



NTSB National Transportation Safety Board

Business Aviation Safety Status and Challenges



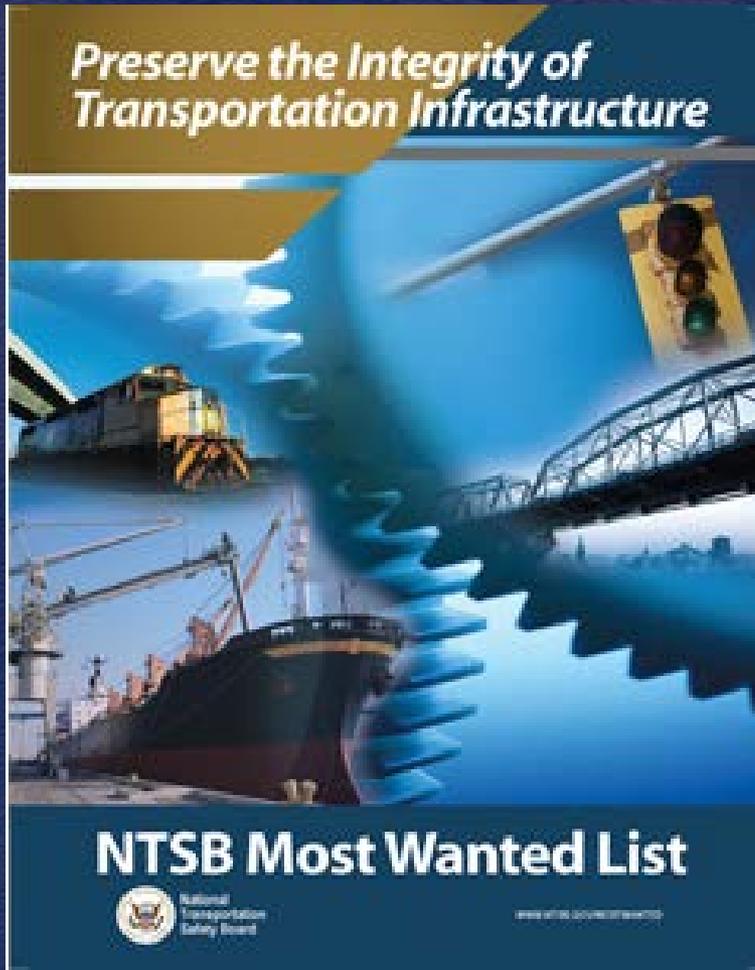
TRB Business Aircraft
Operations
January 15, 2014

Earl F. Weener, Ph.D.
Member, NTSB

NTSB Mission

The NTSB is an independent US federal agency charged with determining the probable cause(s) of transportation accidents, making recommendations to prevent their recurrence, conducting special studies and investigations, and coordinating resources to assist victims and their families after an accident.

