

Aviation Safety



Commercial Aviation Safety Team



*Aviation Safety Information
Analysis and Sharing*

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Confidential Information



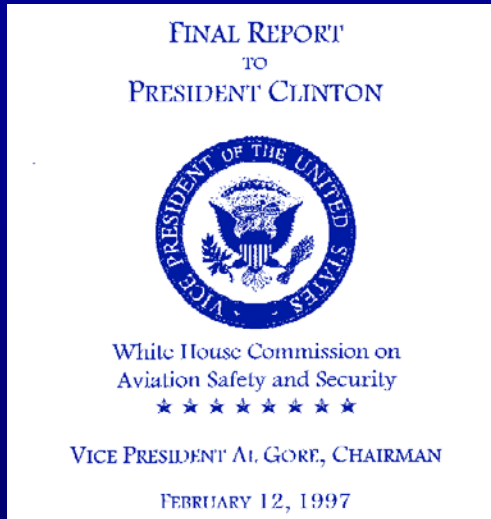
**Federal Aviation
Administration**



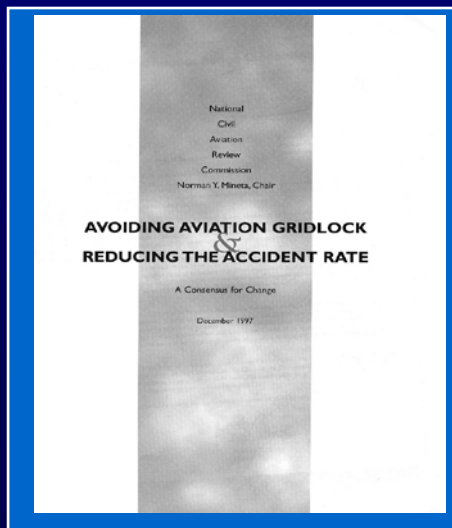
Aviation Safety



In the U.S., our focus was set by the White House Commission on Aviation Safety, and The National Civil Aviation Review Commission (NCARC)



1.1 . . . Reduce Fatal Accident Rate . . .



- . . . Strategic Plan to Improve Safety . . .
- . . . Improve Safety Worldwide . . .



Commercial Aviation Safety Team

- **CAST came together in 1997 to form an unprecedented Industry-Government partnership...**

- Voluntary commitments
- Consensus decision-making
- Data-driven risk management
- Implementation-focused
- Goal:

