

Advisory Circular

MANAGEMENT OF LITHIUM BATTERIES IN THE AIRCRAFT

GENERAL	1
PURPOSE	1
APPLICABILITY	1
RELATED REGULATIONS	1
RELATED ADVISORY CIRCULARS	1
CANCELLATION	1
EFFECTIVE DATE	2
OTHER REFERENCES	2
1 BACKGROUND	3
2 MANAGEMENT OF PEDS, STANDALONE LITHIUM BATTERIES AND RELATED LITHIUM BATTERY-POWERED ARTICLES THROUGHOUT THE AIRCRAFT	3
3 CHARACTERISTICS OF LITHIUM BATTERY FIRES	6
4 HANDLING LITHIUM BATTERY FIRES	7
5 USE OF FIRE CONTAINMENT PRODUCT TO HANDLE PED FIRE	10
6 CREW TRAINING	11
7 ACTION BY THE AOC HOLDER	12

GENERAL

Advisory Circulars (ACs) are issued by the Director-General of Civil Aviation (DGCA) from time to time to provide practical guidance or certainty in respect of the statutory requirements for aviation safety. ACs contain information about standards, practices and procedures acceptable to CAAS. An AC may be used, in accordance with section 11 of the Air Navigation Act 1966 (ANA), to demonstrate compliance with a statutory requirement. The revision number of the AC is indicated in parenthesis in the suffix of the AC number.

PURPOSE

This AC provides guidance on the safe carriage, use and management of PEDs, standalone lithium batteries and related lithium battery-powered articles throughout the aircraft. It also provides guidance on the prevention, detection and management of lithium battery-related incidents, including the use of Fire Containment Products (FCPs).

APPLICABILITY

This AC is applicable to an AOC holder operating an aeroplane in accordance with ANR-121.

RELATED REGULATIONS

This AC relates specifically to Regulations 10, 11, 12, 13, and 150 of ANR-121.

RELATED ADVISORY CIRCULARS

- AC 121-2-1 Guidance on Operational Procedures for ANR-121 Operations
- AC 92-2-2 Guidance on Dangerous Goods Carried in Passenger and Crew Baggage
- AC 91-2-2: Reporting and Investigation of Reportable Safety Matters

CANCELLATION

This AC supersedes AC 121-2-7(Rev 0). The revised AC expands the scope of guidance to cover the safe carriage and management of PEDs, standalone lithium batteries and related

lithium battery-powered articles throughout the aircraft, with enhanced area-specific risk assessment and response considerations for the passenger cabin, galley and flight deck. The AC also provides guidance on the use of Fire Containment Products (FCPs) as an additional fire mitigation tool, strengthens guidance on power banks and battery-powered mobility aids, and addresses crew training, communication protocols, post-incident management and crew welfare considerations following lithium battery incidents.

EFFECTIVE DATE

This AC is effective from 9 October 2026.

OTHER REFERENCES

- ICAO Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods (Doc 9481)

1 BACKGROUND

- 1.1 The use of PEDs and standalone lithium batteries such as power banks by passengers and crew has increased exponentially throughout the aircraft. An AOC holder may allow the use of PEDs on its flights provided approval is sought from CAAS.
- 1.2 PEDs brought onboard flights, including laptop computers, some children's toys/games, mobile phones, portable electronic tablets and readers, point-of-service devices and smart baggage are mostly equipped with lithium batteries. Standalone lithium batteries such as power banks are also carried onboard by passengers and crew. This has resulted in a significant increase in lithium battery presence within the passenger cabin. Importantly, lithium batteries in these devices can pose fire hazards and therefore increase the risk of battery fires.
- 1.3 Research has demonstrated that PED thermal runaway events present different risk profiles depending on their location within the aircraft. Thermal runaway events occurring in the galley or flight deck are of heightened concern, as the build-up of smoke and toxic fumes in these confined areas may impair the ability of the crew members to carry out their duties, potentially compromising flight safety.
- 1.4 This AC aims to provide guidance to the AOC holder for the safe management of PEDs and lithium batteries throughout the aircraft. The AC also provides guidance on the development of procedures to address potential in-flight fires involving PEDs and lithium batteries.

