or landing, the FAA prohibits the operation of an aircraft below the following altitudes:

a) Over Congested Areas

Over any congested area of a city, town or settlement, or over any open-air assembly of persons, an altitude of **1,000** feet above the highest obstacle within a horizontal radius of **2,000** feet of the aircraft.

b) Over other than Congested Areas

An altitude of **500** feet above the surface, except over open water or sparsely populated areas. In that case, the aircraft may not be operated closer than **500** feet to any person, vessel, vehicle or structure.

**A COPY OF THIS BULLETIN SHALL BE ATTACHED TO THE CALL SHEET ON
DAYS THE AIRCRAFT IS BEING UTILIZED**

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #11

GUIDELINES REGARDING THE USE OF FIXED-WING AIRCRAFT IN MOTION PICTURE PRODUCTIONS

"ADDENDUM A" - EXTERNAL LOAD GUIDELINES

(FOR ESSENTIAL PERSONNEL OR EQUIPMENT TO FILM OR BE FILMED WHILE ON THE EXTERIOR OF, ENTERING, OR EXITING AN AIRPLANE IN FLIGHT)

1. An **Airplane External Load** is equipment or essential personnel that may be required outside the airplane in flight, including wing walkers, parachutists, cameramen, stunt persons, etc.

Stunt persons are often suspended from landing gear struts, wing struts, trapeze devices, bungee cords or cables and perform various types of air to air transfers, air to ground transfers and air to surface vehicles transfers.

Safe completion of these traditional motion picture activities require the complete understanding and coordination of all parties involved, *i.e.*, the **Aerial Coordinator and/or Pilot in Command, the Designated Production Representative, Stunt Persons, Stunt Riggers, Airplane Riggers, Special Effects and Grip Riggers** and essential ground crew.

2. The **Pilot in Command** is at all times the final authority over his/her airplane and shall be in command over his/hers **flight operations and/or related activities**.

The **Pilot in Command and/or Aerial Coordinator** shall have the authority to abort any flight operation **in the interest of safety**.

3. **Risk Management**

Participants will conduct a thorough evaluation of the operations to be conducted and the potential risk to essential personnel, if any.

4. **Personnel Involved**

Aerial Coordinator and /or Pilot in Command, essential personnel to be flown, airplane rigging, safety and production personnel.

5. **Briefing**

Briefings will be conducted by the **Aerial Coordinator and /or Pilot in Command**, specific to the scheduled airplane external load operations and in compliance with the approved Motion Picture Operations Manual, briefing provisions.

6. Communication

Communication must exist at all times between the Pilot in Command and the essential personnel being flown. This can be accomplished through the use of radios, intercoms or pre-briefed hand signals.

Additionally, in the event of lost communications, the pilot must be able to maintain visual contact with the stunt person or cameraman. If visual contact cannot be maintained, then a third party, who can maintain visual contact, will be used. This person may be onboard the aircraft, on the ground, or in a chase aircraft.

7. Attaching Methods and Devices

All personnel must be attached to the aircraft while in flight, unless those persons are performing an essential function outside the aircraft requiring them to depart the aircraft in flight, e.g. parachuting or transfers.

Seat belts, cables and safety lines will be attached to existing aircraft hard points, seat belt attach points, cargo tie down points, or other suitable airframe locations.

Attaching devices, cables, carabineers, braided nylon climbing rope, nylon straps, steel clevises, body harnesses, etc. are normally provided by the motion picture special effects and stunt personnel.

All of the above attaching devices have load ratings established by the manufacturer in compliance with various industry and government specifications and established Motion Picture Safety Guidelines.

NOTE: A person will never be attached to a load release device.

8. Parachutes

If parachutes are to be utilized, they must be of an FAA approved type, must have been packed and certified within the preceding 120 days.

While wearing a parachute the stunt person must not be attached to the aircraft except during takeoff and landing.

An accidental parachute opening while attached to the airplane could have serious negative effect on the aircraft and parachutist.

9. Weight and Balance

Due to the nature of airplane external loads involving persons or equipment, the longitudinal C.G. (center of gravity) considerations are nominal and can be easily calculated using the manufacturers' weight and balance data.

Conversely, the majority of airplane external loads involving persons and/or equipment are more likely to affect the lateral weight and balance.

Airplane manufacturers normally do not provide lateral C.G. charts or limits.

Therefore, it is essential to determine what effect a wing walker or other essential personnel exterior to the airplane will have on the lateral C.G., prior to attaching them to a specific location.

This can be accomplished through consultation with pilots having previous experience with similar aircraft and configuration or through a flight evaluation.

10. Pilots Check List

A. Aircraft

1. Load-bearing capacity and method of securing of all attaching devices related to the external load.
2. Verification of load bearing capacity and anticipated loads on the airframe attachment points to be utilized.
3. Accomplish Weight and Balance of the external load, including if necessary, the possible release or departure of the external load.

B. Personnel

1. Verify that only essential personnel are onboard the aircraft.
2. Confirm essential personnel specific duties and responsibilities.
3. Communications check, audio and hand.
4. Review emergency procedures specific to the external load operation with all essential personnel.
5. Review potential risk, if any, with the essential personnel.
6. No essential personnel may participate in airplane external load operations unless they have read, understood and agreed to comply with the conditions of the Waiver Holders, Certificate of Waiver and its special provisions, if any.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #12

GUIDELINES FOR THE USE OF EXOTIC VENOMOUS REPTILES

1. The Producer shall notify a nearby medical facility, one day prior to use, that a live venomous reptile is to be used in close proximity to personnel, and insure that proper anti-venom is available.
2. Only personnel essential to the scene will be allowed within a fifty foot (50') perimeter of the reptile.
3. A representative of the American Humane Association shall be notified of the use of the venomous reptile.
4. The snake handler in charge must have a "Prohibited Species Permit" from the State of California Wildlife Protection Department with him/her to be shown if necessary.
5. Proper protection (*i.e.*, barriers, gloves, adequate leg guards) for cast and crew who have to work closely with the reptile shall be provided.
6. A stand-by vehicle with driver shall be available to transport in case of an accident while the reptile is out of its cage.

NOTE: A snake should be milked the same day to remove most of the venom. Carbon Dioxide (CO₂) bottles should be on hand. The snake handler should have a snake pincer.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #13

GASOLINE OPERATED EQUIPMENT

As a reminder, the following information was disseminated to the Industry in 1974:

Internal combustion engine driven equipment shall be operated inside of buildings or enclosed structures only when such operation does not result in harmful exposure to concentrations of dangerous gas or fumes in excess of threshold limit values except as permitted by Cal/OSHA General Industry Safety Orders Sec. 5146.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #14

PARACHUTING AND SKYDIVING

The following information pertains ONLY to Federal Aviation Administration (FAA) regulated activities.

It DOES NOT pertain to non-FAA activities such as “Base Jumping” or “Parasailing.”

This bulletin identifies safety guidelines that should be considered when filming parachuting or skydiving sequences. In all parachuting and skydiving jumps, personnel must follow all federal, state, and local rules, laws, and regulations pertaining to parachuting and skydiving. Should any of the following guidelines conflict with federal, state, or local rules, laws, or regulations, personnel must follow the rules, laws, or regulations.

All productions that require a parachutist or skydiver must include the participation of a Parachuting Coordinator, who possesses a United States Parachute Association (USPA) Professional Exhibition Rating. Otherwise, the Parachuting Coordinator must provide evidence of the necessary experience, knowledge, and skill required to attain a USPA Professional Exhibition Rating before rendering services on a production.

1. The Parachuting Coordinator is responsible for all parachuting and skydiving activities. The Parachuting Coordinator should be consulted if there are any “unusual” activities or hazards related to the filming of the parachuting or skydiving sequence. Unusual jumps include those involving non-standard landing areas, wardrobe, prosthetics, wigs, lenses, props, helmet cameras, or other equipment which is not typically worn by a parachutist or skydiver. The circumstances surrounding any unusual jump should be presented to the Parachuting Coordinator in sufficient time before any jump so that he or she may evaluate the effects, if any, on the execution of the jump.
2. The Parachuting Coordinator and the parachutist performing the jump should agree that in planning the jump they are satisfied that they have addressed all possible safety issues. They should articulate to the productions designated representative how they have reached that conclusion.
3. The jumper should have sufficient experience with the type of canopy that he or she will use.

Revised: January 6, 2006

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SAFETY BULLETINS ARE RECOMMENDED GUIDELINES ONLY; CONSULT ALL APPLICABLE RULES AND REGULATIONS

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4. The Parachuting Coordinator and/or each individual parachutist must have authority over his or her jump, including the authority to abort a jump. Abort signals should be specified before starting the jump.
5. The Parachuting Coordinator should designate a qualified person as a Ground Safety Contact, who should not have other responsibilities during the filming of the sequence that could interfere with his or her duties as the Ground Safety Contact.
6. The Parachuting Coordinator, together with the Ground Safety Contact and any other designated production representative, should implement a plan for communications between the participants in the air and on the ground. This plan should incorporate the following equipment and actions to the fullest extent possible:
 - a. Air to ground radios (VHF or FM) and any other effective means of communication.
 - b. Assignment of discreet radio frequencies (channels).
 - c. Visual signals (e.g., flags, specified hand signals, panels, lights or flares) to be used to, among other things, halt filming in the event of lost communications or inability to utilize radios.
 - d. Abort signals (audible or visual) to be used to halt filming in the event of unforeseen circumstances or safety hazards.
7. A pre-planned stunt sequence involving parachuting or skydiving should not be changed without the authorization of the Parachuting Coordinator. If the parachuting sequence involves special effects, the Special Effects Coordinator should also be consulted and both should agree on the proposed change(s). No changes should be made to a pre-planned stunt sequence once the stunt performers have departed the briefing area.
8. Landings in public places must be restricted from the public. The Parachuting Coordinator should determine whether security personnel are necessary to exclude non-essential crew and non-participating spectators from the landing area.
9. All flights and jumps must be conducted in accordance with Federal Aviation Regulations, Part 105, except variances that are outlined in a current FAA approved Motion Picture & Television Operations Manual and accompanying Waiver.

10. The Parachuting Coordinator should determine whether the visibility, cloud ceiling height, and velocity of wind (as they apply to the particular situation) are safe for a jump and should take into consideration the landing area size, canopy type, number of jumpers and the planned stunt. In all circumstances, FAA rules regarding visibility and cloud clearance must be followed.
11. Before each jump is performed, the Parachuting Coordinator should brief all persons involved with the on-site production and filming of the jump. He or she may include a "walk-thru," simulation or "dry run" on the ground.
12. The Parachuting Coordinator and jumpers should have the opportunity to inspect all landing sites before the jump during daylight hours, and again at night if a night landing is required. Jumps near or into potentially hazardous landing areas, (water, power lines, etc.) as determined by the Parachuting Coordinator, should be considered carefully.
13. Before jump sequences, the Parachuting Coordinator or the designated production representative will conduct a SAFETY MEETING for the production staff and those persons necessary for filming, including emergency, safety and security personnel. Additional SAFETY MEETINGS may be required as necessary for intended action sequences or scenes.

SAFETY MEETINGS may include discussion of the following:

- a. Pertinent jumping sequence, timing, landing zone, special considerations of the Parachuting Coordinator, or aerial coordinator, such as review of the Motion Picture and Television Operations Manual and accompanying Waiver, or any mandates by the local FAA Flight Standards District Office.
 - b. Possible risk to personnel who are involved.
 - c. Safeguards to personnel and equipment.
 - d. Communication plan, including agreed upon visual and abort signals.
 - e. Emergency procedures.
 - f. Location of boundaries.
 - g. Local governmental limitations or restrictions, if any.
14. All equipment, props, wardrobe, etc., must be made available to the Parachuting Coordinator and the parachutist involved in the jump for evaluation before the jump. The Parachuting Coordinator should be consulted prior to establishing placement of any equipment, props, wardrobe, etc., that will be used in the jump. When necessary, this equipment, props, wardrobe, must be made available for test jumping or other practice.

15. The Parachuting Coordinator may postpone or cancel the jump if at any time the safety of persons or property on the ground or in the air is in jeopardy, or if there is a contravention of the terms or conditions of any FAA Letter of Authorization, or any other applicable law, rule or regulation.
16. A jumper may jump only with a main parachute packed by a "certificated parachute rigger," or the jumper.
17. All operations involving aircraft must conform to FAA regulations. All operations involving aircraft should also consider the Industry Wide Labor-Management Safety Committee Safety Bulletins #3 (Helicopters), #11 (Fixed-Wing Aircraft), and #29 (Hot Air Balloons).
18. All pilots involved in parachuting or skydiving sequences must be familiar and have experience with the dropping of jumpers. They should also be familiar with flights with the flight door removed, Federal Aviation Regulations, Part 105, and other applicable federal, state, and local laws, rules, and regulations. Before any jump, the pilot should know all ground signals and the agreed upon abort signal. He or she should be involved with rehearsals of aircraft exits, and should be familiar with any Letters of Authorization or waivers applicable to the jump. He or she should analyze the weight and balance of the aircraft with jumpers in exit position.
19. Adequate watercraft and flotation gear must be available when the possibility of a water landing exists. Jumpers should consider wearing an approved self-inflating personal flotation device when a jump involves the possibility of a water landing.
20. If the jump includes an intentional water landing, there should be one (1) boat per jumper with each containing an operator and safety personnel familiar with parachutes and water retrievals. The boat should be in the water with the engine running in sufficient time before jumpers exit the aircraft. Personal watercrafts are not recommended for retrieving jumpers with wet parachutes. All jumpers must wear an approved self-inflating personal flotation device when a jump involves a water landing.
21. If the parachuting sequence involves a freefall cinematographer, he or she should consult with the Parachuting Coordinator and both should agree on the "Plan of Activities". Any freefall cinematographer should be experienced with the type of camera equipment which will be used in the filming of the jump.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #15

GUIDELINES FOR BOATING/WATERCRAFT SAFETY FOR FILM CREWS

These guidelines are intended to provide recommendations for safety on and around boats and other watercraft. Watercrafts may include, but are not limited to: ships, boats, personal watercraft and other floating vessels.

PRE-PRODUCTION

1. The production should designate a responsible person to be in charge of all production watercraft. The production also should determine whether the scope, action, or complexity of any boating sequence requires a Marine Coordinator.
2. The Marine Coordinator or responsible person shall pre-inspect the proposed water routes or paths of travel for underwater obstructions, i.e. cables, reefs rocks, trees and pilings.
3. Each boat operator should have an effective means of communication.
4. To the extent practicable, cast and crew should be informed in advance that they will be working on or around watercraft. Cast and crew who cannot work in this environment should advise production management and/or their Department Head.
5. Cast or crew members susceptible to sea sickness should consult their physician in advance and should advise the set medic.
6. The responsible person or Marine Coordinator will establish a means by which to monitor and communicate weather and water conditions.
7. The production should be aware that bodies of water can have multiple authorities having jurisdiction with specific regulations related to watercraft activities. The production should identify these laws and regulations.
8. The production will establish work procedures to be followed while working on or around watercraft, including procedures for abandoning the watercraft; responding to fire, collision, and general alarms; and rescuing personnel. In establishing these procedures, the production should consider the manufacturer's operating and safety guidelines, and the scope, action, and complexity of the planned boating sequences.

9. The responsible person or Marine Coordinator will determine who will be assigned the responsibility for conducting a head count. A head count should be conducted when the amount of cast and crew, the size and design of the vessel, the intended operations aboard the vessel, or the environmental conditions make an immediate visual assessment of cast and crew impractical.
10. Each watercraft shall be equipped with all United States Coast Guard required safety equipment for the vessel type and size, including approved Personal Floatation Devices (PFD) for each person aboard the watercraft.
11. The responsible person or Marine Coordinator shall check the number, rating, and condition of all PFDs and, if required, rescue devices and safety equipment needed on board and dockside.
12. The responsible person or Marine Coordinator should determine the occupancy and weight limits for each watercraft. Only essential personnel and equipment should be on board.
13. The responsible person or Marine Coordinator will approve how equipment will be rigged and secured to the watercraft.
14. All shore power and portably supplied AC power shall be protected by Ground Fault Circuit Interrupters ("GFCI").
15. The watercraft owner/operator should pre-approve generator use. Generators need to be secured, and exhaust properly vented. Generators also must be equipped with a charged and readily accessible fire extinguisher.
16. The responsible person or Marine Coordinator needs to approve all areas where fuel is stored and used.

PRIOR TO BOARDING

1. Safety Meetings – The First Assistant Director (1st A.D.), along with the responsible person or Marine Coordinator, shall conduct a safety meeting with all cast and crew. Safety meeting topics may include, but are not limited to: work procedures; emergency procedures; and known or potential hazards.
2. All persons should wear closed-toe, non-skid, rubber-soled shoes when working on watercraft.
3. Avoid clothing, jewelry or loose items that can get caught in machinery or rigging, or impede watercraft transfers.

4. Wear clothing appropriate to the anticipated environmental conditions, such as a brimmed hat, sunglasses, and long-sleeved shirt. Apply and reapply sunblock as needed.
5. A head count shall be taken when applicable, the Marine Coordinator or his/her designee shall conduct a head count as cast and crew board the vessel. A similar head count shall be conducted upon disembarking.

BOARDING

1. Stand clear of the watercraft and away from the dock edge during docking procedures. Do not attempt to board until the watercraft is secured to the dock and a member of the watercraft crew gives instructions and permission to board.
2. Never place arms, legs or any other part of the body between the watercraft and dock, between two watercrafts, or between the lines used to secure watercrafts.
3. When boarding, only the designated boarding area or device shall be used. Do not step over rails, gunwales (side of boat), or lifelines without permission.
4. Do not block access to the watercraft's rigging, ladders, or emergency-access hatches. Stow gear and equipment in pre-approved areas only.

ONCE ON BOARD

1. When underway or anchored or docked in choppy water, keep one hand free at all times to hold onto the watercraft or railing.
2. PFDs and other floatation devices must be available for all cast/crew members. If you are instructed to put on a PFD, do so and be sure it is properly secured.
3. Only personnel designated by the responsible person or Marine Coordinator should operate the watercraft's machinery, valves, switches, and other equipment.
4. No one should straddle the gunwale or sit with their legs dangling over the side of the watercraft, unless it is required for production or vehicle operation and the necessary safety precautions are in place.
5. Always ensure an emergency escape route is available, including while positioning and securing gear and equipment.
6. Do not throw any waste overboard.

7. The private quarters, engine room, and the wheelhouse/bridge are off limits to the cast and crew, unless approved.
8. Smoking and open flames are not allowed, unless specifically required for a scene and necessary safety precautions are in place.
9. Marine toilets may not be as efficient as those on land. Do not flush objects other than approved toilet tissue.
10. Cast and crew should be aware of sudden and drastic movement from moving parts, i.e. overhead booms, winches, additional rigging lines, etc., which may hit and injure an unsuspecting person.
11. Performers requested to operate watercraft on-camera should be provided appropriate training. When a performer is operating the watercraft, emergency procedures to reestablish operational control of the on-camera watercraft should be in place.

SEA SICKNESS

1. If you feel nauseous, do not go below the deck. Instead, stay on deck in the fresh air, look at the horizon line, and contact the set medic immediately.
2. Eat soda crackers or plain bread and drink soda water when sea-sickness symptoms are present.
3. Cast and crew who have taken sea sickness medicine should promptly advise the set medic.

BOAT-TO-BOAT TRANSFERS

1. Do not attempt to transfer until watercraft personnel have designated the transfer points and have given the command to transfer.
2. Stand clear of the transfer-craft, tie-up area until the transfer craft is secured to the watercraft.
3. Prior to transferring to another watercraft, allow watercraft personnel to assist in the transfer of gear and equipment. Use two hands to steady yourself when transferring to the other watercraft.

BOAT-TO-BEACH TRANSFERS

1. Because proper timing is essential for the watercraft operator to safely enter and exit from a beach, the watercraft operator will advise the cast and crew on boat-to-beach transfer procedures.

WHEN AT ANCHOR OR AT SEA

1. If you see someone fall into the water, yell, "MAN OVERBOARD," as loudly as possible and point in the direction of that person. DO NOT take your eyes off that person. Continue pointing until watercraft personnel take over.
2. Stay out of the water, unless you are part of a planned scene.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #16

**RECOMMENDED GUIDELINES FOR SAFETY WITH
PYROTECHNIC SPECIAL EFFECTS**

This Safety Bulletin applies to pyrotechnic materials such as explosives and flammable or combustible liquids, gases and solids when used to create pyrotechnic special effects.

ALL USE, HANDLING, STORAGE AND TRANSPORTATION OF PYROTECHNIC MATERIALS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

Pre-Production/Planning

- When pyrotechnic materials are used on set, such use shall be under controlled conditions with due regard for the safety of all involved.
- The Production Company or Studio shall make sufficient advanced notification of the use of pyrotechnic materials to the appropriate departments (such as Special Effects, Stunts, Camera, Art, Construction, Hair, Make-up and Wardrobe), in order to safely plan pyrotechnic special effects. Any performer who may be involved in a pyrotechnic special effect shall be notified.
- Any required licenses and/or permits shall be obtained from proper Authorities Having Jurisdiction (AHJ) over pyrotechnic materials prior to using pyrotechnic special effects. Pyrotechnic Special Effects Operator(s) must hold valid State and Federal license(s), as applicable.
- Consideration of using remote control detonation devices should be discussed with Safety, Fire, Production, Stunts, and Special Effects prior to use.
- Prior to pyrotechnic special effects work, productions must develop emergency procedures and contingency plans, including identifying emergency fire suppression equipment and personnel needs. All equipment shall be checked to verify that it is in good operating condition. Individuals using this equipment must have proper training in its use and limitations.
- The need for personal protective equipment (PPE) should be identified during the planning stage.
- Special effects personnel must inform the Transportation Coordinator of what pyrotechnic materials will be transported. Vehicles must be properly placarded when

required by Federal or State law. All vehicles transporting pyrotechnic materials shall have an inventory of the materials being transported or stored readily available. Drivers must be qualified to transport pyrotechnic materials.

- Sets, equipment, props, wardrobe, make-up, wigs, hair supplies, etc. that will be in close proximity to planned pyrotechnic special effects must be prepared accordingly and/or should be made of flame retardant material. All sets, equipment, props, wardrobe, wigs, etc., must be made available in advance to the Pyrotechnic Special Effects Operator in charge for evaluation, to establish placement, and if necessary, for testing.

Clothing and Personal Protective Equipment

- Cast and crew in close proximity to planned effects should wear appropriate protective clothing. Depending on the hazards involved, this clothing should include appropriate closed-toe footwear, long pants, and a long-sleeved shirt made of 100% cotton or material which provides equal or greater protection.
- Cast and crew must be notified by the Pyrotechnic Special Effects Operator in charge when there is potential for exposures to pyrotechnics, such as fireball, debris, and shock wave. PPE must be provided as appropriate for the hazard(s) involved and considerations must be made for head, hand, eye, ear and respiratory protection. Depending on the hazards involved, the AHJ may require full fire turnout gear and Self Contained Breathing Apparatus (SCBA). These guidelines will also apply to performers when appropriate. All users must have proper training in the use and limitations of such PPE.

Fire Protection

- Pyrotechnic materials shall be kept a safe distance from open flames and other sources of ignition. Where required, such materials shall also be stored in approved, properly labeled containers.
- Smoking is prohibited in all pyrotechnic areas and "No Smoking" signs shall be posted in all appropriate areas of the premises or locations where pyrotechnic materials are stored and handled.
- Sufficient fire suppression equipment (such as charged extinguishers and fire hoses) must be manned, ready for use and placed at an appropriate safe distance from the effect, during testing, rehearsal and filming.
- Designated personnel performing fire suppression activities during testing, rehearsal and filming must be properly clothed and wear appropriate PPE.

Personnel Using and Handling Pyrotechnic Materials

- Special effects personnel working with pyrotechnic materials (pyrotechnicians) should be dressed in appropriate clothing to protect them from potential hazards. At a minimum, clothing should consist of appropriate closed-toe footwear, long pants, and a long-sleeved shirt made of 100% cotton or material which provides equal or greater protection. PPE considerations must be made for head, hand, eye, ear and respiratory protection. Depending on the hazards involved, the AHJ may require full fire turnout gear.
- Intoxicating liquids, drugs and other controlled substances (except for prescription drugs not impairing the user's judgment and motor functions) shall not be used by any person handling pyrotechnic special effects at any time during transportation, set-up, firing or removal.
- Pyrotechnicians must be given sufficient time to safely perform the work (including the transporting, storing, creating, rigging, firing, striking and extinguishing of all pyrotechnic special effects materials). While conducting such duties, pyrotechnicians should not be rushed, interrupted or distracted from focusing on their work.
- The rigging of any type of pyrotechnic device to a performer shall be done by a qualified special effects operator.
- Pyrotechnic special effects shall not be fired unless the area involved with the firing is in the continuously unobstructed full view of the Pyrotechnic Special Effects Operator in charge or his or her designated representative at the time of firing, unless equal means of observation are used.

Awareness

- When using pyrotechnic special effects on any set, notification shall be given to personnel by way of the call sheet, or other suitable means. The call sheet should also state the type of pyrotechnic special effects work that is planned.
- Before any pyrotechnic special effects or potentially hazardous sequence is to be performed, all persons involved shall be thoroughly briefed at a safety orientation meeting on the site.
- The safety orientation meeting shall include an "on site walk-through" and/or "dry run" with the Pyrotechnic Special Effects Operator in charge and all other persons involved in the event, including Stunt Coordinator if applicable. PPE should be in place at that time.

- No performer shall be rigged with a pyrotechnic device without his or her prior consent and consultation with the qualified Pyrotechnic Special Effects Operator in charge and, if applicable, Stunt Coordinator.
- If practical and upon a reasonable and timely request, the Pyrotechnic Special Effects Operator in charge may conduct a test firing of pyrotechnics when such are to be discharged in the vicinity of cast and crew.
- If at any time a significant change becomes necessary, the First Assistant Director will again call all persons involved in the event to another meeting to confirm everyone understands the proposed change(s).

Emergency Procedures

- Emergency procedures and contingency plans, including appropriate signs and signals and the authority to abort the shot, shall be specified prior to engaging in any pyrotechnic special effects work.
- Before the performance of a pyrotechnic special effect, the First Assistant Director, or designee, shall clearly announce to all persons the location of exits, the primary escape route and alternate escape routes. Escape routes must provide a clear and unobstructed passage to a designated safe area.
- Each person should ensure their designated escape routes are clear and remain accessible. Any person who is unsure of their designated escape routes should check with the First Assistant Director and learn of the escape routes upon entering the work area.
- In the event of an emergency, only those designated with emergency response roles should enter the pyrotechnic special effects area.

Authorized Personnel in the Pyrotechnics Area

- Access to areas where pyrotechnic materials are stored or handled shall be limited to authorized personnel only. All other personnel shall remain at a designated safe distance. If needed to prevent unintentional entry into hazardous areas, warning signs should be posted and/or other appropriate precautions taken.
- Prior to using pyrotechnic special effects with minors present, key production personnel, such as the Director, First Assistant Director, Pyrotechnic Special Effects Operator in charge, Stunt Coordinator and safety professional, should confer with the minor, minor's parent/legal guardian and Studio Teacher to review and discuss the planned activity. Only those minors under the age of 16 whose performance requires them to be on the set when pyrotechnic special effects are being handled are allowed on the set, and in some states may be prohibited altogether. Production should

check applicable state laws with respect to the employment of minors in these situations. The production shall consider any reasonable request from the minor, minor's parent/legal guardian, and/or Studio Teacher regarding the minor's proximity to any pyrotechnic special effect.

Use of Power Sources in Firing Pyrotechnic Materials

- To protect against accidental firing, all electrically fired pyrotechnic devices shall be shunted at all times prior to firing.
- Power sources for firing pyrotechnic special effects devices shall be restricted to isolated ungrounded batteries or individually designated ungrounded generators (below 5 kilowatts to comply with non-grounding requirements) used exclusively for firing purposes only.
- Commercial or house power shall not be used directly for firing purposes.
- There should be no wireless transmissions in the area where electrically fired pyrotechnic devices are being used without prior consultation with the Pyrotechnic Special Effects Operator in charge. In addition, caution should be taken to avoid extraneous or induced electrical currents from sources such as power lines, radar/microwave transmitters, electrical cable, lightning, static electricity, etc. Note that static electricity is especially a problem during periods of low humidity.
- Whenever practical, pyrotechnic special effects should be hard wired from the effect to the firing system. When remote control firing is planned, special precautions must be taken to prevent accidents, including but not limited to the following:
 - Having familiarity with the system being used and its limitations;
 - Performing a risk analysis in the event of premature firing or firing failure; and
 - Testing the firing system under the anticipated conditions of use.

Safety on the Set After Use of Pyrotechnic Material

- After each pyrotechnic event, no one shall enter the pyrotechnic area other than the Pyrotechnic Special Effects Operator in charge, or his or her designated representative(s), until it is declared safe. This includes testing, rehearsals, and filming.
- Appropriate fire watch, as determined by the AHJ, should be maintained after each pyrotechnic event.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #17

WATER HAZARDS

The following procedures are recommended for all water work, including, but not limited to ponds, rivers, lakes, swamps, bogs, oceans, pools, and tanks, or any other unduly wet work environment.

1. When working on a body of water is contemplated, the Producer should identify and make known prior to actual filming, all available knowledge regarding currents; and natural and man-made hazards, including sub-surface objects, underwater life and contamination. Upstream activities, such as dams, waste disposal sites, agriculture, chemical plant dumping sites, flash flood dangers, etc. should also be evaluated

If a potential safety hazard is found to exist, the Producer should take appropriate steps to mitigate the hazard.

2. Prior to personnel entering a body of water, a determination should be made that the water quality meets the applicable regulatory standards for “recreational full body contact.” This determination may be made by one or more of the following: Direct water sampling, contact local health authorities and/or detailed other knowledge of the uses and water sources supplying the body of water. Water sampling results and acceptable water quality criteria shall be made available upon request.

NOTE: When it is determined that a body of water is contaminated or hazardous, the contamination or hazard should be neutralized or the site shall be avoided.

3. Extreme care should be taken regarding dangerous marine life, including reptiles.
4. When necessary for personnel to work in fast-moving rivers, downstream safety pickup personnel and safety equipment should be stationed for downstream emergency rescue.
5. Where boating traffic is anticipated, all precautions, including those mandated by the appropriate authorities, will be enforced. (See Safety Bulletin #15, “Guidelines for Boating/Watercraft Safety for Film Crews.”)
6. All personnel scheduled for water work shall be notified in advance via the Call Sheet. Personnel who are uncomfortable working in or around water should notify their supervisor prior to that day’s call.

7. All personnel working in or around water shall be provided with the appropriate water safety devices. (See Safety Bulletin #7, "Recommendations for Diving Operations.")
8. The Producer should take steps to prevent hyperthermia (elevated body temperature) and hypothermia (reduced body temperature).
9. All personnel should be advised to keep all potential contaminants away from the water, including paints, thinners, repellents, gasoline, oils, etc.
10. Provisions for post-immersion washing should be available.
11. When necessary, the Producer should implement a plan to account for personnel in the water, such as a "buddy" or a check in/check out system.
12. Special care must be used whether AC or DC electricity is used in or around water. All electrical cables and lights in close proximity to water shall be properly secured to prevent tipping and falling. All wiring, electrical equipment and devices that will, or may be, subject to a submerged condition should be approved for underwater use, be watertight, have no exposed live connections and be constructed such that there is no shock hazard under any likely conditions of use. All applicable provisions of the National Electric Code should be followed. Local regulations may be more restrictive and should be consulted.
13. When lighting, electrical distribution, or any electrically powered equipment is used in close proximity to water or can make contact with water, the use of GFCI should be evaluated by a qualified person. This includes all areas where water hazards exist. When persons, wardrobe, props, or equipment are wet, the need for GFCI protection should be evaluated.

GFCIs should not be used on circuits where removal of power may create a greater hazard, such as airbags, decelerators, emergency egress lighting, etc.
14. All electrical connections should be made by, or under the supervision of, a qualified person.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #18

GUIDELINES FOR SAFE USE OF STUNT AIR BAGS, BOXES OR OTHER FREEFALL CATCH SYSTEMS

These guidelines are intended to provide recommendations on the safe use of stunt-related systems into which performers or objects fall.

1. The following shall be taken into consideration when choosing a system:
 - a) The type of stunt to be performed.
 - b) The height of the jump/fall.
 - c) The weight that will impact the device or system.
 - d) The number and sequence of falling performers or objects.
 - e) The area where the device or system will be placed.
 - f) Special effects, wardrobe, props or any other item that may affect the stunt.
 - g) Any other unusual conditions.
2. If the stunt is planned to take place at night, suitable lighting must be provided. Care must be taken to ensure that the performer(s) can adequately see the intended target and to ensure the set or safety lighting does not obscure the performers' vision.
3. The Stunt Coordinator should assess the fall area for cables, wiring, or building infrastructure, (i.e., fire escapes, landings, access ladders) that could impede the fall path.

The Stunt Coordinator should inspect the condition and structural integrity of the device or system. All devices and systems should be of good quality and appropriate for the task.
4. The Stunt Coordinator should inspect the fall area prior to and during the stunt.
5. The Performer and Stunt Coordinator will inspect the device or system prior to each use.
6. Inspections should include:

- a. Air Bags
 - Stitching, seams and vents
 - Fans
 - Power Source: Adequate power supply from an independent source, appropriate cable size and secured connections.
 - b. Boxes
 - Condition – dry, structural integrity for the application, empty
 - Assembled and oriented per the Stunt Coordinator's instructions.
 - c. Other Devices or Systems
 - Condition of integral components of any device or system used.
7. Qualified personnel should set up each device or system.
 8. Use a sufficient number of spotters, designated by the Stunt Coordinator, around each device or system to ensure safety.
 9. The duties for ground-based spotters should include, but are not limited to the following:
 - a) Protecting performers, through the use of individual crash pads, peripheral devices or other equipment, in case the performers become misaligned during the fall.
 - b) Observing any unusual changes in atmospheric conditions, particularly wind and effects-related debris, which may affect the performer's fall.
 - c) Lifting and moving the device or system should the performer become misaligned during the fall.
 - d) Continuously inspecting all power operated equipment.
 - e) Ensuring no unnecessary personnel or equipment are within the fall area.
 - f) Being aware of location peculiarities that may affect the performer's fall.
 10. Implement additional pre-planning if two performers are to use the same device or system at the same time. For example, it may be problematic when the two performers' weights are significantly different when using an air bag.
 11. Prior to the stunt and after any change or modifications to the stunt sequence, the First Assistant Director shall conduct a safety meeting at the site with all

personnel involved.

12. Conduct a walk-through or dry run of the stunt sequence with all appropriate personnel on the day of the stunt. Assure that all have a clear understanding of the intended action and their duties.
13. Communicate to all appropriate personnel the method and meaning of abort signals. Discuss primary and/or back-up signals (e.g., radios and hand signals).
14. Allow only safety personnel and personnel necessary for assisting, directing, filming or performing the stunt in the stunt area
15. The performer(s) should have the necessary experience and knowledge to perform the particular stunt sequence.
16. Fall protection for all other personnel working at height is required.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #19

RECOMMENDED GUIDELINES FOR THE USE OF OPEN FLAME ON PRODUCTION

These guidelines are intended to give recommendations on the use of open flame on production. This Safety Bulletin does not apply to full or partial body burns, fire breathing, or other fire performance work (See Safety Bulletin #4 “Stunts”).

ALL USE, HANDLING, STORAGE AND TRANSPORTATION OF BULK FUEL, COMPRESSED GAS CYLINDERS AND OTHER MATERIALS USED TO CREATE OPEN FLAME SHALL BE IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

Pre-Production/Planning

- When torches, candles, fireplaces or other open flames are used on set, such use shall be under controlled conditions with due regard for the safety of all involved.
- A responsible person (such as a Special Effects Operator in charge or other qualified individual) shall be designated for the daily handling, placement, safe use and securing of any open flame devices.
- The Production Company or Studio shall make sufficient advanced notification of the use of open flame to all appropriate departments in order to safely plan the sequences. Any performer who may be working around an open flame shall be notified.
- Prior to use, any required licenses and/or permits for open flame shall be obtained from the appropriate Authorities Having Jurisdiction (AHJ).
- Prior to work with open flame, productions must develop emergency procedures and contingency plans, including identifying emergency fire suppression equipment, venting of low lying areas and personnel needs. All equipment shall be checked to verify that it is in good operating condition. Individuals using this equipment must have proper training in its use and limitations.
- The need for personal protective equipment (PPE) should be identified during the planning stage.
- Special effects personnel must inform the Transportation Coordinator as to the types of bulk fuel and/or compressed gas cylinders that will be transported.

Vehicles must be properly placarded when required by Federal or State law. All vehicles transporting bulk fuel or compressed gas cylinders shall have an inventory of the materials being transported or stored readily available. Drivers must be qualified to transport these materials.

- Sets, equipment, props, wardrobe, make-up, wigs, hair supplies, etc., that will be in close proximity to open flame must be prepared accordingly and/or should be made of flame retardant material. All sets, equipment, props, wardrobe, wigs, etc., must be made available in advance to the designated responsible person for evaluation, to establish placement, and if necessary, for testing.

Clothing and Personal Protective Equipment

- Cast and crew in close proximity to open flame should wear appropriate protective clothing. Depending on the hazards involved, this clothing should include appropriate closed-toe footwear, long pants, and a long-sleeved shirt made of 100% cotton or material which provides equal or greater protection.
- Cast and crew must be notified by the designated responsible person when there is potential for exposures to open flame. PPE must be provided as appropriate for the hazard(s) involved and considerations must be made for head, hand, eye, ear and respiratory protection. Depending on the hazards involved, the AHJ may require full fire turnout gear and Self-Contained Breathing Apparatus (SCBA). These guidelines will also apply to performers when appropriate. All users must have proper training in the use and limitations of such PPE.

Fire Protection

- All stationary open flame devices should be firmly secured.
- Flammables and combustibles, including bulk fuel, compressed gas cylinders and highly concentrated dust effects, shall be kept a safe distance from open flame and other sources of ignition. Where required, such materials shall also be stored in approved, properly labeled containers.
- All lines and fittings used in the delivery of fuel gas to open flame devices shall be appropriate for the fuels being used, (i.e., natural gas usage requires different hoses and fittings than liquid petroleum gas).
- “No Smoking” signs shall be posted in all areas where fuel and compressed gas cylinders are stored and handled.
- Sufficient fire suppression equipment (such as charged extinguishers and fire

hoses) must be manned, ready for use and placed at an appropriate safe distance from the open flame during testing, rehearsal and filming.

- Designated personnel performing fire suppression activities during testing, rehearsal and filming must be properly clothed and wear appropriate PPE.

Personnel Using and Handling Open Flame

- Personnel working with open flame should be dressed in appropriate clothing to protect them from potential hazards. Depending on the hazards involved, clothing should consist of appropriate closed-toe footwear, long pants, and a long-sleeved shirt made of 100% cotton or material which provides equal or greater protection. PPE considerations must be made for head, hand, eye, ear and respiratory protection. Depending on the hazards involved, the AHJ may require full fire turnout gear.
- Intoxicating liquids, drugs and other controlled substances (except for prescription drugs not impairing the user's judgment and motor functions) shall not be used by any person involved in open flame effects at any time during transportation, set-up, use or removal.
- Personnel working with or around open flame must be given sufficient time to safely perform the work (including the transporting, storing, creating, rigging, igniting, striking and extinguishing of all open flame devices and materials). While conducting such duties, personnel should not be rushed, interrupted or distracted from focusing on their work.
- The rigging of any type of open flame device to a performer shall be done by a qualified special effects operator, with the consultation of the stunt coordinator if applicable.
- When igniting and maintaining an open flame, it must be continuously observed and controlled by the designated responsible person, unless equal means of observation are used.

Awareness

- When using open flame on any set, notification shall be given to personnel by way of the call sheet, or other suitable means. The call sheet should also state the type of open flame work that is planned.
- Before any open flame effects or potentially hazardous sequence is to be performed, all persons involved shall be thoroughly briefed at a safety orientation

meeting on the site.

- The safety orientation meeting shall include an “on-site walk-through” and/or “dry run” with the designated responsible person and all other persons involved in the event, including Stunt Coordinator if applicable. PPE should be in place at that time.
- If practical and upon a reasonable and timely request, the designated responsible person may conduct a test of the open flame when it is in the vicinity of cast and crew.
- If at any time a significant change in open flame use becomes necessary, the First Assistant Director will again call all persons involved in the event to another meeting to confirm everyone understands the proposed change(s).

Emergency Procedures

- Emergency procedures and contingency plans, including appropriate signs and signals and authority to abort the shot, shall be specified prior to engaging in any open flame work.
- Before the use of open flame on set, the First Assistant Director, or designee, shall clearly announce to all persons the location of exits, the primary escape route and alternate escape routes. Escape routes must provide a clear and unobstructed passage to a designated safe area.
- Each person should ensure their designated escape routes are clear and remain accessible. Any person who is unsure of their designated escape routes should check with the First Assistant Director and learn of the escape routes upon entering the work area.
- In the event of an emergency, only those designated with emergency response roles should enter the open flame area.

Authorized Personnel in the Open Flame Area

- Access to areas where open flame is rigged or present should be limited to authorized personnel only. All other personnel shall remain at a designated safe distance. If needed to prevent unintentional entry into hazardous areas, warning signs should be posted and/or other appropriate precautions taken.
- Prior to using open flame with minors present, key production personnel, such as the Director, First Assistant Director, designated responsible person, Stunt

Coordinator and safety professional, should confer with the minor, minor's parent/legal guardian and Studio Teacher to review and discuss the planned activity. The production shall consider any reasonable request from the minor, minor's parent/legal guardian, and/or Studio Teacher regarding the minor's proximity to any open flame.

Safety on the Set After Use of Open Flame

- After each use of open flame, no one shall enter the area other than the designated responsible person(s), until it is declared safe. This includes testing, rehearsals and filming.
- Appropriate fire watch, as determined by the AHJ, should be maintained after each open flame event.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #20

GUIDELINES FOR THE USE OF MOTORCYCLES

1. The motorcycle operator should hold a current, valid motorcycle operator's license. The operator should be familiar with the techniques for safely performing the requirements of the sequence to be photographed, taking into consideration the terrain, driving surface and other conditions.
2. Extreme caution in the use of motorcycles should be exercised at all times both by the operator and by persons in the vicinity. No persons should be in the vicinity unless their assignment requires them to be there.
3. Protective clothing and equipment such as a helmet, gloves, etc., should be worn at all times, the only exception being scene requirements while actually being photographed. In such situations, protective clothing should be worn under the costume if possible.
4. Motorcycles, ramps and other equipment shall be examined prior to use to determine if they are in proper operating condition.
5. The sequence to be photographed, including ramps, jumps, lay-downs, endos, and other potential hazards, should be clearly set forth and discussed by all persons who are immediately involved.
6. All picture motorcycles shall be equipped with a grounded cut-off switch (deadman switch). When a stunt is to be performed, this switch shall be attached to the handlebars and the wrist of the operator in such manner that the engine shuts off when the rider separates from the motorcycle.
7. A person qualified under the circumstances to administer medical assistance on an emergency basis shall be present or readily available at all rehearsals and all performances during which planned potentially hazardous motorcycle riding and motorcycle stunts are performed.
8. Picture motorcycles are not to be used for transportation. No one other than the designated operator should be permitted to operate or ride on a motorcycle unless the rider is required in the sequence to be photographed.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #21

GUIDELINES FOR APPROPRIATE CLOTHING AND PERSONAL PROTECTIVE EQUIPMENT

The purpose of this Safety Bulletin is to provide guidance in the selection of appropriate clothing and certain types of Personal Protective Equipment (PPE).

This bulletin does not include or apply to clothing or PPE for persons subject to the bloodborne pathogens standard (Safety Bulletin #24, "Cal-OSHA Safety Requirements for Handling of Blood and Other Potentially Infectious Materials"). Additionally, personnel working with or around pyrotechnics and/or open flame on production should refer to Safety Bulletin #16, "Recommended Guidelines for Safety with Pyrotechnic Special Effects" and/or Safety Bulletin #19, "Recommended Guidelines for the Use of Open Flames on Production" for guidance.

Suitable and effective PPE shall be provided and used where an activity presents a significant risk to health and safety and the risk cannot be reduced by any other means.

In particular, employers shall inform employees engaged in any of the following activities of specific PPE requirements by OSHA and/or other authorities:

- Working with electricity (see Safety Bulletins 23, 23A, 23B and 23C)
- Working with hazardous materials
- Welding or cutting
- Working around boats and water (see Safety Bulletin 15)
- Working with special effects, pyrotechnics, open flames, or hazardous objects (see Safety Bulletins 1, 2, 12, 16, 19, 27, 30, and 31)
- Construction, including alteration, painting, repairing, maintenance, renovation, removal or wrecking (see Safety Bulletin 39)
- Working around traffic (see Safety Bulletins 8, 8A, 8B, 8C, 20, 28, and 40)
- Working at heights

PPE must not significantly increase other risks by reducing visibility or interfere with other safety measures. Employees must be given appropriate instruction and training

on how to use any PPE issued. Once issued, PPE must be worn as required and any defects must be reported to the employer.

CLOTHING

- Clothing determined by the employer to be appropriate for the work being done shall be worn.
- Jewelry, loose sleeves, exposed shirt tails, neckties, lapels, loose cuffs or other loose clothing shall not be worn around machinery in which it might become entangled.
- Long hair shall be tied back when working around machinery and/or equipment with moving parts.
- Costumes should be selected and prepared in anticipation of the potential risks and hazards.

FOOT PROTECTION

- Appropriate foot protection shall be worn by employees who may be exposed to foot injuries from hot surfaces, corrosive materials, hazardous substances, falling objects, crushing or penetrating actions which may cause injuries, or who are required to work in abnormally wet or cold locations.
- Personnel working around open flame and pyrotechnic material must always wear appropriate closed-toe footwear.

HAND PROTECTION

- Hand protection (gloves) shall be worn by employees whose work exposes them to potential injuries, such as exposure to cuts, burns, harmful physical hazards, chemical agents or electrical hazards which are encountered and capable of causing injury or impairments.
- Hand protection should not be worn if there is a danger of it becoming entangled in moving machinery.
- Hand protection should be appropriate for the type of exposure.
- Gloves should be properly discarded when they become worn, contaminated, saturated or otherwise no longer usable.

EYE AND FACE PROTECTION

- Employees working where there is a risk of receiving eye injuries shall wear appropriate eye or face protection.
- Side shield protection shall also be utilized when employees are exposed to the risk of flying objects/particles/materials entering the eyes from the side.
- Suitable screens or shields isolating the hazardous exposure may be used if they provide adequate safeguarding for nearby employees.
- Specialized forms of eye protection are required for certain types of work, such as welding.
- The use of sunglasses or prescription eye glasses may not provide appropriate eye protection.

HEARING PROTECTION

- When operating or near loud equipment, amplified sound, pyrotechnics or gun fire, consideration should be given to wearing appropriate hearing protection suitable for the hazards encountered.

HEAD PROTECTION

- Employees exposed to flying or falling objects and/or electric shock and burns shall be safeguarded by means of approved head protection.
- Operation of vehicles, such as motorcycles, all terrain vehicles, bicycles, etc., may require the use of a helmet. (see Safety Bulletins 20 and 40)

SAFETY VESTS

Federal, State and local laws require safety vests to be worn and visible when working on active public roadways.

Safety vests shall always be properly worn by employees under the following circumstances:

- During set-up, rigging, filming or striking activities performed in or near an active public roadway, unless production has obtained full closure and control of the

roadway. **NOTE:** Alternative safety considerations should be made when wardrobe requirements would prevent cast from wearing safety vests while working in or near an active public roadway without full closure and control.

- When directing traffic or responsible for lockup during partial lane closures where intermittent traffic control is used to control traffic.

Other conditions and locations may require the use of safety vests, such as railroads, subways, construction sites, airports, docks, etc.

The color of the safety vests must be either fluorescent orange-red or fluorescent yellow-green. The retro-reflective material shall be orange, yellow, white, silver, yellow-green or a fluorescent version of these colors.

RESPIRATORY PROTECTION

The need for respiratory protection is unique to the hazards of the workplace. Consult your employer regarding their specific respiratory protection policy.

SANITATION OF PPE

- PPE shall be kept clean and in good repair.
- PPE not capable of being easily cleaned or disinfected shall be disposed of after use.
- PPE must be properly stored when not in use.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #22

GUIDELINES FOR THE USE OF ELEVATING WORK PLATFORMS (SCISSOR LIFTS) AND AERIAL EXTENSIBLE BOOM PLATFORMS

(Also see "Addendum A" – Power Line Distance Requirements)

1. These guidelines are applicable to vertically operated elevated work platforms or "Scissors Lifts" and boom mounted, telescoping and rotating, elevating work platforms, such as "Condors."
2. Only persons trained in the safe use of elevating work platforms are authorized to operate these devices. The Industry-Wide **Safety Pass Training Course**, sponsored by Contract Services Administration Training Trust Fund (CSATTF), provides safety training for employees. Successful completion of the training will be reflected on Online Roster, and an employee will receive a certificate stamp from CSATTF in his or her **Safety Passport**.
3. Aerial/elevating equipment is designed to position employees and tools at the worksite. Within manufacturer's defined limits, lighting, camera and diffusion equipment may be rigged in the basket; in such case additional training is required, and specific aerial/elevating equipment is required for this procedure. Consult the manufacturer's "Operators Supplemental Manual for Authorized and Trained Set Lighting Technicians and Studio Grips."

IF THE MANUFACTURER DOES NOT PROVIDE WRITTEN GUIDELINES, DO NOT RIG BASKET WITH THE EQUIPMENT.

4. Equipment shall be inspected prior to operation for satisfactory condition, damage and defects. This shall include all operational controls, which shall be in proper functioning condition.
5. Operators shall report all discrepancies to their supervisors.
6. Operators shall consider the job to be performed and shall evaluate the job site location for potential hazards.

This equipment shall not be operated within **10 feet** of an energized, high voltage source unless danger from accidental contact with that source has been effectively guarded against.

The operation of aerial devices/work platforms OVER energized, high-voltage sources of any sort is prohibited at all times.

7. Appropriate measure should be taken to ensure that the job site's surface is stable and will support the equipment and that there are no hazardous irregularities or accumulation of debris, which might cause a moving platform to overturn.

Survey the route to be traveled, checking for overhead obstructions; traffic; holes in the pavement, ground, or shoulder; ditches, slope of road, etc. Operation of these devices on inclined surfaces shall NOT exceed manufacturers' ratings.

Wheel chocks shall be used on inclined surfaces.

Aerial/elevating equipment is designed to be used on "firm level surfaces only." Within manufacturer's defined limits, cribbing can be used to create a firm level surface. Training is required for the construction and use of such cribbing. Specific aerial/elevating equipment is required for this procedure. Consult the manufacturer "Cribbing Instructions" and/or "Supplemental Manual for Authorized and Trained Studio Technicians for Cribbing."

IF THE MANUFACTURER DOES NOT PROVIDE WRITTEN GUIDELINES, DO NOT USE CRIBBING WITH THE EQUIPMENT.

8. An employee, while in an elevated aerial device, shall be secured to the boom, basket or tub of the aerial device through the use of a safety belt, body belt or body harness equipped with a safety strap or lanyard. (Cal-OSHA Title 8, Subchapter 7, Group 4, Article 24, "Elevating Platforms and Aerial Devices.")
 - (a) The personal fall protection equipment shall be securely attached to the boom basket, tub or platform to an approved attachment point.
 - (b) Safety belts/body belts are prohibited for use in personal fall arrest systems, but may be used as part of a fall restraint or positioning device system.
 - (c) Safety belts/body belts used as part of a positioning device system shall be rigged such that an employee cannot free fall for more than 2 feet.
 - (d) A body harness may be used in a personal fall restraint, positioning or fall arrest system. When a body harness is used in a fall arrest system, the lanyard shall be rigged with a deceleration device to limit maximum arresting force on an employee to 1,800 pounds, prevent the employee from hitting any levels or objects below the basket or platform, and shall limit free fall to a maximum of 6 feet.

- (e) Attaching the personal fall protection equipment to an adjacent pole, structure or equipment while working from the basket, tub or platform is **NOT PERMITTED.**
 - (f) Objects or production equipment, which could fall from the aerial basket/platform, shall be secured with an adequate safety lanyard.
9. The basket, tub or platform shall **not** be loaded beyond its rated capacity.
10. Ladders, planks or other objects shall NOT be placed in, or on top of the platform or guardrail to gain greater height. Employees shall NOT sit or climb on the edge of the basket/platform.
11. "Climbers" (pole climbing equipment) shall NOT be worn while performing work from an aerial device. The risk of falling while climbing in or out of the basket is too great.
12. Workers shall NOT work from aerial work platforms when:
- (a) Exposed to extreme weather conditions (thunderstorms, heavy rain, extreme heat or cold) unless provisions have been made to ensure protection and safety of the workers.
 - (b) Winds exceed 25 miles per hour.
13. Aerial baskets, tubs or platforms shall NOT be supported by, or attached to, any adjacent structures.
14. Where moving vehicles or pedestrian traffic is present, flags, signs, traffic cones or other means of traffic control, shall mark the work area around the aerial equipment.
15. The braking system shall be set when elevating employees and when wheel chocks are used.
- Never leave this equipment unattended if you have stopped it on a ramp, grade or incline until you have chocked at least one tire.
- NOTE: These vehicles will creep if not on a level that can be set to prevent creeping. Avoid stopping on a grade if possible.**
16. Outriggers must be on solid footing and shall be equipped with hydraulic holding valves or mechanical locks at the outriggers.

17. Operate all controls slowly to ensure smooth platform movement.
18. DO NOT use an aerial device as a welding ground. DO NOT weld on an aerial device without first disconnecting both positive and negative battery terminals. Refer to manufacturer's equipment manual.
19. DO NOT attempt to raise platform/basket beyond its rated maximum height or reach.
20. "TOWERING" (traveling with a worker in the basket) is NOT permitted.
21. Aerial platforms, when in operation, shall be solely under the control of the operator in the basket. At no time shall the equipment be moved, lowered, or otherwise controlled from the secondary (ground control) panel unless the operator in the basket makes a request that it be done, or the operator is ill or otherwise incapacitated.

Switching controls and moving the equipment in any manner without the consent of the operator while the operator is in the basket is prohibited.

22. Boom-mounted telescoping and rotating aerial platforms shall NOT be used as a crane (objects slung below the basket).
23. When moving scissor lift-type platforms, operators shall first position themselves on board the platform, and then conduct all moving operations from that position.
24. When moving this equipment forward, do not engage the REVERSE switch until the vehicle has come to a complete stop. Use the REVERSE only as an emergency measure should the equipment continue to crawl after releasing the stop switch.

Use the FORWARD only as an emergency measure should the equipment continue to crawl after releasing the stop switch.

CAUTION: Do not use either of these emergency measures if doing so will endanger anyone in the vicinity.

These are only guidelines. Refer to the Manufacturer's operating manual on each type of equipment you operate. Operational differences, location of controls, safety devices and load capacity may vary to each model or equipment manufacturer.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #22

GUIDELINES FOR THE USE OF ELEVATING WORK PLATFORMS (SCISSOR LIFTS) AND AERIAL EXTENSIBLE BOOM PLATFORMS

"ADDENDUM A" – POWER LINE DISTANCE REQUIREMENTS

AVOID POWER LINES. This includes, but is not limited to, the placement of equipment such as ladders, scaffold, booms, forklifts, aerial lifts, sets, cranes or other rigging.