NTSB Most Wanted List

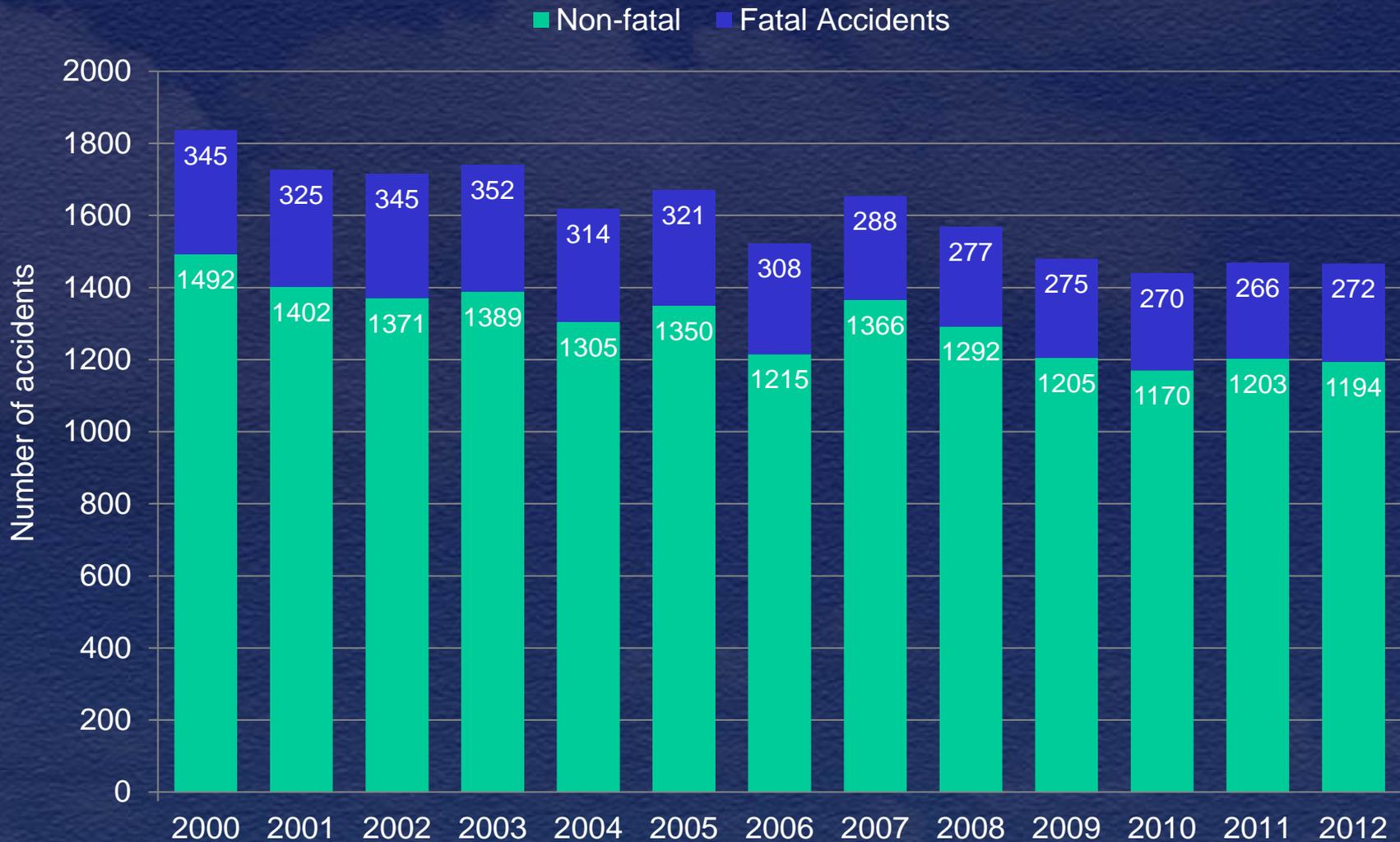


- Improve general aviation safety
- Improve safety of airport surface operations
- Eliminate distraction in transportation
- Preserve the integrity of transportation infrastructure
- Improve fire safety in transportation
- Enhance pipeline safety
- Implement positive train control systems
- Improve the safety of bus operations
- Eliminate substance-impaired driving
- Mandate motor vehicle collision avoidance technologies

Why GA on the Most Wanted List?

- NTSB investigates approximately 1500 GA accidents per year
- Overall GA accident rate flat
 - Has not improved over the last ten years
 - Air carrier accident rate decreased almost 80%
- Personal flying accident rate
 - Increased 20% over last 10 years
 - Fatal rate increased 25% over that period
- ***GA safety needs attention***

