# Double Standards in Cargo Safety Aircraft Rescue & Fire Fighting



#### NTSB Air Cargo Safety Forum

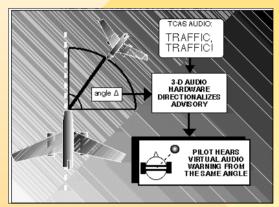
Captain Shannon L. Jipsen

Independent Pilots Association

Washington, DC

March 30 - 31, 2004

#### Other Double Standards for Cargo



From NASA Ames



→ TCAS —Traffic Collision
Avoidance System

→ Fire Detection & Suppression



NTSB Chairman Ellen Engleman-Connors stated, "The goal of this forum is to augment and support industry - government dialogue on air cargo safety and to help advance the important work currently being done in this area. Air cargo is a critical segment of our transportation system and we need to do all we can to ensure that the highest safety standards are maintained."

March 5, 2004 NTSB Press Release

Fed Ex, MD-11, EWR: July 31, 1997



# Fed Ex DC-10, Newburgh, NY September 5, 1996



"Plans should take into consideration the types of hazardous materials incidents that could occur at the airport based on the potential types and sources of hazardous materials passing through the airport." NTSB final report



# HAZMAT

Hazardous Materials Regulations. Part 139 requires the airport operator to address response to HAZMAT incidences occurring on the airport in the airport's emergency plan.

29 CFR parts 1910.120 and 1910.134 state specific standards which must be followed when performing emergency operations in HAZMAT and Immediately Dangerous to Life and Health (IDLH) situations.

29 CFR Part 1910.120 recognizes in its definitions that <u>aircraft</u> are considered a facility where HAZMAT must be handled in an approved way. The <u>Incident Command Structure</u> of 1910.120 requires a <u>minimum of 6 people</u> to respond to a HAZMAT situation.



## **HAZMAT Comparison**

	located?	Fire Detection / Suppression on board?	<u>NOTAC</u>	HAZMAT hotline?	Who knows what's on the plane?
<u>UPS</u>	All over plane	Detection on top & bellies  SUPPRESSION in some bellies	Envelope	1-800- 554-9964 Support Cntr.	Crew & Originating Gateway
FED-Ex	All over depending on type	Detection on top & bellies SUPPRESSION only in HAZ cans	Envelope	Yes 1-800-GO FEDEX	Crew & Hotline
<u>Airborne</u>	Accessible	Detection only  NO SUPPRESSION	Sheet of paper	Yes 1-800- 736-3973 ext. 2450	Crew & FOCUS Computer



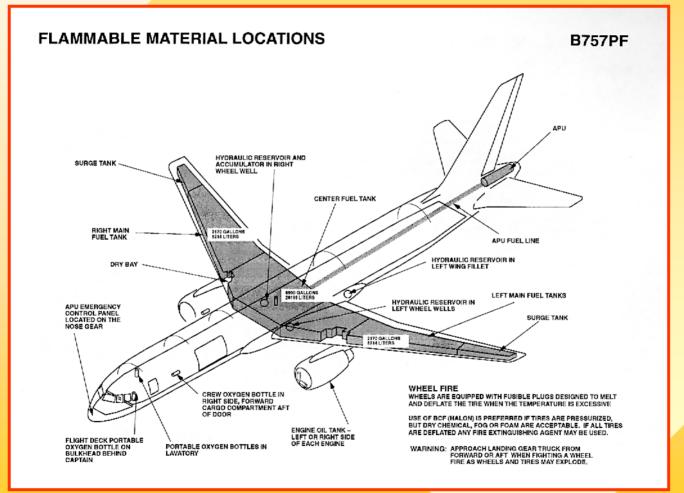


Cargo A-300Main CargoCompartment

Cargo B-727
Main Cargo Compartment



# Potential Hazards Fuel & Hydraulic Fluid





## Fine Air DC-8 MIA August 1997



**Smoldering composites produce toxic gases** 



### MIA ARFF responded in 2 min— 5 fatalities from impact



# UPS B-767 Accident EFD Sept. 11, 1998



Cargo Investigations many times are put aside as low priorities due to "insignificant loss of life" however, there is much to be learned from cargo accidents. This is another double standard in the industry.