At a minimum, when working in California follow California Code of Regulations, Title 8, Section 2946, and Tables 1 and/or 2 below. Please note the difference of activities allowed in the two tables.

Table 1 - California

General Clearances Required from Energized Overhead High-Voltage Conductors

The operation, erection, handling or transportation of tools, machinery, materials, structures, scaffolds, or any other activity where any parts of the above or any part of an employee's body will come closer than the minimum clearances from energized overhead lines as set forth in Table 1 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	6
over 50,000.....345,000	10
over 345,000.....750,000	16
over 750,000.....1,000,000	20

Table 2 - California

Boom-type Lifting or Hoisting Equipment Clearances Required from Energized Overhead High-Voltage Lines

Boom-type lifting or hoisting equipment: The erection, operation, or dismantling of any boom-type lifting or hoisting equipment, or any part thereof, closer than the minimum clearances from energized overhead high-voltage lines set forth in Table 2 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	10
over 50,000.....75,000	11
over 75,000.....125,000	13
over 125,000.....175,000	15
over 175,000.....250,000	17
over 250,000.....370,000	21
over 370,000.....550,000	27
over 550,000..... 1,000,000	42

When working outside of California in the United States, follow the Code of Federal Regulations, Title 29, Part 1910, Section 333, and follow Table 3 below, unless the state in which you are working has separate standards, which can be accessed on the state's OSHA website. Production should always consult the proper authority (federal and/or state) to ensure compliance with applicable laws and regulations for the jurisdiction in which they are working.

Table 3 – Federal

Federal Clearances Required When Working On or Near Exposed Energized Parts

When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
50,000 or below	10
over 50,000	10 feet plus 4 inches for every 10,000 volts over 50,000 volts

Your employer may choose to set greater clearance requirements than listed above. If there are questions or concerns, consult with your studio safety representative for more information.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #23

GUIDELINES FOR WORKING WITH PORTABLE POWER DISTRIBUTION SYSTEMS AND OTHER ELECTRICAL EQUIPMENT

Also refer to Safety Bulletin #23: Addendum A – "Power Line Distance Requirements"
Addendum B – "Basic Electrical Safety Precautions for Motion Picture and Television Off Studio Lot Location Productions"
Addendum C – "Working With 480 Volt Systems"
Addendum D – "Common Motion-Picture/Television Tasks and Associated Personal Protective Equipment"
Addendum E – "Guidelines for Meeting National Electrical Code (NEC) Grounding Requirements for Portable Generators Supplying Portable Equipment in the Motion Picture and Television Industry"

All electrical systems and electrically energized equipment are potentially hazardous, whether Alternating Current (AC) or Direct Current (DC), whether 50 volts, 120 volts or higher.

Only employees authorized by the employer to do so shall connect, disconnect, or operate electrical distribution systems. Prior to energizing any systems, ensure that all personnel are clear of all electrical equipment connected to the system.

This Safety Bulletin is intended to identify potential hazards and to recommend some specific safe practices for trained personnel. This Safety Bulletin is not intended as a design specification or as an instruction manual for untrained persons.

The City of Los Angeles Department of Building and Safety has published **BASIC ELECTRICAL SAFETY PRECAUTIONS FOR MOTION PICTURE AND TELEVISION OFF STUDIO LOT LOCATION PRODUCTIONS**. Those guidelines are included as Addendum B to this Safety Bulletin.

The County of Los Angeles Fire Department has published **GUIDELINES FOR MEETING NATIONAL ELECTRICAL CODE (NEC) GROUNDING REQUIREMENTS FOR PORTABLE GENERATORS SUPPLYING PORTABLE EQUIPMENT IN THE MOTION PICTURE AND TELEVISION INDUSTRY**. Those guidelines are included as Addendum E to this Safety Bulletin.

This document serves as minimum guidelines to the use of Portable Power Distribution Systems and other electrical equipment. Local Authorities Having Jurisdiction ("AHJ") may have requirements that are more restrictive. Always adhere to the National Electrical Code ("NEC"), all applicable Federal, State, and Local laws and regulations, and the determinations of the AHJ.

GENERAL SAFETY MEASURES

1. Plugging and Unplugging Electrical Equipment

Visually inspect the condition of the plug, cable, and equipment for any signs of excess wear, frayed cables or exposed current-carrying parts. **DO NOT USE** any equipment that is damaged.

All grounded equipment should be tested for continuity between the ground pin on the plug and the metal parts of the equipment before it is put into service. In addition, all cables should be tested for continuity of the ground, neutral and phase conductor.

Verify all equipment is in the OFF position prior to plugging or unplugging to avoid creating an arc at the receptacle. Wear protective gloves to avoid injury from a possible flash created by a short-circuit in the equipment.

Do not pull on the cord when unplugging equipment. This can cause one or more of the wires to pull out of its termination in the plug. Always grasp the plug firmly to unplug.

When using both AC and DC systems in the same location, each system must be clearly identified as AC or DC. Always verify that you are not plugging AC equipment into DC systems or DC equipment into AC systems.

2. Replacing Fuses and Circuit Breakers

Over-current protection is one of the most vital parts of the electrical circuit since improper over-current protection leads to fire and/or damage to equipment.

Before attempting to replace a fuse, turn off and verify the circuit is de-energized.

Fuses should only be replaced by qualified personnel. Fuses come in a wide variety (e.g., one-time, time-delay, slow-blow, dual-element, etc.). When replacing a blown fuse, be sure to select a fuse of proper voltage, interrupting capacity, and amperage for the application.

Over-current protection must be sized according to the ampacity of the conductors and equipment served as per the NEC Table 400.5A or B for flexible cords and cables.

Disconnect switches still contain energized parts within the switch even in the OFF position. Because these disconnect switches may contain more than 400A and up to 480V, the use of properly-rated Personal Protective Equipment (PPE), including gloves and eye protection, is required. Pliers and other tools not

designed for fuse replacement shall not be used. The use of insulated, specialized fuse-replacement tools is required when replacing fuses in disconnect switches.

An overloaded circuit or equipment failure will cause circuit tripping or blown fuses. NEVER use oversized fuses, circuit breakers, copper slugs or tubing to replace fuses.

Follow proper over-current protection per the NEC.

3. Power Tools

When using power tools that are not double-insulated or battery powered on construction sites, Ground Fault Circuit-Interrupter (GFCI) protection is required. Test the GFCI device before use to verify it is functioning properly.

Insulating platforms, rubber gloves, and rubber mats provide an additional safety factor when working with electrically powered tools in damp locations.

ELECTRICAL SYSTEMS SAFETY MEASURES

1. Rigging a System

Use proper lifting techniques when lifting or moving heavy objects, such as cable or lighting equipment. Do not step directly on equipment such as cable. Cables can roll underfoot causing a slip or fall hazard.

The electrical system should be de-energized while it is being rigged. Before energizing the system, verify that the system is free from short circuits and/or crossed wires and verify all connections are properly mated.

2. Connecting Order of Single Conductors

All single conductor connections shall be made in the following order:

- 1st - Grounds (all AC, and on DC where used)
- 2nd - Neutrals
- 3rd - Phase Conductors (Hots)

Disconnect in the reverse order:

- 1st - Phase Conductors (Hots)
- 2nd - Neutrals
- 3rd - Grounds (all AC, and on DC where used)

All multi-pole connectors used on AC shall provide for "first make, last break" of the ground pole.

3. **Color Coding**

Portable cables and conductors shall be color coded in accordance with the NEC.

Neutral conductors shall be identified by marking at least the first 6 inches of both ends of each length of cable with white or gray.

Grounding conductors shall be identified by marking at least the first 6 inches of both ends of each length of cable with green or green with yellow stripes.

Phase conductors (hots) shall be identified by marking at least the first 6 inches of both ends of each length of cable with any color other than green, green with yellow stripes, white, or gray.

Commonly used colors for phase conductors (hots) on 120V systems are red, black and blue. Commonly used colors for phase conductors (hots) on 480V systems are brown, orange and yellow.

Where more than one voltage system exists within the same premises, each system conductor shall be identified by the system to which it is connected. This can be done by separate color coding, marking tape, tagging, or other equally effective means.

Where color coding is used to distinguish between different lengths or owners of cable, it must be done in a way that will not create confusion.

Caution should be used when using the color yellow as it may appear white under sodium lighting.

4. **Devices and Cables**

Cables and devices should be protected from foot and vehicle traffic damage.

Electrical distribution systems should be elevated in such a manner that they will not come in contact with running or standing water.

When it is necessary to have electrical distribution systems and devices which come into contact with water, such systems shall be designed and listed for use in water.

When lighting, electrical distribution, or any electrically powered equipment is used in close proximity to water or can make contact with water, the use of GFCI should be evaluated by a qualified person. This includes all areas where water hazards exist. When persons, wardrobe, props, or equipment are wet, the need for GFCI protection should be evaluated.

GFCIs should not be used on circuits where removal of power may create a greater hazard, such as airbags, decelerators, emergency egress lighting, etc.

Alligator clips or clamps shall not be used in conjunction with any electrical system or equipment.

Two-wire, non-polarized, DC-plugging boxes, paddle plugs, and porcelain boxes are not permitted on AC systems. This applies even with the use of an external ground.

All gang boxes supplied by a connector plug with an ampere rating higher than the receptacles in the gang box shall contain fuses or circuit breakers sized according to the ampere rating of those receptacles.

All AC multi-pole connectors shall be grounded and polarized.

All cable shall be listed by an approved testing laboratory. Only types "G," "W," or Flexible Stage and Lighting Power Cable (EISL, SC, SCE, SCT) are acceptable for single-conductor feeder cables.

Single-conductor connectors used on phase conductors and neutrals shall be connected to the conductors by means of solder, set-screw, or crimping. Flexible cords and cables shall be connected to devices and to fittings so that tension is not transmitted to joints or terminals.

Equipment Grounding Conductor connection devices or fittings that depend solely on solder shall not be used.

5. Guarding of Energized Parts

Any exposed or non-insulated part of the distribution system must be considered as energized until verified otherwise. and protected from accidental contact. Any point of danger, including the arc flash boundary, should be protected, shielded or barricaded to prevent any possible entry by unauthorized persons or objects.

6. Portable and Vehicle Mounted Generators

Approach to exposed connections on portable and vehicle mounted generators should be physically restricted or barricaded to non-qualified persons. Any

generator with exposed busbars or other energized parts should be guarded as described in Section 5 of this document.

Read thoroughly any operational manuals and complete appropriate forms and logs provided with the generator. Only a qualified operator designated by the employer shall operate a generator.

A fire extinguisher specific for the generator unit must be present and readily accessible outside the generator enclosure. Refer to studio policy on employee use of fire extinguishing equipment.

The generator should have as much open space as possible on all sides to allow maximum ventilation and minimum interference. It is important that all generating sets be protected from the elements and from unauthorized access.

The following precautions must be taken when re-fueling the generator:

- The generator must be off.
- A listed fuel nozzle must be used to prevent static electricity build-up.
- Connect a ground bond from the frame of the re-fueler to the frame of the generator.

Make sure exhaust fumes are ventilated away from enclosed areas, personnel, and air intake ducts, such as trailers and buildings. Be aware of hot surfaces when working around a generator.

Portable AC generators shall comply with the NEC, Section 250.34.

Vehicle mounted generators mounted on the same frame as the equipment they are supplying shall be completely insulated from earth by means of rubber tires, rubber mats around metal stairways and rubber mats under any type of lift gate or jacking device. Metal supports for trailers shall be insulated by means of wooden blocks. Safety tow chains shall be secured so as to not touch the ground. If complete insulation is not possible, a grounding electrode system shall be installed per the NEC, Section 250.52.

Earth grounding of portable generators shall comply with applicable sections of Article 250 of the NEC as determined by the AHJ.

Portable generators that produce both AC and DC are not producing pure direct current, and must not be used in DC mode around water. GFCIs will not function when supplied by DC.

7. Generator Grounding Connections

Generators shall be grounded in accordance with Article 250 of the NEC.

Fire hydrants, interior metal pipes, fixtures, standpipes or metal frames of buildings SHALL NOT BE USED as a grounding connection for mobile generators, unless approved by the AHJ.

8. **Portable Transformers**

Portable transformers shall be used, grounded, and bonded in accordance with the NEC, all applicable Federal, State and Local laws and regulations, and the determinations of the AHJ.

The ground of all transformers shall be connected to the ground of the supplying power source.

Proper clearance and ventilation shall be maintained around the transformer.

Verify the ground is bonded to the neutral inside the transformer.

9. **Bonding of Separately Derived Power Sources**

The grounds of separately derived power sources must be bonded together when located within 20 feet of each other or when one power source supplies equipment that may come within 20 feet of equipment supplied by another power source. When filming on interior sets this distance may be reduced to 12 feet.

When supplemental power is provided to a building (where allowed) and/or is supplying additional power inside the building, the ground of the supplemental power source must be bonded to the building's grounding electrode system.

The size of the bonding conductor(s) shall not be less than that given in NEC Table 250.66.

10. **Grounding Direct-Current Equipment**

DC-supplied equipment operating over 150 volts shall be grounded. Care should be taken to provide a barrier, either of material or space, between grounded and non-grounded devices.

When using 2-wire, ungrounded equipment on DC, verify there are no grounded metal surfaces, such as green beds, pipe grids or scaffolding, within 12 feet of the DC equipment.

11. **Grounding Alternating-Current Systems and Equipment**

All AC-supplied systems and equipment used by the motion picture and television industry shall be grounded.

All AC-supplied equipment shall have all non-current-carrying metal parts grounded by a continuously connected, equipment-grounding conductor back to the source of power. This conductor shall be sized according to NEC Table 250.122 .

12. Connecting to Premises/House Electrical Power Source (tie-in)

Connecting to a premises/house electrical power source (tie-in), such as a panel board or switchboard, can create the risk of a serious or fatal accident. Such connections shall only be made by a qualified person. Before performing this work, check with the NEC, all applicable Federal, State and Local laws and regulations, and the determination of the AHJ.

At a minimum, the AHJ will require that a qualified person possess:

- The skills and techniques necessary to distinguish exposed live parts from other parts of electrical equipment.
- The skills and techniques necessary to determine the nominal voltage of exposed live parts.
- The knowledge of working clearance distances specified for various voltages to which personnel will be exposed, including arc-flash and shock-protection boundaries.
- The knowledge of lockout/tagout procedures and access to lockout/tagout equipment.
- The knowledge of proper use of personal protective equipment, insulating and shielding materials, and insulated tools.
- The knowledge to not wear jewelry, conductive clothing, and other unsuitable synthetic apparel when working on or around electrical equipment.
- The knowledge to select, inspect and use appropriate electrical test equipment.
- The necessary credentials and/or the ability to obtain required permits.
- The knowledge to perform proper emergency procedures.

Unless the electrical system of a building has been properly de-energized, locked out/tagged out, and verified to be de-energized, assume the electrical panel is energized.

Energized parts with which a person could make contact must always be de-energized, unless:

1. The de-energization of the system is not possible, due to the design of the equipment.
2. The de-energization of the system will cause an additional hazard, such as deactivation of emergency systems.
3. The electrical system supplies circuits that form an integral part of a continuous process that would need to be completely de-energized in order to work on the panel or circuit.

When unable to de-energize the circuit, and where the possibility exists of personnel coming in contact with energized equipment, equipment shall be properly insulated as described in Section 5 of this bulletin.

The use of an in-house “Energized Electrical Work Permit” system as described in NFPA 70E is recommended to determine the necessity of the energized work and to ensure that all parties involved are aware of the hazards associated with connecting to an energized power source, including potential hazards to other systems that are connected to the power source.

Connecting to an energized system is strongly discouraged. If work on energized electrical equipment is necessary, at a minimum, you must follow the arc-flash hazard-analysis label (if present) to determine the hazard/risk category and associated PPE required to prevent injury or death. In lieu of a label, consult and follow NFPA 70E Table 130.7(C)(9) requirements. **Remember, always consider exposed electrical parts to be “energized” until you have verified they have been de-energized and locked out/tagged out.**

Obtain an electrical permit from the appropriate AHJ before such work is done. Any connection to a premises/house electrical power system shall be performed by a qualified in-house electrician. If a qualified in-house electrician is not available, the work shall be performed by a qualified electrical contractor or other qualified person.

Prior to a qualified person connecting to a premises/house electrical power system, the following requirements, among others, must be adhered to:

- Determine if the electrical system voltage is compatible with the equipment to which it will be connected.

- Calculate the electrical panel's existing maximum ampere load to determine if the remaining capacity is sufficient for the additional equipment being connected.
- Use a properly sized circuit breaker or fusible disconnect switch to connect a distribution system to the premises/house electrical power system.
 - The rated interrupting capacity of the circuit breaker or fuses must meet the available interrupting capacity at the point of connection to the premises/house electrical power system.
- Use only approved lugs or devices to connect to the panel bus.
- Never use "Alligator" type clamps.
- Never connect ahead of the main circuit breaker, fuse box, or meter.
- If required, obtain a permit to remove a panel cover.
- Use suitable barriers, partitions, or other means to limit access to the connection to protect against accidental contact with energized parts and unauthorized entry into the arc-flash boundary by unauthorized persons or objects.
- Replacement of all panels, covers and screws must be done by a qualified person immediately after disconnecting from the premises/house electrical power system.

13. Personal Protective Equipment (PPE)

All persons working on or near energized electrical equipment shall wear PPE appropriate for the level of electrical hazard to which they are exposed. This PPE may include non-melting, long-sleeved shirts and long pants, or other Arc Rated (AR) clothing, and closed-toed, nonconductive-soled shoes and Safety Glasses. Garments made from synthetic materials not manufactured specifically for electrical work, such as polyester and nylon, are not suitable to protect from electrical hazards.

For an extended list of common motion-picture/television tasks and associated PPE refer to Addendum D. This addendum is based on NFPA 70 E and will be updated as warranted.

Refer to NFPA 70E Tables 130.7(C) (9) and (10) for a full list of tasks performed

on energized equipment, the associated hazards/risk categories, and required PPE.

14. **Emergency Response**

If an electrical accident occurs, notify emergency medical personnel and activate the Emergency Action Plan.

An Emergency Action Plan should include the following items:

- Location, method and any necessary tools required for emergency power disconnection
- Emergency Medical Services on hand or readily available with working means of contact
- Exact location of where the work is being performed
- Identification of CPR Trained Personnel
- Location of available AEDs

DO NOT APPROACH ANY ELECTRICAL ACCIDENT UNTIL YOU HAVE BEEN NOTIFIED BY QUALIFIED PERSONNEL THAT IT IS SAFE TO APPROACH.

Properly secure the accident area while maintaining a safe distance to prevent the possibility of additional victims.

DO NOT touch or approach a victim of electric shock while he or she is being shocked. If safe to do so, turn off the power.

Trained personnel should follow proper procedures for Cardiopulmonary Resuscitation ("CPR") and Automated External Defibrillator ("AED") use.

Since the possible effects of electrical shock can manifest hours after the event, **ANY** VICTIM OF ELECTRIC SHOCK **MUST** BE EVALUATED BY A QUALIFIED MEDICAL PROFESSIONAL.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #23

GUIDELINES FOR WORKING WITH PORTABLE POWER DISTRIBUTION SYSTEMS AND OTHER ELECTRICAL EQUIPMENT

"ADDENDUM A" – POWER LINE DISTANCE REQUIREMENTS

AVOID POWER LINES. This includes, but is not limited to, the placement of equipment such as ladders, scaffold, booms, forklifts, aerial lifts, sets, cranes or other rigging.

At a minimum, when working in California follow California Code of Regulations, Title 8, Section 2946, and Tables 1 and/or 2 below. Please note the difference of activities allowed in the two tables.

Table 1 - California

General Clearances Required from Energized Overhead High-Voltage Conductors

The operation, erection, handling or transportation of tools, machinery, materials, structures, scaffolds, or any other activity where any parts of the above or any part of an employee's body will come closer than the minimum clearances from energized overhead lines as set forth in Table 1 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	6
over 50,000.....345,000	10
over 345,000.....750,000	16
over 750,000.....1,000,000	20

Table 2 - California

Boom-type Lifting or Hoisting Equipment Clearances Required from Energized Overhead High-Voltage Lines

Boom-type lifting or hoisting equipment: The erection, operation, or dismantling of any boom-type lifting or hoisting equipment, or any part thereof, closer than the minimum clearances from energized overhead high-voltage lines set forth in Table 2 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	10
over 50,000.....75,000	11
over 75,000.....125,000	13
over 125,000.....175,000	15
over 175,000.....250,000	17
over 250,000.....370,000	21
over 370,000.....550,000	27
over 550,000.....1,000,000	42

When working outside of California in the United States, follow the Code of Federal Regulations, Title 29, Part 1910, Section 333, and follow Table 3 below, unless the state in which you are working has separate standards, which can be accessed on the state's OSHA website. Production should always consult the proper authority (federal and/or state) to ensure compliance with applicable laws and regulations for the jurisdiction in which they are working.

Table 3 – Federal

Federal Clearances Required When Working On or Near Exposed Energized Parts

When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
50,000 or below	10
over 50,000	10 feet plus 4 inches for every 10,000 volts over 50,000 volts

Your employer may choose to set greater clearance requirements than listed above. If there are questions or concerns, consult with your studio safety representative for more information.

**CITY OF LOS ANGELES
CALIFORNIA**



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Mayor

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August 01, 2000

**BASIC ELECTRICAL SAFETY PRECAUTIONS FOR MOTION PICTURE AND TELEVISION
OFF STUDIO LOT LOCATION PRODUCTIONS**

**PART A
GROUNDING**

GENERAL

All electrical equipment (required to be grounded) is to be grounded back to the point where the electrical system receives its source of power. Even though Direct Current equipment operating at less than 150 volts to ground is not required to be grounded, it is highly recommended for safety purposes.

METHODS

Electrical equipment grounding conductors are to be continuous from the load being served back to the source of power. Approved cable connectors and devices will be considered as part of the continuous conductor. The grounding conductors are to be sized according to the rating of the overcurrent device protecting the circuit supplying the individual piece, or group, of equipment. (20 Amp - #12, 30/60 Amp - #10, 100 Amp - #8, 200 Amp - #6, 300 Amp - #4, 400 Amp - #3, 500 Amp - #2, and 600 Amp - #1 AWG)

CONNECTORS

Flexible cord or multiple conductor cable (enclosed in an overall jacket) supplying circuits or equipment are to be connected by use of a polarized plug and receptacle. Larger single conductor cables may be connected with listed single pin plugs or connectors. So called alligator clamp connectors should never be used for grounding connections. The basic design of these alligator types of connectors does not provide a suitable grounding connection. Unless designed for the purpose, connectors or splices shall be suitably isolated from contact with live vegetation, damp or wet locations.

GENERATORS, TRUCK OR TRAILER MOUNTED

Generators mounted on trucks or trailers shall be completely insulated from earth by means of rubber tires, rubber mats around metal stairways and rubber mats under any type of lift-gate or jacking device. Metal supports for trailers shall be insulated by means of wooden blocks. Safety tow chains shall be secured so as to not touch the ground. If complete insulation is not possible, a grounding electrode system shall be installed per the California Electrical Code, Article 250-83 (c) or (d).

GENERATOR GROUNDING CONNECTIONS (WHEN REQUIRED)

Interior water pipes, interior metal fixtures, metal frames of buildings, and the building grounding electrode system shall not be used as a grounding connection for mobile generators supplying power exclusively to location production systems.

When mobile generators supply power to location production systems in addition to the building's electrical system, the generator's grounding connection shall be bonded to the main building grounding electrode system at the service.

Multiple generators shall have their grounding connections bonded to each other when located within 20 feet of each other or when one supplies equipment which might possibly come within 20 feet of equipment supplied by the other(s).

Bonding conductors shall be sized per the California Electrical Code, Article 250-95.

PART B OVERCURRENT PROTECTION

GENERAL

Conductors and cables should never be loaded in excess of 100% of their actual ampacity. The rating of the overcurrent device (i.e., fuse or circuit breaker) should never be confused with the rating of the conductors or cables.

RATING FOR CONDUCTORS AND CABLES

The California Electrical Code assigns ampacity ratings for conductors and cables used in motion picture production which are higher than the commonly used ratings. These ratings are found in table 400-5(B), apply only to cable types SC, SCE, SCT, PPE, G and W, and requires that the cable be installed per the footnotes. Ampacities for the commonly used distribution cables are AWG 4/0-360 amps, AWG 2/0-265 amps, AWG #2-170 amps. Note that ampacities listed in column D in the 75 degree C (167 degree F) section are used because 75 degrees C is the maximum rating of termination points.

RATING OF OVERCURRENT DEVICES

The California Electrical Code requires conductors and cables to be protected by overcurrent devices rated at not more than 400% of the ampacity given in table 400-5(B). Some generators have overcurrent devices rated as high as 1200 amps. Suitable overcurrent devices must be installed to protect the smallest size conductor or cable between the generator and the distribution box (typically AWG #2 "banded" cable).

The 400% rating of the overcurrent device does **NOT** mean that the cable or conductor may be loaded beyond the ampacity rating given in the table!

EQUIPMENT

The California Electrical Code requires equipment to be protected at its ampacity. A branch circuit of any size supplying one or more receptacles shall be permitted to supply stage set lighting loads. A branch circuit is defined as the circuit conductors between the final overcurrent device protecting the circuit and the outlet(s). Twenty amp circuits supply equipment rated up to 2000 watts (16 amps), fifty amp circuits supply 5K's, hundred amp circuits supply 10K's. Some equipment is marked with the maximum overcurrent protection permitted.

PART C GENERAL EQUIPMENT REQUIREMENTS

EQUIPMENT

All equipment, new and existing, shall comply with the minimum requirements for safety of the Los Angeles Municipal Code. All existing equipment shall be maintained in an electrically safe condition with NO exposed live parts that in any way will present a potential shock or fire hazard.

All equipment shall be provided with overcurrent protection as required by the California Electrical Code. All cables and flexible cords shall be of the types permitted by Articles 400, 520 and 530 of the California Electrical Code and those specifically approved by City of Los Angeles. Welding cable **shall not be used.**

All Alternating Current (AC) supplied HMI fixtures and ballasts shall be grounded by a continuously connected equipment grounding conductor back to the source of power. These shall not be grounded to the nearest available water pipe connection. This also applies to Direct Current supplied units where grounded. All electrical equipment required to be grounded shall be grounded only by the California Electrical Code required methods and devices.

All electrically powered equipment (except cameras, radios, audio equipment and the like that have self-contained power sources) **shall be** listed by a laboratory approved by this department. Equipment that does not bear the listing mark of an approved laboratory shall not be used.

PART D
GENERAL SAFETY PRECAUTIONS

INSTALLATION CONNECTIONS AND DISCONNECTIONS

Connections shall be made in the following order: a. Equipment grounding conductor. b. Grounded conductor (i.e., neutral). c. Ungrounded conductors (i.e., hot conductors). Disconnection shall be in the reverse order.

All connections shall be made from the farthest load connection first, and then progressively toward the source of supply. All disconnections shall be made in the reverse order.

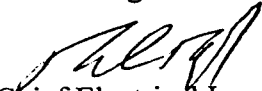
GUARDING OF LIVE PARTS

In any part of a location distribution system that may potentially have exposed live parts, precautions shall be taken to assure they are covered, shielded, fenced, enclosed, or otherwise protected by means of suitable covers, casings, barriers, rails, screens, mats, or platforms to remove the likelihood of any contact by objects or persons.

These guidelines are based upon the 1998 California Electrical Code.

OTHER ELECTRICAL SAFETY AND RELATED ITEMS MAY BE ADDED AS NEEDED
DEPENDING ON THE REQUIREMENTS AND ADVANCEMENTS WITHIN THE FILMING INDUSTRY

Robert England.


Chief Electrical Inspector,
City of Los Angeles

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #23

GUIDELINES FOR WORKING WITH PORTABLE POWER DISTRIBUTION SYSTEMS AND OTHER ELECTRICAL EQUIPMENT

"ADDENDUM C" – WORKING WITH 480 VOLT SYSTEMS

As 480 volt systems become more common on production, employees working with them should be aware of the potential hazards which are greater than 120 volt systems. Such hazards include, but are not limited to, greater arc flash potential, arc blast explosions, significantly greater shock hazard, and a greater ability to arc between conductive surfaces.

Only qualified employees who have been properly trained and authorized by the employer should connect, disconnect, or operate 480 volt systems or equipment.

This Safety Bulletin is intended to identify potential hazards and to recommend safe practices for trained personnel. This Safety Bulletin is not intended as a design specification, nor is it intended as an instruction manual for untrained persons.

For additional information, please refer to the following:

- Safety Bulletin #23, **GUIDELINES FOR WORKING WITH PORTABLE POWER DISTRIBUTION SYSTEMS AND OTHER ELECTRICAL EQUIPMENT**
- Safety Bulletin #23, Addendum A – **POWER LINE DISTANCE REQUIREMENTS**
- Safety Bulletin #23, Addendum B – The City of Los Angeles Department of Building and Safety, **BASIC ELECTRICAL SAFETY PRECAUTIONS FOR MOTION PICTURE AND TELEVISION OFF STUDIO LOT LOCATION PRODUCTIONS**
- Safety Bulletin #23, Addendum D - **COMMON MOTION-PICTURE /TELEVISION TASKS AND ASSOCIATED PERSONAL PROTECTIVE EQUIPMENT**
- Safety Bulletin #23, Addendum E - The County of Los Angeles Fire Department, **GUIDELINES FOR MEETING NATIONAL ELECTRICAL CODE (NEC) GROUNDING REQUIREMENT FOR PORTABLE GENERATORS SUPPLYING PORTABLE EQUIPMENT IN THE MOTION PICTURE AND TELEVISION INDUSTRY**
- National Fire Protection Association ("NFPA") 70 (aka National Electrical Code ("NEC"))
- NFPA 70E: Standard for Electrical Safety in the Workplace

GENERAL SAFETY MEASURES

IDENTIFYING SOURCE VOLTAGE FOR CORD AND PLUG CONNECTED DEVICES

Distribution board, panel board and disconnect switch enclosures can only be opened by qualified and designated person(s). Prior to connecting onto or energizing any 480 volt system, the source voltage must be identified and verified. Proper and safe meter techniques must be observed to prevent arcing. An appropriately rated voltage meter must be used. Employees using test equipment on 480 volt systems shall receive proper training prior to metering the source power.

COLOR CODING FOR VOLTAGE AND PHASE IDENTIFICATION

Portable cables and conductors **MUST** be color coded to ensure that 120 volt equipment is not mistakenly connected to a 480 volt system.

Neutral conductors shall be identified by marking at least the first 6 inches from both ends of each length of conductor with GRAY (white is to be used for 120 volt neutral conductors).

Grounding conductors shall be identified by marking at least the first 6 inches from both ends of each length of conductor with GREEN or GREEN WITH YELLOW STRIPES.

Phase conductors (hots) shall be identified by marking at least the first 6 inches from both ends of each length of conductor with BROWN, ORANGE or BRIGHT YELLOW tape.

Where more than one voltage system exists within the same location, each system shall be identified by voltage and system. This can be done by additional color coding, marking tape, tagging, or other equally effective means.

Where color coding is used to distinguish between different lengths or owners of cable, it must be done so that there is no confusion created.

To avoid confusion between different nominal voltage systems, YELLOW SHOULD NOT BE USED IN PORTABLE 120 VOLT SYSTEMS.

GROUNDING PROCEDURES

All 480 volt systems shall be grounded in accordance with NEC Article 250 and additional requirements, if any, of the Authority Having Jurisdiction ("AHJ").

Special attention should be taken when using multiple power sources whose energized systems may come into contact with each other. Ensure systems are bonded together with the appropriately sized bonding jumper and connected to a common grounding electrode to ensure that no potential exists between the system grounds.

If grounding rods are required, use proper sized grounding rods and connectors as per the NEC.

Before driving grounding rods into the earth, an underground service company should be contacted to make sure the area is clear of hidden hazards such as water pipes, gas lines, buried cable, and other obstructions.

Grounding conductors from portable 480 volt sources used in buildings should be connected to the grounding connection at the service entrance or main power source.

DEVICES AND CABLES

All cable shall be listed for its intended use by an approved testing laboratory.

Dual jacketed type "W" or equivalent cable is recommended for single conductor feeder cables on 480 volt power systems since small punctures and fractures in the insulation may not be seen during visual inspection.

Single conductor connectors used on "hots" and "neutrals" shall be connected to the conductors by means of solder, set-screw, or crimping. Equipment grounding conductor connection devices or fittings that depend solely on solder shall not be used. Single conductor connectors shall be of the single pole and locking type.

Spider boxes, splicing blocks, and other distribution equipment shall be rated and identified for use on 480 volt systems in conformity with the provisions of the NEC. When more than one voltage system is used on the same premises, the equipment shall be marked in a suitable manner to identify the system to which they are connected.

Cables and devices must be protected from foot and automobile traffic. When using elevated truss crossovers, the metal structure must be grounded to the source ground.

When 480 volt equipment is mounted, suspended, or otherwise attached to any structure which uses metal in its construction (e.g., scaffold, truss, greenbeds, or pipe grids), the metal components of the structure must be grounded to the source ground.

480 volt systems should be elevated and/or protected in such a manner to avoid contact with water.

When 480 volt systems may be used in or around water, such systems shall be designed and listed for use in water or wet conditions (e.g., NEMA 3R enclosures, GFCI devices).

PLUGGING AND UNPLUGGING ELECTRICAL EQUIPMENT

Visually inspect the condition of the plug, cable, and equipment for any signs of excess wear, loose parts, frayed cables, cracked/punctured insulation, pinched/crushed outer

jacket, exposed current-carrying parts or any other signs of damage. **DO NOT USE** equipment in any of these conditions. Label and return this equipment for repair.

All grounded equipment should be tested for continuity between the ground pin on the plug and the metal parts of the lighting equipment before it is placed into service.

Turn off the power when connecting to, or disconnecting from, 480 volt systems. When branching off an energized system, shut off the power and lock-out/tag-out all switches that may energize the circuit being worked on. All equipment that is being plugged and unplugged shall be in the off position to avoid creating an arc at the receptacle. Verify with the appropriate meter that the power is turned off. Proper Personal Protection Equipment (PPE), including protective gloves and clothing, shall be worn to avoid getting burned from a flash created by a short-circuit in the equipment.

CONNECTING ORDER OF SINGLE CONDUCTORS

All single conductor connections shall be made in the following order:

- 1st – Grounds
- 2nd – Neutrals
- 3rd – Hots

Disconnect in the reverse order:

- 1st – Hots
- 2nd – Neutrals
- 3rd – Grounds

All multi-pole connectors shall provide for "first make, last break" of the ground pole.

GUARDING OF LIVE OR NON-INSULATED PARTS

Any part that is live or non-insulated must be covered with appropriate insulation material or protected or barricaded to prevent accidental contact by persons or objects.

EMERGENCY RESPONSE

Electrical accidents are very serious and care must be taken to ensure that potential rescuers do not become victims. If an electrical accident occurs, follow proper emergency procedures and have Emergency Medical Services ("EMS") contacted immediately. **DO NOT APPROACH ANY ELECTRICAL ACCIDENT UNTIL YOU HAVE BEEN NOTIFIED BY QUALIFIED PERSONNEL THAT IT IS SAFE TO APPROACH.** Properly secure the accident area to prevent the possibility of additional victims.

DO NOT touch a victim of electrical shock while he or she is connected to the circuit. If safe to do so, turn off the power.

While waiting for EMS to arrive, and if trained, follow proper procedures for Cardiopulmonary Resuscitation ("CPR"), including the use of an Automated External Defibrillator ("AED"), if available.

Since the possible effects of electrical shock can manifest hours after the event, ANY VICTIM OF ELECTRICAL SHOCK **MUST** BE EVALUATED BY A QUALIFIED MEDICAL PROFESSIONAL.

**INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE
SAFETY BULLETIN #23**

**GUIDELINES FOR WORKING WITH PORTABLE POWER DISTRIBUTION SYSTEMS AND OTHER ELECTRICAL EQUIPMENT
"ADDENDUM D" - COMMON MOTION-PICTURE/TELEVISION TASKS AND ASSOCIATED PERSONAL PROTECTIVE EQUIPMENT**

120V/208V or 120V/240V Power Systems Supplied by Utility or Generators	PPE	Voltage-Rated	Voltage-Rated
Task	Category	Tools	Gloves
Metering (inc. Power Source, Feeder Circuit, and Branch Circuit)	0	Y	Y
Connecting/Disconnecting Single Conductor Cable (energized)	1	Y	Y
Replacing Dimmer Modules	1	Y	Y
Operating Circuit Breakers or fused switches (covers on)	0	N	N
Connecting to Systems	1	Y	Y
277V/480V Power Systems Supplied by Utility or Generators	PPE	Voltage-Rated	Voltage-Rated
Task	Category	Tools	Gloves
Metering Utility Fed Systems (inc., Feeder Circuit)	2	Y	Y
Connecting/Disconnecting Single Conductor Cable (energized)	Not Allowed		
Replacing Dimmer Modules	Equipment Not Available		
Operating Circuit Breakers or fused switches (covers on)	0	N	N
Connecting to Systems	2	Y	Y

PPE Equipment	Category 0	Category 1	Category 2
Non-Melting* or Long Sleeve, Untreated, Natural Fiber Shirt+	X		
Non-Melting* or Natural, Untreated Fiber or Denim Long Pants+	X	X	
Eye Protection	X	X	X
Arc Rated Face Shield (Double Layer Switching Hood)			X
Hard Hat		X	X
AR Long Sleeve Shirt (or AR Coveralls)		X	X
AR Long Pants (or AR Coveralls)		X	X
Hearing Protection			X
Leather Work Shoes	X	X	X
Leather Gloves (Gauntlets)		As Needed	X
*According to ASTM F 1506-00			
+ AR Coveralls Acceptable			

NOTE: Based on NFPA 70E 2009

Revised: October 10, 2011

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SAFETY BULLETINS ARE RECOMMENDED GUIDELINES ONLY; CONSULT ALL APPLICABLE RULES AND REGULATIONS

SAFETY BULLETINS MAY BE VIEWED OR DOWNLOADED FROM THE WEBSITE WWW.CSATF.ORG

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COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

April 11, 2013

COUNTY OF LOS ANGELES FIRE DEPARTMENT PUBLIC SAFETY FILM UNIT PORTABLE GENERATOR GUIDELINES

The attached guidelines shall be used by County of Los Angeles Fire Department's Fire Safety Officers and Fire Safety Advisors with regard to electrical safety and the motion picture and television industry.

Questions regarding the guidelines should be directed to Captain Cesar Cano, Public Safety Film Unit, at (818) 364-8240.

BATTALION CHIEF KEN DOUGLASS
NORTH REGION FIRE PREVENTION DIVISION

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

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ARTESIA
AZUSA
BALDWIN PARK
BELL
BELL GARDENS
BELLFLOWER
BRADBURY

CALABASAS
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SANTA CLARITA

SIGNAL HILL
SOUTH EL MONTE
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TEMPLE CITY
WALNUT
WEST HOLLYWOOD
WESTLAKE VILLAGE
WHITTIER

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

Guidelines for Meeting National Electrical Code (NEC) Grounding Requirements for Portable Generators Supplying Portable Equipment in the Motion Picture and Television Industry

Single Generator (NEC 250.34)

The frame of the generator mounted to a truck or trailer may serve as the grounding electrode (in place of the earth) for the portable power distribution system. A ground rod is not required if the generator units and vehicles they are mounted to are insulated from the earth.

Two or More Generators (NEC 250.30)

- Where two or more portable generators are located within 20 feet or less of each other they shall be bonded together by a dedicated bonding conductor from generator to generator. The bonding conductor shall be copper and sized in accordance with NEC Table 250.122. A ground rod is not required if the generator units and vehicles they are mounted to are insulated from the earth.
- Generators shall be bonded together when two or more generators supply power to a common set where the portable equipment is in close proximity to each other (within 12 feet for interior sets, 20 feet for exterior sets).

Portable Generator Supplying Power to Portable Equipment in a Structure (NEC 250.34)

- In a de-energized building the grounding requirements are the same as an exterior location.
- When a portable distribution system is brought into an energized structure, where structure power is not used for production power, bonding to the structure's grounding electrode is not required.

Generator Supplying Portable Power in Combination with Structure Power (NEC 250.30)

Using a portable power distribution system inside a structure in combination with the structure's power supply, or where large metal equipment supplied by the structure's power may come in contact with the portable power distribution system or equipment, requires the generator grounding conductor to be bonded to the structure's grounding electrode, and the conductor shall be sized

Addendum 23E to Safety Bulletin #23, “Guidelines for Working with Portable Power Distribution Systems and Other Electrical Equipment”

according to NEC 250.66. The grounding electrode is usually found at the structures electrical meter.

Generator Supplying Portable Power to Portable Equipment Attached to a Structure (NEC 250.30)

Motion Picture and Television productions do not energize permanently installed systems that are no longer connected to utility power, unless supervised by a licensed electrician.

Connecting to Structures Utility Power (NEC 590)

Only a qualified person shall perform tie-ins to premises wiring. Tie-ins need to be protected from contact, barricaded and have proper overcurrent protection.

Ground Fault Circuit Interrupter (GFCI)

NEC Section 530.6 allows short-term outdoor use of standard non-GFCI protected indoor portable stage and studio lighting equipment and portable power distribution equipment.

NEC Section 530.21 does not require GFCI protection for plugs and receptacles used in Motion Picture and Television Studios and on Locations.

GFCIs are devices intended for the protection of personnel only. The code requires GFCI protection for certain permanently installed receptacles on premises or permanent structure wiring (NEC Article 210) and on construction sites (NEC Article 590). Motion Picture and Television productions typically use GFCIs in wet conditions or when systems or energized devices come within 10 feet of water.

Portable Generators 5 Kilowatts or less (Putt-Putt)

These generators shall meet the same isolation and bonding requirements of larger portable generators.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #24

CALIFORNIA OSHA SAFETY REQUIREMENTS FOR HANDLING OF BLOOD AND OTHER POTENTIALLY INFECTIOUS MATERIALS

The California Department of Industrial Relations ("Cal OSHA") Bloodborne Pathogen Standard is a series of regulations to protect workers from contracting disease through direct contact with contaminated blood and other potentially infectious materials¹ ("OPIM"). This Safety Bulletin highlights certain provisions or requirements from the regulations. (See Title 8, California Code of Regulations Section 5193 for the complete text of the regulations.) See applicable Federal and other state and local regulations for other requirements when outside California. The Bloodborne Pathogens standard requires employers to protect those employees reasonably at risk (employer designated medical care providers and other employees who are assigned responsibility for responding to incidents involving blood or OPIM) from exposure to bloodborne pathogens². Your employer is required to have a written exposure control plan which is required to be accessible to employees. (Title 8, CCR § 5193 (c)(1))

Universal Precautions is an approach to infection control. According to the concept of Universal Precautions, "all human blood and certain human body fluids are treated as if known to be infectious for Hepatitis B virus (HBV), Hepatitis C (HCV) Human Immunodeficiency Virus (HIV), and other bloodborne pathogens." (Title 8, California Code of Regulations § 5193.) "Universal Precautions shall be observed to prevent contact with blood or OPIM. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials." (Title 8, CCR § 5193 (d)(1).)

The following methods of compliance shall be observed under the Cal OSHA regulations:

1. Treat all blood and body fluids as if they are known to be infectious with HBV, HCV or HIV (Title 8, CCR § 5193(b)).
2. Use appropriate personal protective equipment (PPE) as required including gloves, face masks, eye shields, protective gowns, disposable resuscitation devices, etc. (Title 8, CCR § 5193(J)(4)(a).)

¹ "Other Potentially Infectious Materials" include the following human body fluids: Semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and any other body fluid that is visibly contaminated with blood such as saliva or vomitus, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as emergency response. (Title 8, CCR § 5193(b))

² "Bloodborne Pathogens" means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B virus (HBV), Hepatitis C virus (HCV) and Human Immunodeficiency Virus (HIV). (Title 8, CCR § 5193(b))

3. Efficient hand washing is the single most effective practice to prevent the spread of infection. Wash your hands immediately or as soon as feasible, after removal of gloves or other personal protective equipment (PPE). When provision of hand washing facilities is not feasible, the employer shall provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible. (Title 8, CCR § 5193(l)(2))
4. Treat all needles and other sharp implements as if they are known to be contaminated with infectious material. (Title 8, CCR § 5193(b))
5. Be sure that ALL biohazard waste including contaminated PPE and sharps are disposed of properly and safely (dispose of sharps in puncture-proof containers). Refer to your employer's written exposure control plan for details. (Title 8, CCR § 5193 (g))
6. If you have an "Occupational Exposure"³ or if you have an "Exposure Incident"⁴ and are accidentally exposed to blood or other potentially infectious materials, a

³ "Occupational Exposure" means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties (Title 8, CCR § 5193(b)).

The employer shall make available the Hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up for bloodborne pathogens exposure to all employees who have had an exposure incident. When an employer is also acting as the evaluating health care professional, the employer shall advise an employee following an exposure incident that the employee may refuse to consent to post-exposure evaluation and follow-up from the employer-healthcare professional. When consent is refused, the employer shall make immediately available to exposed employees a confidential medical evaluation and follow-up from a healthcare professional other than the exposed employee's employer.

EXCEPTION: Designated first aid providers who have occupational exposure are not required to be offered pre-exposure Hepatitis B vaccine if the following conditions exist:

1. The primary job assignment of such designated first aid providers is not the rendering of first aid.
 - a. Any first aid rendered by such persons is rendered only as a collateral duty responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred.
 - b. This exception does not apply to designated first aid providers who render assistance on a regular basis, for example, at a first aid station, clinic, dispensary, or other location where injured employees routinely go for such assistance, and emergency or public safety personnel who are expected to render first aid in the course of their work.
2. The employer's Exposure Control Plan, subsection (c)(1), shall specifically address the provision of Hepatitis B vaccine to all unvaccinated first aid providers who have rendered assistance in any situation involving the presence of blood OPIM (regardless of whether an actual exposure incident, as defined by subsection (b), occurred) and the provision of appropriate post-exposure evaluation, prophylaxis and follow-ups for those employees who experience an exposure incident as defined in subs (Title 8, CCR § 5193(f)(1)).

⁴ "Exposure Incident" means a specific eye, mouth, or mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious material that results from the performance of an employee's duties. (Title 8, CCR § 5193(B))

series of Hepatitis B vaccinations and post-exposure evaluation and follow-up will be offered to you at that time, free of charge. The cost of these vaccinations is the responsibility of your employer. If you have an exposure, report the incident immediately to your supervisor and to first-aid personnel. (Title 8, CCR § 5193 (f))

The key to protection and prevention is compliance with regulations and universal precautions. Your health and safety may depend on it!

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #25

CAMERA CRANES

This Safety Bulletin pertains to the safe assembly and usage of powered and manually operated, counterbalanced camera cranes used for the purpose of television and film production. This Safety Bulletin may also be applicable to jib arms and similar types of units. Please consult Safety Bulletin #8, "Guidelines for Insert Camera Cars" when camera cranes are used in conjunction with insert cars, tow dollies or process trailers.

1. Each camera crane should be accompanied by an assembly/usage manual supplied by the manufacturer/vendor. The manual should clearly show assembly instructions, maximum payload and maximum gross weight in all configurations, safety precautions and maintenance procedures. Where different, manufacturer's/vendor's instructions shall supersede this Safety Bulletin. Read and follow all manufacturers' placards on the equipment.
2. Only persons trained in the safe use of camera cranes should assemble and/or operate these devices.
3. When used, camera cranes should be inspected daily by qualified personnel (e.g., key grip, camera crane/dolly grip, vendor's representative or other qualified personnel as determined by the Producer), following an inspection protocol supplied by the manufacturer/vendor. If components are missing, damaged or improperly fitted, the equipment should be removed from service. Missing or damaged components are to be replaced or repaired in accordance with the manufacturer's/vendor's procedures prior to the equipment being returned to service.
4. Using the largest base that is practical increases the stability of the unit. The appropriate base for a crane is determined by the height, length and total load. Refer to the operating manual.
5. The camera crane base should be on a flat and level surface, platform or track system capable of supporting the intended load. The weight of all personnel, equipment and the camera crane should be taken into consideration.
6. The payload on the boom arm should not exceed that which can be balanced by the counterweight system supplied with the equipment. Additional counterbalance weight that is above and beyond that specified by the manufacturer/vendor should not be used. The manufacturer/vendor should be consulted regarding all extension configurations that are not explicitly specified in the operating manual.

7. Seat belts are to be provided on all camera cranes where passengers are required for operation. Seat belts should be maintained in good condition, and used by all passengers.
8. Pushing camera cranes across slopes or over uneven surfaces such as cables, speed bumps, or curbs can cause the unit to tip over.
9. When operating a camera crane, qualified personnel should ensure that there is adequate clearance for operation. Potential obstructions or hazards, such as power lines, helicopter rotors, fire sprinkler heads, etc. should be considered. Qualified personnel and the designated on-set safety coordinator should establish a safe operating zone. The designated on-set safety coordinator should maintain the safe operating zone. Special attention should be given to working around high voltage power lines.

Clearances Required from Energized Overhead High-Voltage Lines		
Nominal Voltage		Minimum Required Clearance (Feet)
600 up to	50,000	10
over	50,000 to 75,000	11
over	75,000 to 125,000	13
over	125,000 to 175,000	15
over	175,000 to 250,000	17
over	250,000 to 370,000	21
over	370,000 to 550,000	27
over	550,000 to 1,000,000	42
Source: Title 8, California Code of Regulations, Subchapter 5, Group 2, Article 37, '2946 29 Code of Federal Regulations 1926.451 (F)(6)		

10. If the camera crane is equipped with outriggers/stabilizers, follow the manufacturers' instructions regarding their proper use. Care should be taken to ensure that the feet of the outriggers/stabilizers will not sink into soft soil or asphalt, otherwise, the unit may tip over. Adequate means of distributing the outrigger/stabilizer load should be used, when appropriate.
11. It is recommended that special care be used when operating camera cranes on curved track. For example, excess speed could cause the unit to tip over.

12. When moving a camera crane on or off the track, the arm weight should be reduced to allow for safe movement so as to reduce the chances of the unit tipping over. Consult manufacturer's/vendor's instructions.
13. When stepping on or off of a camera crane, do so only after approval from the person operating the unit. Stepping off of a balanced camera crane without providing a counterbalance (e.g., another person to replace the weight) can cause the arm to elevate rapidly and possibly cause serious injury.
14. Unattended camera cranes should be secured to prevent movement of the unit (e.g., adding or removing manufacturer-supplied weights from the weight bucket).
15. When handling un-coated lead weights you should wear appropriate protective gloves and wash hands after use.
16. When operating camera cranes, consideration should be given to wind, rain, extreme heat and cold and other atmospheric conditions, whether natural or manmade, which can affect the safe use of camera cranes.

+INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #25

CAMERA CRANES

"ADDENDUM A" – POWER LINE DISTANCE REQUIREMENTS

AVOID POWER LINES. This includes, but is not limited to, the placement of equipment such as ladders, scaffold, booms, forklifts, aerial lifts, sets, cranes or other rigging.

At a minimum, when working in California follow California Code of Regulations, Title 8, Section 2946, and Tables 1 and/or 2 below. Please note the difference of activities allowed in the two tables.

Table 1 - California

General Clearances Required from Energized Overhead High-Voltage Conductors

The operation, erection, handling or transportation of tools, machinery, materials, structures, scaffolds, or any other activity where any parts of the above or any part of an employee's body will come closer than the minimum clearances from energized overhead lines as set forth in Table 1 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	6
over 50,000.....345,000	10
over 345,000.....750,000	16
over 750,000.....1,000,000	20

Table 2 - California

Boom-type Lifting or Hoisting Equipment Clearances Required from Energized Overhead High-Voltage Lines

Boom-type lifting or hoisting equipment: The erection, operation, or dismantling of any boom-type lifting or hoisting equipment, or any part thereof, closer than the minimum clearances from energized overhead high-voltage lines set forth in Table 2 shall be prohibited.

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
600.....50,000	10
over 50,000.....75,000	11
over 75,000.....125,000	13
over 125,000.....175,000	15
over 175,000.....250,000	17
over 250,000.....370,000	21
over 370,000.....550,000	27
over 550,000..... 1,000,000	42

When working outside of California in the United States, follow the Code of Federal Regulations, Title 29, Part 1910, Section 333, and follow Table 3 below, unless the state in which you are working has separate standards, which can be accessed on the state's OSHA website. Production should always consult the proper authority (federal and/or state) to ensure compliance with applicable laws and regulations for the jurisdiction in which they are working.

Table 3 – Federal

Federal Clearances Required When Working On or Near Exposed Energized Parts

When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
50,000 or below	10
over 50,000	10 feet plus 4 inches for every 10,000 volts over 50,000 volts

Your employer may choose to set greater clearance requirements than listed above. If there are questions or concerns, consult with your studio safety representative for more information.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #26

PREPARING URBAN EXTERIOR LOCATIONS FOR FILMING

Urban locations such as alleyways, beneath bridges, tunnels, abandoned structures, storm channels and other locations may present health risks and other hazards, which can be mitigated prior to the Production Company prepping and/or shooting at the location. These guidelines are intended to provide recommendations to prepare urban locations for filming. Safety bulletins are recommended guidelines only; consult all applicable rules and regulations including Title 8, California Code of Regulations.

Hazard Identification

The Production Company should conduct an assessment of the urban location to identify possible hazards to the health and safety of cast and crew. Potential hazards may include:

1. Biohazards

Human or animal waste, mold, fungus, bacteria, body fluids, vermin, insects, and other potential biohazards.

2. Chemical Hazards

Asbestos, lead paint, solvents, insecticides, herbicides, and other potentially harmful chemicals.

3. Physical Hazards

Rubbish, refuse, abandoned materials, broken glass, scrap metals, discarded needles, other waste or **utility/electrical lines** that can create a potential physical hazard.

The Production Company should evaluate the type and scope of hazards and, if necessary, create a plan to mitigate the hazards prior to the crew's arrival at the location.

Production should secure, if necessary, the services of an industrial hygienist or other appropriate professional capable of conducting necessary analysis to determine the type and scope of hazards present at the location.

Physical Mitigation

The Production Company should take necessary steps to minimize exposure of cast and crew to the aforementioned hazards. Such steps may include, but are not limited to, power washing, steam cleaning, removal of refuse and rubbish, fumigation, and use of chemical disinfectant(s). Because of the nature of such locations, production should consider securing the location during and after mitigation procedures.

In some cases, the type and/or scope of hazards present at the urban location may necessitate the use of a licensed contractor certified in the proper handling and removal of the offending substances and materials.

Electrical cables, props, and other equipment used at the location should be protected where practical. Cables should be supported off the ground whenever possible. Protective ground cover, such as layout board or other material, should be positioned in work areas to minimize contact with potentially affected areas. Props and equipment that come in contact with the ground should be disinfected. Washing facilities should be available for the cast and crew - who should be reminded to wash periodically and before meals. Long pants, long sleeved shirts, and hard-soled shoes are recommended to minimize contact. Proper personal protective equipment should be provided and used.

