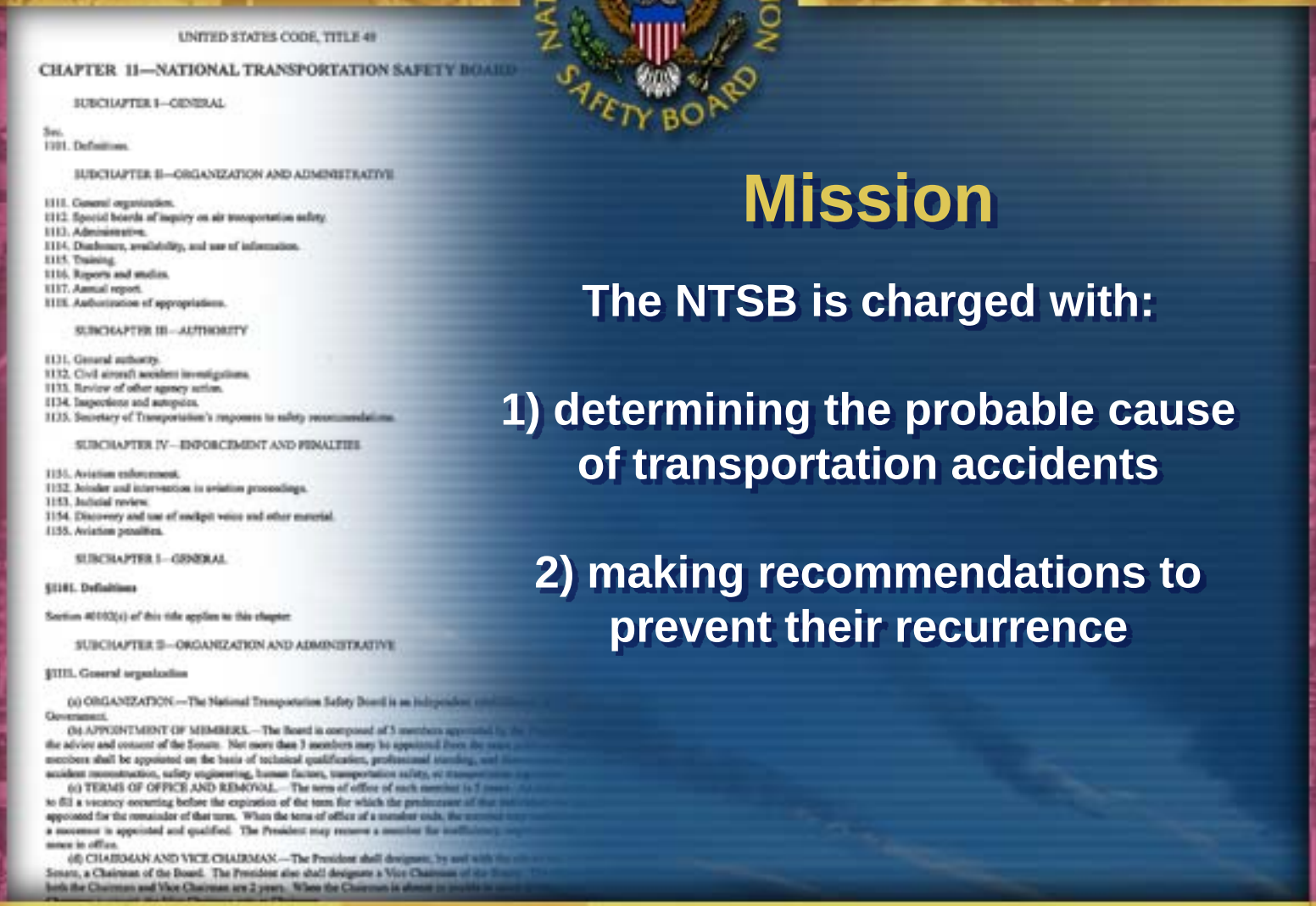
NTSB National Transportation Safety Board

Enhancing Aviation Safety: RAA Progress and Opportunities

Honorable Mark R. Rosekind, Ph.D.
Board Member

36th Annual RAA Convention
May 17, 2011


UNITED STATES CODE, TITLE 49

CHAPTER 11—NATIONAL TRANSPORTATION SAFETY BOARD

SUBCHAPTER I—GENERAL

Sec.
1101. Definitions.

SUBCHAPTER II—ORGANIZATION AND ADMINISTRATIVE

1111. General organization.
1112. Special boards of inquiry on air transportation safety.
1113. Administrative.
1114. Disclosure, availability, and use of information.
1115. Training.
1116. Reports and studies.
1117. Annual report.
1118. Authorization of appropriations.

SUBCHAPTER III—AUTHORITY

1131. General authority.
1132. Civil aircraft accident investigations.
1133. Review of other agency action.
1134. Inspections and autopsies.
1135. Secretary of Transportation's responses to safety recommendations.