## UPS DC-8 Chicago, Aug. 1999



Pilot / ARFF communications may have prevented aircraft damage & injury to crewmember



# Emery Worldwide DC-8 MHR February 16, 2000 3 fatalities



MHR: still not a Part 139 certificated airport. No tower, no ARFF at the time of the accident.



#### July 26, 2002 Tallahassee, FL B-727





#### 14 CFR Part 139



Establishes the criteria for an airport operator to receive & retain an airport operating certificate applicable to airports which receive scheduled and unscheduled air carrier aircraft designed for more than 9 passenger seats.

Note: This now depends on Class I-IV per the Feb. 10, 2004 document

→ ICAO & NFPA base ARFF on size of aircraft, not use

→ The US DOT recognizes <u>Large Certificated Air Carriers</u> as a/c with a seating capacity of more than 60 or a <u>maximum payload capacity of more than 18,000</u> <u>pounds.</u>



## Title 49, US Code 44706

US Code 44706 must be changed so that the Applicability of 14 CFR Part 139 would include air carriers conducting all cargo air transportation with aircraft having a maximum gross take-off weight of 33,000 pounds (15,000 kg) or greater.





# Current Airport Index Requirements per 14 CFR Part 139

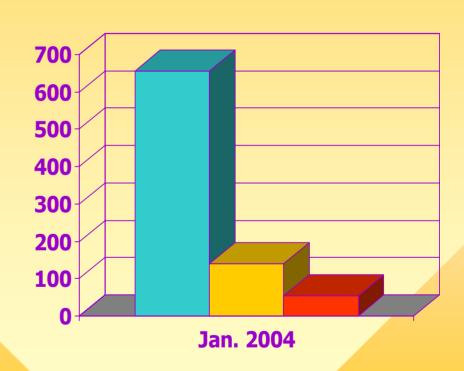
Index Required	Aircraft Length	Example of Aircraft Type	ARFF Fire Apparatus Required	ARFF Personnel Required	Gallons of Water Required by FAA
(139.315)	(139.315)		(139.317)	(139.319)	(139.317) "Escape Path Only"
Index A	<90'	ATR-72	1	1	100
Index B	90' to <126'	737-300	1 or 2	1 or 2	1,500
Index C	126 to <159'	727 / 757	2 or 3	2 or 3	3,000
Index D	159 to <200'	767 / DC-8 / A-300	3	3	4,000
Index E	200' +	747	3	3	6,000

UPS Examples: SDF—current Index C, but have Index E resources for cargo B-747, BFI--A (757), CID--B (757), DEC--A (727), ABY--A (757), FSD--B (757), FWA--B (727), HRL--B (757), & SBN--B (757) are a few that if based on weight rather than PAX seating, could require greater ARFF resources.



## Number of Part 139 Airports Potentially Affected...8%

- 656 current certificated airports
- 141 certificated airports currently used by Cargo Carriers
- 53 certificated airports
   <u>might</u> be affected if
   Cargo Carriers included
   in Part 139



Information Sited from: FAA 14 CFR Part 121 & 139 Final Rule dated February 10, 2004, FAA Airport Facility directory dated May 15, 2003 – July 10, 2003, www.airnav.com, and UPS, Fed Ex, and Airborne Express.



#### Cargo Trends...

- According to Boeing World Air Cargo Forecast 2000-2001 Report, "During the <u>next 20 years</u>, the <u>freighter</u> fleet is <u>expected to double</u>..."

  Their 2002-2003 report stated, "The freighter fleet will increase over the next 20 years...History shows a doubling of the jet freighter fleet every 10 years to meet the air cargo sector's vibrant growth."
- → UPS 2002 Annual Report: For the year ended December 31, 2002, international package revenue improved 10.2% or \$435 million (8.1% currency-adjusted...In total, international package average daily volume increased 0.7%
- → FedEx 2003 Annual Report: International Priority volume up 9%
- → US Bureau of Transportation Statistics March 10, 2004: ...the TSI (Transportation Services Index) for freight increased 2.9 % in December 2003...and was 1.2 percent higher than the December 2002 level.

Around the world...cargo is growing & here to stay



#### **Contact Information**

#### Shannon L. Jipsen

**IPA Accident Investigation Committee Chairman** 

- 1-800-285-4472 ext. 2844
- AV8MOTIV8@aol.com



