



**NTSB** National Transportation Safety Board

# NTSB General Aviation Focus



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

GAMA Board of Directors  
May 10, 2012

# 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 “Air Force”

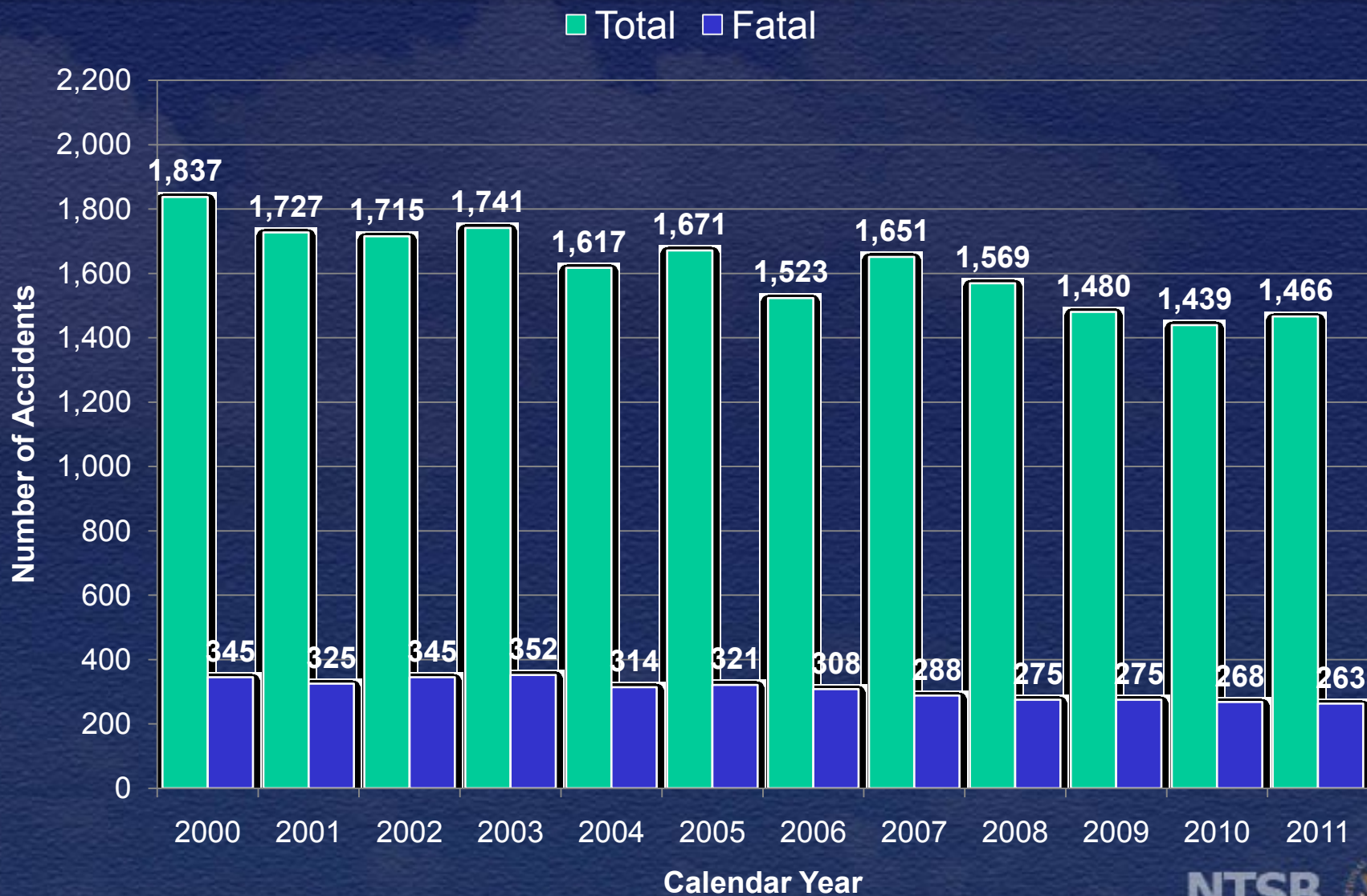
- Built/Restored or Building/Restoring\*
- **Sheryl Chappell:** Cessna 180 Floatplane
- **John Clark (EAA #603773):** Schreder RS-15, Vans RV-9A, Vans RV-12
- **Paul Cox:** Beech Bonanza G33, Vans RV-8a (Building)
- **Dennis Crider (EAA #1041658):** Vans RV-12
- **Dennis Diaz (EAA #1047382):** Vans RV-7a
- **Craig Hatch (EAA #659495):** Vans RV-8a, Cessna 140
- **Tom Haueter (EAA #251921):** 1943 Stearman, 1934 Lockheed Altair
- **Tim LeBaron (EAA #454270):** Piper J-3, Breezy (experimental), Pober Jr. Ace, 1941 Piper J5A, 1946 Cessna 120, 1975 Cessna 150, 1946 Ercoupe, Vans RV-4, 1947 Piper PA-11 Cub Special
- **Larry Lewis (EAA #751909):** Varga Kachina 2150A, Vans RV-8
- **Ron Price:** 1972 McCollough J2, Long EZ
- **Elliott Simpson:** Vans RV-7, Pietenpol Aircamper
- **Bob Swaim (EAA #221919):** 1974 Beech Sport, 1947 Cessna 140, 1967 Cessna 150, 1941 Stinson 10A, Kitfox
- \* At least one airplane listed was built/restored or is in the process of being built/restored.