All GA Accidents

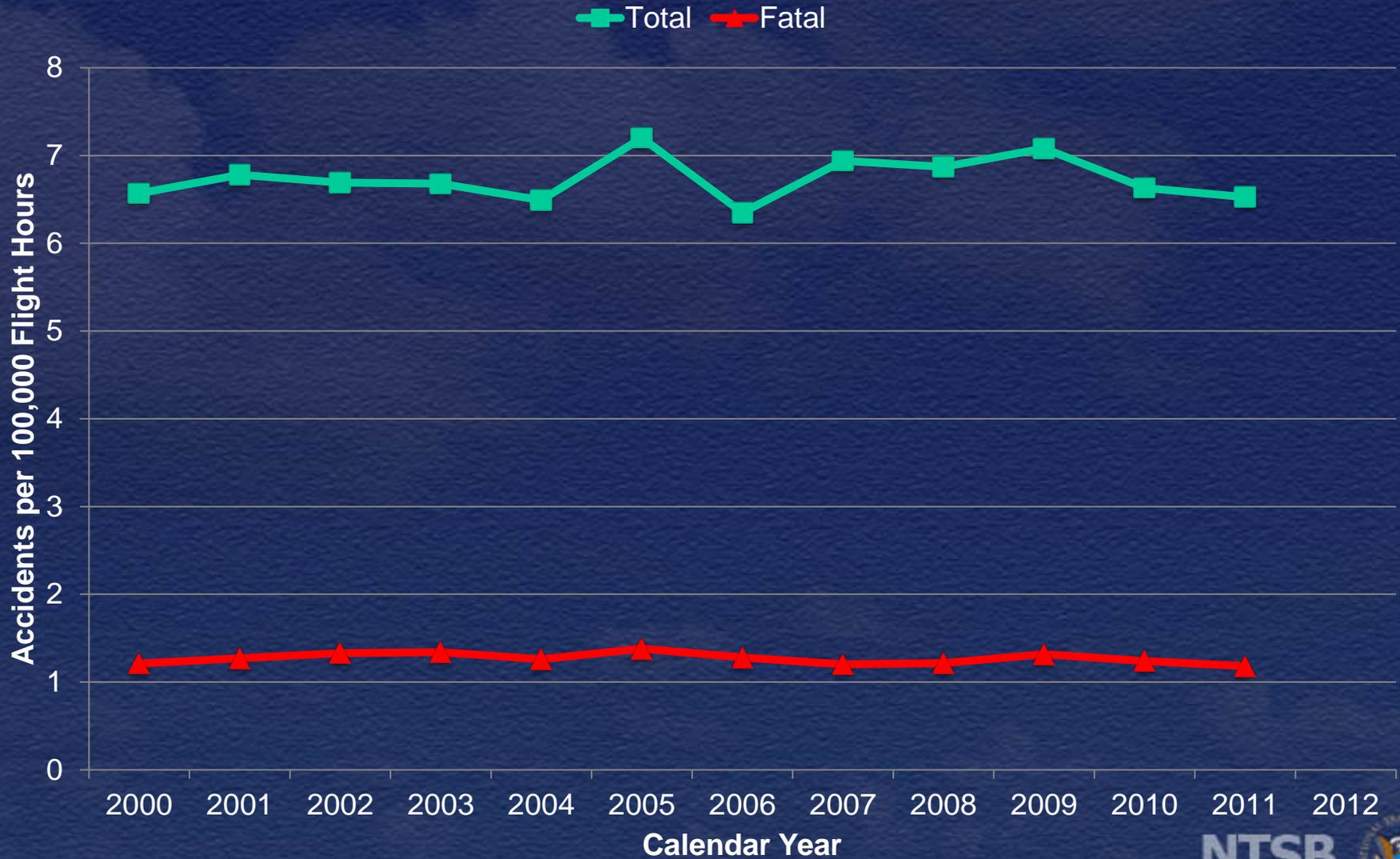


GA Accident-involved Fatalities

GA Accident-Involved Fatalities



GA Accident Rates

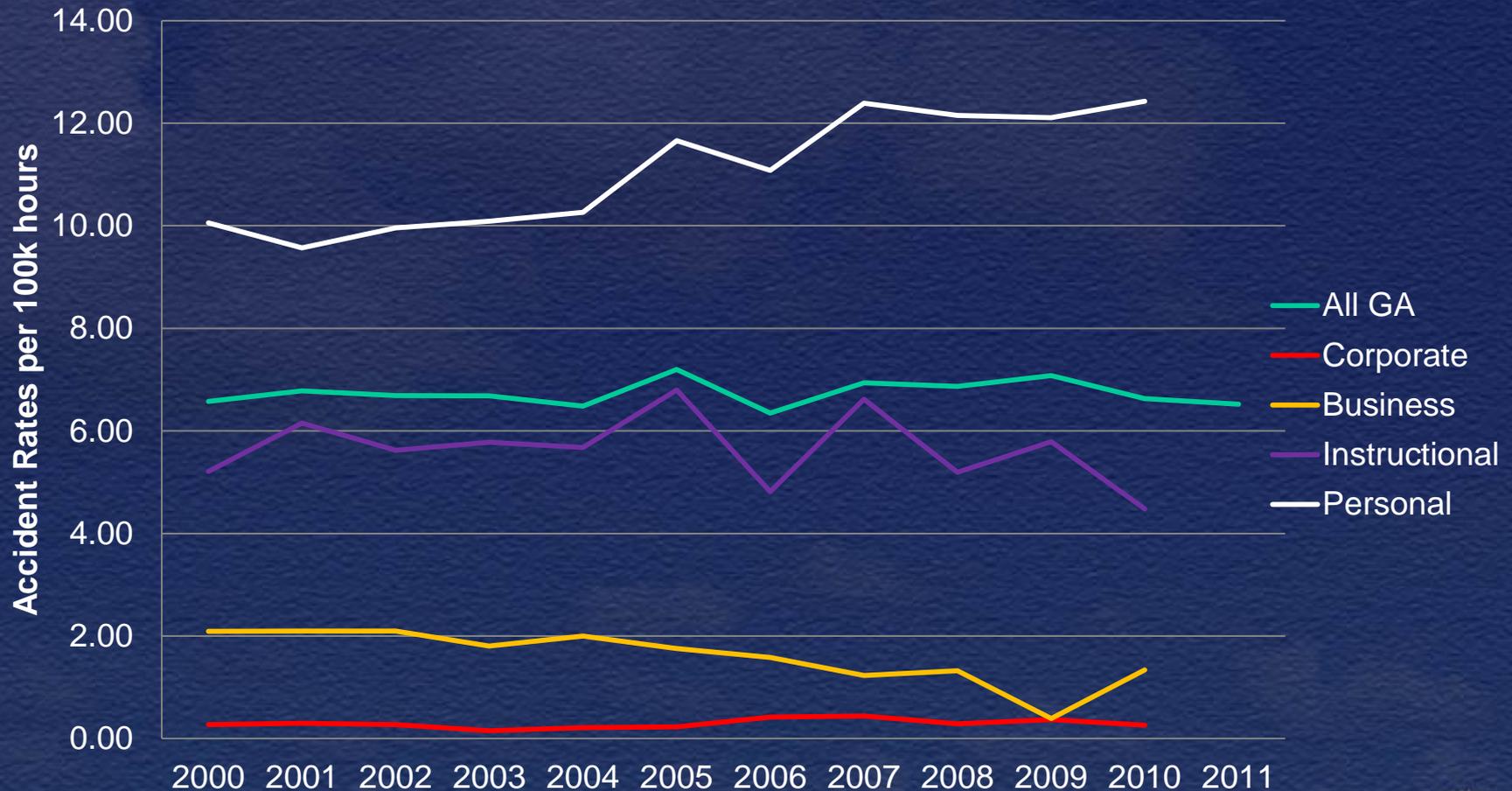


Defining Fatal Accident Events All GA 2008-2012

- Loss of Control in Flight
- System/Component Failure – Powerplant
- Controlled Flight into Terrain
- Collision with Terrain/Object (non-CFIT)
- VFR Encounter with IMC
- System/Component Failure –
Non-Powerplant