2 MANAGEMENT OF PEDS, STANDALONE LITHIUM BATTERIES AND RELATED LITHIUM BATTERY-POWERED ARTICLES THROUGHOUT THE AIRCRAFT

2.1 General Risk Management Principles

- 2.1.1 The AOC holder should recognise that the consequences of a lithium battery failure may vary depending on factors such as battery energy capacity, usage conditions, how quickly a thermal runaway situation is managed, and the operating environment. Different devices may also present differing risk profiles due to variations in device design and thermal management capability. Standalone lithium batteries and power banks may warrant additional operational controls due to their intended charging functions.
- 2.1.2 Beyond regulatory requirements, the AOC holder should adopt a risk-based approach within its SMS when establishing policies and procedures for the carriage and use of PEDs and lithium batteries. The AOC holder should consider the:
 - (a) differences in risk environments across aircraft areas including passenger cabin, galley, and flight deck, considering:
 - (i) physical layout of the aircraft area and accessibility of devices;
 - (ii) ventilation conditions on the accumulation of smoke and heat;
 - (iii) crew workload and operational constraints;
 - (iv) PEDs usage and charging behaviours in each area; and
 - (v) the ability of the procedures to support early detection, timely intervention, and incident containment.
 - (b) differences in risk characteristics between installed batteries in PEDs and standalone lithium batteries, including power banks.

2.1.3 Before allowing any PEDs and lithium batteries to be used onboard a flight, the AOC holder should ensure that it has:

- (a) established safety policies and procedures on the safe management of PEDs and spare batteries throughout the aircraft. These should include area-specific carriage and usage conditions, stowage and securing of devices, crew responsibilities and procedures in normal, non-normal and emergency circumstances (e.g. thermal runaway of lithium battery);
- (b) sought approval from the Director-General of Civil Aviation;
- (c) documented approved conditions for use and carriage in its operations manuals to guide operational personnel; and
- (d) briefed and trained operational personnel on their responsibilities and the operator's policies and procedures.

Note: The AOC holder should also manage the risk of electromagnetic interference to aircraft systems arising from PED use. Guidance on this is provided separately in AC121-1-2.

2.2 Personal PEDs

2.2.1 The AOC holder should adequately address the operational risks and establish procedures to govern the proper use of personal PEDs. These procedures include instructions:

- (a) to restrict the use of PEDs during aircraft refuelling;
- (b) to stow the PEDs properly at suitable locations during flight;
- (c) for crew and passengers to:
 - (i) not charge a device during taxi, take-off and landing phases;
 - (ii) monitor devices at all times while charging and/or using them, ensuring that they remain visible and readily accessible and promptly report any signs of swelling, smoke, or other abnormal conditions to facilitate timely crew intervention;
 - (iii) avoid adjusting their seats when their devices inadvertently dropped between passengers' seats and seek crew assistance instead; and
 - (iv) identify and to switch off PEDs when their carry-on baggage containing these devices is required to be checked-in and loaded into the aircraft cargo compartment.
- (d) for crew to carry out cabin checks before take-off and before landing, and regular in-flight cabin checks, to ensure that the conditions of use of the devices are adhered to.

2.3 Operator-Provided PEDs

2.3.1 For operator-provided PEDs and lithium batteries used for operational needs or in-flight entertainment, the AOC holder should adequately address the operational risks associated with their carriage, storage, charging and use. When establishing storage

arrangements and operational controls, consideration should be given to factors such as battery energy capacity, the quantity of devices or batteries stored together, accessibility for crew response and the potential thermal runaway propagation. The AOC holder should ensure that:

- (a) PEDs and spare lithium batteries are safely stowed, with no more than two operator-provided PEDs or batteries per enclosed location to mitigate consecutive thermal runaway risks;
- (b) Each storage location can support the weight of PEDs or batteries and other intended contents;
- (c) Each storage location (e.g. containers, drawers) can minimise the risk of lithium battery fires spreading to other PEDs or batteries;
- (d) PEDs are protected with a sleeve or cover to prevent damage or short circuit. The materials of the sleeve or cover should meet the flammability requirements (commonly known as 14 CFR 25.853 – Compartment Interiors or CS 25.853 – Compartment Interiors).

2.4 Spare / Standalone Lithium Batteries and Power Banks

2.4.1 For the safe management of spare / standalone lithium batteries, including power banks, the AOC holder should establish procedures governing their carriage, stowage and use during all phases of flight. Such procedures should be consistent with the carriage requirements, quantity limitations and approval provisions specified in AC 92-2-2, and should include instructions:

- (a) for the AOC holder to define acceptable handling and stowage conditions, considering the ability to promptly locate, access and manage affected batteries in the event of smoke, fire or thermal runaway;
- (b) for passengers to not stow spare batteries in the overhead baggage compartments. However, the AOC holder that intends to permit this should conduct safety risk assessments to identify potential hazards and implement appropriate mitigation measures to ensure crew accessibility and emergency response capability;
- (c) for crew and passengers to remove any standalone lithium batteries from their carry-on baggage when their carry-on baggage is required to be checked-in and loaded into the aircraft cargo compartment; and
- (d) for crew in addressing situations when informed by a passenger that standalone lithium batteries are left in checked baggage.

