



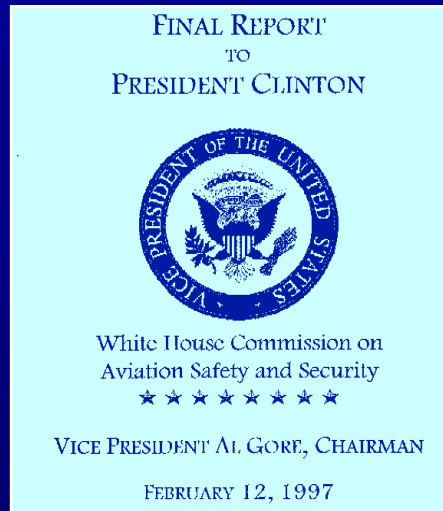
# **Commercial Aviation Safety Team (CAST)**

## **Overview**

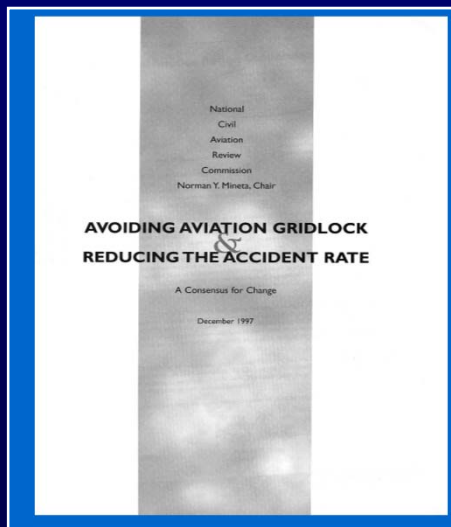
**PA-RAST**

**March, 2016**

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

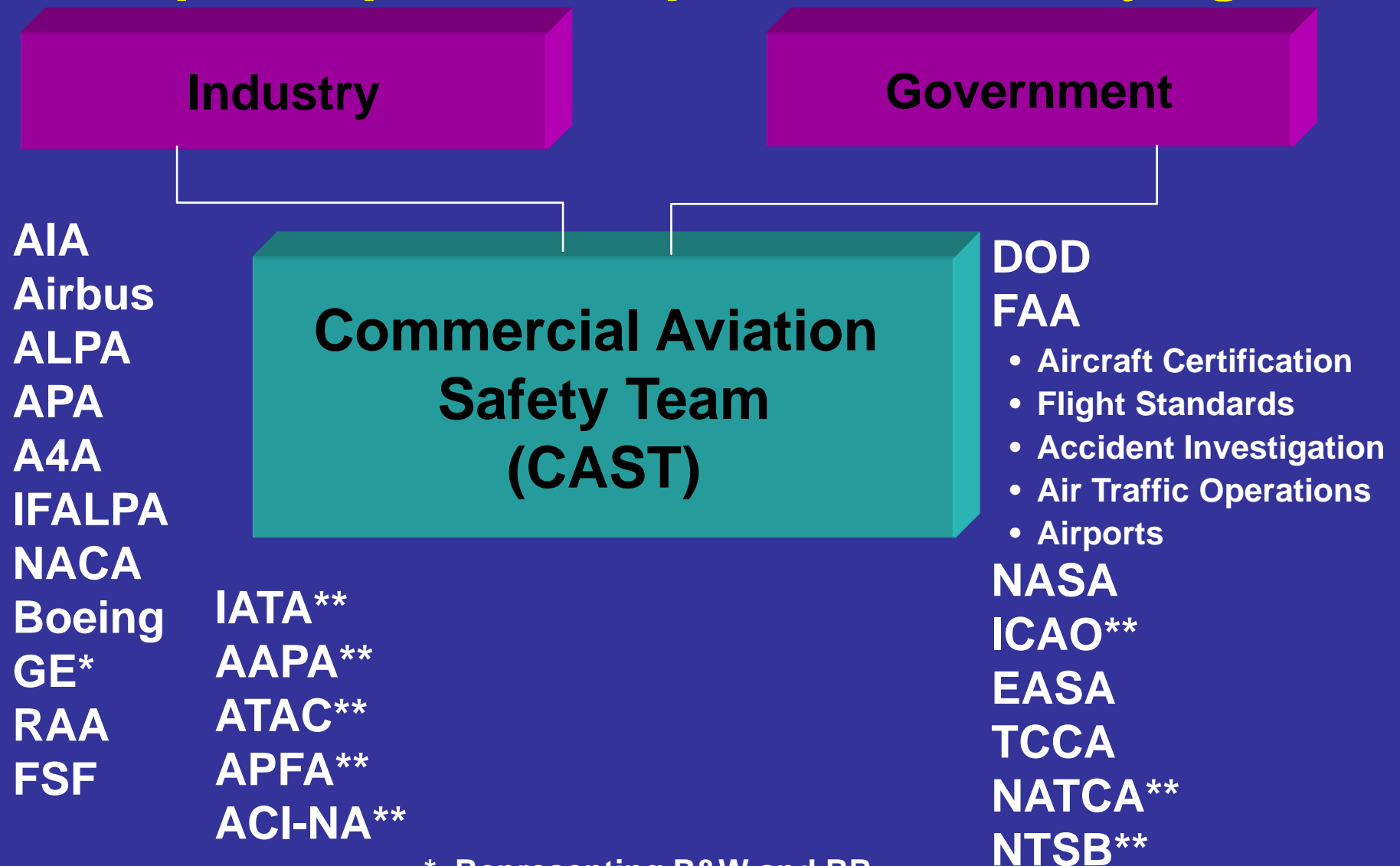


## 1.1 . . . Reduce Fatal Accident Rate . . .



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

# CAST brings key stakeholders to cooperatively develop & implement a prioritized safety agenda



\* Representing P&W and RR

\*\* Observer

# Vision - Mission - Goals



## Vision

- Key aviation stakeholders acting cooperatively to lead the world-wide aviation community to the highest levels of global commercial aviation safety by focusing on the right things.