Location Maintenance

If possible, the urban location should be locked-off and secured to maintain the cleanliness of the set. If that is not practical, Production should conduct daily cleaning activities before crew call to remove any sources of exposure or hazards that accumulated during the Production Company's absence.

Additional Concerns

Some mitigation procedures may cause objections from local authorities or the community. The Production Company should first check with local agencies to insure that their preparation activities do not violate local ordinances.

NOTE: **Refer to a location "Safety Checklist."** Contact the projects' Production Safety Coordinators for a copy of their companies' "Safety Checklist." If not available, a generic "Safety Checklist" can be obtained from the AMPTP.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #27

POISONOUS PLANTS

This bulletin addresses special safety considerations when working outdoors and exposed to nasty plants. Although the types of nasty plants may vary from region to region, basic safeguards should be taken to prevent serious injury or illness to crew members working at locations where these plants grow.

GENERAL INFORMATION

These plants (e.g., Poison Oak, Poison Ivy and Poison Sumac) cause an allergic reaction in about 90% of all adults. The oleoresin in the juice of these plants causes dermatitis in allergic people from contact from their clothes, tools, equipment, pet fur, or smoke of burning plants. The fluid from the resulting blisters **does not** contain oleoresin, and **cannot** cause dermatitis.

These irritating plants normally grow along fence rows, waste areas, open and cut over forest lands, stream banks, swamps, ponds and rocky canyons. In the fall, their leaves turn to brilliant red.

NOTE: People who have allergic reaction to these types of plants should notify production company and/or set medic prior to entering an area that is known to have these types of plants.

PROTECT YOURSELF

Clothing Guidelines - in areas where nasty plants are likely:

1. Wear long pants with your pant legs tucked into your socks or boots. A good boot above your ankle can help protect you better.
2. Wear long sleeves and a loose fitting shirt, and a ventilated hat.
3. Cover as much skin as you can. The less skin exposed, the less likely you may be affected.
4. All contaminated clothing should be washed separately with detergent.
5. Wear protective gloves when handling.
6. Wear practical change clothes and shoes before leaving the location. Work clothes should be placed in a bag and taken home for laundering.

GENERAL SAFETY PRECAUTIONS

1. Wash often. Wash hands before eating, smoking or applying cosmetics.
2. Identify the areas that may contain the plants and use the proper safeguards to avoid them.

IDENTIFICATION

1. Both Poison Oak and Poison Ivy are readily identified by their trademarked three-leaf pattern.
2. Poison Ivy has its three leaflets with pointed tips, while Poison Oak has its three leaflets with rounded tips.
3. Leaflets range from a half-inch (1/2") to two (2") inches long.
4. Flowers are greenish white, about one-quarter (1/4") inch across and are borne in clusters on a slender stem.
5. The fruits are white, berry-like, glossy and dry when ripe; about one-sixth (1/6") of an inch in diameter in Poison Ivy and slightly larger in Poison Oak.
6. All parts of Poison Oak and Ivy are poisonous year round, except the pollen.
7. Burning is not recommended; as inhaling dust and ash from the smoke can result in poisoning of the lungs that can require hospitalization.

POISONING

1. The poisonous sap is carried in the roots, stem, leaves and fruit.
2. The plant is bruised, the sap is released.
3. It is easier to contract the dermatitis in the spring and summer due to the tender nature of the leaves.
4. Sap may be deposited on the skin by direct contact with the plant or by contact with contaminated objects such as shoes, clothing, tools, equipment and animals.

SYMPTOMS

1. The interval between contact and the appearance of dermatitis will vary considerably.
2. Most people will develop dermatitis 24 to 48 hours after contact.
3. Blistering will follow moderate itching or burning sensation.
4. Blisters usually rupture and are followed by oozing of serum and subsequent crusting.
5. Healed areas often remain hypersensitive to further contact for several months.
6. Although extremely irritating, most cases disappear in a week to 10 days.

TREATMENT

1. Thoroughly wash the skin with soap and water (brown soap is best)
2. Apply anti-itch lotion, such as Calamine or Caladryl.
3. In severe dermatitis, cool wet dressings or compresses will be required. Heat releases histamines, which cause the intense itching.
4. A physician should examine severe rashes, especially those covering large areas or accompanied by abnormal body temperatures.
5. Medical treatment is most effective if applied before the oozing sores appear.
6. All exposures should be reported to the set medic.

OTHER POISONOUS PLANTS

Other plants that can cause mild to severe dermatitis include:

1. Stinging nettle
2. Crown of thorns
3. Buttercup
4. May apple
5. Marsh marigold
6. Candelabra cactus
7. Brown-eyed Susan
8. Shasta daisy
9. Chrysanthemum

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #28

GUIDELINES FOR RAILROAD SAFETY

These guidelines are recommendations for safely engaging in rail work, i.e., working onboard trains, in railroad yards, subways and elevated systems, or in the vicinity of railroad equipment.

There are strict rules governing rail work. These rules must be communicated to and followed by all cast and crew. Check with the Authority Having Jurisdiction (AHJ) and with the owner/operator for local regulations, specific guidelines, and required training. Additionally, each railroad property or transportation agency may have its own rules and training requirements. In many cases, everyone must receive training.

PRIOR TO THE START OF RAIL WORK

Prior to starting rail work, the Production, in conjunction with the railroad representative, will conduct a safety meeting with all involved personnel to acquaint cast and crew members with possible workplace risks.

Consult with the appropriate Department Heads to determine if equipment, such as lighting, grip equipment, props, set dressing, electric generators or other equipment will be used. When using these items, ensure that they are properly secured and their use has been authorized by the railroad representative.

Plan proper ventilation and exhaust when using electric generators. Electrical bonding may be necessary.

Ensure conditions and weight loads of the work area and adjacent roads used for camera cars, camera cranes, horses, etc. are adequate for the intended work.

WORKING IN A RAIL YARD

1. Always follow the instructions of the designated railroad representative, and any written work or safety rules distributed by production.
2. Remain alert and aware of your surroundings at all times. Locomotives, railroad cars and other equipment may move without warning on any track in either direction. Never assume a train will be traveling in a particular or "normal" direction on any track.

3. If working around electrified train equipment, be aware of any “third rails” or overhead lines present in the area. A third rail is an electrified line that presents an immediate life threatening hazard. Never approach, step on or touch an energized third rail. For more detailed information see “Working on or Around Electrified Trains or Systems” below.
4. ANSI compliant high visibility vests are to be worn at all times. For specific information on vests please refer to AMPTP Safety Bulletin #21, Guidelines for Appropriate Clothing and Personal Protective Equipment.
5. Ankle-supported, reinforced-toe, work boots/shoes are recommended. Sandals, sneakers, and running shoes should not be worn.
6. Ask the designated railroad representative where to store production equipment. Extra care should be taken when storing hazardous or flammable materials.
7. **DO NOT RELY ON OTHERS TO WARN YOU** of approaching locomotives, rail cars or other equipment. Even if personnel have been assigned to provide warning, stay alert. You may not hear or see the warning.
8. When whistle or flag signals are to be used to communicate, everyone must be familiar with their meaning. The railroad representative or 1st AD shall educate cast and crew as to the meaning of these signals prior to commencement of work.
9. Listen for the sound of approaching locomotives or rail cars, as well as audible signals, such as bells or whistles. Trains typically use such signaling devices before moving, but do not assume that such warnings will be sounded.
10. Be aware that the train is significantly wider than the track’s width. 15 feet from either side of the tracks is considered a safe distance. Closer distances need to be approved by the designated railroad representative.
11. Always face moving trains as they pass.
12. Never sit, walk or stand on the rails, ties, switch gear, guardrails or other parts of the track or structure. Be aware that tracks can move.
13. Before crossing tracks look backwards and at parallel tracks. Once determined to be clear, cross immediately.

14. Do not place any objects on the rails, switches, guardrails or other parts of the track structure. If the performance of any of these activities is required for production purposes, specific permission must be obtained from the designated railroad representative and additional safety precautions may be required.
15. Whenever you are walking, always face in the direction in which you are proceeding. Be aware of possible trip hazards and debris. If it is necessary to turn your head or look backward, stop and look before proceeding.
16. When using radios/cell phones or referring to paperwork, step away from the tracks, stop walking, and stand still until you are finished.
17. Do not operate switches or other railroad equipment.
18. Take extra precautions if rain, snow or ice is present. Snow may conceal trip hazards. Avoid walking or working under icicles. Walkways, platforms, steps, etc., should be clear of ice and snow.

RIDING RAILROAD EQUIPMENT

1. Riding on equipment should be restricted to essential personnel.
2. Never attempt to get on or off moving equipment, unless authorized by the designated railroad representative.
3. Only authorized personnel may ride on the side of a locomotive or rail car.
4. Remain alert for conditions that can cause abrupt changes in speed, e.g., train braking, changes in grade, wet or icy tracks, and entering or leaving a rail yard or train station.
5. Be alert for conditions that can cause slack action (e.g. train brake, change in grade or change in speed). Protect yourself by remaining seated and with both feet on the ground. If duties require you to stand, keep your feet shoulder width apart, one foot slightly ahead of the other, with hands braced on the wall or grab bar.

WORKING ON, INSIDE OR UNDER RAILROAD EQUIPMENT

1. Remain alert for the unexpected movement of equipment.

2. Observe the condition of equipment before using it. Look for sharp edges or other potential hazards including loose, bent or missing stirrups, ladder rungs and brake platforms.
3. Face equipment as you ascend or descend equipment. Look for obstructions before ascending or descending.
4. Dismount or mount equipment only when it is stopped, unless authorized by the designated railroad representative.
5. When moving from one side to the other of a stopped train, you may safely cross in front of the first locomotive or behind the final car. Crossing mid-train may only be done on locomotives or rail cars that are equipped with handrails and end platforms. Never cross the tracks between or under cars, unless authorized.
6. Do not move from one rail car to another rail car while the train is in motion, unless authorized by the designated railroad representative.
7. Cross between passenger cars by holding on to railings and grab bars. Remain aware of walking surface conditions.
8. Blue Flag Rules are special rules to inhibit train movement. These rules protect personnel working on a car, train or track. Anyone can request a "Blue Flag" to be set by the designated railroad representative. Once the blue flag is set, the train cannot move for any reason until the blue flag is removed.

WORKING ON OR AROUND ELECTRIFIED TRAINS OR SYSTEMS

1. Transit systems and trains are commonly powered by electricity. The most common methods of electric power come in the form of electrified "third rails" or overhead catenary lines.
2. Voltages can range from 600-V or 750-V for electric third rail systems to over 14,000-V for overhead catenary systems.
3. Never touch an electric third rail or any supporting electrical equipment. Always be aware of electric third rails and always assume they are energized until verified otherwise.
4. A safe clearance distance as determined by the rail system operator and approved by the designated railroad representative must be maintained when working in the vicinity of an electric third rail. If it is absolutely necessary to work

within the established safe distance to the third rail and the possibility exists that personnel or equipment may contact the rail, appropriate measures as determined by the designated railroad representative must be implemented to eliminate the electrical hazard. Appropriate measures may include methods such as, de-energizing, locking-out, and grounding the third rail; covering the third rail with rubber mats approved by the rail system operator; etc. All third rail protective measures should be performed by approved railroad personnel.

5. Always assume that an overhead catenary line is energized until verified otherwise. **ONLY RAILROAD OR ELECTRIC COMPANY PERSONNEL MAY DE-ENERGIZE AND VERIFY CATENARY LINES.**
6. When overhead catenary lines cannot be de-energized, a clearance distance minimum of 10-feet must be maintained at all times, unless approved by the designated railroad representative. Be mindful of any booms, ladders, sticks, or production equipment that could inadvertently make contact with the overhead lines.
7. Never touch any train equipment that is attached to the overhead catenary line. The “pantograph” extends from the train to the overhead line. This piece of equipment should always be considered live as it carries current. Never touch the pantograph, even if it is in the retracted position.

SUBWAYS AND ELEVATED TRAIN SYSTEMS

1. Subways and elevated trains present unique hazards and caution must be taken at all times when working within tunnels and on elevated tracks.
2. Never enter a subway tunnel, elevated track, or other prohibited area, without authorization and clearance from the designated railroad representatives. Do not touch any equipment within the tunnels or elevated tracks as they may present numerous hazards, such as electricity.
3. Be aware of exit and escape routes as well as your surroundings. Listen for the sounds of approaching trains. Always face and watch approaching trains on adjacent tracks.
4. Know the location of the electric third rail and/or overhead catenary lines. Be aware that catenary lines in tunnels may be much lower than on above-ground systems. In this case, use caution when carrying equipment.

5. Be mindful of insects and animals, including rodents, which are commonly present in subway tunnels.
6. When working on elevated structures, determine if guardrails or other appropriate fall protection systems are needed.

SPECIAL NOTE ON AUTOMATED TRAIN SYSTEMS

Some transit systems, (e.g., airport and amusement park people movers) are automated, meaning that they do not rely on onboard operators or engineers. Automated systems present unique hazards as there is usually no person on board to warn or stop the train if someone or something is on the track.

NEVER enter into an automated system when it is operational. If the production requires the filming of an automated system, a safety plan must be developed with the system owner/operator to ensure safety of all parties.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #29

GUIDELINES FOR SAFE USE OF HOT AIR BALLOONS

(Also refer to Safety Bulletin #29, Addendum A – "External Load Guidelines")

The flying accuracy of a Hot Air Balloon may be adversely affected by changing natural conditions such as wind, air density, humidity and time of day. Special precautions should be taken to ensure safety when working in any extreme temperatures or terrain, e.g., mountains and deserts. Manmade conditions such as weight, weight distribution and/or the discharge of pyrotechnics in close proximity can also affect the balloon's ability to fly.

1. **NOTE: Any Balloon that is inflated and standing must have a FAA certified pilot, with a commercial rating for lighter than air aircraft.** A qualified Pilot shall be utilized to pilot the balloon or dirigible.
2. There are three (3) certified pilot ratings:
 - c. Free Balloon with airborne heaters (usually propane fueled)
 - d. Gas filled Balloon (usually helium filled)
 - e. Dirigible (usually helium filled)
3. All **Aerial Coordinators and/or Pilots in Command** shall possess a current FAA approved **Motion Picture and Television Operations Manual** and accompanying **Waiver**.

The **Waiver** is specific to those Federal Aviation Regulations specified in the approved manual.

4. The **Pilot in Command** is at all times the final authority over his/her balloon and shall be in command over all **flight operations and/or related activities**. The **Pilot in Command** shall have the authority to abort any operation. Abort signals should be specified ahead of time.

5. Communications: The **Aerial Coordinator and/or Pilot in Command** will coordinate with the designated production representative and implement a plan for communications between the participants in the air and on the ground.

The plan will incorporate the following:

- a. Designated ground contact personnel
 - b. Air to ground radios (VHF or FM)
 - c. Assignment of discreet frequencies (channels)
 - d. Visual signals (flags, specified hand signals, or light) shall be used to halt filming in the event of lost communications or inability to utilize radios (**note: flares are not to be used in or around a balloon**)
 - e. Abort signals, audible and visual to halt filming in the event of unforeseen circumstances or safety hazards
6. Prepare plot plans and graphics to locate the intended landing area, intended flight paths, and designated emergency landing sites. Indicate the location and types of special effects.
7. MEETING for the production staff for those persons necessary for filming, including emergency, safety and security personnel.

NOTE: A subsequent briefing/**SAFETY MEETING** may also be required as necessary for an intended action.

Both meetings shall include the following:

- a. Pertinent items and the special provisions of the Aerial Coordinator and/or Pilot in Command along with any additional provisions issued by the local FAA Flight Standards District Office
 - b. Possible risk to personnel that are involved
 - c. Safeguards to personnel and equipment
 - d. Communications
 - e. Emergency procedures
 - f. Location of boundaries
 - g. Local governmental limitations or restrictions (if any)
8. The **Aerial Coordinator and/or Pilot in Command** shall designate one person as the Ground safety contact with no other responsibilities. The Balloon Crew Chief may be designated as the ground safety contact around the balloon, if qualified.

9. A preplanned stunt and/or special effect sequence, if any, will not be changed in any way once the Balloon has been launched. If there is a question as to safety of any aerial filming sequence involving low, over-the-camera shots, a briefing/**Safety Meeting** shall be held between the **Aerial Coordinator and/or Pilot in Command** and concerned persons as to whether the use of a locked-off camera is necessary.
10. Allow only personnel essential to the filming of the balloon to be in the area. All other personnel shall remain at least **50** feet away from the balloon.
11. No smoking is allowed within **100** feet of the balloon or any of its components, which includes the propane storage area.
12. There shall be a designated and approved area for the storage of propane fuel tanks (usually with or at the support vehicle location).
13. Check on predicted weather conditions in the areas of the launch site, flight paths, and landing site. Provide as much advance notice as possible to the **Aerial Coordinator and/or Pilot in Command** regarding any weather problems such as high winds, rain or lightning. Sudden changes in any of the above may require that the flight be delayed or canceled.
14. **Balloon support equipment is very important as parts are easily damaged while on the ground. Do not step on any part of the balloon or tether ropes.**
15. Keep all sharp objects, heat sources or open flames and non-essential equipment at least **100** feet from the balloon.
16. If a foreign object(s) falls into, on or against any part of the Balloon or rigging, report it immediately to the **Pilot in Command and/or Aerial Coordinator**.
17. A chase vehicle shall be assigned with no other duty than to support the balloon crew.
18. Before any stunt or special effects sequence is to be performed, all persons involved shall be thoroughly briefed as to any potential hazards and safety questions prior to the filming.
19. If an emergency occurs, **DO NOT TOUCH** any part of the balloon. A designated balloon ground crew member will take charge and coordinate rescue operations. Immediately call 911 or the designated emergency number for the area.

20. If you are unsure about any part of the balloon operation, ask the **Pilot in Command and/or Aerial Coordinator**.
21. The production company must notify all cast and crew members and the front of the studio call sheet shall contain a statement to the effect that:

"An aircraft is being used and will be flown in close proximity to crew and equipment. Anyone objecting will notify the production manager or 1st AD prior to any filming."

**A COPY OF THIS BULLETIN SHALL BE ATTACHED TO THE CALL SHEET ON
DAYS THE AIRCRAFT IS BEING UTILIZED**

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #29

ADDENDUM "A"

EXTERNAL LOAD GUIDELINES FOR SAFE USE OF HOT AIR BALLOONS

GUIDELINES FOR ESSENTIAL PERSONNEL OR EQUIPMENT TO FILM OR BE FILMED WHILE ON THE EXTERIOR OF, ENTERING, OR EXITING A BALLOON BASKET OR GONDOLA IN FLIGHT

Traditional ballooning motion picture activities include air to ground transfers, air to surface vehicles or persons, rappelling, parachuting, long line and many other scenarios where essential personnel may be required outside of the balloon basket or gondola.

Stunt persons and camera operators are often called upon to stand outside of or hang from the basket or gondola, cargo hooks, trapeze devices, bungee cords, cables, ladders, long lines, etc.

Safe completion of these operations require the complete understanding and coordination of all parties involved, *i.e.* the **Aerial Coordinator and/or Pilot in Command, Designated Production Representative, Stunt Persons, Stunt Riggers, Balloon Riggers, Special Effects and Grip Riggers, and essential ground crew.** In performing these types of operations the following guidelines should be used:

1. The **Pilot in Command** is at all times the final authority over his/her balloon and shall be in command over his/hers **flight operations and/or related activities.**

The **Pilot in Command and/or Aerial Coordinator** shall have the authority to abort any flight operation **in the interest of safety.**

2. Risk Management

Participants will conduct a thorough evaluation of the operations to be conducted and the potential risks to essential personnel, **if any.**

3. Personnel Involved

Aerial Coordinators and/or Pilot in Command (Waiver Holder), essential personnel to be flown, stunt persons, balloon rigging, safety and production personnel.

4. **Briefing**

Briefings will be conducted by the **Aerial Coordinator and/or Pilot in Command (Waiver Holder)** specific to the scheduled balloon external load operations and in compliance with the approved **Motion Picture Operations Manual**, briefing provisions.

5. **Communication**

Communication must exist at all times between the **Pilot in Command**, stunt person(s), camera operator and the essential personnel being flown. This can be accomplished through the use of radios, intercoms or pre-briefed hand signals.

Additionally, in the event of lost communications the pilot must be able to maintain visual contact with the stunt person or camera operator. If visual contact cannot be maintained, then a third party who can maintain visual contact will be used.

This person may be onboard the balloon, on the ground, or in a chase aircraft.

6. **Attaching Methods and Devices**

Belts, harnesses, cables and safety lines will be attached to existing balloon basket or gondola hard points, cargo tie down points, basket or gondola bridles, or other suitable basket or gondola locations.

Attaching devices, cables, carabineers, braided nylon, climbing rope, nylon straps, steel clevises, body harnesses, etc. are normally provided by the motion picture special effects and stunt personnel.

All of the above devices have load ratings established by the manufacturer in compliance with various industry and government specifications and established Motion Picture Safety Guidelines.

Note: A person will never be attached to a load release device.

7. **Weight and Balance**

Due to the nature of balloon external loads involving essential persons or equipment, diligent review and compliance with the manufacturer's maximum weight data is required.

This can also be accomplished through consultation with pilots having previous experience with similar balloon configuration or through a flight evaluation.

8. Pilot Check List

A. Balloon

1. Load bearing capacity and method of securing of all attaching devices related to the external load.
2. Verification of load bearing capacity and anticipated loads on the basket or gondola attach points to be utilized.
3. Accomplish Weight and Balance of the external load, including, if necessary, the possible release or departure of the external load.

B. Personnel

1. Verify that only essential personnel are onboard the balloon.
2. Confirm with essential personnel specific duties and responsibilities.
3. Verify all communications and check audio and/or hand signals.
4. Review emergency procedures specific to the external load operation with all essential personnel.
5. Review any potential risk factor, if any, with the essential personnel.
6. **No essential personnel may participate in airplane external load operations unless they have read, understood, and agreed to comply with the conditions of the Waiver Holders, Certificate of Waiver and its special provisions, if any.**

9. Parachutes

If parachutes are to be used, they must be of an FAA approved type and must have been packed and certified within the preceding **120** days.

While wearing a parachute the stunt person must not be attached to the balloon.

An accidental parachute opening while attached to the balloon could have serious negative effect on the aircraft and parachutist.

10. Rappelling

A. Pilot Qualifications:

Qualifications on the basis of previous experience and safety record, or an actual light, demonstrating the pilot's knowledge and skill regarding rappelling, and operations.

B. Rappellers Qualifications:

1. Rappellers and Spotters (Stunt Persons) will be required to demonstrate their ability during required familiarization flights.
2. The Waiver Holder and/or Pilot will have the authority to withhold approval of any rappeller or spotter (stunt person).

C. Rappelling Special Provisions:

The **Pilot in Command (Waiver Holder)** has the authority to cancel or delete any activity or event, if in their opinion, the safety of persons, or property on the ground or in the air is at risk, or if there is a contravention to the provisions of the **Motion Picture Waiver**.

D. Rappelling Equipment:

1. Rope size appropriate to the rappel (friction) device being used, will be required for all rappel operations.
2. Rope strength for each specific load, a safety factor of **10:1** between the strength of the weakest piece of attaching equipment and the load to be carried will be utilized.
3. The absolute minimum tensile strength of any rappel rope will be **5000 lbs.** Tested to NFPA and/or other regulatory standards.
4. Ropes will have a rubber jacket or other appropriate edge protection to give protection on basket or gondola edges when using basket or gondola attach points.
5. Carabineers, steel or aluminum must have a minimum tensile strength of **5000 lbs.**, be of a locking type and be tested to NFPA and/or other regulatory standards.
6. Cutting devices, knives, cable cutters, etc. shall be sufficient to cut any attaching device will be provided to the spotter or safety person(s) for use in an emergency.
7. Rappel ropes will have a minimum of two (2) attach points per rope with test strengths greater than or equal to **5000 lbs.** per rappeller.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #30

RECOMMENDATIONS FOR SAFETY WITH EDGED AND PIERCING PROPS

These guidelines are intended to provide recommendations on the safe handling, use and storage of those props that can cut or puncture cast or crew members. These props include but are not limited to knives, swords, razors, darts, bows and arrows, hatchets, saws, spears, cross bows and martial arts throwing stars.

SAFE USE AND HANDLING OF EDGED AND PIERCING PROPS

1. Real or fake prop weapons shall be strong enough that they will not accidentally break into dangerous pieces when being used for their intended purpose. It is best to use dulled or blunted weapons made to order for use as props. Dulling a sharp weapon can lessen its tensile strength. Sharpened prop weapons should only be used when the appearance of cutting or piercing cannot be otherwise simulated.
2. Prop weapons used to strike other weapons or other hard surfaces should be made of steel or high tensile aluminum. The use of fiberglass props in such situations should be avoided.
3. The use of these props should be limited to filming and rehearsals supervised by qualified personnel.
4. Use these props only for their intended purpose. Do not engage in or permit horseplay or target practice on or off the set.
5. Consult the Property Master, First Assistant Director, Production Safety Representative, Stunt Coordinator or Technical Advisor if you have any doubts or questions about the proper handling of these props. Actors and others who will handle an edged or piercing prop and who claim prior knowledge will be required to demonstrate their experience in the safe handling of the prop to one of the persons listed in the preceding sentence.
6. No person is to be coaxed, coerced or forced into handling these props.
7. Maintain all safety devices and guards (such as sheathes) in place until the prop is about to be used.
8. Inspect the area in which the action is to be rehearsed or filmed, with special attention to the surfaces on which the performers will be standing.
9. Prior to rehearsing the action, inform the cast and crew of the safety precautions to be observed, including their positions during rehearsing and filming.

10. Allow sufficient time to train performers and to rehearse the action so that everyone involved knows what their part in the action is to be. Keep all persons who are not involved out of the area of the rehearsal.
11. Know where and what your target is at all times. Do not release the prop unless you have a clear view of your target.
12. Never propel one of these props until you have received the designated signal to do so from the individual designated to signal. Always have an agreed upon abort signal in case it is necessary to abort the use of a prop. Use a signal that can be recognized even during photography.
13. Report any malfunctions of equipment to the Property Master immediately. Do not attempt to adjust, modify or repair equipment yourself. It is best to have a duplicate immediately available. Malfunctioning equipment should be taken out of service until properly repaired by a person, such as an armorer, qualified to do so.
14. Never lay down or leave these props unattended. Unless actively filming or rehearsing, all props should be secured by the Property Master or an individual designated for this duty such as a weapons expert if one is assigned to the production.
15. Use appropriate personal protective equipment whenever camera, sound or other crew or cast are exposed to these props.
16. All State and Federal safety regulations are applicable and override these guidelines if they are more stringent.

The Property Master is responsible for:

NOTE: The Property Master should coordinate these duties with the weapons expert if one has been assigned to the production.

- 1) Proper storage, possession, control and distribution of all of these props on the set. All such props to be used on the production, whether company owned or rented, or privately owned, are to be given to the Property Master.
- 2) Designating individuals under the Property Master's direct supervision to assist them if necessary.
- 3) Being qualified to work with the types of props being used, and being knowledgeable in their handling, use and safekeeping.

- 4) Seeking expert advice if he or she is not familiar with the prop weapons to be used.
- 5) Being knowledgeable in the laws governing transportation, storage and use of these props and complying with those laws.
- 6) Being knowledgeable of and adhering to all manufacturers' warnings, storage and use of these props and complying with those laws.
- 7) Issuing of props; the Property Master will issue to untrained personnel only after he/she has confirmed, with one of the persons named in #5 above, such personnel have been properly trained.
- 8) Retaining possession of all props except during actual filming or rehearsal. The Property Master, or an individual designated by the Prop Master, shall collect all such props as soon as they are not immediately required on the set.
- 9) Checking each prop before each use. All props must be cleaned, checked and inventoried at the close of each day's shooting. All props must be accounted for before personnel are allowed to leave the area. The production company should allow time in its schedule for this procedure.
- 10) Using simulated or dummy props whenever possible.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #31

SAFETY AWARENESS WHEN WORKING AROUND INDIGENOUS "CRITTERS"

(Refer to Safety Bulletins #6 and #12 when filming animals and reptiles)

This bulletin addresses special safety considerations when working on locations where various indigenous critters may be present. Although the types of critters may vary from region to region, basic safeguards should be taken to prevent serious injury or illness to cast and crew members.

PRE-PLANNING

"Critters" awareness starts during the initial search for locations. The location manager, his or her department representative, production management, studio safety department representative and/or any medical personnel assigned to the project should consider safety precautions when pre-planning and preparing to use a location that may contain some type of indigenous critters, including identifying the type(s) of critters present, the location of nearby hospitals or medical facilities, and the availability of any anti-venom that may be required. Pre-planning may also include contacting the local zoo to see if they have the anti-venom and to alert them you will be working in the area, especially if the production will be working with animal actors that could escape. Contact should be made with local wildlife authorities such as State Fish and Game as to the protective status of indigenous critters in the area.

It is production's responsibility to assure the safety of the indigenous critters in the filming area, and to consult the agency or persons responsible for the removal of wildlife from location sets. Any such indigenous critters that remain on the set are subject to American Humane Association (AHA) Guidelines and Procedures, including but not limited to:

Section 809.1 which states, if native animals are not to remain on the set, they must be carefully removed, relocated, or properly housed and cared for, then safely returned to their habitat after filming is complete. Only qualified and trained personnel should attempt removal of nests or hives.

Section 809.2 which states, a production may not intentionally harm and must take precautionary measures to protect nests, dens, caves, caverns, etc.

Section 809.3 which states, care must be taken to ensure that non-indigenous animals are removed from the area after the production has completed filming.

Animal actors brought to a location can be affected by other indigenous critters: this could range from distraction to life threatening situations or the transmittal of diseases between critters. Notification should be provided to the professional trainer/supplier of the animal actors.

If you have additional questions regarding the AHA's Guidelines for the Safe Use of Animals in Filmed Media, contact the Film and Television Unit at (818) 501-0123.

GENERAL SAFETY PRECAUTIONS

- While working around critters, it is advisable to wear long pants with the pant legs tucked into socks or boots. A good boot above the ankle will provide better protection. It is also advisable to wear a long-sleeved shirt, dress in layers and wear light colors. Generally, critters are dark in color; they are spotted easily against a light background.
- Avoid heavy perfumes or after-shaves as they attract some pests. Apply repellents according to label instructions on the product. Applying repellents to clothing appears to be most effective.
- If a pesticide is being used to control pests, follow manufacturers' instructions including the proper use of personal protective equipment (PPE) as noted on the product label and/or Material Safety Data Sheet (MSDS) for persons applying the product or entering the treated area. Allow time for dissipation prior to using a treated location. The MSDS must be available to all cast and crew upon request.
- In the case of bites or stings, serious allergic reactions are possible. If you have any known allergies, notify the set medic and/or safety representative prior to or when you first arrive at the location.
- If you are bitten or stung by an indigenous critter, immediately contact the set medic. If the encounter with the indigenous critter involves a life threatening situation, **call "911."**
- For additional precautions or questions, contact the studio safety representative, local health department, set medic or local experts in the area you will be working in.

INDIGENOUS CRITTERS

Since there are numerous types of critters, there is no way this Safety Bulletin can cover all of the various types. The following are some of the more commonly encountered critters on locations:

1. Ants:

- Are red, brown or black in color and have a three-segment body with six legs
- They are found everywhere and their bites are mild to painful
- Special precautions should be taken when working around red fire ants to keep from being bitten

2. Ticks:

- Are red, brown or black in color and have a hard-shelled body with eight legs
- Some types of ticks are very small in size and difficult to detect
- They are found in open fields, overgrown vegetation, wooded areas, and on or near animals
- Ticks live on deer, mice, and birds
- Do not attempt to remove ticks by using any of the following:
 - Lighted cigarettes
 - Matches
 - Nail polish
 - Vaseline
- **If bitten**, seek medical attention immediately. Ticks are known to carry many types of diseases such as tick paralysis, Lyme disease and Rocky Mountain spotted fever.

3. Scorpions:

- Are tan, brown or black in color and have a hard-shelled body with eight legs, claws and a barbed tail
- When a scorpion stings, it whips its tail forward over its head
- They can be found under rocks or fallen wood and are most common in the desert and southwest
- All stings are painful, however, very few are fatal

4. **Stinging, Flying Insects (Bees, Hornets and Wasps):**

- Are black, yellow, or red in color and have a three-segment body with wings, and a tail stinger
- They can be found everywhere and can produce a mild to painful sting which causes allergic reactions in some
- **If stung**, seek medical attention and notify the set medic. People who are allergic should carry reaction medication
- Stinging flying insects are generally dormant at night with the exception of mosquitoes
- Identification of Africanized killer bees is very difficult. Remember this type of bee is very aggressive and will attack in swarms. Extreme care should be taken if a hive is located.

5. **Biting Insects**

a. **Mosquitoes and Flies**

There are many different species of mosquitoes and flies in the United States. They can be found in wooded areas, near or on animals, refuse areas, or water, particularly standing water.

NOTE: These insects can carry various types of diseases. Malaria and dengue fever are not just found in tropical locations, it has been found in the United States. Asian "tiger mosquitoes" have been found in the Los Angeles area and are known to carry dengue fever.

b. **Chiggers**

- Are red, tiny and smear red when crushed
- They are prevalent throughout the southern part of the United States
- They live on the ground, around shrubs and plants, or anywhere vegetation will protect them
- They prefer shade and moist areas, but will forage for food at great distances
- They can also detect a food source from a great distance
- Chigger bites produce blisters by irritating the skin. Use chigger bite ointment to remove the itch and promote healing

6. **Poisonous Spiders**

a. **Black Widow Spider**

- Are black in color and have a two-segment body with eight legs and a red hour glass design on the abdomen
- They are prominent in warm climates and prefer cool, dry, and dark places
- They can produce painful to fatal bites

b. **Brown Recluse Spider**

- Are brown in color, have a two-segment body with eight legs and a violin shaped design on the abdomen
- They can produce painful to fatal bites

7. **Snakes**

a. **Pit Vipers (Rattlesnakes, Copperheads, etc.)**

- They come in sixteen (16) distinctive varieties
- There are numerous subspecies and color variations, but the jointed rattles on the tail can positively identify all
- While most are concentrated in the southwest U.S., they have extended north, east, and south in diminishing numbers and varieties so that every contiguous state has one or more varieties
- Pit Vipers produce painful to fatal bites and do not have to be coiled to strike. For example, a rattlesnake can strike out for one-half of its body length

b. **Other Exotic Snakes**

- When working in other foreign locations that have various other exotic snakes indigenous to the area (cobra, black mamba, etc.), these snakes produce fatal bites; therefore, the location of anti-venom is extremely important
- Different anti-venom will be required for various species
- Consult with local experts and governmental authorities

If bitten:

- Seek immediate medical attention
- Attempt to note the time and area of body bitten
- Immediately immobilize the body part affected
- Do not apply a tourniquet, incise the wound, or attempt to suck out the venom
- Do not allow the victim to engage in physical activity

Tips for Snake Avoidance:

- Always look where you are putting your feet and hands
- Never reach into a hole, crevices in rock piles, under rocks, or dark places where a snake may be hiding. If you need to turn over rocks, use a stick
- Attempt to stay out of tall grass, if you can. Walk in cleared spots as much as possible. Step on logs, not over them so that you can first see whether there is a rattlesnake concealed below on the far side
- Be cautious when picking up equipment, coiled cables, and bags left on the ground
- Never pick up a snake or make quick moves if you see or hear a rattle. If bitten by a snake, remember what it looked like. Various snakes require different anti-venoms
- Remember that rattlers are protectively colored (camouflaged)
- On hot summer days, rattlesnakes can become nocturnal and come out at night when you do not expect it. Care should be taken when working at night after a hot summer day
- Other types of snakes indigenous to the United States are **cottonmouth** and **coral snakes**. These snakes can produce fatal bites and can become very aggressive

8. Alligator and Crocodiles

- Can be found in various waterways around the world
- They have been known to attack large animals and humans and will exit the water to attack prey on the shoreline
- They can be found in both fresh and salt water
- Both the alligator and crocodile have been known to ambush their victims

9. **Sharks, Sea Urchins, Rays, Scorpion Fish, Jellyfish and Other Exotic Marine Life**

When working around water environment, you may contact and consult with local experts, Studio safety representatives or medical staff to become familiar with the critters in or around the water environment in question.

10. **Rodents**

- Locations that may involve the use of alleyways, beneath bridges, tunnels, abandoned buildings, or other structures, may involve potential contact with rats, squirrels and other rodents
- They can carry various types of diseases, which can be contracted if bitten by one of these critters
- Refer to **Safety Bulletin #26, Preparing Urban Locations** for precautions and clean up of locations that may have these types of rodents present

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #32

FOOD HANDLING GUIDELINES FOR PRODUCTION

(Also refer to Safety Bulletin #32, "Addendum A" – Public Health Advisory)

The following guidelines are provided to assist your production in understanding State and Local Health Department requirements for the preparation and serving of food to your cast and crew. Most cities and counties have adopted food-handling requirements that are similar to those outlined below. To insure compliance, refer to all applicable rules and regulations for the jurisdiction in which you will be working (see Addendum "A" for Los Angeles and California requirements). Violation of established food-handling requirements may lead to the spread of food-borne illness and may be punishable by a fine and/or imprisonment.

Food-borne illnesses are caused by bacteria easily transmitted by food service workers due to improper personal hygiene, poor food handling practices and/or inadequate cold and hot food holding temperatures. Careful attention to safe food handling practices, personal hygiene and cleanliness can help reduce the potential of spreading illness.

All food serving areas should be kept clean, healthful, and/or free from debris, pests and other unsanitary conditions.

Please ensure that your production meets the safe food handling requirements outlined below. Should you have any questions, please contact your Safety Program Administrator.

A copy of this bulletin and Health Advisory (Addendum "A") should be posted wherever food is prepared or served on the production.

DEFINITIONS

Certified Food Handlers: Must be present in every food preparation facility. This may include the facility owner and at least one employee on each shift. Various accredited trainers throughout the State provide certification.

Work Areas Requiring A Permit: Refers to commissaries, vehicles, and other locations where food has been inspected and permitted by a local authority having jurisdiction -- in Los Angeles, it is the Los Angeles County Health Department.

Preparation: Refers to slicing, chopping, combining ingredients, cooking, re-heating, wrapping, packaging and the serving of bulk-food items.

LICENSED FOOD ESTABLISHMENT (caterers, commissaries and restaurants)

When a licensed food establishment is providing food service for a production, the establishment should provide evidence that the food preparation is being provided by licensed caterers working from permitted work areas. In California, the entire operation must operate under the direction of a Certified Food Handler.

These types of establishments normally provide unlimited food preparation for main meals.

MOBILE FOOD FACILITIES

Food Preparation Vehicles:

The Health Department regulates how food is prepared and stored on a vehicle. "Any wheeled vehicle upon which ready-to-eat food is cooked, wrapped, packaged, processed or portioned for service, sale or distribution," is considered a Mobile Food Preparation Vehicle and must have a valid Public Health Permit.

All catering vehicles must have a valid Public Health Permit to operate. This Health Permit must be posted or kept within the vehicle at all times.

In California, construction of food prep vehicles must comply with the requirements of California Administrative Code Mobile Food Preparation Units and Article 11 and Article 12 of the County Health Code, which requires detail of the specific structural and sanitary requirements of the food prep vehicles.

ALL OTHER FOOD PROVIDED

Any personnel may be allowed to handle individually wrapped prepackaged foods purchased from an approved facility (such as a grocery store), or serve hot meals purchased from a licensed restaurant and transported to the work site, such as:

- Individually wrapped or prepackaged foods for individual consumption;
- Single servings of sodas, juice boxes, and milk; and/or
- Other hot beverages such as coffee and tea.

Such prepackaged food must be purchased from licensed food establishments. Food that could be potentially hazardous food should be consumed within two (2) hours. Potentially hazardous food products not consumed within two (2) hours should be discarded. Delivery vehicles may not be utilized for the storage of food products; they are limited to the conveyance of food product.

Authority: California Health and Safety Code Division 104, Part 7, Chapter 4, Article 4 §113925 Article 7 §113995, §114010; Los Angeles County Code Title 11 Health and Safety, Chapter 11.12.

FOOD SERVICE AND PREPARATION:

Food prepared and served on a production must meet Health Department requirements. Please observe the attached Health Advisory issued by the Los Angeles County Health Department, which outlines the required permits, certifications and licenses for food preparation work areas and vehicles on a production in Los Angeles County.



ENVIRONMENTAL
Bureau of Special Services
5050 Corbin Avenue
Telephone: (626) 430-5100

NOTICE: This Health Advisory was issued in 2001. As of August 16, 2011, This Health Advisory is pending revisions from the Los Angeles County Department of Health Services.



Approved Film Production Food Services

Several types of food services may be provided to the staff at a film site. Depending on the food service, a Public Health Permit may be required.

PERMIT REQUIRED

The following types of food services have been established to conform to the requirements of the California Health and Safety Code (CAL HSC) and Los Angeles County Code.

Mobile Food Facility Permit (CAL HSC §§ 114294, 114295, 114297, 114305, & 114315)

This type of food service utilizes a permitted commercial food truck or cart to provide food service at the film site. Outdoor food preparation and service areas are not approved under this permit.

Catering to the Film Site by a non-Motion Picture Catering Vehicle (CAL HSC §§113789, 113790, 114294, 114295, 114297, 114305, & 114315)

A permitted restaurant or caterer may be contracted to provide food service at the film location.

Motion Picture Catering Operation Permit (Permit Business Code 3010) (LA County Code § 8.04.316)

A Motion Picture Catering Operation (MPCO) Permit was recently developed by the Department. This permit covers a mobile food facility, no more than two mobile storage vehicles, and outdoor food preparation and service areas, where the operator is under contract to operate at a licensed film studio or at a site with a permit for filming on location issued by the appropriate city or county.

NO PERMIT REQUIRED

The following food services are restricted and must meet the requirements below.

Commercially Prepackaged Food

This type of food service is limited to single-serving size, commercially pre-packaged foods, displayed on a table for self service, and may include limited coffee service. This type of service does not allow food to be served from or stored on a vehicle.

Requirements:

- Only commercially prepackaged, single-serving, non-potentially hazardous foods and beverages from a permitted facility may be served. Approved foods include:
 - o Commercially prepackaged, single-portioned cereal
 - o Commercially prepackaged, single-portioned, non-potentially hazardous pastries

Approved Film Production Food Services

- o Commercially prepackaged, single-portioned snacks and beverages (e.g., chips, candy, cookies, trail mix, sodas, bottled water, etc.)
- o Whole, uncut and prewashed fruits
- o Individual serving-sized commercially prepackaged condiments such as sugar and creamer
- The only potentially hazardous food (PHF) that may be served is commercially prepackaged individually sized milk that must be maintained at 45°F or below.
- Coffee service from a professional vending service is recommended. Coffee may be served using a commercial coffee maker. However, coffee pots and filter holders must be properly cleaned and sanitized using, at a minimum, a 2-compartment sink with hot and cold running water that is not used for janitorial purposes.
- Only single-use plates, cups and utensils may be used.
- The food may not be served from or stored on a vehicle.

Food Delivery

This type of food service involves daily purchasing of individually packaged meals from permitted food facilities (e.g., sandwiches, salads, burritos, etc.).

Requirements:

- All meals must be purchased daily from a permitted food facility.
- All food must be individually packaged by the permitted food facility (e.g., individually bagged combo meals, prepackaged sandwiches, individually portioned salad, potato salad or other side dishes, individually sized pre-packaged condiments, and single serving beverages).
- All individually packaged food that is potentially hazardous must be served immediately after delivery, or discarded if not served.
- Unpackaged food may not be handled or served.
- If transporting from a retail food facility for more than 30 minutes, an insulated cooler should be used to maintain the proper temperature of PHF: cold food, at or below 41°F; hot food, at or above 135°F. (CAL HSC § 113996).

For more information regarding these food services, please contact the Food and Milk Program at (626) 430-5400.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #33

SPECIAL SAFETY CONSIDERATIONS WHEN EMPLOYING INFANT ACTORS (FIFTEEN DAYS TO SIX MONTHS OLD)

This bulletin addresses special safety considerations regarding the employment of infant actors in motion picture and television production.

1. Hands should be washed before and after handling infants and after changing diapers.
2. Applicable laws and regulations pertaining to tobacco smoke must be followed.
3. When using special effects smokes the producer should take steps to prevent exposure of the infant to the smoke. You should also consult **Safety Bulletin #10, "Guidelines Regarding the Use of Artificially Created Smokes, Fogs, and Lighting Effects."**
4. With regard to an infant, whose employment is governed by California Laws, the responsibility for caring and attending to the infant's health and safety is as follows:

Studio Teacher:

"In the discharge of these responsibilities, the studio teacher shall take cognizance of such factors as working conditions, physical surroundings, signs of the minor's mental and physical fatigue, and the demands placed upon the minor.... The studio teacher may refuse to allow the engagement of a minor on a set or location and may remove the minor therefrom, if in the judgement of the studio teacher, conditions are such as to present a danger to the health, safety or morals of the minor."

(8 CCR § 11755.2)

Nurse:

"Direct and indirect patient care services that insure the safety, comfort, personal hygiene, and protection of patients; and the performance of disease prevention".

(2 BPC § 2725 (a))

For infants subject to laws other than California's, an appropriate person should be designated responsible for that infant's health and safety. That person should make the determination as to whether or not a hazard exists and take appropriate action as described in this paragraph.

If unsafe conditions are suspected by the Studio Teacher or nurse, a studio safety professional, if available, should be called for consultation, as required by the production's *Injury and Illness Prevention Program*.

5. Trailer holding tanks should not be pumped while the infant is present or immediately prior to the infant's arrival. The trailer should be well ventilated prior to the arrival of the infant.
6. When substances are used for altering an infant's appearance, provisions should be made for bathing the infant.
7. Foods which commonly cause allergic reactions should not be used to alter the appearance of the infant's skin, unless their use is specifically approved by a medical doctor. These foods include, but are not limited to: raspberry and strawberry jams, jellies and preserves.
8. Consumer products including glycerin, lubricating jellies, and cosmetics, should not be used to alter an infant's appearance. Permission should be obtained from the parent or guardian prior to applying any substance to the infant's skin.
9. Once wardrobe and props have been issued by the production for use on/with an infant, the wardrobe and props should not be reissued for another infant without laundering wardrobe and disinfecting props.
10. Infant accessories provided by the production, such as bassinets, cribs and changing tables, should be sanitized at the time of delivery to the set, and on a regular basis. Infant accessories should not be exchanged from one infant to another without first having been sanitized, (bottles, nipples and pacifiers should not be exchanged between infants).

Note: All production personnel working with infants are urged to review the "Blue Book," entitled "The Employment of Minors in the Entertainment Industry," published by the Studio Teachers, Local 884, IATSE. Reference should also be made to the extensive federal and state labor laws and to any applicable collective bargaining agreements which govern the employment of child actors.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #34

GUIDELINES FOR WORKING IN EXTREME COLD TEMPERATURE CONDITIONS

INTRODUCTION

When working in cold conditions, the two most common hazards are hypothermia and frostbite. With proper awareness and pre-planning, these hazards can be eliminated.

HYPOTHERMIA

Hypothermia is a potentially deadly condition, which results in an abnormally low body temperature. This drop in temperature occurs when the body loses heat faster than it is produced. Anyone exposed to near freezing temperatures for prolonged periods of time should be familiar in the prevention and treatment of hypothermia. A combination of cold, wet and windy conditions will result in hypothermia for anyone who is inadequately prepared and protected.

Certain conditions will increase your risk:

- Improper dress for the conditions
- Poor physical condition
- Fatigue
- Illness
- Poor diet or alcohol, tobacco or drug use

An individual's physiology may affect the body's ability to acclimate; possibly, increasing the risk.

Early symptoms of hypothermia are often overlooked, they include:

- Intense shivering
- Muscle tension
- Fatigue
- Intense feeling of cold or numbness

To most people, these may just seem like normal consequences of exposure to winter conditions. Ignoring these early signs can be very dangerous. If you or a co-worker experience early symptoms of hypothermia, take action.

Also watch for additional behavioral signs including:

- Slurred speech
- Difficulty performing tasks
- Loss of coordination
- Lethargy
- Erratic behavior, poor decisions
- Irritability
- Slow breathing and heart rate

At the first sign of any of these conditions, notify your supervisor and/or seek medical attention (*i.e.*, set medic, studio hospital or medical provider) then go inside and get warm, before you attempt to complete the job or project you are working on.

HYPOTHERMIA PREVENTION

Preventing hypothermia is not difficult. In fact, it is much easier to avoid hypothermia than to treat it after the fact. You can prevent hypothermia if you pre-plan, know what the conditions are expected to be and plan your clothing accordingly.

Some clothing tips to remember:

- Clothing does not warm you; it provides insulation to preserve your warmth.
Layer your clothing
- As much as half of your body heat is lost through your head and neck, so keep them covered
- Keep rain and wind out of your clothing
- Avoid overheating and sweating by ventilating as needed
- Wool clothing is best followed by synthetics, down is okay if kept dry, but cotton is a bad choice

Food and behavior:

- Watch what you eat. Minor changes to your normal behavior are an important step in preventing hypothermia
- This is not the time for a starvation diet. It is important to maintain your optimal metabolism
- Take extra steps to stay warm and dry by preventing exposure to wind and water

If you are working in cold weather, remember these tips:

- Do not diet; give your body the appropriate nutrients
- This will increase your metabolism and help keep you warm
- Continue to drink fluids, water is best, **no alcohol**

Consider the following:

- If you do not need to be outside, go inside, even if it is only for a few minutes
- If you cannot go inside, exercise, jog in place, shake your arms, these activities will increase your circulation and increase heat

If someone is showing signs of hypothermia:

- Hypothermia symptoms should receive medical treatment as soon as possible
- Prevent further heat loss by sheltering from exposure to wind and water
- Bring the crew member inside to a warm area, if possible
- Treat the crew member gently
- Seek medical attention (*i.e.*, set medic, studio hospital or medical provider)
- Remove any wet clothing and replace with dry clothing
- Wrap the crew member in blankets and cover their head
- No caffeine, alcohol or tobacco should be used

FROSTBITE

Frostbite is more common than hypothermia. It is the result of the freezing of the extracellular fluid in the skin, which can permanently damage the tissue. This condition usually affects the extremities, such as the tips of fingers, the ears and nose but other exposed areas can also be affected. Like hypothermia, a combination of elements usually leads to frostbite not cold air alone. In fact, most frostbite is the result of conduction, the rapid transfer of heat, for example, touching cold metal surfaces with bare hands. Exposure to cold temperatures and wind can quickly result in frostbite.

Factors that can increase your risk of frostbite are:

- Improper dress for the conditions
- Poor physical condition
- Fatigue
- Illness

- Poor diet
- Alcohol
- Tobacco
- Drug use

Signs and Symptoms of Frostbite

Mild frostbite affects the outer skin layers and appears as a blanching or whitening of the skin. This usually disappears as warming occurs, but the skin may appear red for several hours

In severe cases the skin will appear waxy-looking with a white, gray-yellow or gray-blue color. The affected parts will have no feeling and blisters may be present. The tissue will feel frozen or "wooden"

Other indicators are; swelling, itching, burning and deep pain as the area is warmed

Frostbite Prevention

Just as with hypothermia, frostbite is much easier to prevent than it is to treat. All of the items listed above for hypothermia would also apply for frostbite.

Summary

- Wear proper clothing which insulates from the cold and provides protection from wind, rain and snow
- Cover your neck and head
- Protect your hands and feet (mittens are warmer than gloves but may limit activity)
- Keep clothing and shoes loose, to ensure good circulation
- Drink plenty of fluids
- Do not diet; give your body the appropriate nutrients
- Alcohol, tobacco or drugs should not be used
- Keep moving, do not stand still
- Take breaks to go inside and warm up
- Never touch a cold metal object with your bare hands

Frostbite Treatment

If you think you may have frostbite, even a mild case, immediately seek medical attention.

The following list will provide some guidelines for treating frostbite:

- Get to a place where you can stay warm after thawing; do not allow the affected body area to refreeze
- Seek medical attention (*i.e.*, set medic, studio hospital or medical provider), re-warming should be conducted under medical supervision
- Warm water is best for re-warming; do not rub or massage the area, or use dry heat (sunlamp, radiator, heating pad)
- If blisters are present, leave them intact
- No alcohol, tobacco or drugs should not be used

GENERAL PRECAUTIONS

The following are some additional steps the production can take to minimize the risks:

- Monitor local weather forecast information daily and conduct cold stress assessments for all areas
- Provide adequate heated shelters for cast and crew
- Maintain a suitable thermometer and anemometer (wind measuring device) at the site; these will be used to determine the equivalent chill temperature
- Charts for establishing acceptable working conditions based on temperature and wind speed, are attached
- Establish safe areas and paths, no wandering or sightseeing, this will reduce the risk of getting lost

EQUIVALENT CHILL TEMPERATURE

Estimated Wind Speeds (In Km/h)	Air Temperature Celsius											
	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
Equivalent chill temperature (C)												
0 calm	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
8	9	3	-2	-7	-12	-18	-23	-28	-35	-38	-44	
16	4	-2	-7	-14	-20	-27	-33	-38	-45	-50	-57	
24	2	-5	-1	-18	-25	-32	-38	-45	-52	-58	-65	
32	0	-7	-14	-21	-28	-35	-42	-50	-56	-63	-70	
40	-1	-1	-16	-24	-31	-38	-46	-53	-60	-67	-76	
48	-2	-10	-17	-25	-33	-40	-48	-55	-63	-70	-78	
56	-3	-11	-18	-26	-34	-42	-50	-58	-65	-73	-81	
64	-3	-11	-19	-27	-35	-43	-51	-59	-66	-74	-82	
(wind speed greater than 64Km/h have little additional effect)	LOW HAZARD Risk of exposure, dry skin being effected in less than one (1) hour			INCREASING HAZARD Danger from freezing of exposed flesh within one (1) minute				HIGH HAZARD Flesh may freeze within thirty (30) seconds				
	Acceptable working conditions, given proper clothing and precautions are taken											

EQUIVALENT CHILL TEMPERATURE

Estimated Wind Speeds (In MPH)	Air Temperature Fahrenheit											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	
	Equivalent chill temperature (F)											
0 calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	
10	40	28	16	4	-9	-24	-33	-46	-58	-70	-83	
15	36	22	9	-5	-18	-32	-45	-58	-72	-85	-99	
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	
35	27	11	-4	-20	-35	-51	-67	-82	-98	-113	-129	
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	
(wind speed greater than 40 MPH have little additional effect)	LOW HAZARD Risk of exposure, dry skin being effected in less than one (1) hour			INCREASING HAZARD Danger from freezing of exposed flesh within one (1) minute				HIGH HAZARD Flesh may freeze within thirty (30) seconds				
	Acceptable working conditions, given proper clothing and precautions are taken											

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #35

Safety Considerations for the Prevention of Heat Illness

This bulletin addresses safety considerations when exposed to heat. Safeguards should be taken to prevent heat illness.