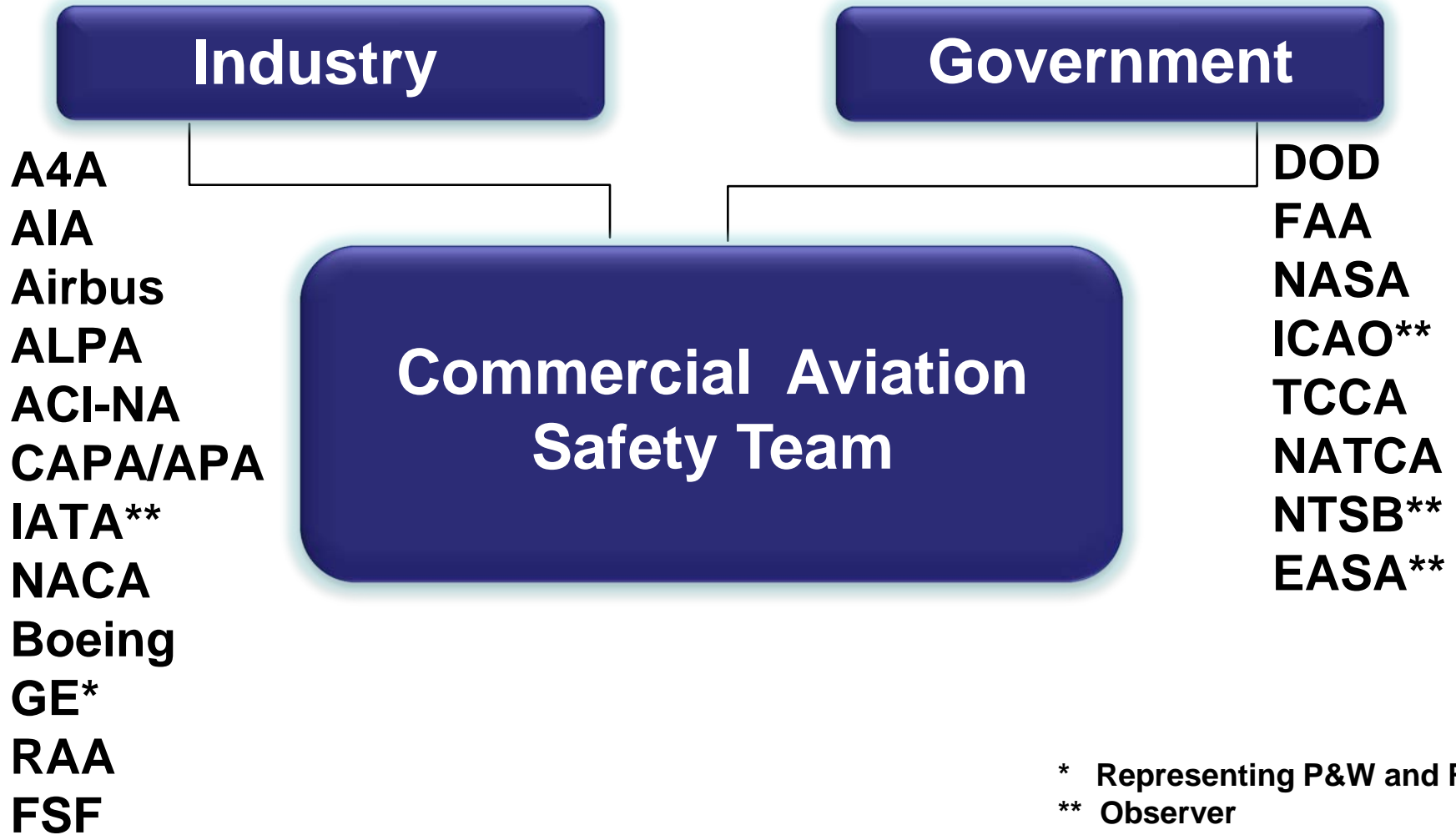


Original *Reduce the US commercial aviation fatal accident rate **83%** by 2007.*

New *Reduce the U.S. commercial aviation fatality risk by at least 50 percent from 2010 to 2025.*



CAST brings together key stakeholders to cooperatively develop and implement a prioritized safety agenda.

