

General Aviation Joint Steering Committee (GAJSC) & GA ASIAs



Kate Fraser — FAA
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In Order to Turn the Tide on GA Fatal Accidents, a New Approach was Needed...

Formed in the late 1990s, the General Aviation Joint Steering Committee (GAJSC) had seen success reducing fatal GA accidents

The GAJSC adopted the Commercial Aviation Safety Team (CAST) methodology in 2011

What is the CAST Model?

- **Commercial Aviation Safety Team (CAST)**
 - Work began in 1998 after two significant accidents in 1996 (TWA 800 & ValuJet 592)
- **CAST lessons learned brought to the GAJSC—**
 - **Functions through voluntary commitments**
 - **Applies consensus decision-making**
 - **Uses data-driven risk management**
 - **Focuses on implementation**
 - **Continuous monitoring of mitigation implementation and effectiveness**
- **The GAJSC is a means to...**
 - **Strategically target Government and industry resources to reduce fatal GA accidents**

GAJSC — Who We Are

Steering Committee

**Co-chairs – Steve Gottlieb (FAA/AVP)
Bruce Landsberg (AOPA/ASF)**

**Government – FAA (AFS, AIR, ATO, AAM & ARP)
– NASA (Research)**

**Industry – GAMA, EAA, NBAA, NATA,
SAFE, LAMA & Insurance**

- Strategic guidance
- Management/Approval of Safety Plan
- Provide direction
- Membership Outreach
- Provides linkage to ASIAs

Safety Analysis Team

**Co-chairs: Corey Stephens (FAA)
Jens Hennig (GAMA)**

**Members: FAA, AOPA, EAA, GAMA, UAA, MFGs,
FAAST, NAFI, Insurance, Academia, SAFE**

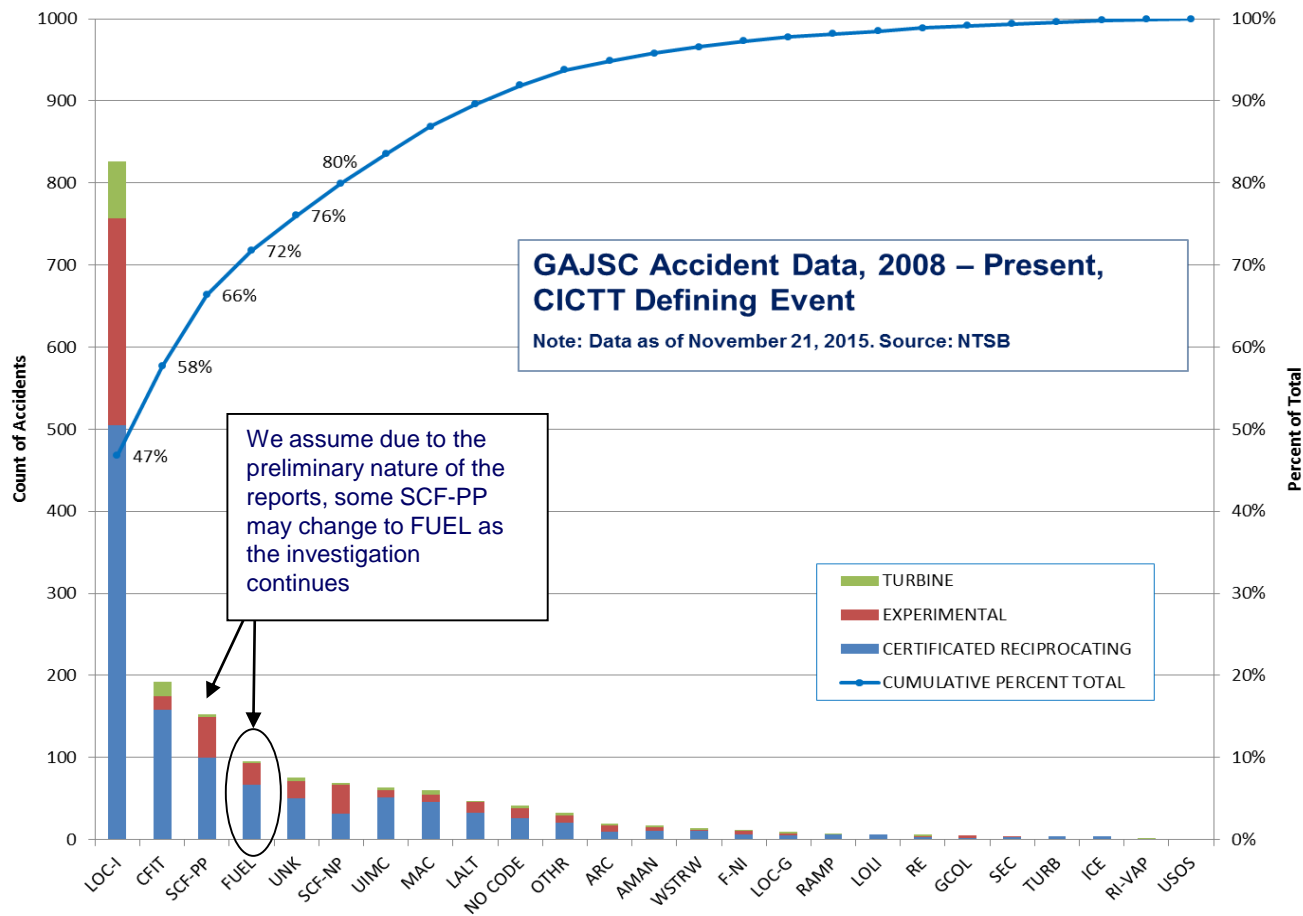
- Identify future areas of study/risk
- Charter safety studies
- Provide guidance and direction
- Draw data from various areas
- Develop a prioritized Safety Plan
- Develop metrics to measure effectiveness of safety solutions

