

Part 7

Major Current Safety Efforts

USA – Commercial Aviation Safety Team (CAST)

Europe – European Safety Strategy Initiative (ESSI)

ICAO – Safety Road Map

Improving Aviation Safety

What's going on today?

ValueJet 592



Searching for the black box

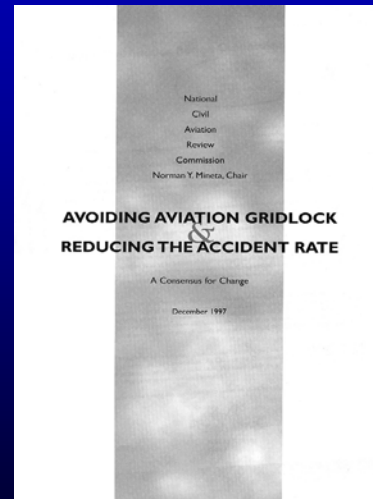
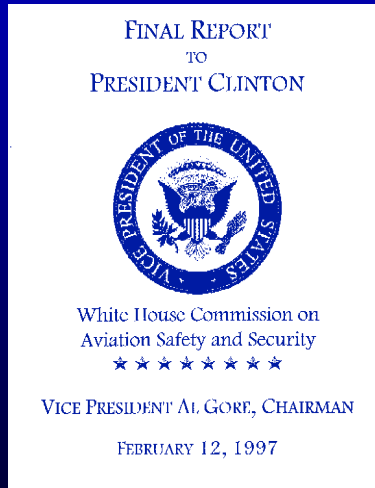
TWA 800