2.4.2 In addition to the above, power banks warrant additional operational controls due to their intended use as portable power sources and the potential risks associated with charging activities. The AOC holder should establish procedures addressing:

- (a) a prohibition on charging of power banks from aircraft power outlets at any time whilst onboard the aircraft; and
- (b) a default prohibition on the use of power banks to recharge other PEDs whilst onboard the aircraft. Where the AOC holder determines, following a safety risk assessment, that such use may be permitted under specific operational conditions, procedures should ensure that:

- (i) power banks are placed in a visible and accessible location when in use, to facilitate timely detection of abnormal conditions and effective crew response; and
- (ii) risks associated with charging-related thermal runaway are adequately addressed.

2.5 Battery-Powered Mobility Aids

- 2.5.1 In considering the carriage of battery-powered mobility aids, the AOC holder should adopt a risk-based approach, taking into account the higher energy capacity of such batteries and their potential impact in the event of a thermal runaway. The AOC holder should recognise that incidents involving mobility aid batteries may result in more severe and prolonged thermal runaway events, with potential implications for firefighting capability, passenger and crew safety, and aircraft operations.
- 2.5.2 The AOC holder should therefore consider, within its SMS risk assessments, appropriate procedures and operational controls for the carriage and management of battery-powered mobility aids, taking into account factors such as stowage arrangements, accessibility for incident response, interaction with aircraft ventilation systems, and pre-boarding condition checks. The assessment should also consider the characteristics of the batteries carried and whether additional operational controls, response measures, crew training, or onboard equipment should be provided to support the management of incidents involving higher capacity lithium batteries. The AOC holder should also refer to AC 92-2-2 and ICAO Doc 9481 for applicable carriage requirements and dangerous goods provisions relating to battery-powered mobility aids.

2.6 Passenger Information

- 2.6.1 The AOC holder should inform travellers before and during their journey on its policies, requirements, and restrictions relating to the carriage, storage, charging and use of PEDs and standalone lithium batteries. The information should include applicable carriage requirements, battery capacity and quantity limitations, requirements for the protection of spare and standalone lithium batteries, restrictions on charging and use, and guidance on responding to lithium battery related incidents.

3 CHARACTERISTICS OF LITHIUM BATTERY FIRES

- 3.1 A lithium battery poses significant safety risks when damaged, overcharged, exposed to extreme temperatures, or poorly manufactured. The primary danger is thermal runaway which may result in rapid overheating, fire, smoke emission and the release of toxic gases. The toxic gases and smoke released may potentially impair visibility, affect crew performance and complicate emergency response activities. Additionally, the fire can be intense and may reignite even after being extinguished.
- 3.2 Thermal runaway may occur during charging if batteries, charging systems, or associated protection mechanisms malfunction. The likelihood of such events may increase when the batteries are damaged, charged with incompatible charging equipment, manufacturing defects, or abnormal operating conditions. Charging activities may also generate additional heat, which can contribute to the initiation or escalation of thermal runaways. It is important that safety guidelines are established for proper charging practices, including using manufacturer-approved chargers and avoiding charging in extreme conditions.

- 3.3 Some devices such as laptop computers, e-tablets, mobile phones and video cameras use battery packs of multiple lithium battery cells. During a fire involving such battery packs, an individual cell may catch fire over a period of several seconds rather than a simultaneous combustion of all cells. The severity and duration of lithium battery fire may vary depending on factors such as battery capacity, number of cells, device design and the amount of energy available within the affected battery system.
- 3.4 Lithium battery fire may involve heat transfer between adjacent cells, batteries, or devices, which can result in propagation and secondary ignition. Such incidents may persist over extended periods and exhibit potential for re-ignition even after initial suppression.
- 3.5 Testing conducted by the FAA's Technical Centre has shown that halon is effective in suppressing flames but does not address internal cell-to-cell propagation. Therefore, this type of fire requires a combined use of halon for flame suppression and the use of water or any non-flammable liquid to impede heat propagation.