# NTSB “Air Force”

- Own (Not Built/Restored)
- **Member Earl Weener (EAA #727429):** Beech Bonanza B36TC
- **Kurt Anderson:** Navion, Aeronca 11AC, Cessna 170A
- **Tim Burtch (EAA #1078661):** Cessna 172
- **John Brannen:** Sonerai IIL
- **Evan Byrne:** Cessna 172
- **Jill Demko:** PA-22-108 Piper Colt
- **J. Michael Duncan:** Beech Bonanza V35B
- **Kristi Dunks (EAA #689578):** 1955 Piper Super Cub
- **Catherine Gagne (EAA #646357):** 1956 Beech Bonanza G35
- **Craig Hatch:** Cessna 170a
- **Mike Huhn:** Cessna 182
- **Judge William Mullins:** Vans RV-8a
- **Jose Obregon:** Cessna 172
- **Jim Ritter:** Piper Comanche
- **Chris Stephens (EAA #689593):** Piper Comanche



# All GA Accidents (Part 91)



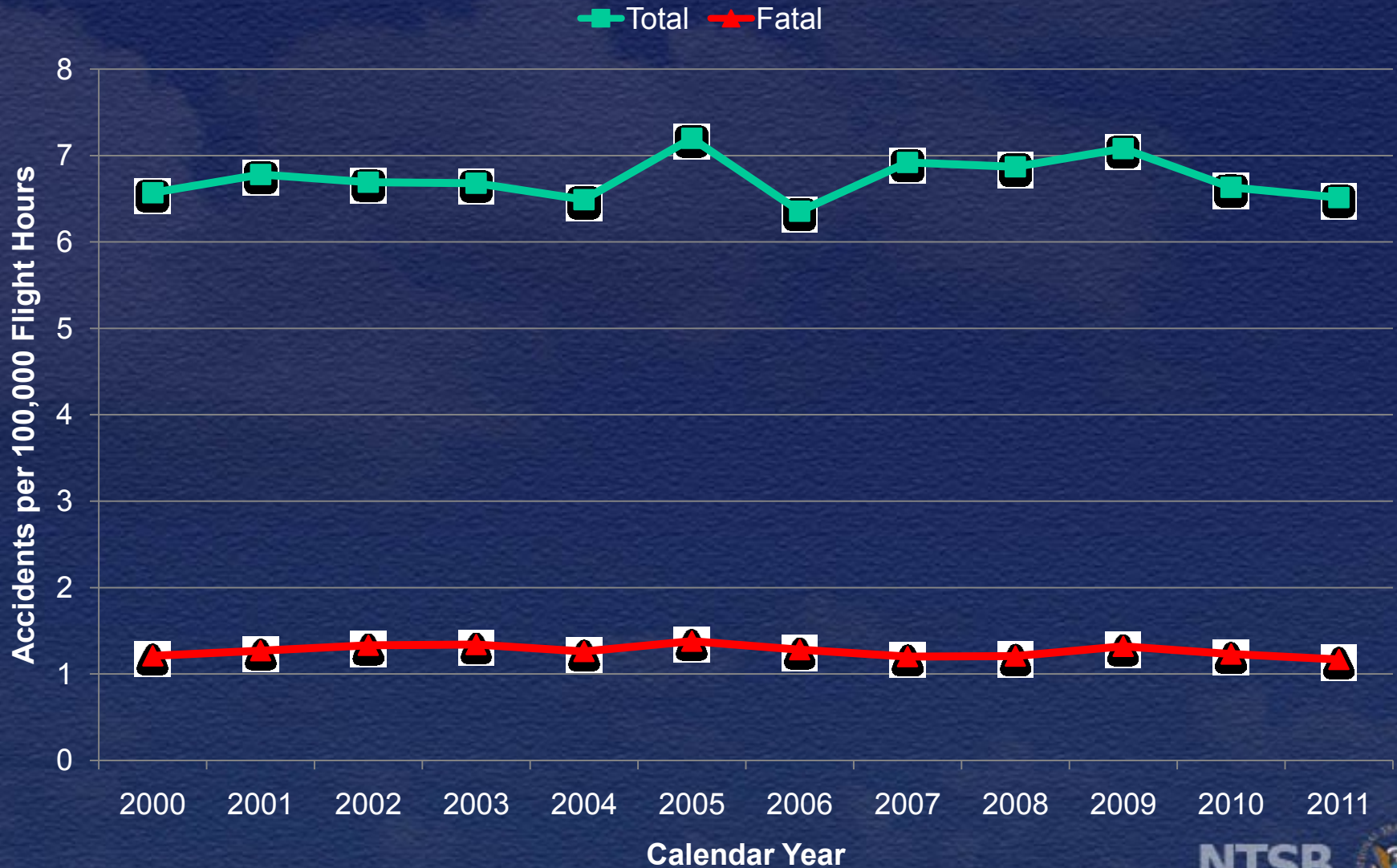
# GA Accident-involved Fatalities

GA Accident-Involved Fatalities





# GA Accident Rates



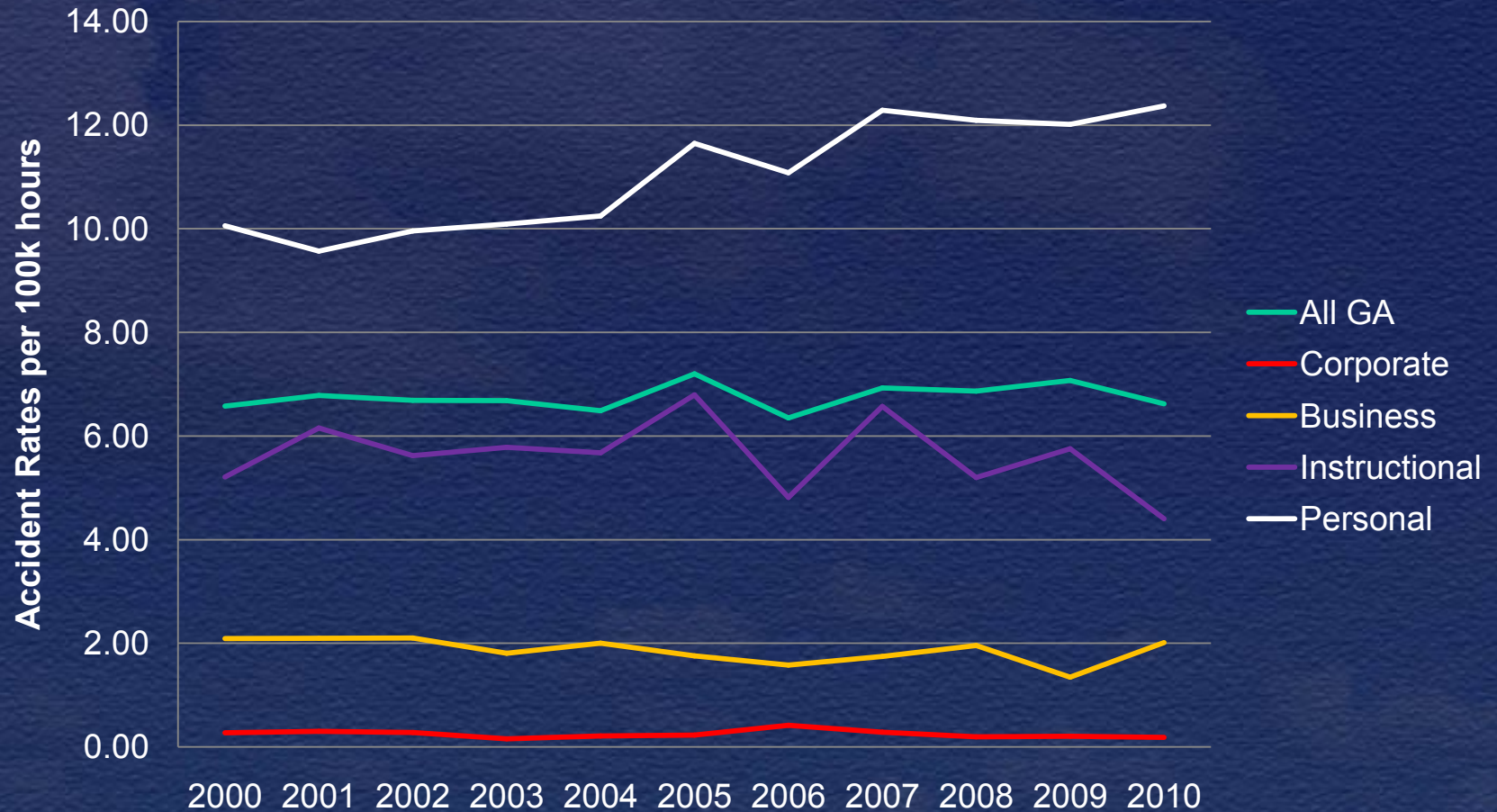
# Defining Fatal Accident Events

- Loss of Control in Flight
- Loss of Control on Ground
- Abnormal Runway Contact
- System/Component Failure – Powerplant
- Controlled Flight into Terrain
- Unintended Flight into IMC



