Thermal Runaway Containment Bags

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By: Thomas Maloney, FAA Fire Safety
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Background

• In response to the ongoing threat of thermal runaway in Portable Electronic Devices (PED), many companies have created PED containment products.
• There is currently not a standard in place to qualify the performance of any of the products.
• UL formed a committee to create a standard.
Introduction

- So far the UL STP 5800 committee has met two times and UL has performed numerous tests in support of development.
- Many containment products are created with the intent of containing a device while it is in thermal runaway.
Containment Bags

• Potential concerns with some containment bags if they are used as designed:
  – Retrieving, opening and operating a containment product will delay response time. Immediate action with cooling is a key component in mitigating thermal runaway propagation.
  – Many products require handling the device. This may increase the potential for injury.
  – Many products trap heat and further increase the likelihood of propagation.
FAA and Containment Bags

• SAFO 09013 is still valid and containment bags can be used as long as:
  – Immediate action of flame extinguishment and sufficient cooling with non-alcoholic liquids has been performed first.
  – At this point, the device should no longer be a threat.
Questions?

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