4 HANDLING LITHIUM BATTERY FIRES

4.1 General Response Principles

- 4.1.1 If a battery fire does occur, passengers and crew members may be exposed to a significant amount of smoke, toxic fumes, and heat. Such events may cause passenger distress, impair visibility, affect crew performance and complicate emergency response activities.
- 4.1.2 The AOC holder should recognise that lithium battery fire may involve multiple ignition events, extended durations, and significant production of smoke and toxic fumes, as described in section 3. Thermal runaway propagation may continue within the affected device or battery pack even after flames have been extinguished. Procedures should therefore emphasise sustained response actions, including continued cooling, monitoring for re-ignition, management of smoke and fumes, and protection of passengers and crew.
- 4.1.3 The AOC holder should ensure that procedures remain practical and executable during high-workload situations and promote effective crew resource management principles, including crew coordination, communication, workload management, passenger management, accessibility of equipment and human performance limitations during emergency response.
- 4.1.4 The AOC holder should ensure that the firefighting equipment carried onboard remains suitable for managing lithium battery fire involving the types of PEDs and lithium batteries carried. The assessment should include battery capacity, quantity of the devices, thermal runaway propagation, cooling requirements, response duration, and protection ability of the equipment.
- 4.1.5 The AOC holder should ensure that appropriate personal protective equipment (PPE), including protective gloves and smoke hoods or oxygen masks where applicable, is readily accessible and that crew members are trained in its use during lithium battery fire. The selection and positioning of PPE should account for the different response environments across the aircraft, recognising that crew in the flight deck and galley may need to don protective equipment more rapidly given the faster deterioration of conditions in those areas.

- 4.1.6 The AOC holder should establish clear communication protocols for lithium battery fire as part of its overall incident response framework. These protocols should ensure timely coordination between crew members during an active incident and should address post-incident reporting and notification requirements to relevant parties. Communication protocols should be compatible with existing crew resource management principles and standard operating procedures and should be regularly reviewed as part of the AOC holder's SMS process.

4.2 Tactical Response Procedures

- 4.2.1 A lithium battery-related fire should not be treated as a Class D (combustible metals) fire. Besides the standard emergency procedures that are used to deal with onboard fires, the following should be considered when fighting a fire that contains lithium batteries:

- (a) **Removal of External Electrical Power from Device (if applicable)** - This should be done in the earliest time possible (preferably before deploying any fire extinguishers) as a battery is more likely to catch fire through thermal runaway during or immediately following a charging cycle. By removing the external power supply from the device, additional energy would not continue to be fed to the battery that might promote a fire.
- (b) **Removal of Power to Remaining Electrical Outlets** - This should be done especially if the device was previously plugged in when the incident of smoke or fire happened. Additionally, if there is a malfunctioning aircraft system, it will not contribute to additional failures of other passengers' portable electronic devices.
- (c) **Use of Halon for initial suppression of fire/flame (if possible)** - As discussed in paragraph 3.5, halon may not be effective against a lithium battery fire. However, if a choice is available, the use of halon or FE-36 halon replacement extinguishers is more appropriate for the initial suppression of fire/flame than using water.
- (d) **Douse Device with Water (or other Non-Flammable Liquid)** - This is required to cool the cells and prevent adjacent cells from overheating and igniting. Sustained cooling is critical to reduce the likelihood of thermal propagation to adjacent cells or devices. Monitor the battery for recurrence and continually cool the device with non-flammable liquids before removing it for post management. The monitoring period should be at least 15 minutes. The AOC holder should recognise that the appropriate monitoring duration may vary depending on the physical size of the device and the severity of the thermal runaway event. Larger devices may require monitoring beyond 15 minutes, prolonged cooling, and continued application of water or non-flammable liquids to adequately confirm that thermal runaway has ceased. Crew should continue monitoring until there are no further signs of heat, smoke, or off gassing from the affected device. When cooling the device, the following should be considered:
 - (i) DO NOT cover the device with ice as this would only insulate the device increasing overheating and resulting in thermal runaway.
 - (ii) Caution should be exercised by the crew not to use liquids on, or in the immediate vicinity of any other piece of electrical equipment that is still connected to an electrical power source.
- (e) **Movement of the Device** - Do not pick up and attempt to move a burning device or a device that is emitting smoke as flames may suddenly ignite or reignite multiple

times as heat is transferred to other cells in the battery pack within the device. It is advisable to cool the device using water (or other non-flammable liquid); injuries may occur if the device reignites while it is being moved.