Working Groups

**(To include SMEs from various general
aviation segments, depending on study)**

- Data analyses
- Safety enhancement
- Mitigation development

GAJSC Pareto CY2001–CY2015



■ RECIPROCATING NON-HOMEBUILT
■ TURBINE
■ HOMEBUILT

LOC-I – Loss of Control Inflight
CFIT – Controlled Flight Into Terrain
SCF-PP – System Component Failure-Powerplant
LALT – Low Altitude Operations
OTHR – Other
SCF-NP – System Component Failure-Non-Powerplant
FUEL – Fuel Related
UNK – Unknown or Undetermined
UIMC – Unintended flight in Instrument Meteorological Condition
MAC – Midair Collisions

GAJSC – Accident Studies to Date

- **39 Safety Enhancements Developed to Date**
 - *20 completed and 19 underway*
- **LOC – Approach & Landing – First Test**
 - Finished Fall 2012
 - 23 SEs approved
- **LOC – All Other Phases of Flight**
 - Finished Fall 2013
 - 6 new SEs were approved
- **SCF-PP – System Component Failure – Powerplant**
 - Work began January 2014
 - Team finished January 2015
 - 10 new SEs were approved

39 Safety Enhancements Developed So Far

- SE-1 & 2 – AOA – New Type Designs & Existing Fleet
- SE-3 – ADM
- SE-4 – Automation
- SE-5 – Transition Training
- SE-6 – LODA
- SE-7 – Simple Procedures
- SE-8 – Training (SE-4 & 8)
- SE-9 – SOP Part 91 positioning legs, FRAT & SMS
- SE-10 – Stab App & Landing Training & Guidance
- SE-12 – Remote Airfield Cameras
- SE-13 – Weather Technologies
- SE-14 – Engine Monitoring
- SE-15 – RX Medication Effects
- SE-16 – Medical Records