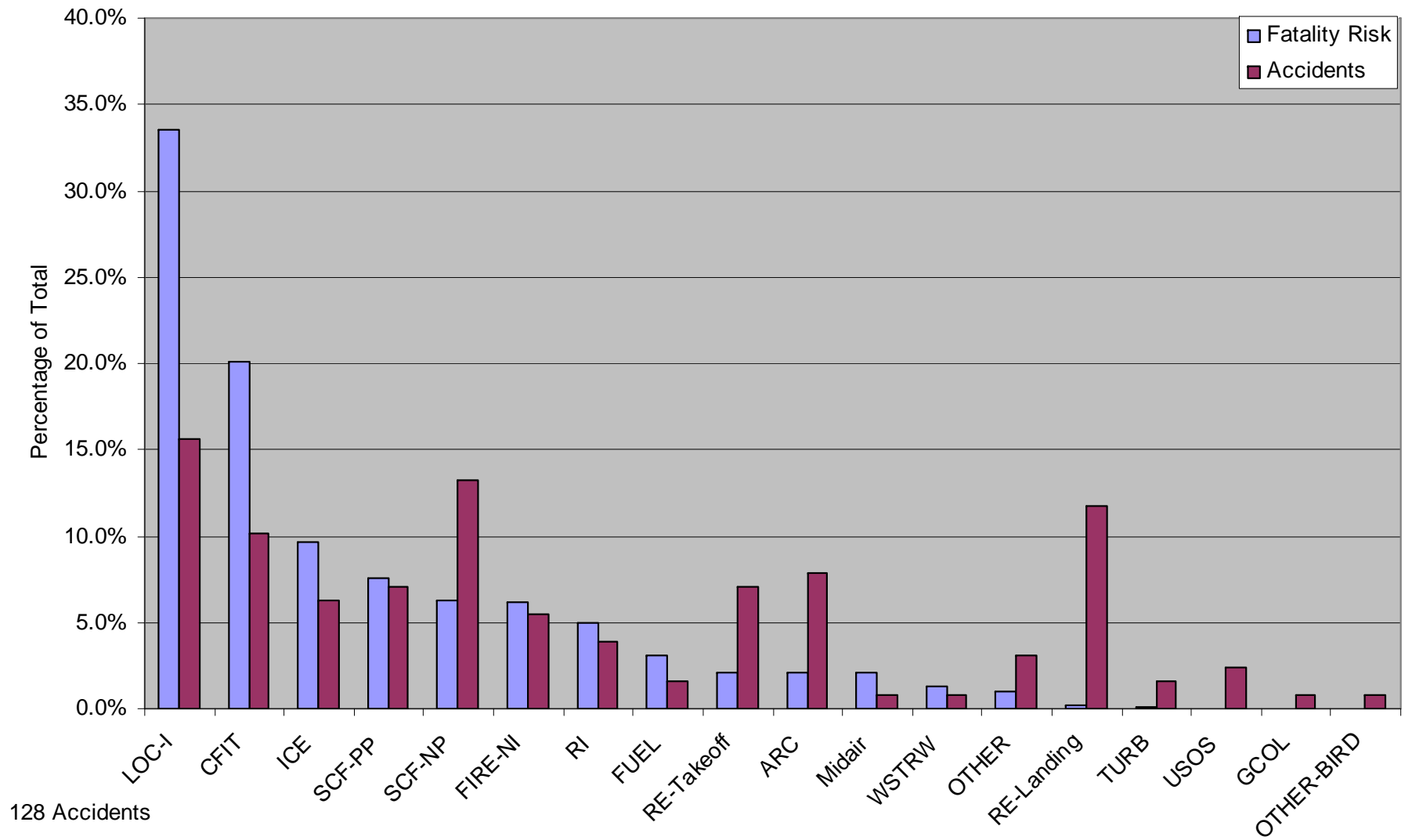
## Mission

- Enable a continuous improvement framework built on the proactive identification of current and future risks, developing mitigations as needed and monitoring the effectiveness of implemented actions.

## Goal

- Reduce the U.S. commercial aviation fatality risk by at least 50% from 2010 to 2025
- and
- Continue to work with our international partners to reduce fatality risk world-wide commercial aviation.