SUBCHAPTER IV—ENFORCEMENT AND PENALTIES

1151. Aviation enforcement.
1152. Joinder and intervention in aviation proceedings.
1153. Judicial review.
1154. Discovery and use of cockpit voice and other material.
1155. Aviation penalties.

SUBCHAPTER I—GENERAL

§1101. Definitions

Section 40102(a) of this title applies to this chapter.

SUBCHAPTER II—ORGANIZATION AND ADMINISTRATIVE

§1111. General organization

(a) ORGANIZATION.—The National Transportation Safety Board is an independent

Government.

(b) APPOINTMENT OF MEMBERS.—The Board is composed of 5 members appointed by the

the advice and consent of the Senate. Not more than 3 members may be appointed from the same

members shall be appointed on the basis of technical qualification, professional standing, and

accident reconstruction, safety engineering, human factors, transportation safety, or transportation

(c) TERMS OF OFFICE AND REMOVAL.—The term of office of each member is 5 years.

to fill a vacancy occurring before the expiration of the term for which the predecessor of that

appointed for the remainder of that term. When the term of office of a member ends, the

a successor is appointed and qualified. The President may remove a member for inefficiency,

office.

(d) CHAIRMAN AND VICE CHAIRMAN.—The President shall designate, by and with the

Senate, a Chairman of the Board. The President also shall designate a Vice Chairman of the Board.

both the Chairman and Vice Chairman are 2 years. When the Chairman is absent or unable to

Mission

The NTSB is charged with:

1) determining the probable cause of transportation accidents

2) making recommendations to prevent their recurrence

The NTSB is Responsible for Investigating:

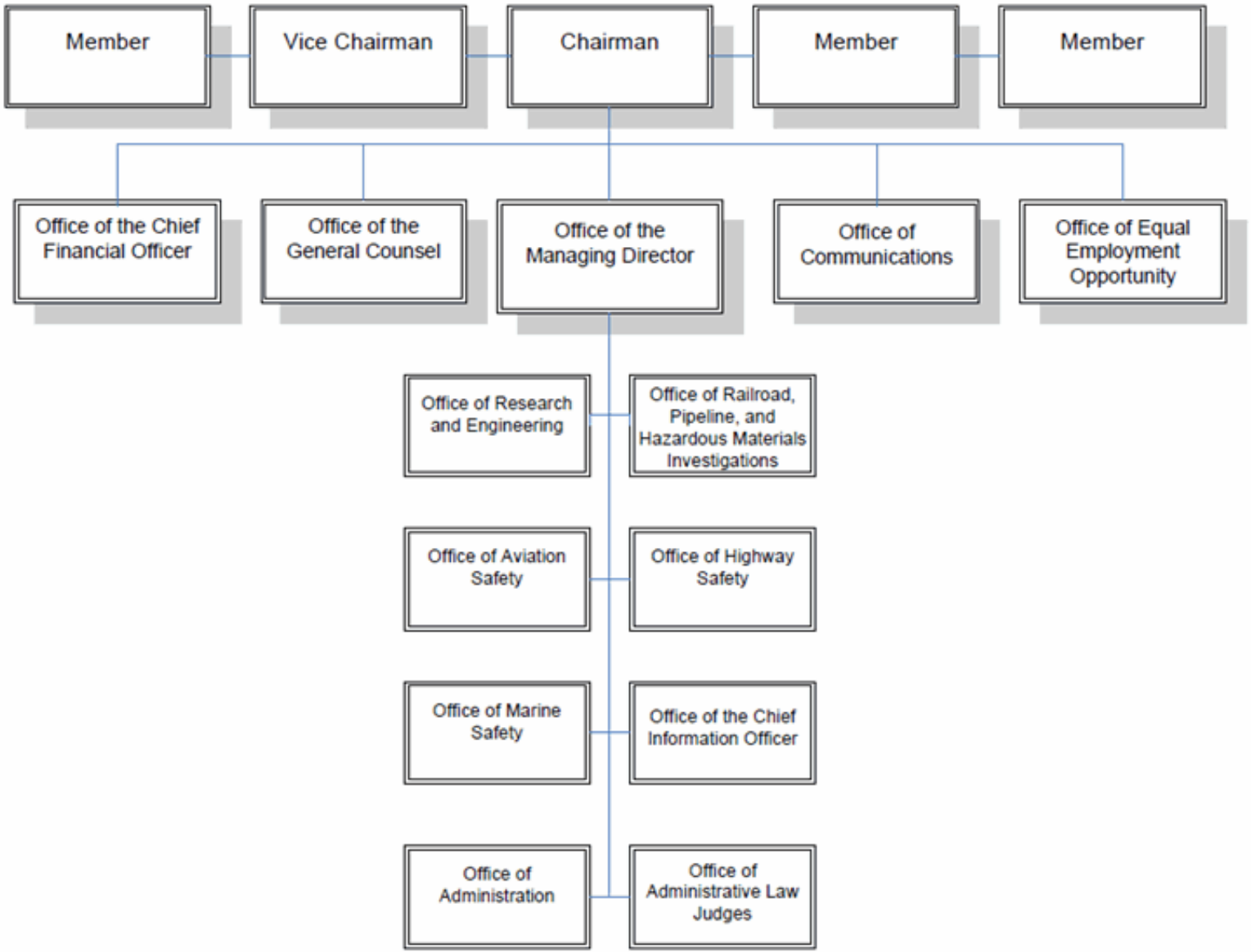
Aviation, highway, rail, marine, pipeline, and hazardous material accidents