NTSB reconstruction

Two Major U.S. Commissions

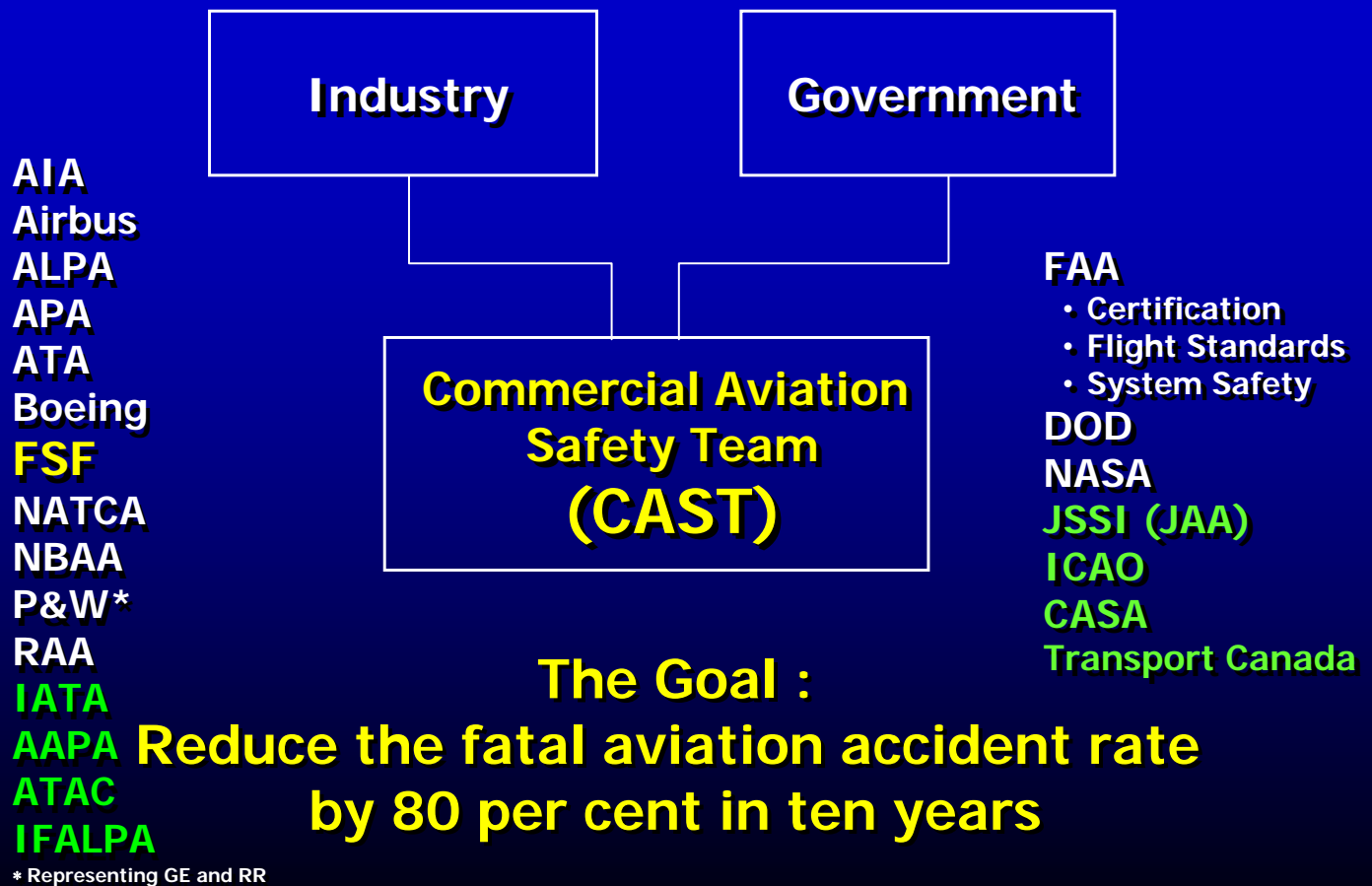
Improving Aviation Safety



Commissions' Recommendations

- There should be a national goal to reduce the fatal accident rate by 80 per cent in 10 years from 1997
- Improving aviation safety should be a joint effort between government and industry
- Safety efforts should be driven by statistics. Focus on those areas that would produce the best results
- US efforts to improve aviation safety should be expanded worldwide

U.S. Safety Coordination Program



CAST Process

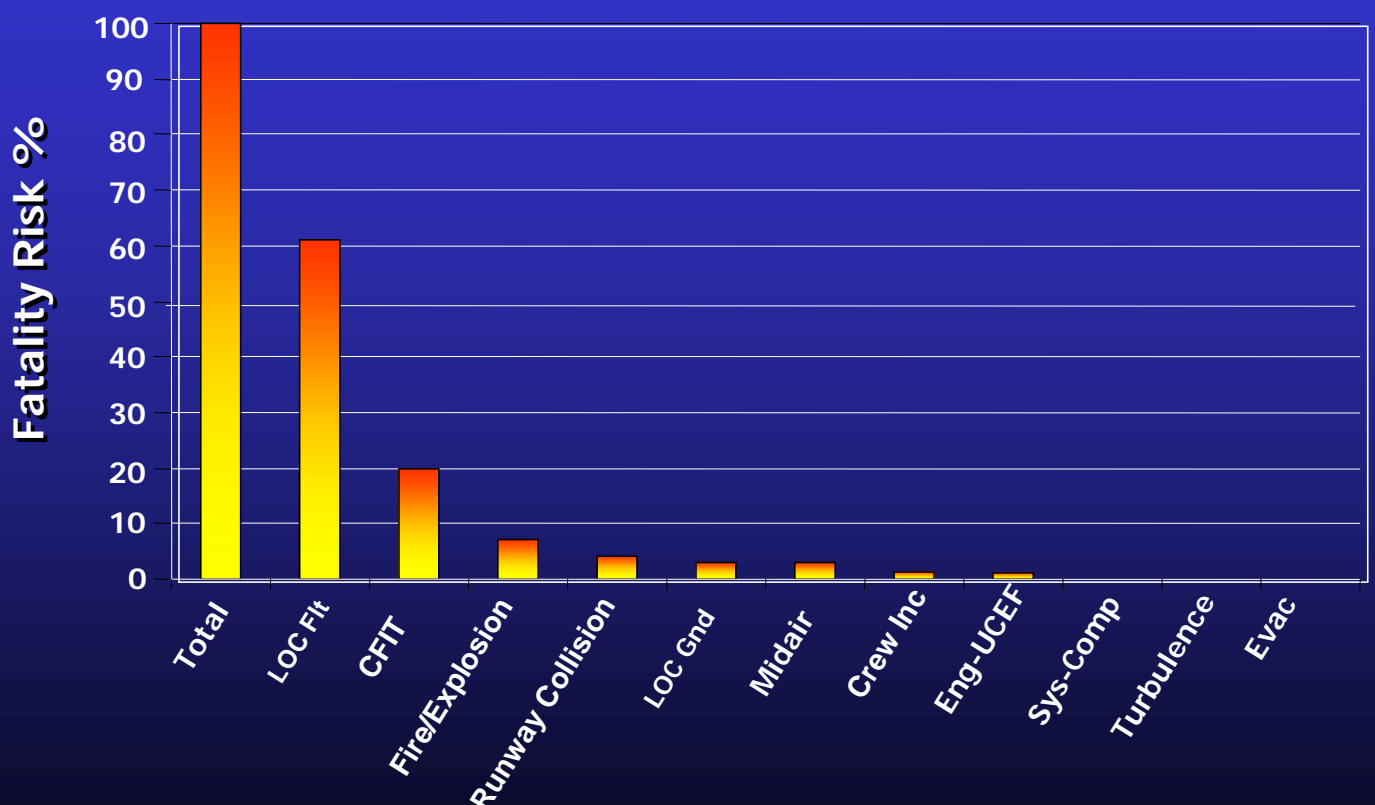
- Analyze past accidents to identify:
 - contributory causes
 - possible intervention strategies
- Implement best interventions
- Measure results
- Repeat the process

