

# <u>CSPA Procedures FOR THE SAFE TRANSPORT & HANDLING OF</u> PYROTECHNICS IN AIRCRAFT USED FOR PARACHUTING.

As the Pilot in Command is responsible for the safety and operation of the aircraft and the Drop Zone Operator is responsible for safe parachuting operations, any parachutist proposing to carry a pyrotechnic device must make the pilot and drop zone operator aware of the type and quantity that will be carried on board aircraft and the precautions that will apply.

Pyrotechnics may not be carried by CSPA members in parachuting aircraft unless:

- The Pilot in Command authorizes the transport of the pyrotechnics on board the aircraft.
- The parachutist is familiar with the safe handling and ignition method of the pyrotechnics to be used.
- The parachutist is familiar with and observes the pyrotechnic handling procedures contained in this directive.
- The assembly for transport of a pyrotechnic device attached to a parachutist utilizes a secure quick release feature.
- The equipment for transport, attachment and release of the pyrotechnics is approved by the SFOC holder and meets or exceeds any requirements of the CSPA Rules and Recommendations.

Where pyrotechnics are used during an Exhibition Jump, it is the responsibility of the Special Flight Operations Certificate (SFOC) holder to ensure that the parachutists are familiar with the safe handling and use of the pyrotechnic device(s) being used.

#### HANDLING PROCEDURES:

# General Precautions

- Pyrotechnic devices should be stored in a cool, dry area. Avoid storage above 60°C.
- Pyrotechnic devices should be stored and handled in accordance with Dangerous Goods Regulations for Class 1.4G and/or 1.4S goods.
- It is recommended that parachutists wear goggles at any time they are handling or stowing pyrotechnic devices.
- Parachutists carrying pyrotechnic devices shall be positioned closest to the aircraft door.
- Before leaving the ground pyrotechnic devices shall be fixed to the parachutist or, if temporarily detached for the ascent, shall at all times be stowed in the aircraft such that they cannot be accidentally dropped from the aircraft.

#### Attachment / Release

- Smoke-generating pyrotechnic devices may be attached to the foot of the parachutist with a quick-releasable bracket. The bracket shall not constitute a hazard to the deployment of the parachutes.
- Pyrotechnic devices that generate a substantial amount of heat must be insulated or shielded from the parachutist's body and equipment.
- Where pyrotechnic devices are suspended below the parachutist, they should be on a chain. In order to be releasable, the attachment to the parachutist may be made in the manner of a 3-ring release, or other combination of hardware attachments that will allow quick release of the assembly. Care must be taken to ensure such an assembly will not come adrift in freefall and create a hazard during parachute deployment.

#### Activation

- Pyrotechnic devices shall not be activated inside the aircraft cabin.
- Pyrotechnic devices being used on night descents must not be activated during the freefall phase of the descent.
- Pyrotechnics that have a striker type of activation shall have the striker shielded by the striker cap or other means until clear of the aircraft.
- Pyrotechnics must never be pointed towards a person or aircraft during activation.

# Accidental Ignition

- The pilot and parachutists shall agree on procedures should a pyrotechnic device ignite inside the aircraft:
  - if below 2200 feet AGL the device shall be moved to the open door and held outside the aircraft until it burns out;
  - if above 2200 feet AGL the device shall be moved to the open door and held outside the aircraft until it burns out, or the parachutist may exit the aircraft.
- The Pilot in Command is responsible to ensure that a suitable fire extinguisher is carried in the aircraft in order to control any secondary fires such as the aircraft carpet or jumpsuits set alight by the accidental ignition of the pyrotechnic device.

### On landing

• Ideally, pyrotechnic devices should have burnt out by the time the parachutist lands. The activation height and rate of descent under canopy should be planned to allow for this. However, if the use of pyrotechnics on a parachute descent presents a potential fire hazard on landing (such as dry grass) then the ground crew should be briefed and equipped to deal with any spot fires and should have a container (such as a metal bucket) ready to contain the pyrotechnic devices.