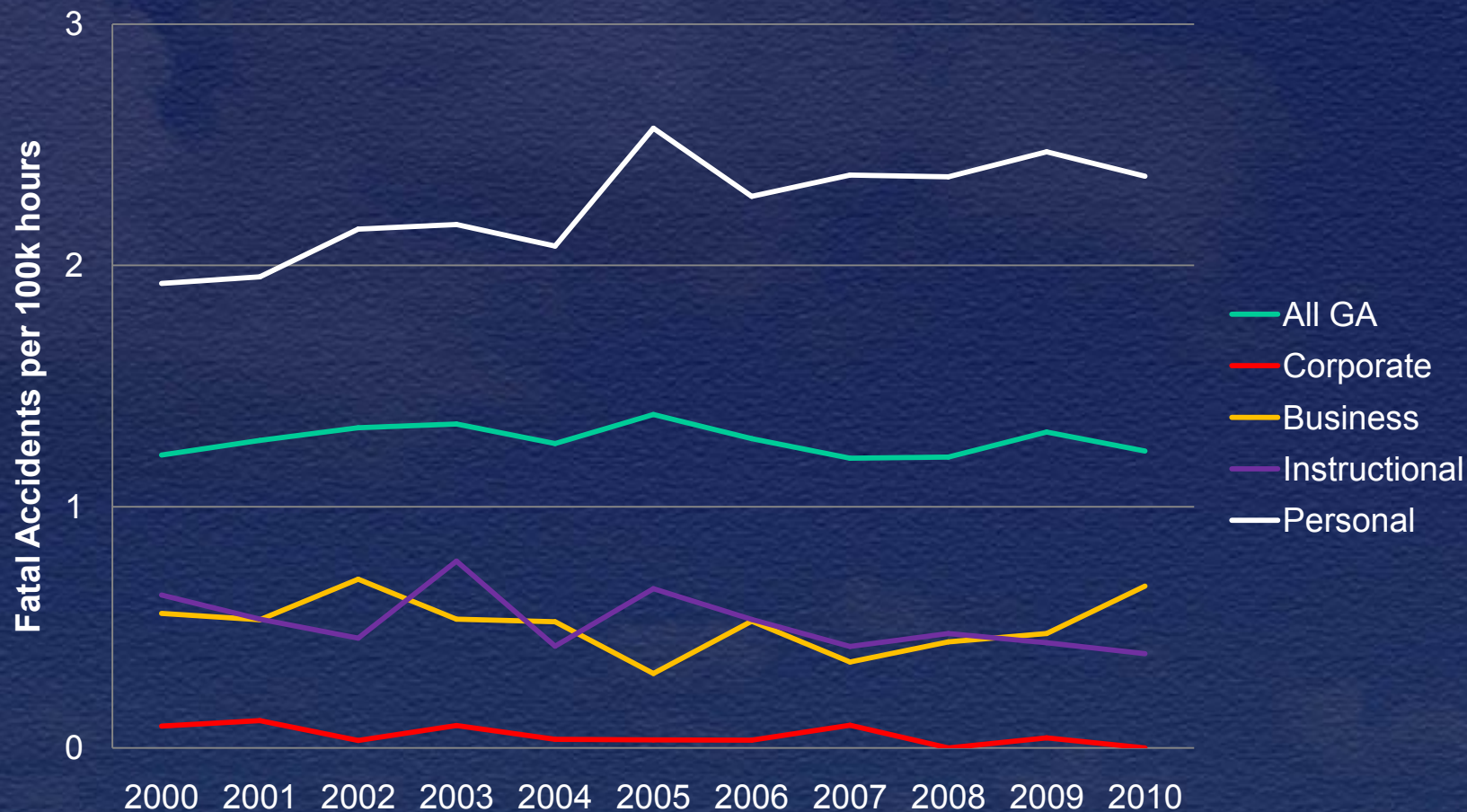
# Accident Rates per 100k Flight Hours

Accident Rates per 100k Flight Hours  
2000-2010



# Fatal Accident Rates per 100k Flight Hours

Fatal Accident Rates per 100k Flight Hours  