INTRODUCTION

Heat stroke can be fatal. Because of the health risks, the symptoms of heat related illness must be recognized. Excess heat buildup in the body can arise through physical exertion, as well as from hot and humid weather. This can place abnormal stress on the body that can result in one or more serious medical conditions such as heat rash, sunburn, heat cramps, fainting, heat exhaustion, or heat stroke.

WHAT IS HEAT ILLNESS?

Heat illnesses are medical conditions that occur when heat builds up inside the body beyond its ideal 98.6 degree Fahrenheit temperature. There are several ways in which the body may react to excessive heat.

HEAT RASH is a skin irritation caused by excessive sweating during hot, humid weather.

SUNBURN is caused by exposure to the sun's rays. Overexposure can cause immediate burns and blisters, while repeated or long-term exposure can potentially lead to skin cancer.

HEAT CRAMPS affect people who sweat excessively during strenuous work activity. The sweating depletes the body's salt and fluids. The low salt level in the muscles causes painful cramps.

FAINTING (Heat Syncope) is caused by a lack of adequate blood supply to the brain usually as the result of dehydration and lack of acclimatization to work in warm/humid weather.

HEAT EXHAUSTION is caused by a loss of fluids from sweating and/or a lack of drinking proper fluids. Symptoms include, but are not limited to, sweating, cool or clammy skin, weakness, fatigue, nausea, vomiting, dizziness, headache, fast or weak pulse, and/or fast or slow breathing.

HEAT STROKE is a life-threatening emergency that occurs when the body overheats to a point where its temperature control system shuts down and heat builds up internally. The signs of impending heat stroke are altered behavior, convulsions, unconsciousness and, usually, lack of sweating. ***Should these symptoms occur, seek medical assistance immediately.***

SYMPTOMS OF HEAT ILLNESS

Early heat illness signs and symptoms may not always follow a progressive pattern from a mild condition such as heat rash up to the life-threatening condition of heat stroke. Thirst alone is a poor indicator of how the body is reacting to heat. Know the symptoms of heat illness to watch for:

- Discomfort
- Headache
- Fatigue
- Loss of coordination
- Vomiting
- Seizures
- Fainting
- Blurry vision
- Confusion
- Dizziness
- Irritability
- Poor concentration
- Muscle pain/cramps
- Lack of sweating or excessive sweating
- Altered behavior

TELL A SUPERVISOR IMMEDIATELY IF YOU THINK YOU OR A CO-WORKER ARE FEELING ILL FROM THE HEAT.

HEAT ILLNESS SUSCEPTIBILITY FACTORS

There are many risk factors that increase susceptibility to heat illness. They include, but are not limited to:

ENVIRONMENTAL CONDITIONS

- Hot air temperature
- High relative humidity
- Physical activity
- Radiant heat from the sun or other source
- Personal protective equipment worn
- Lack of air movement

PERSONAL CONDITIONS

- A history of heat illness
- Insufficient water consumption
- Over/under weight
- Poor level of fitness
- Lack of acclimatization
- Poor medical condition
- Use of prescription and over the counter medications and other drugs
- Consumption of alcohol, caffeine, carbonated drinks, energy drinks
- Advanced age or young age
- On a low salt diet

Consult with a doctor if you know you have risk factors for heat illness.

ACCLIMATIZATION

During the first few days of working in heat, the body needs time to adjust. This period of adjustment (acclimatization) varies by individual and can take up to a few weeks. During this acclimatization period you should:

- Start work slowly and increase the pace gradually. During a heat wave there is still a risk for heat illness even if previously acclimatized.
- Report to a supervisor if returning to work after an absence or illness, or when changing from a cool to a hot and/or humid climate.
- Supervisors and employees should be aware that acclimatization to heat can take several days and work/rest cycles should be scheduled accordingly.

HEAT ILLNESS PREVENTION

Drink Plenty of Water

Dehydration occurs quickly no matter how well acclimatized to the heat. The average person loses between 1 and 2 quarts of fluid an hour in perspiration during heavy exertion in hot weather. The only way to replace the loss (and help the body continue to cool itself) is to drink water.

- Frequently drink small quantities of water throughout the entire work shift. A minimum of 1 quart (four 8-oz cups) per hour is recommended.
- **Don't wait until thirsty to drink water.** Being thirsty is not a good signal for the need to hydrate. Drink water both before and after work. Avoid substituting soft drinks and coffee for water.
- Drinking water needs to be available for all employees at all work locations.
- Know the location(s) of the closest drinking water supplies.

Wear Appropriate Work Clothes and Cool Down Under Cover

- Know the nearest cool resting place(s). Get out of the sun or away from the source of heat and find a cool, preferably well ventilated, resting place when you are starting to overheat or need to cool down.
- Wear light-colored loose fitting long-sleeved shirt and pants, and UV sunglasses or, if appropriate, other protective equipment.
- Wear a wide brim hat (baseball caps do not cover the ears and neck).
- Use sunscreen or sun block and reapply as needed.
- Eat light meals. Hot, heavy meals add heat to the body.

SUMMARY

Heat illness is preventable. Know your limits and take time to adjust to the heat. Above all, drink plenty of water and immediately report any signs of heat illness in yourself or others.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #36

RECOMMENDED GUIDELINES FOR SAFELY WORKING AROUND UNMANNED AIRCRAFT SYSTEMS (UAS)

The following guidelines are for the outdoor and indoor use of UAS.

Note: Outdoor use of UAS must follow the guidelines in Addendum “A” - “Unmanned Aircraft Systems (UAS) Exemption Summary”.

UAS combine the use of aeronautics, electronics, and wireless transmission technologies through the use of a remote-controlled or a programmable unit. UAS types include, but are not limited to, helicopters, multi-rotor, and fixed wing aircraft.

Guidelines for Operation

1. The Pilot in Command (PIC) is at all times the final authority over the UAS, shall be in command over all flight operations and/or related activities, and be appropriately trained. The PIC shall have the final authority to abort any flight operation in the interest of safety. Abort signals shall be specified ahead of time.
2. The PIC, or a person knowledgeable of this flight operation that has been designated by the UAS Operator, will establish the communication protocols with the designated production representative to implement a plan for communications.
3. At the start of each day's filming, the PIC or a person knowledgeable of this flight operation that has been designated by the UAS Operator, and the designated production representative will conduct a briefing/safety meeting for the cast and crew and those persons necessary for filming.

Briefings/Safety Meetings should include a discussion of the following:

- Possible risk to personnel involved
- Safeguards to personnel, animals, and equipment
- Communications, including chain of command; and emergency procedures, including landing zones and designated safety zones
- Boundaries and intended flight paths
- The intended use of any stunts or special effects during UAS operations
- Electronic devices and/or other equipment that may interfere with the operation of the UAS

- Obstacles, equipment and/or locations that may present a hazard
- Abort signals, audible and/or visual, used to halt filming in the event of unforeseen circumstances or safety hazards
- Federal, state, and local regulatory limitations or restrictions, if applicable
- Any exemptions from Addendum “A” that are unique to the UAS operator

Note: Subsequent briefings/safety meetings may be necessary to address cast and crew members’ concerns regarding other sequences, changes, and/or additional scenes.

4. Once the UAS is airborne, no change will be made to any sequence without authorization from the PIC.
5. Equipment shall not be attached to, nor altered on, the UAS without the authorization of the PIC.
6. Unless authorized by the PIC, or a person knowledgeable of this flight operation that has been designated by the UAS Operator, no personnel shall approach the UAS, whether it is running or not.
7. An exclusion zone must be established for the setup, testing, takeoff, and landing of the UAS. This zone should be cleared of all debris, including trash or anything else that may hinder the operation of the UAS. All equipment (e.g., cameras, lights, sound booms, etc.) shall be placed at a safe distance away from the zone.
8. Access to areas where UAS are in operation shall be limited to authorized personnel only. All other personnel shall remain at a designated safe distance. If needed to prevent unintentional entry into potentially hazardous areas, warning signs should be posted and/or other appropriate precautions taken.
9. Never throw anything such as grip tape, clothing, paper, etc., around the UAS.
10. Personal Protective Equipment (PPE) shall be provided and worn, as appropriate.
11. The PIC, or a person knowledgeable of this flight operation that has been designated by the UAS Operator, is responsible for determining if there are any potential radio frequencies or electrical transmissions that could interfere with or affect the safe operation of the UAS. Cast and crew members with electrical or transmission equipment should contact the PIC to see if it may affect the operation of the UAS.

12. Authorities Having Jurisdiction (AHJ) may have their own requirements regarding UAS operations.
13. The storage and transportation of batteries shall be in compliance with all applicable federal, state, and local laws and regulations and any shipping company restrictions.
14. Appropriate precautions should be taken for flammable fuel sources.
15. The flying accuracy of the UAS may be adversely affected by natural conditions such as wind, air density, temperature, gross weight, humidity, and time of day. Man-made conditions such as a weight load, wind (fans), explosives disturbing airflow and center of gravity can also affect the UAS.

Notification

The Production Company must notify all production personnel of the planned use of UAS so that any objection can be communicated prior to UAS operation. Notification can be accomplished by including a statement like the following on the call sheet:

“An Unmanned Aircraft System (UAS) will be used in close proximity to production personnel and equipment. Any personnel who does not consent to working within the UAS area must notify _____ [*please insert the assigned production designee(s)*] prior to use of the UAS.”

Indoor Use

1. As a general matter of safe work practices, these “Guidelines for Operation” and “Notification” procedures listed above should be followed during indoor UAS operations.

Note: The indoor use of UAS is not regulated by federal regulations or by the rules in Addendum A - “Unmanned Aircraft Systems (UAS) Exemption Summary.”

2. Indoor conditions such as increased heat resulting in reduced air density and ventilation systems could adversely affect flying characteristics.
3. There may be times when the UAS is used as a toy or as a prop. Safety precautions for these types of uses should be developed in conjunction with the corresponding risk they present.
4. Prior to each flight the UAS should be inspected to determine that the UAS is safe for flight.
5. The PIC, or a person knowledgeable of this flight operation that has been

designated by the UAS Operator, and the designated production representative should evaluate the indoor location for items such as interior sets, walls, ceiling beams, lighting equipment, rigging, cables, HVAC equipment, etc. and consider these potential hazards before operation of the UAS. The proximity of the UAS to cast and crew and a live audience, if applicable, and any planned special effects or stunts should also be considered.

A COPY OF THIS BULLETIN SHOULD ACCOMPANY THE CALL SHEET ON DAYS THAT THE UAS IS BEING UTILIZED.

UNMANNED AIRCRAFT SYSTEMS (UAS) EXEMPTION SUMMARY

INTRODUCTION

In September 2014, the Federal Aviation Administration (FAA) granted regulatory exemptions to selected companies to operate Unmanned Aircraft Systems (UAS) on scripted, closed-set, motion picture and television productions under specific, outdoor conditions within the United States.

This summary has been developed to provide guidance for all outdoor UAS operations, including when the UAS is flown as a prop.

I. REQUIREMENTS PRIOR TO OPERATION

All UAS vendor companies must possess a current, FAA Section 333 Exemption, FAA-approved UAS Motion Picture and Television Operations Manual (Manual), and must obtain an Air Traffic Organization-issued Certificate of Waiver or Authorization (COA) per instructions detailed in the respective Section 333 Exemption prior to conducting any commercial UAS operation.

The UAS vendor is responsible for maintaining and inspecting the UAS to ensure that it is in a condition for safe operation. The operator must follow the UAS manufacturer's maintenance, overhaul, replacement, inspection, and life limit requirements for the aircraft and aircraft components. Each UAS must comply with all manufacturer safety bulletins.

All UAS must be identified by serial number, registered in accordance with 14 CFR part 47, and have identification (N-Number) markings in accordance with 14 CFR part 45, Subpart C. Markings must be as large as practicable.

FAA regulations require that the UAS vendor utilize a qualified Pilot in Command (PIC) and a Visual Observer (VO) for each UAS in operation. The PIC and VO must meet the training and proficiency requirements set forth in the UAS vendor's Section 333 Exemption.

The PIC must have on set with them at all times all pertinent documentation, which includes, but is not limited to:

Operational Documents: Section 333 Exemption Grant, the Manual; any relevant COA; Plan Of Activities;

Pilot Certification:

- Pilot certificate (Airline Transport Pilot, Commercial, Private, Recreational, or Sport Pilot);
- Current medical certificate, or valid U.S. Driver's License issued by a state, the District of Columbia, Puerto Rico, a territory, a possession, or the Federal government.

(NOTE: These documents must be made available to both the Production Company and to regulatory agencies upon request)

The UAS vendor may either operate within the provisions of the FAA "blanket" COA (see below) or file a separate COA for activities outside of the "blanket" COA. The provisions are:

Flights at or below 200 feet, aircraft weighing less than 55 pounds, operating during daytime Visual Flight Rules (VFR) conditions, within visual line of sight (VLOS) of the pilots, and maintain the following distances away from airports or heliports:

5 nautical miles (NM) from an airport having an operational control tower; or

- 3 NM from an airport with a published instrument flight procedure, but not an operational tower; or
- 2 NM from an airport without a published instrument flight procedure or an operational tower; or
- 2 NM from a heliport with a published instrument flight procedure

The UAS vendor company must request a Notice to Airman (NOTAM) between 48 and 72 hours prior to UAS operation.

The UAS vendor may not operate within 5 nautical miles of an airport reference point (ARP) as denoted in the current FAA Airport/Facility Directory (AFD) or for airports not denoted with an ARP, the center of the airport symbol as denoted on the current FAA-published aeronautical chart, unless a letter of agreement with that airport's management is obtained or otherwise permitted by a COA issued to the exemption holder. The letter of agreement with the airport management must be made available to an FAA Inspector or any law enforcement official upon request.

At least 3 days before aerial filming, the UAS vendor must submit a written Plan of Activities to the local Flight Standards District Office (FSDO) with jurisdiction over the area of proposed filming. The 3-day notification may be waived with the concurrence of the FSDO. The plan of activities must include at least the following:

- a) Dates and times for all flights;
- b) Name and phone number of the UAS vendor for the UAS aerial filming conducted;
- c) Name and phone number of the person responsible for the on-scene operation of the UAS;
- d) Make, model, and serial or N-Number of UAS to be used;
- e) Name and certificate number of UAS PICs involved in the aerial filming;
- f) A statement that the operator has obtained permission from property owners and/or local officials to conduct the filming production event; the list of those who gave permission must be made available to the inspector upon request;
- g) Signature of exemption holder or representative; and description of the flight activity, including maps or diagrams of any area, city, town, county, and/or state over which filming will be conducted and the altitudes essential to accomplish the operation.

Before conducting UAS operations, the PIC must ensure that the radio frequency spectrum used for the operation and control of the UAS complies with the Federal Communications Commission (FCC) or other appropriate government-agency requirements and does not conflict with any radio frequencies used by production.

Authorities Having Jurisdiction (AHJ) may have their own requirements regarding UAS operations.

A safety meeting should be conducted with all affected production personnel prior to UAS operations.

II. OPERATION AND SAFETY

The UAS must weigh less than 55 pounds (25 Kg), including energy source(s) and attached equipment.

The UAS may not be flown at a ground speed exceeding 87 knots (approximately 100 MPH).

The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough available power for the UAS to conduct the intended operation and to operate after that for at least five minutes or with the reserve power recommended by the manufacturer if greater.

If the UAS loses communications or its Global Positioning System (GPS) signal, the UAS must return to a predetermined location within the security perimeter and land or be recovered in accordance with the Manual.

The UAS must be operated within Visual Line Of Sight (VLOS) of the PIC at all times. This requires the PIC to use human vision unaided by any device other than corrective lenses. The VO may be used to satisfy the VLOS requirement, as long as the PIC always maintains VLOS capability and the VO and PIC can communicate verbally at all times.

The UAS cannot be operated by the PIC from any moving device or vehicle.

Flights must be operated at an altitude of no more than 200 feet above ground level when utilizing the “blanket” COA, or no more than 400 feet above ground level when operating under a COA other than the “blanket” COA.

The UAS always must remain clear of, and yield the right of way to, all other manned operations and activities (e.g., ultralight vehicles, parachute activities, parasailing activities, and hang gliders).

UAS operations must be conducted during day time and in Visual Meteorological Conditions (VMC). Presently the FAA does not allow UAS operations at night.

The UA may not be operated less than 500 feet below or less than 2,000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.

Prior to each flight, the PIC must conduct a pre-flight inspection and determine the UAS is in a condition for safe flight. The pre-flight inspection must account for all potential discrepancies, e.g., inoperable components, items, or equipment. If the inspection reveals a condition that affects the safe operation of the UAS, the aircraft is prohibited from operating until the necessary maintenance has been performed and the UAS is found to be in a condition for safe flight.

The PIC must abort the UAS operation in the event of unpredicted obstacles or emergencies.

The UAS vendor company must report to the FAA UAS Integration Office within 24 hours any: 1) incident, 2) accident, or 3) flight operation that transgresses the lateral or vertical boundary of the COA-defined operational area.

The UAS vendor company also must report all accidents to the National Transportation Safety Board.

Further flight operations may not be conducted until the incident, accident, or boundary transgression is reviewed and authorization to resume operations is provided.

III. DISTANCE REQUIREMENTS

The UAS may not be operated directly over any person, except for authorized and consenting production personnel, who must be essential to the closed-set production operation.

The distance between the UAS and authorized and consenting production personnel shall be determined by the Manual.

All Flight operations must be conducted at least 500 feet from all nonparticipating persons, vessels, vehicles, and structures unless:

- a) Barriers or structures are present that sufficiently protect nonparticipating persons from the UAS and/or debris in the event of an accident. The operator must ensure that nonparticipating persons remain under such protection. If a situation arises where nonparticipating persons leave such protection and are within 500 feet of the UA, flight operations must cease immediately in a manner ensuring the safety of nonparticipating persons; and
- b) The owner/controller of any vessels, vehicles or structures has granted permission for operating closer to those objects and the PIC has made a safety assessment of the risk of operating closer to those objects and determined that it does not present an undue hazard.
- c) This distance may be reduced when operating under the Manual. In such instances, distance requirements shall be in compliance with the UAS vendor's Manual.

IV. NOTIFICATION

The Production Company must notify all production personnel of the planned use of UAS so that any objection can be communicated prior to UAS operation.

Notification can be accomplished by including a statement like the following on the call sheet:

“An Unmanned Aircraft System (UAS) will be used in close proximity to production personnel and equipment. Any personnel who does not consent to working within the UAS area must notify _____ [please insert the assigned production designee(s)] prior to use of the UAS.”

V. ADDITIONAL INFORMATION

For more information on the FAA and UAS:

<http://www.faa.gov/about/initiatives/uas/>

To view the FAA's Grants of Exemption:

https://www.faa.gov/uas/legislative_programs/section_333/

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #37

VEHICLE RESTRAINT SYSTEMS - SEAT BELTS AND HARNESSSES

This Safety Bulletin is intended to give recommendations in the safe use of Restraint Systems (e.g., Seat Belts, Harnesses, Head and Neck Restraint Systems, etc.) to persons who are either in or on Picture Vehicles/Stunt Vehicles.

For recommendations regarding Seat Belts, Harnesses, or Personal Protective Equipment (PPE) for Construction Vehicles (e.g., Forklifts, Lifting Platforms, Aerial Lifts, Scissor Lifts, etc.), Production Support Vehicles, Camera Platforms (e.g., Insert Cars, Camera Cranes, etc.) or Aircraft, refer to Safety Bulletins #3, #8, #8A, #8B, #11, #11A, and #22.

- When any Vehicle is to be used in a filmed sequence, either off-camera or on camera, such Vehicle will be equipped with the appropriate Restraint System. These Restraint Systems must be used at all times by all Vehicle operators and passengers.
- Every effort should be made to install the appropriate safety Restraint System for all Vehicles. It is recognized that in exceptional circumstances, such as the case of Vintage or Antique Vehicles, installation of Restraint Systems may pose additional concerns. These concerns should be addressed as far in advance to filming as is practical.
- A thorough evaluation of the stunt or driving sequence will be performed and safety concerns should be discussed with all personnel involved. The level of protection should be appropriate to the intended result or other reasonably anticipated consequence of the action.
- All Vehicles, including their additional Safety Equipment (e.g., Harnesses, Belts, Roll Cages, etc.), must undergo thorough Safety Inspection and Testing on a daily basis by qualified experienced personnel. Restraint Systems that show signs of damage or fraying shall be immediately removed from service and replaced.
- Prior to filming, consideration should be given to issues that concern Air Bags (such as unintentional deployment) and/or other Dynamic Safety Devices.
- **It may be unlawful for any driver or passenger to operate or ride on a vehicle without wearing the proper seat belt while it is being operated on a public highway or road as specified in the applicable vehicle Code.**

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #38

GUIDELINES FOR INCLEMENT OR SEVERE WEATHER

This bulletin identifies the safety considerations that should be addressed when working outdoors in areas where there is a potential for thunderstorms, lightning, flash flooding, extreme winds, large hail, tornados and hurricanes.

PRE-PLANNING

Pre-planning can reduce many of the potential dangers posed by inclement weather. The location manager, his/her department representative or production management, should develop an "**action plan**" when preparing to use locations that may present an inclement or severe weather hazard.

The **action plan** should designate a person who is responsible for monitoring potential inclement weather by commercial weather services, television and radio station news casts, or other available means.

The **action plan** should include a method for communication with cast and crew members in the event of inclement or severe weather. The communication methods should reflect the conditions and circumstances at the scene. Other elements to include should be site specific procedures which include methods and routes of evacuation, meeting areas, a means of establishing a head count for cast and crew members and procedures for equipment shut-down, stowage and/or removal. If there is the possibility of inclement or severe weather, a "**safety meeting**" shall be held to review and communicate the elements of the **action plan**.

Specific hazards which may be addressed in the action plan:

1. Flash Flooding

Causes:

Flash flooding is usually caused by slow moving thunderstorms and can occur within a few minutes or hours of excessive rainfall. High risk locations include low water crossings, recent burn areas in mountains and urban areas which have pavement and roofs which concentrate rainfall runoff.

Flash flooding may be worsened by topography, soil conditions and ground cover. Be especially cautious at night when it is harder to recognize flood dangers.

Realize it does not have to be raining at your specific location for a flood to occur.

Potential Hazards:

- Crew and equipment could become trapped or stranded as escape routes may be damaged and/or blocked.
- Equipment and personnel could be swept away or covered by water, mud or debris.
- Drowning
- Electrocution
- Mud slides

Possible Actions:

- Activate the **action plan**.
- Secure equipment and all electrical power.
- Remove all cast and crew from elevated equipment, scaffolds, booms and sets.
- Stay clear of potential slide areas next to hillsides or on edges of cliff areas.
- Follow directions for evacuation procedures as outlined in the **action plan**.
- Gather at pre-determined evacuation point and ensure everyone is accounted for.
- If you come upon a flowing stream where water is above ankles, STOP! Turn around and go another way.
- Do not drive through moving water or a flooded roadway.
- Do not attempt to return to the area until an "all clear" signal has been given by a regulatory authority or production management.

2. Lightning

Causes:

Lightning results from the buildup and discharge of electrical energy in clouds. Lightning may strike several miles from an associated thunderstorm and may strike when no clouds or rain are present.

Potential Hazards:

- Electrocution
- Burns
- Falling debris
- Concussion
- Fire

Possible Actions:

- Activate the **action plan**
- When working in lightning prone areas, the use of a lightning detector/meter is highly recommended. If a meter is not available, it is possible to estimate the distance of lightning by the thunder. When lightning is seen, count the seconds until thunder is heard and then divide the seconds counted by five to obtain the approximate distance in miles.
- 30-30 rule: The first 30 means if you count to 30 seconds or less (from lightning to thunder), the lightning is within 6 miles of your location and you are in potential danger and should seek shelter. The second 30 means you should wait 30 minutes from the last flash or thunder to establish an "all clear."
- Seek shelter in a sturdy building, a hardtop automobile or truck with the windows rolled up. If such cover is not available seek shelter in wooded areas with thick small trees. Avoid isolated trees.
- Avoid high ground and keep clear of tall objects, towers, aerial lifts, camera booms, scaffolding, fences or other metal equipment.
- Avoid contact with any body of water.
- Avoid using a telephone or cellular phone.
- Where appropriate, shut down generators in accordance with the established action plan.
- Avoid using other electrical equipment or appliances.
- When instructed, move to the pre-determined evacuation area.
- Do not attempt to return to the area until an "all clear" signal has been given by a regulatory authority and/or production management or 30 minutes after the last thunder sound is heard.

3. High Winds

Causes:

High winds can be associated with extreme weather phenomenon including thunderstorms, tornados, hurricanes, and high and low pressure systems. During the summer months in the Western States, thunderstorms often produce little rain but very strong wind gusts (some up to 100 mph) and dust storms.

Potential Hazards:

- Flying debris
- Dust
- Possibility of persons being swept off their feet
- Equipment can be blown over and carried for a distance
- Set destruction

- Eye injuries

Possible Actions:

- Activate the **action plan**
- Remove all cast and crew from elevated areas, sets, scaffolding and other high objects
- Lower all aerial, lighting, diffusion, camera boom equipment and tents
- Tie down and secure all loose equipment
- When instructed, seek refuge from the winds at your pre-determined safe area
- Be aware and protect your eyes from potential injury
- Do not attempt to return to the area until an "all clear" signal has been given by a regulatory authority or production management

4. Large Hail

Causes:

Hail is usually associated with thunderstorms and is caused by freezing rain that can become very large.

Potential Hazards: May cause injuries to crew and damage to equipment

Possible Actions:

- If a watch or warning has been issued, the **action plan** should be activated and the crew should follow all instructions
- Secure and protect all equipment
- Get down from elevated areas, aerial lifts, booms, scaffold and other high areas
- When instructed, seek shelter at your pre-determined safe area
- Do not attempt to return to the area until an "all clear" signal has been given by a regulatory authority or production management

5. Blizzard or Severe Snow Storms

Causes:

A storm accompanied by strong winds creating blizzard conditions with blinding wind-driven snow, severe drifting and dangerous wind chill.

Potential Hazards:

- Blinding conditions

- Creation of snow drifts
- Dangerous wind chill factor (*refer to Safety Bulletin #34*)
- Avalanche danger, being caught and/or buried
 - Usually triggered by victim or members of victims party
 - Generally occur with clear skies, little or no snow fall and light or calm winds
 - The weak layer often consists of surface hoar, facets or depth hoar
 - On 30-40 degree slopes, often at a convex part of the slope

Possible Actions:

- If a watch or warning has been issued, the **action plan** should be activated and the crew should follow all instructions
- Secure and protect all equipment
- Get down from elevated areas, aerial lifts, booms, scaffold and other high areas
- Stay clear from potential avalanche areas
- When instructed, seek shelter at your pre-determined safe area
- Do not attempt to return to the area until an "all clear" signal has been given by a regulatory authority or production management

6. Tornados

Causes:

A tornado is a violent windstorm characterized by twisting, funnel-shaped wind. Tornados tend to occur in the afternoon and evening hours.

Potential Hazards:

- Tornados are unpredictable and may form without warning
- Winds can exceed 200 to 300 mph
- Tornados may appear nearly transparent until dust and debris are picked up or a cloud forms within the funnel
- Severe damage can occur to structures
- The precise location of a touch down point cannot be determined

Possible Actions:

- If a watch or warning has been issued, the **action plan** should be activated
- The crew should be regularly updated regarding any changes to potential weather conditions
- All cast and crew members must follow all instructions given

- No employees should be working on elevated equipment. This includes aerial lifts, scaffolds, camera booms, and other high areas
- Evacuate the area immediately if instructed by a regulatory authority or production management
- Only secure equipment if there is time and it can be done safely
- Do not attempt to return to the area until an all clear signal has been given by a regulatory authority or production management

7. Hurricanes

Causes:

A slow developing tropical weather phenomenon that forms over water. Its greatest impacts are felt near or on shorelines of land. You will not be surprised by a hurricane, as they are usually tracked by a weather service for many days. They are also known as cyclones or typhoons.

Potential Hazards:

- Severe winds and rainfall, which may cause extreme flooding
- Storm surges
- High waves possibility of persons being swept off their feet
- Drowning
- Localized tornados
- Extreme damage to structures, roads, utilities, vehicles and boats
- Severe injury due to flying debris

Possible Actions:

- In most cases, you will have several days warning to activate your **action plan**
- Do not stay by shoreline
- Pack and secure all equipment and remove to a safe area
- Lower all aerial lifts, camera booms and other equipment. Remove to a safe area as time permits
- If ordered to evacuate, leave area early -- do not hesitate
- Do not attempt to return to the area until an "all clear" signal has been given by a regulatory authority or production management

ADDITIONAL NOTES

- OSHA mandates that aerial lifts and other like equipment are not to be operated when winds exceed 25 mph.
- Be aware that many of the same precautions (e.g., eye protection and securing equipment), can also apply to man-made wind effects such as rotor wash from airplanes or helicopters and large ritter fans.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #39

SAFETY GUIDELINES FOR USING FOAM(ED) PLASTICS IN SET AND PROP CONSTRUCTION

The following recommendations are intended to give general guidance on the safe handling, use, storage and disposal of foam(ed) plastics when used to construct stage sets and props. Foam(ed) plastics are products made of petroleum distillates which can ignite when used in connection with heat from a hot wire or welding/cutting operation (hot work), or when used in close proximity to a fire effect or special effect/pyrotechnic device. Accordingly, it is recommended that only approved fire resistant foam(ed) plastics be used. *Prior to purchasing any foam(ed) plastics, check with the local fire Authority Having Jurisdiction (AHJ) in which the production is taking place, or appropriate studio or production safety representatives for guidance.*

TYPES OF FOAM(ED) PLASTICS

The following types of foam are most commonly used in set and prop construction:

- Sprayable polyurethane foam
- HSF 110 Pour Foam, Class 1
- Two-part rigid foam (AB foam)
- Expanded Polystyrene (EPS) or polyurethane or polystyrene foam blocks

NOTE: Caution must be taken at all times when working with or near foam(ed) plastics. The foams listed above are available in different classes, fire resistant and non-fire resistant. Under the right conditions even fire resistant foams will burn.

- Foam(ed) plastics must meet the requirements and guidelines of all applicable federal, state, and local laws, rules, regulations, and approved standards. In California, all foam(ed) plastics must meet the requirements of the California Fire Code, Article 40. In many other jurisdictions, foam(ed) plastics material used for decorative purposes, scenery, sets, or props, must comply with the requirements of National Fire Protection Association (NFPA), Article 140.
- When ordering foam(ed) plastics, request that your supplier include both "Manufacturer's Technical Data Sheet(s)", if available, and "Material Safety Data Sheets(s)" (MSDS) with each order. *Foam(ed) plastics should not be allowed in any work area without these documents.*

POTENTIAL HEALTH HAZARDS FROM WORKING WITH OR AROUND FOAM(ED) PLASTICS

NOTE: When foam products burn they will generate dense clouds of black smoke and a variety of toxic gases, including carbon dioxide, carbon monoxide, oxides of nitrogen, and traces of hydrogen cyanide. All precautions must be taken to avoid ignition of foam(ed) plastics to prevent inhalation of potentially hazardous smoke and other injuries, such as burns.

If inhalation of potentially hazardous smoke occurs, immediately seek medical attention.

The primary hazards in working with or around foam(ed) plastics are adverse health effects from direct exposure to foam(ed) plastics and injuries caused from ignition of foam(ed) plastics. Although foam(ed) plastics can be used safely, they must be handled in accordance with the procedures designed to minimize exposure and ignition.

EXPOSURE TO FOAM(ED) PLASTICS

Typically, there are three primary routes of possible exposure to foam(ed) plastics and the vapors released from such products: inhalation, skin contact, and eye contact.

NOTE: Foam(ed) products may contain chemicals known to produce chemical sensitivities. Individuals who know they have, or are prone to, chemical sensitivities must avoid any and all exposure to these products.

Inhalation

Airborne vapors, aerosol mists, and particulates are irritating to the respiratory tract. Symptoms of overexposure may include tightness of the chest and difficult or labored breathing. Headache, nausea, or vomiting may also occur. Exposure to higher concentrations may result in chemical bronchitis, pneumonitis, and pulmonary edema. Some individuals may become sensitized and experience severe asthma-like attacks whenever they are subsequently exposed to even minute amounts of vapor. Once sensitized, these individuals must avoid any further exposure.

Skin Contact

Although a single prolonged exposure is not likely to result in the foam material being absorbed through the skin in acutely toxic amounts, skin contact may discolor the skin and cause irritation. Skin contact may produce contact dermatitis and skin sensitization. Therefore, contact with the skin should be avoided.

Eye Contact

Direct or indirect contact with foam material may cause eye irritation, temporary blurred vision or corneal damage. Be aware that ordinary safety goggles or facemasks will not prevent eye irritation from high concentrations of vapor.

GENERAL PRECAUTIONS WHILE CUTTING, CARVING, SCULPTING, GLUING AND/OR SPRAYING

1. Skin and eye protection should be used during all normal working operations. Personal protective equipment includes, but is not limited to, safety glasses, chemical worker's goggles, chemical gloves, face shield, long-sleeve coveralls, safety shoes, or boots.
2. Mechanical ventilation adequate enough to draw vapors, aerosol mists, or smoke away from an operator's breathing zone should be provided at all work stations.
3. When adequate local exhaust ventilation is not feasible, proper personal respiratory equipment must be used.
4. Monitoring for airborne contaminants may be necessary.

GENERAL PRECAUTIONS FOR WORKSITE, STORAGE AND DISPOSAL

1. Due to potential fire hazard, consideration should be given during the design and pre-production of the set to ensure appropriate egress for cast and crew.
2. During construction the Construction Coordinator, or other designated person, shall identify the location of exits and maintain escape routes. All escape routes must be clear and unobstructed. The First Assistant Director, or his or her designee, is responsible to ensure that cast and crew members are made aware of the designated escape routes.
3. Foam(ed) plastics are combustible. Care should be taken to avoid contact with sources of ignition before, during, and after installation of all foam(ed) plastics. *Smoking while working with or around foam(ed) plastics is strictly prohibited.*
4. Foam(ed) products and associated adhesives must be dry and cured prior to sculpting and/or shaping.
5. When setting up welding/cutting operations, do not locate them in close proximity to foam(ed) plastics operations (see Hot Work on Foam(ed) Plastics).
6. Working with foam(ed) plastics produces combustible dust. Keep the work area clean.
7. Fire suppression devices and materials should be readily available when working with foam(ed) plastics. Only qualified individuals may use these devices.
8. Do not expose foam(ed) plastics to reactive chemicals (such as solvents, petroleum products, etc.). Consult the product MSDS and Manufacturer's Technical Data Sheet for further information.
9. Since uncured AB foam can generate heat and cause fires, use care in disposal.

APPLICATION OF TWO PART (AB) FOAM

In addition to the “General Precautions”, the following safety guidelines should be used when working with two part (AB) foam:

1. Only qualified personnel should spray AB foam.
2. Application of AB foam should be scheduled when other cast and crew members are not on the stage or set.
3. When using AB foam, either hand mixed or with froth packs, workers should refer to the MSDS and wear the proper personal protective equipment (PPE).
4. Be aware the application process of AB foam generates heat and may increase the likelihood of fire.
5. Minimize spaces between foam blocks that will be filled with AB foam. Large spaces that have been filled with AB foam have a greater likelihood of igniting when using the “hot wire” technique.
6. Allow all joints time to dry and cure before cutting or shaping. A non-cured joint is a fire hazard.
7. All equipment used in spraying foam should be kept clean, properly calibrated, and in good working order. Special attention should be paid to nozzles, pick-ups, and tubing.
8. The drums and/or containers of AB foam components require bonding and/or grounding to prevent the build up of static electricity.
9. Precaution should be taken to avoid spills when storing and using AB foam. When storing 55-gallon drums of AB foam use appropriate secondary containment. Consult the Studio Safety Representative, local Fire Authority or local Authority Having Jurisdiction (AHJ) when storing large amounts (55 gallon drums) of AB foam.

SCULPTING FOAM

In addition to the “General Precautions”, the following safety guidelines should be used when sculpting foam:

1. Sculpting foam(ed) plastics may involve many different types of tools. Care must be taken when using sharp tools or those with moving parts to avoid injury. Be aware of others working in close proximity.

2. Abrading, sawing, cutting, sanding, or other methods of sculpting foam(ed) plastics will cause dust and debris to form, which increases the potential for flammability.
3. Wear appropriate PPE when necessary. Keep the work area clean by regular sweeping and disposal of dust and debris.

HOT WORK ON FOAM(ED) PLASTICS

In addition to the "General Precautions", the following safety guidelines should be used when performing hot work on foam(ed) plastics:

1. Only qualified personnel should use hot wire devices.
2. Hot work, which includes hot wire sculpting and welding/cutting, may require a fire department permit.
3. Hot wire sculpting uses various types of electrical and heated devices. AB foam must be fully cured before sculpting with a hot wire.
4. Exposed hot wire devices are heated to high temperatures. The hot wire heated elements must not be left connected and unattended.
5. All equipment used in a hot wire operation must be inspected and kept in good working order at all times.
6. Any handheld hot wire device should be able to be disconnected from the electrical supply at the device.
7. The hot wire should be adjusted such that the wire is not visibly red.
8. Hot work must not be performed within ten (10) feet of any flammable and/or combustible materials, unless approved by the AHJ.
9. A fire watch should be provided during a hot work operation. Individuals assigned to fire watch duty must have fire-extinguishing equipment readily available and must be trained in the use of such equipment. If possible and safe to do so, individuals assigned to fire watch duty should extinguish spot fires and communicate an alarm in the event of a fire.
10. Fire watch assignments should continue for a minimum of thirty (30) minutes after the interruption or conclusion of hot work operations.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #40

GUIDELINES FOR NON-CAMERA UTILITY VEHICLES

These guidelines address non-camera utility vehicles used for production support, such as ATVs, golf carts, snowmobiles and utility vehicles with small engines and/or electric powered. (For camera vehicles, see bulletins #8, 8A and 8B.) Vehicle operators must observe all applicable rules and regulations. In order to provide a safe workplace, the following vehicle guidelines have been established regardless of the type of vehicle used:

1. **Horseplay or careless operation is not allowed and will not be tolerated.**
2. Inspect the vehicle before use.
3. Understand the vehicle controls. If you do not know how to operate the vehicle, ask for instruction. Employers/production have the obligation to ensure that employees are instructed in the safe use and operation of the vehicle.
4. Operators have the responsibility for the safe transportation of passengers and equipment.
5. Operators should hold a valid driver's license and if not held, notify production.
6. Each passenger must have a seat. No sitting on laps, standing on bumpers or riding on tailgates. Multiple people sitting in a seat designated for one and riding on parts of the vehicle that are not designed for that purpose are strictly prohibited.
7. Wear a seat belt, if provided.
8. Keep arms and legs in the vehicle at all times.
9. If the vehicle is not equipped with a windshield, eye protection is recommended.
10. A helmet may be necessary in certain situations.
11. If the vehicle is equipped to carry loads, secure or place them in a manner that will not allow them to shift or fall from the vehicle.
12. Do not exceed the manufacturers' load recommendations as overloading can affect braking and control of the vehicle. Loads should be appropriately balanced.
13. Do not operate the vehicle in a manner that is dangerous to you or to others.

14. Always use caution around people and animals. Pedestrians always have the right of way.
15. Exercise caution going around corners. Look for hazards, such as other vehicles and people.
16. Be familiar with the terrain.
17. To reduce the risk of rollovers, avoid driving off curbs, from one level to another, and/or turning on inclines.
18. Drive at speeds appropriate to the surface, road and weather conditions (e.g., driving in dirt or gravel, on a steep incline, on ice, in rain, etc.).
19. In poor visibility, vehicles should not be operated unless equipped with headlights or sufficient lighting is provided.
20. Towing should only be performed in a manner specified by the manufacturer.

Using and working safely around non-camera utility vehicles requires the full attention and care of the entire crew. Horseplay and excessive speed are the primary causes of accidents and injuries. Extreme caution should be used when operating these vehicles.

Operators are responsible to follow these safety guidelines, employer guidelines and manufacturer operating manuals for the safe operation of these types of vehicles.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #41

RECOMMENDED GUIDELINES FOR SAFELY WORKING ON AND AROUND GIMBALS

These guidelines are intended to give recommendations for safely working on and around gimbals. Gimbals are generally one-of-a-kind, purpose-built devices designed to simulate real-world movement. Challenging environments, such as an airplane in flight, a ship in a storm, and many others may be simulated through the use of a gimbal. Gimbals are typically used to move cast, crew, and sets through a number of programmed or choreographed motions. Gimbals can range in complexity from small-scale, seesaw-type devices moved by simple leverage to complex, multi-axis powered motion bases controlled by computer.

Gimbals are typically designed for specific applications and short duration operation. Gimbals should only operate to the level for which they are designed. Design and assembly of the gimbal is not covered in this Safety Bulletin. This Bulletin assumes that the gimbal has been properly assembled and is fully operational with a clearly defined Exclusion Zone (e.g., marked with tape, barricades, etc.). The Exclusion Zone is the immediate area surrounding a gimbal where only authorized cast and crew are allowed.

Responsible Person

Production shall assign a Responsible Person for the safe configuration and operation of the gimbal. A Responsible Person is defined as someone with both the experience and training to recognize and resolve problems relating to the safe operation of the gimbal.

The Responsible Person will have the ultimate authority over all gimbal operations, including, but not limited to:

- Determining the maximum weight capacity on the gimbal
- Marking the Exclusion Zone around the gimbal and control areas
- When Ground Fault Circuit Interrupters (GFCI) or Residual Current Devices (RCD) should be used for the gimbal or its controls
- The authority to abort operations. He/she may designate an operator(s) as needed.

Set Construction and Pre-Rig

1. ***Limitations of the gimbal*** should be communicated to all applicable departments by the Responsible Person.
2. ***Reevaluate Exclusion Zone***. The Exclusion Zone may change as construction and pre-rigging occurs.

3. **Establish work procedures** (e.g., lockout/tagout/blockout, fall protection, guardrails, etc.) and other special procedures for working on or around the gimbal.
4. **Establish emergency shutdown procedures.** The dynamic action of the gimbal may create an additional hazard to personnel working on or around the gimbal if it is suddenly shutdown. Personnel on or around the gimbal may have to take specific action to protect themselves in the case of an emergency shutdown.
5. The Responsible Person should be consulted before operating heavy equipment (e.g., aerial lifts, camera cranes, forklifts, etc.) around the gimbal, hydraulic lines, and/or control lines.
6. When necessary, crib or block to prevent parts from moving inadvertently when the gimbal is not in operation.
7. Ensure crossovers and/or protective covers are used to protect hoses, electrical cables, and control lines and to prevent possible tripping hazards.

Safety Meetings During Construction and Pre-Rig

Make crew and applicable department heads aware of the designated Responsible Person, Exclusion Zone parameters, gimbal limitations, work procedures, emergency procedures, and individuals authorized to be inside the Exclusion Zone.

All items included in Set Construction and Pre-Rig should be reevaluated throughout the production as conditions change.

Inspection and Testing

Representatives from all applicable departments shall be included in conducting inspections of their equipment on or around the gimbal, prior to operation.

The Responsible Person should:

1. Reevaluate the limitations of the gimbal such as, but not limited to, load capacity, how it may be affected by water, weather, additional equipment, structures, dust effects, etc.
2. Inspect gimbal, base, hoses, structure, service connections to equipment on the gimbal (e.g., electrical special effects), etc.
3. Test controls.
4. Evaluate potential impact on cast and crew within the intended load and range of movement.
5. Prior to operation, verify the Exclusion Zone is free of any unauthorized persons or items.
6. Check for electrical and/or radio and wireless interference, and maintain the proper perimeter around the gimbal and computer controls.

Prior to Rehearsal and Filming

Reevaluate the Exclusion Zone and communicate to all cast and crew (size and operation of the gimbal will dictate).

Please follow Inspection and Testing items 1–6 above.

Inspect and test other production-related equipment on or around the gimbal.

Safety Meeting

The First Assistant Director shall, along with the Responsible Person, conduct a safety meeting with all cast and crew, including, when necessary, a stunt coordinator, prior to working on or around the gimbal.

Safety meeting topics may include, but are not limited to:

- Communicating to all involved personnel, including performers, the intended action, full range of movement, need for increased awareness, possible changes, and authority to abort, including any visual or audio signals to be used.
- Authorized personnel riding the gimbal should consider their health status and report any concerns to the appropriate person.
- The possible effects of electrical or radio and wireless devices on radio-sensitive equipment.
- Awaiting Responsible Person to give permission before approaching the gimbal.
- The perimeter of the Exclusion Zone.
- Emergency Shutdown Procedures.

The Responsible Person should be notified of any changes or concerns in the use of the gimbal, action of the cast or crew, or placement of equipment in order to determine whether an additional safety meeting is necessary.

Ongoing Testing

The Responsible Person or his/her designee shall conduct a test of all controls at least prior to the gimbal being used during each work shift and upon returning to the gimbal from breaks.

During Operation

- Follow established procedures when entering the Exclusion Zone.
- Gimbal Operator needs a clear line of sight or, if needed, a spotter to assist.
- Gimbal Operator should be at the controls at all times when the gimbal is operational.

- Gimbal should be stopped if unauthorized personnel enter the Exclusion Zone.
- Watch for loose materials, sharp edges, pinch points, etc.
- Authorized cast and crew should be made aware of the capabilities and anticipated movement of the gimbal.
- Ensure clear, safe access and egress.
- Maintain reliable communications during operation.
- Always wait for the Responsible Person to give permission before approaching the gimbal.
- Secure set pieces, production equipment, and props on the gimbal.
- On computer controlled gimbals, ensure the computer has an uninterrupted power supply to allow reliable operation and shutdown in the event of a power interruption.

Additional Considerations

Production Management and the Responsible Person shall take the following into consideration and address with the appropriate personnel:

- Fall protection for cast and crew; for example, barriers, guard rails, pads, or fall restraint equipment including appropriate anchor points
- All electrical distribution system components exposed to water should be designed to work in water
- Galvanic action, which is corrosion from contact between dissimilar metals
- Inspection of underwater equipment
- Windy conditions
- Environmental and human factors
- Hydraulic leaks
- Inclement weather
- Access to the gimbal by cast and crew
- Placement of electrical equipment and power supply system
- Lockout/Tagout/Blockout

Additional information may be found in AMPTP Safety Bulletin #4, "Stunts," Safety Bulletin #7, "Recommendations for Diving Operations," Safety Bulletin #15, "Guidelines for Boating Safety for Film Crews," Safety Bulletin #17, "Water Hazards," and Safety Bulletin #23, "Guidelines for Working with Portable Power Distribution Systems and Other Electrical Equipment."

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #42

GUIDELINES FOR ALTERNATIVE DRIVING SYSTEMS

These guidelines are intended to give recommendations for safely working on and around Alternative Driving Systems (ADS) e.g., Pods. An ADS is typically a custom-built device that is connected to the vehicle so that the vehicle can be driven safely without the person sitting in the normal driving position controlling the steering, accelerator, brakes, or other components. This Safety Bulletin does not address the use of wireless-controlled vehicle systems.

ADS should only be operated to the levels for which they are designed based upon the requirements and conditions discussed between the Production and the ADS manufacturer or fabricator. The design, fabrication, and assembly of ADS are not covered in this Safety Bulletin.

Responsible Person

Production shall assign a Responsible Person or Persons. A Responsible Person is someone with both the experience and training to recognize and resolve problems relating to the configuration and operation of the ADS. The Responsible Person will have authority over all ADS operations.

Considerations for Using an ADS

- Type of vehicle to which the ADS will be installed
- Intended speed and maneuvers
- ADS rigged vehicle operating in close proximity to other vehicles
- Aircraft flown in close proximity
- Scene action (e.g., stunts, performance, and special effects)
- Route conditions (e.g., curved, incline, crown, obstacles, clearances, length, width, paved, gravel, dirt, flat, hilly, wet, or slippery)
- Anticipated weather
- Evaluation of the vehicle's original systems and whether they should be disengaged (e.g., brakes, ignition, airbags, steering, and accelerator)
- A secure area for cast and crew riding in or on the ADS vehicle
- Load capacity, center of gravity, and counter-balance
- Equipment weight, placement and use (e.g., camera, lighting, and props)
- Visibility conditions of ADS operator such as dust, spray, blinding lights, restrictive covering over the windshield, smoke
- Emergency stop system
- Communication system
- Allowing time for proving/testing the system

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SAFETY BULLETINS ARE RECOMMENDED GUIDELINES ONLY; CONSULT ALL APPLICABLE RULES AND REGULATIONS

SAFETY BULLETINS MAY BE VIEWED OR DOWNLOADED FROM THE WEBSITE WWW.CSATF.ORG

Pre-Rig

The capabilities and limitations of the ADS should be communicated to all applicable departments. All rigging of the ADS and equipment, including cameras and lights, is to be performed by qualified personnel in an area secured for the purpose of rigging, which is free of known hazards, including other vehicular traffic. The rigging must be discussed with the Responsible Person and the ADS operator prior to the use of the vehicle. The Responsible Person and ADS operator must inspect the vehicle after any rigging change is made to ensure that the change will not adversely affect the safe operation of the vehicle. Only authorized persons should be in the secured area. When the ADS vehicle is not in operation, steps should be taken to ensure the vehicle cannot inadvertently move.

Inspection

The connected vehicle must be inspected before and after each run. Inspection items include, but are not limited to, the ADS, brakes, steering, tires, engine, drive train, vehicle's electrical system, connection points, towing equipment, and all safety equipment. Any items not fully functioning must be repaired by a qualified person before use.

Prior to Operation

A walk through with the performer(s) should be conducted regarding which of the vehicle's original systems are operational and which have been disengaged.

A rehearsal should be considered to familiarize the performer with the operational characteristics of the vehicle and controls.

Safety Meetings

A shot-specific safety meeting should be held by the First Assistant Director, Responsible Person, and Stunt Coordinator, as needed, involving all personnel riding in, on, or in close proximity (e.g., stunt personnel or background performers) to the ADS vehicle. This meeting should discuss the following topics below:

- Shot sequence and route (e.g., stunt action including crossovers/head-on or near misses, vehicle speed, number and proximity of other vehicles, crew and camera placement, background performers, and property)
- Walk-through or dry-run
- Environmental conditions (e.g., weather, surface conditions, such as cement, gravel or dirt, topography, such as flat or hilly)
- Possible changes due to hazards
- Authority to abort including signals to be used
- Route conditions (e.g., slope, curved, incline, crown, obstacles, clearances, length and width)

- Equipment considerations (e.g., rigging, exposed controls, drive systems, air bags, automatic roll bar, and fuel-cell position)
- Communication systems (e.g., intercom and designated channel)
- Signaling system to alert personnel to the ADS impending movement
- Visibility
- Special effects
- Personal protective equipment (e.g., harnesses, seat belts, helmets, and eye protection)
- Traffic and pedestrian control (e.g., street closures and Intermittent Traffic Control [ITC])
- Emergency plan (e.g., escape routes and contingency plan)

If for any reason there is a change in the choreography or personnel involved in the shot, a safety meeting must be held with all personnel involved to ensure everyone understands the changes.

Operation

During rehearsals and takes:

- The Responsible Person and/or the ADS Operator has the authority to suspend operation of the ADS vehicle, including the ability to abort
- Changes should be approved by the Responsible Person and/or ADS Operator
- The ADS vehicle and equipment should be inspected after each run
- Do not approach, enter, or exit the ADS without permission from the Responsible Person, First Assistant Director, or ADS Operator
- Only essential personnel required for the shot should be allowed on or in the ADS vehicle
- Cast and crew riding on or in the ADS vehicle must be provided a safe and secure place to ride

INDUSTRY-WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN # 44

GUIDELINES FOR WORKING SAFELY WITH RADIOFREQUENCY (RF) TRANSMITTERS

These guidelines are intended to help cast and crew understand radiofrequency exposure for equipment that is commonly used by production. RF radiation can be harmful due to the ability of RF energy to heat biological tissue faster than the body can cope with or dissipate the excessive heat. It is not presently known whether there are non-heat related effects of RF exposure.

COMMON SOURCES OF RADIOFREQUENCY

RF is continuously emitted from certain types of wireless transmitting equipment that is commonly used on cameras, audio equipment, wireless lighting controllers, and Wi-Fi hotspots. Equipment that only receives RF is not a source of RF emissions.

This bulletin is not meant to address radio transmitting facilities, satellite antenna farms, microwave installations, cellular telephone towers, and other industrial equipment that may emit radio waves. Individuals working in these areas should follow all warning signage and comply with the facility's safety protocols and procedures.

The FCC recognizes two tiers of Maximum Permissible Exposure (MPE) limits. This bulletin follows the stricter limits of the General Population/Uncontrolled Exposure (GP/UE) guidelines.

CONSIDERATIONS FOR USE

1. Follow the manufacturer's guidelines. Camera-back transmitters commonly used in the film and television industry are authorized for license-free use by the Federal Communications Committee (FCC) under Part 15 and require that all Part 15 devices be subject to FCC RF exposure guidelines.
2. Unless it is permissible by the manufacturer, the RF equipment should not be modified in any way. Equipment exceeding FCC unlicensed power limits or otherwise requiring a Special Temporary Authorization (STA) from the FCC should be used only by trained technicians in accordance with the FCC license. If equipment that exceeds FCC unlicensed power limits must be used, production personnel should be made aware so that the required additional safety protocols and precautions can be implemented.
3. Be aware of the RF output power and minimum safe operating distances from the transmitting source, i.e. antenna. Antennas may be supported by a mast that provides distance from the transmitter. These masts are not an active RF source.
4. Establish operating procedures that enable personnel using RF Equipment to remain at safe operating distances or provide other means of protection from excessive RF exposure.

GUIDELINES FOR SAFE OPERATION

Methods for mitigating the health effects of RF exposure include:

- a. Hardwiring the equipment
- b. Increasing one's distance from the RF emitting device
- c. Employing RF shielding or protective clothing

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SPECIAL PROCEDURES FOR MINORS PERFORMING PHYSICAL ACTIVITIES

This document addresses special procedures for minors performing physical activities in motion picture and television production. Under California law, a minor is an individual who is under eighteen (18) years of age who is required to attend school under the applicable provisions of the California Education Code (Cal. Fam. Code §6500).

Procedures:

1. Prior to rehearsal or filming, the production company should perform an initial review of the physical activity, including but not limited to:
 - a. the age, height, weight and maturity of the minor,
 - b. the physical fitness, coordination, expertise in the planned activity, and film experience of the minor,
 - c. the amount of additional information and movement the minor will be asked to consider (e.g., camera positions, acting, looking over shoulder, waving arms, etc.),
 - d. how wardrobe or props will affect the actions and/or vision of the minor,
 - e. the amount of rehearsal and preparation time which has been provided,
 - f. the appropriate amount of protective gear or equipment necessary to safely perform the activity,
 - g. the area around the minor during the activity, and
 - h. any other factors affecting the minor.
2. Prior to rehearsal or filming the physical activity, key production personnel, such as the Director, First Assistant Director, Stunt Coordinator and safety professional, should confer with the minor, minor's parent/legal guardian and Studio Teacher to review and discuss the activity.
3. Rehearsals and filming of the physical activity should take place with the Assistant Director, Stunt Coordinator, Studio Teacher, and parent/legal guardian present. If the situation warrants, a person qualified to administer medical assistance on an emergency basis must be present or readily available at the rehearsal and filming of the activity.
4. If any aspect of the activity changes, a new discussion and/or meeting should be held and a new rehearsal should be considered.