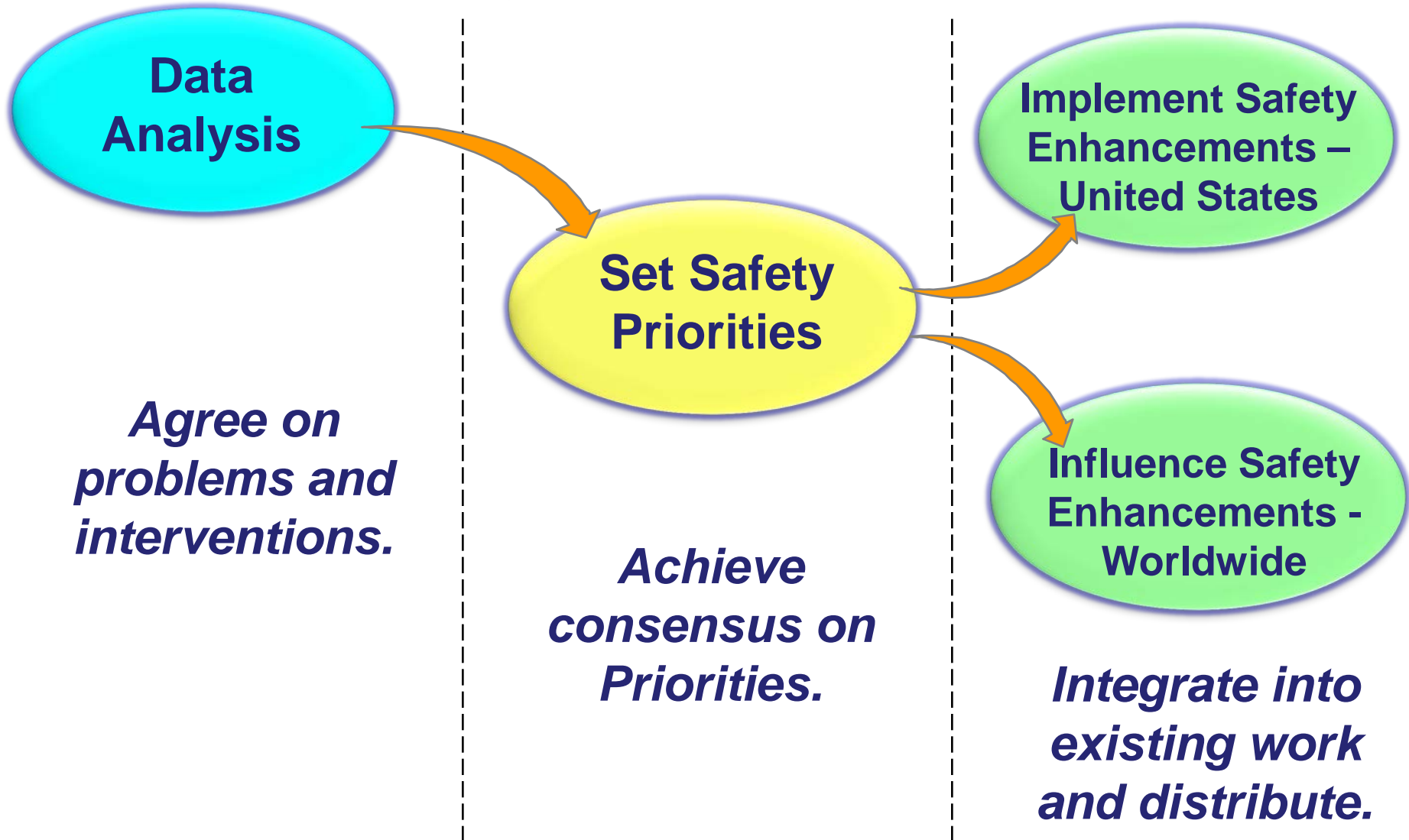


* Representing P&W and RR

** Observer



CAST Safety Strategy



Commercial Aviation Safety Team (CAST)

CAST

**Joint Safety
Analysis Teams (JSAT)**

- Data analyses

**Joint Safety
Implementation
Teams (JSIT)**

- Safety enhancement development

**Joint Implementation
Measurement Data
Analysis Team (JIMDAT)**

- Master safety plan
- Enhancement effectiveness
- Future areas of study

Today and Beyond

- We are in the midst of the safest period in aviation history.
- In the United States there are no longer major causes of accidents.
- With so few accidents and no “common causes,” we need more data points so we can move to a prognostic or predictive approach.
- And, we need to share what we learn.



Improving Aviation Safety



Benefits of Data Sharing

- Combining information resources will create a more accurate picture of what is going on in the aviation community.
- Possession of complete and accurate data leads to better problem analysis and sound decision-making.
- Key decisions on how to invest and allocate resources will be more effective and easily justified if they are data-driven.
- A combination of sound analysis and effective interventions targeting emerging problems will help reduce undesirable events from occurring.





What is

ASIAS?

*Aviation Safety Information
Analysis and Sharing*

***A collaborative
Government-Industry
initiative on data sharing
& analysis to proactively
discover safety concerns
before accidents or
incidents occur, leading
to timely mitigation and
prevention***





ASIAS Objectives

- **Develop tools** to make the analysis more sophisticated.
- Cultivate **key data sources**.
- Advance the **science of vulnerability discovery** within and across data sources.
- Develop **automated information integration capabilities** centered on aviation safety risk topics.



ASIAS Functional Benefits

With ASIAS, the aviation community will be able to . . .

Identify Systemic Risks

- Establish safety baselines of current operations.
- Identify known and newly emerging system vulnerabilities.
- Monitor safety trends.

Evaluate Identified Risks

- Estimate event probabilities.
- Assess event severities.
- Uncover event precursors.
- Diagnose event causation.

Formulate Mitigations

- Assess the probable effects of various safety enhancements through simulation studies.

Monitor/Implement Mitigation Effects

- Assess the effectiveness of safety enhancements in accordance with metrics established by CAST.



Summary



- **Unprecedented partnership and positive impact.**
- **Long-term industry and government commitment.**
- **Dramatically improved aviation safety in United States and worldwide.**
- **Committed to continue to drive future safety improvements.**