2000-2010





# Business Flying, 2007-2009

**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, followed by controlled flight into terrain, CFIT.

**Number of Fatal Accidents**

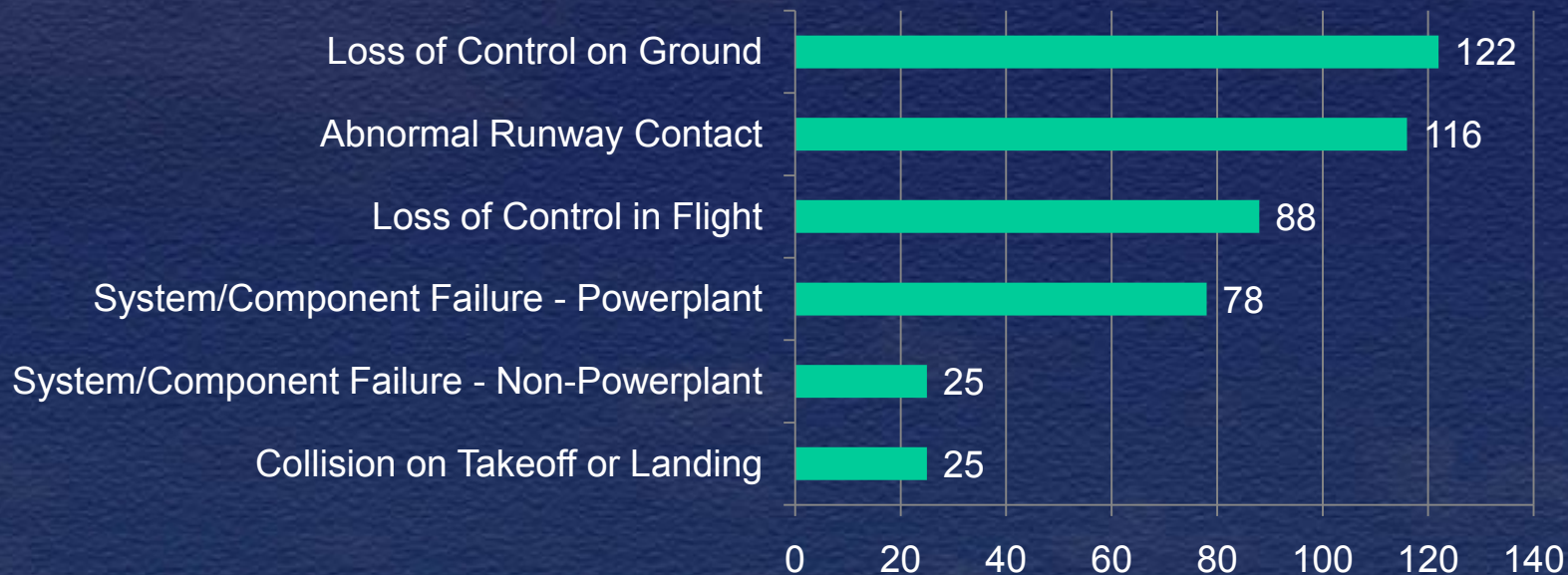


