

International Aviation Safety Fire Protection Working Group

October 21-22, 2015

Atlantic City, NJ

UPS Airline Safety Enhancements

- Fire Resistant Containers (FRC)
- Fire Containment Covers (FCC)
- Flight Deck Improvements



Fire Resistant Containers (FRC)

- Fire Resistant Containers (FRC) are designed to contain a fire for 4 hours
- UPS is working to acquire a Supplemental Type Certificate (STC) for an FRC with a built in suppression system



Fire Resistant Containers (FRC)

- 2015 and future testing geared towards controlling ignition of flammable vapors
- FRC modifications underway
- Testing will continue in 2016



Fire Containment Covers (FCC)

- FCCs are treated fabric covers designed to starve a fire of oxygen and contain it for 4 hours
- FCCs cover high-energy shipments and unknown palletized freight from origin to final destination



Fire Containment Covers (FCC)

- On March 18, 2014, FAA conducted a **FCC Fire Test** with 5000 lithium-ion batteries
- Test duration of 4 hours was obtained with a peak temperature of 1500F



Fire Containment Covers (FCC)

- UPS engineered a solution that requires no additional time to place a FCC on a pallet than a cargo net
- UPS has 575 FCCs in service and has covered 9000+ palletized shipments



Flight Deck Improvements



Full-Face Oxygen Masks

- UPS has refitted our entire fleet with quick-donning, one piece face masks that provide a higher level of safety
- Full-Face Masks reduce operational complexity and allow a better fit and more effective mask purging



Emergency Vision Assurance System

- Emergency Vision Assurance System (EVAS) is being installed on all UPS aircraft
- EVAS provides a clear view of primary flight instruments and outside the front windshield



Emergency Vision Assurance System



Final Thoughts...

- A greater level of aviation safety is possible
- Industry and regulators need to work together to develop fire-safety certification rules and standards reflecting current (and future) technologies
- If we do our jobs well, aviation safety will be greatly enhanced

Questions?

