National Transportation Safety Board

The Globalization of Aviation Safety

Robert L. Sumwalt, III
Board Member

Structure of Today's Discussion

I. What is the NTSB?

II. Aircraft manufacturing is global

III. Aviation safety is a global concern

First discussion point:

WHAT IS THE NTSB?

NTSB is an independent federal agency, charged by Congress to investigate transportation accidents, determine probable cause, and issue safety recommendations.

Facilities

- Headquartered in Washington, DC
- 4 Regional Offices
- NTSB Training Center

The Board

Mark Rosekind

Chris Hart

Debbie Hersman

Robert Sumwalt

Earl Weener

NTSB
NTSBgov
07/11/2007
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Wichita State Alumni

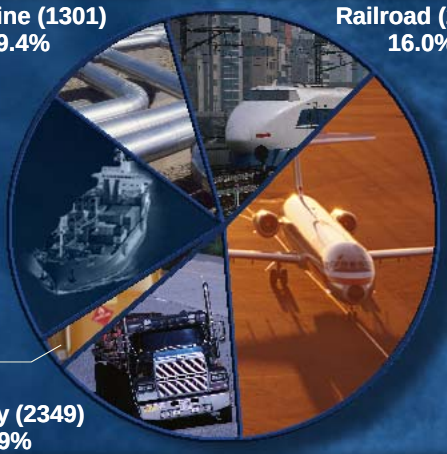
John Clark

Loren Groff, Ph.D

Wichita State University, August 8, 2013

NTSB

13,886 Safety Recommendations issued since 1967



Rev: August 2013

Second discussion point:

AIRCRAFT MANUFACTURING IS GLOBAL

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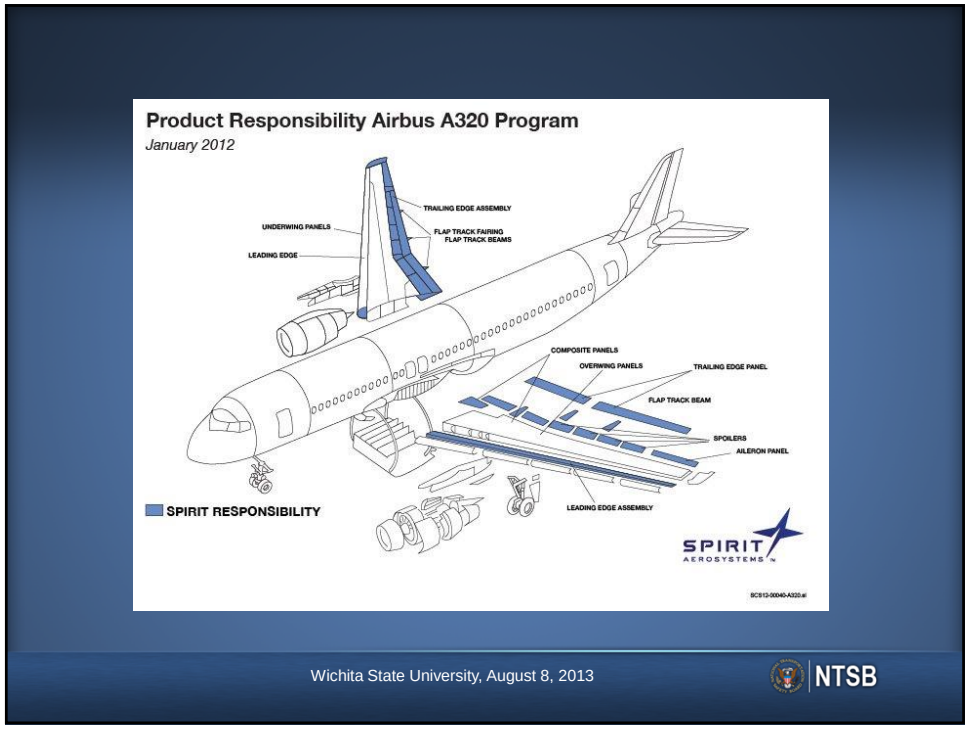
Airbus



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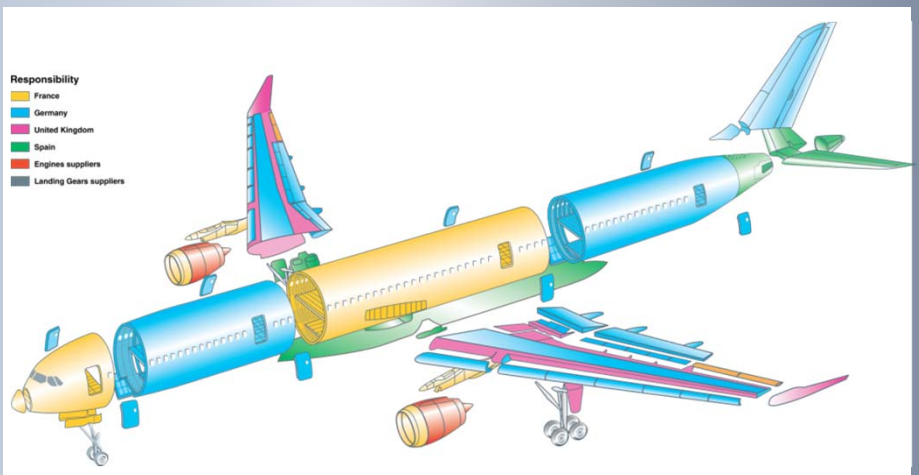
A350-900 XWB manufacturing work sharing