- (f) **Collate Information** – Procedures should be established for the crew to provide as much information as possible that may be required for thorough investigation of the incident. As a guide, the following should be initial information that could be collated by the crew from the passenger involved:
- (i) What was the type of device involved in the incident?
 - (ii) What was the manufacturer and model number of the device?
 - (iii) What was the battery capacity, if known?
 - (iv) Was the battery pack supplied by the device manufacturer or a third party?
 - (v) Was the device repaired, modified, damaged or replaced recently and who conducted the repairs/modification?
 - (vi) Was the battery being charged when the fire started?
 - (vii) Was the charging cable supplied by the airline or the passenger?

4.3 Aircraft Area Response Considerations

4.3.1 Passenger Cabin

- (a) For incidents occurring within the passenger cabin, procedures should consider sustained response actions, including continued cooling, monitoring for re-ignition, passenger management, and management of smoke and toxic fumes.
- (b) Within its SMS risk assessments, the AOC holder should consider factors such as cabin ventilation effectiveness, passenger exposure to airborne contaminants, and scenarios where affected devices may be inaccessible, to ensure that procedures remain practical across a range of incident conditions.

4.3.2 Galley

- (a) The AOC holder should recognise that galley areas may present different operational challenges during PED and lithium battery-related incidents due to confined areas, potential ventilation limitations, and the concentration of equipment and crew activities in a relatively small area. Research has indicated that conditions in galley areas can deteriorate rapidly following the onset of thermal runaway, with toxic gas concentrations potentially exceeding safety thresholds within a short period.
- (b) The AOC holder should consider, within its SMS risk assessments, whether differentiated response procedures, additional protective measures, or operational restrictions are required for PED and lithium battery use or charging in galley areas are warranted, taking into account the reduced time available for crew intervention and the potential impact on crew performance in these environments.

4.3.3 Flight Deck

- (a) The AOC holder should note that lithium battery incidents in the flight deck present the most critical risk environment due to the confined space, limited ventilation, and the direct impact on flight crew performance and flight safety. Research has indicated that conditions in the flight deck can deteriorate rapidly following the onset of thermal runaway, with visibility and toxic gas concentrations potentially reaching critical levels within a very short period, significantly impairing flight crew capability.

- (b) The AOC holder should therefore consider, within its SMS risk assessments, whether dedicated response procedures, enhanced protective measures, and operational restrictions on PED use and charging in the flight deck are warranted, taking into account the extremely limited time available for crew intervention, the potential impact on flight safety, and the need for compatibility with aircraft-specific systems and existing flight and cabin crew operating procedures.

4.4 Post-Incident Management

- 4.4.1 The AOC holder should also develop post-incident procedures for handling PEDs or lithium batteries involved in a fire or smoke event. These procedures should consider whether the device, could be returned to the passenger during flight or should be removed from the aircraft at the first point of landing as the damaged battery cells may still be charged and risk further thermal runaway. The AOC holder should also note the following when developing post-incident management procedures:

- (a) Some authorities may require the device to be placed in quarantine while awaiting the arrival of investigative authorities. Hence, considerations should be made to retain the affected device until all investigations have been completed by the investigative authorities.

- (b) The device manufacturer may also require the device so that they can conduct a failure analysis to determine the cause if it was so determined by the investigation.

- 4.4.2 Incidents involving smoke or fumes may have physical and psychological effects on crew members who were involved in its management. The AOC holder should establish processes to assess the crew member's fitness to continue flying following an incident in-flight.

5 USE OF FIRE CONTAINMENT PRODUCT TO HANDLE PED FIRE

- 5.1. The AOC holder may incorporate commercially available FCPs into its PED fire mitigation strategies following safety risk assessments to identify potential hazards and corresponding mitigating measures. The AOC holder should recognise that FCPs are intended as supplementary risk mitigation tools and should not replace established procedures such as cooling, monitoring and crew response actions (refer to 4.2.1).

- 5.2. The AOC holder should ensure that FCP deployment procedures are appropriate to the aircraft environment and consider operational factors such as crew workload, accessibility, and usability under emergency conditions.

- 5.3. When evaluating FCPs, the AOC holder should consider available technologies and their suitability for its fleet and operations, any potential benefits and limitations of containment approaches, crew safety and operational feasibility, and integration with existing emergency procedures and equipment. Selected FCPs should demonstrate capability to contain PED thermal runaway events and meet appropriate performance standards such as UL 5800 or equivalent, whilst allowing flexibility for emerging technologies. The AOC holder should recognise that FCPs are intended to contain the effects of a thermal runaway event and do not prevent thermal runaway from occurring and should ensure that the deployment of FCPs does not delay the prompt cooling of affected devices.