# 1987-2011 Part 121 Hull Loss and Fatal Accidents



# CAST Safety Strategy

**Data  
Analysis**

*Agree on  
problems and  
interventions*

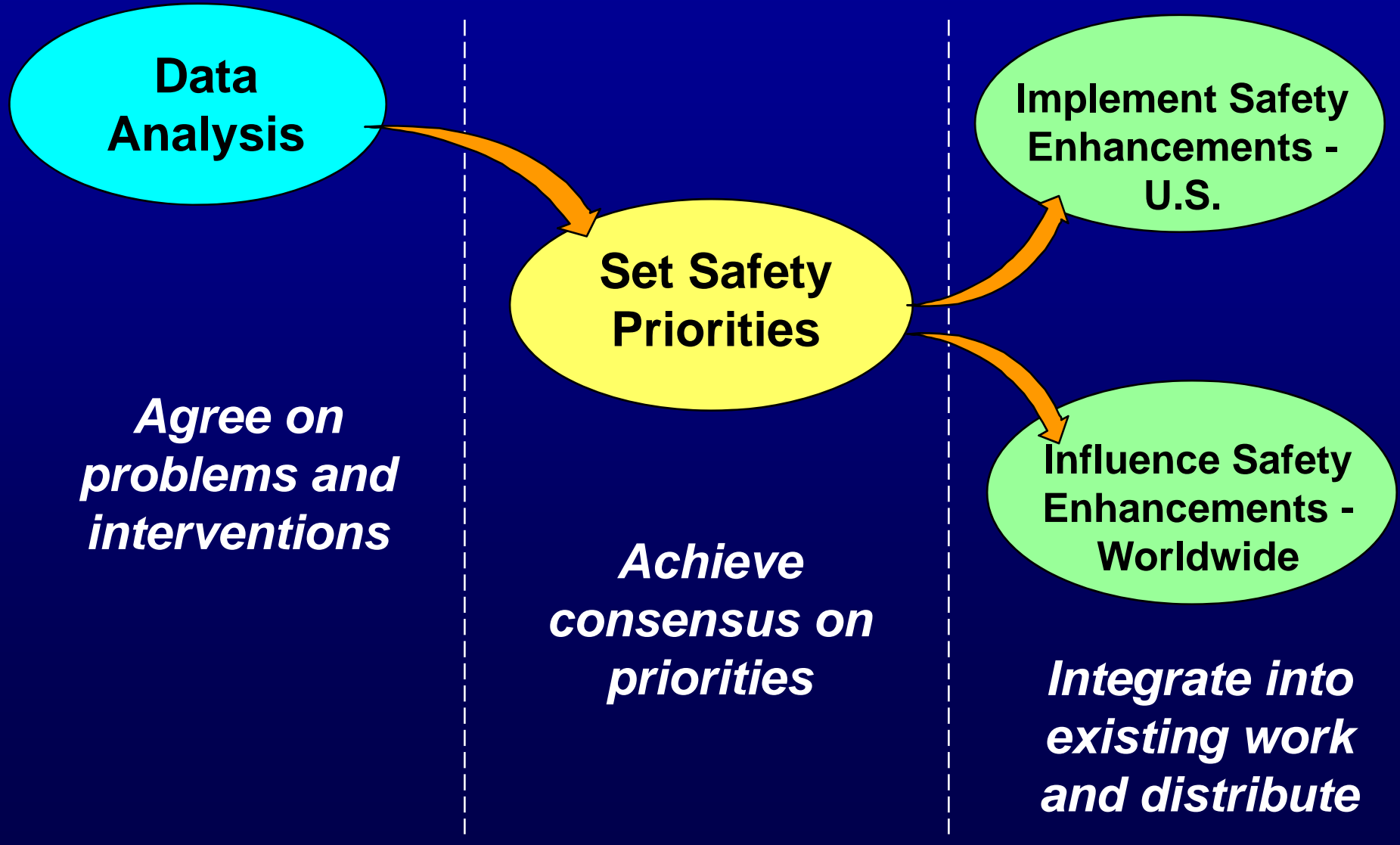
**Set Safety  
Priorities**

*Achieve  
consensus on  
priorities*

**Implement Safety  
Enhancements -  
U.S.**

**Influence Safety  
Enhancements -  