# Instructional Flying, 2007-2009

**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 on Ground, followed by Abnormal Runway Contact

## Number of Fatal Accidents



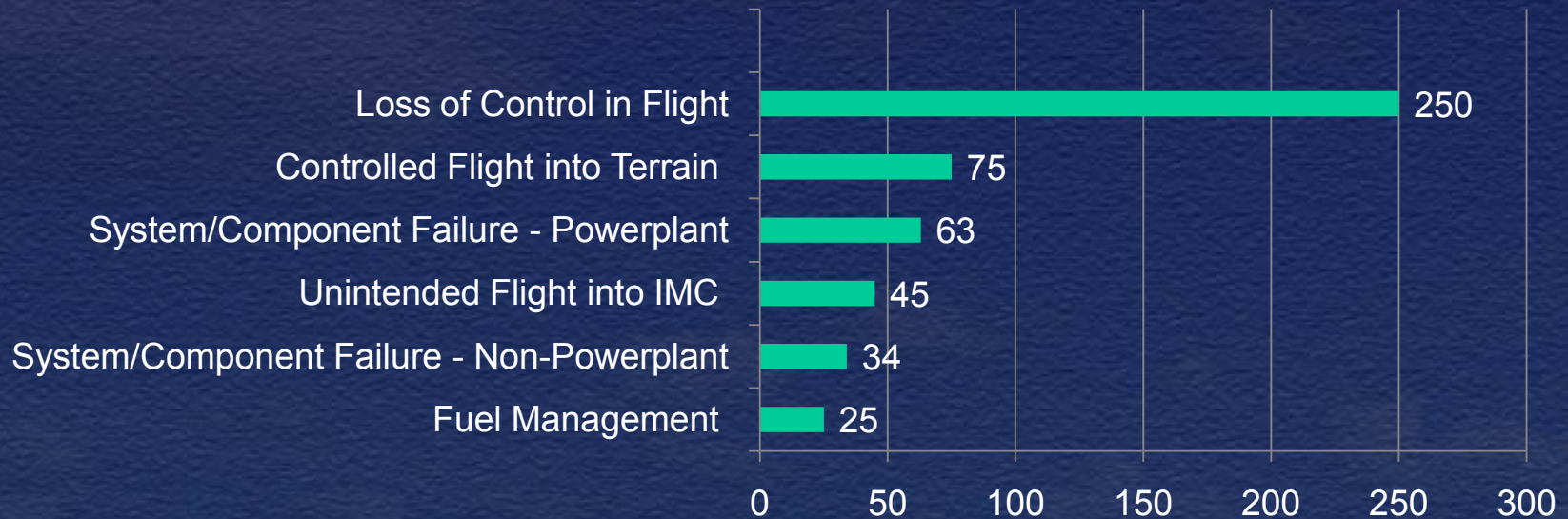


