

IATA SIRM DAKAR 24-25 APRIL  
2024

# Cabin Safety.

LIMAM ABBE / Cabin Crew

Mauritania airlines



# Main Points.

- Safe transport of batteries .
- FIRE on board.
- Unlawful interference.
- Inadvertent deployment of emergency slides.
- Treating unruly passengers.

## THE SAFETY ROLE OF CABIN CREW

Traditionally, the role of cabin crew members focused on the evacuation of an aircraft in the event of an accident. However, cabin crew members also play an important proactive role in managing safety, which can contribute to the prevention of accidents. This role includes, but is not limited to:

- ✓ Preventing incidents from escalating in the cabin, such as smoke or fire;
- ✓ Informing the flight crew of abnormal situations observed in the cabin or relating to the aircraft, such as pressurization problems, engine anomalies, and contamination of critical surfaces;
- ✓ Preventing unlawful interference and managing passenger events that can compromise safety and security of the flight, such as hijackings.

# Introduction

**Welcome to today's presentation on the safe transport of batteries and handling various in-flight emergencies. We'll discuss the risks associated with batteries, the potential for fires on board, and how to prevent them. We'll also cover unlawful interference, inadvertent deployment of emergency slides, and strategies for treating unruly passengers. Let's delve into these crucial aspects to ensure safe and secure air travel for everyone on board.**



# Safe Transport of Batteries



- **Classification:** Batteries are classified based on type, size, and composition.
- **Quantity Limits:** Limits on the quantity and size of batteries per passenger or aircraft.
- **Packaging:** Batteries must be properly packaged and protected to prevent damage.
- **Declaration:** Passengers may need to declare spare batteries during check-in or screening.
- **Terminal Protection:** Terminal protection may be required for lithium batteries.
- **Prefer Carry-On:** It's safer to carry batteries in carry-on luggage.
- **Stay Informed:** Passengers should stay updated on any changes to regulations.



# Portable Electronic Devices (PEDs)

The problem of interference to aircraft electronic equipment radio, navigation and communication systems from passengers operated portable electronic devices are long known. It should also be noted that the vulnerability of aircraft, radio navigation and communication systems might be greatest during

Take-Off,

Approach and Landing phases of flight.

DEPARTURE will be from Engines start (push back) until “Fasten Seat Belt” Signs are switched “OFF” during climb or 10,000 feet whichever is higher.

ARRIVAL will be from 10,000 feet until “Fasten Seat Belt” Signs are switched “OFF” at the gate/steps.

Interference to these aircraft systems, particularly when the aircraft is at low altitude is of great concern. This is due to the short response time available to Flight Deck Crew to recognize and make necessary corrective actions.

# Procedure

## References:

- **IATA Cabin Operations Safety Best Practices Guide**
- **FAA Cabin Safety Inspector Handbook**

In the event of an **overheated battery**, cabin crew follow these procedures:

1. **Identification:** Recognize signs of overheating, such as smoke or unusual odor.
2. **Isolation:** Remove and isolate the affected device or battery to prevent further damage.
3. **Containment:** Place the overheated battery in a fire-resistant container if available.
4. **Alerting:** Notify the flight deck crew immediately to assess the situation.
5. **Emergency Response:** Initiate emergency procedures if necessary, including firefighting measures and passenger communication.
6. **Documentation:** Document the incident for reporting and analysis.

In a 2017 incident, a laptop battery overheated on a transatlantic flight, emitting smoke and heat. Cabin crew quickly isolated the laptop, contained the overheated battery in a fire containment bag, and alerted the flight deck crew. Despite not escalating into a fire, crew remained vigilant and reassured passengers. The aircraft safely landed, and the incident highlighted the importance of proactive monitoring, rapid response, and effective communication in handling onboard emergencies.





# FIRE



**A fire on board an aircraft is a critical emergency requiring immediate action due to the enclosed environment and high risks involved. Originating from various sources like electrical faults or engine issues, fires can escalate quickly, jeopardizing safety and potentially causing catastrophic consequences. Aircraft are equipped with specialized firefighting equipment and crews undergo rigorous training to handle such emergencies. Preventive measures, regular maintenance, and passenger awareness are essential to minimize risks and ensure a swift response to manage the situation effectively.**

## Common causes of fires on board an aircraft include:

1. **Electrical Malfunctions:** Faulty wiring or equipment.
2. **Engine Issues:** Engine malfunctions or failures.
3. **Spontaneous Combustion:** Lithium batteries or hazardous cargo.
4. **Overheating:** Machinery or components.
5. **Fuel Leaks:** Leaking fuel.
6. **Galley Fires:** Cooking equipment malfunctions.
7. **Smoking Materials:** Improperly discarded cigarettes.
8. **Cargo Compartment Issues:** Improperly packaged or hazardous materials.

Prevention, regular inspections, and safety protocols help minimize these risks.



# The cabin crew's fire procedure on an aircraft involves:

1. **Detection:** Identify fire or smoke.
2. **Notification:** Alert the flight deck and crew.
3. **Containment:** Try to confine the fire.
4. **Firefighting:** Use onboard extinguishers to put out the fire.
5. **Evacuation:** Prepare for emergency evacuation if needed.
6. **Communication:** Keep passengers informed and calm.
7. **Assistance:** Help passengers and ensure everyone is safe.
8. **Post-Emergency:** Debrief and report to authorities.



