

# CABIN SAFETY BULLETIN ISSUE NO. 28

## Cabin crew uniform guidance



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A cabin safety bulletin is an advisory document that alerts, educates and makes recommendations about cabin safety matters. Recommendations in this bulletin are not mandatory.

### **Revision history**

Amendments/revisions of this cabin safety bulletin are recorded below in order of most recent first.

Table 1. Revision history table

Version No.	Date	Parts/Sections	Details
1.0	September 2025	All	First release

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#### 1. Purpose

This bulletin provides operator guidance in relation to cabin crew member uniform material and design including the potential hazards for crew members when uniforms do not provide adequate protection whilst fighting a fire or during an evacuation of an aircraft. It is recommended that this bulletin be taken into consideration when an operator is planning to produce, modify or replace existing crew member uniforms.

A cabin safety bulletin is an advisory document that informs, educates and makes recommendations about cabin safety matters. On its own this bulletin does not change, create, amend or permit deviations from regulatory requirements, nor does it establish minimum standards.

### 2. Applicability

This document applies to all operators of Australian registered aircraft and personnel who are assigned cabin crew duties and responsibilities on those aircraft. Of note is that an operator may choose to consider the information contained in this bulletin more broadly within their organisation such as flight crew.

#### 3. Background

The primary duty of a cabin crew member is to assist passengers evacuate an aircraft in an emergency. In the event the emergency involves fire, a crew member's uniform can affect their ability to help occupants evacuate the aircraft. Although toxic gases and smoke are typically the most significant threats in an aircraft fire, the threat of thermal injury (burns) can be increased if a cabin crew member is not clothed properly.

#### 4. Cabin crew uniform fabric

Cabin crew require uniforms that ensure they are easily identifiable and would not impede them from fulfilling their responsibilities in the event of an emergency. The uniform can provide impact protection and fire protection, which can contribute to a successful evacuation. Given the environment and duties associated with cabin crew, several factors need to be considered when evaluating uniform fabric (Bhatt, 2000) which include:

- Durability in terms of its ability to withstand mechanical and environmental stress
- Launderability and maintenance i.e. improper laundering can degrade the flammability characteristics of fabrics with natural flame-resistant properties, as well as those treated with flame-resistant chemicals.
   Failing to follow the manufacturer's washing instructions, or even using liquid fabric softener, can seriously alter a fabric's flame-resistant properties
- Reaction to fire i.e. the impact on characteristics of the fabric when exposed to a heat source
- Level of protection the fabric can provide the wearer when exposed to various conditions, especially heat sources. Measurement of how effectively the fabric conducts heat; the temperature at which its structure is deformed as well as the fabric's self-extinguishing abilities
- Comfort i.e. the flexibility and breathability of the material together with its ability to absorb liquids and vapours and whether there is any propensity to irritate skin.

Table 2 summarises the flammability characteristics of fabric types mentioned and how each could potentially be made fire retardant.

Table 2. Flammability characteristics of fabric types – Source: Bhatt

			Flan	nmability characteri	stics
Fabric	Туре	Ignition temperature	Reason to heat source	Condition after removal of heat source	To improve fire-retardant properties
Cotton	Natural, cellulose	400 degrees Celsius	Burns readily and supports combustion	Often produces afterglow	Increase weight and weave or add fire-retardant chemicals
Wool	Natural, protein	590 degrees Celsius	Flame propagation is gradual	Extinguishes with no afterglow	Least flammable of all natural fibres
Polyester	Synthetic polymers	510 degrees Celsius	Burns readily, melts and draws away from heat source	Affected areas cool to form a stiff material	Difficult to modify flammability characteristics
Polyester cotton blend	Synthetic plus natural	Above 400 degrees Celsius but below 510 degrees Celsius	Shrinks, melts before ignition, then flame propagates quickly	Cools to form a crisp, paper-like, substance	Only cotton is treatable with fire-retardant chemicals

### 5. Design aspects

Operators take the following into consideration when updating, modifying or replacing crew member uniforms to ensure that the uniforms are best suited for crew member safety duties during both normal and emergency situations:

- Select natural fibres, such as cotton or wool, or blends with a high percentage content of natural fibres.
- Select long sleeved shirts.
- · Select pants over shorts or skirts.
- Select a second layer garment, such as a jacket/blazer, cardigan or vest.
- · Select enclosed, low heeled shoes with laces, straps, or functional buckles; and
- Select appropriate footwear for cold or inclement weather operations.

Operators adopt the following operational procedures:

- Cabin crew don their full uniform before taking their assigned station for the safety demonstration, take-off and landing.
- Cabin crew wear outer clothing for take-off and landing during cold or inclement weather operations.
- Where possible, cabin crew don their uniform jackets before conducting firefighting procedures.
- Cabin crew should not wear high heeled or open toed shoes during taxi, take-off, and landing, or during abnormal and emergency situations; and
- Lanyards worn around the neck should have a quick release and be removed for take-off, landing, and during critical phases of flight.

Designing cabin crew uniforms taking into consideration safety, cultural and practical aspects are outlined in Table 3. It is recommended that policies outlined in the exposition define the uniform requirement to be worn

during take-off and landing to afford the best protection in the event of an emergency and to better identify cabin crew to passengers and emergency responders.

