

International Fire Aviation Working Group – Practice Guide

Fire Operations

FO 5.7 - Personal Protective Equipment

This Practice Guide is incorporated into the International Manual of Common Rules and is one of a series of voluntary guides for use in fire aviation

1. Purpose

1.1. To provide guidance to Fire Agencies, Aircraft Operators, Pilots, Aircrew and Passengers regarding Personal Protective Equipment (PPE) recommended to be worn during Fire Aviation operations.

2. Application

- 2.1. Fire Agencies that manage and use aircraft.
- 2.2. Aircraft Operators engaged fire management activities.
- 2.3. Aircraft Operators providing aircraft under bi-lateral or multi-lateral resource sharing agreements.

3. General

- 3.1. Personnel shall only wear PPE of a type approved by the respective Fire Agencies and Aircraft Operators which meets the relevant national standard.
- 3.2. PPE shall be worn correctly according to manufacturers' specifications when conducting the relevant aviation operation.
- 3.3. PPE must be maintained and stored in accordance with manufacturers' specifications or relevant standards or procedures.
- 3.4. Any damaged or contaminated PPE must be removed and replaced or decontaminated as required.

4. Passengers - Ferry or Travel Flight

- 4.1. Personnel on a ferry or travel flight should wear:
 - Leather safety footwear that provides complete coverage of the foot to ankle height.
 - Clothing comprised of 100% natural fibre or cotton.
 - Non flammable underclothes.
 - Hearing protection where required.

5. Air Crew including pilots – all operations

5.1. Pilots and aircrew should wear

- Flying suit, coveralls or long trousers and long sleeved top of fire retardant or natural fibre material, extending to wrists and ankles
- Leather or fire retardant ankle length footwear
- Natural fibre or fire resistant underclothing

6. Air Crew including pilots – sustained operations below 1000ft

- 6.1. Personnel conducting sustained "low level" flight operations below 1000 ft. AGL shall wear:
 - All items specified above
 - Fire retardant flight gloves (e.g. NOMEX)
 - Protective flying / communications helmet (except where precluded by headroom) – (e.g. GENTEX SP5H)
 - Four-point shoulder harness properly fastened at all times during flight for front seat occupants.

7. Air Crew including pilots – operations involving pick-up of water from a body of water

- 7.1. Pilots and aircrew must wear
 - All items specified above
 - Life jacket with fire retardant cover
- 8. Aircrew Rappel or Hover Exit
- 8.1. Pilots and aircrew involved in Rappel or hover exit tasks should wear
 - Safety helmet with chin strap and attached ear protectors
 - Safety boots with high ankle support
 - Single piece protective firefighting/fire resistant overalls fully covering the body, legs and arms with sleeves and chest fully buttoned
 - Eye goggles
 - Communications headset where required;
- 8.2. Rappel dispatchers shall in addition wear:
 - Rappel gloves shall be worn during all rappel operations
 - Protective flight/communications helmet (e.g. GENTEX SPH5)
 - Flight helmet visors shall be worn down during all "doors open or removed" operations
 - Protective knee pads.
- 9. Ground Crew all support operations (incl. Helipad Marshal)
- 9.1. Personnel conducting ground support the following operations shall wear:
 - Protective goggles

- Full length protective clothing such as overalls
- Safety boots
- Hearing protection
- Sunscreen if appropriate
- Fire retardant, anti-static, high visibility, safety vest or shirt

10. Ground Crew – refuelling (including hot refuelling)

- 10.1. Personnel conducting the refuelling operations must wear:
 - All items specified above
 - Fire retardant or natural fibre full length protective clothing, or protective firefighting overalls
 - Natural fibre or fire resistant underclothing
 - Fire retardant gloves suitable for handling fuel
 - Eye goggles suitable for handling fuel

11. Ground Crew - helicopter sling load

- 11.1. Personnel conducting sling load operations must wear:
 - All items specified above
 - Safety helmet with chin strap
 - Gloves

12. Ground Crew – aerial drip torch mixing

- 12.1. Personnel involved in aerial drip torch operations must wear:
 - All items specified above
 - Fire retardant or natural fibre full length protective clothing, or protective firefighting overalls
 - Natural fibre or fire resistant underclothing
 - Protective leather work gloves
 - Eye goggles (not safety glasses)
 - Hearing protectors (not foam ear plugs)
 - Safety helmet with chin strap

13. Related Documents and References

- 13.1. The application of this Practice Guide should be read and applied in conjunction with the following related documents:
 - FO 5.7 PPE attachments

14. Procedure Manager

- 14.1. Participating Fire Agencies shall ensure maintenance and adherence of this Practice Guide.
- 14.2. Reviews shall be conducted as required and other participating Fire Agencies will be consulted on any amendments as part of the review process.

- 14.3. Date approved (this version):
- 14.4. Date due for review: TBA