5. The production shall consider any reasonable request for additional equipment from the minor, parent/legal guardian, or Studio Teacher.
6. If a consensus regarding the physical activity is not established, the minor, the minor's parent or guardian, the Studio Teacher, the Stunt Coordinator, the First Assistant Director, or the safety professional may request a re-evaluation of the activity in its entirety. If, after the Studio Teacher, parent, Stunt Coordinator, First Assistant Director and/or the safety professional agree on the planned activity, but the minor expresses apprehension about performing the planned activity, he/she may refuse to do it.
7. The Studio Safety Hotline is available to all persons to anonymously report any concerns they have regarding the activity.

Note: All production personnel working with minors are urged to review the "Blue Book," entitled "The Employment of Minors in the Entertainment Industry," published by the Studio Teachers, Local 884, IATSE. Reference should also be made to the extensive federal and state labor laws and to any applicable collective bargaining agreements which govern the employment of child actors.

GENERAL CODE OF SAFE PRACTICES FOR PRODUCTION

This "**General Code of Safe Practices**" incorporates information from safety bulletins that have been developed and issued by the Industry-Wide Labor Management Safety Committee over the past 20 years. Many of these guidelines are simply common sense; others have evolved from Federal, State and/or Local laws and regulations.

These laws require every employer to have and post a general set of *Code of Safe Practices* at each job site.

This document is not intended to take the place of the Safety Bulletins. You should also refer to the Safety Bulletins (*index attached*), which address concerns specific to your work environment.

By following these guidelines, Safety Bulletins, laws, regulations and company policy and procedures, serious accidents and injuries can be prevented.

Working conditions may change from day to day, particularly on location. To prevent accidents, you need to be aware of your work environment and the equipment being used. Pay special attention to call sheets as they may contain important safety information for the next day's shoot. **Safety Meetings** will be conducted as necessary to brief you on potentially hazardous set conditions. (Additional information on "**Safety Awareness**" and "**Safety Meetings**" may be found in **Bulletin #5**)

If you have any questions or concerns, or notice anything you believe could be hazardous and/or unsafe to the cast and crew, please talk to your supervisor, unit production manager, producer, union

representative or studio safety representative and/or call the studio safety hotline anonymously. You will not be disciplined or discharged for bringing attention to safety concerns.

Each company is required to name the person responsible for safety on the production as outlined in their Injury and Illness Prevention Program (IIPP).

A production company or studio may have additional or specific guidelines as part of their IIPP. You should refer to the IIPP and Safety Manual of the employer for whom you are employed.

1. **GENERAL RULES**

Familiarize yourself with emergency procedures for each location. You are responsible for knowing how to react in an emergency situation. Contact your supervisor if you do not know emergency procedures.

At a minimum, a four-foot perimeter should be kept clear around the interior of the stage walls. Make sure all exit doors are unobstructed, unlocked and capable of being opened from the inside.

Good housekeeping should be maintained at all times. Walkways and work areas are to be kept clear of materials, trash, equipment and debris.

All decorative set materials should be flame retardant or made of non-combustible materials if such materials will be exposed to hot lamps, fire effects or other ignition sources.

Obey all "No Smoking" signs. Observe designated smoking areas and always extinguish cigarettes in the appropriate containers (butt cans).

Fire equipment (hydrants, extinguishers, sprinklers, hoses, etc.) must be accessible at all times.

Always be aware of personnel working above and below you. All overhead equipment fixtures and props should be properly secured.

All cables should be neatly routed. Cables in walkways and traffic areas should be covered with mats and/or cable crossovers.

Pranks and other types of horseplay are unacceptable. Distracting crewmembers could result in accidents and injuries.

Report accidents immediately to your leadman, foreman, supervisor, and/or medical personnel. Follow instructions given to you when referred for medical treatment for any injury and retain documentation. **All injuries must be reported on the date of occurrence.**

Wear appropriate clothing and any required personal protective equipment (PPE). A shirt and proper footwear should be worn at all times. Safety glasses or hearing protection must be worn when operating equipment or performing work where eye or ear damage could potentially occur.

Medication which might interfere with your alertness or ability to perform your work should be used only under a doctor's direction. If you feel that any medication is impairing your work, please discuss this with your supervisor. Do not work while under the influence of illegal drugs or

alcoholic beverages. Don't put yourself or your fellow workers at risk.

Attend all on-production, off-production and/or individual department **Safety Meetings**.

If involved in any stunt, special effect, aviation sequence, water sequence or other potentially hazardous or unusual activities, attend any additional **Safety Meetings** held for that activity.

Be aware of general location safety concerns, including extreme temperature conditions, physical surroundings, indigenous critters and nasty plants.

Additional information can be found in Industry Safety Bulletins #17, #21, #26, #27, #31, #34, #34A and #35.

2. LIFTING AND MOVING OBJECTS

Lifting loads improperly can cause back injuries.

Make sure you get the appropriate assistance when lifting or moving heavy or awkward objects. Avoid lifting such objects whenever possible by using carts, dollies and other mechanical devices or **GET ADEQUATE HELP**.

Before lifting any load, check for slivers, jagged edges, burrs, rough or slippery surfaces and protruding nails.

Check your intended path for obstructions.

3. COMMON FALL RISKS

Fall Protection:

Use appropriate fall protection equipment whenever you are working greater than 30 inches (general use/California) or 6 feet (during construction) above the floor, ground or other working area, when standard guardrails or other equivalent protection is not available.

Unprotected work areas such as platforms, sets, walkways, cliffs, floor openings, shafts and rooftops (when approaching within 6 feet of the roof's edge) require the use of approved fall protection measures. These measures include but are not limited to guardrails, barriers, safety net systems, a written fall protection plan, and/or the use of personal fall arrest, fall restraint, or work positioning systems.

Fall arrest equipment is always required when working in the permanent grid and truss system (perms) outside the catwalks and handrails.

DO NOT use fall protection equipment without proper training and instruction. Only use appropriate anchorage points.

Temporary stair railings and guardrails are required around elevated surfaces, pits, holes or other unprotected openings.

Ensure proper lighting in such areas and post signs as necessary.

Scaffolds:

Only use scaffolds with the appropriate guardrails, mid rails and toe boards. **DO NOT** remove guardrails; contact the scaffold "competent person" if they need to be

removed to perform special work. **REPORT** any missing guardrails at once.

DO NOT climb across braces.

Ladders:

Inspect all ladders before each use for broken or missing rungs, steps, split side rails or other defects.

NEVER place ladders in doorways unless protected by barricades or guards.

NEVER stand on the top two rungs of a ladder.

USE only approved ladders or steps. Check the labels for compliance.

ALWAYS USE both hands while climbing.

4. CHEMICALS AND FLAMMABLE MATERIALS

Store all flammable liquids in approved safety containers or cabinets. Paint, chemicals, and other materials should not accumulate on stage floors, under platforms or in other work areas.

You should know and follow proper handling and storage procedures for all combustible or flammable materials.

Ensure that there is proper ventilation and wear appropriate personal protective equipment (PPE).

A **Material Safety Data Sheet (MSDS)** shall be obtained from the manufacturer or distributor and a copy of the MSDS must be kept on file for all chemicals and substances being used and/or stored.

5. HAND TOOLS AND RELATED EQUIPMENT

Use the right tool for the job. **Do Not** use tools or equipment for which you have not been properly trained and qualified. See your supervisor if you are unfamiliar with the equipment, have any questions or feel that you need additional training.

Ensure that all equipment is in proper working order and that all protective guards are in place and used.

Do Not attempt to alter, modify, displace, or remove any existing safety equipment. Saw guards, safety switches and other safety mechanisms are installed for your protection. Tag ("**Do Not Use**") and report any damaged or malfunctioning equipment.

Wear appropriate personal protective equipment (PPE) and be aware of flying debris.

Additional information can be found in Industry Safety Bulletin #21.

6. FILMING EQUIPMENT & VEHICLES

(Including Booms, Camera & Insert Cars, Cranes, Process Trailers, Tow Dollies, Camera Dollies, Elevated Platforms, Fixed Wing Aircraft, Boats, Cars, Helicopters, Motorcycles, Trains)

Ratchet straps and/or ropes are the preferred method of securing loads and/or equipment. If using "bungees," "rubber snubbers" or other elastic-type devices, ensure they are not frayed, worn, damaged, cracked or have damaged or bent hooking devices. Uncontrolled release can cause severe injuries to unprotected body parts, particularly to the face or eyes.

Use the proper equipment for the job; be aware of load and rider capacities. **Never allow more than 9 people (including the driver) on an insert car.**

Operators and passengers of all vehicles should always use personal protective equipment (PPE).

Obtain training from a qualified instructor prior to operating aerial lift platforms, scissor lifts, forklifts or rough terrain variable-reach forklifts. OSHA requires the operators of such equipment to wear approved personal protective equipment (PPE).

Be particularly cautious when driving, walking or traveling; proceed slowly and watch for sudden movements of objects or individuals.

Be especially careful when working around helicopters or on runways. Remain at least 50 feet away from helicopters or other aircraft unless directed by the Aerial Coordinator and/or Pilot in Command or ground safety contact.

Under no circumstances should you approach the helicopter or aircraft without permission from the ground safety contact or the Pilot in Command.

Whether the rotors are turning or not, always approach and leave the helicopter from the front. **NEVER WALK NEAR OR AROUND THE TAIL ROTOR OF A HELICOPTER.**

The use of aircraft, boats, trains or cars may require special permits and/or operator certifications. All vehicles, including their peripheral safety equipment (*i.e.*, harnesses, belts, roll-cage, fuel cells, etc.), must undergo thorough safety inspection and testing on a daily basis by qualified experienced personnel.

Additional information can be found in Industry Safety Bulletins #3, #3A, #8, #8A, #8B, #8C, #11, #11A, #15, #20, #22, #28, #29, #29A, #36 and #37.

7. ELECTRICAL SAFETY

POWER LINES: California Code of Regulation, Title 8, Section 2946, **Overhead Clearances**, *must* be observed and maintained at all times (applicable regulations are set forth in Addendum #8C, #22A and #25A of the Industry Safety Bulletins). This applies to ladders, scaffolds, booms, forklifts, aerial lifts, scissor lifts, cranes, rigging, sets, truss work, backdrops and other equipment that could come in contact with power lines.

To prevent electrocutions and injury resulting from contact between overhead power lines and conductive tools, materials, or scaffolds, OSHA recommends that employees be informed that most overhead, high voltage power lines are not insulated and, when in doubt, employees should assume that power lines are not insulated.

Employers should notify the utility company when work must be performed under and/or near overhead power lines where clearances cannot be maintained. In such situations, utility companies should de-energize the power lines or temporarily move or cover them with insulating hoses or blankets before any work is initiated.

Properly maintain all electrical equipment and wiring; no live parts should be exposed. Use equipment only for its intended purpose. Be particularly careful around water, especially when filming in rain scenes.

All A.C. (alternating current) electrical systems shall be grounded.

Keep electric panels accessible at all times. There should be no obstructions or storage within three feet (3') of a panel.

Remember that lights placed too closely to props, sets and other materials may pose a fire risk and, therefore, make sure that lights are placed far enough away to alleviate risk.

Only qualified persons with the appropriate technical knowledge should perform electrical work.

Additional information can be found in Industry Safety Bulletins #8, #8A, #22, #22A, #23, #23A and 25.

8. WATER HAZARDS

If working on or near water, an employee should make the Production Company aware if he or she has a fear of working around water or cannot swim.

All cast and crewmembers working on or near water should wear life vests or other water safety gear when appropriate.

When using watercraft, be aware of load and rider capacity limits. Only required personnel should be on watercraft; all others should remain on land.

Safety lines, nets, watch safety personnel and/or divers should be used when filming in rivers or other bodies of water where potentially hazardous conditions could exist (e.g., swift currents, thick underwater plant life, or rocks).

Know as much as you can about the body of water you're working on or in, including its natural hazards and animal life. The Production Company, Location Manager or the Safety Coordinator should have all relevant information.

If personnel are going to enter the water, when appropriate, samples of the water should be taken and analyzed for any potential environmental concerns and/or health hazards.

Additional information can be found in Industry Safety Bulletins #7, #15 and #17.

9. STUNTS & SPECIAL EFFECTS

All stunts and special effects should be reviewed by all participants prior to execution to help ensure that they are performed in the safest manner possible.

Before filming a stunt or special effect, the involved parties should all perform an on-site dry run or walk-through. A safety meeting should be held and documented.

Special effects involving pyrotechnics, explosives and/or fire must be noted in advance on the call sheet. Properly licensed individuals must perform all such effects. The necessary permits must be obtained and the appropriate regulatory agencies notified. Explosives must be stored and disposed of properly.

Appropriate personal protection equipment (PPE) and/or other safety equipment must be provided to the cast and crew as needed. There must be a planned escape route and each person involved should personally check all escape routes. Only persons authorized

by the special effects and/or stunt coordinator shall be allowed in the area.

Radios, cell phones, pagers, personal data assistants (PDAs), transmitting equipment or remote control equipment should not be used around pyrotechnic or other explosive devices.

Additional information can be found in Industry Safety Bulletins #1, #2, #3A, #4, #11A, #14, #16, #18, #20, #29A, #30 and #37.

10. ARTIFICIALLY CREATED SMOKES, FOGS & DUST EFFECTS

Be aware that the use of atmosphere smoke has become highly regulated and limited by a variety of regulatory agencies. Contact the Safety Coordinator or Studio Safety Representative for guidelines and regulations.

Additional information can be found in Industry Safety Bulletin #10 and the Photographic Dust Awareness Sheet.

11. FIREARMS & OTHER WEAPONS

Treat all weapons as though they are loaded and/or ready to use. Do not play with weapons and ***never*** point one at anyone, including yourself. Follow the directions of the Property Master and/or Weapons Handler regarding all weapons.

The use of firearms and other weapons may require special permits and/or operator certifications. Anyone that will be using a weapon shall know all the operating features and safety devices. All weapons must undergo thorough safety inspection, testing and cleaning on a daily basis by qualified personnel.

Anyone handling a weapon shall receive the proper training and know all operating features and safety devices.

If firearms and other weapons are used in filming, the Property Master and/or Weapons Handler must meet with cast and crew and inform them of the safety precautions in effect and answer any questions.

Additional information can be found in Industry Safety Bulletins #1, #2, #16 and #30.

12. ANIMALS

Animals are unpredictable. If animals are used in filming, the Animal Handler should meet with cast and crew and inform them of the safety procedures in effect and answer any questions. Safety meetings should be held when appropriate.

Do not feed, pet or play with any animal without the permission and direct supervision of its trainer. **Defer to the animal trainers at all times.**

When working with exotic animals, the set should be closed and notices posted to that effect, including a note on the call sheet.

Additional information can be found in Industry Safety Bulletins #6, #12 and #31.

13. ENVIRONMENTAL CONCERNS

All hazardous waste generated by the company, including paint, must be disposed of properly. Proper documentation and permits for the

transportation and disposal of such waste is required by law.

Be aware of hazards associated with lead paint and asbestos. If encountered, **do not disturb** and immediately report to your supervisor or safety representative.

Be aware of biological hazards such as human or animal waste, mold, fungus, bacteria, body fluids, blood borne pathogens, used needles (sharps), vermin, insects and other potentially infectious materials.

Employees shall not enter confined spaces (manholes, underground vaults, chambers, silos, etc.) until the oxygen and gas levels have been checked and confirmed to be within acceptable levels.

Certain situations may require permits and/or licenses, for example, when the production will be using artificial smoke, large dust effects, creating excessive noise or when working around endangered plant or animal life. Please be sure to comply with all applicable statutes and/or regulations.

Additional information can be found in Industry Safety Bulletins #17, #24 and #26.

NOTE:

Additional information regarding "job specific" safe practices and guidelines relating to special equipment should be reviewed as necessary. Contact the production company Safety Coordinator, Studio Safety Representative, supervisor or your union representative for additional information.

INDUSTRY-WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN # 44

GUIDELINES FOR WORKING SAFELY WITH RADIOFREQUENCY (RF) TRANSMITTERS

These guidelines are intended to help cast and crew understand radiofrequency exposure for equipment that is commonly used by production. RF radiation can be harmful due to the ability of RF energy to heat biological tissue faster than the body can cope with or dissipate the excessive heat. It is not presently known whether there are non-heat related effects of RF exposure.

COMMON SOURCES OF RADIOFREQUENCY

RF is continuously emitted from certain types of wireless transmitting equipment that is commonly used on cameras, audio equipment, wireless lighting controllers, and Wi-Fi hotspots. Equipment that only receives RF is not a source of RF emissions.

This bulletin is not meant to address radio transmitting facilities, satellite antenna farms, microwave installations, cellular telephone towers, and other industrial equipment that may emit radio waves. Individuals working in these areas should follow all warning signage and comply with the facility's safety protocols and procedures.

The FCC recognizes two tiers of Maximum Permissible Exposure (MPE) limits. This bulletin follows the stricter limits of the General Population/Uncontrolled Exposure (GP/UE) guidelines.

CONSIDERATIONS FOR USE

1. Follow the manufacturer's guidelines. Camera-back transmitters commonly used in the film and television industry are authorized for license-free use by the Federal Communications Committee (FCC) under Part 15 and require that all Part 15 devices be subject to FCC RF exposure guidelines.
2. Unless it is permissible by the manufacturer, the RF equipment should not be modified in any way. Equipment exceeding FCC unlicensed power limits or otherwise requiring a Special Temporary Authorization (STA) from the FCC should be used only by trained technicians in accordance with the FCC license. If equipment that exceeds FCC unlicensed power limits must be used, production personnel should be made aware so that the required additional safety protocols and precautions can be implemented.
3. Be aware of the RF output power and minimum safe operating distances from the transmitting source, i.e. antenna. Antennas may be supported by a mast that provides distance from the transmitter. These masts are not an active RF source.
4. Establish operating procedures that enable personnel using RF Equipment to remain at safe operating distances or provide other means of protection from excessive RF exposure.

GUIDELINES FOR SAFE OPERATION

Methods for mitigating the health effects of RF exposure include:

- a. Hardwiring the equipment
- b. Increasing one's distance from the RF emitting device
- c. Employing RF shielding or protective clothing

SAFETY & HEALTH AWARENESS SHEET

EXTENDED OR SUCCESSIVE TAKES

INTRODUCTION

Advances in technology have enabled filmmakers to extend the length of individual takes (including continual resets) and the number of successive takes. In these circumstances, cast and crew may be required to support a weighted load (e.g., hand held sound boom, hand held camera, props, etc.) or maintain an awkward or still position for longer durations. Therefore, consideration should be given to the length of a take and the number of successive takes.

This Awareness Sheet has been developed to provide guidance for safety concerns caused by extended and successive takes. The objective is to increase awareness to enable the producer, director, cast and crew to communicate about and address these concerns before they become problems.

POTENTIAL HEALTH EFFECTS AND SAFETY CONCERNS

Maintaining an awkward position or supporting a weighted load for extended lengths of time can lead to various ailments ranging from body discomfort to muscle fatigue. Resulting safety concerns, such as dropping equipment, and trips and falls may also occur, potentially causing injury to the individual and to others.

Each production is unique and requires different technical and creative set-ups for shooting takes. In addition, each person's physical capabilities are different. These factors call for specific planning and communication in pre-production and throughout the duration of the production.

RECOMMENDED ACTIONS

- At the earliest stages of pre-production, conduct discussions with all affected department heads regarding the possibility of extended and/or successive takes.
- Evaluate when and where equipment and/or personnel options can be utilized to provide relief during the production.

- Special consideration should be given when equipment and/or personnel options are limited or unavailable.
- Throughout production, keep the lines of communication open and free-flowing between all cast, crew and production management.

In addition to the actions suggested, a review of available equipment options that provide support for weighted loads and relief to affected personnel should be included in pre-production meetings.

EQUIPMENT OPTIONS

A wide variety of equipment options are available for consideration during production and can include, but are not limited to:

- Dolly-mounted microphone boom
- Wireless microphone
- Camera dolly
- Tripod
- Stand
- Powered assist device

PERSONNEL OPTIONS

Some personnel options to consider:

- Rotation of operators
- Provide adequate rest intervals
- Spotters assigned to operators
- Encourage warm-up and stretching exercises

SUMMARY

Employees experiencing muscle fatigue or discomfort due to extended or successive takes are encouraged to communicate their situation to appropriate safety personnel and/or production management in a timely manner. Production management is encouraged to consider all options, including the above-outlined equipment and personnel options, to address these concerns.

SAFETY & HEALTH AWARENESS SHEET

GUIDELINES FOR REDUCING THE SPREAD OF INFLUENZA-LIKE ILLNESS

INTRODUCTION

There are a wide variety of seasonal influenza and flu-like illnesses that can impact the workplace. Seasonal and novel influenza H1N1, previously referred to as "swine flu," are among the most widely known. This Safety & Health Awareness Sheet has been developed to educate personnel on signs, symptoms and preventative measures to avoid catching or spreading the flu.

SYMPTOMS

In general, symptoms of seasonal influenza or novel influenza H1N1 can include the following:

Fever > than 100°F	Chills
Cough	Headache
Sore throat	Fatigue
Runny or stuffy nose	Body aches
Decreased appetite	Diarrhea
Nausea/vomiting	

Symptoms of novel influenza H1N1 may disproportionately affect young people age 25 and below, whereas the seasonal flu affects those age 65 years and older

Like seasonal flu, novel influenza H1N1 may worsen underlying chronic medical conditions. People at higher risk of serious complications from seasonal or novel influenza H1N1 include:

- Children younger than 5 years old
- Pregnant women
- People of any age with chronic medical conditions, such as asthma, diabetes, or heart disease
- People with weakened immune systems

If you are at higher risk contact your healthcare provider regarding possible preventative measures (e.g., antivirals, vaccines, etc.).

ACTIONS

How is influenza spread?

Flu viruses are spread mainly from person to person through coughing, sneezing or touching. You may infect yourself by touching contaminated surfaces and then touching your eyes, nose or mouth.

People infected with influenza may infect others before symptoms develop and after becoming sick.

Take these steps to protect yourself and others:

- Wash your hands often with soap and water or an alcohol-based hand cleaner. This is especially important after you cough, sneeze or use the bathroom. Always wash your hands prior to entering the crafts service/catering areas!

Additionally:

- Avoid touching your eyes, nose or mouth.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after use.
- Cough or sneeze into your upper sleeve if you do not have a tissue.
- Avoid close contact with people exhibiting signs of influenza.
- If you are sick with a flu-like illness, the Centers for Disease Control (CDC) recommends that you stay home for at least 24 hours after your fever is gone (without the use of fever-reducing medicine).
- Sanitize your hands before touching crafts service equipment, including inside ice chests, the handles of serving utensils or other commonly shared surface.
- Regularly sanitize commonly touched surfaces (i.e., door handles, phones, tools, handrails, etc.) with alcohol or bleach solutions.

WHEN TO GET MEDICAL HELP

If you are at risk of serious complications and you become ill with any of the symptoms below, you should contact your health-care provider immediately.

See emergency medical care if you experience any of the following symptoms:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting
- Flu-like symptoms improve, but then return with fever and worsening cough
- Decreased urination

ADDITIONAL INFORMATION

<http://www.flu.gov>
<http://www.cdc.gov/flu/>
<http://www.who.int/en/>
<http://www.hhs.gov>

PROTECT YOURSELF BY WASHING YOUR HANDS FREQUENTLY!

PROTECT YOUR CO-WORKERS BY COVERING YOUR COUGH!

SAFETY & HEALTH AWARENESS SHEET

GUIDELINES FOR HANDLING FRESHLY PAINTED OR PRINTED BACKDROPS AND OTHER GRAPHIC ARTS

INTRODUCTION

A wide variety of products are used to create backings and graphic arts in motion picture and television production.

The following safety guidelines should be considered when handling, hanging, and installing freshly hand-painted or digitally printed backdrops and other graphic arts such as posters, carpets, wallpaper, and vehicle graphics, or when working around these products.

PRODUCT INFORMATION

The creation of backings and other graphic arts involves a wide variety of technologies which use dyes, inks, paints, and sub-strates.

Off-gassing, the process in which the chemicals from the paint or the products in the inks are released from the completed product, is a normal part of the drying/curing process and may result in the presence of odors. Off-gassing is more prevalent in printed backdrops which use a wet solvent process.

The presence of odors may be the result of the product not having adequate time to dry and cure before being shipped. It is recommended that you allow at least 24 hours for the product to fully cure after drying before it is rolled and shipped. Remember that some products and sub-strates may require additional time.

Workers should refer to the current Material Safety Data Sheet(s) (MSDS) and, if available, the Manufacturer's Technical Specification Sheet(s) for precautions, personal protection recommendations, and fire and health hazards associated with the materials used to create the product(s).

POTENTIAL HEALTH EFFECTS

It is important that workers fully understand the potential health effects which may occur from exposure to the chemicals present in the various solvents, inks, paints and sub-strates used to create painted or printed backdrops and other graphic arts. These health effects can include headaches, dizziness, nausea, and respiratory problems. Exposure to high concentrations of these products also may affect the central nervous system or cause unconsciousness.

The routes of exposure that can cause these health effects include inhalation, ingestion, and direct or indirect absorption through the skin and eyes. Refer to the MSDS for an explanation of the potential health effects associated with the materials used to create painted or printed backdrops and other graphic arts. Anyone with chemical sensitivities, allergies, asthma or other respiratory illnesses or limitations should take appropriate precautions.

ACTIONS

The following are some actions you can take to minimize potentially harmful or dangerous exposures:

- Remove unnecessary personnel from the area(s) in which the products will be used.
- **Open or unpack the product in a well ventilated area(s), or provide ventilation by placing fans in the work area.**
- **Additional ventilation can be provided by opening stage doors, using roof vents or turning on general exhaust fans to ventilate the work area(s).**

- Know the products that you are using as well as the location and conditions under which they will be used.
- Obtain and review current Manufacturer's Material Safety Data Sheet(s) (MSDS) and, if available, Manufacturer's Technical Specification Sheet(s).
- Appropriate personal protective equipment (PPE) may be necessary while unpacking, unrolling and installing the product.
- Allow sufficient time for the product to fully cure after drying before working with or around it.

OTHER SAFETY CONSIDERATIONS

- Be aware that some solvents are flammable and are especially dangerous when in a gaseous form. **Do not** use freshly painted or printed backdrops or other graphics arts around open flames, set lighting, or other potential sources of ignition, especially if strong odors are still present.
- Temperature increases (from activities such as set lighting) may increase the rate of off-gassing resulting in the reappearance of odors.
- Be aware that vapors may be more concentrated above the product because vapors have a tendency to rise. Therefore, employees working in elevated areas should be made aware of the work that is going to be performed before unpacking the product. Such employees also should take appropriate safety precautions.

REGULATIONS

Refer to federal, state, and local laws and regulations for further requirements and information.

SUMMARY

There are many different product(s) available to create backings and graphic arts in motion picture and television production. You need to understand the specific product being used. Each has its own unique properties and potentially adverse effects. Refer to the current Material Safety Data Sheet(s) (MSDS) and, if available, the Manufacturer's Technical Specification Sheet(s) for physical properties, safe handling, and emergency procedures associated with the materials used to create the product(s).

If a backdrop is new or freshly painted, these are items to remember:

- Increase the **ventilation** by opening doors or roof vents, utilizing house air, or using additional portable fans.
- Allow the product sufficient time to fully cure after drying before working with or around it.
- Use appropriate PPE as necessary while unpacking, unrolling, or installing the product.
- Inform other employees working in the area of the potential vapors caused by off-gassing, especially above the product and when set lighting the product. These employees should take appropriate safety precautions.

FURTHER ASSISTANCE

- Studio or Production Safety
- Manufacturer/Distributor
- AMPTP/CSATF
- Supervisor
- Business Agent/Union Office

SAFETY & HEALTH AWARENESS SHEET

PHOTOGRAPHIC DUST EFFECTS

INTRODUCTION

A wide variety of products are used to create photographic dust effects in motion picture and television production. This awareness sheet has been developed to inform and assist productions when using these products. It is important that productions fully understand the possible effects of exposure, especially if potentially harmful ingredients are present.

PRODUCT INFORMATION

The following information is based on information obtained from product manufacturers, U.S. Geological Surveys and the U.S. Bureau of Mines.

MINERAL PRODUCTS

"Fuller's Earth" is the most common "product" used for photographic dust effects in the film industry. Unfortunately, the contents can vary widely from different suppliers. The term "Fuller's Earth" has neither a compositional nor a mineralogical connotation but is usually understood to be a non-plastic variety of kaolin (clay) containing aluminum magnesium silicate. It is sometimes synonymous with montmorillonite, kaolin, kaolinite, floridin, bentonite, wilkonite and halloysite. These products and others (e.g., pyrophyllite, pyrolite and diatomaceous earth) are all used to create photographic dust effects.

ORGANIC PRODUCTS

Photographic dust effects are also created by the use of organic products. Some of the more common organic products include wheat flour, rice flour, corn starch, coffee creamers and crushed nutshells.

Individuals with allergies to these products should use caution and avoid exposure.

POTENTIAL HEALTH EFFECTS

- Common effects of exposure are eye irritation, respiratory irritation, and skin irritation (*i.e.*, contact dermatitis).
- Anyone with allergies, asthma or other respiratory illnesses or limitations should take appropriate precautions.
- Burns as a result of ignition and flashing.

ACTIONS

The following are some actions you can take to minimize potentially harmful or dangerous exposures:

1. Prior to using any materials for photographic dust effects:
 - Know the products that you are using as well as the location and conditions under which they will be used.
 - Obtain a current Manufacturer's Material Safety Data Sheet (MSDS) for the specific product you are using.
 - Avoid products that contain known carcinogens.
 - Inform all cast and crew about the products being used, the necessary precautions that should be taken, and the products' potential effects.

2. To minimize potential exposures:
- Remove unnecessary personnel.
 - Use only enough products to create the effect needed.
 - If indoors, periodically ventilate the area.
 - Use proper Personal Protective Equipment (PPE) as necessary.

3. Other Safety Considerations:

- Any combustible material which, in a finely powdered form, is suspended in the air in sufficient quantity has the potential to flash or explode. Therefore, be aware of static electricity, which can cause dust products to flash, when transferring dust products from containers.
- Be aware of elevated airborne concentrations during clean-up procedures. Elevated airborne concentrations increase the potential for exposure and flashing.
- If the product is combustible, do not use around open flames or other potential sources of ignition (e.g., set lighting devices).
- Industrial hygiene monitoring may be necessary to determine the airborne concentration, lower explosion levels, and/or particulate size during use.

REGULATIONS

Refer to Federal and Cal OSHA Regulations for further information and/or requirements. (Many products have Permissible Exposure Limits (PEL) established by Federal and Cal OSHA.)

SUMMARY

There are many different products available to create photographic dust effects. You need to understand the specific product being used. Each has its own unique properties and potentially adverse effects.

When choosing a dust product, you should refer to the MSDS and ask yourself the following questions:

1. Are you or any member of the cast or crew asthmatic, allergic or have other medical conditions that would be affected by exposure to the product?
2. Is the product combustible; and will it be used on an interior set or location?
3. Does the concentration of the product that will be used have a "Permissible Exposure Limit" that will require an Industrial Hygienist to monitor exposure?

When using products to create photographic dust effects, you must take all appropriate safety precautions.

FURTHER ASSISTANCE

If you have further questions, contact:

- Studio or Production Safety
- Manufacturer / distributor
- AMPTP/CSATF
- Supervisor
- Business Agent/Union Office

TOOL BOX TALKS

The Construction Coordinator or Foreman should regularly give Tool Box Talks to emphasize safe working habits. Have each employee who attends the Tool Box Talk sign the Tool Box Talk Attendance Form, and forward it to the Production Manager.

**** Tool Box Talk Attendance Form ****

Fall Protection Basics

Recognizing and Understanding Hazardous Chemical Warning

Labels Suit Up for Safety

Using Machine Guards for Safety

Using Power Tools Safely

Preventing Forklift Accidents

Animal Handling Rules for the Motion Picture Industry

Keys to Ladder Safety

Guidelines for Insert Camera Cars

Staying Safe Around Scaffolds

Lockout/Tagout is Serious Business

Fifteen Things to Remember When Working with Electricity Working

Safely with Flammable Liquids

Save Your Sight

Respirator Fit and Maintenance

Working Around and Operating Heavy Equipment Safely

Working Near Overhead Power Lines

Working Safely with Compressed Gases

Working Safely with Paint

Tool Box Talk Attendance Form

Production:

Stage#/Location:

Instructor:

Date:

Tool Box Talk Topic:

Sign-In Sheet

Print Name		Sign Name	Job Description/Local
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
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19.			
20.			

Fall Protection Basics

Falls are among the most common causes of serious work-related injuries and deaths. Employers must take measures in their workspaces to prevent employees from falling off of overhead platforms, elevated work stations, roofs or aerial lifts or into holes in floor and walls.

To prevent employees from being injured from falls, employers must:

- Guard every floor hole into which a worker can accidentally walk by use of a railing and toeboard or a floor hole cover.
- Provide a guardrail and toeboard around every open-sided platform, floor or runway that is 4 feet or higher off the ground or next level.
- Regardless of height, if a worker can fall into or onto dangerous machines or equipment, employers must provide guardrails and toeboards to prevent workers from falling and getting injured.
- Other means of fall protection that may be required on certain jobs include safety harness and lanyard or self-retracting lifeline (SRL), stair railings and handrails.



OSHA requires employers to:

- Provide working conditions that are free of known dangers.
- Keep floors in work areas in a clean and sanitary condition.
- Select and provide required personal protective equipment at no cost to workers.
- Train workers about job hazards in a language that they can understand.

For additional information regarding fall protection or workplace safety, visit
www.safetyontheset.com



S & EA
The Department of Safety and
Environmental Affairs

Recognizing and Understanding Hazardous Chemical Warning Labels

Understanding warning labels will help you to handle and use hazardous chemicals properly and to avoid health and safety problems at the worksite. The Hazard Communication Standard—or HazCom—requires all hazardous chemical containers to have warning labels on them or on a sign placed near the container.

What You Can Find on a Warning Label

- ◆ the name of the chemical
- ◆ the name, address and telephone number of the manufacturer or importer
- ◆ the chemical code number
- ◆ one of three signal words indicating the danger level of the chemical: "Warning," "Caution" or "Danger"
- ◆ the word "Poison" if the chemical is highly toxic
- ◆ physical hazards (flammable, explosive, corrosive, etc.)
- ◆ health hazards (eye, lung and skin irritation, burns, etc.)

Some warning labels may also show:

- ◆ how to store the chemical.
- ◆ how to dispose of the chemical.
- ◆ what personal protective equipment to use with the chemical.
- ◆ how to clean up the chemical.
- ◆ how to handle leaks or spills.
- ◆ first aid instructions for exposure.

Always Read the Label

When you take responsibility for knowing the contents of chemical containers, you protect yourself and every other worker at your worksite.

- ◆ Always read the warning label whenever you use any hazardous chemical. Even if you've used the same chemical many times, the manufacturer may have changed the formula or provided the wrong concentration.
- ◆ Avoid identifying chemicals by the label's color or design alone.
- ◆ If the label raises any questions in your mind about the appropriateness of your environment and protective equipment, check your company's policy or consult your supervisor before using the chemical.

Warning Labels Are Everyone's Responsibility

Making certain that hazardous materials are properly labeled is a responsibility that all workers must share.

- ◆ If you find a container without a label or with a torn or illegible label, report it to your supervisor immediately.
- ◆ Don't attempt to handle a chemical without a label until you know what it is.
- ◆ If you're carrying hazardous chemicals in a portable container that someone else might use, label the container to ensure the safety of other workers.



SAFETY CHECKLIST

- ☐ I always read the warning label every time I work with the chemical.
- ☐ I make sure each chemical in my area has a label.
- ☐ I report missing or illegible labels.
- ☐ If I don't understand the information on the label, I ask for help.
- ☐ I always follow the instructions on the label.
- ☐ I make sure labels aren't covered up or removed.
- ☐ If I need to know more information about a chemical, I read the MSDS.

Suit Up for Safety

Wearing the proper clothing and personal protective equipment for each job you do can help protect you from serious injury and even death. Each year, more than 2 million workers suffer serious on-the-job injuries and illnesses. Most personal protective equipment (PPE) may seem bulky and uncomfortable, but you need to have it on before it's too late. So you must know which hazards you may encounter before you work.

HEAD HAZARDS



If you work in an area where there's a possible danger of head injury from impact, falling or flying objects or electrical shock or burns, then you must wear head protection. Hard hats are specifically designed to resist penetration and to absorb the shock of a blow. Ask your supervisor which type of hard hat you need to wear.

RESPIRATORY HAZARDS



If the air in your workplace contains fine particles, sprays, mists or toxic gases, you should wear respiratory protection. Air-purifying respirators filter contaminants out of the air. Supplied-air respirators provide a source of air when there's not enough oxygen. Masks for fumes, dust and particulate can also protect your respiratory system. Talk with your supervisor about which type of respirator you should use.

EYE HAZARDS



If anything in your workplace can fly, splash or drift into your eyes, you need eye protection. Common causes of eye injury when eyes are unprotected include flying objects or particles; splashing liquids and metals; drifting gases, vapors, dusts, powders, fumes and mists; thermal and radiation hazards, such as heat, glare, ultraviolet and infrared rays; lasers; and electrical hazards. Safety glasses, goggles and face shields are designed to protect against impact from objects, irritating substances, chemical and other splashes, extreme heat and many other hazards. Ask your supervisor which type of eye protection you need and when to wear it.

HEARING HAZARDS



If you have to shout to be heard on the job, you're working in noise levels that are high enough to damage your hearing over time, so you need to wear hearing protection. Hearing protection devices, such as earplugs and earmuffs, screen out loud, harmful noises while allowing you to hear what you need to hear. Talk with your supervisor about the correct hearing protection for you.

FOOT HAZARDS



If you work in an area where it's possible that your toes, ankles or feet could be injured by sharp objects, falling objects, impact, slipping, tripping, electrical hazards, chemical spills or heat hazards, then you need to wear foot protection, such as steel-toed boots. Consult with your supervisor to find out which type of foot protection you should wear.

HAND HAZARDS



If your hands are exposed to possible injury from machinery, heat, cold, electricity, chemicals, toxic substances, materials such as metal, wood, concrete, mortar, paint, tools, etc., you need to wear hand protection. The proper hand protection, in the form of gloves, mitts, thimbles, finger cots, hand pads, barrier creams and arm cuffs can protect you from abrasions, cuts, lacerations, punctures, crushing, burns, heat and cold, dermatitis and other injuries. Ask your supervisor which type or types of hand protection you need.

Using Machine Guards for Safety

Most of the machinery you work with is probably equipped with safety guards. Guards are designed to protect you from numerous dangers, including moving or sharp machine parts, flying sparks or particles and hot surfaces.

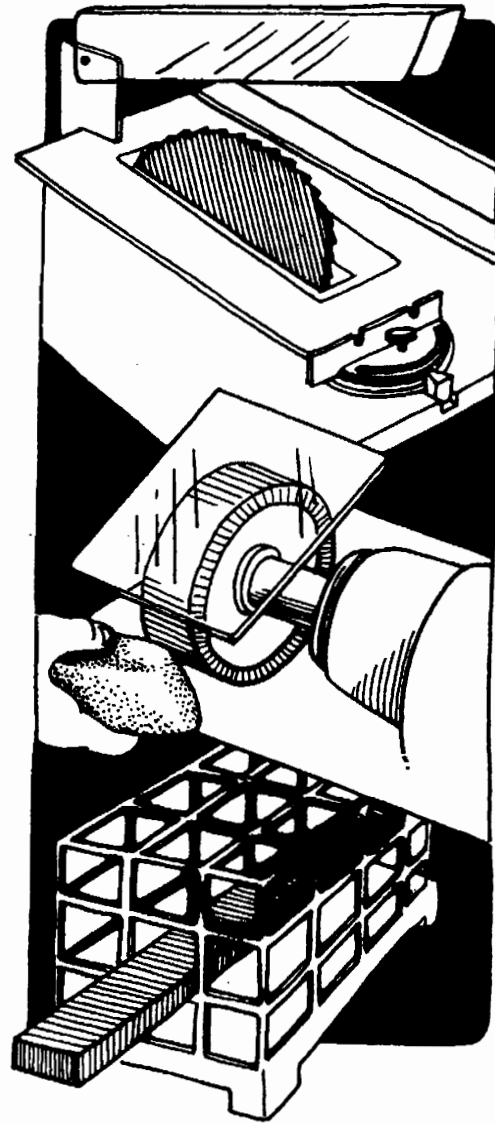
Guards help protect your arms, hands and fingers, which are especially vulnerable to injury from a variety of machinery parts: cutting edges, punching and shearing parts, rotating and in-running shafts and pointed objects.

The machines you use should have guards if there's any way your hands could come into contact with the point of operation or any moving parts. There should be no way for your hands or fingers to get in from any angle, and the guard itself should not have any sharp surfaces or pinch points. Common guarding methods include:

- ✓ enclosures.
- ✓ interlocking devices.
- ✓ remote control.
- ✓ electronic safety devices.
- ✓ removal devices.
- ✓ moving barriers.
- ✓ two-handed tripping devices.

Machine Guard Safety Rules

- Never remove or bypass a guard or other safety device.
- Never operate a machine if a guard is missing, modified or not working properly.
- If a guard must be removed for maintenance, make sure it's replaced and working properly before operations resume.



WORKING WITH GUARDS

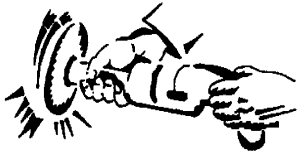
There's never any good reason to remove or modify a guard on a machine that you're using. Even if you think you can work faster without the guard, it's there to protect you and help you do the job more safely. Talk to your supervisor if you're worried about meeting production goals or if you think the guard should be changed.

Using Power Tools Safely

Power tools make it possible to do many tasks quickly and efficiently. But because they use electricity and have fast-moving parts, you must exercise extra caution when using them. Follow these safety rules when using power tools:

POWER TOOL SAFETY TIPS

- Wear the proper personal protective equipment for the job.
- Before you use it, inspect the tool for broken parts, loose bolts, defective or broken cord insulation, plugs or switches, or improper connections.
- Only use equipment that's in good condition.



- Test the tool before you use it. For example, for a cutting tool, test its sharpness with a piece of wood, not your fingers.
- To prevent shock, make sure your tool is properly grounded and double-insulated.
- Keep power cords away from heat, sharp objects and chemicals that could damage their insulation.
- Be sure to keep your work area dry.
- Never use electrical equipment when your hands are wet or any part of you is touching water.
- If you must work in a wet area, keep the power cord clear of wet surfaces and use a ground fault circuit interrupter (GFCI).

- Keep your work area free of debris.
- Use tools in well-lit areas.
- Never use electric tools where flammable vapors or gases are present.
- Report unsafe conditions, such as defective cord insulation, poor connections to terminals, broken switches or plugs, sparking or overheating equipment, and outlets without GFCIs in damp areas.
- Never carry a power tool by the cord or hose.
- Disconnect tools before changing accessories, such as blades, bits or cutters, and before servicing or inspecting them.
- Secure your work material with clamps or a vise if possible.
- Avoid wearing clothing or jewelry that may become caught in a tool.
- Report equipment as unsafe if it has insulation defects, if it sparks or if you feel any shock or tingling when using it.
- Start and end from "off." Make sure the power switch is off before plugging in equipment. When you're finished, turn the equipment off before unplugging it to protect yourself and the next user.
- When you turn off a tool, let it stop completely before

putting it down in a safe place.

- Never horseplay around power tools.
- Avoid kinking, cutting or crushing any electrical cord.
- If equipment has a three-prong plug, use a three-slot outlet or extension cord.
- Never modify three prongs to fit two slots by removing the third prong. Use an adapter instead, making sure that the metal grounding piece on the adapter is connected to a grounded object, such as the screw on the receptacle cover plate.
- Avoid overstraining equipment by using it improperly.
- Service equipment regularly and repair or replace it as needed.
- Pay attention to the direction of the tool's rotation. You're responsible for seeing that no one is in the path of flying objects.
- Use the switch lock only when the tool is in a stand or jig.
- Make sure you have good footing when you're using heavy tools or working at an awkward angle, such as overhead.

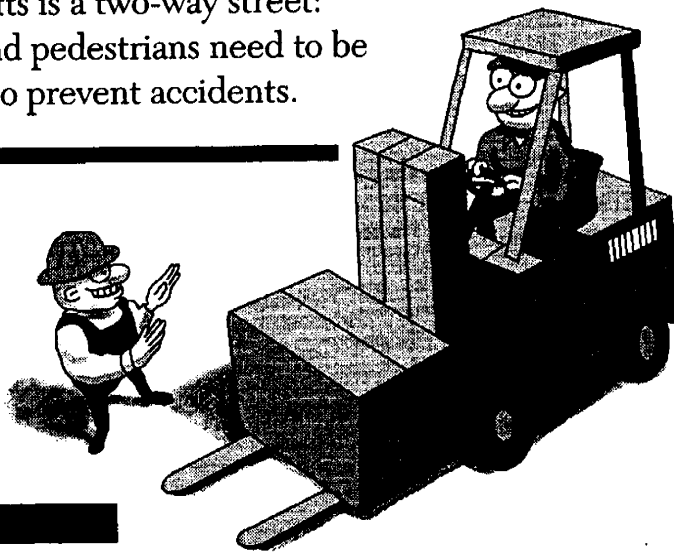


Preventing Forklift Accidents

Working safely with and around forklifts is a two-way street: Operators need to take precautions and pedestrians need to be alert and stay out of the way in order to prevent accidents.

Forklift Dangers

- ✓ injuries to pedestrians
- ✓ collisions
- ✓ falling loads
- ✓ tipping over



SAFETY RULES FOR OPERATORS

- Get training on how to operate the forklift.
- Always wear your safety belt and hard hat.
- Keep your hands and feet inside the cab.
- Always check for pedestrians.
- Inspect the forklift daily and report any problems.
- Make sure pallets are well-stacked and secured.
- Keep loads centered to avoid losing balance.
- Keep loads low to the ground when moving—no more than 10 inches high.
- Make extra trips instead of overloading.
- Know your forklift's capacity and stay within the load limit.
- Use a forklift only for its intended purpose—it's not a means of transportation.
- Make sure the forklift you're unloading has been secured to prevent its movement during unloading.
- Make sure loads don't obstruct your view.
- Use extreme caution when turning.
- Move slowly when on wet surfaces.
- Keep your forklift in good working order.
- Always park on a flat surface away from traffic and set the parking brake.
- Never give people a ride on the forklift.
- Sound your horn at intersections.
- Always lower forks to the ground when parking.

SAFETY RULES FOR PEDESTRIANS

- Work in designated areas only.
- Avoid shortcuts through traffic areas.
- Never walk under the raised load of a forklift.
- Stop and look both ways at intersections.
- Stay clear when a forklift is backing up or turning.
- Watch out so you don't trip on the lowered forks of a stopped forklift.
- Pay attention to what's going on around you at all times.
- Listen for horns and look for flashing lights.
- Let the forklift operator know when and where you're working in an area.
- Never hitch a ride on a forklift.
- Never engage in horseplay around a forklift.

Keys to Ladder Safety

Ladders can be a great help on the job. They're simple to use and get you where you need to be. Although ladders are uncomplicated devices, they can be dangerous. It's important to know and follow ladder safety guidelines.

Choose the Right Ladder for the Job

- Make sure your ladder's strong enough and long enough for the job.
- Check the ladder's duty rating and don't exceed its limits. Type I, an industrial ladder, holds 250 pounds. Type II holds up to 225 pounds. Type III, the household ladder, holds up to 200 pounds.
- Remember to consider the weight of your tools when selecting a ladder.
- If you work around electrical wires or power lines, use a wooden or nonconductive fiberglass ladder, not metal.
- Never connect two short ladders to form a long one.

Inspect Your Ladder Before You Use It

- Check for loose or bent rungs, cracked side rails or bent or missing parts.
- Make sure the spreaders can be locked in place when opened.
- Metal ladders should have plastic or rubber feet and step coverings.
- Check for oil and grease on the rungs which could cause you to slip.
- Replace missing parts and tighten loose hardware.
- Avoid repairing major structural damage. Instead, get a new ladder.
- Make sure the steps are wide enough for you to spread your feet for balance.

Set Up Your Ladder Carefully

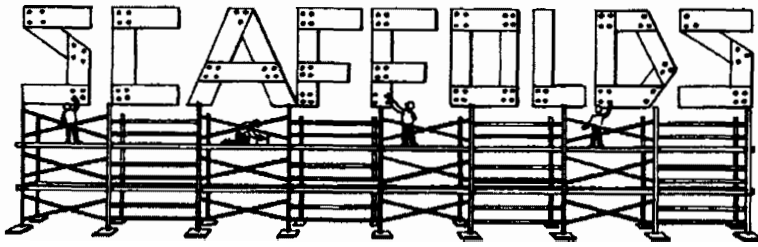
- Place your ladder on a firm, level surface with its feet parallel to the wall it's resting against.
- Use the 4-to-1 ladder rule: Set the base of your ladder 1 foot away from the wall for every 4 feet of ladder height.
- In busy areas, use a barricade to prevent collisions.
- Lock nearby doors that could open toward you.
- Always tie off your ladder. Lash straight ladders at the top and bottom.
- The top of a straight ladder should extend 3 feet beyond its resting point.
- Carry your ladder vertically, or use two people—one at each end.

Climb Cautiously

- Face the ladder when you climb up or down.
- Hold on to the side rails with both hands.
- Carry only necessary tools on your belt.
- Use a rope to raise heavier equipment.
- Never overreach.
- Use the "belt buckle" rule. Always keep your body centered between the rails.
- Always wear a safety harness if you're climbing more than 6 feet off the ground.
- Allow only one person on a ladder at a time.
- Wear shoes with nonskid soles.
- Make sure your hands are dry and free of grease.
- Never step on the top two rungs of a ladder.
- Never use a ladder for anything other than its intended purpose.



Staying Safe Around Scaffolds



Scaffold Safety Rules

- Supported scaffolds must sit on base plates and mud sills or other steady foundations.
- Objects such as blocks of wood or buckets must not be used to support scaffolds or be used as working platforms.
- Supported scaffold poles, legs, posts, frames and uprights must be perfectly vertical and braced to prevent swaying and movement.
- The inboard ends of suspension scaffold outriggers must be stabilized by bolts or other direct connections to the floor or roof deck, or stabilized by counterweights.
- The connections must be checked before you use a suspension scaffold.
- Counterweights must be secured by mechanical means to the outrigger beams of a suspension scaffold. They can't be made of flowable material, such as gravel, or construction materials, such as masonry units or rolls of roofing felt.
- Suspension ropes must be inspected before each work shift and after every event which could affect a rope's integrity.
- Report any rope problems to your supervisor, such as any physical damage which doesn't allow the rope to work properly or that makes it weaker; kinks that might cause a problem during tracking or wrapping around a drum; and broken wire strands, abrasions, corrosion or

flattening, causing loss of more than one-third of the original diameter of the outside wires.

- Gasoline-powered equipment and hoists must not be used on suspension scaffolds.
- Gears and brakes of power-operated hoists used on suspension scaffolds must be enclosed to prevent pinch hazards.
- Two-point and multipoint suspension scaffolds must be tied or secured to prevent them from swaying. Window cleaners' anchors can't be used for this purpose.

Platforms and You

- For every 4 feet of a scaffold's height, its plank must be at least 1 foot wide. If it isn't, it must be protected from tipping by tying, bracing or guying.
- The front edge of the platform must not be more than 14 inches from the face of your work unless guardrails are erected along the front edge. Note that the maximum distance from the face of work for plastering and lathing is 18 inches.
- The ends of your platform, unless cleated or somehow restrained, must extend over the center line of its support at least 6 inches except when each end of your platform is 10 feet or less in length, and then it must not extend over its support more than 12 inches. When each end of a platform is greater than 10 feet in length, it must not extend over its support more than 18

inches, unless it's designed to support workers and/or materials without tipping, or it has guardrails to block workers' access to the platform end.

- Wooden platform planks should be rough-dressed, seasoned, straight-grained and free of knots.
- Never drill, cut or nail into planks or allow them to be damaged by welding sparks or by throwing them.
- Test the plank by laying it across two concrete blocks and having two people stand in the center.
- Always secure the plank by wiring it to the scaffold.

Using Scaffolds

- Before each shift, inspect the scaffold and plank for defects.
- Always inspect the scaffold to ensure all pins and clips are in place. Look for any damage or parts that need repair.
- Never load a scaffold to more than its maximum intended load or rated capacity.
- Never work on scaffolds during storms or high winds.
- Avoid letting debris accumulate on your scaffold.
- Remove elements such as ice, snow, water, grease, mud and other slippery materials from your scaffold.
- Always use fall protection when working on a scaffold platform.
- Never use the crossbraces to gain access to a scaffold.
- Never use improvised scaffolding such as piling boxes on top of the plank.
- Remove all materials and tools from scaffolding at the end of the day.
- Place screen or toe boards around the scaffold to keep objects from falling off.
- Never allow vehicles or materials to bump or strike scaffolds.

Lockout/Tagout Is Serious Business

Machinery or equipment that starts up unexpectedly or releases stored energy while someone is performing maintenance or repairs can cause serious injury. Lockout/tagout procedures prevent these types of accidents from happening. Although only authorized employees are permitted to perform lockout procedures and to remove locks and tags, all employees need to understand lockout and tagout procedures.

What Is Lockout?

Lockout means putting a lock on a machine or piece of equipment to make sure it stays off. Electrical, mechanical, chemical, thermal, hydraulic, pneumatic, raised-weight, pressurized and coiled-spring systems must be neutralized for safety during maintenance and repairs.

A lockout device is a lock, block or chain that keeps a switch, valve or lever in the "off" position. Lockout locks must meet special requirements and must be identified by the name of the worker who installs and removes them. Only use locks provided by your employer for lockout purposes. Never use these locks for toolboxes, storage sheds or other uses.



What Is Tagout?

When equipment can't be locked out, it must be tagged out with a special tag that warns workers to not start up the equipment. A tag is not a physical restraint. Tags must clearly state: "Do not operate or remove this tag." Tags must be placed on each handle, push button, lever or circuit breaker used to energize the equipment.

Tags must meet special requirements and show the identity of the authorized employee. Both locks and tags must be strong enough to prevent unauthorized removal and to withstand various environmental conditions.

LOCKOUT STEPS

1. Identify all parts of any systems that need to be shut down. Find the switches, valves or other devices that need to be locked out.
2. Tell employees that the equipment will be locked out and why.
3. Locate all power sources, including stored energy in springs or hydraulic systems.
4. Neutralize all power at its source. Disconnect electricity; block moveable parts; release or block spring energy.
5. Drain or bleed hydraulic and pneumatic lines.
6. Lower suspended parts to rest positions.
7. Lock out all power sources. Use a lock designed for this purpose. Each worker should have a personal lock.
8. Test operating controls. Turn on all controls to make sure the power doesn't go on.
9. Turn controls back to "off."
10. Perform necessary repairs or maintenance.