39 Safety Enhancements Developed So Far

- SE-17 – Improve Communication between AMEs and Pilots
- SE-21 – Risk Based Review
- SE-22 – GA FOQA
- SE-23 – EAB Flight Test
- SE-24 – Single Pilot CRM
- SE-25 – Reducing Regulatory Roadblocks for New Technologies
- SE-26 – Part 23 Re-org
- SE-27 – Part 21 Review
- SE-28 – Pilot Response to Unexpected Events
- SE-30 – Med List for Pilots
- SE-31 – Test Pilot Utilization and E-AB Pilot Proficiency
- SE-32 – Airman Certification Standards
- SE-33 – GA Safety Culture
- SE-34 – LOC-I Outreach

SCF-PP Safety Enhancements

- SE-35 Direct Tension Indicators
- SE-36 Vmc Training
- SE-37 Multi Engine Cockpit Technology
- SE-39 Smart Cockpit Technology
- SE-41 Survivability
- SE-44 Maintenance Data Exchange
- SE-45 Maintenance Placard
- SE-47 A&P Education
- SE-48 Ignition Systems
- SE-49 Outreach

Two Paths Toward Improving Safety



- Accident Investigation
- Historical Accident Analysis/Review

- Flight Operations Quality Assurance
- Pilot Reporting
- SMS

GA ASIAs Members

Commercial Air Carriers (46)

ABX Air	ExpressJet	PSA Airlines
Aerodynamics, Inc.	FedEx Express	Republic Airlines
Air Transport Intl.	Frontier Airlines	Shuttle America
Air Wisconsin Airlines	GoJet Airlines	Silver Airways
Alaska Airlines	Hawaiian Airlines	SkyWest Airlines
Allegiant Air	Horizon Air	Southern Air
Aloha Air Cargo	JetBlue Airways	Southwest Airlines
American Airlines	Kalitta Air	Spirit Airlines
Atlas Air	Mesa Airlines	Sun Country Airlines
Cape Air	Miami Air Intl.	Swift Air
CommutAir	Mountain Air Cargo	Trans States Airlines
Compass Airlines	National Airlines	United Airlines
Delta Air Lines	Northern Air Cargo	United Parcel Service
Empire Airlines	Omni Air Intl.	Virgin America
Endeavor Air	Piedmont Airlines	
Envoy Air	Polar Air Cargo	

Industry

A4A—Airlines for America	NACA—National Air Carrier Association
AIA—Aerospace Industries Association	NATCA—National Air Traffic Controllers Association
Airbus	RAA—Regional Airline Association
ALPA—Air Line Pilots Association	SAPA—SkyWest Airlines Pilot Association
APA—Allied Pilots Association representing Coalition of Airline Pilots Associations (CAPA)	SWAPA—Southwest Airlines Pilots' Association
Boeing	

General Aviation Operators (33)

Costco Wholesale	NetJets
Eli Lilly	Northeastern Aviation Corp
Embraer Executive Jets	OnFlight, Inc.*
Flexjet	REVA
Flight Options	Vulcan, Inc.
Gama Aviation	XOJET
Johnson & Johnson	19 additional Operators*
LECO Corporation	

Industry

ACSF—Air Charter Safety Foundation	NBAA—National Business Aviation Association
Embraer	NJASAP—NetJets Association of Shared Aircraft Pilots
GAMA—General Aviation Manufacturers Association	
Gulfstream Aerospace	