- 5.4. The AOC holder using FCPs should:

- (a) In addition to protocols outlined in paragraph 4.2, develop deployment requirements based on operational considerations including aircraft type (wide-body versus narrow-body layouts and crew ratios), route characteristics (short-haul versus long-haul or overwater operations), cabin configurations (premium versus high-density seating), and crew resources.
- (b) Consider alternative response methods when FCP use is inappropriate due to device size/damage, unsafe deployment locations, inaccessibility, or crew safety concerns.
- (c) Tailor procedures to match the unique features and requirements of the specific FCP product, including size limitations, deployment methods, mandatory cooling and monitoring periods before use, monitoring capabilities during containment, and post-incident handling. Procedures should emphasise that devices are monitored and cooled for an appropriate duration, typically at least 15 minutes, to ensure that thermal runaway has ceased before FCP deployment. The effectiveness of FCPs is dependent on prior cooling and may be reduced if applied during ongoing thermal runaway.

6 CREW TRAINING

- 6.1 Firefighting training is mandatory for crew members as the first line of defence against onboard fires. This training enables crews to quickly identify, contain, and extinguish aircraft fires. As aviation risks evolve with advances in technology and changes in passenger behaviour, firefighting procedures and associated training should be regularly reviewed and updated, if necessary, to maintain crew competency and operational readiness. Refer to AC121-9-5 for SEP training details.
- 6.2 The AOC holder should implement the necessary training to ensure its operational personnel including crew members are appropriately trained and familiar with the policies, processes and procedures as highlighted in paragraphs 2, 3, 4 and 5, following any review or update to its PEDs/standalone lithium batteries policies, processes and procedures.
- 6.3 The AOC holder should ensure that training programmes emphasise the recognition of elevated-risk conditions, including charging activities, damaged cables, physically damaged devices, swollen batteries, and unattended charging. Training should also address smoke and fume hazards, response considerations for lithium battery incidents occurring in different aircraft locations such as the passenger cabin, galley and flight deck, and situations where devices or batteries have become inaccessible or trapped within aircraft furnishings. Training should further address crew resource management principles, workload and passenger management during the incident. Where practicable, the AOC holder should incorporate scenario-based training that reflects extended duration events and potential re-ignition characteristics of lithium battery incidents.
- 6.4 The training in relation to the carriage of PED/standalone lithium battery should include the following:
 - (a) Procedures for cabin checks before take-off, before landing, and during flight to ensure compliance with the applicable restrictions on carriage and use of the devices, and for the identification, reporting and management of non-compliance or lithium battery related hazards, including notification to ground staff before departure or to the flight crew after push back or in flight;

- (b) Procedures for handling, cooling, monitoring and where appropriate, stowing affected devices;
- (c) The importance of applying water or other non-flammable liquid to cool the faulty device and minimise thermal runaway propagation;
- (d) Scenario-based training in managing lithium battery fires in various locations, including overhead bins, seat pockets, and other cabin areas where the PEDs and/or standalone lithium batteries may be stowed.
- (e) Training on the use, capabilities and limitations of all onboard fire-fighting and protective equipment, including management of lithium battery incidents involving higher-capacity batteries, thermal runaway propagation, or prolonged thermal runaway situations. The AOC holder utilising FCPs should ensure crew training addresses the principles and limitations of the chosen FCP approach.
- (f) Procedures for the collection and preserving relevant information relating to lithium battery incidents to support occurrence reporting, investigation and safety analysis.

7 ACTION BY THE AOC HOLDER

- 7.1 The AOC holder should incorporate the guidance provided in this AC when developing and maintaining policies, procedures and training programmes for the management of PEDs, standalone lithium batteries and related lithium battery-powered articles throughout the aircraft. The AOC holder should ensure that these are reviewed and updated periodically, and following significant lithium battery incidents, to reflect operational experience, emerging research findings, and changes in the types of devices and batteries carried onboard.
- 7.2 For information on the types and quantities of lithium batteries permitted to be carried by crew and passengers in their baggage, the AOC holder may refer to CAAS AC 92-2-2. For guidance on handling fires involving PEDs or standalone lithium batteries, the AOC holder may also refer to ICAO Doc 9481.
- 7.3 Report to CAAS, events or anomalies related to the use of lithium battery(ies) and/or standalone lithium battery(ies) in the passenger cabin during any phase of flight. The reporting procedure can be found in CAAS AC 91-2-2: Reporting and Investigation of Reportable Safety Matters.