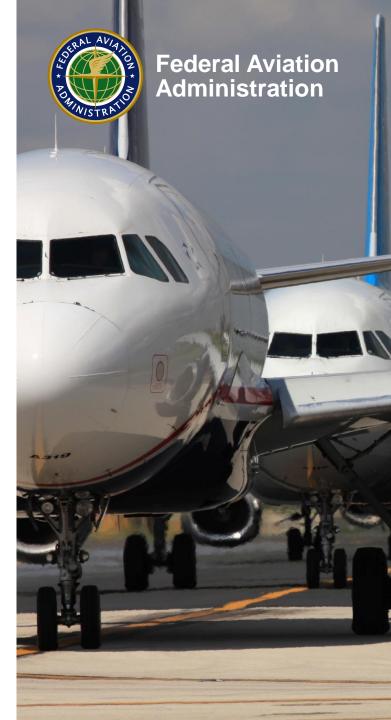
# Unit Load Devices (ULD)

Presented to: IGHC Ground Handling Conference Members and ULD CARE Conference Members

By: Wende T. DiMuro, Aviation Safety Inspector, AFS-330, Air Carrier Maintenance Branch

Date: 8,9 May 2013



# FAA Looks at Unit Load Devices

**Objectives:** 

- Look at the Past, Present and Future
- FAA Guidance
- Training



# THE PAST



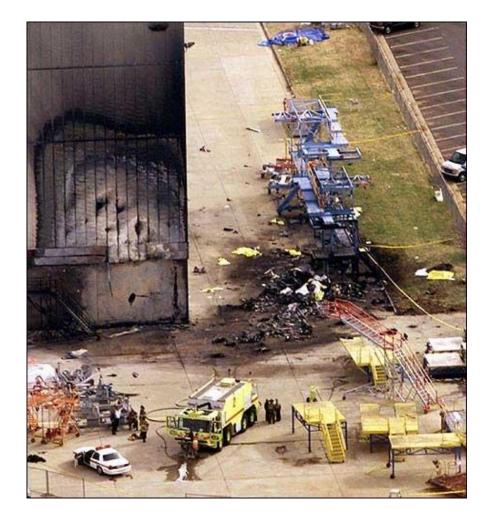
#### **Fine Air**

## Miami, FL 1997





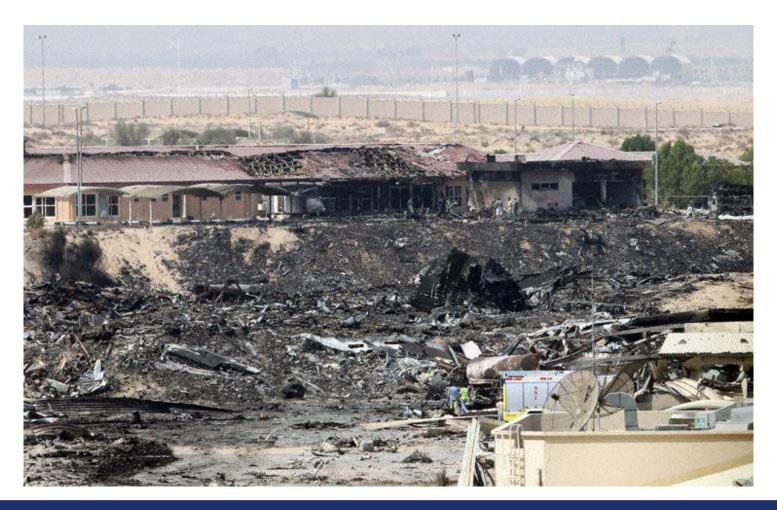
### **US Air Express Charlotte, NC 2003**





#### UPS

### **Dubai 2010**





# **Cargo Accidents**

- Fine Air Part 121 supplemental air carrier; (cargo)
- US Air Express Part 121 scheduled passenger flight; (passengers and cargo)
- UPS- Part 121 supplemental, domestic and flag air carrier; (cargo)



## **FAA Response**

- Development of Advisory Circular (AC) 120-85, Air Cargo Operations
- Safety Alert for Operators (SAFO) 10017. Risks in Transporting Lithium Batteries in Cargo by Aircraft
- FAA Order 8900.1, Flight Standards Information Management System (FSIMS)



# THE PRESENT



## **Expansion of Cargo Carriers**









## Loading









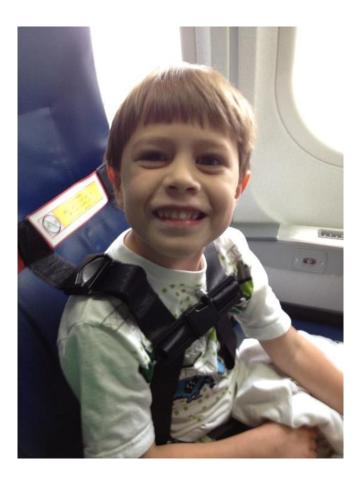


# Who is Handling Cargo?

- Part 121 & 135 passenger carriers carry more cargo
- Major cargo carriers contract with other operators for pilots & aircraft
- Cargo transported:
  - By all type operators (Part 91, 121, 125, 135)
  - In various aircraft sizes & configurations



# **FIRST FLIGHT!**



- What was in the cargo compartment of his first flight?
- Was it HAZMAT?
- Was it properly manifested?
- Was it properly secured?
- Was a loved one of yours on this flight?



# **THE FUTURE**



## **Cargo in Space**





## **FAA Guidance and Regulations**







## Title 14 Code of Federal Regulations

- Part 43- MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION
  - §43.13 Performance rules (general)
  - §43.13(b)
- Part 45- IDENTIFICATION AND REGISTRATION MARKING
  - §45.15(b) TSO articles



## **FAA Guidance**

- AC 120-85, Air Cargo Operations
- AC 120-27E, Aircraft Weight and Balance Control
- TSO-C90d, Cargo Pallets, Nets and Containers (Unit Load Devices)
- TSO-C172, Cargo Restraint Strap Assemblies
- Order 8900.1, Vol. 3, Ch. 47 & 48



## **Resources for Information**

- Flight Standards Information Management System (FSIMS):
  - http://fsims.faa.gov
  - www.MYFAA.GOV
- Operator manual system:
  - Operations specification (OpSpecs)
  - Management specification (MSpecs)
  - Approved Weight and Balance Program



### **Training for the Future**





## **Operators and Cargo Handlers**

- Should facilitate cultural changes in their organizations
- Know that ULD's are considered part of the aircraft and must be maintained to highest degree of airworthiness
- Promote basic principles of safe ULD build up



## **Cargo management:**

- Aircraft are properly loaded within weight and balance / CG limits
- Aircraft & cargo restraint components are properly maintained
- All cargo personnel are adequately trained



# **Air Cargo Operations Course**

- FAA Academy offers the following course which is opened to industry
- Air Cargo Operations Course 21000056
- Contact the FAA Academy at: <u>www.MYFAA.GOV</u>
  - Under Learning & Development, for course offerings



## Summary

- We discussed the past, present and the future of cargo
- Reviewed Federal Regulations
- The need of training for operators and ground handlers
- The culture change required for cargo safety