# Personal Flying, 2007-2009

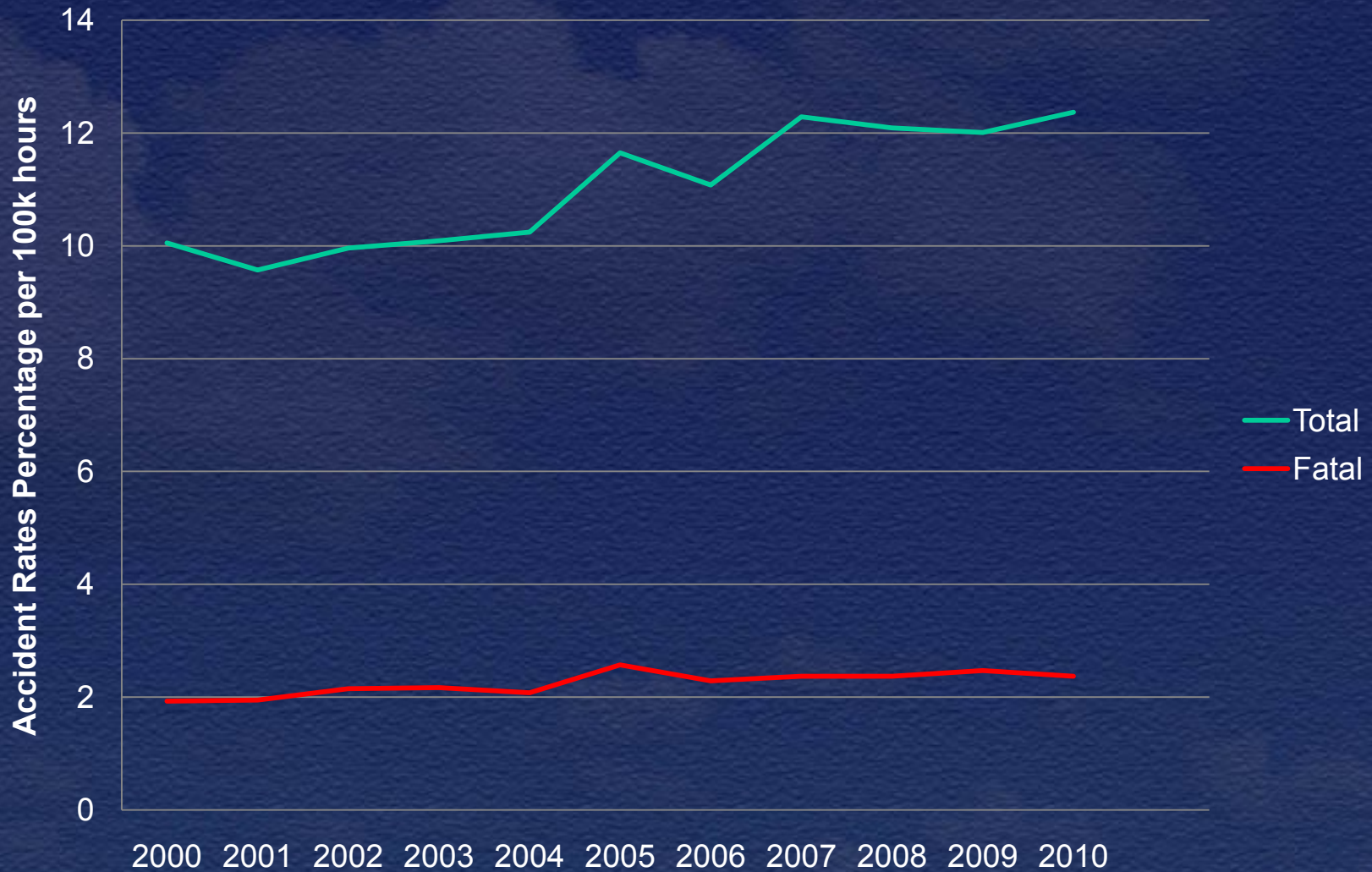
**Total accidents** - loss of control in flight and on the ground and power plant failure were the most common defining events.

