



SAFETY BULLETINS

**RECOMMENDED BY
INDUSTRY WIDE LABOR-MANAGEMENT
SAFETY COMMITTEE**

**FOR THE
MOTION PICTURE AND TELEVISION
INDUSTRY**

November 2009

COURTESY OF
THE NATIONAL STUNT & SAFETY DEPARTMENT
SCREEN ACTORS GUILD



November 2009

Re: Industry Wide Labor-Management Safety Committee
Safety Bulletins

This booklet contains the recommended Safety Bulletins for work in a film or television production. These guidelines are recommended by the Industry Wide Labor-Management Safety Committee and should not be considered binding laws or regulations. However, state, federal and/or local regulations applies and would override the guidelines. Additionally, each SAG collective bargaining agreement has provisions concerning Safety issues that impact the performers.

If any safety issue should occur, please report it to the Guild's Stunt & Safety Department (323) 549-6855. For after business hours and on weekends, you may contact the Guild at (323) 954-1600. Or if you are working in another state, you may contact one of the local SAG offices listed in this booklet. Safety problems could also be reported to one of the applicable studio safety hotlines listed here.

Lastly, the Industry Wide Labor-Management Safety Committee researches and issues these bulletins during the course of the year. You may receive a newly released Safety Bulletin by contacting the Guild's Stunt & Safety Department. Or you may locate the full compendium of Safety Bulletins on the website for the Contract Services Administration Trust Fund, at www.CSATF.org.

Please join us in ensuring that Safety remains the highest priority when working in any production.

Sincerely,

A handwritten signature in black ink, which appears to read "Glenn K. Hiraoka". The signature is written in a cursive style and is followed by a horizontal line.

Glenn K. Hiraoka
National Director, Stunt & Safety Department

INTRODUCTION

This publication contains SAFETY BULLETINS which were researched, written, and distributed by the Industry Wide Labor-Management Safety Committee for use by the motion picture and television industry. The Industry Wide Labor-Management Safety Committee is composed of Guild, Union, and Management representatives active in industry safety and health programs.

These SAFETY BULLETINS are guidelines recommended by the Safety Committee. They are not binding laws or regulations. State, federal, and/or local regulations, where applicable, override these guidelines. Modifications in these guidelines should be made, as circumstances warrant, to ensure the safety of the cast and crew.

The Committee and these SAFETY BULLETINS are representative of the commitment of both Labor and Management to safe practices in the motion picture and television industry. The members of the Committee and all those who contributed to its work have devoted a great deal of time and effort to these guidelines because of the importance of safety to our industry.

All industry personnel have legal and moral responsibility for safety on the set or wherever they may be working. These SAFETY BULLETINS may be reproduced and attached to Call Sheets or otherwise distributed to affected employees.

SAFETY BULLETINS are written or revised to meet new standards or situations. Your questions or suggestions are invited. Safety is something in which we all have a share.

Contact:

**INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE
CONTRACT SERVICES AND ADMINISTRATION TRUST FUND
15503 VENTURA BOULEVARD
ENCINO, CALIFORNIA 91436-3140**

(818) 995-0900 or www.csaft.org

- **AS AN ACTOR, YOU ARE ULTIMATELY RESPONSIBLE FOR YOUR OWN SAFETY AND THE SAFETY OF YOUR FELLOW CAST MEMBERS.**

Production management and crew are responsible for creating and maintaining safe conditions, but it is your right and responsibility to double check the set up to ensure your own Safety.

- **YOU HAVE THE ABSOLUTE RIGHT TO SAY NO TO ANY STUNT OR SCENE YOU THINK MIGHT BE DANGEROUS**

SAG contracts guarantee your right to refuse to perform any Stunt or hazardous activity you even think might put you in any danger. If you have doubts about the Safety of any set-up, say no and stick to it.