CAST Strategic Safety Plan

- Contains 46 safety enhancements
 - 25 completed so far
 - 21 committed and underway
- Initially combines short-term actions
 - education and training
 - standard operating procedures
- Transition to design change enhancements long term
 - installation of technical equipment
- Several prioritized R & D projects including
 - synthetic vision
 - runway occupancy signals
- Forms basis for continuous improvements in worldwide aviation safety

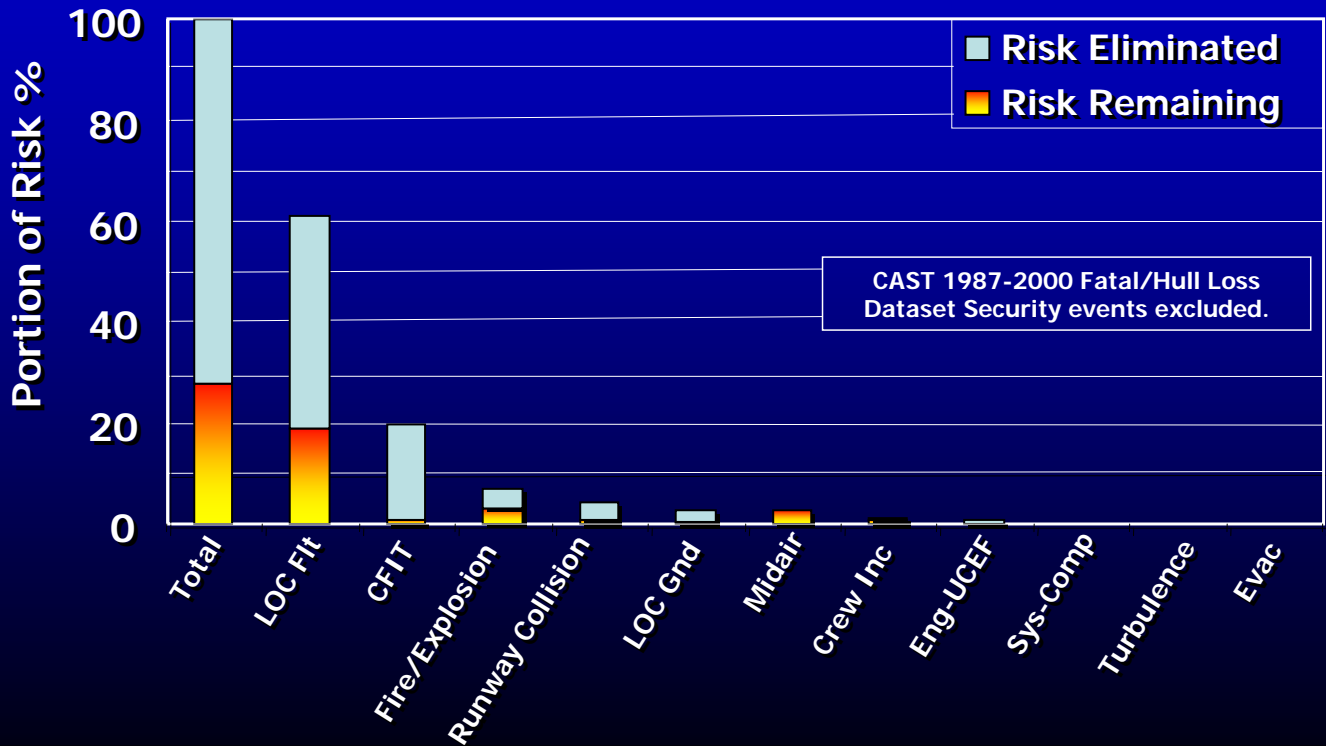
Fatality Risk

(1987-2000)