Maintenance, Repair & Overhaul

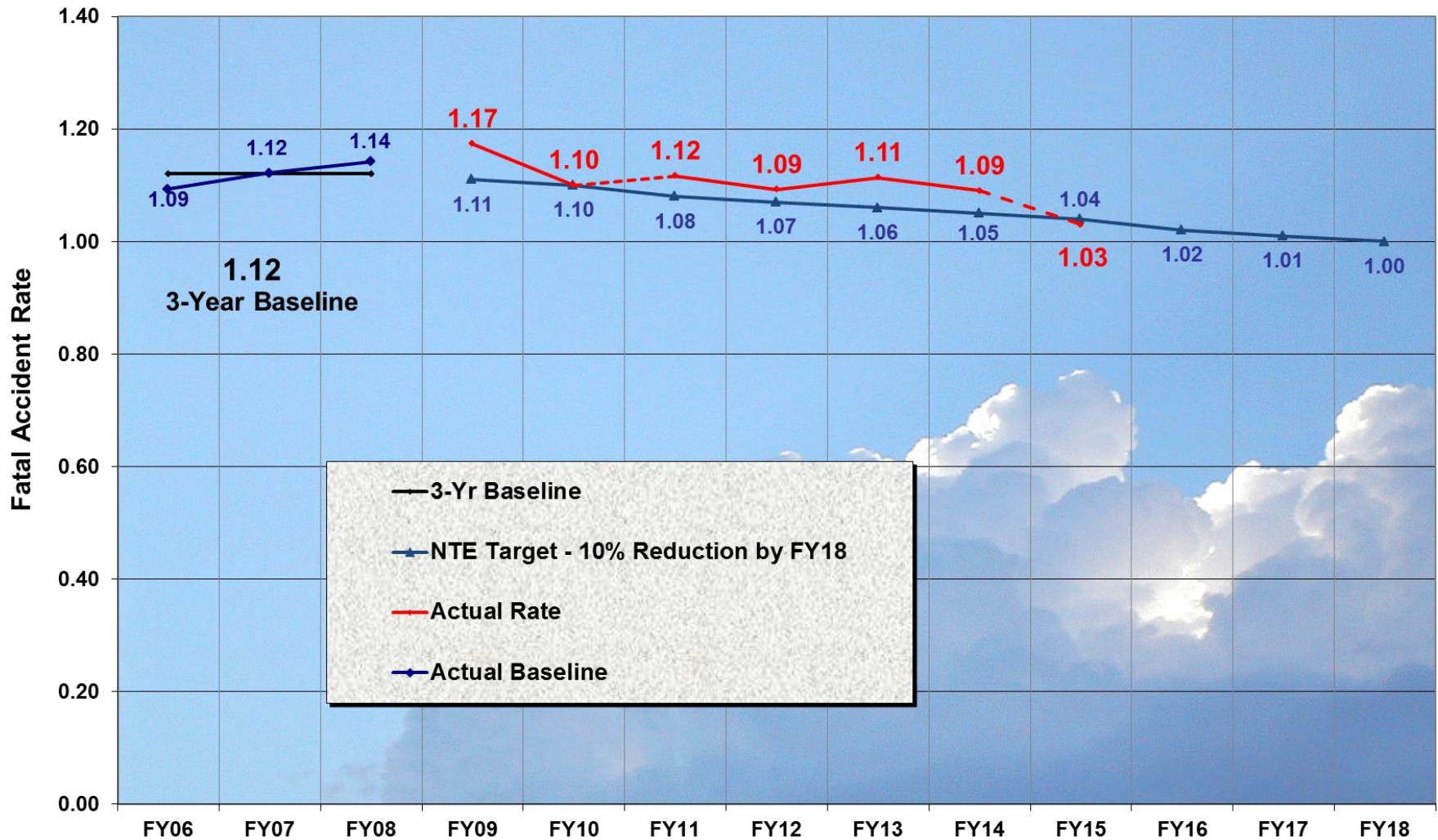
AAR Aircraft Services	HAECO Americas
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Government

AMC—Air Mobility Command	Naval Air Force Atlantic
FAA	USAF Safety Center
NASA	

Academic

AVS Safety Performance GA Fatal Accident Rate (Fatal Accidents/100,000 Hours)



Summary

- History shows focused, data-driven action and the introduction of new technologies have led to accident risk reductions.
- Working together, the GAJSC is implementing 29 data-driven risk mitigations against inflight loss of control – *the leading accident type in GA*.
- This process has led to novel approaches to mitigate the risk of GA fatal accidents, and the speed with which they have been implemented is an absolutely remarkable achievement.
- ASIAS is enabling the GA community to work together to generate awareness and understanding of emerging safety threats in ways never before possible.

Questions?

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