- **YOU HAVE THE RIGHT TO REQUEST A STUNT DOUBLE**

SAG contracts guarantee your right to request a Stunt Double for any potentially hazardous activity or scene. Stunt Performers are experienced in the special skills required to safely perform dangerous looking scenes -- that is their job! Of course, Stunt Performers also have the right to say NO to any dangerous set-up.

- **SUPPORT YOUR FELLOW PERFORMERS WHO SAY NO.**

If another Actor or Stunt Performer says NO to a Stunt or hazardous activity, support that Performer by providing the No behind the No. Don't ever be pressured or induced to take a chance with your safety.

- **IF YOU HAVE A PROBLEM, CALL THE GUILD**

The Screen Actors Guild will confidentially counsel and advise you by phone and send a staff representative to the set, if necessary. SAG has the right to delay production until safe conditions are implemented. If requested, your name and phone call will be held in confidence.

**ALL THE RECOMMENDATIONS
CONTAINED HERIN ARE INTENDED TO
CONFORM WITH APPLICABLE LAWS AND
GOVERNMENTAL REGULATIONS, AND IN
THE EVENT OF ANY CONFLICT,
APPLICABLE LAWS AND GOVERNMENTAL
REGULATIONS
WILL PREVAIL.**

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 #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 INSERT 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 Insert 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 Insert 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 INSERT CAMERA CARS

ADDENDUM "B" - CAMERA BOOM VEHICLES

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

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #8

GUIDELINES FOR INSERT CAMERA CARS

"ADDENDUM C" – POWER LINE DISTANT 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, the following overhead clearances must be observed (California Code of Regulation, Title 8, Section 2946):

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.

Table 1

General Clearances Required from Energized Overhead High Voltage Conductors

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

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.

Table 2

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

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

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.

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #10

GUIDELINES REGARDING THE USE OF ARTIFICIALLY CREATED SMOKES, FOGS AND LIGHTING EFFECTS

1. **The following substances should not be used:**
 - a) Known human carcinogens including any particulates of combustion, including tobacco smoke (except where such smoke results from the smoking of tobacco by an actor in a scene);
 - b) Fumed and hydrolyzed chlorides;
 - c) Ethylene glycol and Diethylene glycol;
 - d) Mineral oils;
 - e) Aliphatic and aromatic hydrocarbons including petroleum distillates;
 - f) Hexachloroethane and Cyclohexylamine;

2. **The following substances may be used:**
 - a) Propylene glycol, Butylene glycol, Polyethylene glycol and Triethylene glycol. Other glycol products should not be used (see c above);
 - b) 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];
 - c) Cryogenic gases (*e.g.*, carbon dioxide, liquid nitrogen) may be used but care must be exercised to avoid depleting oxygen levels, especially in confined areas. Use care also to avoid adverse effects of cooled air on exposed persons.

3. When creating smoke or fog effects on any set, Producer(s) will utilize the minimum concentration necessary to achieve the desired effect.

4. When smoke or fog effects are created on an interior set, the stage shall be periodically ventilated or exhausted, vertically and laterally, or all personnel and animals shall be given a break away from the stage at appropriate intervals.

5. When creating smoke or fog effects on interior sets, Producer(s) shall make available on request respirators of the appropriate type.
6. When smoke or fog effects are utilized on any interior set, all non-essential personnel shall be excluded from the set. Whenever possible, personnel shall be vacated from all dressing rooms located on the stage. School rooms located on the stage shall be vacated.
7. When utilizing smoke on an interior set on location, Producer(s) shall provide means to exhaust or ventilate the set.
8. When creating smoke or fog effects on an exterior location, Producer(s) shall exercise all reasonable precautions to prevent smoke and fog inhalation and Producer(s) shall make available on request respirators of the appropriate type.
9. When smoke or fog effects are scheduled to be created on any set, prior notification as to use and type shall be given to all personnel and whenever possible, the call sheet shall state that smoke or fog effects are to be used. The person responsible for providing respirators shall be designated.

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.

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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.

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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.