

GA JSC & Weather Related Safety Enhancements



Corey Stephens - FAA
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GA JSC SAT Co-Chairs

July 22nd, 2014

GA Joint Steering Committee

- Evolve GA JSC to a CAST like Model
 - *Voluntary commitments*
 - *Consensus decision-making*
 - *Data driven risk management*
 - *Implementation-focused*
- The GA JSC is a means to...
 - Focus Limited Government/Industry Resources to Data Driven Risks and Solutions*

What is CAST?

- Work began in 1997 after two significant accidents in 1996 (TWA 800 & ValueJet 592)
- CAST focus was set by:
 - **White House Commission on Aviation Safety**
 - **The National Civil Aviation Review Commission (NCARC)**
- *Opportunity for industry and government to focus resources on one primary aviation safety initiative*

General Aviation Joint Steering Committee (GAJSC)

Steering Committee

Co-Chairs: Bruce Landsberg (AOPA/ASF)

Tony Fazio (FAA/AVP)

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

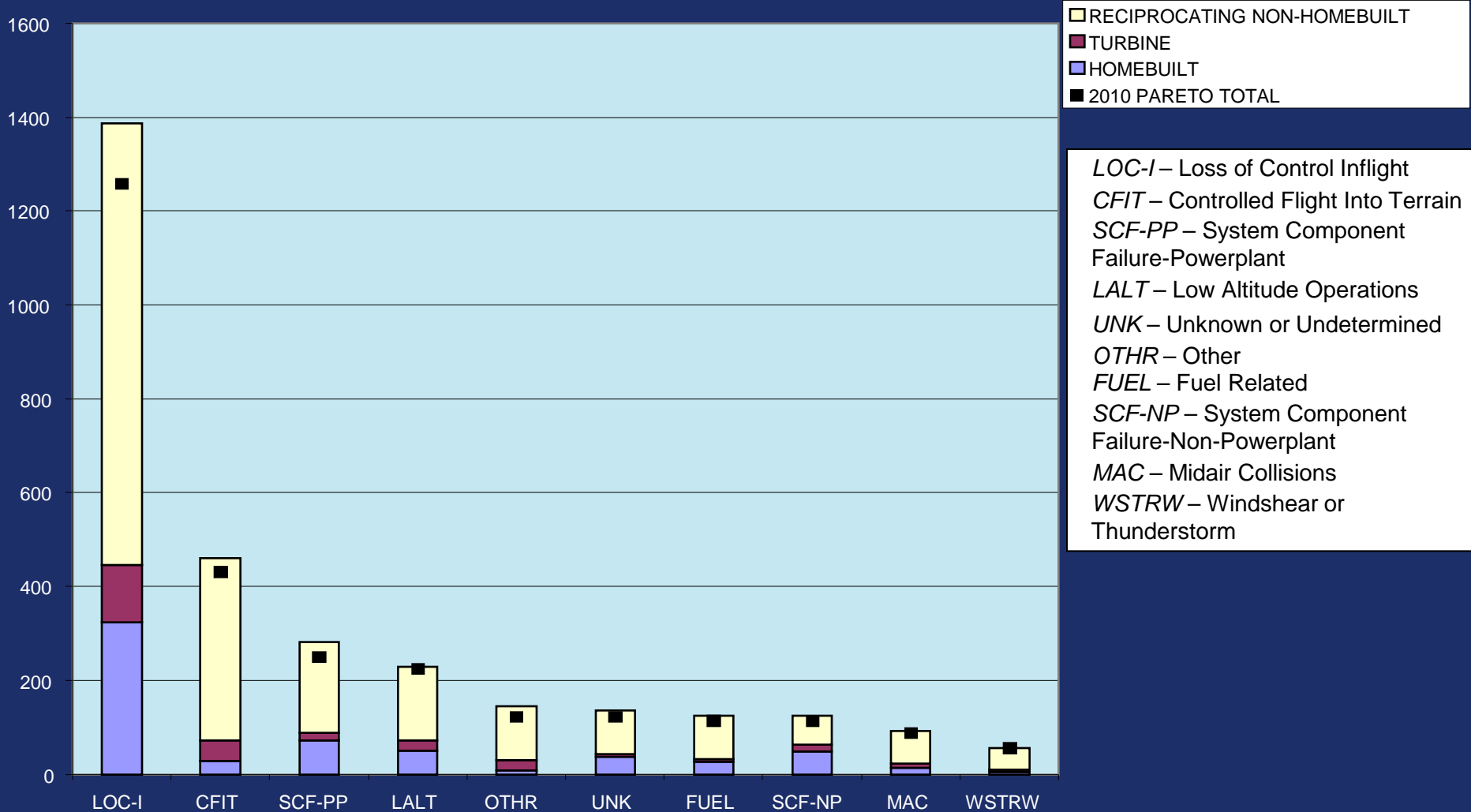
(To include SMEs from various general aviation segments, depending on study)