**Fatal Accidents** - Loss of control in flight, followed by CFIT.

## Number of Fatal Accidents



# Personal Flying Accident Rates





# Most Wanted List



10 issue areas

Reviewed annually

Objective – bring focus on need for improvements

# NTSB Most Wanted List

- General Aviation Safety
- Runway Safety
- Bus Occupant Safety
- Safety Management Systems
- Recorders
- Teen Driver Safety
- Human Fatigue
- Alcohol-Impaired Driving
- Motorcycle Safety
- Pilot and Air Traffic Controller Professionalism





# 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 Personal flying safety needs attention**

# GA Safety – *Climbing to the Next Level*



- Improving GA Safety (What To Do and How To Do It)
- June 19-20, 2012
- NTSB Board Room, 429 L'Enfant Plaza, SW, Washington, DC
- Webcast information on [NTSB.gov](http://NTSB.gov)



# GA Safety Forum Panels

- **Safety Priorities for General Aviation**
  - NTSB, NASA, GA-JSC, FAA (AFS-800)
- **Safety Programs**
  - ABS, AVEMCO Insurance, AOPA, FAA (Wings Program)
- **Role of the Flight Instructor**
  - SAFE, NAFI, FAA, UND, IAFI
- **Content, Quality & Consistency of Pilot Training**
  - FAA, ASA, Red Bird Simulators, SAFE, ERAU

# GA Safety Forum Panels (cont'd)

- **Weather Related Decision-Making**
  - Independent Weather Expert, ERAU, CAMI, FAA, XM Weather
- **Aircraft Maintenance and Modification**
  - FAA, EAA, AMT Society, PAMA
- **New Aircraft Certification and Technologies**
  - FAA, AOPA, Cirrus, GAMA (ARC Industry Co-chair)
- **Advanced Avionics and Handhelds**
  - GAMA, NASA, AOPA, ERAU





# GA Search and Rescue Forum



July 17-18, 2012

429 L'Enfant Plaza, SW,  
Washington, DC

Webcast information on  
[NTSB.gov](http://NTSB.gov)

# SAR Forum Panels

- **Background, Policy Issues**
  - NOAA, NSARC, USCG
- **Background, Policy Issues cont'd**
  - FAA, FCC, AOPA, Transport Canada/Canadian, SAR Sec, U.S.F.S.
- **Operational Issues**
  - FAA (Ofc of SAR), FAA (ATC), AFRCC, CAP, State SAR Coordinators
- **Technical Issues**
  - AEA, RTCA/RTCM, FAA (Flight Standards), FCC, Artex/ACR, ACK/EBC



# SAR Forum Panels (cont'd)

- **Emerging Technologies and the Future of GA SAR**
  - FAA (ADS-B), ProTECTS Alliance, SPOT, Spidertracks, Guardian SkyTrax, CITA
- **Emerging Technologies and the Future of GA SAR cont'd**
  - AFRCC, USCG, DOD-USAF, Equipped to Survive Foundation

# NTSB Outreach

- NTSB Most Wanted List
- EAA Airventure - Oshkosh 2011
- EAA Airventure - Oshkosh 2012
- Sun 'n Fun 2012
- GA JSC Participation
- EAA Sport Aviation Magazine Article on NTSB
- Airventure - Association Presidents Meeting 2011 & 2012
- Forum - GA Safety – Climbing to the Next Level
- Forum - GA Search & Rescue
- Experimental Amateur Built Safety Study

*Take safety messages to pilots and industry*





**NTSB**