Worldwide**

*Integrate into  
existing work  
and distribute*





# CAST Organization



## **Joint Safety Analysis Teams (JSAT)**

- Data analyses

## **Joint Safety Implementation Teams (JSIT)**

- Safety enhancement development

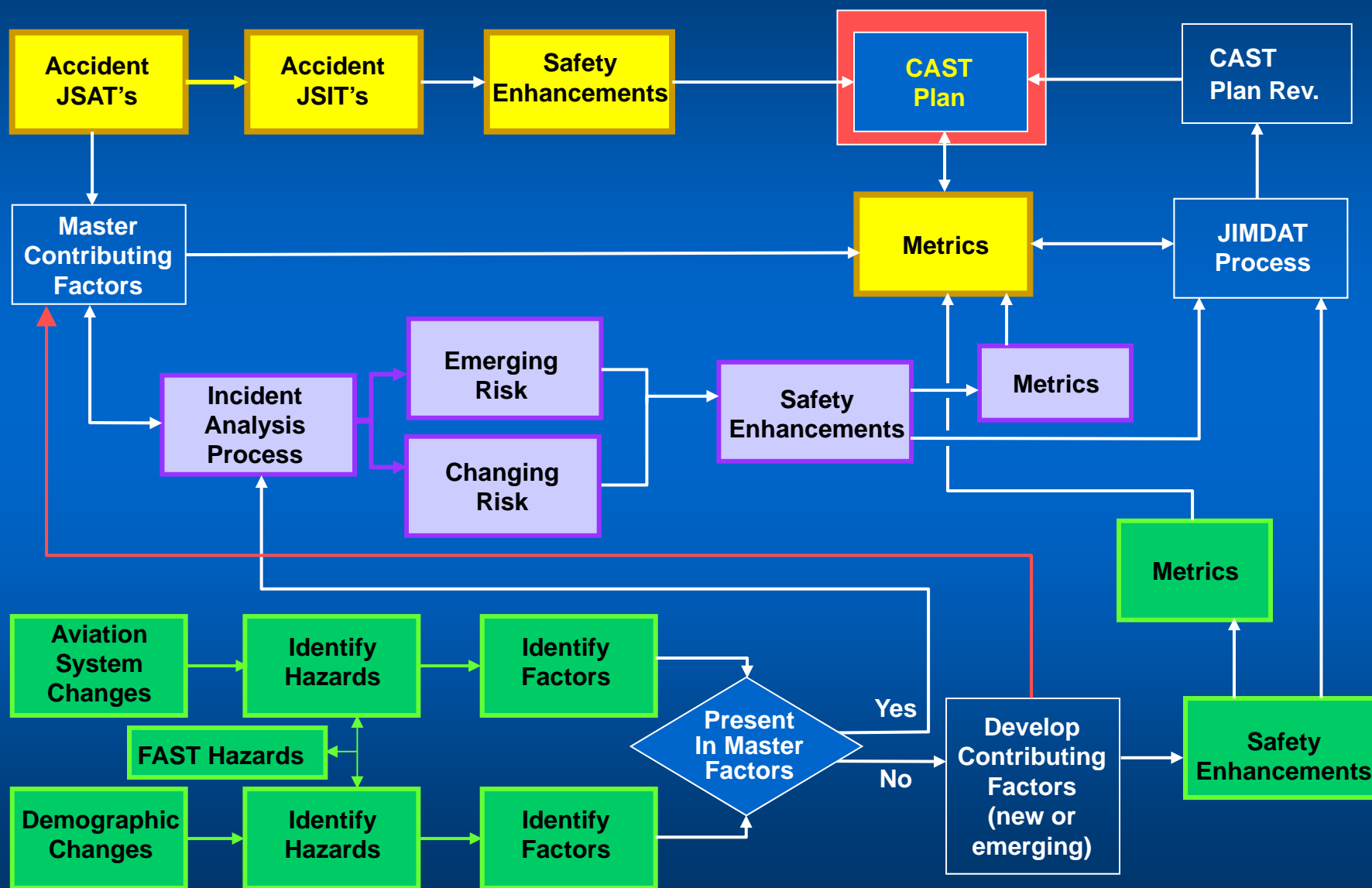
## **Joint Safety Analysis and Implementation Teams (JSAIT)**