## Prevention of fires on board an aircraft includes:

1. **Regular Maintenance:** Maintain aircraft systems and wiring.
2. **Hazardous Materials:** Proper handling and storage.
3. **No-Smoking Policy:** Strict enforcement.
4. **Galley Safety:** Maintain cooking equipment and fire suppression.
5. **Cargo Safety:** Proper packaging of cargo.
6. **Crew Training:** Fire prevention and firefighting drills.
7. **Fire Detection:** Effective smoke and fire detection systems.
8. **Fire Equipment:** Availability and maintenance of firefighting tools.

# Unlawful Interference

**Unlawful interference on board an aircraft refers to acts that threaten its safety and security, such as terrorism, hijacking, or unruly behavior. These incidents pose serious risks to passengers, crew, and the aircraft.**

**Airlines and authorities enforce strict security measures and train crew to handle such situations, emphasizing the importance of safety and vigilance in aviation.**



## To prevent unlawful interference on board an aircraft:

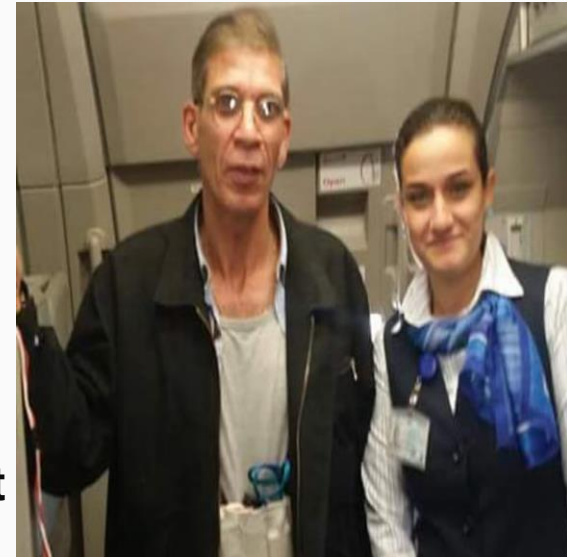
1. **Enhanced Security:** Rigorous passenger and baggage screening.
2. **Crew Training:** Train crew in security and threat response.
3. **Cockpit Security:** Secure cockpit doors.
4. **Surveillance:** Monitor passenger behavior.
5. **Communication:** Clear protocols with authorities.
6. **Intelligence Sharing:** Collaborate on threat information.
7. **Passenger Awareness:** Educate on security measures.
8. **Legal Measures:** Strict penalties for interference.



**These measures help ensure safer flights and deter potential threats.**

## Recent hijacking incident occurred in 2016 involving an EgyptAir flight.

**In 2016, EgyptAir Flight MS181 was hijacked en route from Alexandria to Cairo and diverted to Larnaca, Cyprus. The hijacker claimed to have an explosive belt, later found to be fake. After negotiations, all passengers and crew were safely released, and the hijacker was arrested. This incident emphasized the need for effective crisis management in response to hijacking threats.**



# Inadvertent deployment of emergency slides

The inadvertent deployment of emergency slides poses a significant safety risk during airline operations. This occurrence, while rare, can lead to flight delays, passenger injuries, and costly maintenance. Understanding the causes and implications of inadvertent slide deployment is crucial for cabin crew members to effectively mitigate risks and ensure passenger safety.





# Causes

The main causes of inadvertent deployment of emergency slides typically include:

- mechanical malfunctions
- human error during maintenance
- pre-flight checks
- issues with door or slide systems.

Understanding and addressing these causes are essential for preventing such incidents and ensuring passenger safety.



# Mitigating the risk



1. Provide robust training for crew.
2. Ensure strict maintenance adherence.
3. Improve design for fail-safe mechanisms.
4. Establish clear procedures for crew response.
5. Maintain effective communication channels.
6. Conduct regular audits for safety assurance.

# Unruly passengers

Unruly passengers pose a significant challenge to airline safety and security. These individuals may exhibit disruptive behavior such as verbal abuse, physical altercations, or non-compliance with crew instructions. Understanding how to effectively manage unruly passengers is essential for cabin crew to maintain a safe and secure cabin environment for all passengers and crew members.



# Treating an unruly passenger



**Treating an unruly passenger involves:**

**(Always inform flight deck crew)**

- 1. Assessing the situation.**
- 2. De-escalating with calm communication.**
- 3. Asserting authority and reminding of rules.**
- 4. Seeking assistance if needed.**
- 5. Documenting the incident.**
- 6. Involving law enforcement if necessary.**
- 7. Restraint as a last resort.**
- 8. Reporting for follow-up action.**

# Conclusion

**In conclusion, understanding the safe transport of batteries and being prepared for in-flight emergencies are vital for maintaining the safety and security of air travel. By addressing these topics proactively and equipping ourselves with the necessary knowledge and protocols, we can mitigate risks and ensure a safer journey for passengers and crew alike. Thank you for your attention, and let's continue to prioritize safety in all aspects of aviation.**



“A good discussion increases the  
dimensions of everyone who takes part”

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- Randolph Brown

Thanks!