Restarting Equipment

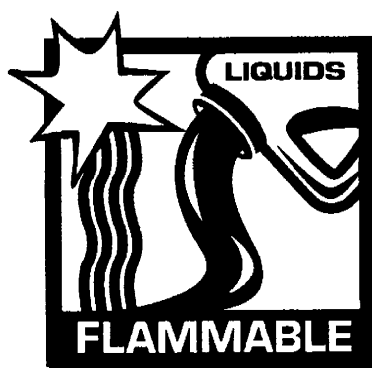
After the maintenance or repair work is completed, only the same authorized employee who installed the lock may remove and restart the equipment. Before restarting the equipment:

- make sure all other workers are a safe distance away.
- remove tools from the equipment.
- reinstall machine guards.
- notify workers that the energy is restored and the machine is working.

Fifteen Things to Remember When Working With Electricity

1. Keep water and electricity far apart.
2. Make sure all equipment is properly grounded and plugged into grounded circuits.
3. Inspect all electrical equipment, tools, cords and outlets for defects. Only use equipment that's in good working order. Report any unsafe conditions you may find.
4. Never wear metal jewelry or headgear when working with electrical parts.
5. Always wear protective equipment such as rubber gloves, sleeves and boots.
6. Use nonconductive or double-insulated tools.
7. Keep electrical cords and cables clean and free from kinks.
8. Never carry equipment by its cord.
9. Never use worn or frayed extension cords.
10. Be aware of flammable or corrosive chemicals and follow your company's procedures for operating electrical equipment in their vicinity.
11. Use ground fault circuit interrupter (GFCI) outlets.
12. Keep clear of energized parts.
13. Keep conductive materials, such as steel wool, metallic cleaning cloths and some chemical solutions, away from sources of electricity.
14. Be aware of lockout/tagout procedures to keep electrical equipment turned off during maintenance and repairs.
15. Never fasten extension cords with staples or hang them from nails or wire; it can damage the cord's insulation.





Working Safely With Flammable Liquids

They're called flammable liquids, but it's not the liquid that you need to worry about—it's the vapor that begins to form as soon as the container is opened. This vapor can explode at the first spark from a tool, a match, simple friction, static electricity or even high temperatures. Most flammable liquids are volatile, that is, they evaporate quickly and reach a concentration in the air that could lead to an explosion.

Flammable vapors are especially dangerous because you can't see them, and often you can't smell them. Solvents, cleaning fluids, acetone, alcohol and fuels are some of the flammable liquids you may use on the job.

Working Safely With Flammable Liquids

- ☑ Control the three potential hazards: temperature, concentration of vapor and ignition sources.
- ☑ Read the material safety data sheet (MSDS) for each liquid you use so you'll know its flash point as well as its upper and lower explosive limits—the range in which vapors are at the right concentration to explode if they're ignited.
- ☑ Follow your employer's flammable liquids safety policy.
- ☑ Always wear the correct, properly fitted personal protective equipment.
- ☑ Ventilate the area to keep vapor concentration down.
- ☑ Know which chemicals, such as oxidizers, increase the fire dangers of flammables.
- ☑ Know the location of the correct fire extinguisher to use in a flammables fire.
- ☑ Never smoke in areas with flammable liquids.
- ☑ Avoid mixing flammables; even small amounts of highly volatile liquids can lower the flash point of the mixture to dangerous levels.
- ☑ Check with your supervisor for instruction on how to dispose of flammable liquids.
- ☑ Store flammable-soaked rags and other waste materials in tightly covered, specially designated containers.
- ☑ Never pour flammable liquids down drains.
- ☑ Keep flammables away from welding, cutting and grinding operations.
- ☑ Be cautious with empty drums that have contained flammable liquids.
- ☑ Never do repair work or welding on an empty flammables drum without getting clearance first.
- ☑ Make sure that areas below where you're working are ventilated or sealed off to prevent the vapors from flowing down into them.
- ☑ Special spark-proof switches and fixtures should be installed in areas where flammable liquids are used.

Storing Flammable Liquids

- ☑ Keep flammable-liquid containers tightly covered, and store away from other chemicals and ignition sources in well-ventilated, temperature-controlled areas.
- ☑ Storage areas for flammables should be equipped with nonsparking electrical systems and heat sources.
- ☑ Store flammables separately from other chemicals, especially reactives such as oxidizers, in well-ventilated, temperature-controlled areas.
- ☑ Make sure flammables are stored in authorized containers and are correctly and clearly labeled for flammability. Liquids with a flash point of 80° F or less must be marked with a red label.
- ☑ Make certain containers are fireproof and have vapor screens and vapor-tight caps.
- ☑ Attach grounding wires to flammable storage containers to prevent static electricity buildup.
- ☑ Before transferring flammable liquids from a drum to a container, be sure to connect the container to the drum with a bonding wire before pouring the liquid, since the friction of pouring can ignite the vapors.

IN CASE OF AN EMERGENCY

Chances are, you'll never have to deal with a fire or explosion caused by flammables, but you should still be prepared. Know your employer's emergency plan, and if a fire breaks out, sound the alarm and evacuate the area immediately.

Save Your Sight

Eye protection is the most important protective gear you can wear. If you're not wearing safety glasses or goggles on the job, you're risking permanent eye damage and blindness. Think about all the work activities you may do each day that can cause eye injury: grinding, sanding, brushing, sawing, drilling, buffing, hammering, cutting, welding and working with chemicals. A speck of dust flying from a power sander, traveling at the speed of a bullet, can severely and permanently injure your eye.

SAFETY GLASSES

If your job involves hazards from dust, flying objects or particles that may strike you from in front, you should be using safety glasses. They may look similar to normal street-wear glasses, but they're made of much stronger lenses. The lenses of safety glasses are specifically designed to be impact resistant, and the frames are built to keep the lenses from being pushed into your eyes. You can't get this kind of protection from regular prescription glasses.



Types of Safety Glasses

- ▶ All safety glasses must meet the American National Standards Institute (ANSI) standards for strength and heat resistance. Look for the "ANSI Z87" imprint on the frames of your safety glasses.
- ▶ Some safety glasses have side shields to provide protection for the sides of your eyes.
- ▶ Eye-cup side shields curve around your eye area providing protection for the front, side, top and bottom of your eyes.
- ▶ For high-impact protection, choose lenses of plastic or polycarbonate, the most impact-resistant material used.
- ▶ Glass lenses protect against scratches from dust and grit better than other lenses.

SAFETY GOGGLES



Safety goggles offer effective protection from impact, flying particles coming from many different directions, fumes, vapors, dust and chemical splashes. For this reason, safety goggles should be worn when grinding, chipping, riveting and working with wood, chemicals and fumes.

Safety goggles are surrounded by a shield that fits snugly on your face all the way around your eyes. Because of their snug fit, the shields of standard safety goggles have ventilation holes to keep them from fogging up. Some goggles have hooded or indirect ventilation openings to keep out thick hazardous dust, chemical splashes or molten materials. There are many special types of safety goggles designed for specific jobs. Ask your supervisor which type of goggles your job requires.

Types of Safety Goggles

- ▶ wire-screen goggles with wire-mesh lenses instead of glass or plastic
- ▶ respirator goggles with a high nose bridge so they can fit with a half-mask respirator
- ▶ rubber-frame goggles to protect from fast-moving, fine dust
- ▶ visor goggles to shade from overhead lights and protect from falling particles
- ▶ splash goggles with no ventilation, to protect against chemical splashes and hazardous mists and dusts
- ▶ tinted goggles to reduce glare from bright lights or molten materials

CARE AND USE OF YOUR SAFETY EYEWEAR

- ▶ Use the right eyewear for your job.
- ▶ If you find your eye protection uncomfortable, try a different size or style.
- ▶ Remember to regularly inspect your eye protection equipment for wear and damage, such as scratches and cracks.
- ▶ Never wear worn, damaged or otherwise defective equipment.
- ▶ Keep your equipment clean according to the manufacturer's instructions and store it in a clean, dry place.
- ▶ You may need to wear a headband or strap with safety glasses to keep them from falling off.
- ▶ If you wear prescription glasses, use special goggles to fit over them, or get safety glasses with your prescription.
- ▶ Make sure your goggles fit snugly but comfortably around the bridge of your nose, cheeks, temples and forehead.
- ▶ If you wear contact lenses, let your supervisor know. Your company may have a special policy.
- ▶ Make sure eye protection equipment conforms to the American National Standards Institute (ANSI) standards.

Respirator Fit and Maintenance

Your respiratory safety on the job depends on you wearing a properly functioning and fitting respirator. Tell your supervisor if your respirator interferes with your ability to see, hear or be heard properly, if it restricts movement so that you can't safely do your job, or if it has any damaged or worn parts.

Checking the Fit

- ▶ Whether you use a full-face respirator or one that covers only your nose and mouth, choose a respirator that's the right size for you and feels comfortable.
- ▶ Don't try to make a respirator more comfortable or better-fitting by altering it in any way or repairing it with parts from another respirator.
- ▶ Follow instructions for putting it on, adjusting the straps if necessary.
- ▶ When a respirator fits properly, the soft, pliable edges of the mask will mold to form a seal to your face, preventing contaminated air from entering.
- ▶ Adjust disposable fiber masks by pinching the metal nose strip to fit around your nose.
- ▶ Make sure no hair sticks out from the edges of your face mask. Beards, mustaches and long sideburns can interfere with the seal.



Testing the Seal

Perform these tests each time you use your respirator. Enter your work area only if your respirator passes the tests. Some employers provide a test atmosphere of banana oil or irritating smoke that you'll detect if your mask is leaking.

Positive Pressure Test

Cover the exhalation valve so that air can't escape through it; then exhale gently. The mask will bulge and you should feel increased air pressure until you inhale or uncover the valve. This means that no air is escaping the mask.

Negative Pressure Test

Cover the air intake ports of the respirator with your palms and inhale. Not only should it be difficult to inhale, but the soft parts of the respirator should collapse inward toward your face and remain that way as long as you're inhaling. This means that no air is getting into the mask from the edges. If you feel air coming in, and the mask regains its shape, there's a leak that must be corrected before you use the respirator.

RESPIRATOR MAINTENANCE

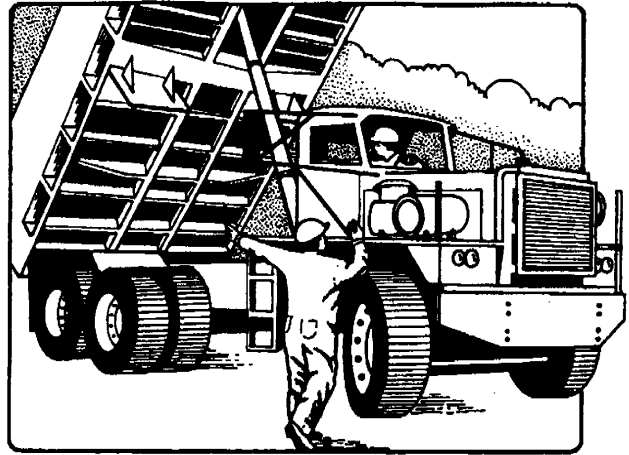
- ▶ Test your respirator's fit regularly.
- ▶ Check filters, cartridges or canisters before each use.
- ▶ Regularly check for cracks, dents, holes, hardening and broken or worn straps or buckles.
- ▶ Replace elastic straps that have lost their stretch.
- ▶ Replace your respirator if the material around the edges has become hard and brittle.
- ▶ Replace cartridges or canisters, valves and hoses according to the manufacturer's guidelines.
- ▶ Avoid changing parts from one model to another.
- ▶ Use only approved parts.
- ▶ Make sure cartridges are threaded correctly into place.
- ▶ Do pressure tests after replacing cartridges or filters.
- ▶ Keep valves clean and functioning properly.
- ▶ Replace dry or cracked valves.
- ▶ Clean your respirator after each use.
- ▶ Wash in mild, soapy water and scrub with a soft brush.
- ▶ If sanitizing, leave your respirator in the solution for at least two minutes and rinse thoroughly.
- ▶ Never use solvents or harsh cleaning agents on rubber or plastic parts.
- ▶ Replace your disposable respirator when it becomes clogged or breathing becomes difficult.
- ▶ Store your respirator in a plastic bag away from sunlight and chemicals.
- ▶ Avoid placing objects on top of your respirator.

Working Around and Operating Heavy Equipment Safely

Heavy equipment is both powerful and dangerous, both for the operator and for those who work around it. It's important that you know the safety precautions to take when working with and around heavy equipment such as dump trucks, front-end loaders, cranes, tractors and cement trucks.

SAFETY RULES FOR HEAVY EQUIPMENT OPERATORS

- When you operate heavy equipment, always check the brakes, steering and other controls before starting the engine.
- Before you start up, make sure no one is near your equipment. The safest way to do this is to walk around your vehicle.
- Always wear the right personal protective equipment such as safety glasses and a hard hat when operating heavy equipment.
- Always wear your safety belt.
- When you park your machine, lower buckets, shovels or dippers, set the parking brake and shut off the engine.
- Resist the temptation to jump off of your machine; instead, use the handholds, rails and steps. Be sure to keep these areas clean and free from grease.
- Always stop the engine before lubricating or working on a machine. And make sure all safety guards are in place.
- Avoid backing up heavy equipment unless it's absolutely necessary.
- Check the surrounding area for obstacles before beginning an operation.
- Keep other vehicles, materials, equipment and people out of areas where heavy equipment is operating.



- Make sure your mirrors are angled to reduce blind spots.
- Check your reverse alarm before operation.
- If you're unable to see behind your machine, use a person on the ground as a "spotter" to help direct you and look for obstacles.
- Only use equipment you're trained to use.
- Be familiar with the limitations of your equipment.
- Never assume your path is clear if you can't see it.

SAFETY RULES FOR WORKING AROUND HEAVY EQUIPMENT

- Keep clear of moving equipment.
- Never assume the operator knows where you are or where you're going.
- Keep an eye out for moving equipment at all times.
- Watch out for and stay clear of pinch points, earth-moving equipment and cranes.
- If you must walk around a piece of heavy equipment, alert the operator to stop the machine before going by.
- Always stay out from under loads on cranes or hoists—even if it means taking the long way around.
- Avoid walking behind a piece of equipment that's backing up. You could trip and fall.
- Never walk beside moving equipment or ride on its running board or drawbar in case it slides or turns or the load shifts.
- Never ride on top of a truck loaded with masonry blocks or other materials that could shift and injure you.
- If you're working on portable staging, scaffolds or platforms, get off while the machine is being moved.

Working Near Overhead Power Lines

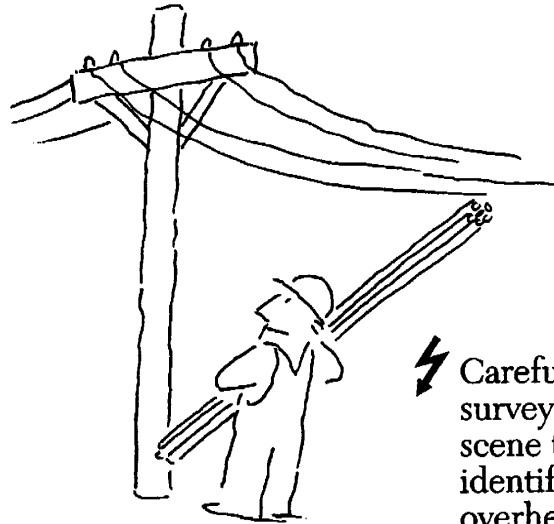
A worker who climbs onto a tall truck bed to unfasten a load can be electrocuted instantly if he or she contacts a nearby power line. And a worker who positions a crane or dump truck beneath a power line risks electrocution when the boom or bed is raised.

Accidents involving overhead power lines are serious and usually result in death. They're typically caused by carelessness and can be prevented.

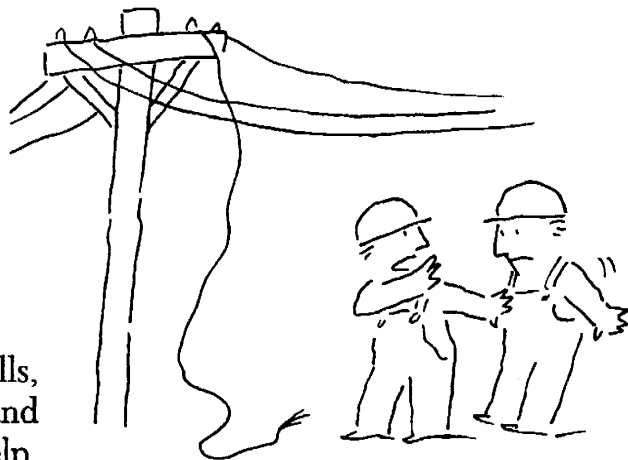
IF YOU WORK BENEATH POWER LINES...

- ⚡ Estimate clearances between power lines and the highest point of your equipment.
- ⚡ Keep yourself and your equipment at least 10 feet from power lines.
- ⚡ Have the power company install protective barriers or de-energize the lines.
- ⚡ Make sure workers on the ground don't touch vehicles or equipment.
- ⚡ Ground all vehicles and other equipment near the power lines, and make sure workers aren't near the grounding location.
- ⚡ Be extra cautious when handling long conductive materials, such as pipes and metal rods.
- ⚡ Use ladders with nonconductive rails.
- ⚡ Wear protective equipment, such as nonconductive headgear and rubber sleeves, gloves and boots.
- ⚡ If a live power line hits your vehicle, stay inside; if there's a fire, jump out—with feet together—as far from the vehicle as you can. Avoid touching the vehicle and the ground at the same time.

⚡ If a live power line falls, stay away from it and call for help.



⚡ Carefully survey the scene to identify any overhead hazards.





Working Safely With Compressed Gases

Any material that's under pressure can be dangerous if it's not handled properly. If the material is a compressed gas, it may be flammable, explosive, reactive, toxic or a combination of these. Because of the hazards of compressed gases, it's very important to know what you're working with, what its hazardous properties are and how to safely handle its container—the compressed-gas cylinder.

Tips for Compressed Gas Safety

- ☒ Before handling any compressed-gas cylinder, identify the type of gas it houses by its identification and hazard labels, not its color. Different manufacturers use different color codes.
- ☒ Check the cylinder's label for hazards, and read the material safety data sheet (MSDS) for instructions on protective equipment and handling.
- ☒ Look for the maximum approved pressure label and make sure a current test date is indicated. If the cylinder is missing this information, it should not be handled.
- ☒ Only trained personnel should unload compressed-gas cylinders.
- ☒ Inspect cylinders for damage or leaks.
- ☒ Move defective cylinders to an isolated storage area; a ruptured cylinder can become a rocket with the force to blast through a concrete wall.
- ☒ When moving cylinders, use special cylinder hand trucks, keeping the cylinder lashed to the cradle and standing as upright as possible.
- ☒ Avoid dropping, banging or rolling cylinders.
- ☒ Keep compressed-gas cylinders away from fire, heat and sparks.
- ☒ When using a cylinder, open the valve slowly, with the cylinder pointed away from people.
- ☒ Make sure the hoses and connections are clean and in good condition each time you use the cylinder.
- ☒ When a cylinder is not in use, screw down the protective metal cap to the last thread.
- ☒ Label empty cylinders with "MT" and keep them separate from full ones.
- ☒ Store compressed-gas cylinders upright, secured with a chain or cable, in a safe, well-ventilated, fire-resistant area with a controlled temperature below 125° F (51.7° C).
- ☒ Keep cylinders out of direct sunlight and away from heat sources, combustible materials and electrical wiring.
- ☒ Group cylinders with others housing the same contents.
- ☒ Rotate stock, using older cylinders first.
- ☒ Avoid using cylinders in confined spaces.
- ☒ Keep oxygen cylinders at least 20 feet away from flammable-gas containers, combustible materials, oil and grease.

Compressed Gases That Need Special Handling

Acetylene and hydrogen: Both of these gases are highly explosive and must be handled with extreme caution. Hydrogen escapes easily from threaded fittings that aren't completely tight, and such leaks can ignite spontaneously from the friction of the escaping gas. Hydrogen has no odor to warn of a leak.

Oxygen: While not flammable itself, oxygen increases the tendency of things around it to burn or explode. Keep oxygen cylinders away from combustible or flammable materials and fire hazards, including grease and oil on your clothes, hands and work area. Oxygen should not be used in place of compressed air.

Chlorine and fluorine: These gases are highly corrosive and irritating. When mixed with acetylene and exposed to light, they may explode. Chlorine will form corrosive hydrochloric acid in water, eating into iron or steel equipment. The proper respirator and other protective equipment should be available in case of a leak.

Ammonia: This is a highly corrosive gas. When using it, make sure you have quick access to the proper respirator and other protective equipment.



Working Safely With Paint

We don't usually think of paint as a hazardous chemical—after all, millions of people use paint in all sorts of situations without wearing any special protective equipment. But understanding the health hazards of prolonged or repeated exposure to paint substances can help you understand why OSHA requires you to protect yourself when using them.

Health Hazards of Paint

Paint contains pigments, solvents, resins and other ingredients to give it color, texture, spreadability and durability. Many of these ingredients are hazardous to your health; among them are solvents, such as mineral spirits, naphtha and turpentine, that evaporate quickly from paint exposed to the air. Even short-term exposure to these chemicals can cause dizziness, eye irritation, nausea, coughing and other symptoms. In addition, paints containing polyisocyanate hardeners can cause shortness of breath, chills and fever. Long-term exposure to paint ingredients, even when no short-term effects are noticed, can damage the kidneys, liver, blood or nervous system. Some even cause cancer and birth defects in laboratory animals.

You may work with paints for a long time with no ill effects. But you can suddenly develop rashes, hives, swelling or scaling of the skin or coughing and shortness of breath, which often lead to permanent lung damage or severe respiratory stress. This is sensitization, an allergic reaction to one or more of the ingredients in paint. Once you become sensitized, it's possible you may never be able to work with the sensitizing substance again. To prevent sensitization, you must avoid contact with the paint in the first place by using the correct personal protective equipment.

Other Hazards

The volatile solvents in paint are flammable. Painting in an unventilated area near an ignition source—such as a cigarette, spark or static electricity—can be very dangerous. Paint containers exposed to high heat may explode. And some paints contain chemicals that may react violently with other substances.

Educate Yourself

Always read the labels of the materials you're going to use before you begin painting. Use the labels and material safety data sheet (MSDS) as a guide to the hazards the paint contains, the type of protective equipment to use and whether the paint may ignite easily. The MSDS will also tell you how to contain and clean up a paint spill and what you can do in case of overexposure to paint.

Protect Yourself

- ◆ You can prevent exposure to harmful paint chemicals by wearing the appropriate personal protective equipment—a respirator designed for painting, coveralls, chemical-resistant gloves and eye protection.
- ◆ Some safety glasses made for painting have special layered peel-off lenses you can remove as they get covered with paint.
- ◆ Paint only in well-ventilated areas if possible.
- ◆ Make sure to use an appropriate respirator when spraying polyurethane paints and other paints in enclosed areas.
- ◆ Change your respirator's cartridges often, as specified by the manufacturer's guidelines.

Clean Up for Safety

- ◆ Keep paint and other paint-related containers tightly sealed and properly labeled when not in use.
- ◆ Store paints at the proper temperature to avoid explosion.
- ◆ Dispose of empty cans and paint- or solvent-soaked rags in airtight containers to avoid spontaneous combustion.
- ◆ Use soap, water and a washcloth to clean your hands; solvents and paint thinners can cause irritation, infection and severe drying of the skin, as well as toxic effects.
- ◆ Remove clothing soaked in solvents and properly clean it.

SAFETY FORMS

Completed Safety Forms help you document your Safety Program, which can be helpful in the event of an investigation by government agencies. Please send all completed forms to the Production Office Coordinator.

***** Form Completion Chart**

Form 1 ***General Safety Guidelines for Production/Employee Acknowledgment IIPP***

Form 2 ***Contact List***

Form 3 ***On-Set Safety Meeting for Crew and Cast***

Form 4 ***Serious Incident Reporting Procedures***

Form 5 ***Production Stage Hazard Assessment Checklist***

Form 6 ***Mill/Stage/Location Construction Hazard Assessment Checklist***

Form 7 ***Location Pre-Production Hazard Assessment Checklist***

Form 7A ***Asbestos/Lead/Mold Guidelines***

Form 7B ***Location Prep/Strike Safety Information***

Form 8 ***Location On-Production Hazard Assessment Checklist***

***** Los Angeles Fire Department Film Location Fire Inspection Safety Checklist**

Form 9 ***Accident Investigation Report***

Form 10 ***Hazard Notification***

Form 11 ***Notice of Unsafe Condition and Action Plan***

Form 12 ***Employee Notice of Safety Violation***

Form 13 ***Production Safety Meeting Report***

Form 14 ***Request for Employee Safety Training***

Form 15 ***Safety Guidelines for Extras and Theatrical Day Hires***

Form 15A ***Assistant Stage Manager Safety Meeting***

Form 16 ***Right of Refusal of Medical Aid***

Production Safety Forms Chart

The Production Manager is to keep a file of all Safety Forms, and to forward a copy of each completed form to the Department of Safety & Environmental Affairs. The chart below outlines when each form is due and whose duty it is to complete.

Form	By Whom	When
Form 1: Safety Guidelines for General Production	Line Producer, Production Manager, Dept. Heads	For all Production employees, once per season. (w/deal memo)
Form 2: Contact List	Production Manager	At show start-up, once per season, or if info changes.
Form 3: On-Set Safety Meeting for Crew and Cast	Stage Manager/1st AD	At every new stage and location and when special activities are planned.
Form 4: Serious Incident Reporting Procedures	Production Manager	At show start-up, once per season, or if info changes.
Form 5: Production Stage Hazard Assessment Checklist	Stage Manager/1st AD or Key Grip	Any permanent stage or location, once every two weeks.
Form 6: Mill/Stage/Location Construction Hazard Assessment Checklist	Construction Coordinator/Staging Supervisor	During set construction, every two weeks.
Form 7: Location Pre-Production Hazard Assessment Checklist	Location Manager	For every location, once per season.
Form 7A: Asbestos/Lead/Mold Guidelines	Location Manager	For every location
Form 7B: Location Prep/Strike Safety Information	Location Manager	For every location
Form 8: Location On-Production Hazard Assessment Checklist	Location Manager	For every new location, once per episode.
LAFD Film Location Inspection Checklist	Stage Manager/1 st AD or Location Manager	For every L.A. City film permit location, every day.
Form 9: Accident Investigation Report	Line Producer, Stage Manager/ 1 st AD, Medic or Witness	To document accidents, injuries and illnesses.
Form 15: Safety Guidelines for Extras and Theatrical Day Hires	Assistant Stage manager/2 nd AD	Every day extras and theatrical day hires are used.
Form 15A: Second AD Safety Meeting	Assistant Stage Manager/2nd AD	Every day at every stage or location
Form 16: Right of Refusal of Medical Aid	Medic	For any injured employee who refuses medical aid.
Form 10 - 14	Anyone	As needed.

Safety Program Form Completion Chart -Revised October 2019

GENERAL SAFETY GUIDELINES FOR PRODUCTION

Production Company: _____

Show Name: _____

Additional safety information is available at www.safetyontheset.com

Before you start your job:

1. Read these **General Safety Guidelines for Production**.
2. Sign the attached **Acknowledgment Form** and give it to your supervisor.

*Know the Emergency Plan and how to react in emergency situations.
Familiarize yourself with emergency procedures for each location. Speak
to your supervisor if emergency procedures are unknown.
Read all posted safety information on your stage or location.*

NOTE: Employees can express safety concerns: 1.) By contacting the Safety Representative assigned to your production; 2.) By calling the **ANONYMOUS SAFETY HOTLINE (818) 954-2800 or (877) 566-8001**; or 3.) In writing by submitting an anonymous web form at safetyontheset.com. No employee shall be retaliated against for reporting hazards or potential hazards, or for making suggestions related to safety.

INJURY AND ILLNESS PREVENTION PROGRAM FOR PRODUCTION

This Production has a written **Injury and Illness Prevention Program (IIPP)**. It is contained in the **Production Safety Manual** and is available to all employees: 1.) as a hard copy kept on the set with the 1st Assistant Director and in the Production Office with the Unit Production Manager; and 2.) on the web at safetyontheset.com.

In addition, this Production requires all CSATF employees whose Local participates in the **SAFETY PASS PROGRAM** to be fully trained in all safety classes that their Local and Management have determined mandatory. The Training Class Schedule may be found at www.csatf.org and registered for by calling (818) 502-9932.

The IIPP for Production addresses the following:

- Responsible Persons
- Compliance: Enforcement of Safe Work Practices
- Communication
- Inspections
- Injury or Illness Investigation
- Hazard Assessment and Control of Unsafe or Unhealthful Conditions
- Safety Training
- Recordkeeping

STATEMENT OF SAFETY POLICY

It is the policy of this Production that an Injury and Illness Prevention Program (IIPP) will be instituted and administered as a comprehensive and continuous occupational IIPP for all employees. Our goal is to prevent accidents, to reduce personal injury and occupational illness, and to comply with all safety and health standards.

Safety is a priority.

NOTE: Whenever an unsafe or unhealthful condition, practice or procedure is observed, discovered, or reported, the UPM or designee will take appropriate corrective measures in a timely manner based upon the severity of the hazard. Affected employees will be informed of

the hazard, and interim protective measures taken until the hazard is corrected.

SPECIAL NOTICE TO HEADS OF DEPARTMENT/SUPERVISORS

The supervisor:

- Is the one person who can take immediate, direct action to make sure that his or her work area is safe for their employees.
- Is the only person who can control employees, machines, and working conditions on a daily, full-time basis.
- Works most directly with their subordinates and bears responsibility and accountability for their work practices.

Under Federal and State Safety Regulations, a supervisor is responsible for certain safety duties, including but not limited to:

- Provide, or arrange and ensure safety training for subordinates
- Provide resources, support and share experience.
- Enforce safety practices consistently
- Oversee worksite safety.
- Investigate workplace accidents
- Correct unsafe conditions
- Lead by working safely and ensure your subordinates follow your lead.

FIREARMS POLICY

The Company expressly prohibits weapons, including but not limited to firearms, in the workplace. The workplace includes all property owned, leased or controlled by the Company. Exceptions will be made for weapons approved for use for filming or with prior written approval by the Company. Failure to strictly adhere to this policy will result in disciplinary action, up to and including termination.

These Safety Guidelines are not intended as legal interpretation of any federal, state, or local laws.

Failure to comply with these Safety Guidelines may result in discipline, up to and including termination.

CODES OF SAFE PRACTICES FOR PRODUCTION

These Codes of Safe Practices have been prepared to inform employees of safety issues associated with their positions, and to recommend ways of preventing injuries while on the job. However, Production Management cannot monitor every employee, in every situation, every minute of the day to see that safe practices are being followed. It is a condition of employment that each employee be committed to safe work practices daily. Each employee, for themselves and fellow workers, must take the responsibility to work safely and should report to his or her supervisor any unsafe conditions or practices observed. While most of these guidelines are driven by common sense, others are mandated by government regulations. Failure to follow these guidelines could result not only in serious injury, but will cost valuable time and expense due to

GENERAL

1. Know the Emergency Plan and how to react in emergency situation. Familiarize yourself with emergency procedures for each location. Speak to your supervisor if emergency procedures are unknown.
2. Attend all pertinent toolbox talks assigned by your supervisor and additional safety meetings whenever any stunt, special effect, firearm, live ammunition, hazardous or unusual activity is scheduled.
3. **Report all injuries, no matter how minor, immediately so proper medical or first aid treatment can be arranged. Inform the appropriate supervisor.**
4. **Report any employees interfering with communications equipment, the dissemination of safety information, or disrupting safety meetings, to their supervisors.**
5. Your supervisor will specify appropriate work shoes and clothing. Loose or frayed clothing, gloves, long hair, rings, etc., can become entangled in certain machines and shall not be worn.
6. Your supervisor will furnish safety equipment. Use goggles or safety glasses when cutting, grinding or chipping; correctly wear harnesses with suitable anchorages when working above or outside of guardrails; wear hard-hats when exposed to potential falling objects.
7. All safety guards and other protective devices should be properly adjusted and remain in place. Missing or faulty safety equipment should visibly marked and be reported promptly to the employee's supervisor.
8. Always use push sticks to guide short or narrow pieces of stock through saws. Using the correct push stick allows saw operators to keep their hands at a safe distance from the saw blade and prevent kickback.
9. **Asbestos Containing Materials (ACM):** No employee of this company shall be asked to remove, demolish, or abate ACM or suspected ACM. All such work will be performed by licensed third party ACM remediation vendors. Contact the Production Safety Representative.
10. Any employee who accidentally disturbs friable ACM and is potentially exposed to ACM should undergo a precautionary decontamination procedure to avoid exposing other workers and, potentially, bringing contaminated materials home:
 - a). the employee should wash down in the nearest shower;
 - b). the employee's clothes should be disposed of by the third-party asbestos remediation company;
 - c). the employee should be loaned clothing to wear when returning home.
11. Only authorized and trained personnel are allowed to use aerial lifts, scissor lifts, etc. Harnesses and lanyards are to be worn at all times, including in scissor lifts and bucket lifts. (May require adjustment of lanyard for Fall Restraint.)
12. Always use aerial lifts, scissor lifts and forklifts as the manufacturers intended or has provided special guidelines. Familiarize yourself with the manual. Do not overload, tower, use in place of a crane, use in high wind conditions, etc.
13. Always make sure the area below is clear of personnel when working with overhead loads unless exception is approved by the Production Safety Representative.
14. Ladders, scaffolds, working platforms and walkways, should be properly maintained and used in a safe manner. Access areas and walkways are to be kept clear of material and debris.
15. Adequate fall protection devices (i.e. guardrails, covers, personal fall arrest systems, barricades) shall be provided at all elevated surfaces, excavations, trenches, pits and floor openings that expose any worker to a potential fall of 4 feet or more. (Trigger height may vary. Contact the Production Safety Representative.)
16. **Liftgates:** Always operate liftgates according to manufacturers' guidelines. Chock or lock wheels of all carts or materials being lifted by liftgate. Keep employees clear when raising or lowering liftgate.
17. **Working Alone or in Isolation:** If your work requires you to be alone or isolated from other employees, let your Department Head know where you will be and what you will be doing. Have the area you are working inspected for any hazards. Establish regular telephone contact with your Department Head. If no telephone service is available, alternate methods of contact should be made.
18. Notify your supervisor if you are taking any medication that may interfere with your ability to work. Working under the influence of illegal drugs or alcohol is prohibited
19. It is your responsibility to report unsafe conditions, employees engaged in unsafe activities, and all accidents to your supervisor or to the Anonymous Safety Hotline (818) 954-2800 / (877) 566-8001.
20. See that all visitors and new hires remain a safe distance from potentially hazardous construction and filming.
21. Do not engage in pranks, horseplay, scuffling or other unsafe acts.
22. Never enter confined spaces (manholes, underground vaults, chambers, silos, etc.) until oxygen and gas levels have been checked by a qualified person and confirmed as being healthful
23. **Stunts and Special Effects** require an on-site walk-through with all involved parties before filming. The meeting and rehearsals should be documented (the daily production report may be used.) Certain stunts and special effects, such as those involving aircraft, high falls, body burns, car crashes, etc., should be reviewed by the Production Safety Representative prior to execution. Special Effects involving pyrotechnics, atmospheric smoke, explosives and/or fire, should be noted in advance on the call sheet. There should be planned escape routes provided for each person who should personally check the route to determine its accessibility. Only persons necessary for the stunt and/or effect should be in the immediate area. Those involved in the scene should ask questions until they thoroughly understand their part in the action. All others should stay in the designated safe zone
24. **Firearms and Live Ammunition** should always be treated as if they are loaded or set to detonate. Do not play with firearms or any weapons and **never point** a firearm at anyone, including yourself. Follow the directions of the property master regarding all firearms and weapons. Ask for clarification until you understand its proper use. Do not bring live ammunition to the filming location
25. **Film Vehicles:** Be particularly cautious when vehicles such as fixed wing aircraft, boats, cars, helicopters, motorcycles and trains are being used. When driving, walking or traveling in any manner in congested areas, proceed slowly and watch for sudden movements. Pay close attention when working around helicopters and on runways.
26. **Water Hazards:** Always wear life vests or other safety gear when possible when working on boats, pontoons, rafts, etc. Use safety lines, nets, observers and/or safety divers when filming in rivers or other bodies of water. Only electrical equipment intended for use in and around water should be used.
27. **Animals:** Make sure you understand and follow the wrangler's safety precautions in effect when animals are present. Do not feed, pet or play with any animal. Defer to the trainer/wrangler at all times.
28. **Tools and Equipment:** See to it that all equipment is in proper working order and that all protective guards are in place and are used. Do not attempt to alter, modify, displace or remove any existing safety equipment. Saw guards, safety switches, and other safety mechanisms are installed for your protection. Always use push sticks to guide short or narrow pieces of stock through saws.

Using a push stick allows saw operators to keep their hands at a safe distance from the saw blades. Do not use tools or equipment for which you are not trained and certified. See your supervisor if you have any questions or feel that you need additional training.

Do not use, alter, or modify equipment being used by another employee without informing them prior to doing so.

29. **Chemical Handling:** Store all flammable liquids in approved safety cans or cabinets. Do not allow paint chemicals and other materials to accumulate on stage floors, under platforms, or in other work areas where they do not belong. Read understand and follow proper handling and storage procedures for all combustible or flammable materials. Use only approved flame retardants and decorative set materials that are non-combustible. Properly dispose of all hazardous waste generated by the company, including paint. Do not dump down the sink, storm drain, septic systems, or in the trash.
30. **Fire Safety:** In buildings, keep all exterior doors unlocked and capable of being opened from the inside. Make sure all aisles, traffic lanes, electrical panels, and fire exits and all fire equipment are kept clear and accessible at all times. Maintain clear walkways (4 feet around the perimeter) and exit passages.
31. **NO SMOKING:** Smoking is prohibited on all soundstages and in all buildings, regardless of location. This applies to all smoking products, including e-cigarettes. Smoke only in designated areas. Extinguish all smoking materials in appropriate butt cans.
32. **Ladders:** Place ladders on slip-free surfaces, even if they have slip-resistant feet. Secure the ladder if a slip-free surface is not available.
33. **Fall Protection:** All personnel working in the permanent grid and truss system (perms) outside the catwalks and handrails will use Cal/OSHA compliant fall protection equipment. Prior to use each day, the wearer should visually inspect all fall protection equipment.
34. **Electrical Safety:** Keep all electrical cords away from pinch points. In any wet, damp or moist environment, Ground Fault Circuit Interrupters (GFCI's) should be used. See to it that all electrical panels are unobstructed and have a minimal clearance of 36".
35. **Lock Out/Tag Out:** Always turn off a tool or appliance before disconnecting it to avoid exposure to live electrical parts. Never work on machinery which may unexpectedly be re-energized.
36. **Lifting Precaution:** When lifting, stand close to the object with your feet comfortably apart, squatting down, and bending at the hips and knees. As you lift the object, arch your back inward and pull your shoulders back, keeping the load close to your body. Once you arrive at your destination, set the load down, bending at the hips and knees. Remember: never twist your body at the hip when carrying a load.
37. **Reach Lifts/Gradall's should only be operated by persons trained on the specific model being used.**

EMERGENCY INFORMATION



EMERGENCY PLAN:

Attend your Emergency Plan meeting.

1. Know exits.
 2. Know assembly points.
 3. Know your fellow employees.
- When an emergency warning is made:
1. WARN OTHERS!
 2. Move to the nearest exit quickly.
 3. Use the stairwells. DO NOT USE THE ELEVATOR.
 4. Evacuate to the outdoors, to a pre-assigned evacuation area.
 5. After reaching the assembly area:
 - a. Stay with your evacuation group and wait for further instructions.

- b. Do not reenter an evacuated building until emergency personnel notify you it is safe.



IN THE EVENT OF A FIRE

1. KEEP CALM.
2. EVACUATE: all occupants from the room in which the fire has occurred.
3. CLOSE THE DOORS AND WINDOWS and leave the room.
4. PULL THE FIRE ALARM OR CALL THE FIRE DEPARTMENT. Tell them your exact location and the nature of the emergency.
5. ONLY IF YOU HAVE BEEN TRAINED TO USE A FIRE EXTINGUISHER AND CAN DO SO SAFELY, return to fight the fire with a fire extinguisher until the Fire Dept. arrives. (See FIRE EXTINGUISHERS)
6. EVACUATE OCCUPANTS FROM THE ADJOINING AREA if there is any danger from spreading fire, smoke, fumes or extreme heat.



FIRE EXTINGUISHERS

1. Use a fire extinguisher only if you have been trained to do so and can do so safely. If there is any danger at all from fire, smoke, fumes or extreme heat, LEAVE THE AREA IMMEDIATELY.
2. Determine what type of fire you have and check the label on the extinguisher to make sure it is intended for your type of fire. Letters on the label indicate the type of fire it will fight:
 - a) **A** = wood, cardboard, paper, cloth
 - b) **B** = flammable liquids and gases
 - c) **C** = electrical equipment
 - d) **D** = metals**(Never use water on an electrical fire – water can cause a fatal shock.)**
3. Use the **PASS** system to put out the fire:
 - a) **P**ull the pin or ring. Some units require releasing of a lock latch, pressing a puncture lever, or other motion.
 - b) **A**im the extinguisher nozzle at the base of the fire.
 - c) **S**queeze or press the handle.
 - d) **S**weep from side to side slowly at the base of the fire until it goes out.
4. If the fire gets big, GET OUT! Close the door to slow the spread of the fire.



FIRE PREVENTION

1. Check to see that all fire exits, doorways, stairways, aisles and corridors are not obstructed or blocked at any time.
2. Make sure you know the location of all fire exits.
3. Poor housekeeping is a fire breeder. Avoid all unnecessary accumulation of combustible debris.
4. Regularly check all electrical cords and plugs for fraying or cracked wire insulation and fitness for use. OSHA prohibits the use of ungrounded extension cords longer than 12 feet in office buildings.
5. Store all flammable liquids, such as copy machine fluids, cleaning products, solvents, etc. according to instructions on label.
6. Report fluorescent lights that give off a loud humming sound, as this may indicate a defective ballast.
7. Turn off all coffeemakers and other personal electrical appliances when they are not in use. Check the plugs, cords and wiring on a regular basis to determine if they are in good condition.

SMOKING IS PROHIBITED ON ALL SOUNDSTAGES, ON ALL SETS, AND IN ALL BUILDINGS, REGARDLESS OF LOCATION. THIS APPLIES TO ALL SMOKING PRODUCTS, INCLUDING E-CIGARETTES.

WORKING AT HEIGHTS

☐ FALL PROTECTION: DEFINITIONS & GUIDELINES

(1) Passive Fall Prevention

- The best way to avoid a fall is not to work from a height. **Bring the work down to ground level** whenever possible.
- If you can't bring the work to ground level, work from access equipment such as **scaffolding, a platform, an aerial lift, or a ladder**.
- If the work environment does not allow you to use access equipment, secure the elevated work area with a passive fall prevention barrier system, such as **guardrails** or a **roof parapet at least 42" high**.

(2) Fall Restraint

If the work environment does not allow for the use of a passive fall prevention system, use an approved fall restraint system. Fall restraint systems, such as a harness, and rope grab prevent the employee from reaching the edge of the roof.

(3) Fall Arrest

- A fall arrest system, such as a **rope grab kit, lanyard, and approved or acceptable anchorage point** arrests and limits the fall of an employee. Plan a method of rescue prior to the use of a fall arrest system.

(4) Controlled Access Zone

- When on elevated surfaces such as rooftops, platforms, or around pits and tanks one option is to establish a Controlled Access Zone (CAZ). A CAZ protects employees not wearing fall protection equipment by warning them when they are within six feet of the fall hazard.
- The system uses stanchions and control lines with high visibility flags every six feet. The line must be rated for two hundred pounds and be not less than six or more than 25 feet from the edge.
- A safety monitor must be assigned to: watch and warn employees who leave the safe zone and enter the CAZ six foot zone who are not wearing fall protection gear.

☐ FALL PROTECTION: TRIGGER HEIGHTS

Fall protection is required when employees are working within six feet from the unprotected edge of a set, platform, or roof, as indicated below:

- For general production crews, the trigger height for mandatory fall protection is 4 feet. Guardrails (42"), or harnesses with appropriate anchorage points are required.
- For construction work on a permanent structure, the trigger height for mandatory fall protection is 6' (7.5' in CA). Guardrails (42"), or harnesses with appropriate anchorage points are required.
- The trigger heights do not apply to work performed from portable ladders. If ladders are used properly, additional fall protection measures are generally not necessary.

☐ FALL PROTECTION: GENERAL LADDER SAFETY

All employees must follow proper safety practices when using ladders. If ladders are maintained and used correctly, additional fall protection measures are generally not necessary.

- Inspect all ladders prior to use. Read all manufacturer safety warnings on the ladder and comply with them.
- Check for loose steps or rungs, cracked or split steps or side rails, loose or bent hinges, missing ladder feet, etc. All defective ladders shall be marked "defective" and brought to the attention of the supervisor and removed from service.

- Make sure the ladder is free of oil, grease, or other slippery hazards.
- Use ladders on stable and level surfaces only.
- Ladders shall not be placed in doorways unless protected by barricades or guards.
- If using a step ladder, make sure it is securely spread open. Never use a folding step ladder in an unfolded position.
- Make sure the ladder is securely fixed at both the top and the foot so that it cannot move from its top or bottom points of rest. If the ladder cannot be secured at the top and bottom, then securely fix it at the base. If this is not possible, have someone stand at the base of the ladder and secure it manually against slipping.
- When using an extension ladder, the base to height ratio should be placed at approximately to 4.
- Ladders used to reach a walking surface or roof must extend at least 3 feet beyond the landing surface.
- Always face the ladder when ascending or descending.
- Use fiberglass or wood ladders when doing electrical work.
- You must maintain three points of contact at all times while climbing. Carry tools in a tool belt, pouch or holster, not in your hands. Keep your hands on the ladder.
- Do not stand on the top two steps of a step ladder.
- Do not try to reach so far above you or to either side that you lose your balance; instead, move the ladder.
- When you are using a hand line to pull up equipment or supplies, all material should be securely attached to the line and you should be in a stable position complying with fall protection regulations.
- No one should be permitted to stand, walk or work under a ladder while it is in use.
- When using rolling "A" frame trestle ladders, never extend them beyond twenty feet or manufacturer's recommendation.
- Always lock or chock the wheels of trestle ladders to prevent any rolling or instability.

☐ FALL PROTECTION: FIXED LADDERS

*When climbing a fixed ladder over 20 feet in length without rest balconies, or a ladder that is not equipped with a ladder cage, **you must use a ladder safety device**. This equipment includes: a full-body harness and a sliding sleeve attached to either a fixed-rail or cable system.*

- Inspect all fall protection equipment prior to use.
- Connect the sleeve to the "D" ring located on the front of your harness.
- Connect the sleeve to the fixed-rail or cable. Connect the sleeve onto the fixed-rail or cable with the arrow pointed toward the top of the ladder.
- Once attached, climb up the ladder normally. The detachable cable sleeve will follow you as you climb.
- When you reach the top of the ladder, carefully disconnect from the ladder safety device to exit the ladder.
- To descend the ladder, reattach your "D" ring to the sleeve and climb down smoothly in a normal manner. Allow the sleeve to "lead" you down. Climbing down out of position will cause the sleeve to lock onto the fixed-rail or cable.
- If the sleeve locks, move upward slightly to release the sleeve.
- You must be attached to the ladder safety system whenever you are on the ladder.
- Do not use unprotected fixed ladders over 20 feet in length. Contact your Production Safety Representative.

FALL PROTECTION: SOUNDSTAGE PERMANENTS

When working outside the catwalks, in the unprotected area of the permanents known as the “ozone,” **you must use fall arrest equipment.** This equipment includes: a full body harness and a self-retracting lanyard.

- Inspect all fall protection equipment prior to use.
- Locate an anchorage point for the self-retracting lanyard (SRL). Single-user anchorage points are located on the soundstage trusses at the corners of the ozone; are constructed of wire rope with thimbles; and have been identified with a yellow tag.
- Select an anchorage point as close as possible to where you are working to avoid or limit a possible swing fall.
- Connect the SRL to the anchorage point with a self-locking carabineer.
- Attach the double-locking snap hook from the SRL to the “D” ring located on the back of your harness.
- Avoid quick or sudden movements in any direction to prevent loss of balance from line tension or locking. The SRL maintains normal line tension when line is being steadily extracted and retracted. Do not allow the SRL to go slack.
- Practice using your attached SRL on the catwalk. This will familiarize you with the tension and locking actions of the system and make you aware of the forces applied to your body by the system during movement.
- If you need to move farther than the SRL will allow, return to the catwalk and find another anchorage point. **Never** try to increase the length of an SRL by attaching it to another SRL.
- Never detach from the SRL until you are safely back on the catwalk.
- **WARNING:** Do not allow the retractable lifeline to wrap around your arm. Do not turn and/or reach over the lifeline.

FALL PROTECTION: HORIZONTAL CABLE SYSTEM OVER PERMANENTS

An employee working outside the catwalks, in the unprotected area of the permanents known as the “ozone,” **must use fall arrest equipment.** This equipment includes: a full body harness, a shock absorbing lanyard or a self-retracting lanyard (SRL), and a carabineer.

- Inspect all fall protection equipment prior to use. Inspect the horizontal wire rope cable for any kinks or damage.
- Select a horizontal line as close as possible to where you are working to avoid or limit a swing fall. These engineered lines are designed for two users per line.
- Connect the lanyard to the fixed horizontal anchorage line with a double-locking snap hook or self-locking carabineer.
- You may connect to the horizontal anchorage line either by:
 - Connecting the SRL to the horizontal line directly with a self-locking carabineer,
 - Substituting a 6-foot shock-absorbing “Y” lanyard for the SRL.
- Attach the double-locking snap hook from the SRL to the “D” ring located on the back of your harness.
- When using an SRL, avoid quick or sudden movements in any direction to prevent loss of balance from line tension or locking. The SRL maintains normal line tension when line is being steadily extracted and retracted. Do not allow the SRL to go slack.
- Practice using the device on the catwalk. This will familiarize you with the tension and locking actions of the SRL and make you aware of the forces applied to your body by the line during movement.
- If you need to move farther than the lanyard will allow, return to the catwalk and find another horizontal line. **Never** try to increase the length of a lanyard by attaching it to another lanyard.

- Never detach from the lanyard until you are safely back on the catwalk.

FALL PROTECTION: BELOW THE PERMANENTS – SINGLE ROPE GRAB SYSTEMS

When working at heights below the permanents that cannot be reached by using a ladder, aerial lift, or scaffolding, **you must use fall arrest equipment.** (Examples of this work include, hanging greenbeds or walking on the top of set walls). The equipment needed includes: a full body harness with a self-retracting lanyard, a vertical rope lifeline with rope grab, a carabineer and a tag line.

- Inspect all fall protection equipment prior to use.
- Locate an anchorage point for the vertical lifeline. Single-user anchorage points are eyebolts located on the soundstage trusses and have been identified with a yellow tag.
- Select an anchorage point above you and as close as possible to where you are going to be working to avoid or limit a swing fall.
- Connect the vertical lifeline to the anchorage point with the double-locking snap hook.
- Open the rope grab and enclose the vertical lifeline with the rope grab (arrow pointed up) then tightly screw the rope grab to the vertical lifeline. **Make sure that the arrow on the rope grab is pointing up toward the anchorage point.**
- Attach the self-retracting lanyard (SRL) to the rope grab with a self-locking carabineer.
- Connect the tag line to the double-locking snap hook on the other end of the SRL.
- Position the rope grab, SRL and tag line on the lifeline so that the final height of the SRL is 6 feet above your intended work height.
- Protect the lifeline against rough edges by using a rope protector or by padding sharp corners.
- From the ground or greenbed, pull the tag line down and attach the double-locking snap hook from the SRL to the “D” ring located on the back of your harness.
- Never remove your lifeline until you are back on the ground or greenbed.
- If you need to move a longer distance horizontally across the set, you can rig two or more vertical lifeline systems. This will reduce the swing fall potential. (See “Multiple Rope Grab Systems” below.)

FALL PROTECTION: BELOW THE PERMANENTS – MULTIPLE ROPE GRAB SYSTEMS

When working at heights below the permanents that cannot be reached by using a ladder, aerial lift, or scaffolding, **you must use fall arrest equipment.** (Examples of this work include, hanging greenbeds or walking on the top of set walls).

When you need to move long distances horizontally across the set, use a multiple rope grab system. Two or more rope grab set-ups will allow you to travel across the set without risking a swing fall. This equipment includes: a full body harness the number of self-retracting lanyards (SRL's) you intend to use, number of vertical lifelines with rope grabs you intend to use, tag lines, carabineers and a double D-ring extender for your harness.

- Inspect all fall protection equipment prior to use.
- Locate an anchorage point for each of your vertical lifelines. Single-user anchorage points are located on the soundstage trusses and have been identified with a yellow tag.
- Select anchorage points above you and as close as possible to where you are going to be working to avoid or limit a swing fall.
- Connect the vertical lifelines to the anchorage points you have chosen with the double-locking snap hook. Attach only one

vertical lifeline per anchor point.

- Open the rope grab and enclose the vertical lifeline with the rope grab (arrow pointed up) then tightly screw the rope grab to the vertical lifeline. **Make sure that the arrow on the rope grab is pointing up toward the anchorage point.**
- Attach the self-retracting lanyard (SRL) to the rope grab with a self-locking carabiner.
- Connect the tag line to the double-locking snap hook on the SRL.
- Position the rope grab, SRL and tag line on the lifeline so that the final height of the SRL is 6 feet above your intended work height.
- Protect the lifeline against rough edges by using a rope protector or by padding sharp corners.
- From the ground or greenbed, pull the tag line and attach the double-locking snap hook from the SRL to the double D-ring extender attached to the D-ring on the back of your harness.
- As you work move toward the next SRL you previously positioned. Pull the tag line and hook the double-locking snap hook to the second D-Ring extender.
- Unhook the first double-locking snap hook from the first SRL.
- Never remove one lifeline until you are safely attached to the second lifeline, or until you are back on the ground or greenbed.

FALL PROTECTION: Rooftop Restraint

*When working within 6 feet of the unprotected edge of a flat or low-pitched roof (maximum allowable pitch 4:12 slope), or around unguarded skylights, then **you must use fall restraint equipment**. This equipment includes a full-body harness and a lifeline; an adjustable rope grab all attached to an appropriate anchorage point by a cross arm strap or other similar method. (Note: Roof edges protected with a 42" guardrail (permanent or a temporary equivalent) or a 42" or higher parapet wall do not require the use of fall restraint equipment.)*

- Inspect all fall protection equipment prior to use.
- Select an anchorage point as close as possible to where you are working. Because you will be harnessing yourself so that it would be impossible to fall over the edge of the building (*Fall Restraint*) the anchorage point should be four times heavier than your body weight. (**Prior to working on a roof with no anchorage points, contact your Production Safety Representative.*)
- Connect the lifeline to the anchorage point cross arm strap D-Ring (or equivalent device) with a double-locking snap hook or self-locking carabiner.
- Open the rope grab and enclose the vertical lifeline with the rope grab (arrow pointed up) then tightly screw the rope grab to the vertical lifeline. **Make sure that the arrow on the rope grab is pointing up toward the anchorage point.**
- Position the rope grab on the lifeline so that its maximum extended length will physically limit your ability to inadvertently fall over the edge of the roof.
- Attach the double-locking snap hook or self-locking carabiner from the rope grab to the "D" ring located on the back of your harness.
- You must be attached to the system prior positioning yourself for work.