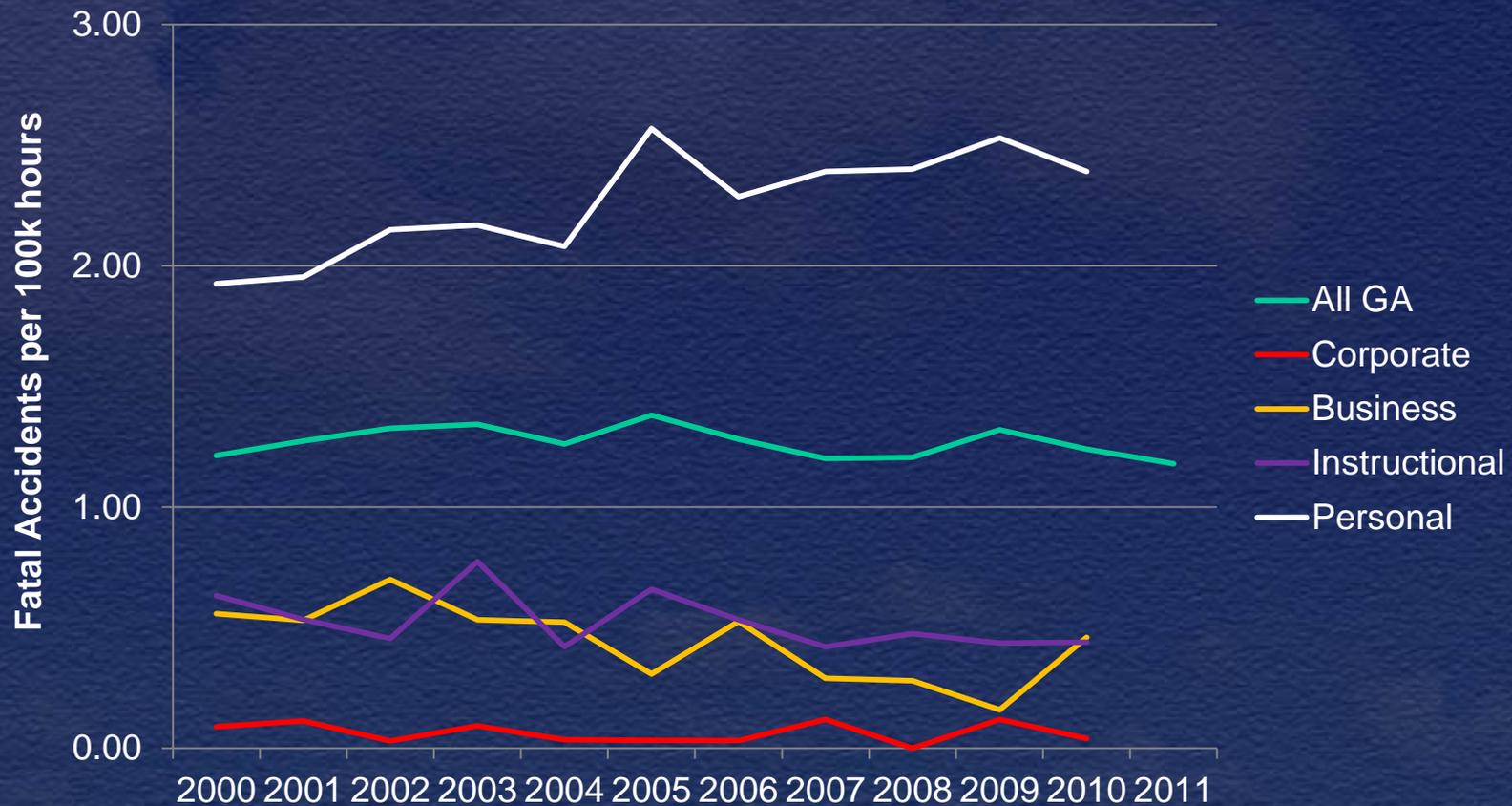
Accident Rates per 100k Flight Hours

Accident Rates per 100k Flight Hours
2000-2011



Fatal Accident Rates per 100k Flight Hours

Fatal Accident Rates per 100k Flight Hours
2000-2011



Accident Rates, 2000 - 2011

- Corporate
 - Accident rates approaching that of the airlines.
- Business
 - Total and fatal accidents relatively flat; substantially below the overall GA accident rates.
- Instructional
 - Total accident rate is slightly below the average for all of GA, the fatal rate is substantially lower.
- Personal
 - Total and fatal accident rates have risen, both rates are substantially above the average of all GA flying.

Business Flying, 2008-2012

All accidents – Loss of control (in-flight or on the ground) accounted for the largest portion, followed by system/component failures.

Fatal accidents - Loss of control in flight accounted for the greatest proportion, followed by controlled flight into terrain.

Number of Fatal Accidents



Instructional Flying, 2008-2012

All Accidents - Loss of control on the ground or in-flight and abnormal runway contact accounted for the great majority of defining accident events.

Fatal Accidents – Loss of Control in-flight, followed by Controlled Flight into Terrain.