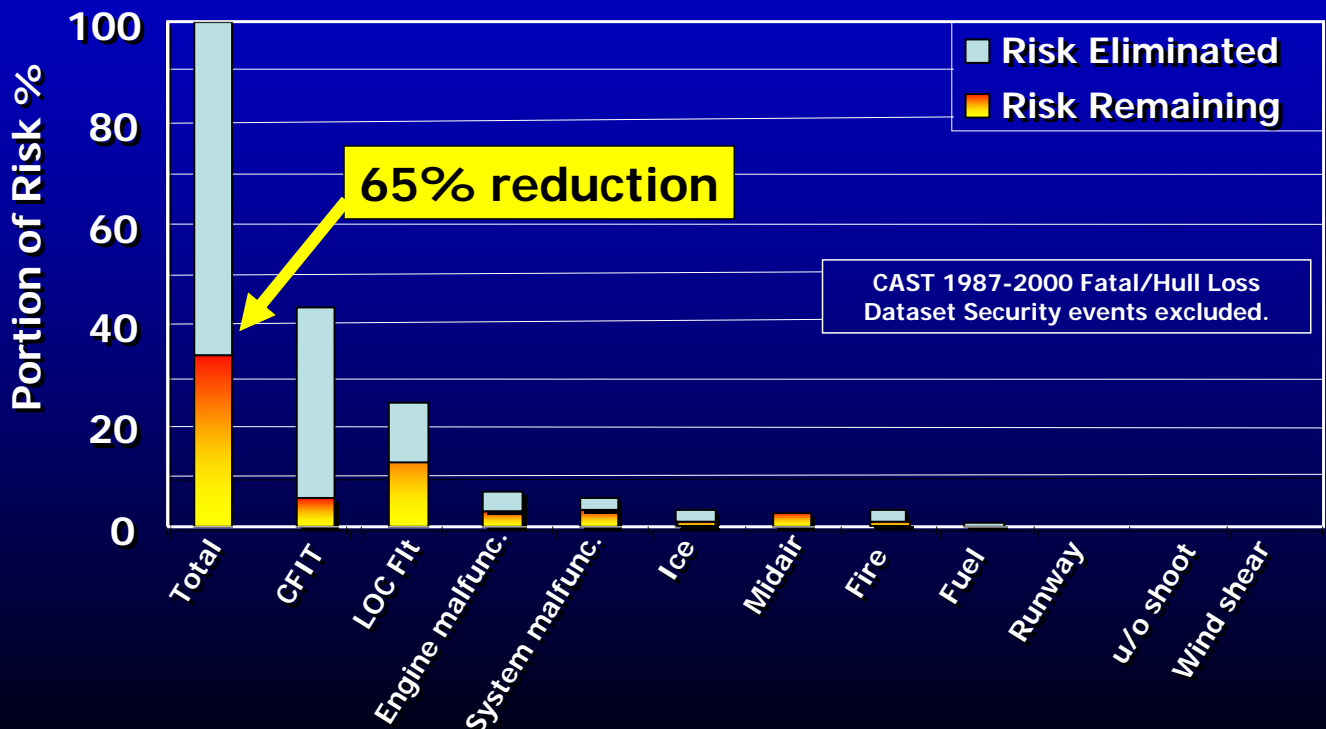
Reduction in Fatality Risk by the CAST Plan

(2007 Implementation Values)



Worldwide Reduction in Fatality Risk

(2007 Implementation Values)



Fundamental Concerns

In many parts of the world:

- Regulatory oversight and infrastructure is lacking.
- Local authorities often have only limited expertise or resources
- Even if they have the will, they do not know what to do or how to do it
- They need guidance and assistance

ICAO Safety Roadmap

Prepared with the help of industry

- ACI
- Airbus
- Boeing
- CANSO
- FSF
- IATA
- IFALPA

Global Aviation
Safety Roadmap

A strategic action plan for future aviation safety developed jointly by
ACI, Airbus, Boeing, CANSO, FSF, IATA and IFALPA for ICAO

Development of an integrated worldwide
safety improvement plan

Global Aviation Safety Roadmap

Background

- **Inspired by 7th ICAO ANC Industry meeting May 2005.**
- **Produced by the Industry Safety Strategy Group (ISSG) with and for ICAO:**
 - Airbus
 - Airports Council International (ACI)
 - Boeing
 - Council of Air Navigation Service Organizations (CANSO)
 - Flight Safety Foundation (FSF)
 - International Air Transport Association (IATA)
 - International Federation of Airline Pilot Associations (IFALPA)