A multi-national success story of cooperation

Slide courtesy of Airbus

AIRBUS

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Airbus in the USA (2012 data)

- Catalyst for $13 billion in annual aircraft related expenditure in the USA
- Supporting over 226,000 jobs* in 40+ states
- Biggest export customer of US aero industry
- Five Airbus sites with over 1,000 employees

Airbus Engineering Center Mobile, Alabama

Airbus Training Center Miami, Florida

Headquarters Herndon, Virginia

Airbus Engineering Center Wichita, Kansas

Airbus Spares Center Ashburn, Virginia

Strong and growing physical and economic presence in USA

* Based on RIMS2 methodology (US Dept. of Commerce) adjusted for inflation

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AIRBUS

Why build an A320 Final Assembly Line (FAL) in Mobile, AL?

A strategic business decision that is great news for:

Airbus and its employees
- Drives long-term growth; helps achieve goal to expand global industrial base

American industry
- Creates new manufacturing jobs
- Enhances partnership between Airbus and supplier-partners

Alabama and Gulf Coast region
- Establishes new aerospace center of competency

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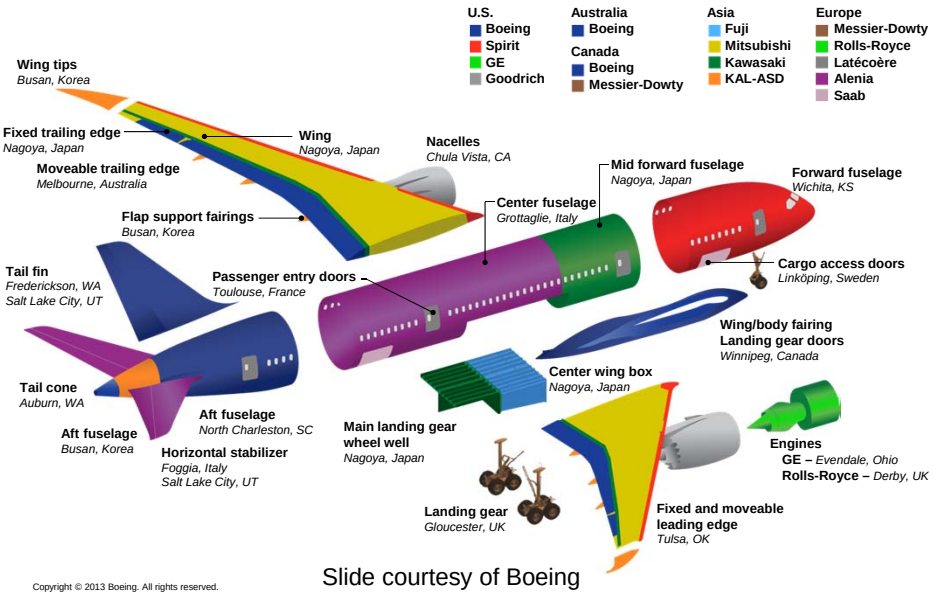
Global Partners Bring the 787 Together



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Risk Sharing Partnerships (RSP)

- Minimizes the financial risk for the aircraft manufacturer
- The RSPs share the risk, but they also share the financial rewards
- Potential reduction in the number of suppliers
  - Embraer reduced suppliers by 90%
- Not all suppliers are RSP

Third discussion point:

AVIATION SAFETY IS A GLOBAL CONCERN

Asiana 214

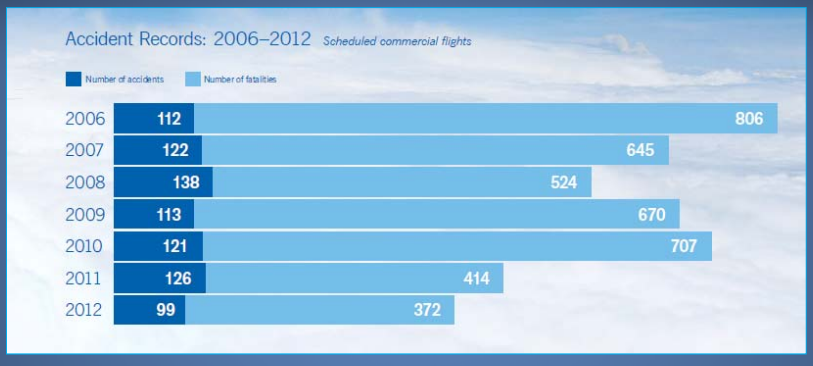
Crew

- 14 Korean
- 2 Thai

Passengers

- 141 Chinese
- 77 Korean
- 64 US
- 3 Indian
- 3 Canadian
- 1 French
- 1 Japanese
- 1 Vietnamese

