

Update: FAA Personal Electronic Device (PED) Video Project



Federal Aviation
Administration



Presented to: Systems Group

By: Thomas Maloney, FAA Fire Safety

Date: August 4, 2020

Background

- **The lithium batteries in Personal Electronic Devices (PED's) sometimes go into thermal runaway on aircraft.**

https://www.youtube.com/watch?v=TvZoCAnp_Ug

- **Some events aboard aircraft (from FAA hazmat website):**

As of January 22, 2020, 268 air/airport incidents involving lithium batteries carried as cargo or baggage that have been recorded since January 23, 2006

Note: These are recent events that the FAA is aware of; this should not be considered a complete listing of all such incidents. The incident summaries included here are intended to be brief and objective. They do not represent all information the FAA has collected, nor do they include all investigative or



Introduction

- An FAA led group is creating two informational videos about PED fires to help industry develop firefighting procedures.
 - Video for flight deck
 - Video for cabin
- Video will include:
 - What to expect from a phone, tablet, or laptop
 - What firefighting may look like when the device is in various locations
 - What add-on hazards may be present that should be taken into consideration.



Background – Informational Videos

- **All documents say about the same thing: Extinguish fire and then douse with non-flammable liquids.**
 - SAFO 09013: Procedures for Handling PED fires
 - ICAO 9481
 - CAA Battery Videos: Covers various scenarios of PED fires
 - InFO 17021: FAA position on fire containment bags for PED's



Civil Aviation Authority Battery Video (UK version of FAA)

- <https://youtu.be/pOiwEW54xL8?t=465>
 - FAA video intends to go into greater detail about possible mitigation techniques for additional scenarios.



Video

- **Both FAA videos have a shared introduction. The goal is for each video to be a few minutes:**
 - Introduction:
 - Introduces lithium batteries, where they exist, how they react in thermal runaway, basic firefighting principles including immediate action etc.
 - Flight Deck:
 - Demonstrates what firefighting looks like after a PED overheats in the flight deck.
 - Highlights oxygen hoses as an added hazard.
 - Cabin:
 - Highlights overhead bin, under seats, etc.



Script

- **Highlights:**
 - Immediate action
 - Extinguisher to knock down flames, liquids to cool



Current Status

- **Videos are nearly complete and are planned/expected to be finished this fiscal year.**
- **Once finished the FAA will determine an appropriate method of releasing them to the public.**



Future Work

- **More videos for baggage handlers, gate agents, airport security...**



Questions?

- **Contact**

- Thomas Maloney
- Office: 609-485-7542
- Thomas.Maloney@faa.gov