- Consolidated data analyses and safety enhancement development team

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

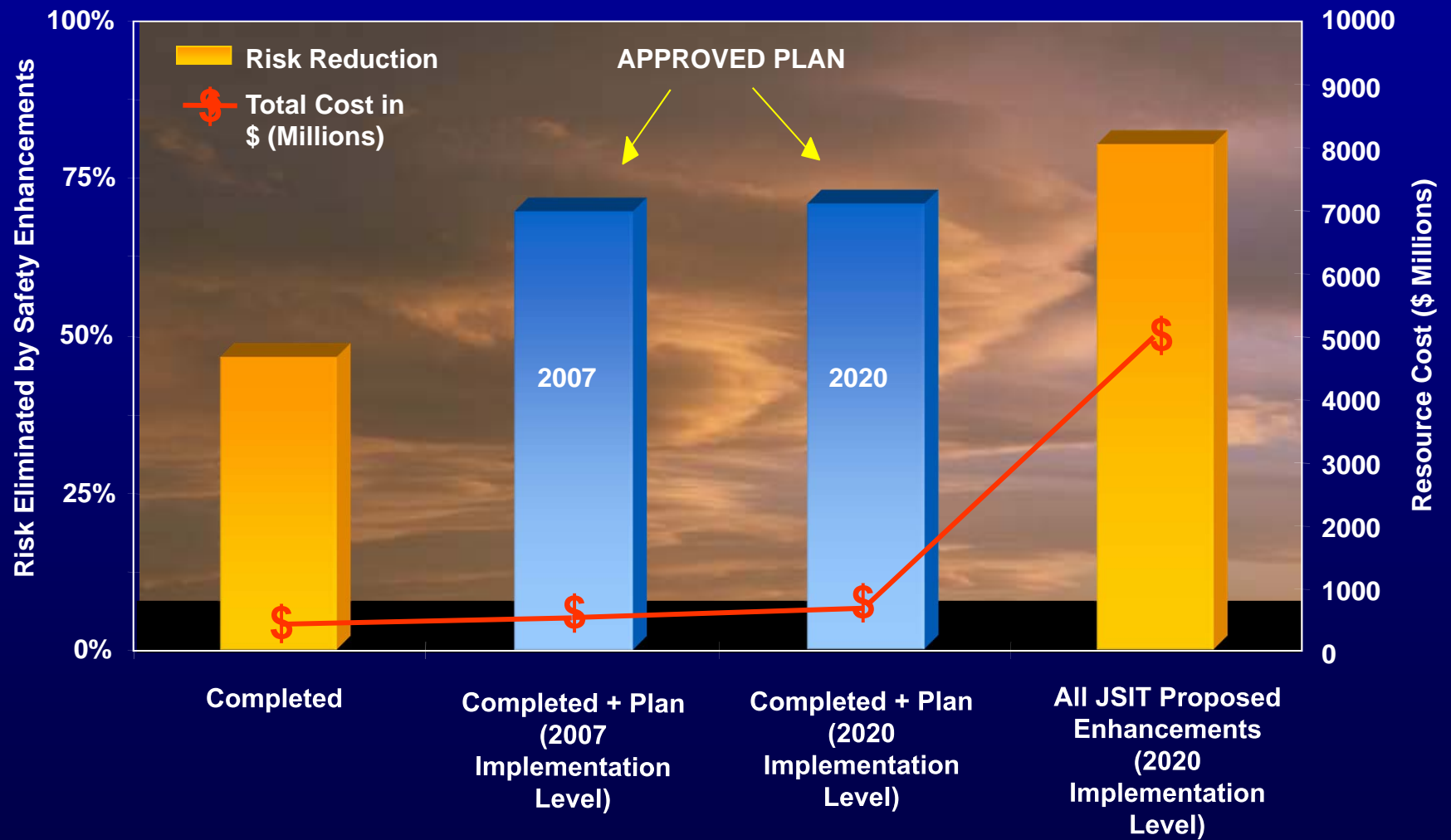
- Master safety plan
- Enhancement effectiveness
- Future areas of study and emerging risks