- 130,000+ accident investigations
- 13,000+ safety recommendations
- 82% acceptance rate

Major product: safety recommendations

Moral compass and industry conscience

National Transportation Safety Board



NTSB: The Board

- Five Members:
  - President nominates
  - Senate confirms

Mark Rosekind
Member

Chris Hart
Vice Chairman

Debbie Hersman
Chairman

Robert Sumwalt
Member

Earl Weener
Member

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- **Fatigue Risks and Issues**
- NTSB Airline Code-Sharing Symposium
- RAA Changes: Progress/Opportunities

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Go! Flight 1002

- early starts, multiple segment days, sleep apnea

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Guantanamo Bay Cuba

First NTSB aviation accident to cite fatigue as probable cause

- acute sleep loss, sleep debt, circadian disruption

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Honorable John K. Lauber:

No Accident ≠

Safe Operation

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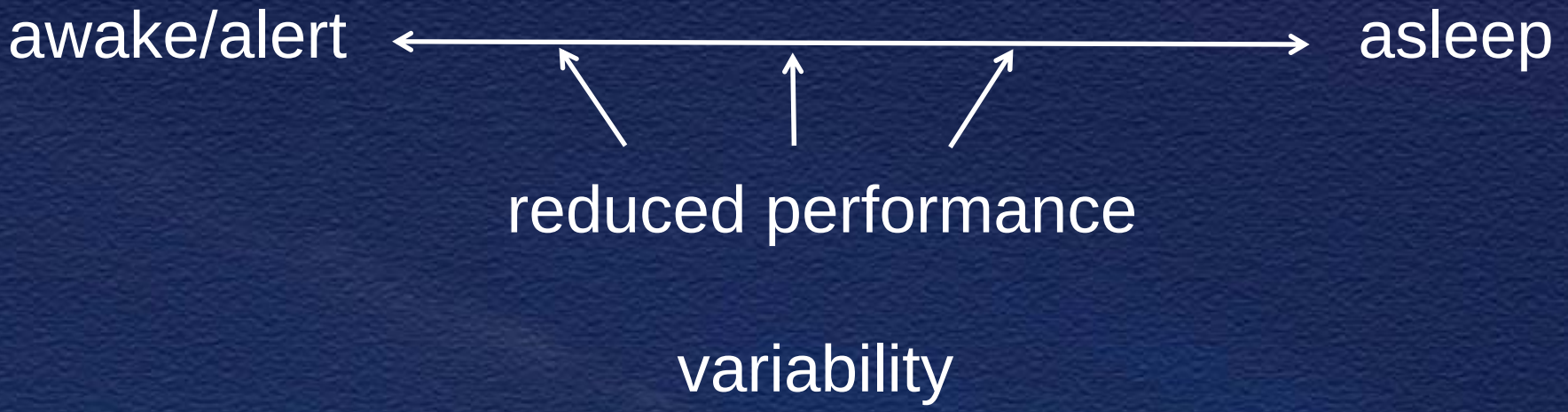
Fatigue Risks



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The Challenges . . .

Diverse operational requirements

Individual differences

Complex physiology

History (“that’s how its always been”)

Economics

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The Challenges Preclude . . .

A simple solution

A single solution

One-size-fits-all

“Magic Bullet”