Aviation Safety is of Global Concern



Source: ICAO, 2013

Accident Rate

Accident Rate

	Accidents in 2012	Flight Hours	Accidents per 100,000 flight hours
US Scheduled Airlines	27		
US Scheduled Charter	4		

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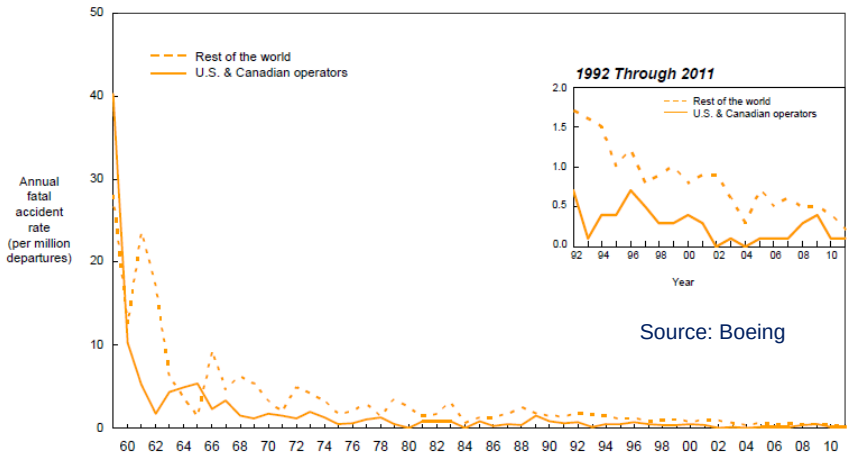
Accident Rate

	Accidents in 2012	Flight Hours	Accidents per 100,000 flight hours
US Scheduled Airlines	27	17,449,000	0.155
US Scheduled Charter	4	319,700	1.251

U.S. and Canadian Operators Accident Rates by Year

Fatal Accidents – Worldwide Commercial Jet Fleet – 1959 Through 2011



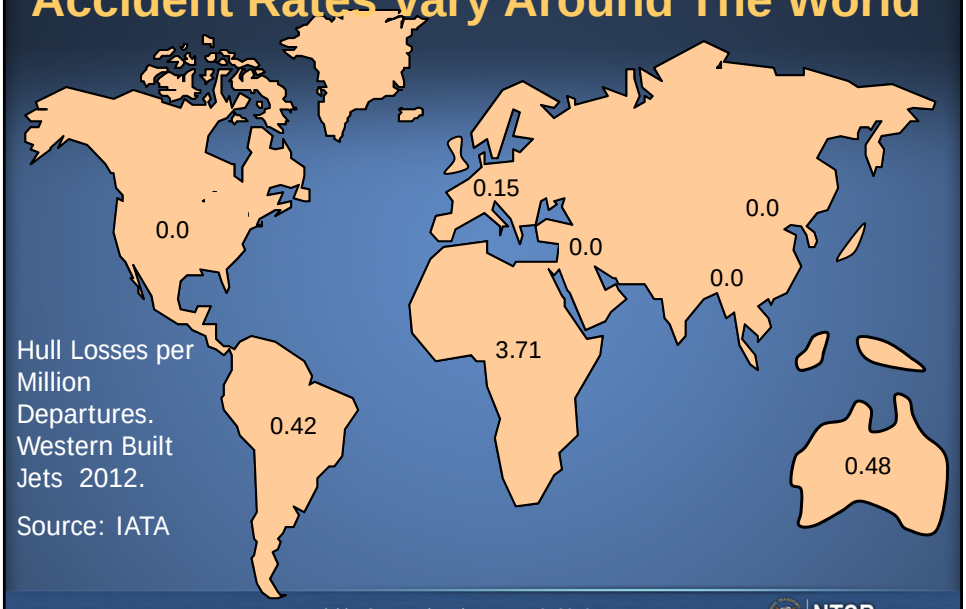
Source: Boeing

Accident Rates Vary Around The World

Hull Losses per Million Departures. Western Built Jets 1987 - 1996.

Source: Flight Safety Foundation

Accident Rates Vary Around The World



Hull Losses per Million Departures. Western Built Jets 2012.

Source: IATA

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International Aviation Safety

International Civil Aviation Organization

- The aviation arm of the United Nations
- Established in 1944 to promote the safe and orderly development of international civil aviation throughout the world
- Sets standards and recommended practices for
  - Safety
  - Security
  - Efficiency
  - Environmental protection

Something to think about

- Are there economic incentives for a country to have a good aviation safety support system?

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