# Safety Plan Development



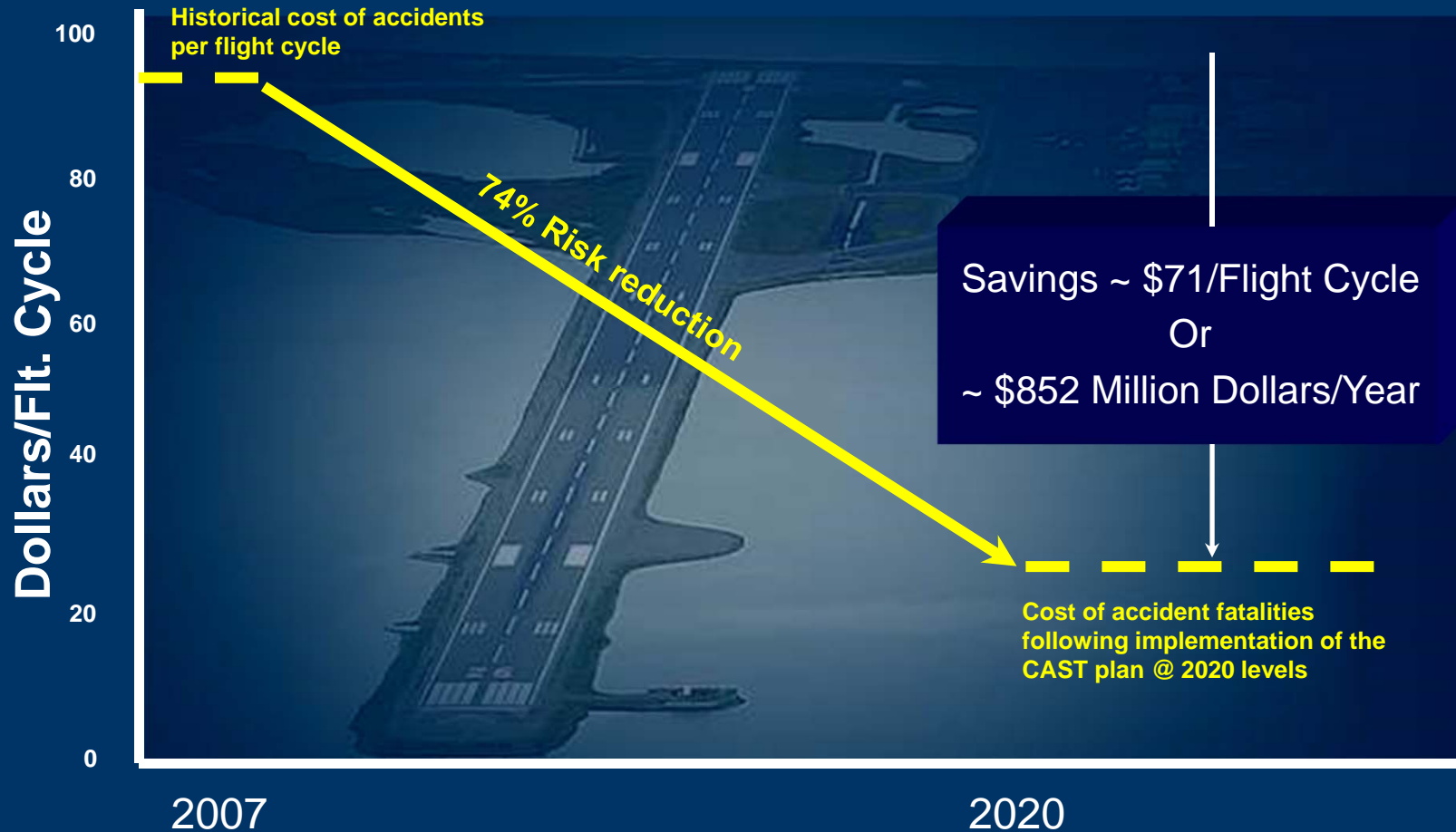


# Resource Cost Vs. Risk Reduction

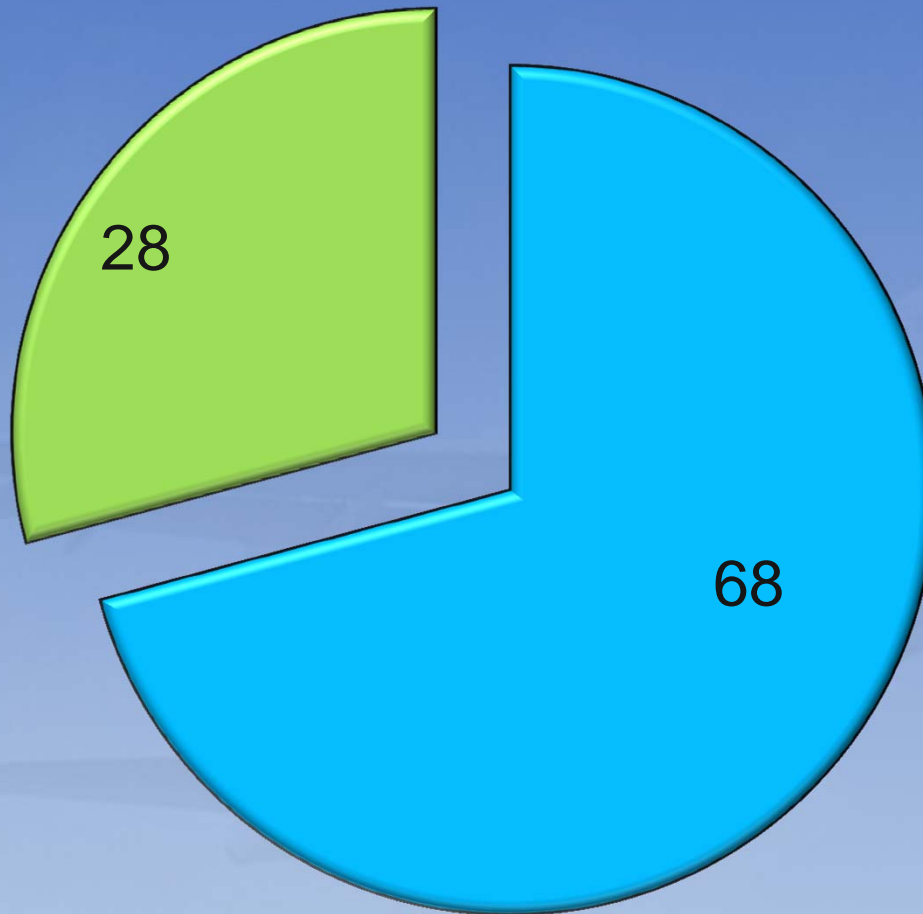


# Cost Savings

## Part 121 Aviation Industry Cost Due to Fatal/Hull Loss Accidents



# CAST – Safety Enhancements



**96 Safety Enhancements**

**68 Complete**

**28 Underway**

■ Completed

■ Underway



# Recent CAST Safety Enhancements Issued



## Airplane State Awareness

- Previously completed JSIT