Number of Fatal Accidents

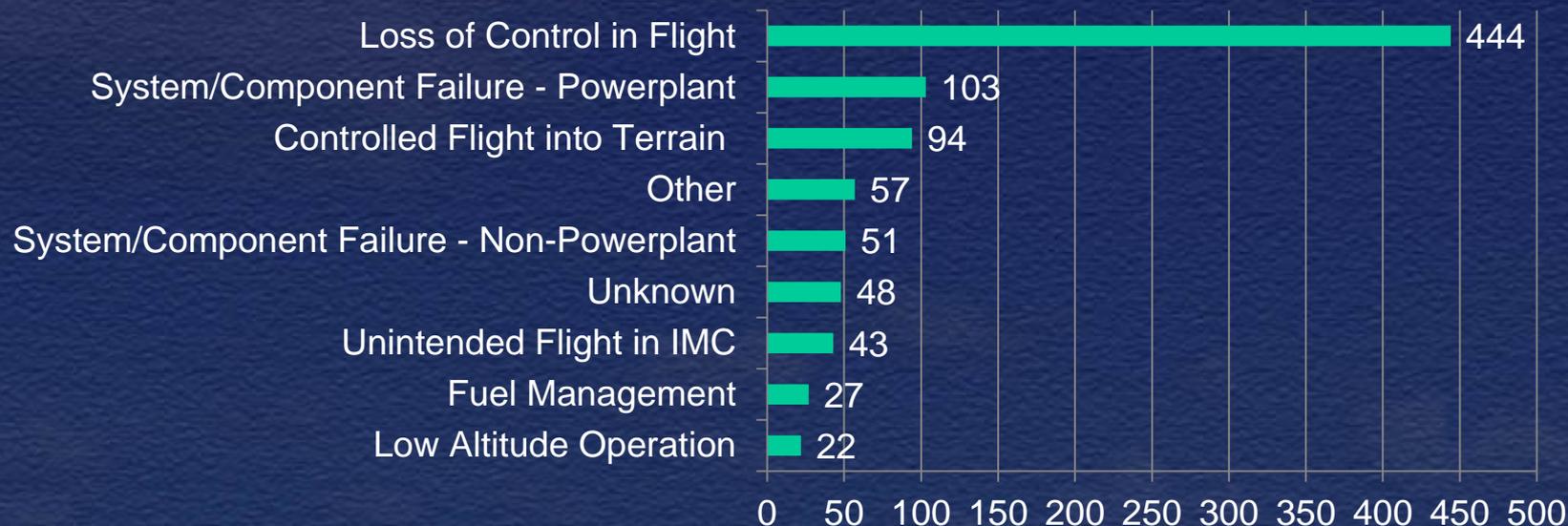


Personal Flying, 2008-2012

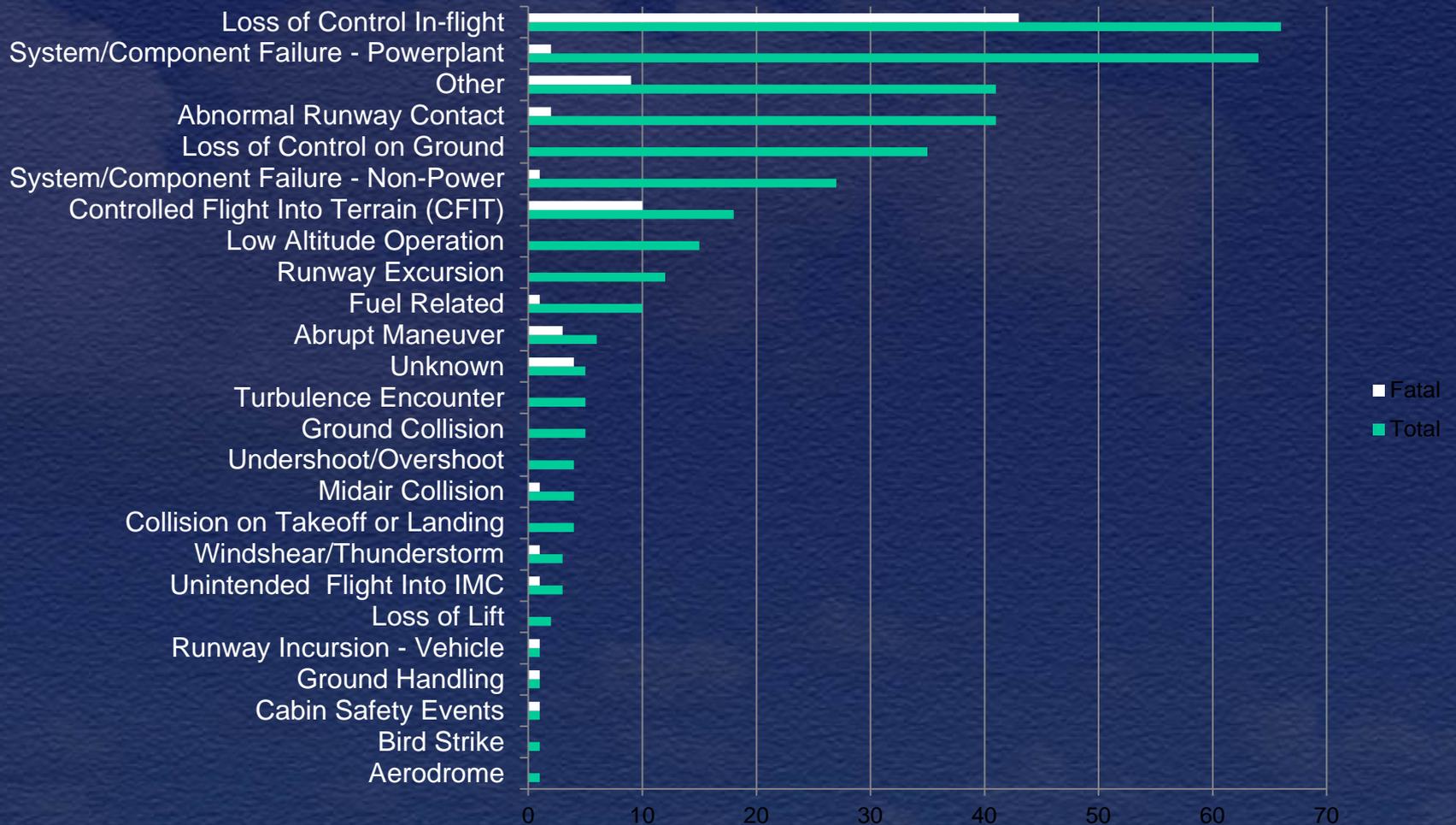
Total accidents - loss of control in flight and on the ground and power plant failure were the most common defining events.

Loss of control in flight accounted for the greatest proportion of the fatal personal flying accidents.