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NTSB Recommendations

- MOST WANTED since 1990
- 190+ fatigue recommendations

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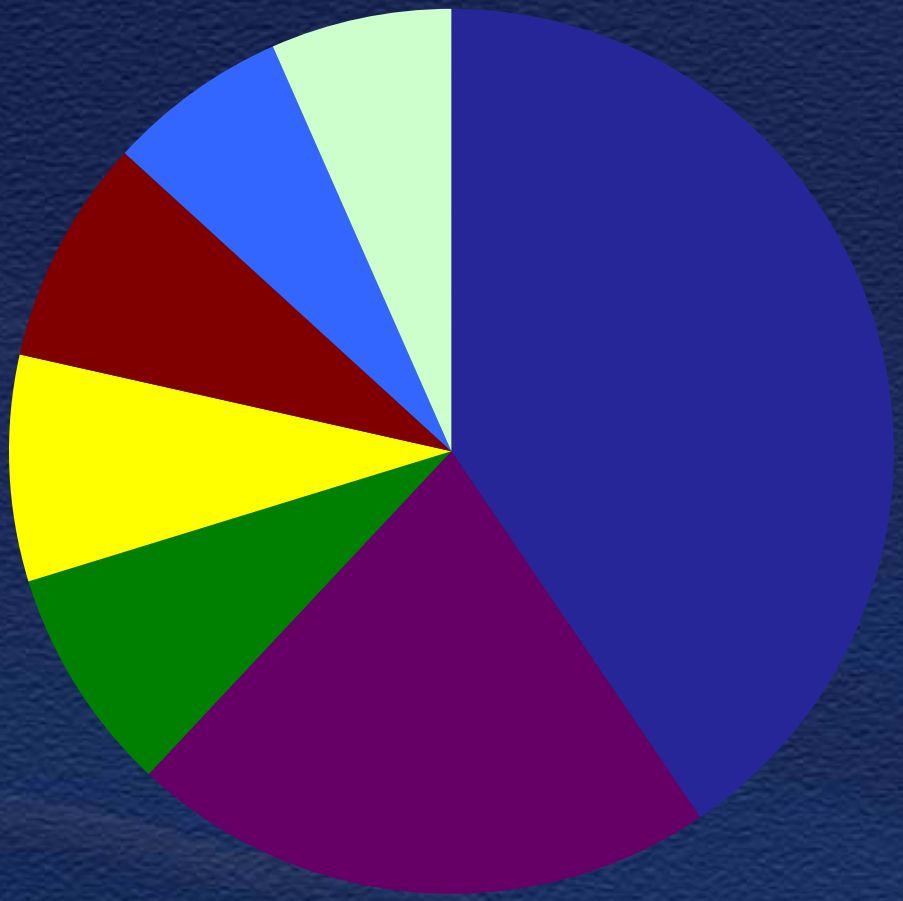
Complex Issue: Requires Multiple Solutions



- Scheduling Policies and Practices
- Education
- Organizational Strategies
- Raising Awareness
- Healthy Sleep
- Vehicle and Environmental Strategies
- Research and Evaluation

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Education/Strategies

- Develop a fatigue education and countermeasures training program
- Educate operators and schedulers
- Include information on strategies
- Review and update materials

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Hours of Service / Scheduling

- Science-based hours of service
- Allow for at least 8 hours of uninterrupted sleep
- Reduce schedule irregularity and unpredictability

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Fatigue Management Systems

- Develop guidance based on empirical and scientific evidence for operators to establish fatigue management systems
- Develop and use a methodology that will continually assess the effectiveness of fatigue management systems

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- RAA Sponsored Fatigue Project:

  - Conducted by independent research center (WSU)

  - Create new prediction modeling analytic tool

  - Compare long-haul vs. multi-segment schedules

  - Support Fatigue Risk Management Program development

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- RAA Sponsored Fatigue Project

  Considerations . . .

  - science-based
  - scientific integrity
  - operational relevance
  - implementation (evaluate/improve)

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- Fatigue Risks and Issues
- **NTSB Airline Code-Sharing Symposium**
- RAA Changes: Progress/Opportunities

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October 26-27, 2010

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Airline Code-Sharing Symposium

- Goals:
  1) learn about the structure of code-sharing arrangements
  2) sharing of safety information between code-sharing partners
  3) role that a major airline would have in the family disaster assistance response for an accident involving a code-sharing partner

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Airline Code-Sharing Symposium

- Three opening presentation panels
- Six industry panels
- Over two dozen panelists representing the airline industry, regulators from the US and Europe, the traveling public, and family members from recent accidents
- Participants included representatives from RAA, Republic, Skywest, American Eagle, and Compass

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Airline Code-Sharing Symposium

- RAA progress . . .
  - industry size: relative flights & enplanements
  - NTSB/public/policy makers better informed about industry safety programs and efforts
  - code-sharing airlines' coordination/cooperation on safety and family assistance activities
  - new initiatives and plans

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- Fatigue Risks and Issues
- NTSB Airline Code-Sharing Symposium
- **RAA Changes: Progress/Opportunities**

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- Empire took action based on lessons learned . . .

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- RAA Opportunities
  - pursue/fully implement safety initiatives (fatigue project/voluntary programs)
  - share best safety practices
  - inform public, policy makers, industry about challenges, programs, progress

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Enhancing Aviation Safety:

RAA Progress and Opportunities

- RAA Opportunities:

  The Safety Challenge

  - where can you do ***more*** . . .

  - how to progress ***faster*** . . .

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