

# Cargo Outlook

March 2007  
FAA Aviation  
Forecast  
Conference



# Cargo Trends



- ✈ **Boeing Cargo Forecast**
  - **Traffic to expand at 6.1% CAGR**
  - **Asia will lead**
  - **China highest potential**
  - **Intra-Asia/Europe-Asia strong**
  - **North America/Europe slower**

# Cargo Segment Trends



## ✈ International Express

- Growing faster than combined rate

## ✈ Domestic Express

- Growing with the economy

## ✈ Scheduled and Charter

- Steady growth
- Charter doing well past several years
- Dependence on DOD

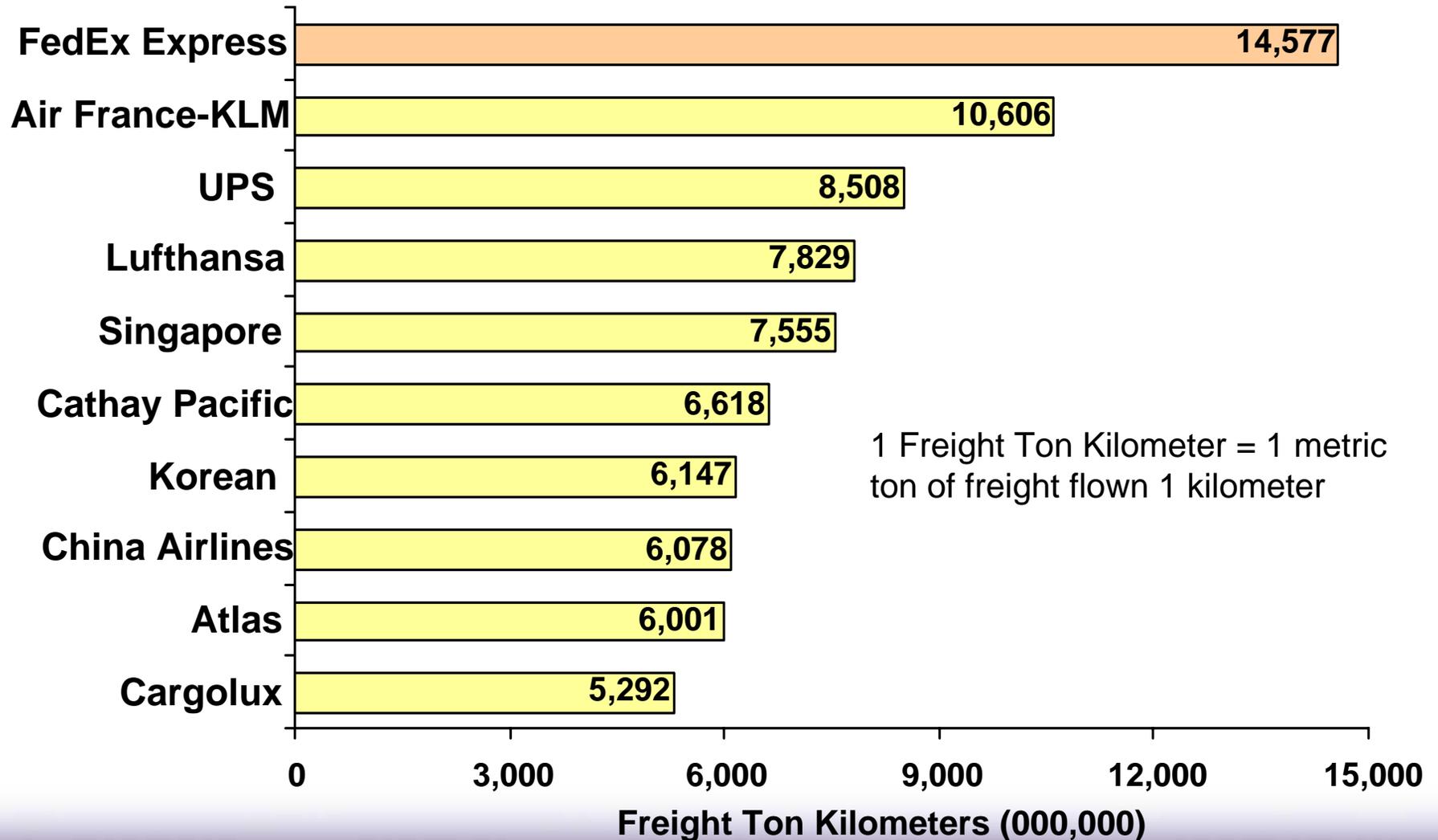
# Cargo Segment Trends



## ✈️ **Belly Freight – to 2011**

- **Transatlantic capacity growing at 4.9%**
- **Transpacific capacity more robust 8.9%**
- **As with all-cargo, Europe-Asia doing well, capacity forecast at 9.9%**
- **Belly capacity growing slightly faster than demand**
- **Freighter traffic growth outpacing pax traffic growth**

# World Cargo Freight Ton Kilometers



# Key Issue: Air Traffic Modernization



- ✈ **Airspace is an economic growth enabler and a finite national resource. It must be:**
  - **Allocated efficiently and supported by infrastructure and an efficient service provider**
  - **Coupled with matching aircraft navigational performance requirements**
  - **Designed to accommodate tremendous growth and usage**

