Safety Management

United States SSP/SMS

Presented By: FAA Flight Standards Service



Federal Aviation Administration



Setting up the foundation

- Research and Collaborative Development
 - Research project survey of practices (2002-2004)
 - Safety Management Focus Group Initial interaction with industry
 - Became SMSFG to support SMS Rule rollout ~ 300 attendees
- SMS framework developed based on risk
 management and QMS principles
- AC 120-92 issued



U.S. State Safety Program (SSP)

- FAA is applying SMS principles internal processes: Risk Based Decision Making
- Core of U.S. SSP
- Systems Approach to Safety Oversight (SASO): System Safety and Risk Management in our oversight system
- Safety Assurance System (SAS): Oversight processes (Critical Elements of Oversight 6 and 7



SSP: (continued)

- Compliance Philosophy: Problem solving rather than enforcement where appropriate (critical element 8)
- Risk Based evaluation process for regulatory exemption petitions (Critical Element 2).
- SRM will be applied to future rulemaking
- Interface with Certificate Holder SMS is a key part of our strategy



Trial and Experimentation: SMSPP

- SMS Pilot Project Initiated in 2006
- Helped to develop implementation and oversight processes and practices in a flexible environment
- Many early industry pioneers (ex. US Airways, American, Delta) engaged and motivated their codeshare partners to engage SMS.



Formalizing the Requirements

- 14 CFR Part 5 issued in 2015 for part 121 carriers
- Aligned with the ICAO SMS Framework
- Provides structure and standardization balanced with flexibility and scalability
- Full implementation required March 9, 2018
- Processes are functionally described
 - "What" not, "how"
 - No prescribed organizational structures (SAG, etc.)



SMSVP: Alternative to regulation

- SMSPP spawned SMS Voluntary Program (SMSVP) standard, published June 2016.
- Same requirements as part 5 SMS rule
 - Part 135 operators do not have to have an SMS as a condition of certification.
 - Adherence is required for FAA ("State") acceptance of the operator's SMS per Annex 19.
 - Third party systems are not recognized for FAA acceptance.



SMSVP Participation

Participants:

- Part 135: 185
- Part 145: 18
- Part 141/142: 8

Classifications of participation

- Applicant: Commitment letter from Accountable Exec
- Active Applicant: Orientation complete
- Active Participant: Plan Approved
- Active Conformance: Final Implementation/Acceptance



Indoctrination of the Workforce

- FAA Academy courses developed to support FAA ASIs involved in CH SMS implementation.
- 3 Phase Field Support Activities conducted by SMSPO to support part 5 milestones



Continuing Operational Safety

- SMS integration into the part 121 Certification Process
 - Certificate Holder applied Risk Management in FAA
 Design Assessments (CE-6)
 - Certificate Holder applied Safety Assurance in FAA Performance Assessments (CE-7)
- On-going oversight SAS tools in development.



International Collaboration

- FAA initiated the Safety Management International Collaboration Group (SMICG) with other regulators in 2009.
- Purpose of the group:
 - Share information, promote standardization
 - Develop products supporting SMS and SSP development and continuous improvement.
- SMICG now has 18 participating authorities, including ANAC.



Lessons Learned and Challenges

- SMS is not a traditional safety program
- SMS must be, "owned" by operational decision makers, not the safety department
- SMS Pilot Project was an asset
- Involvement of oversight personnel is key
- Risk management skills are essential
- SRM is valuable in change management
- Performance measurement is next challenge

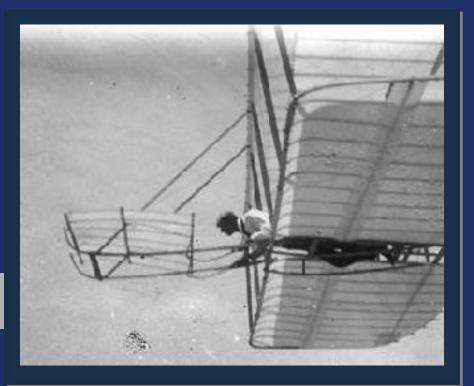


"Carelessness and overconfidence are more dangerous than deliberately accepted risk" Wilbur Wright, 1901

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Wilbur Wright gliding, 1901 Photographs: Library of Congress







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Wilbur Wright gliding, 1901 Photographs: Library of Congress

