



# SHAPE SAFETY BULLETIN #3A

(Safety & Health In Arts Production & Entertainment)

## **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**

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.

### **1. PILOT IN COMMAND:**

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.

### **2. PERSONNEL INVOLVED:**

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

### **3. 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.

### **4. RISK MANAGEMENT:**

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

### **5. 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.

**Safety Bulletins Are Recommended Guidelines Only; Consult All Applicable Rules and Regulations**



Hand signals used to communicate between air and ground crews should be understood by the workers exposed to identified hazards. A designated signaller must be clearly identifiable to the pilot by means of high visibility apparel and position.

**6. 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.

In Canada, attaching devices must be Airworthiness approved.

Seat belts, cables and safety lines should be attached to appropriate helicopter hard points (i.e., seat belt attach points, cargo tie down points, and 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 and be Airworthiness approved in Canada.

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

**In Canada, a Class D external load must be jettisonable.**

**7. PARACHUTES:**

If parachutes are to be utilized, they 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.