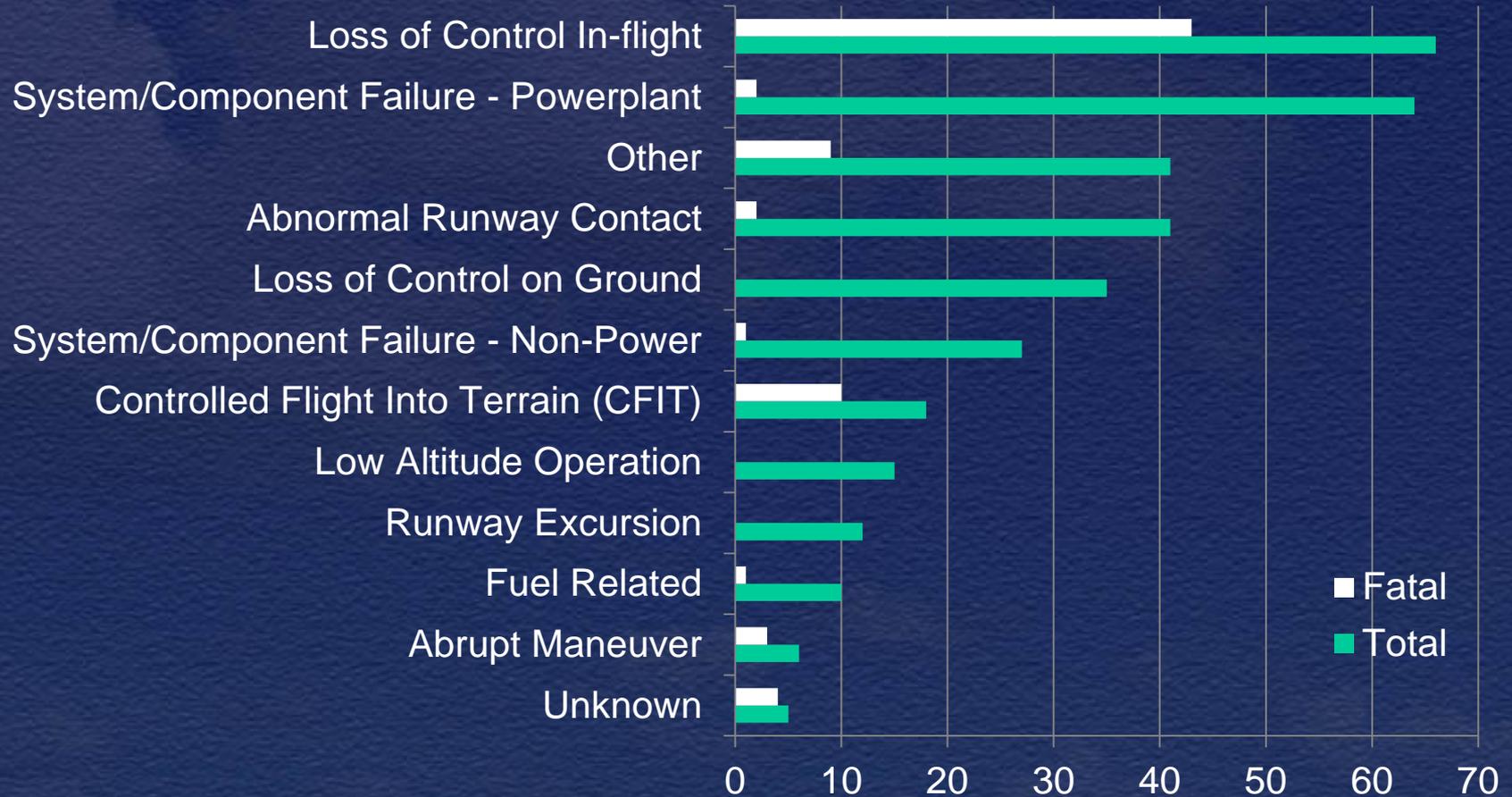
Number of Fatal Accidents



Part 91 Turboprop Accidents 2008-2013

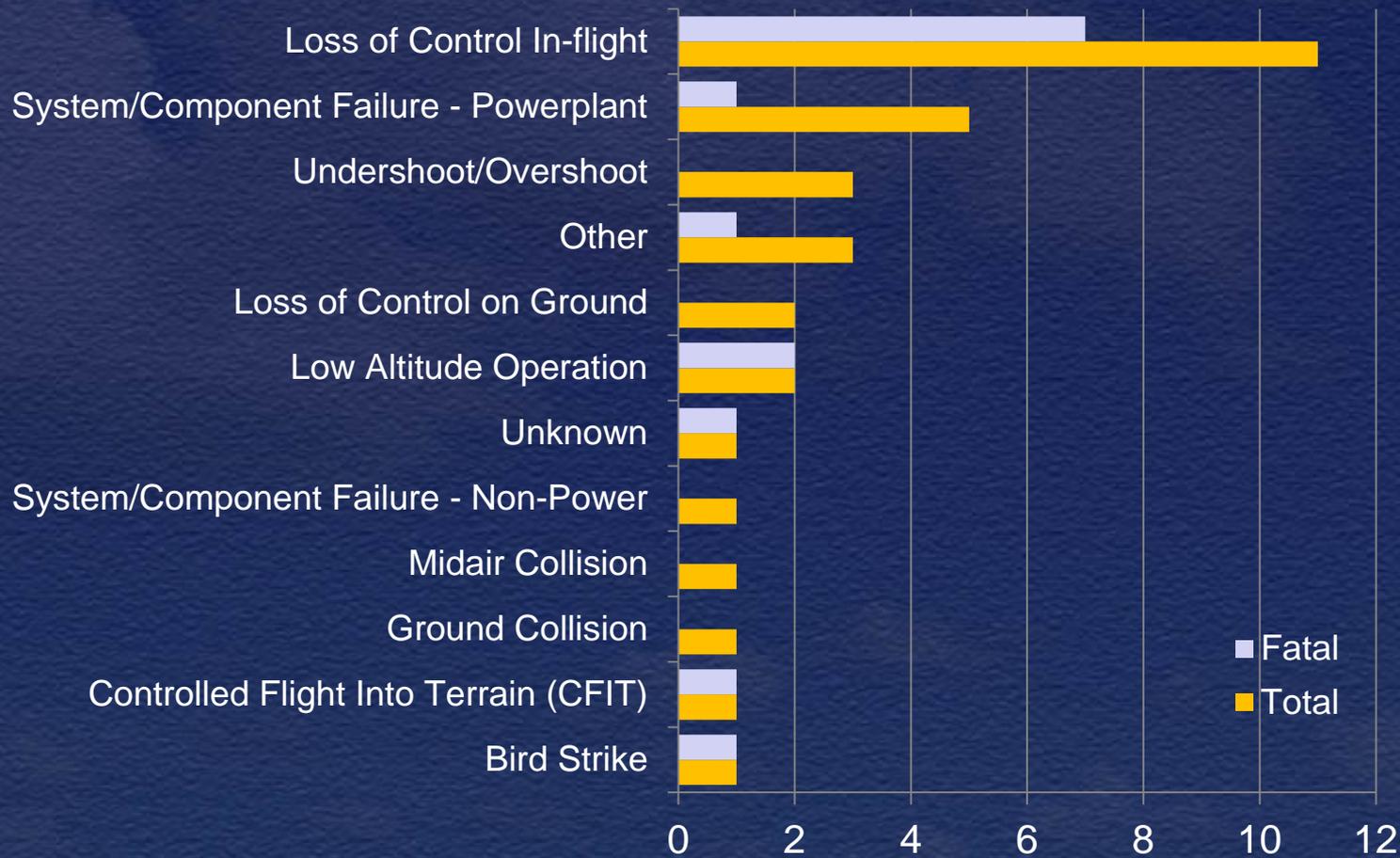


Part 91 Turboprop Accidents 2008 - 2013



Part 91 Turbojet Accidents 2008-2013

Defining Event



NTSB Safety Alerts

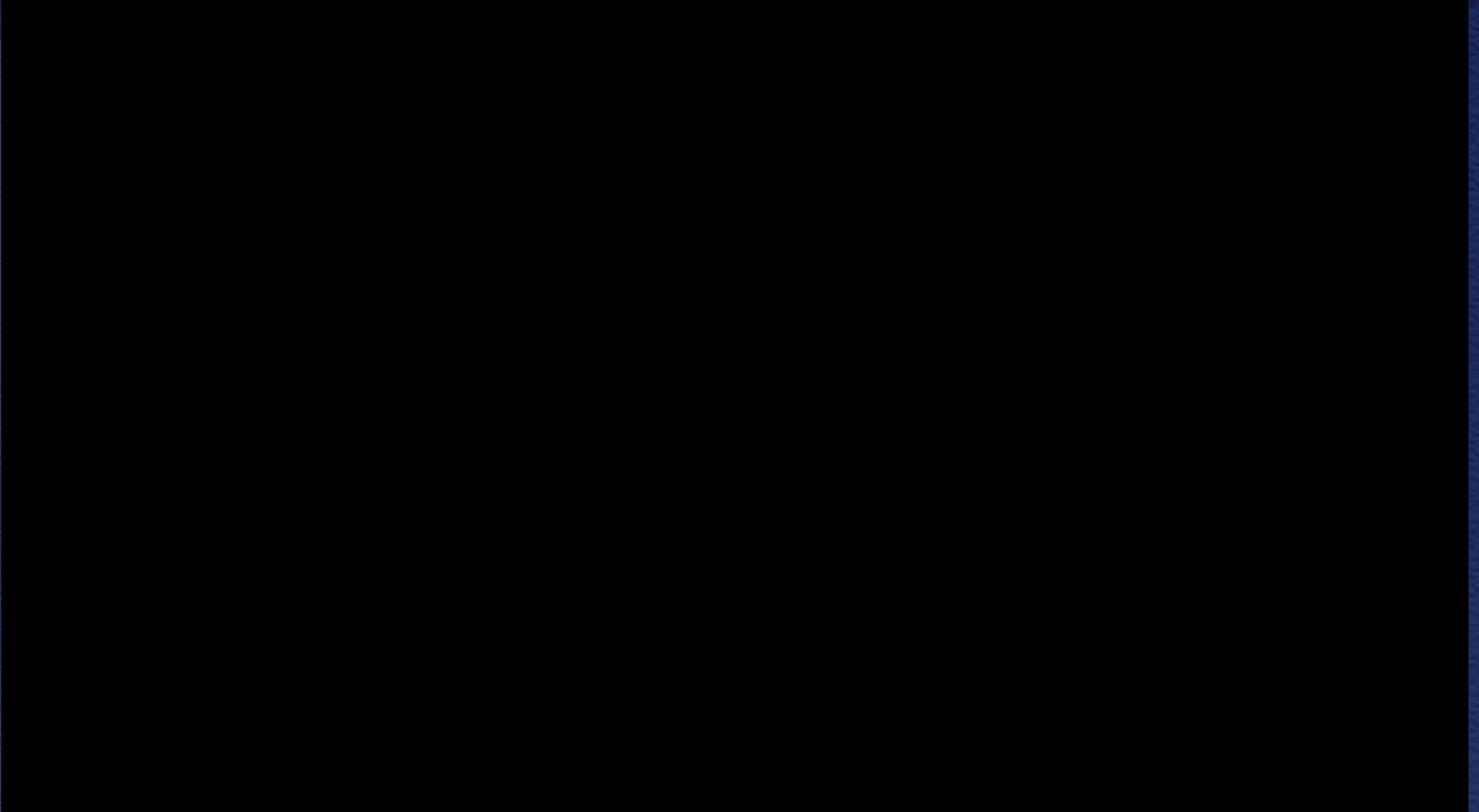
- Preventing Aerodynamic Stalls
- Reduced Visual References
- Is Your Aircraft Talking to You
- Risk Management for Pilots
- Risk Management for Mechanics



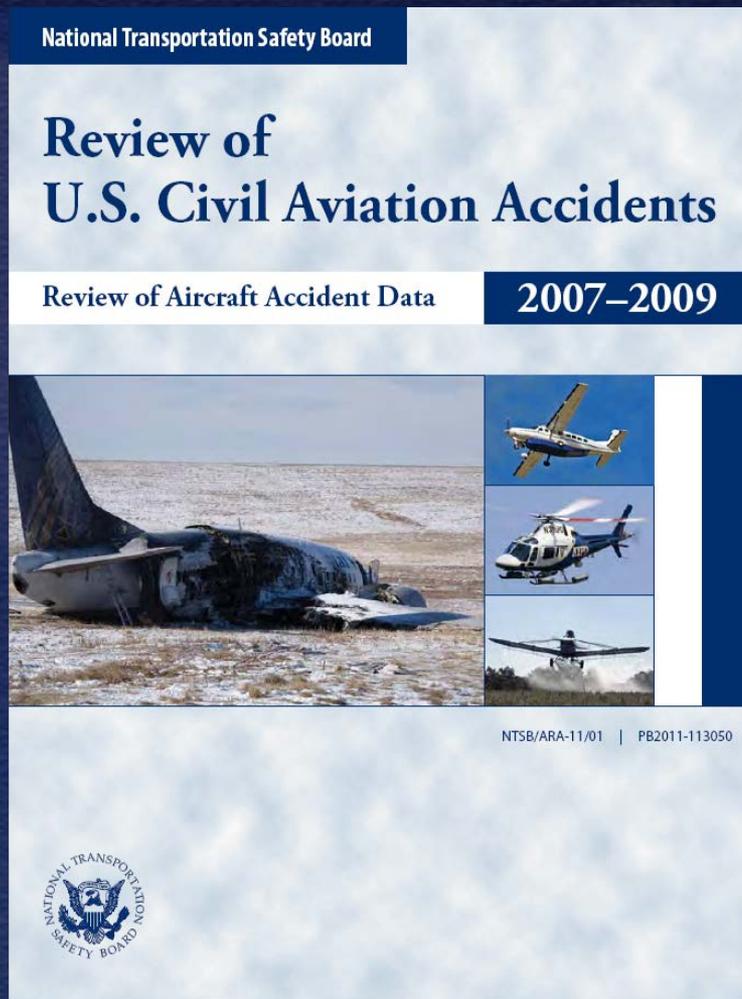
Available on www.NTSB.gov



Safety Alert Video Preview



Accident Investigations



- NTSB accident files are on-line
- Many recent accident Dockets are on-line
 - Factual reports,
 - Interviews
 - Photographs
- www.nts.gov

<http://www.nts.gov/doclib/reports/2011/ARA1101.pdf>



NTSB

Reduced Visual References

- Preflight weather briefing
- Resist external pressures
- Honestly assess your skills
- Know your equipment
- Seek help from ATC
- Understand challenges of night flying
- Manage distractions

Alfred Sheinwold

“Learn all you can from the mistakes of others. You won’t have time to make them all yourself”

Douglas Adams

“Human beings, who are almost unique in having ability to learn from the experience of others, are also remarkable for their apparent disinclination to do so.”