Global Aviation Safety Roadmap

Goals and Objectives

- **Provide a common frame of reference for all stakeholders**
- **Coordinate and guide safety policies and initiatives worldwide to reduce the accident risk for commercial aviation**
- **Avoid duplication of effort and uncoordinated strategies**
- **Encourage close industry and government cooperation on common safety objectives**

Timescale

- **Near term 2006-10; Medium Term 2010-14**

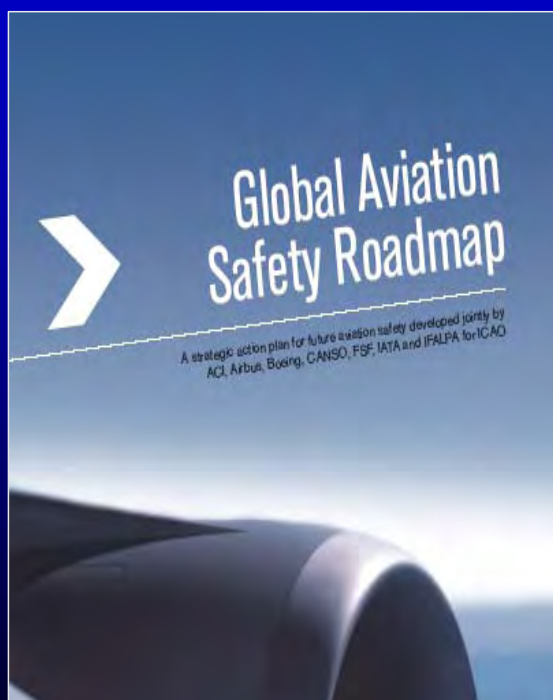
Global Aviation Safety Roadmap

Stakeholders

- States
- Regulatory authorities
- Airline operators
- Airport operators
- Aircraft manufacturers
- Pilot associations
- Safety organizations
- Air traffic service providers

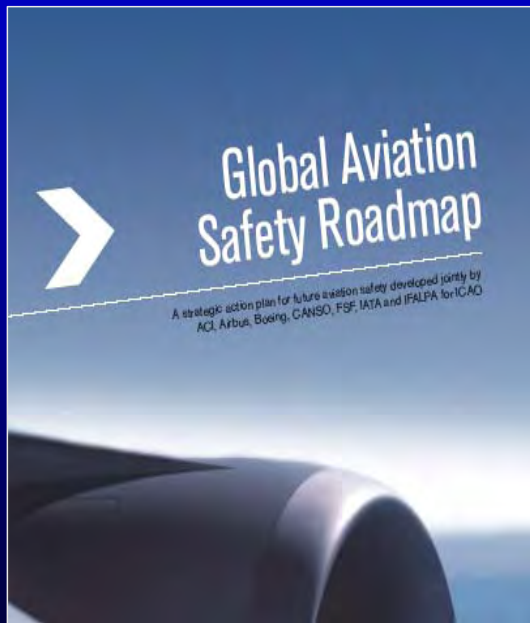
Global Aviation Safety Roadmap

Industry commits to unify plans through Roadmap



Part 1 was presented to ICAO and accepted June 2006

Global Roadmap's 12 Focus Areas "The Roads"



- **States**
 - Consistent implementation of int'l. standards
 - Consistent regulatory oversight
 - No impediments to reporting errors/ incidents
 - Effective incident and accident investigation
- **Industry**
 - No impediments to reporting and analyzing errors/ incidents
 - Consistent use of Safety Management Systems
 - Consistent compliance with regulatory reqmts
 - Consistent adoption of industry best practices
 - Alignment of global industry safety strategies
 - Sufficient number of qualified personnel
 - No gaps in use of technology to enhance safety
- **Regions**
 - Consistent coordination of regional programs

Global Aviation Safety Roadmap

Part 2

- A detailed plan intended to guide Roadmap implementation plans by regional safety teams
- Best Practices described for each Objective
- Metrics provided for each Best Practice
- A four-level Maturity Model provided for each objective based on implementation of Best Practices
- Process described to assess current status and gaps that need to be addressed.

Accepted by the ICAO Air Navigation Commission, December, 2006.

**A major new
international
safety initiative**

Taiwanese industry should be involved