FALL PROTECTION: CONTROLLED ACCESS ZONE

*When you are working in elevated areas such as rooftops, unprotected platforms, or around pits and tanks, one option for fall prevention is to establish a **Controlled Access Zone (CAZ)**. The CAZ is the area within six feet of the edge of the fall hazard. A CAZ protect employees not wearing fall arrest or fall restraint equipment by physically and verbally warning them when they are within 6 feet of a potential fall hazard. This system requires stanchions, control lines, high visibility markers and additional employees acting as safety monitors.*

WARNING: The CAZ requires vigilance, and a dedicated designated "safety monitor". It is therefore not appropriate to all situations.

- The Controlled Access Zone (CAZ) is separated from the Safe Zone by a heavy control line that restricts access to the CAZ.
- **Post Signs** at the entrance of the Safe Zone warning employees or unauthorized personnel that they: (1) are entering a CAZ; (2) should stay within the visibly marked control lines (Safe Zone); and, (3) to do as they are told by the Safety Monitors.
- Control lines must be positioned not less than 6 feet from the fall hazard and not more than 25 feet from the fall hazard.
- Expand the CAZ during adverse conditions (e.g., rain, wind, slippery roof), or when working at an additional elevation within the "Safe Zone" (e.g., on a step ladder).
- Make sure control lines consist of ropes, wires, or equivalent materials that have a minimum breaking strength of 200 pounds.
- Control lines should be clearly marked every six feet with high-visibility materials. (Bright barricade tape or red flags).
- Rig each line so it is between 39 inches and 45 inches from the working surface. Do not let them "sag".
- Anyone working outside the "SAFE ZONE" and inside the CAZ (within 6 feet of the leading edge or fall hazard), must wear fall restraint or fall arrest equipment.
- Designate a person whose sole job and responsibility is to monitor the safety of other employees in the work area and who will:
- Watch and warn employees when it appears that they are acting in an unsafe manner; crossing the CAZ line without wearing fall protection or fall arrest protection.
- The Safety Monitor must be able to see that the entire CAZ is clear of unprotected employees. If necessary add an additional Safety Monitor to ensure the CAZ remains clear.
- All Employees who working at a location utilizing a Controlled Access Zone will comply with the Safety Monitors directives.
- If there are repeated infractions into the CAZ, the Safety Monitor will bring the matter to the attention of the 1st AD.

FALL PROTECTION: IN THE EVENT OF A FALL

(NOTE: All falls sustained by employees in fall protection equipment should immediately be reported to local emergency personnel (911).

Self-Rescue: If a person falls a short distance and is conscious, uninjured, and can reach a working surface safely, the employee should do so and be taken to First Aid.

Ladder or Aerial Work Platform Rescue: if self-rescue is not possible, the next option is the use of a ladder, "condor," or scissor lift. This rescue depends upon the accessibility and condition of the person; the availability of appropriate equipped personnel and the necessary equipment. Ensure the employee is taken to First Aid.

Fire Department Rescue: if the previous rescue options cannot be accomplished in a prompt and safe manner, the fire department personnel will rescue the person using advanced techniques.

- Establish verbal contact and continuously monitor the employee.
- Watch for signs or complaints of suspension trauma: faintness, nausea, breathlessness, dizziness, sweating, paleness, hot flashes, loss of vision or increased heart rate.
- Continue to talk to the suspended worker; tell them to keep their legs moving to increase circulation.
- Safely lower a rope with a loop tied in the end of it and the opposite end tied to an anchor point to the suspended worker. Have the worker step into the loop and stand up at regular intervals to remove the pressure on his legs created by the leg straps. This also enables him to shift his body weight around into a more comfortable position.

- After the event do not continue to use any of the Fall Protection Equipment involved in the incident. Tag it, “Do Not Use” and return it to your supervisor or Production Safety Representative.
- **Report all falls to your supervisor and Production Safety Representative.**



HAZARD COMMUNICATIONS

This Code of Safe Practices is designed to help employees work safely with potentially hazardous materials that they may use. This program outlines procedures for Department Heads and Supervisors to make employees aware of the chemical hazards that they may encounter and how to protect themselves from them.

1. Supervisors shall see that employees understand proper handling and disposal of hazardous products they use.
2. Observe and comply with all Warning Signs that you encounter (i.e. DANGER - NO SMOKING, etc.).
3. Read, understand and obey Warning Labels that are attached to containers of products containing hazardous chemicals.
4. Check to see that all containers being used to store hazardous chemicals, including those filled from the original container are labeled with the same safety information that is available on the manufacturer's label.
5. Alert your supervisor when you discover unlabeled containers. Do not use the contents of the container.
6. Safety Data Sheets (SDS): You can request a copy of an SDS for any product by calling the 3E Company at (800) 451-8346, an SDS management company for this Production.
7. Always wear the appropriate eye, skin, body and respiratory personal protective equipment (PPE) required to protect you from potential workplace hazards. If unsure of the type of PPE to use, ask your supervisor, Production Safety Representative, or follow the directions on the container or SDS.
8. Store chemicals in approved areas (i.e. flammable materials in flammable cabinets, acids in acid cabinets, etc.). Incompatible materials like flammable and oxidizing materials or inorganic acids and certain combustible materials can react violently if allowed to mix. Always store these incompatible materials separately. SDS's or the original container should be consulted for specific incompatibility information.
9. Notify your supervisor before mixing together any hazardous materials for the first time. Conduct all mixing operations following the directions found on the product's warning label, the manufacturer's mixing instructions, or on the SDS.
10. Call local emergency personnel (911) whenever there is a large spill involving potentially hazardous or unknown chemical products.
11. In the event of a spill, attempt to contain the spread of the hazardous material only if it is safe to do so.
12. Regularly inspect hazardous material containers for leaks or signs of deterioration. Notify your supervisor of containers in poor condition or those exceeding shelf life.
13. Check the ventilation requirements for a chemical product before using it in a space with low ventilation.
14. Contact the Production Safety Representative if you have any questions or concerns about materials or chemicals present in your workplace.



LOCK OUT/TAG OUT

1. Only employees who have been trained in LOCK OUT/ TAG OUT shall service or repair any machine or equipment that could cause injury during unexpected startup or movement.
2. Lock Out/Tag Out is a method for preventing equipment from being set in motion and endangering workers.

3. Common situations for use of Lock Out/Tag Out are: (a) when you are to remove or bypass a guard or other safety device not installed by a fellow employee, (b) when you are to place any part of your body where it could be caught moving machinery, (c) when using electrical circuits.
4. Whether the power switch is on or off, be aware that residual energy could be present in equipment.
5. Stored energy poses special problems. Employees should know or determine the nature of the power source, i.e. hydraulic pressure, steam, electric charge, etc. All residual energy should be dissipated prior to work being performed. Ask your supervisor if you do not know how to do this procedure.
6. Energy controls are applied according to a six-step procedure:
 - Preparation for shutdown
 - Equipment shutdown
 - Equipment isolation
 - Application of Lock Out/Tag Out devices
 - Control of stored energy
 - Equipment isolation verification

Removal

1. Prior to removing Lock Out/Tag Out devices, make sure that the equipment is safe to operate by removing all tools and verifying that the system is fully assembled.
2. Lock Out/Tag Out devices may only be removed by the person who put them on, except in an emergency.
3. When the worker who applied a lock is not present to remove the lock, it can be removed only under the direction of the supervisor.
4. Follow the manufacturer's checklist to re-energize the system.
5. If an outside contractor or other outside worker is performing service or maintenance, they are to coordinate their activities with all affected Production employees.
6. If servicing lasts more than one shift, Lock Out/Tag Out protection should not be interrupted. One shift should inform the next.
7. Never remove a lock until you are absolutely sure that it is completely safe to do so.



TRENCHING AND SHORING

1. Contact the Production Safety Representative if you are planning any trenching job deeper than 4 feet.
2. A Trenching and Shoring Trained Competent Person is to be in charge of any shoring operation.
3. Before digging, you are to check the site for potential hazards.
4. Adequate barriers (i.e. guardrails, covers, barricades) shall be provided at all excavations, trenches, pits and holes.
5. A shoring or benching system is to be employed in trenches and evacuation deeper than 5 feet.
6. Before excavating, locations of existing underground utilities are to be determined by Underground Services Alert at (800) 422-4133. They require 48-hour notice, unless it is an emergency.
7. Before entering a confined space, the air in the space is to be tested for dangerous gases and oxygen levels.
8. No part of any shoring system of an excavation shall be removed until proper steps have been taken to avoid hazard to men from moving ground.
9. Spoil piles are to be 2' back from edge of all excavations.



LIFTING

1. Before lifting, check the load for slivers, jagged edges, burrs, rough or slippery surfaces, and protruding nails.
2. Wear appropriate protective clothing (gloves, safety shoes, etc.).

3. Ask for help when a load cannot be handled safely by one person because of excessive weight, bulkiness or awkward shape of the load.
4. Check your route of travel for any slip, trip or fall hazards before you lift.
5. When lifting as a group, one person should communicate commands to the others. Indicate any changes in elevation, cornering or rotating. Always give adequate warnings before setting your portion of the load down.
6. **Recommended Lifting Procedures:**
 - a) Stand close to the load with your feet spread shoulder width apart.
 - b) Squat down, bending at the hips and knees, while keeping your back straight.
 - c) Grip the load firmly, tighten your abdomen, and use your legs to lift the object.
 - d) Lift in one continuous motion while keeping your back straight.
 - e) Remember to breathe normally while you lift. Steady breathing prevents you from becoming fatigued.
 - f) Keep the load close to your body. The closer the load is to your body, the less pressure it exerts on your back.
 - g) Change directions by moving your feet. Never twist your body.
 - h) When you set the load down, bend only at the hips and knees while keeping your lower back straight.
 - i) If retrieving a load from above your shoulder level, do not reach over your head. Elevate yourself to the load with a ladder. Get help if you need it.

☐ **HEAT ILLNESS (Cal/OSHA)**

When the body is unable to cool itself by sweating, several heat-induced illnesses such as heat stress or heat exhaustion and more severe heat stroke can occur. All are serious conditions and should be treated immediately.

Factors Leading to Heat Stress

1. High temperature and humidity
2. Direct sun or heat
3. Limited air movement
4. Physical exertion
5. Poor physical condition
6. Some medicines
7. Inadequate acclimatization to work in hot area

Symptoms of Heat Exhaustion

1. Headaches, dizziness, lightheadedness, fainting
2. Weakness and moist skin
3. Mood changes such as irritability and confusion
4. Upset stomach or vomiting

Symptoms of Heat Stroke

1. Dry, hot skin with no sweating
2. Mental confusion or losing consciousness
3. Seizures or convulsions

Preventing Heat Stress

1. Know signs/symptoms – monitor yourself and watch for symptoms in coworkers.
2. Block direct sun or other heat sources with EZ-Ups or other shelters or shade, and take frequent advantage of any shade.
3. Use cooling fans/air conditioning where possible.
4. Rest regularly.
5. Drink plenty of water – about 1 cup every 15 minutes.
6. Wear lightweight, light-colored, loose-fitting clothes and broad-brimmed hats.
7. Avoid alcohol, caffeinated drinks and heavy meals.

What to Do for Heat-Related Illness

1. Call local emergency personnel (911) immediately.
2. While waiting for help to arrive:
3. Move the worker to a cool, shady area.

4. Loosen or remove heavy clothing.
5. Provide cool drinking water.
6. Fan and mist the person with water.

For more complete information, contact your Production Safety Representative.

☐ **SCAFFOLD USER AWARENESS**

1. Only employees who have been properly trained to do so may work from scaffolds.
2. Do not use scaffolds that do not have proper guardrails, mid rails and toe boards (as appropriate).
3. Do not overload scaffolds. Follow the manufacturer's or construction coordinators safe working load recommendations.
4. Do not climb cross braces. Use only approved access ladders or steps and use both hands while climbing. When climbing, always maintain three points of contact.
5. Do not stand on guardrails, ladders or makeshift devices on top of scaffolds to gain greater height.
6. Never use scaffolds where contact can be made with live electrical circuits or power lines. Always maintain safe clearance from any electrical source.
7. Never apply shock loads to the scaffold platform. (Never jump down onto the platform.)
8. Do not remove top or mid rails or toeboards.
9. Do not leave trash or debris on scaffolds.
10. Prior to working below the scaffolds, make sure overhead protection (i.e. toeboards) are in place.
11. Wear your hardhat when exposed to overhead hazards.

☐ **BLOODBORNE PRECAUTIONS**

1. All employees, whose jobs may expose them to blood during first aid or paramedic procedures, or during cleaning operations, are to receive *Bloodborne Pathogens Training*.
2. Other employees whose jobs may expose them to blood should always use Universal Precautions.

Universal Precautions:

Treat all human blood and certain human bodily fluids as if they were infectious.

1. Employees shall wash their hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as possible following contact with blood or potentially infectious materials.
2. Employees who may have contacted blood should call First Aid or the Anonymous Safety Hotline immediately.
3. All fluids are to be wiped up with disinfectants (i.e. 100% bleach) by a person trained in Bloodborne Pathogens.

PERSONAL PROTECTIVE EQUIPMENT

☐ **General**

1. Always wear appropriate clothing and work shoes. Do not wear loose or frayed clothing, long hair, rings, etc., near machinery and other sources of entanglement.
2. Always wear appropriate foot protection when you are exposed to foot injuries from hot, corrosive, hazardous substances, falling objects, crushing or penetrating actions that may cause injuries, or when you are working in abnormally wet locations.
3. Always wear appropriate hand protection (gloves) when you are exposed to cuts, burns harmful physical or chemical agents that are encountered and capable of causing injury or impairments. Never wear gloves where there is a danger of their becoming entangled in moving machinery. Use push-sticks.

4. Always wear face or eye protection when working in locations where there is a risk of receiving eye injuries such as punctures, abrasions, contusions, or burns as a result of contact with flying particles, hazardous substances, projections or injurious light rays.
5. Suitable screens or shields isolating the hazardous exposure should be used to safeguard nearby employees.
6. Always wear approved head protection when you are exposed to flying or falling objects.
7. Always wear hearing protection when noise levels exceed 85 decibels.
8. See to it that personal protective equipment (PPE) is cleaned regularly or disposed of after use. Always keep PPE in good repair.
9. If you are working with electricity, you require additional or specialized PPE and should consult with your supervisor.

RESPIRATORS

This Code of Safe Practices is designed to act as a guide in the use, selection and care of respiratory protective equipment. All respirator protective equipment used on this Production is intended to be used to reduce employees' potential exposure to airborne dusts, gases, vapors, mists and fumes.

1. Only employees who have been fit tested and trained in the proper use of respirators may use them. The Production Safety Representative can help arrange training and fit tests. Vendors may also be authorized to train in the selection, use, cleaning and maintenance of their respiratory equipment.
2. Respirator training and certification is specific for each different make and model of respirator. Employees are to receive additional training before they use any respirator for which they have not been trained and fit tested.
3. Respirators may be required when creating smoke or fog effects on interior sets or when working in locations with compromised air quality. Producer(s) are responsible for the purchase of appropriate respirators (consult SDS as required). Refer to **Safety Bulletin #10 - Artificially Created Smokes, Fogs and Lighting Effects** for further information.
4. Prior to the issuance and use of a respirator and at least annually thereafter, each employee shall be given a qualitative fit test by a qualified person.
5. Employees who have a diagnosed respiratory disease or ailments (i.e. asthma, emphysema, cardio-pulmonary disease, chemical sensitivity, respiratory allergies, etc.) or who feel that they could not wear a respirator because of some other physical or medical limitation are to notify their supervisor or the Production Safety Representative so they can be given special consideration.
6. If you are using a new product, your supervisor or Production Safety Representative will determine what type of respiratory protection should be used. This determination will be based on the nature and level of the airborne contaminant(s) in your work area.
7. Employees shall request assistance from the Production Safety Representative whenever the nature or level of airborne contaminants changes and they are not sure if their respiratory protection is appropriate for the work they are doing.
8. **NEVER** use dual cartridge respirator or paper mask (dust, paint fumes or high efficiency particulate air filters) to enter an oxygen-deficient or suspected oxygen-deficient atmosphere. *Call the Production Safety Representative when there is any reason to suspect an environment may be oxygen deficient.*
9. Respiratory protection shall be used when required by law or when deemed necessary by your supervisor or Production Safety Representative.
10. Employees are to make sure to obtain a gas-tight seal between their facial skin and the respirator. This means that employees who have a beard, moustache, or who are not clean-shaven may not be issued or wear a respirator.

11. Employees shall perform a negative and positive pressure test before each use of their respirator.
12. Employees shall inspect their respirators for defects before each use and shall not wear a faulty respirator under any circumstance.
13. If an employee smells or tastes the airborne contaminant that the respirator is designed to remove, then the employee shall leave the work area, re-inspect the respirator and conduct another positive and negative test. If there is a gas-tight seal and the smell/taste returns, then the employee shall install new cartridge filters of the type recommended by the product manufacturer or the Production Safety Representative.
14. If breathing through the respirator becomes difficult, the filter cartridges or pre-filters may need to be replaced. Contact your supervisor or Production Safety Representative for replacement parts. If breathing remains difficult, call your supervisor or Production Safety Representative immediately.
15. Employees will routinely clean their respirators in accordance with the manufacturer's instruction.
16. Respirators will be stored in air tight bags when not in use.

TOOLS

POWER TOOLS

1. Only persons trained in the safe operation of power tools shall be allowed to operate them.
2. Wear safety glasses whenever you are performing work that may generate dust, chips, splinters, shards, dust or flakes. Sources of debris such as drills, grinding equipment, table saws, wire brushes or similar equipment are obvious; however less obvious causes of eye loss include cutting wire, working with chemicals, and misusing air hoses.
3. Check your working materials carefully before proceeding. Make sure there are no nails, bolts or flaws before you run the materials through table saws, jointers, sanders, routers or other power tools.
4. Make sure all guards are in place prior to using power tools. Do not wear clothes, gloves or items that may become entangled in the machine.
5. Use a push stick when ripping material on a table saw or when using a jointer. Whenever possible, avoid standing directly behind the blade in order to avoid kickback.
6. Do not force wood, Plexiglas, or any other material through any saw, jointer, planer, etc. Allow the blades to do the cutting.
7. When walking by operating power equipment, wear safety glasses to safeguard against flying particles. Be aware and avoid accidental contact with the equipment.
8. Disconnect power before changing blades, belts or bits. (See Lock Out/Tag Out).

POWDER-ACTUATED TOOLS

1. Only qualified employees who carry valid operator cards shall be permitted to operate powder-actuated tools. Training can be arranged through the manufacturers' representative or your Production Safety Representative.
2. Eye or face protection shall be worn by operators and assistants when the tool is in use.
3. Prior to use, the operator is to inspect the tool to determine that it is in proper working condition.
4. Any tool found not to be in working condition shall be immediately removed from service, tagged "Defective," given to the supervisor and not used until it has been repaired.
5. Use only fasteners and powder loads recommended by the tool manufacturer for a particular tool.
6. Tools shall be loaded just prior to firing. If the work is interrupted after loading, the tool shall be unloaded immediately.
7. Never point a loaded or unloaded powder actuated tool at any person.

8. Always keep hands and feet clear of the open barrel end.
9. The tool should be held perpendicular to the work surface when fastening into any material, except for specific applications approved by the tool manufacturer.



TABLE SAWS

Woodworking can be DANGEROUS if safe and proper operating procedures are not learned and followed. Using the machine with respect and caution will considerably lessen the possibility of personal injury. If normal safety precautions are overlooked or ignored, severe injury to the operator may result. Whenever possible use all safety equipment such as guards, push sticks, hold-downs. Featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. Even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workplace. If a procedure feels dangerous, or you do not understand the task and equipment interface then don't try it. Get advice from your supervisor or figure an alternative way to make the cut that feels safer. REMEMBER: Inform your supervisor of any faulty equipment. Your personal safety is your responsibility.

Table saws are designed for certain applications only. Do not modify or use this machine for any application other than those for which it was designed. If you have any questions relative to an application, do not use this table saw until you have first contacted your supervisor or the manufacturer and determined if the machine is appropriate to your task.

1. Only persons trained in the safe operation of table saws shall be allowed to operate them.
2. For your own safety, read the instruction manual before operating. Learn the correct application and limitations as well as any specific potential hazards of your table saw.
3. **KEEP GUARDS IN PLACE** and in working order. Removal of the guard requires the permission of your supervisor.
4. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, rings, bracelets, or other jewelry that may get caught in moving parts of the table saw. Non-slip footwear is recommended. Wear protective hair covering to keep hair from becoming entangled.
5. **ALWAYS USE SAFETY GLASSES.** Every day eye glasses only have impact resistant lenses; they are not safety glasses. Also use face shields and/or dust masks if cutting operations are dusty.
6. **GROUND ALL TOOLS.** If a tool is equipped with a three-prong plug, it should be plugged into a three-hole electrical receptacle, if an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.
7. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form the habit of checking to see that keys and adjusting wrenches are removed from the table saw before turning it "on."
8. **KEEP YOUR WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Use a brush to clear not your hands.
9. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep your work area well-lighted.
10. **KEEP EMPLOYEES AND VISITORS AWAY.** All fellow employees and visitors should be kept a safe distance from your work area. You should stay a safe distance back from other employees work areas.
11. Make work area FOOLPROOF — with padlocks, master switches, lock out tag out, or by removing starter keys.
12. **DON'T FORCE** a table saw. It will cut cleaner and be safer at the rate for which it was designed.
13. Secure work. Use clamps or vise to hold your work when practical. It's safer than using your hand and frees both hands to

operate the table saw.

14. Don't overreach. Keep proper footing and balance at all times.
15. **MAINTAIN** tools in top condition. Keep tools sharp and clean for best and safest performance. Follow manufacturer instructions for lubricating and changing accessories.
16. **TURN OFF THEN DISCONNECT** the machine before servicing and when changing accessories such as blades, bits, cutters, etc.
17. Use recommended accessories: The use of accessories and attachments not recommended by the manufacturer may cause hazards or a risk of injury to you or other nearby employees.
18. Reduce the risk of unintentional starting. Make sure switch is in "OFF" position before plugging in power cord.
19. **NEVER STAND ON A TABLE SAW.** Serious injury could occur if the tool is tipped or if the cutting blade is accidentally contacted.
20. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function — check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
21. Direction of feed. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
22. **NEVER** leave a tool running unattended. **TURN THE POWER OFF.** Don't leave the table saw until the blade comes to a complete stop.
23. **DRUGS, ALCOHOL, MEDICATION.** Do not operate this tool while under the influence of drugs, alcohol, or any medication.
24. Make sure the table saw is disconnected from power supply while the motor is being mounted connected or disconnected.

WARNING: The dust generated by certain woods and wood products may be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use proper dust removal systems whenever possible. Use appropriate PPE such as dust masks. If you have any questions, contact your Production Safety Representative.



CIRCULAR SAWS

1. Only persons trained in the safe operation of circular saws shall be allowed to operate them.
2. **WARNING:** Do not operate your saw until it is completely assembled and installed according to the instructions.
3. If you are not thoroughly familiar with the operation of circular saws, seek advice from your supervisor, knowledgeable employee, or other qualified person.
4. **AVOID** awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool. Find another way.
5. **ALWAYS KEEP HANDS AND FINGERS AWAY FROM THE BLADE.**
6. **NEVER** stand or have any part of your body in line with the path of the saw blade,
7. **NEVER** reach behind or over the cutting tool with either hand for any reason.
8. **NEVER** attempt to free a stalled saw blade without first turning the saw "OFF."
9. **NEVER** start the saw with the work-piece pressed against the blade.
10. **NEVER** use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material. Only a soft damp cloth should be used to clean plastic parts.
11. Should any part of your circular saw be missing, damaged, or fail in any way, or any electrical components fail to perform properly,

shut off switch and remove plug from power supply outlet. Tag and report the machine to your supervisor. Ensure that missing, damaged or failed parts are present and in good working order before resuming operation.

Additional information regarding the safe and proper operation of this product is available from the Safety Pass Center; the Production Safety Representative; the National Safety Council, the manufacturer and your supervisor.

WELDING

Only persons trained in the safe operation of welding equipment shall be allowed to operate it.

Gas Welding

1. Compressed gas cylinders should be stored and transported in the upright position with the valve protective caps on. Cylinders in portable service are to be secured upright with a chain.
2. Welding is not permitted in areas with limited or restricted air supply (see Confined Space) without prior approval from the Production Safety Representative.
3. Cylinders will not be stored or placed where they are exposed to heat, flame, impact, electric arcs or circuits, high temperature process equipment or sparks.
4. Empty cylinders should be tagged "Empty" and stored separately from full ones with the valve cap in place.
5. Proper eye and/or face protection will be worn when welding.
6. Torches should be lighted by friction lighters or other approved devices and not by matches or from hot work.
7. Cutting or welding will be permitted only in areas that are, or have been made, fire safe.
8. Suitable fire extinguishing equipment should be maintained ready for use while welding and cutting are being performed.
9. Designated fire watches should be used whenever welding or cutting is performed in locations where other than a minor fire might develop.

Arc Welding and Cutting

1. Workers or other persons adjacent to the welding areas shall be protected from the rays by noncombustible or flameproof screens or shields, or should wear appropriate goggles.
2. Arc welding and cutting cables should be completely insulated, flexible and capable of handling the maximum current required by the operations to be performed. Take into account the number of duty cycles.
3. When electrode holders are left unattended, electrodes should be removed and holders situated so as to prevent employee injury.
4. The power supply switch should be kept in the off position when arc welders or cutters leave or stop work, or when machines are moved. Never unplug a machine in the "on position".
5. When arc welding is performed in wet or in high humidity conditions, employees should use additional protection to prevent the increased potential of electric shock. Use rubber pads or boots.
6. When welding employees are exposed to ultraviolet radiation and should cover their skin completely to prevent ultraviolet burns or damage. Helmets and hand shields should not have leaks, openings or highly reflective surfaces.

ROPE AND CHAIN

Fiber Rope

1. Never drag a rope. This hurts the outer fibers and leads to the eventual deterioration of the rope's overall strength.
2. Avoid kinking. This strains the rope and overstresses the fibers.
3. Splice, don't knot. When joining lengths of ropes, they should be spliced, not knotted. A properly done splice will hold up 100% of the strength of the rope, but a knot only half.

4. Don't allow rope to freeze and store away from heat, moisture, chemicals, rodents, and sunlight.

Wire Rope

1. Use sheaves and drums of suitable size and design.
2. Don't exceed the rated capacity of wire rope.
3. Check for the integrity of the wire rope.
4. Be sure to use the correct lay (twist) for the application.

Chains

1. Take up slack slowly and make sure every link seats correctly.
2. Chain shackles are to be used for shortening and/or splicing chains together. Bolts as makeshift links or fasteners are prohibited.

INDOOR CRANE (HOIST)

1. The hook should have a safety latch that closes the throat of the hook.
2. Read the ANSI warning tag listing operational checks, which should be located on the control section.
3. Never exceed the cranes lifting capacity; it should be stenciled on both sides of the hoist.
4. Determine the weight of the load by checking the manufacturer information or request a dynamometer from your Production Safety Representative.
5. Select the proper rigging gear that is within the Safe Working Load (SWL) of the web sling or wire rope being used.
6. Inspect the rigging gear prior to use. For wire rope, never exceed six or more broken wires within one lay of strand length. The wire rope is to be discarded.
7. Cranes are designed for vertical lifts only. Side pulling may result in hoist and crane breakdown or collapse.
8. Sling angles are very critical; never exceed 45 degrees, as this will put too much tension on the sling.
9. Conduct all lifting operations so that no one would be injured if there were an equipment failure.
10. Never leave a suspended load unattended.
11. Do not pass a load over coworkers or allow anyone to walk under the load.
12. Personal protective equipment, including, hard hats, eye protection, hearing protection, and gloves should be worn by employees when appropriate.

COMPRESSED AIR

1. Compressed air or other compressed gases in excess of 10 pounds per square inch gauge shall not be used to blow dirt, chips, or dust from clothing while it is being worn.
2. Do not disconnect air hoses at compressors until the hose line has been bled.
3. Compressed air or gases are not to be used to empty containers of liquids where the pressure can exceed the container's safe working pressure.
4. Use personal protective equipment such as safety glasses to protect employees from eye or body injury.
5. Abrasive blast cleaning nozzles are to be equipped with an operating valve, which are to be held open manually. A support is to be provided on which the nozzle may be mounted when not in use.
6. Compressed gases shall not be used to elevate or otherwise transfer any hazardous substance from one container to another unless the containers are designed to withstand (with a factor of safety of at least four) the maximum possible pressure that may be applied.

VEHICLES

☐ **LIFTGATES**

Pre-Operations

1. Read and comply with the liftgate operating instructions and all safety decals.
2. Inspect the liftgate and do not use if there are signs of poor maintenance.
3. Before loading the liftgate, ensure that the landing area is adequate for loading and unloading freight.

Operations

1. Before lifting or lowering, ensure that loads are secure (i.e. brakes, chocks, sandbags.).
2. Anyone riding the liftgate should position themselves so a shifting load will not harm them or knock them off the liftgate.
3. Recognize and avoid pinch points.
4. Keep the work area clear of people, and stand to the side of the vehicle when bringing the liftgate up or down.
5. If necessary - due to the nature of the load - ask for help from an employee with experience operating liftgates.
6. Secure top-heavy loads with ratchets or strapping to prevent them from tipping.
7. Do not lift or lower loads greater than the rated capacity of the liftgate.

☐ **FORKLIFTS**

1. Only employees who have been properly trained and can safely operate a forklift may do so. The Production Safety Representative can help arrange training.
2. The use of additional counter balances on forklifts is strictly forbidden.
3. Never allow riders on vehicles or bicycles to "hitch rides."
4. Never ride or allow anyone to ride on the forks of lift trucks.
5. Never place any part of your body outside the running lines of an industrial truck or between the mast uprights or other parts of the truck where shear or crushing hazards exist.
6. Never stand, pass, or work under the elevated forks of any industrial truck, loaded or empty, unless they are blocked in position.
7. Never operate an industrial truck with a leak in the fuel or hydraulic system.
8. When operating a forklift, always look in the direction of travel and never move a vehicle until you're certain there are no people in your path of travel.
9. When ascending or descending grades in excess of 10 percent, drive loaded trucks with the load upgrade.
10. Always carry the forks as low as possible, consistent with safe operations.
11. When leaving a vehicle unattended, always shut off the power, set the brakes, lower the forks, and bring the mast to the vertical position. When leaving the vehicle on an incline, always chock the wheels.
12. When necessary to elevate employees using a forklift, make sure the platform is of sufficient size to accommodate the employee and material elevated, and that the platform is secured and meets the guardrail, backboard and toe board requirements as set forth by CAL/OSHA. Refer to section "Forklift Mounted Work Platforms" for additional requirements.
13. **NEVER TOWER OR TRAVEL WITH A WORKER IN A FORKLIFT MOUNTED WORK PLATFORM.**
14. Never operate a vehicle on floors, sidewalks, doors or platforms that will not safely support the loaded vehicle.

15. Always maintain a minimum distance of one tire width from the edge of any elevated dock, platform, freight car or truck.
16. Never load any truck in excess of its rated capacity as stated on the manufacturers ID plate.
17. Never move a loaded vehicle until the load is safe and secure.
18. Use extreme care when tilting loads. **NEVER TILT FORWARD WITH THE FORKS ELEVATED**, except when picking up a load. **NEVER TILT AN ELEVATED LOAD FORWARD**, except when depositing it onto a storage rack or equivalent. When stacking or tiering, limit backward tilt to that necessary to stabilize the load.
19. Always place the forks in such a manner that the load will be securely held or supported.

☐ **FORKLIFT- MOUNTED WORK PLATFORMS/ MANBASKETS**

1. The platform deck shall be equipped with:
 - a) A guardrail or other structure around its upper periphery that shall be 42 inches high with a midrail. (Chains or the equivalent may be substituted where they give equivalent protection.)
 - b) Where the guardrail is less than 39 inches high, an approved personal fall protection system consisting of a harness and shortened lanyard providing fall restraint shall be used.
2. Elevating Work Platforms shall include:
 - a) Toeboards at sides and ends which shall not be less than 3 ½ inches high. (EXCEPTION: Toeboards may be omitted at the access openings and on television and movie camera booms.
 - b) A platform the minimum width of which shall not be less than 16 inches.
3. Aerial baskets or platforms shall not be supported by adjacent structure(s) when workers are on the platform or in the basket while in an elevated position.
4. Lift controls shall be tested in accordance with the manufacturer's recommendations or instructions prior to use to determine that such controls are in safe working condition.
5. Belting off to an adjacent pole, structure or equipment while working from an aerial device shall not be permitted.
6. Employees shall not sit or climb on the edge of the basket or use planks, ladders or other devices to gain greater working height.
7. Boom and basket and platform load limits specified by the manufacturer shall not be exceeded.
8. When elevating personnel with the vehicle stationary the braking systems shall be set.
9. Provided they can be safely installed, wheel chocks shall be installed before using an aerial device on an incline.
10. If an approved forklift work platform is used to elevate workers, ensure the work platform is securely attached to the forks or mast in such a manner as to prevent tipping, slipping, or falling from the supports.
11. Ensure that the rear of the basket has a protective barrier at least six feet tall securely strapped to the rails of the basket to prevent any elevated employees from becoming entangled in the forklift's elevating machinery.
12. Always make sure there is an operator in the control position on the lift truck while there is a worker on the elevated platform.
13. Do not travel with the workers on the platform (towering) other than to make minor adjustments for final positioning of the platform.
14. **Do not operate forklifts within 10 feet of an energized high voltage source unless** danger from accidental contact has been effectively guarded against.

15. Never work from a platform attached to a forklift when:
 - a) exposed to extreme weather conditions (thunderstorms, high winds, heavy rain, extreme heat/cold etc.) unless provisions have been made to for the protection and safety of the workers
 - b) winds exceed 25 miles per hour.
16. Secure all loose objects or production equipment that may inadvertently fall from the platform.
17. Do not use a forklift or other aerial device as a welding ground.
18. Do not weld on aerial equipment without first disconnecting both positive and negative battery terminals. Refer to the manufacturer's Operating Manual.



CRANE OPERATION AWARENESS

1. The travel of cranes or boom-type excavators shall be controlled so as to avoid collision with persons, material, and equipment.
2. The empty hook shall be lashed or otherwise restrained so that it cannot swing freely.
3. Tag or restraint lines shall be used where rotation of the load is hazardous.
4. Cranes shall not be operated with wheels or tracks off the ground or working surface at any time unless properly bearing on outriggers.
5. The brakes shall be tested each time a load approaching the rated load is handled by raising the load a few inches and applying the brakes.
6. Only one crane is to be used to lift a load.
7. A crane, derrick, or hoist shall not be loaded beyond its rated capacity.
8. The load shall be attached to the hook by means of sling or other suitable or effective means.
9. Slings shall be inspected before use and be free of kinks or twists.
10. When moving the load, the individual directing the lift shall see that:
 - a) The crane is leveled for the work being performed and the wheels blocked where necessary.
 - b) The load is well secured and properly balanced in the sling or lifting device before it is lifted a few inches.
11. All individuals assisting in the lift shall wear proper personal protective equipment including seat belts, gloves and hard hats.
12. When a load of any kind is to be suspended for any considerable length of time, the brake shall be firmly applied.
13. Cranes shall not be left unattended while the load is suspended unless the load is suspended over water, a barricaded area, or blocked up or otherwise supported from below during repairs or emergency.
14. Employees are prohibited from standing under any suspended loads.



AERIAL PLATFORMS: General

1. This section covers the safe operations of the following vehicles: (1) vertically operated elevating work platforms or "scissors lifts"; (2) boom mounted telescoping and rotating elevating work platforms or "condors", and (3) forklifts with attached work platforms.
2. Only persons trained in the safe operation of these work platforms shall be allowed to operate the elevating aerial work platforms described above.
3. Do not use this equipment if you feel dizzy, ill, or unsteady in any way. Do not use while under the influence of alcohol or drugs.
4. All labels and placards shall be legible and in good condition. Operators should review the accompanying manual.
5. Clear all personnel below and around the platform when it is being raised or lowered.

6. Do not sit or stand on guardrails or use guardrails to carry materials. Do not allow overhanging materials when elevating the platform.
7. Work only within the platform guardrail area and do not attempt to increase the working height by any other means such as standing on the mid-rail or toe-board. Do not lean out over the platform railing to work.
8. Do not release the outriggers, or move the unit with a person or materials on board.
9. Do not use the lift to do work which would result in horizontal force being applied to the work platform.
10. Make sure the chain guardrail is in place.
11. Do not use near moving vehicles.
12. Batteries should be charged in well ventilated areas free of sparks and open flames.
13. Do not exceed manufacturer's load capacity.
14. The condition of the equipment shall be inspected prior to operation. Check for the manual, maintenance logs, for damage or leaking hydraulic lines. Carefully check each operational control. Return the equipment to the vendor if any of the aforementioned condition exists.
15. Evaluate the job to be done using the equipment you intend to use at the job sites location and think through the work to discover potential hazards.
16. Do not operate an aerial elevating work platform within 10 feet of an energized, high voltage line or source unless danger from accidental contact with the source has been effectively guarded against. Apply greater clearance distances with greater high voltage, and wetter conditions.
17. The operation of aerial platforms OVER energized, high voltage sources of any kind is prohibited at all times.
18. Make sure the jobsite's surface is stable and will support the equipment, and there are no hazardous irregularities or accumulation of debris, which might cause the moving platform to overturn.
19. Soft surfaces or soundstage flooring with pits or weight restrictions may require the use of grip track (to spread the load) or outriggers (to add stability). When in doubt, contact the facility Operations Department or your Production Safety Representative. Always observe stage floor load restrictions.
20. Survey the route to be used. Check for overhead obstructions, traffic, holes in the pavement, ground, soft shoulders, ditches, slope of the road, etc.
21. Operation of aerial platforms on inclined surfaces shall not exceed manufacturer's ratings. Wheel chocks shall be used on inclined surfaces.
22. No employee shall stand in front of or behind an aerial platform when it is being moved.



AERIAL PLATFORM: Operation

1. SAFETY HARNESES – an approved safety harness with lanyard shall be properly worn when using an aerial/elevating work platform.
2. The lanyard shall be securely attached to the manufacturer's anchorage point basket, tub, or platform.
3. Belting off to an adjacent pole, structure or equipment while working from basket, tub, or platform is prohibited.
4. The lanyard shall be attached in a manner that prevents a free fall of more than four feet. (Lanyards used on scissor lifts shall be shortened so the employee cannot fall over the top rail.)
5. Do not load the basket, tub, or platform/basket beyond its rated maximum height or reach.
6. Do not attempt to raise the platform/basket beyond its rated maximum height or reach.

7. Aerial baskets, tubs, or platforms shall not be supported by or attached to any adjacent structures.
8. Ladders, planks, or any other objects shall not be placed in or on top of the platform (or guardrail) to gain greater height.
9. Workers shall not climb or sit on the edge of the basket/platform.
10. The brake system shall be set whenever workers are being elevated in the vehicle.
11. Outriggers should be on solid footing and shall be equipped with hydraulic holding valves or mechanical locks at the outriggers.
12. Operate all controls slowly to facilitate smooth platform movement.
13. Only in emergencies should lower level controls at the base of the platform be operated when workers are in the basket.
14. Boom mounted, telescoping and rotating aerial platforms shall not be used as cranes.
15. **No Towering** - When using condors and scissors lifts, DO NOT travel (move the wheels) with a worker in the basket. The boom should be retracted completely before traveling or moving.
16. "Climbers", pole-climbing equipment, shall not be worn while performing work from an aerial device.
17. Where traffic or moving vehicles are present, the work area around the aerial equipment shall be marked by flags, signs, traffic cones, or other means of traffic control.
18. Remote control operation may only be done from the side of the aerial platform: never in front of, or behind the vehicle.

ELECTRIC CARTS

1. Electric cart speed limit is **8 mph**.
2. Electric carts are not to be modified in a way that will affect capacity and safe operation of the vehicle (for instance, you should not add a trailer hitch).
3. Battery charging installations will be in marked designated areas that are well ventilated.
4. Whether on or off-lot, drivers of electric carts will obey all DMV vehicular traffic signs and regulations:
 - a) stop at posted intersections and blind corners
 - b) obey the speed limit
 - c) do not pass moving vehicles
 - d) avoid quick or jerky stops and turns at fast speeds.
 - e) use seat belts and turn signals whenever crossing city streets.
5. **Only licensed and specially-equipped golf carts are allowed on city streets. Always check with your supervisor before driving off the lot.**
6. Feet, legs, arms and hands are to be kept inside the electric cart at all times. **Do not drag your foot outside the cart.**
7. Never park the electric cart in a fire lane, aisle or doorway, or block material or equipment to which someone else may need access.
8. The number of passengers may not exceed the number of seats or the manufacturer's recommended seating/weight capacity.
9. When carrying a load, it is the driver's responsibility to be sure the load is stable and will not fall off the vehicle while the vehicle is moving. Loads will be balanced, braced and secured. Always drive more slowly and with greater caution when transporting a heavy load.
10. Golf carts have been known to flip over, causing serious injury. Always drive under control and avoid sudden sharp turns.
11. Smoking is not permitted in golf carts.
12. Communications on cell phones is not permitted while driving a cart.

There is to be absolutely no horseplay on the golf carts.

BICYCLES

1. Keep your bicycle in good mechanical condition (tires, chain, brakes).
2. Obey all traffic rules and signs - always give proper signals to indicate your intended direction at intersections.
3. Walk your bike across busy intersections.
4. Always ride with the traffic and as close as possible to the right side of the road.
5. Smoking is not permitted on bicycles.
6. Communications on cell phones is not permitted while riding a bicycle
7. Beware of production vehicles and silent electric carts.
8. Always ride single file and watch for opening car doors.
9. Bicycles are built to carry one person **ONLY**.
10. Yield right of way to pedestrians.
11. Never carry heavy loads or long items which reduce your ability to maneuver your bicycle safely.
12. When carrying a small load, it is the rider's responsibility to be sure the load is stable and will not fall off the bicycle while it is moving. Loads will be balanced, braced and secured to prevent tipping and falling.
13. Riders should not attempt to tow other materials alongside or behind a bicycle (for example, with a rope, chain or by hand).
14. Riders are not allowed to "hitch rides" alongside other moving vehicles, such as golf carts, forklifts, etc.

SET WALLS

Loading, Transporting, & Storing

1. Have adequate manpower and proper tools available prior to loading. Inform your supervisor if you need help.
2. Inspect each set wall for splinters, jagged edges, rough or slippery surfaces, and protruding nails prior to loading.
3. Set walls should be loaded properly prior to transport:
 - a. Secure the first (key) set wall to the gate or side of the A-frame/truck/trailer/lowboy.
 - b. Secure the next set wall to the key set wall via grip chain or cleats and floor nailing.
 - c. Secure each additional set wall in the same manner.
 - d. During loading or upon completion, nail a top cleat or "high tie" to the set walls. Do not allow set walls to remain "free-standing".

Unloading

1. Inspect the load to ensure no set pieces have become dislodged during transport and that the load was properly secured.
2. Have adequate manpower and proper tools prior to unloading. Inform your supervisor if you need help.
3. Remove "high tie" which is securing the outer set wall to the inner set walls.
4. Remove the side cleat or grip chain and floor nails securing the outer set wall while leaving the remaining set walls secure.
5. Carefully unload the outer set wall. All workers should position themselves from the sides and not in the middle.
6. If a forklift is not available or the weight of the set wall requires wall jacks, they should be attached to both ends of the set wall as soon as it is lowered from the A-frame/truck/trailer/lowboy.
7. Once pushed into position, the wall jacks should be removed one at a time.
8. When using a dolly to roll the set wall into place, position it carefully under the wall.

REMEMBER: You may not move set walls when you lack manpower. Tell your supervisor when you need help.

EMPLOYEE ACKNOWLEDGMENT
General Safety Guidelines for Production

Production Company: _____

Show Name: _____

I understand and acknowledge:

- The Company's Production Safety Manual and applicable Federal and State laws and regulations, outline additional safety responsibilities for Heads of Department/Supervisors. If I am a Head of Department or Supervisor, I accept these responsibilities.
- As an employee of the Company, I have received and read the *General Safety Guidelines for Production*, and any revisions to the same (collectively "Guidelines"). I have been informed that failure to adhere to these Guidelines will subject me to discipline up to and including immediate discharge for cause. In addition to the Guidelines, the Company has an Injury & Illness Prevention Program (IIPP). It is located in the ***Production Safety Manual*** and available for review in the Production Office, Construction Office, on-set with the 1st AD, or online at safetyontheset.com.
- I will see my Supervisor or call the Anonymous Safety Hotline at (818) 954-2800 or (877) 566-8001 (toll-free worldwide) if I have questions, safety concerns or need training.
- If I am injured or feel ill for any reason, I will notify my Supervisor and/or First Aid immediately.
- Personal Protective Equipment (PPE): I will wear appropriate clothing, work shoes, and PPE as recommended by Company representatives, such as supervisors, and Production Safety Representatives.
- This Production has a strict fall protection policy. I will always wear a full-body harness with a lanyard attached to an appropriate anchor point whenever I am in an aerial boom lift, a scissor lift, a man lift, or working near the edge of any elevated work surface. (*See attached General Safety Guidelines for Production for trigger heights.*)
- This Production has a strict table saw use policy. I will always use the saw guard, unless making certain cuts as authorized by my supervisor. While operating the saw, I will not wear gloves, long hair, jewelry, scarves or other items that can become entangled.
- I will not knowingly operate any machinery that is not in good working order. Any deficiencies I notice will be tagged and brought to the attention of my supervisor.
- I will not perform any potentially hazardous activity that I have not been trained to do.
- I can request a copy of a Safety Data Sheet (SDS) for any product by calling the 3E Company at (800) 451-8346, an SDS management company for this Production.
- The *General Safety Guidelines for Production* offer general safety advice for situations that typically arise during construction or production. More detailed safety information is available in the IIPP/ Safety Manual, from my Supervisor, at www.safetyontheset.com and/or from the Production Safety Representative. The IIPP guidelines include:
 - Aerial lifts – including condors, scissor lifts, man lifts.
 - Working from Heights – including ladders, soundstage permanents, rooftops and scaffolding.
 - AMPTP Safety Bulletins.
 - Codes of Safe Practices.
 - Tool Box Talks.
 - Safety Data Sheets (SDS).

- I must attend safety meetings and training as instructed by my supervisor or whenever they are appropriate for my work.
- Working under the influence of alcohol, or any drug that would impair my ability to work safely, is prohibited.
- Guns are prohibited in the workplace as outlined in the Production Weapons Policy.

IMPORTANT!

By signing this form you do not waive any of your rights under Workers' Compensation laws.

Employee Name (print):

Employee Signature:

Job Title / Position:

Department:

Date:

CONTACT LIST FOR INJURY AND ILLNESS PREVENTION PROGRAM FOR PRODUCTION			
Production Name:		Production Location:	
Today's Date:		To Be Completed By:	<i>Production Manager</i>
To Be Retained By:	<i>Production Manager</i>	To Be Sent To:	<i>Production Safety Consultant</i>
Instructions:	When: <i>At beginning of production.</i> Frequency: <i>Once, unless contact information changes.</i>		
<i>Position</i>	<i>Name</i>	<i>Office Phone</i>	<i>Emergency Phone</i>
Line Producer			
Field Producer/Segment Producer			
Production Manager			
Stage Manager/1 st AD			
Construction Coordinator/ Staging Supervisor			
Transportation Coordinator			
Production Executive			
Production Attorney			
Production Safety Consultant			

On-Set Safety Meeting for Crew and Cast

At every stage and location, the Stage Manager/1st AD should conduct an on-set safety meeting with all Crew and Cast. The outline below should be used as a guide for subjects to be covered. In addition, the meeting should be recorded in the Daily Production Report – including time, location, specific topics covered and who was there if specific departments or people. A separate meeting should be held at every stage and/or location for any given day.

Production Name:

Date:

Time:

AM PM

Location:

Meeting Conducted By: (Name)

(Title)

SAFETY MEETING CHECKLIST

☐ **Emergency Plan:**

- Local Emergency Response telephone number
- Fire alarm pull stations
- Emergency exits
- Escape routes
- Post-evacuation assembly area
- DO NOT re-enter evacuated building until okayed by Fire Dept.

☐ **Name and location of Set Medic**

☐ **Location-specific hazards: lead paint, asbestos, traffic, etc.**

☐ **Potential hazards of planned activities: stunts, FX, drones, etc.**

☐ **Heat Illness Prevention Plan if temperatures above 80 F.**

☐ **If you are too tired or ill to work safely or drive home safely, tell Supervisor.**

☐ **Report any safety concerns to the Anonymous Safety Hotline at (818) 954-2800 or 877-566-8001.**

SERIOUS INCIDENT REPORTING PROCEDURES

Incidents that result in transportation by ambulance, visitation to the hospital by one or more employees, any treatments other than general first aid, or any serious property/asset damage, must be reported as follows:

Line Producer (LP) Responsibilities:

In the event of a serious accident, injury or mishap, AFTER ALL NECESSARY EMERGENCY PERSONNEL ARE CALLED, the LP should contact the PRODUCTION EXECUTIVE WITHOUT EXCEPTION.

Name: _____ **Office:** _____ **Cell:** _____

After discussion with your Production Executive and with her/his instruction, the following people will be notified:

- **Production Safety Representative:** Name: _____
Office: _____; Cell: _____; Anonymous Safety Hotline: (877) 566-8001
- **Risk Management Representative:** Name: _____
Office: _____; Cell: _____
- **Labor Relations Executive: *** Name: _____
Office: _____; Cell: _____
- **Publicity:** Name: _____
Office: _____; Cell: _____
- **Production Legal:** Name: _____
Office: _____; Cell: _____

**Under the union collective bargaining agreements, union notification is required of any injury, regardless of the severity.*

California OSHA, Federal OSHA, US States and other Countries and Provinces all have unique reporting requirements. The Production Safety Representative (PSR) will determine if the injury or illness should be reported. If so, the PSR will help you gather the required information, and will make the notification for you.

NOTE: Any employer, officer, management official or supervisor who knowingly fails to report a death to Cal/OSHA or knowingly induces another to do so is guilty of a misdemeanor and will face a penalty of up to one year in jail, a fine of up to \$15,000 or both. If the violator is a corporation or a limited liability corporation or company could be fined up to \$150,000.

The Production Safety Representative will assist you in completing an Accident Investigation Report – Form 9.

CAUTION: Written and/or verbal statements should not be taken unless authorized by the Studio Legal Department. Speculation regarding the cause(s) of accident(s) are not to be included as part of any investigation report. Under the guidance and direction of the Studio Legal Department, the Production Safety Representative will conduct any additional accident investigations necessary.

Any accident should be noted on the back of the Production Report on the date the accident occurred by identifying only the name of injured employee and classification.

PRODUCTION STAGE HAZARD ASSESSMENT CHECKLIST

For any items found to be deficient, follow up with appropriate Key or Department Head, or Production Safety Consultant

Production Name:		To Be Completed By:	<i>Stage Manager/1st AD Key Grip</i>
Copies Sent To:	<i>Production Safety Consultant</i>	To Be Stored By:	<i>Production Manager</i>
Production Location:		Today's Date:	
Special Instructions:	<i>Complete a Hazard Assessment Checklist every other week for every stage used by Production. **Mark "N/A" for any items not applicable to your stage.**</i>		

GENERAL

☐	☐ N/A	Safety Poster completed and displayed in a location where all employees are likely to see it.
☐	☐ N/A	Entrances to stage are clear of trip hazards.
☐	☐ N/A	General housekeeping in good order.
☐	☐ N/A	Fire extinguishers accessible and "FIRE EXTINGUISHER" signs visible.
☐	☐ N/A	Appropriate safety equipment available.
☐	☐ N/A	Four-foot perimeter, aisles and passageways free of hazards.
☐	☐ N/A	Flats appropriately secured and braced.
☐	☐ N/A	Pits and floor openings covered or otherwise guarded.
☐	☐ N/A	All exits free of obstructions and "EXIT" signs visible.
☐	☐ N/A	Directions to exits, when not immediately apparent, marked with visible signs.
☐	☐ N/A	Standard stair rails or handrails on all stairways having four or more risers.
☐	☐ N/A	No storage under occupied raised platforms.

PAINT AND CHEMICAL PRODUCTS

☐	☐ N/A	Covered metal cans used for paint and paint-soaked waste.
☐	☐ N/A	Portable eye wash station present and "EYE WASH" sign is visible.
☐	☐ N/A	Paints, adhesives, solvents and chemicals kept in closed containers when not in use.
☐	☐ N/A	Each container (vat, bottle, storage tank, etc.) for a hazardous substance labeled with product identity and hazard warning.
☐	☐ N/A	Pressure vehicles/cylinders properly stored.
☐	☐ N/A	All propane has been removed from the stage.
☐	☐ N/A	All paint and chemical-containing products disposed of properly using certified hazardous waste company.
☐	☐ N/A	No paint or chemical products allowed in storm drains, sinks, or toilets.

AERIAL PLATFORMS AND LADDERS

☐	☐ N/A	Only trained and authorized personnel allowed to operate aerial platforms.
☐	☐ N/A	Approved safety harnesses and lanyards worn when using aerial platforms.
☐	☐ N/A	All ladders maintained in good condition and safety labels visible. (Take note of joints between steps and side rails, all hardware and fittings, and movable parts.)
☐	☐ N/A	Ladders kept clear of doorways, exits, and passageways.
☐	☐ N/A	When a ladder is used to gain access to an elevated work area, the ladder extends at least 3 feet above the elevated surface.

PERMANENTS - Catwalks

☐	☐ N/A	Guard rails (top and middle) and toe boards present and properly secured on all sides of the catwalks (except at the entrance to stairways or ladders.)
☐	☐ N/A	Catwalks free of trip hazards (rope, bracing, electrical cables, protruding nails, etc.)
☐	☐ N/A	All floating slats in place and spaced correctly.
☐	☐ N/A	Sufficient access and working space provided and maintained about all electrical equipment to permit ready and safe operations and maintenance.
☐	☐ N/A	House lighting in good working order.

(Form continues on back of page.)