N6529R - B36TC Bonanza





GENERAL AVIATION SAFETY

Climbing to the Next Level

June 19-20, 2012

Safety Forum Agenda

- **Panel 1 – Safety Priorities**
 - NASA, GA-JSC, FAA
- **Panel 2 – Safety Programs**
 - ABS, AVEMCO Insurance, AOPA, FAA (Wings Program)
- **Panel 3 – Role of the Flight Instructor**
 - SAFE, NAFI, FAA, UND, IAFTP
- **Panel 4 – Content, Quality & Consistency of Pilot Training**
 - FAA, ASA, Red Bird Simulators, SAFE, ERAU

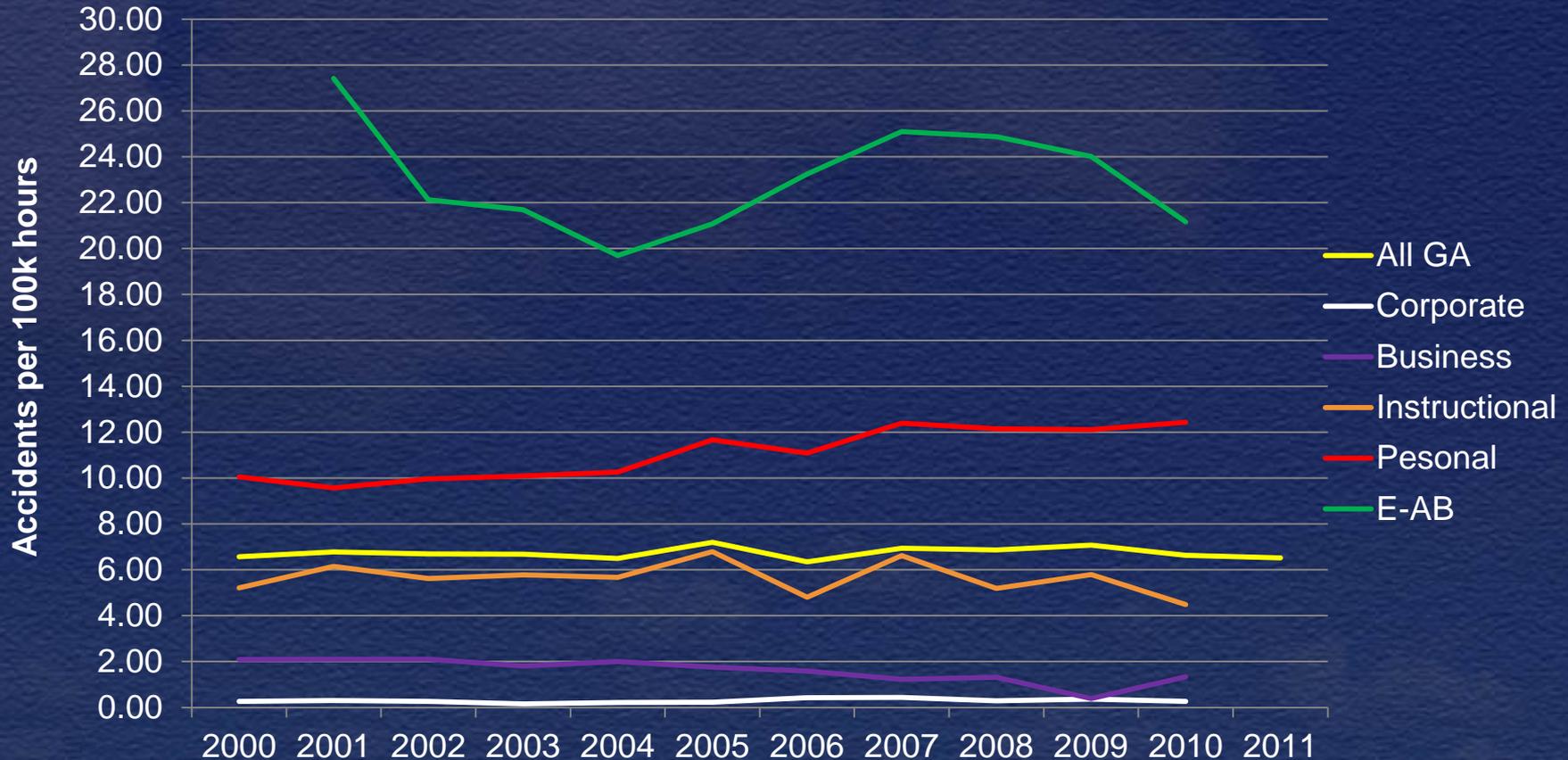
Safety Forum Agenda (cont'd)

- **Panel 5 – Weather Related Decision-Making**
 - FAA, Baron Services, ERAU, CAMI, Independent Aviation Safety Speaker, FAA
- **Panel 6 – Aircraft Maintenance and Modification**
 - FAA, EAA/VAA, Middle TSU, PAMA
- **Panel 7 – New Aircraft Design and Certification**
 - FAA, GAMA, Cirrus, AOPA, ICON Aircraft
- **Panel 8 – Advanced Avionics and Handhelds**
 - GAMA, AOPA, NASA, ERAU



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