Transforming General Aviation Safety
Five-Year Strategy

Flight Standards Service
General Aviation and Commercial Division, AFS-800
2011
Overview of Five-Year Strategy

- General Aviation Vision
- Need for Transformation
- Non-regulatory Strategic Approach
- Two-year Review
Vision

To transform General Aviation safety and reduce the fatal accident rate to an unprecedented low level.
Why is a Transformation Necessary?

• In 2010, the GA fatal accident rate was 1.14 accidents per 100,000 hours flown, or 268 accidents

• Over the past several years, the GA accident rate as a whole has basically been static with only very minor improvements

• We can do better by working with the GA community within legal boundaries and without rulemaking

General Aviation is one of the FAA’s last unresolved safety challenges
Overarching Fatal Accident Prevention Strategy

• A concentrated and focused outreach, training, and engagement strategy to produce the desired internal and external culture change will result in a previously unachievable accident reduction in the GA community.

*History has shown that a focused and committed effort by the FAA and the community produces the desired objective*

• The overall strategies are based on:
  – Identification of the risk (correcting and analyzing the data)
  – Mitigation of the risk utilizing training and outreach
  – Working across the general aviation community
Transformation Approach

RISK MANAGEMENT
(Identification and Mitigation)

- Top 10 causes & contributing factors
- Amateur built
- Aerial applicators

OUTREACH AND ENGAGEMENT
- Aviation associations
- Type clubs
- Manufacturers
- Insurance providers
- Academia
- FAASTeam
- www.faasafety.gov

TRAINING
- Expanded CFI focus
- FIRC changes
- WINGS
- Remedial Training
- Academia

SAFETY PROMOTION
- FAA Safety Briefing
- Integrated safety communication
Risk Management

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RISK IDENTIFICATION AND MITIGATION
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SAFETY COMMUNICATION
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- Insurance providers
- Academia

OUTREACH AND ENGAGEMENT
- FAASTeam
- www.faa.gov
- FAA Safety Briefing
- Integrated safety communications
Risk Identification and Mitigation: Near Term

- Identify top ten causes of fatal accidents
- Identify the leading contributing factors

Mine data to address highest risk areas and achieve greatest safety benefits*

Reach out, and listen, to GA community and its organizations to receive input on possible improvements and other options

Develop and implement general mitigation strategies

* These first years, we concentrate on generalized improvements throughout the GA community while we (FAA & industry) mine data for more specific future interventions
Top Ten GA Accident Causes*

- Maneuvering - Loss of control in flight
- Initial climb - Loss of control in flight
- Maneuvering-low-alt flying - Aerodynamic stall/spin
- Maneuvering-low-alt flying - Low altitude operation/event
- Enroute-cruise - Controlled flight into terr/obj (CFIT)
- Initial climb - Aerodynamic stall/spin
- Enroute - VFR encounter with IMC
- Enroute-cruise - Loss of control in flight
- Maneuvering-low-alt flying - Loss of control in flight
- Maneuvering-low-alt flying - Collision with terr/obj (non-CFIT)

Top Ten GA Accident Contributing Factors

- Failure to Maintain Airspeed
- Situational Awareness
- Preflight Planning
- Intentional Disregard
- Flight Crew Experience
- Distraction
- Drugs/Alcohol
- Spatial Disorientation
- Failure to Recover
- Unusual Attitude
- Pilot Fatigue
Risk Identification and Mitigation: Long Term

- GA JSC* and CAST** model will allow analysis of the data to identify the specific interventions that provide the “biggest bang for the buck”

- Develop richer data sources and further refine data mining capabilities

- Encourage and broaden involvement across aviation community to ensure validation of data and interventions

- Implement highly targeted mitigations as identified through GA JSC and CAST

- Continuously measure results

*General Aviation Joint Steering committee  **Commercial Aviation Safety Team
Risk Identification and Mitigation: Targeted Interventions

• **Amateur-Built Aircraft**
  – Airmen transition to experimental or unfamiliar airplanes
  – Published Advisory Circular (AC 90-109, Airmen Transition to Experimental or Unfamiliar Airplanes)

• **Agricultural Operations**
  – Establish workgroup to include field expertise
  – Review operations and airworthiness
  – Targeted outreach based on findings
Outreach and Engagement

- Aviation associations
- Type clubs
- Manufacturers
- Insurance providers
- Academia
Outreach and Engagement

- Type Clubs
- CFIs
- Aviation Associations (AOPA, EAA, etc.)
- Manufacturers
- Aircraft Insurance Providers
- Academia
Training

- Expanded CFI focus
- FIRC changes
- WINGS
- Remedial training
- Academia
Training

• Expanded CFI Focus
  – Senior CFI Forum
  – FIRC updates
  – Review CFI recurrent training and renewal requirements
  – Gather input from GA community

• WINGS pilot proficiency: www.faasafety.gov

• Re-emphasis on remedial training – pilots and mechanics
Safety Communication

- FAASTeam
- www.faasafety.gov
- FAA Safety Briefing
- Integrated safety communications
Safety Communication

• **FAASTTeam**
  – Refocused on GA and accident reduction and outreach.
  – The 2nd Annual Safety Standdown: April 2 kick-off at Sun 'n Fun, regional Standdown-focused events throughout April
  – Greater presence for national exhibit team

• **www.faasafety.gov**
  – Improvements to Web site for ease of access and content upgrades
  – Further improvements to WINGS pilot proficiency program

• **FAA Safety Briefing**
  – Provide information and resources on accident causes, mitigation strategies, and training
  – Develop methods, including use of social media, to target unreached members of the GA community
Two-Year Review

• Review effectiveness of non-regulatory mitigations
• Share results with key stakeholders
• Adjust strategy as necessary
• Rolling review process
Bottom Line

• To have the necessary impact on safety, with this non-regulatory strategy, we must all be part of the solution.

“You must be the change you wish to see in the world.”

Mahatma Gandhi