Table 3. Safety, cultural and practical aspects of uniform design - Source: IATA

Event	Hazards	Risks (consequence or	Potential mitigations
(adverse event)	(potential cause)	outcome)	
Entanglement with door operating handles or other cabin fixtures	Loose necklace, lanyards, jewellery, scarves, neckties	Cabin crew unable to operate the exit during evacuation	Remove lanyards while on board or provide alternative method of display. Formulate policy to keep jewellery covered under uniform.
Obstruction to evacuation	Wearing high or sharp pointed heels on shoes	Damage to evacuation slides/rafts, inability to use exit for evacuation	Appropriate footwear to be worn during evacuation
Health and safety outside the aircraft on the tarmac or during evacuation	Environmental conditions outside the aircraft, such as spilt fuel, hydraulic fluids	Cabin crew injury	Appropriate footwear to be worn on the tarmac and during evacuation
Cabin crew thermal discomfort	Temperature and climate differences at origin/destination/route	Cabin crew complaints, illness or incapacitation	Variations of uniforms appropriate to climate and environmental conditions at origin and destination
Cabin crew burn	Wearing flammable clothing while dealing with an onboard fire	Cabin crew incapacitation during firefighting	Use fabrics with high flammability protection
Cabin crew injury	Sharp items carried on the person being pressed into the body while wearing crew harness	Cabin crew puncture wound or incapacitation	Pocket or pouch for stowage of pens or other items frequently used by cabin crew

Information presenting in Table 4 below elaborates guidance on fabric flammability and considerations for operators in relation to uniform design that will optimise protection for the wearer.

Table 4. Considerations for crew member uniform design – Source: Transport Canada

Aspect	Guidance and considerations
Fabric	<ul> <li>Research has shown that outer and inner garments made from natural fibres, such as wool and cotton, provide better protection than synthetic fibres, as natural fibres:</li> </ul>
	<ul> <li>do not flare up vigorously when brought into contact with ignition sources</li> </ul>
	<ul> <li>tend to self-extinguish once the ignition source has been removed</li> </ul>
	<ul> <li>normally chars rather than shrink or melt</li> </ul>
	<ul> <li>do not transmit heat as readily as synthetic materials, and</li> </ul>
	<ul> <li>are more resistant to destruction by radiant heat.</li> </ul>
	<ul> <li>Synthetic materials pose a hazard during a fire situation. Application of an ignition source to synthetic material will generally cause ignition of the material, and vigorous burning will continue when the ignition source is</li> </ul>

Aspect	Guidance and considerations	
	removed. Transmitted or radiant heat will cause synthetic material to shrink before it finally melts.	
	<ul> <li>Many synthetic fibres burn easily and, when ignited, tend to melt down quickly and stick to a person's skin.</li> </ul>	
Style of clothing	<ul> <li>The purpose of a uniform is to clearly distinguish and identify a crew member to passengers in a normal or emergency situation. A uniform design should be durable, practical, and inspire confidence in passengers.</li> </ul>	
	<ul> <li>Wearing a second layer garment, such as a uniform jacket or vest, should be encouraged for protection during critical phases of flight. Breathability of the fabric helps to mitigate skin irritation and allows layering of garments for protection without discomfort. A uniform could consist of several different items that the crew member can combine according to the season, work duties and their own preferences.</li> </ul>	
	<ul> <li>Long sleeve shirts and pants are preferred over short sleeve shirts and skirts or shorts. Generally, the more of a person's body that is covered the better protection that will be offered against fire or environmental elements.</li> </ul>	
	<ul> <li>Operators should also consider clothing that is suitable for evacuating an aircraft and will not restrict the movement of cabin crew.</li> </ul>	
Footwear	<ul> <li>Shoes without laces, straps or functional buckles may be thrown off as a result of significant impacts causing high g-forces during an aircraft incident or accident, may be lost when the wearer is moving on or near aircraft wreckage or debris, or in very soft terrain such as desert sand or deep snow.</li> </ul>	
	<ul> <li>Shoes with laces, straps or functional buckles should be encouraged rather than shoes without as they provide more protection during aircraft incidents or accidents.</li> </ul>	
	<ul> <li>High heeled shoes or sandals should be discouraged as they may not be suitable for use during an evacuation.</li> </ul>	
	<ul> <li>Enclosed, low-heeled shoes are encouraged as they provide the wearer with more protection during an evacuation.</li> </ul>	
Inclement weather conditions	<ul> <li>Wearing outer clothing for take-off and landing during cold or inclement weather operations should be considered for improved protection to crew members from environmental elements during an evacuation or an aircraft incident or accident.</li> </ul>	

### 6. References

Table 5. Reference material

Document source	Title
Flight Safety Foundation, Cabin Crew Safety, March-April 1999	Uniform Materials Affect Flight Attendant Safety and Ability to Help Passengers Evacuate Burning Aircraft
IATA - Guide, Edition 10	Cabin Operations Safety Best Practices Guide (BPCOS)
Transport Canada AC 700-058 Issue 1, April 2021	Crew Member Uniform Materials and Protective Clothing

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Document source	Title
UNSW Aviation, Air Transport Safety II, AVIA 3710, 16NOV2000	Palak Bhatt, Flammability of Cabin Crew Uniforms
OHS Canada Magazine, Schoonover, M. 2025	Five Life-Saving Facts You May Not Know about Flame-Resistant Fabrics
MC Silva-Santos. MS Oliviera, AM Giacomin, MC Laktim and J Baruque-Ramos, University of Sao Paulo, Brazil, 9/11/2017	Flammability on textile of flight crew professional clothing

#### 7. More information

If you have an inquiry, please phone 131 757 and ask to speak with a cabin safety inspector.

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