# Key Issue: Aircraft Modernization

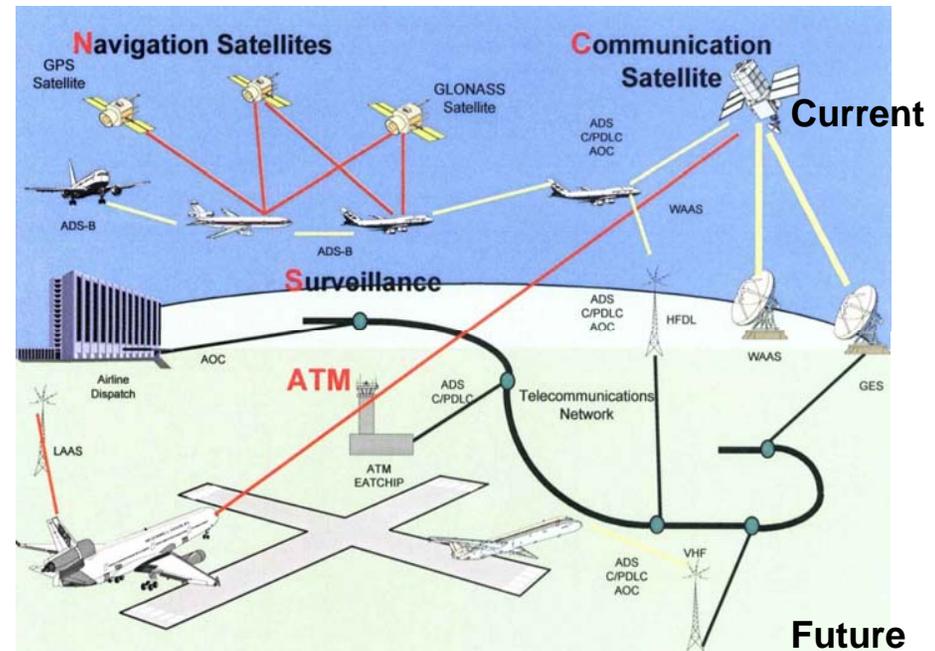


## ✈️ Programs

- Communication
- Navigation
- Surveillance

## ✈️ Issues

- Cost shift to acft
- Older equipment
- Intl compatibility



# Key Issue: Safety



## ✈ Main Deck Fire Suppression System

- Thermal detection
- Container fires extinguished by foam
- Pallet fire suppressed by fire retardant bag



Pallet Bag

# Key Issue: Safety

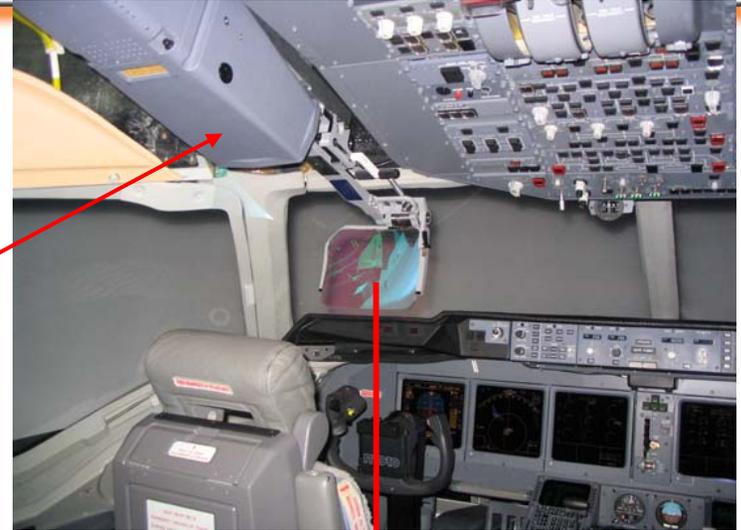


## ✈ Head-Up Display / Enhanced Flight Vision System

- Flight guidance
- Infrared sensor provides

- “Night into day” image
- Airport image thru cloud

HUD



EFVS  
infra-red  
imagery



# Key Issue: Cargo Security



- ✈ **Global Harmonization**
  - **Terrorism is global**
  - **Multi-lateral approach optimal**
  - **Prevent bottlenecks; control cost**
  - **Mutual recognition is key**
- ✈ **Balanced Legislation**
  - **Flexible, layered approach**
  - **Threat-based solutions by mode**
  - **Win-Win for security and commerce**

# Key Issue: Security



Counter  
MANPADS  
unit

- **Counter MANPADS Program**
- **Eleven FedEx MD-10 aircraft in operational testing**
- **Passenger 757 and DC-10 in development**

# Key Issue: Emissions



- ✈ **Worldwide, aviation accounts for 2% of anthropogenic CO<sub>2</sub> (IPCC 1999 report).**
- ✈ **Most effective method for reducing transportation greenhouse gas emissions:**
  - **Set fuel-economy standards for commercial vehicles.**
  - **Raise fuel-economy standards for passenger vehicles and light trucks.**
  - **Modernize ATC systems – eliminate 10-15% of emissions.**