PERMANENTS - "O" Zones		
☐	☐ N/A	Fall protection systems being used.
☐	☐ N/A	"O" Zones free of trip hazards (rope, protruding nails or bracing, etc.)
☐	☐ N/A	Hoisting areas designated and appropriate for the task.
☐	☐ N/A	When hoisting material or equipment, provisions made to assure no one will be passing under the suspended loads.
PERMANENTS - Electrical		
☐	☐ N/A	All wires and/or cords free of fraying and deteriorating insulation.
☐	☐ N/A	Electrical cords or cables routed neatly to one side of the catwalk to prevent tripping.
☐	☐ N/A	The bull cans have "WARNING" signs.
☐	☐ N/A	The bull cans are closed.
☐	☐ N/A	All set lights and/or overhead lighting fixtures (e.g. chandeliers) have a safety tie.
☐	☐ N/A	DC or AC cable runs and over current protection devices clearly identified and marked.
GREEN BEDS		
☐	☐ N/A	Green beds properly hung.
☐	☐ N/A	Green beds properly braced.
☐	☐ N/A	Hand and mid rails in place.
☐	☐ N/A	Cables properly stored or run neatly down one side of green bed.
☐	☐ N/A	Floor boards in good condition, not broken or holes outstanding.
☐	NOTES: <i>Please contact the Production Safety Consultant if any unsafe conditions exist.</i>	
☐ Surveyed By:		☐ Title:
☐ Signature:		

CONSTRUCTION HAZARD ASSESSMENT CHECKLIST

For any items found to be deficient, follow up with appropriate Key or Department Head, or Production Safety Consultant

Production Name:		To Be Completed By:	<i>Construction Coordinator/Staging Supervisor</i>
Copies Sent To:	<i>Production Safety Consultant</i>	To Be Stored By:	<i>Production Office Coordinator</i>
Production Location:		Today's Date:	
Special Instructions:	<i>Complete a Hazard Assessment Checklist every other week for every Construction Mill or location.. **Mark "N/A" for any items not applicable to your stage.**</i>		
GENERAL			
☐	☐ N/A	Safety Poster completed and displayed in a location where all employees are likely to see it.	
☐	☐ N/A	Entrances to stage are clear of trip hazards.	
☐	☐ N/A	General housekeeping in good order.	
☐	☐ N/A	Fire extinguishers accessible and "FIRE EXTINGUISHER" signs visible.	
☐	☐ N/A	Appropriate safety equipment available.	
☐	☐ N/A	Appropriate machine guards - including push sticks - available and in use.	
☐	☐ NA	Appropriate Person Protective Equipment (PPE) available and in use.	
☐	☐ N/A	Four-foot perimeter, aisles and passageways free of hazards.	
☐	☐ N/A	Flats appropriately secured and braced.	
☐	☐ N/A	Pits and floor openings covered or otherwise guarded.	
☐	☐ N/A	All exits free of obstructions and "EXIT" signs visible.	
☐	☐ N/A	Directions to exits, when not immediately apparent, marked with visible signs.	
☐	☐ N/A	Standard stair rails or handrails on all stairways having four or more risers.	
☐	☐ N/A	No storage under occupied raised platforms.	
PAINT AND CHEMICAL PRODUCTS			
☐	☐ N/A	Covered metal cans used for paint and paint-soaked waste.	
☐	☐ N/A	Portable eye wash station present and "EYE WASH" sign is visible.	
☐	☐ N/A	Paints, adhesives, solvents and chemicals kept in closed containers when not in use.	
☐	☐ N/A	Each container (vat, bottle, storage tank, etc.) for a hazardous substance labeled with product identity and hazard warning.	
☐	☐ N/A	Pressure vehicles/cylinders properly stored.	
☐	☐ N/A	All propane has been removed from the stage.	
☐	☐ N/A	All paint and chemical-containing products disposed of properly using certified hazardous waste company.	
☐	☐ N/A	No paint or chemical products allowed in storm drains, sinks, or toilets.	
AERIAL PLATFORMS AND LADDERS			
☐	☐ N/A	Only trained and authorized personnel allowed to operate aerial platforms.	
☐	☐ N/A	Approved safety harnesses and lanyards worn when using aerial platforms.	
☐	☐ N/A	All ladders maintained in good condition and safety labels visible. (Take note of joints between steps and side rails, all hardware and fittings, and movable parts.)	
☐	☐ N/A	Ladders kept clear of doorways, exits, and passageways.	
☐	☐ N/A	When a ladder is used to gain access to an elevated work area, the ladder extends at least 3 feet above the elevated surface.	
☐	NOTES: <i>Please contact the Production Safety Representative if any unsafe conditions exist.</i>		
☐ Surveyed By:		☐ Title:	
☐ Signature:			

Tool Box Talk Attendance Form

Production:	Stage#/Location:	Instructor:
Date:	Tool Box Talk Topic:	

Sign-In Sheet

	Print Name	Sign Name	Job Description/Local
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

The following information is presented as a general safety checklist to help identify potential production location safety issues.

Project Name:		To Be Completed By:	
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(Form 7) Location Pre-Production Hazard Assessment Checklist

Asbestos/Lead/Mold Guidelines

YES	NO	
		Are there any damaged building materials or debris at the location? Examples of damaged materials include the following: - Flakey Paint Chips - Loose Plaster/Drywall - Broken Floor Tiles - Exposed Pipe Insulation VISIBLE Mold (See additional measures below)
		Will any additional building materials be disturbed by production during prep, filming and/or strike? Disturbance includes the following: - Drilling/Nailing - Demo/Removal - Sanding - Rigging If the answer to either of the above questions is “YES”, then these materials should be sampled by an environmental consultant to determine whether asbestos or lead is present.
		Did any of the materials tested come back positive for asbestos or lead? If this answer to the above question is YES, a licensed abatement contractor should be contracted to mitigate the hazard. This may include the following: - Complete or Partial Abatement/Removal - Sealing/Encapsulating the Damaged Surface/Material - Isolating the Area Following the cleanup, a third-party environmental consultant should provide clearance sampling to verify that the work area is safe for re-entry. Please note that clearance sampling for lead abatement should only consist of air sampling unless minors will be present. If minors will be present, then wipe sampling should be performed.
VISIBLE MOLD During the building materials survey by the environmental consultant, a notation should be made in the report as to whether there’s visible mold in the building. Air samples for mold should not be collected. If visible mold is present, any water leaks should be repaired, and the visible mold should be removed by an abatement company. The confirmation of abatement shall consist of a subsequent visual inspection.		
If testing and/or mitigation is performed, all reports should be forwarded to your production safety representative and posted on location.		

LOCATION PREP/STRIKE SAFETY

This form contains important location safety information for Prep and Strike crews. The Location Manager should complete for every location and distribute to Prep and Strike crews for posting. Copies should be sent to the Production Manager and the Production Safety Consultant.

Production Name:

Date:

Location Name:

Number & Street:

City & Zip:

Phone:

EMERGENCY PLAN

Medical, Fire or Police Emergency: 911 Unless facility has on-site response number:

Emergency Exit Locations:

Evacuation Assembly Area Location: (Attach map if necessary)

Nearest Hospital Name:

Number & Street:

City & Zip

Phone:

Additional Safety Information: (i.e. Environmental Reports – separate posting if necessary)

SAFETY PROGRAM CONTACTS

Production Safety Consultant:

Phone:

Location Manager:

Phone:

Line Producer:

Phone:

Anonymous Safety Hotline: 877-566-8001

Safety Data Sheets: Verisk 3E 800-451-8346



COUNTY OF LOS ANGELES FIRE DEPARTMENT FILM LOCATION FIRE SAFETY FIELD INSPECTION CHECKLIST



PERMIT NUMBER _____	DATES OF FILMING _____
	DAY ____ OF ____ FILM DAY(S)
LOCATION ADDRESS _____	PRODUCTION NAME _____

THIS CHECKLIST MUST BE COMPLETED DAILY FOR EACH PERMITTED FILMING LOCATION AND MUST BE AVAILABLE WITH A COPY OF THE FILM PERMIT. This completed checklist shall be:

- **Provided to any County of Los Angeles Fire Department Inspector visiting the filming location.**

For each item below, indicate if the location matches the statement or if it is Not Applicable. For each NO answer, corrective actions must be noted and executed before filming can continue.

Today's Date: _____

	Question	Yes	No	N/A
I. ACCESS/ FIRE EQUIPMENT				
A	Are all required fire lanes kept clear (20-foot clearance)? Are all fire hydrants and Fire Department Connections (FDC's) clear of all equipment and vehicles?			
B	Are all fire sprinkler heads kept clear for proper operation (18" clearance)? There is nothing attached or hung from the sprinkler system piping.			
C	Are all sprinkler systems, standpipes, fire alarms and other fire protection equipment properly serviced and in good working order? Fire protection systems shall be disabled for filming operations only with specific approval from County of Los Angeles Fire Department and the owner of the building.			
D	Are fire extinguishers (2A-10B C min rating) and other fire and life safety equipment (exit signs, secondary lighting, etc.) properly serviced, in good working order and readily available?			
E	Is there a method of reporting an emergency to the Fire Department readily available (cell phone, landline)?			
CORRECTIVE ACTION TO BE TAKEN:				
II. EXITING				
A	Have the building's exit system including the exit access, exits, and exit discharge routes been inspected to ensure they are clear of obstructions and impediments (including slip, trip or fall hazards), are clearly visible, and doors and gates not locked or hindered for immediate egress use?			
B	Are all exits free from exposure from any hazards created by the filming operation that would prevent the exit from full instant use (combustible materials, flammable liquids, LPG and pyrotechnics)?			
C	Are portable air condition, heaters, etc., installed not to block or impede exit paths, stairways or fire escapes?			
D	Have all filming locations (including roofs, basements, and mezzanine), been shown and approved on the Fire Department permit?			
CORRECTIVE ACTION TO BE TAKEN:				

III. SMOKING/IGNITION SOURCES									
A	Is smoking or other open flame prohibited inside buildings and sets? If approved, are the required fire safety precautions in place and being used?								
B	Are smoking areas designated, clearly marked and supplied with butt cans?								
C	Are smoking and ignition sources prohibited near pyrotechnics/special effects, flammable liquid storage, fuel dispensing and similar areas?								
CORRECTIVE ACTION TO BE TAKEN:									

Question		Yes	No	N/A
IV. ELECTRICAL & LIGHTING				
A	Has the filming location been inspected to ensure there are no potential electrical hazards (exposed wiring, electrical boxes, etc.)?			
B	Are the electrical cables protected from physical damage, and trip hazards mitigated?			
C	Are the cables in an orderly manner to keep exits reasonably unobstructed? Are cables covered with ramps or mats in walkways, aisles or doorways?			
D	Are electrical distribution boxes or spiders kept clear of 4-foot perimeter and exits?			
E	Are all electrical panels clear for instant access (path to and 3-foot clearance in front of the panel)?			
F	Are film lights producing heat adequately separated from combustible materials; combustible construction including the fusible element of fire sprinkler heads?			
G	Is the Ground Fault Interrupter protection (GFI) being utilized when working near water or damp areas?			
H	Are connections to a building's electrical panel done by an authorized electrician with a proper building department permit?			

CORRECTIVE ACTION TO BE TAKEN:

V. BASE CAMP/ VEHICLES									
A	Is all fueled equipment, including electrical generators, shut off and electrically bonded while being refueled? Do all refueling trucks have a valid Fire Department permit?								
B	Have all generators been inspected to ensure proper electrical grounding or insulation?								
C	Are generators placed in locations that do not block access to fire protection systems or exits, and do not expose combustible materials to ignition?								
D	Is catering located in a safe area to operate? Is the catering vehicle located outside a building, tent, or other structural enclosure?								
E	Do catering vehicles have fire extinguishers (2A-10B C min rating) readily available?								
F	Where provided, is the grease cooking exhaust hood system in proper working order, and has the hood extinguishing system and grease fire extinguisher been properly serviced and maintained?								
G	Are liquid propane gas (LPG) portable containers greater than 2.5 lbs in capacity prohibited inside buildings unless, properly approved and permitted?								
H	Are all tents properly permitted; secured; and provided with the required life and safety equipment including "No Smoking" signs, fire extinguishers and exit signs? Does the tent fabric bear the proper flame retardant (CSFM Logo)?								
I	Has the vendor or site manager obtained the proper permit for all tents over 400 square feet? Has Filming in LA County provided the film production company with valid permits?								
J	Have "Picture Vehicles" including boats and other motor crafts that are placed inside of buildings, been checked to ensure the batteries are disconnected, fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (whichever is less), and fuel tanks and fill openings are closed or sealed to prevent tampering? (Vehicles, boats or other motor craft equipment are not to be fueled or defueled within the building)								

CORRECTIVE ACTION TO BE TAKEN:

VI. FLAMMABLE LIQUIDS & GASES						
A	Are flammable liquids stored in approved containers (non-combustible, self-closing) and no larger than 5 gallons?					
B	Are all flammable liquids and gases kept 25 feet away from heat sources?					
C	Are LPG portable containers and other pressure vessels secured and stored outside with "No Smoking" signs and protected from vehicle traffic?					
CORRECTIVE ACTION TO BE TAKEN:						
VII. PYROTECHNIC SPECIAL EFFECTS						
A	Are there any special effects activities (pyrotechnics, open flame, etc.) permitted and scheduled for the day?					
B	Has the permit been issued? Is the permit on-site? If yes, does the pyrotechnic operator hold a valid State Fire Marshal license?					
C	Does the Fire Department pyrotechnic permit list the material used? Are there any additional fire and safety equipment for the pyrotechnic material, and has the production company been briefed? Safety meetings are required prior to any pyrotechnic activity.					
CORRECTIVE ACTION TO BE TAKEN:						
Question				Yes	No	N/A
VIII. CONSTRUCTION/ SETS						
A	Are all sets constructed at least 20 feet away from combustible vegetation?					
B	Are flammable or combustible spray operations conducted in properly ventilated areas away from the exposures? Are "No Smoking" signs posted and fire extinguishers provided?					
C	Are combustible waste and dust in carpenter shop and other work areas cleaned and removed frequently?					
D	If rags are used with paints, solvents, and other flammables are they safely disposed of in metal safety containers with a tight fitting lid?					
E	Are combustible curtains, backdrops, window covering, trees, bushes, hay, etc. that are in a configuration that would tend to increase the fire and panic hazard fresh within a building treated with a SFM approved flame retardant?					
CORRECTIVE ACTION TO BE TAKEN:						
IX. HIGH RISE BUILDINGS						
A	If the fire and safety equipment have been disconnected, did the Fire Department and building owner approve this?					
B	Are all fire rated openings (doors in rated corridors, rated stairway, fire separation walls, etc.), kept clear of cables and equipment to be automatically closed properly?					
C	Are all aisles, corridors, stairways, and exit paths kept clear and unobstructed?					
D	Are all fire escapes kept clear as escape routes and not used for storage of any kind?					
CORRECTIVE ACTION TO BE TAKEN:						
Additional Comments						

Failure to comply with the requirements identified within this document may result in the revocation of permit and/or cancellation of film production.

Should Los Angeles County Fire Department Inspectors need further information regarding the completion of this form, please contact:

**County of Los Angeles Fire Department Public Safety and Film Unit (PSFU) at
(818) 364-8240.**

Name_____ Title_____ Phone Number_____

Name_____ Title_____ Phone Number_____

Los Angeles County Fire Department PSFU Inspector

Signature_____ Date _____

ACCIDENT INVESTIGATION REPORT

(Send to Production Manager when completed.)

**To be completed for EVERY injury or illness, regardless of severity.
For serious injuries or illnesses, see Form 4: Serious Incident Reporting Procedures.**

EMAIL OR FAX (818-954-2805) TO PRODUCTION SAFETY CONSULTANT WITHIN 24 HOURS OF ACCIDENT

PRODUCTION NAME: _____

DATE: _____

INJURED'S NAME: _____

TITLE: _____

DATE OF ACCIDENT: _____

TIME OF ACCIDENT: _____ AM ☐ PM ☐

LOCATION OF ACCIDENT: _____

Type of Injury/Illness

(Check all that apply)

- | | | | | | |
|--------------------------------------|-------------------------------------|--|--|--|-------------------------------------|
| ☐ Fracture | ☐ Amputation | ☐ Head Injury | ☐ 1 st Degree Burn | ☐ Foreign Body in Eye | ☐ Bite/Sting |
| ☐ Strain | ☐ Laceration | ☐ Neck Injury | ☐ 2 nd Degree Burn | ☐ Contact Dermatitis | ☐ Splinter |
| ☐ Sprain | ☐ Avulsion | ☐ Back Injury | ☐ 3 rd Degree Burn | ☐ Allergic Reaction | ☐ Nausea |
| ☐ Dislocation | ☐ Abrasion | ☐ Abdomen Injury | ☐ Tooth Injury | ☐ Rash | ☐ Illness* |
| ☐ Contusion | ☐ Puncture | ☐ Crushing Injury | ☐ Hearing Loss | ☐ Infection | ☐ Other* |

- Describe Illness or Other:

Injured Part of Body

(Check all that apply)

- | | | | | | | | | |
|-----------------------------------|--------------------------------------|------------------------------------|--|---------------------------------------|------------------------------------|-----------------------------------|---------------------------------|---------------------------------|
| ☐ Head | ☐ Chest | ☐ Shoulder | ☐ Wrist | ☐ Upper Leg | ☐ Foot | ☐ Eye | ☐ Mouth | |
| ☐ Right | ☐ Neck | ☐ Ribs | ☐ Upper Arm | ☐ Back of Hand | ☐ Knee | ☐ Toe | ☐ Nose | ☐ Tooth |
| ☐ Left | ☐ Back | ☐ Abdomen | ☐ Elbow | ☐ Palm of Hand | ☐ Lower Leg | ☐ Forehead | ☐ Cheek | ☐ Throat |
| ☐ Buttocks | ☐ Pelvis Area | ☐ Lower Arm | ☐ Finger
(Digit _____) | ☐ Ankle | ☐ Ear | ☐ Chin | ☐ Other* | |

- Describe Other:

Explain Cause of Accident and Nature of Injury: (DO NOT SPECULATE)

Corrective Action Taken to Prevent Recurrence:

Witnesses, If Any:

Form Completed By (Print):

Title:

Signature: _____ **Date:** _____

HAZARD NOTIFICATION

*This form is designed to be used by cast and crew members to report any hazards or unsafe acts noted on the production.
The reporting cast or crew member may remain anonymous.*

Production Name:			To Be Completed By:	<i>Any member of Cast or Crew</i>
Copies Sent To:	<i>Line Producer</i>	<i>Production Safety Consultant</i>	To Be Stored By:	<i>Production Manager</i>
Production Location:			Today's Date:	
Special Instructions:	When: <i>As required.</i>		Frequency: <i>As needed.</i>	
Date Observed:			Time Observed:	
Location of Hazard or Unsafe Act: <i>(Be specific)</i>				
Description of Hazard or Unsafe Act:				
Action Taken: <i>(Note any <u>immediate</u> action taken to minimize risks.)</i>				
Suggestions for Corrective Action: <i>(Note any <u>long-term</u> corrective action taken on Form 11: Notice of Unsafe Condition and Action Plan)</i>				
Name: <i>(Voluntary)</i>				
Position: <i>(Voluntary)</i>				

NOTICE OF UNSAFE CONDITION AND ACTION PLAN

Production Name:		To Be Completed By:	<i>Line Producer</i>
Copies Sent To:	<i>Line Producer Production Safety Consultant</i>	To Be Stored By:	<i>Production Manager</i>
Production Location:		Today's Date:	
Special Instructions:	When: <i>As required.</i> Frequency: <i>As needed.</i>		
Date Observed:		Time Observed:	
Hazard Notification Received: Yes No		Date Received:	
Location: <i>(Be specific)</i>			
Cast and/or Crew notified of unsafe condition: ☐ Yes ☐ No <i>(If "No", explain why):</i>			
Action Taken: <i>(Note any immediate action taken to minimize risks.)</i>			
Correction Action Required: <i>(Describe who will do and what will be done to correct unsafe condition. Note any individual or department to whom this condition is referred and the date of referral.)</i>			
Date Corrected:			
Corrected By: (Name)		(Title)	
Supervisor's Signature:		(Title)	

SAFETY WARNING NOTICE

Production Name:		To Be Completed By:	<i>Supervisors</i>
Copies Sent To:	<i>Line Producer Production Safety Consultant</i>	To Be Stored By:	<i>Production Manager</i>
Production Location:		Today's Date:	
Special Instructions:	When: <i>As required.</i>	Frequency: <i>Once for each incident.</i>	
Employee Name:		Social Security Number:	
Position/Title:			
Description of Unsafe Act: On _____, you were observed engaging in the following activity that violates safety policy contained in the Injury & Illness Prevention Program for Production: 			
Description of Correct Procedure: In the future, please adhere to the correct procedure, which is described as follows: 			
Supervisor's Signature: _____			
Title: _____			
Date: _____			
<i>The purpose of this notice is to call the above deficiency to your attention, and give you an opportunity to correct it. A copy of this notice will be placed in your personnel file. Any further safety violation or any other misconduct will subject you to further disciplinary action, up to and including discharge.</i>			
Without agreeing with the above, I hereby certify that I have received a copy of this notice.			
Employee's Signature: _____			
Date: _____			

PRODUCTION SAFETY MEETING REPORT

*This form is to be utilized when a Safety Meeting cannot be documented on the
Daily Production Report.*

Production Name:		To Be Completed By:	<i>Line Producer, Stage Manager/1st AD</i>
Copies Sent To:	<i>Production Safety Consultant</i>	To Be Stored By:	<i>Production Manager</i>
Production Location:		Today's Date:	
Special Instructions:	When: <i>For productions when additional safety planning is required for an event.</i> Frequency: <i>As needed.</i>		
Meeting Location:			
Conducted By:		Title:	
Cast/Crew Craft or Category:			
SUBJECT(S) DISCUSSED			
ATTENDEES			
Print Name	Title	Sign Name	

Additional attendees should be noted using sheet on Page 2.

Production Safety Meeting Report Attendees

[illegible]

REQUEST FOR EMPLOYEE SAFETY TRAINING

Production Name:		To Be Completed By:	<i>Supervisor</i>
To Be Sent To:	<i>Production Safety Consultant</i>	To Be Stored By:	<i>Production Manager</i>
Production Location:		Today's Date:	
Special Instructions:	When: Whenever training is required. Frequency: For any job for which employee has not been trained.		

*Training Selections **

A. Aerial Lift Safety	G. Lifting Practices
B. Bloodborne Pathogens	H. Lockout/Tagout
C. Confined Space Entry	I. Powder-Actuated Tools
D. Fall Protection	J. Respiratory Protection
E. Forklift Safety	K. Trenching & Shoring
F. Hazard Communication	

NAME	JOB DESCRIPTION	TO BE TRAINED FOR
<i>e.g. John Smith</i>	<i>e.g. Electrician</i>	<i>e.g. A, C & H</i>

On-Set Safety Meeting for Extras and Day Hires

At every stage and location, the Assistant Stage Manager/2nd AD should conduct an on-set safety meeting with all Extras and Day Hires. The outline below should be used as a guide for subjects to be covered. In addition, the Safety Meeting Attendance Sheet should be signed by all attendees for every meeting held. A separate meeting should be held at every stage and/or location for any given day.

Production Name:

Date:

Time:

AM PM

Location:

Meeting Conducted By: (Name)

(Title)

SAFETY MEETING CHECKLIST

- ☐ Review and post Form 15: Safety Guidelines for Extras and Theatrical Day Hires.
- ☐ Emergency Plan:
 - Local Emergency Response telephone number
 - Fire alarm pull stations
 - Emergency exits
 - Escape routes
 - Post-evacuation assembly area
 - DO NOT re-enter evacuated building until okayed by Fire Dept.
- ☐ Name and location of Set Medic
- ☐ Location-specific hazards: lead paint, asbestos, traffic, etc.
- ☐ Potential hazards of planned activities: stunts, FX, drones, etc.
- ☐ Heat Illness Prevention Plan if temperatures above 80 F.
- ☐ If you are too tired or ill to work safely or drive home safely, tell Supervisor.
- ☐ Report any safety concerns to the Anonymous Safety Hotline at (818) 954-2800 or 877-566-8001.
- ☐ Safety Meeting Attendance Sheet

RIGHT OF REFUSAL OF MEDICAL AID

Show Name: _____

I hereby refuse the first aid treatment recommended to me by the First Aid Person employed by my production for the illness or injury incurred by me on this date.

In signing this waiver, I release the First Aid Person, the Production and its personnel from any liability resulting from this refusal to accept such first aid treatment.

Injured's or Guardian's Signature

Date

Injured's Name (print)

/ _____
Injured's Cell #

Job Title or Position

Guardian's Name in case of minor

Relationship to Injured

First Aid Person Signature

First Aid Person Name (print)

Witness Signature

Witness Name (print)

/ _____
Witness Cell #

This form should be signed, dated and returned to the Production Safety Representative.

NOTES: _____

SAFETY SIGNS & OSHA POSTINGS

The following signs should be posted on stages and locations. Location Safety Posters are available from the Production Safety Consultant. Additional information is available at safetyontheset.com.

Anonymous Safety Hotline/Website Address

Safety Data Sheets (SDS) Information

Cal OSHA Emergency Phone Numbers

Cal OSHA Safety & Health Protection on the Job

Cal OSHA Operating Rules for Industrial Trucks

State of California Prop 65 Warning

State of California "Whistleblower" Protection

Heat Illness Prevention Plan

No Smoking

Helicopter Safety

Table Saw Guard Policy

Firearms Policy

Anonymous Safety Hotline

(818) 954-2800

(877) 566-8001

Safety Website

www.safetyontheset.com

Material Safety Data Sheets (MSDS)

The Versisk 3E Company

800-451-8346

EMERGENCY

AMBULANCE: _____

FIRE — RESCUE: _____

HOSPITAL: _____

PHYSICIAN: _____

ALTERNATE: _____

POLICE: _____

CAL/OSHA: _____

Posting is required by Title 8 Section 1512 (e), California Code of Regulations



March 1990
S-500

State of California
Department of Industrial Relations
Cal/OSHA Publications
P.O. Box 420603
San Francisco, CA 94142-0603

Safety and Health Protection on the Job

State of California
Department of Industrial Relations



California law provides workplace safety and health protections for workers through regulations enforced by the Division of Occupational Safety and Health (Cal/OSHA). This poster explains some basic requirements and procedures to comply with the state's workplace safety and health standards and orders. The law requires that this poster be displayed. Failure to do so could result in a substantial penalty. Cal/OSHA standards can be found at www.dir.ca.gov/samples/search/query.htm.

WHAT AN EMPLOYER MUST DO:

All employers must provide work and workplaces that are safe and healthful. In other words, as an employer, you must follow state laws governing job safety and health. Failure to do so can result in a threat to the life or health of workers, and substantial monetary penalties.

You must display this poster in a conspicuous place where notices to employees are customarily posted so everyone on the job can be aware of basic rights and responsibilities.

You must have a written and effective Injury and Illness Prevention Program (IIPP) meeting the requirements of California Code of Regulations, title 8, section 3203 (www.dir.ca.gov/title8/3203.html).

You must be aware of hazards your employees face on the job and keep records showing that each employee has been trained in the hazards unique to each job assignment.

You must correct any hazardous condition that you know may result in injury to employees. Failure to do so could result in criminal charges, monetary penalties, and even incarceration.

You must notify a local Cal/OSHA district office of any serious injury or illness, or death, occurring on the job. Be sure to do this immediately after calling for emergency help to assist the injured employee. Failure to report a serious injury or illness, or death, within 8 hours can result in a minimum civil penalty of \$5,000.

WHAT AN EMPLOYER MUST NEVER DO:

Never permit an employee to do work that violates Cal/OSHA workplace safety and health regulations.

Never permit an employee to be exposed to harmful substances without providing adequate protection.

Never allow an untrained employee to perform hazardous work.

EMPLOYEES HAVE CERTAIN WORKPLACE SAFETY & HEALTH RIGHTS:

As an employee, you (or someone acting for you) have the right to file a confidential complaint and request an inspection of your workplace if you believe conditions there are unsafe or unhealthful. This is done by contacting the local Cal/OSHA district office (see list of offices). Your name is not revealed by Cal/OSHA, unless you request otherwise.

You also have the right to bring unsafe or unhealthful conditions to the attention of the Cal/OSHA investigator inspecting your workplace.

Any employee has the right to refuse to perform work that would violate an occupational safety or health standard or order where such violation would create a real and apparent hazard to the employee or other employees.

You may not be fired or punished in any way for filing a complaint about unsafe or unhealthful working conditions, or for otherwise exercising your rights to a safe and healthful workplace. If you feel that you have been fired or punished for exercising your rights, you may file a complaint about this type of discrimination by contacting the nearest office of the California Department of Industrial Relations, Division of Labor Standards Enforcement (Labor Commissioner's Office) or the San Francisco office of the U.S. Department of Labor, Occupational Safety and Health Administration. (Employees of state or local government agencies may only file these complaints with the California Labor Commissioner's Office.) Consult your local telephone directory for the office nearest you.

EMPLOYEES ALSO HAVE RESPONSIBILITIES:

To keep the workplace and your coworkers safe, you should tell your employer about any hazard that could result in an injury or illness to an employee. While working, you must always obey state workplace safety and health laws.

HELP IS AVAILABLE:

To learn more about workplace safety rules, you may contact Cal/OSHA Consultation Services for free information, required forms, and publications. You can also contact a local district office of Cal/OSHA. If you prefer, you may retain a competent private consultant, or ask your workers' compensation insurance carrier for guidance in obtaining information.

Call the FREE Worker Information Helpline – (866) 924-9757

DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (CAL/OSHA)

HEADQUARTERS: 1515 Clay Street, Ste. 1901, Oakland, CA 94612 – Telephone (510) 286-7000

District Offices

American Canyon	3419 Broadway St., Ste. H8, American Canyon 94503	(707) 649-3700
Bakersfield	7718 Meany Ave., Bakersfield 93308	(661) 588-6400
Foster City	1065 East Hillsdale Bl., Ste. 110, Foster City 94404	(650) 573-3812
Fremont	39141 Civic Center Dr., Ste. 310, Fremont 94538	(510) 794-2521
Fresno	2550 Mariposa St., Rm. 4000, Fresno 93721	(559) 445-5302
Long Beach	3939 Atlantic Ave., Ste. 212, Long Beach 90807	(562) 506-0810
Los Angeles	320 West Fourth St., Rm. 820, Los Angeles 90013	(213) 576-7451
Modesto	4206 Technology Dr., Ste. 3, Modesto 95356	(209) 545-7310
Monrovia	800 Royal Oaks Dr., Ste. 105, Monrovia 91016	(626) 239-0369
Oakland	1515 Clay St., Ste. 1303, Box 41, Oakland 94612	(510) 622-2916
Redding	381 Hemsted Dr., Redding 96002	(530) 224-4743
Sacramento	2424 Arden Way, Ste. 160, Sacramento 95825	(916) 263-2800
San Bernardino	464 West Fourth St., Ste. 332, San Bernardino 92401	(909) 383-4321
San Diego	7575 Metropolitan Dr., Ste. 207, San Diego 92108	(619) 767-2280
San Francisco	455 Golden Gate Ave., Rm. 9516, San Francisco 94105	(415) 557-0100
Santa Ana	2000 E. McFadden Ave., Ste. 122, Santa Ana 92705	(714) 558-4451
Van Nuys	6150 Van Nuys Blvd., Ste. 405, Van Nuys 91401	(818) 901-5403

Regional Offices

San Francisco	455 Golden Gate Ave., Rm 9516, San Francisco 94102	(415) 557-0300
Sacramento	2424 Arden Way Ste. 300, Sacramento 95825	(916) 263-2803
Santa Ana	2000 E. McFadden Ave. Ste. 119, Santa Ana 92705	(714) 558-4300
Monrovia	750 Royal Oaks Dr., Ste. 105, Monrovia 91016	(626) 470-9122

Cal OSHA Consultation Services

Field / Area Offices

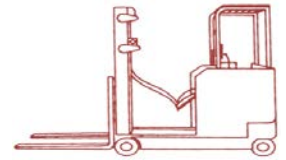
•Fresno / Central Valley	2550 Mariposa Mall, Rm. 2005 Fresno 93721	(559) 445-6800
•La Palma / Los Angeles / Orange County	1 Centerpointe Dr., Ste. 150 La Palma 90623	(714) 562-5525
•Oakland/ Bay Area	1515 Clay St., Ste 1103 Oakland 94612	(510) 622-2891
•Sacramento / Northern CA	2424 Arden Way, Ste. 410 Sacramento 95825	(916) 263-0704
•San Bernardino	464 West Fourth St., Ste. 339 San Bernardino 92401	(909) 383-4567
•San Diego / Imperial County	7575 Metropolitan Dr., Ste. 204 San Diego 92108	(619) 767-2060
•San Fernando Valley	6150 Van Nuys Blvd., Ste. 307 Van Nuys 91401	(818) 901-5754

Consultation Region Office

•Fresno	2550 Mariposa Mall, Rm. 3014 Fresno 93721	(559) 445-6800
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Enforcement of Cal/OSHA workplace safety and health standards is carried out by the Division of Occupational Safety and Health, under the California Department of Industrial Relations, which has primary responsibility for administering the Cal/OSHA program. Safety and health standards are promulgated by the Occupational Safety and Health Standards Board. Anyone desiring to register a complaint alleging inadequacy in the administration of the California Occupational Safety and Health Plan may do so by contacting the San Francisco Regional Office of the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor Tel: (415) 625-2547. OSHA monitors the operation of state plans to assure that continued approval is merited. **October 2017**

OPERATING RULES FOR INDUSTRIAL TRUCKS



General Industry Safety Order [3664](#) Operating Rules (Part (a))

- (a) Every employer using industrial trucks or industrial tow tractors shall post and enforce a set of operating rules including the appropriate rules listed in Section [3650](#) (t).

General Industry Safety Order [3650](#) Industrial Trucks. General (Part (t))

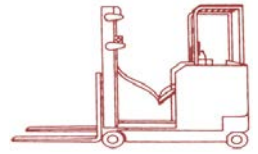
- (t) Industrial trucks and tow tractors shall be operated in a safe manner in accordance with the following operating rules:
- (1) Only drivers authorized by the employer and trained in the safe operations of industrial trucks or industrial tow tractors pursuant to Section [3668](#) shall be permitted to operate such vehicles.
 - (2) Stunt driving and horseplay are prohibited.
 - (3) No riders shall be permitted on vehicles unless provided with adequate riding facilities.
 - (4) Employees shall not ride on the forks of lift trucks.
 - (5) Employees shall not place any part of their bodies outside the running lines of an industrial truck or between mast uprights or other parts of the truck where shear or crushing hazards exist.
 - (6) Employees shall not be allowed to stand, pass, or work under the elevated portion of any industrial truck, loaded or empty, unless it is effectively blocked to prevent it from falling.
 - (7) Drivers shall check the vehicle at the beginning of each shift, and if it is found to be unsafe, the matter shall be reported immediately to a foreman or mechanic, and the vehicle shall not be put in service again until it has been made safe. Attention shall be given to the proper functioning of tires, horn, lights, battery, controller, brakes, steering mechanism, cooling system, and the lift system for forklifts (forks, chains, cable, and limit switches).
 - (8) No truck shall be operated with a leak in the fuel system.
 - (9) Vehicles shall not exceed the authorized or safe speed, always maintaining a safe distance from other vehicles, keeping the truck under positive control at all times and all established traffic regulations shall be observed. For trucks traveling in the same direction, a safe distance may be considered to be approximately 3 truck lengths or preferably a time lapse - 3 seconds - passing the same point.

General Industry Safety Order [3650](#) Industrial Trucks. General (Part (t))

- (10) Trucks traveling in the same direction shall not be passed at intersections, blind spots, or dangerous locations.
- (11) The driver shall slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- (12) Operators shall look in the direction of travel and shall not move a vehicle until certain that all persons are in the clear.
- (13) Trucks shall not be driven up to anyone standing in front of a bench or other fixed object of such size that the person could be caught between the truck and object.
- (14) Grades shall be ascended or descended slowly.
 - (A) When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade.
 - (B) On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.
 - (C) Motorized hand and hand/rider trucks shall be operated on all grades with the load-engaging means downgrade.
- (15) The forks shall always be carried as low as possible, consistent with safe operations.
- (16) When leaving a vehicle unattended (the operator is over 25 feet (7.6 meters) from or out of sight of the industrial truck), the brakes are set, the mast is brought to the vertical position, and forks are left in the down position, either:
 - (A) The power shall be shut off and, when left on an incline, the wheels shall be blocked; or
 - (B) The power may remain on provided the wheels are blocked, front and rear.
- (17) When the operator of an industrial truck is dismounted and within 25 feet (7.6 meters) of the truck which remains in the operator's view, the load engaging means shall be fully lowered, controls placed in neutral, and the brakes set to prevent movement.

Continued in the next page....

OPERATING RULES FOR INDUSTRIAL TRUCKS



General Industry Safety Order [3650](#) Industrial Trucks. General (Part (t))

Exception:

Forks on fork-equipped industrial trucks may be in the raised position for loading and unloading by the operator if the forks are raised no more than 42 inches above the same level on which the industrial truck is located, the power is shut off, controls placed in neutral and the brakes set. If on an incline, the wheels shall be securely blocked. Whenever the forks are raised, the operator will remain in the seat of the industrial truck except when the operator is actively loading or unloading materials.

- (18) Vehicles shall not be run onto any elevator unless the driver is specifically authorized to do so. Before entering an elevator, the driver shall determine that the capacity of the elevator will not be exceeded. Once on an elevator, the industrial truck's power shall be shut off and the brakes set.
- (19) Motorized hand trucks shall enter elevators or other confined areas with the load end forward.
- (20) Vehicles shall not be operated on floors, sidewalk doors, or platforms that will not safely support the loaded vehicle.
- (21) Prior to driving onto trucks, trailers and railroad cars, their flooring shall be checked for breaks and other structural weaknesses.
- (22) Vehicles shall not be driven in and out of highway trucks and trailers at loading docks until such trucks or trailers are securely blocked or restrained and the brakes set.
- (23) To prevent railroad cars from moving during loading or unloading operations, the car brakes shall be set, wheel chocks or other recognized positive stops used, and blue flags or lights displayed in accordance with Section [3333](#) of these Orders and [Title 49, CFR, Section 218.27](#) which is hereby incorporated by reference.
- (24) The width of one tire on the powered industrial truck shall be the minimum distance maintained from the edge by the truck while it is on any elevated dock, platform, freight car or truck.
- (25) Railroad tracks shall be crossed diagonally, wherever possible. Parking closer than 8 1/2 feet from the centerline of railroad tracks is prohibited.
- (26) Trucks shall not be loaded in excess of their rated capacity.
- (27) A loaded vehicle shall not be moved until the load is safe and secure.

General Industry Safety Order [3650](#) Industrial Trucks. General (Part (t))

- (28) Extreme care shall be taken when tilting loads. Tilting forward with the load engaging means elevated shall be prohibited except when picking up a load.
Elevated loads shall not be tilted forward except when the load is being deposited onto a storage rack or equivalent. When stacking or tiering, backward tilt shall be limited to that necessary to stabilize the load.
- (29) The load engaging device shall be placed in such a manner that the load will be securely held or supported.
- (30) Special precautions shall be taken in the securing and handling of loads by trucks equipped with attachments, and during the operation of these trucks after the loads have been removed.
- (31) When powered industrial trucks are used to open and close doors, the following provisions shall be complied with:
 - (A) A device specifically designed for opening or closing doors shall be attached to the truck.
 - (B) The force applied by the device to the door shall be applied parallel to the direction of travel of the door.
 - (C) The entire door opening operation shall be in full view of the operator.
 - (D) The truck operator and other employees shall be clear of the area where the door might fall while being opened.
- (32) If loads are lifted by two or more trucks working in unison, the total weight of the load shall not exceed the combined rated lifting capacity of all trucks involved.
- (33) When provided by the industrial truck manufacturer, an operator restraint system such as a seat belt shall be used.



**Follow
operating rules
so that
everyone is
safe.**

(2/2) RIGHT

WARNING

**This area contains chemicals
known to the State of California
to cause cancer and birth defects
or other reproductive harm.**

The Division of Labor Standards Enforcement believes that the sample posting below meets the requirements of Labor Code Section 1102.8(a). This document must be printed to 8.5 x 11 inch paper with margins no larger than one-half inch in order to conform to the statutory requirement that the lettering be larger than size 14 point type.

WHISTLEBLOWERS ARE PROTECTED

It is the public policy of the State of California to encourage employees to notify an appropriate government or law enforcement agency when they have reason to believe their employer is violating a state or federal statute, or violating or not complying with a state or federal rule or regulation.

Who is protected?

Pursuant to [California Labor Code Section 1102.5](#), employees are the protected class of individuals. "Employee" means any person employed by an employer, private or public, including, but not limited to, individuals employed by the state or any subdivision thereof, any county, city, city and county, including any charter city or county, and any school district, community college district, municipal or public corporation, political subdivision, or the University of California. [[California Labor Code Section 1106](#)]

What is a whistleblower?

A "whistleblower" is an employee who discloses information to a government or law enforcement agency where the employee has reasonable cause to believe that the information discloses:

1. A violation of a state or federal statute,
2. A violation or noncompliance with a state or federal rule or regulation, or
3. With reference to employee safety or health, unsafe working conditions or work practices in the employee's employment or place of employment.

What protections are afforded to whistleblowers?

1. An employer may not make, adopt, or enforce any rule, regulation, or policy preventing an employee from being a whistleblower.
2. An employer may not retaliate against an employee who is a whistleblower.
3. An employer may not retaliate against an employee for refusing to participate in an activity that would result in a violation of a state or federal statute, or a violation or noncompliance with a state or federal rule or regulation.
4. An employer may not retaliate against an employee for having exercised his or her rights as a whistleblower in any former employment.

Under [California Labor Code Section 98.6](#), if an employer retaliates against a whistleblower, the employer may be required to reinstate the employee's employment and work benefits, pay lost wages, and take other steps necessary to comply with the law.

How to report improper acts

If you have information regarding possible violations of state or federal statutes, rules, or regulations, or violations of fiduciary responsibility by a corporation or limited liability company to its shareholders, investors, or employees, **call the California State Attorney General's Whistleblower Hotline at 1-800-952-5225**. The Attorney General will refer your call to the appropriate government authority for review and possible investigation.

HEAT ILLNESS PREVENTION PLAN FOR PRODUCTION

HEAT ILLNESS PREVENTION PLAN FOR PRODUCTION

This Production is committed to worker safety. Heat Illness is a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion and heat stroke. This Heat Illness Prevention Plan (HIPP) has been instituted to help keep our employees protected when working in hot weather. The UPM, with assistance from the Production Safety Representative, is responsible for overseeing and administering the HIPP.

The Heat Illness Prevention Plan incorporates the following elements:

1. Provision of Water
2. Access to Shade
3. Written Procedures
4. Training

PROVISION OF WATER

Water is a key preventive measure to reduce the risk of heat related illnesses.

Follow these steps

On hot weather days, to ensure adequate hydration:

1. At least 2 gallons of water per employee per 8 hour shift will be readily accessible.
2. Department Heads, Supervisors, and WB Safety will remind employees to drink water frequently.
3. Employees required to work outside will be provided with access to plenty of water, Gatorade-type drinks and ice.
4. Where plumbed water is not readily available, bottled water will be placed as close as possible to workers.
5. Plastic bottles and/or disposable cups will be made available.

ACCESS TO SHADE

Access to rest and shade or other cooling measures are important preventive steps to reduce the risk of heat related illnesses. Productions on the studio lots have access to air-conditioned buildings and tree-shaded areas in which employees can recover from the heat.

When employees are required to work in exposed outdoor areas on hot weather days, the following steps will be taken:

1. Supervisors will ensure adequate shade or set up portable shade, close to the work area (preferably no more than 50 to 100 yards away).
2. Employees will be shown the nearest air conditioned building or vehicle in which they can cool down quickly.
3. Employees working in the sun should wear hats, sunglasses and sunscreen.

WRITTEN PROCEDURES

Written procedures help reduce the risk of heat related illnesses and ensure that emergency assistance is provided without delay.

In the event of a heat-related illness, call 911 (or the local emergency equivalent) with specific instructions regarding your location.

On hot days, the following procedures will be initiated to reduce the risk of heat related illnesses and help employees respond to possible symptoms:

1. A tool box talk relating to heat illness prevention will be given to all employees at the start of their shift, or when the weather becomes warm.
2. ***In the event of a heat-related illness, employees shall call 911 (or the local emergency equivalent) with specific instructions regarding your location.***
3. Supervisors and/or employees will carry cell phones or two-way radios to ensure communication in the event of any emergency.
4. Employees should drink water and take rest breaks when needed.
5. Supervisors will monitor employees for symptoms of heat illness.
6. Co-workers will use a "buddy system" to watch each other closely for symptoms of heat illness.
7. Supervisors and employees will be encouraged never to discount any symptoms of heat illness and will immediately address them.
8. For off-lot locations, the Production shall post, along with this Heat Illness Prevention Plan, specific information regarding the location, including: street address and directions to location; name, address and telephone number of the nearest hospital; locations of water-staging areas, shaded rest areas and other heat illness prevention accommodations.

TRAINING

Training is critical to help reduce the risk of heat related illnesses and to assist in obtaining emergency assistance without delay. Department Heads and Supervisors will use any combination of toolbox talks, handouts, posters and safety meetings to train their employees in the following:

1. Risk factors for heat illness.
2. Procedures for minimizing risk of heat illness as described herein.
3. The importance of drinking up to 4 cups of water per hour on hot days.
4. The importance of resting and recovering in shade when needed.
5. The importance acclimatization.
6. The different types of heat illness and the common signs and symptoms.
7. The importance of the "buddy system" and/or means of communication on hot days.
8. The importance of employees immediately addressing signs of heat illness in themselves or co-workers.

INSTRUCTIONS FOR COMPLETING

“HEAT ILLNESS PREVENTION PLAN - LOCATION INFORMATION”

This form should be completed and posted every day when the temperature is forecast to be 80 degrees Fahrenheit (27 Celsius) or higher. Filling it out accurately will help ensure that production personnel are aware of the steps taken to prevent heat illness, and know important location information to help direct emergency personnel to the scene if necessary. Review verbally with crew, cast and extras.

- **Production Name:** Use your Company Name and Show Name (i.e. “WBTV - The Middle”)
- **Date:** Complete a form for every day that temps are expected to be 80 degrees F (27 C) or higher and you have people working outside.
- **Location Address:** Include the complete address information, including Zip Code, to assist emergency personnel in finding you.
- **Nearest Hospital Information:** Give complete information here for every location, so that anyone needing to call an ambulance will be able to find the information quickly.
- **Set Medic Information:** Fill in completely, including the exact location of Set Medic station, in case cell phone reception is bad and someone needs to find the Medic quickly.
- **Location(s) of Shaded Rest Area:** Could be a pop-up tent, a building, under a large tree, or all of the above. Temperature in the shaded rest area needs to be cooler than work area temperature so employees can cool down and recover from the heat.
- **Location(s) of Water Station:** Can be in more than one place. Should be placed as near as possible to crew, cast and extras so they can easily stay hydrated between takes.
- **Other Accommodations:** Check off those that apply, list any additional steps taken to provide cooling and hydration.
- **Additional Directions for Emergency Personnel:** This is for additional information to assist emergency personnel in finding exactly where the injured person is if your location needs further explanation. “We are in the field at the end of the dirt road, just beyond the barn on the right hand side.”

HEAT ILLNESS PREVENTION PLAN

LOCATION INFORMATION

This form should be completed and posted every day when the temperature is forecast to be 80 degrees Fahrenheit (27 Celsius) or higher.

Filling it out accurately will help ensure that production personnel are aware of the steps taken to prevent heat illness, and know important location information to help direct emergency personnel to the scene if necessary. Review verbally with crew, cast and extras.

****High temperatures expected today - Heat Illness Prevention Plan in effect.****

Production Name:

Date:

Location Address:

Nearest Hospital Information:

Name of Location:

Name of Hospital:

Number & Street:

Number & Street:

City & Zip:

City & Zip:

Phone:

Phone:

Set Medic Information:

Name:

Phone:

Location:

Location(s) of Shaded Rest Area:

Location(s) of Water Station:

☐☐☐☐☐☐

Other Accommodations:

Check all that apply.

☐ **Hats**

☐ **Cool Ties**

☐ **EZ-Ups**

☐ **Misting Fans**

☐ **Other** *specify:*

Additional Directions to Location for Emergency Personnel:

Be specific - include landmarks that could assist an ambulance in locating you.



HEAT ILLNESS



When the body is unable to cool itself by sweating, several heat-induced illnesses such as heat stress or heat exhaustion and the more severe heat stroke can occur. Heat stroke can result in death if not treated immediately.

Environmental Risk Factors:

Working conditions that create the possibility that Heat Illness could occur. Includes air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by employees.

Personal Risk Factors:

Factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to the heat.

Symptoms of Heat Exhaustion

- Headache, dizziness or fainting.
- Weakness and wet skin.
- Muscle cramps.
- Irritability or confusion.
- Thirst, nausea or vomiting.

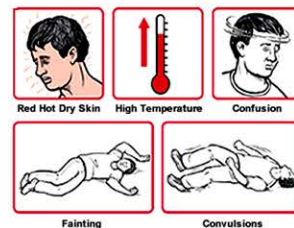
SEE MEDIC OR CALL 911 IMMEDIATELY



Symptoms of Heat Stroke

- May be confused, unable to think clearly.
- May pass out, collapse or have seizures (fits).
- May stop sweating.

CALL 911 IMMEDIATELY



How You Can Protect Yourself and Others

- Know signs/symptoms of heat illnesses.
- Monitor yourself; use a buddy system.
- Block out direct sun and other heat sources.
- Drink plenty of fluids. Drink often and **BEFORE** you are thirsty.
- Drink 8 ounces of water every 15 minutes.
- Avoid beverages that contain alcohol or caffeine.
- Wear lightweight, light colored, loose-fitting clothes.



What to Do When a Worker Has Heat Illness

- Call Medic or Supervisor for help. If not available, **call 911**.
- Have someone stay with the worker until help arrives.
- Move worker to cooler/shaded area.
- Remove the worker's outer clothing.
- Fan and mist the worker with water; apply ice bags or ice towels.
- Provide cool drinking water if the worker is able to drink.



IF THE WORKER IS NOT ALERT OR SEEMS CONFUSED, THIS MAY BE A HEAT STROKE. CALL 911 IMMEDIATELY.

NO SMOKING

*SMOKING IS PROHIBITED ON ALL
SOUNDSTAGES, IN ALL BUILDINGS AND
ON ALL SETS - INTERIOR AND EXTERIOR -
REGARDLESS OF LOCATION.*



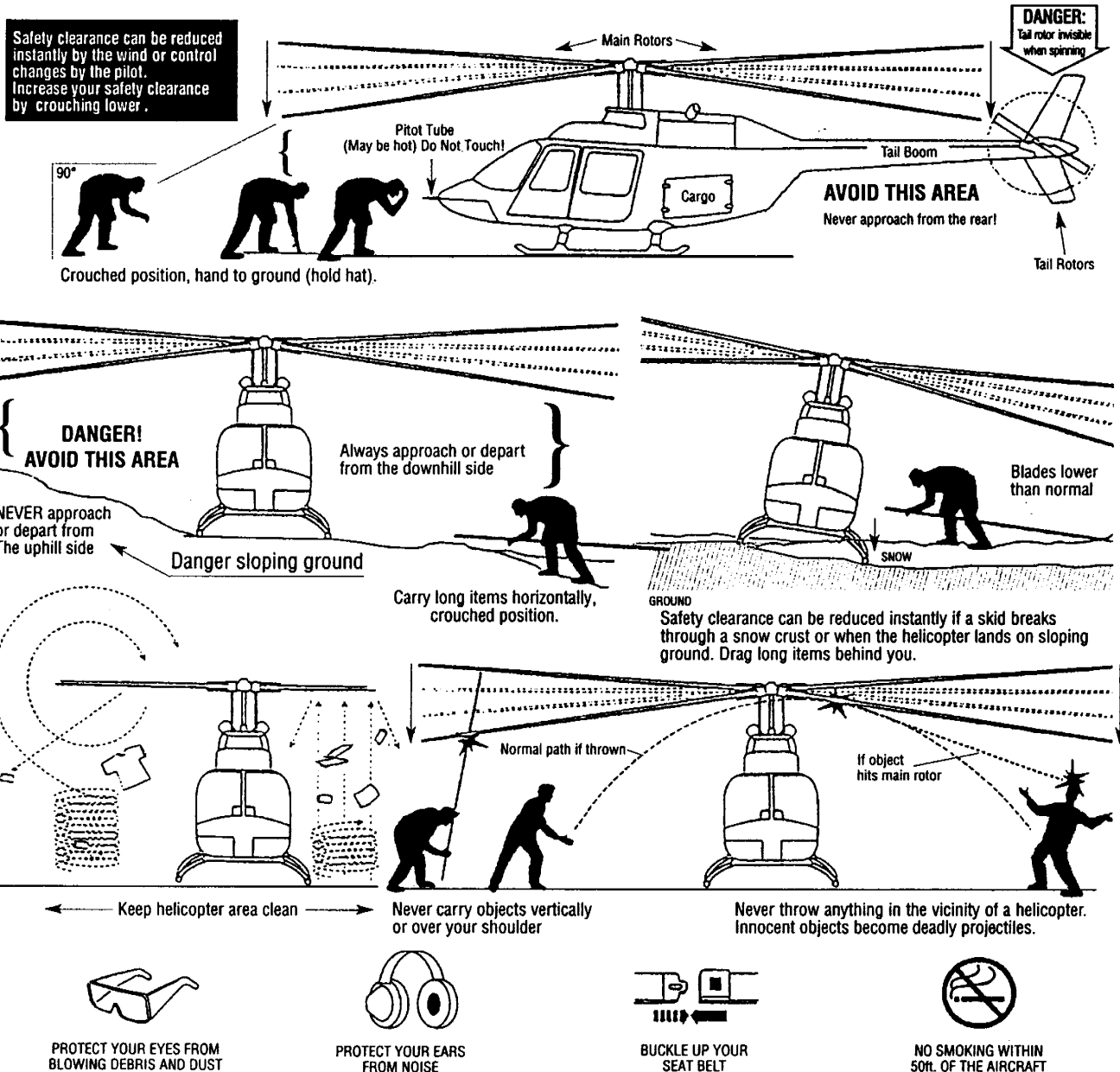
You may not smoke within 20 feet of any building, any set, or any place where employees may be likely to work or pass.

***THIS POLICY APPLIES TO ALL SMOKING PRODUCTS,
INCLUDING E-CIGARETTES***

NO VAPING

HELICOPTER SAFETY POSTER

1. Remain clear of the area below the path of the helicopter, including: approach/departure area, flight path, landing pad and emergency landing areas.
2. If you get hit by the main rotor blade or tail rotor, or if the helicopter lands on you - It can kill you!
3. Only approach the helicopter if Ok'd by the pilot.
4. If you receive permission to approach, assume the crouched position and approach from the front or side - **Never from the rear!**



* The material presented on this poster is informational only and not intended to supersede any procedure established by a qualified safety officer or government regulation. Equipment, personnel, circumstances and conditions vary substantially. Unique factors must always be considered.



**PRODUCTION
HELICOPTERS**

The Film & Commercial Company

Los Angeles, CA 310-474-7375 • Vancouver, BC 604-328-5543 • Montreal, PQ 514-942-5252

WARNING

TABLE SAWS

- Keep guard* in place.
- Wear safety glasses.
- Use push stick.
- No gloves.
- Beware of possible kickback.
- No loose-fitting clothing, jewelry or hair that could become entangled in the blade.

* *For certain cuts, temporary removal of the guard may be allowed. Always check with your Supervisor before removing guard.*

Anonymous Safety Hotline:
(818) 954-2800 / (877) 566-8001

FIREARMS/WEAPONS POLICY



The Company expressly prohibits weapons, including but not limited to firearms, in the workplace. The workplace includes all property owned, leased or controlled by the Company.

Exceptions will be made for weapons approved for use for filming or with prior written approval by the Company