- Data analyses
- Safety enhancement
- Mitigation development

GAJSC Pareto CY2001-CY2011

Source: NTSB Aviation Accident/Incident Database.

Note: 66% and 5% of fatal accidents have been finalized for 2010 and 2011 respectively



LOC-I – Loss of Control Inflight
CFIT – Controlled Flight Into Terrain
SCF-PP – System Component Failure-Powerplant
LALT – Low Altitude Operations
UNK – Unknown or Undetermined
OTHR – Other
FUEL – Fuel Related
SCF-NP – System Component Failure-Non-Powerplant
MAC – Midair Collisions
WSTRW – Windshear or Thunderstorm

GA JSC Working Group (WG) Process

- WGs to be formed based on risk (example: Loss of Control - LOC)
- Broad-based teams (20-30 specialists /team)
- Teams can be divided by aircraft or operation type (example: turbine, reciprocating and homebuilt reciprocating/turbine)

GA JSC Working Group (WG) Process

- Detailed event sequence - problem identification from US accidents and incidents
- Develop GA JSC SEs
- Solutions (SEs) are a mix of training, technology, outreach, guidance and education

GA JSC SAT Process

- Once plan is approved, **industry and government begin implementation**
- GA JSC will...
 - Track implementation schedules and levels (are mitigations on time and at levels we were expecting)
 - Work to track effectiveness of the mitigations in place
 - Identify and recommend areas for future study/mitigation

Three Working Groups To Date...

- **LOC – Approach & Landing – First Test**
 - Finished Fall of 2012
 - Currently implementing SEs
- **LOC – All Other Phases of Flight**
 - Finished Fall of 2013
 - Four new SEs approved, two in rewrite
- **SCF-PP – System Component Failure – Powerplant**
 - Work began end of January 2014
 - Three meetings to date

GA JSC Approved Safety Enhancements

- SE-1 - AOA – New Designs
- SE-2 - AOA – Existing Fleet
- SE-3 - ADM
- SE-5 - Transition Training
- SE-6 - LODA
- SE-7 - Simple Procedures
- SE-8 – Training (SE-4 & 8)
- SE-9 - SOP Pt-91 positioning legs, FRAT & SMS
- SE-10 - Stab App & Landing Training & Guidance
- SE-12 - Remote Airfield Cameras
- SE-13 - WX Technologies
- SE 14 – Engine Monitoring

GA JSC Approved Safety Enhancements (cont)

- SE-15 - RX Medication Effects
- SE 16 - Medical Records
- 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-31 - Test Pilot Utilization and E-AB Pilot Proficiency
- SE-32 - Airman Certification Standards

GA JSC Safety Enhancement SE-12

- Deploy cost-effective technologies that can provide real-time weather information (including actual conditions as viewed through a remote camera) at remote airports.

GA JSC Safety Enhancement SE-13

- The FAA and industry will educate the GA community on and promote the use of available weather information technologies, such as the National Oceanic and Atmospheric Administration (NOAA) Aviation Digital Data Service (ADDS) icing tool

GA JSC Safety Enhancement SE-25

- Institute streamlined FAA processes in its Office of Aviation Safety (AVS) for certifying and installing new and novel technology that has a high probability of safety benefits with an accompanying low safety risk

Thank You