  - 19 new Safety Enhancements (SEs 192-211)

## RNAV-Departures and STARs

- Recently completed JSAT
  - 3 new Safety Enhancements (SEs 212-214)

## Runway Excursions

- Recently Completed JSAT
  - 8 new Safety Enhancements (SEs 215-222)

## Misconfiguration

- Analysis underway, set to conclude in the next few months

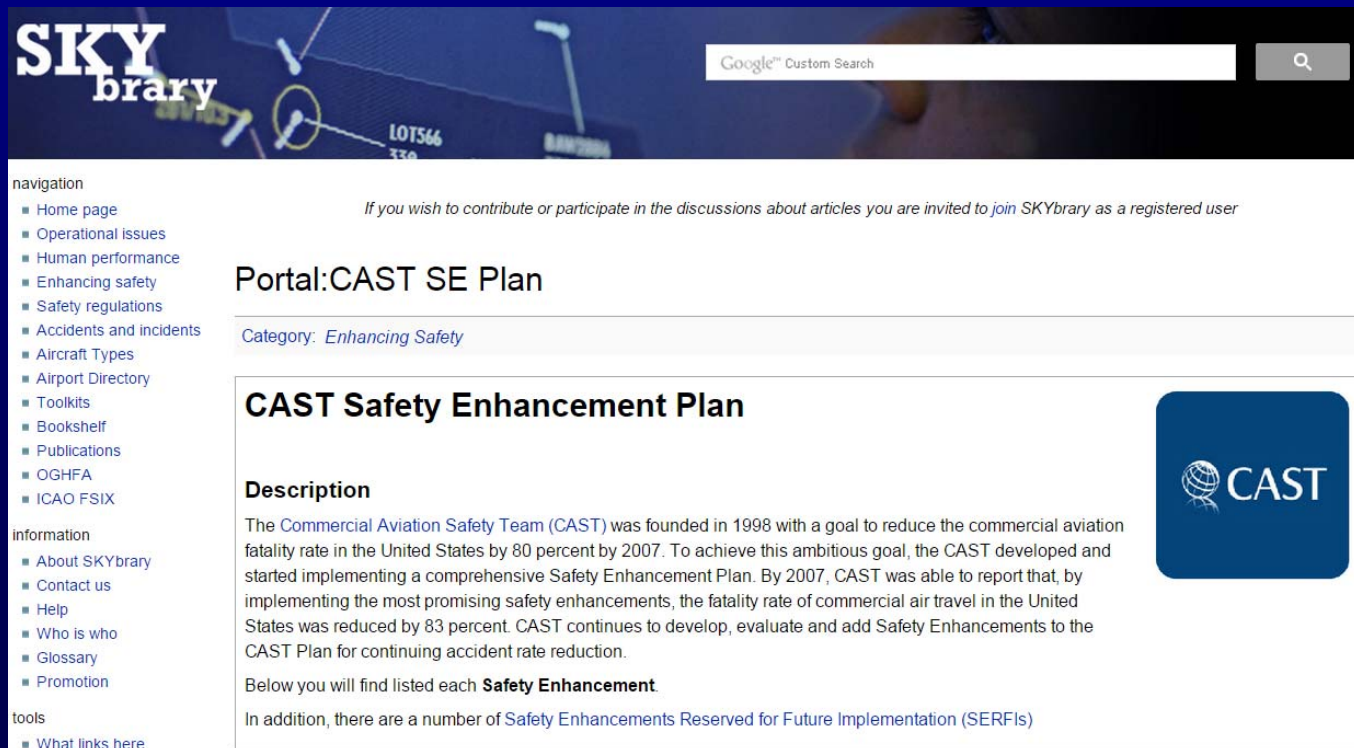
Safety Enhancements available on Skybrary:

[http://www.skybrary.aero/index.php/Portal:CAST\\_SE\\_Plan](http://www.skybrary.aero/index.php/Portal:CAST_SE_Plan)

# CAST

CAST Safety Enhancement Plan and details of all Safety Enhancements can be found at:

[http://www.skybrary.aero/index.php/Portal:CAST\\_SE\\_Plan](http://www.skybrary.aero/index.php/Portal:CAST_SE_Plan)



The screenshot shows the SKYbrary website interface. At the top, there is a header with the SKYbrary logo on the left and a Google Custom Search bar on the right. Below the header, a navigation menu is visible on the left side, listing various topics such as Home page, Operational issues, Human performance, Enhancing safety, Safety regulations, Accidents and incidents, Aircraft Types, Airport Directory, Toolkits, Bookshelf, Publications, OGHFA, and ICAO FSIX. The main content area displays the title "Portal:CAST SE Plan" and a category "Enhancing Safety". The primary heading is "CAST Safety Enhancement Plan". Under the "Description" section, it states that the Commercial Aviation Safety Team (CAST) was founded in 1998 with a goal to reduce the commercial aviation fatality rate in the United States by 80 percent by 2007. It mentions that by 2007, CAST was able to report that, by implementing the most promising safety enhancements, the fatality rate of commercial air travel in the United States was reduced by 83 percent. CAST continues to develop, evaluate and add Safety Enhancements to the CAST Plan for continuing accident rate reduction. Below this, it indicates that below the user will find listed each Safety Enhancement. Additionally, there are a number of Safety Enhancements Reserved for Future Implementation (SERFIs). A CAST logo is displayed on the right side of the page.

SKYbrary

Google™ Custom Search

navigation

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- Enhancing safety
- Safety regulations
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## Portal:CAST SE Plan

Category: *Enhancing Safety*


### CAST Safety Enhancement Plan

#### Description

The Commercial Aviation Safety Team (CAST) was founded in 1998 with a goal to reduce the commercial aviation fatality rate in the United States by 80 percent by 2007. To achieve this ambitious goal, the CAST developed and started implementing a comprehensive Safety Enhancement Plan. By 2007, CAST was able to report that, by implementing the most promising safety enhancements, the fatality rate of commercial air travel in the United States was reduced by 83 percent. CAST continues to develop, evaluate and add Safety Enhancements to the CAST Plan for continuing accident rate reduction.

Below you will find listed each **Safety Enhancement**.

In addition, there are a number of Safety Enhancements Reserved for Future Implementation (SERFIs)







# CAST International Outreach





# CAST Engagement Criteria



- Safety Value
  - CAST's effort will provide an opportunity to improve safety within the region
- Infrastructure
  - The region has an established infrastructure to enable the implementation of safety improvements
- Partnerships
  - The region has established a government and industry partnership to influence change and establish their own safety goals

# InfoShare



- InfoShare is a semiannual Industry-sponsored, FAA facilitated event for airline safety professionals, manufacturers, and the FAA to share safety issues, lessons learned and mitigation strategies, in a protected environment.
- Focused largely on operational safety issues, but airplane design is always an underlying issue.
- Next meeting will be held March 15-17
- InfoShare generates many issues to JIMDAT to perform risk assessment.



## A large commercial airplane is shown from a low angle, flying towards the viewer. The plane is dark, and its landing gear is visible. The sky is a clear, deep blue.



BACKUP SLIDES



Guideline  
Criteria C 1.1

## Study Prioritization (Fleet Risk)

