

Safety Management Systems

FAA Airports Efforts

Presented to: ACI-NA Airports@Work

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Federal Aviation
Administration



SMS Basics



SMS Defined

“...a system to assure the safe operation of aircraft through effective management of safety risk. This system is designed to continuously improve safety by identifying hazards, collecting and analyzing data and continuously assessing safety risks.” – *ICAO SMM Doc9859, 2013*

“ The formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety risk controls. It includes systematic procedures, practices, and policies for the management of safety risk.” – FAA Order 8000.369A,

“...an integrated collection of processes and procedures that ensures a formalized and proactive approach to system safety through risk management.” – *Notice of Proposed Rulemaking, Safety Management System for Certificated Airports, 2010*

SMS Defined

The Four SMS Components

Safety Policy

Establishes senior management's commitment to continually improve safety; defines the methods, processes, and organizational structure needed to meet safety goals

Safety Assurance

Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards

Safety Risk Management

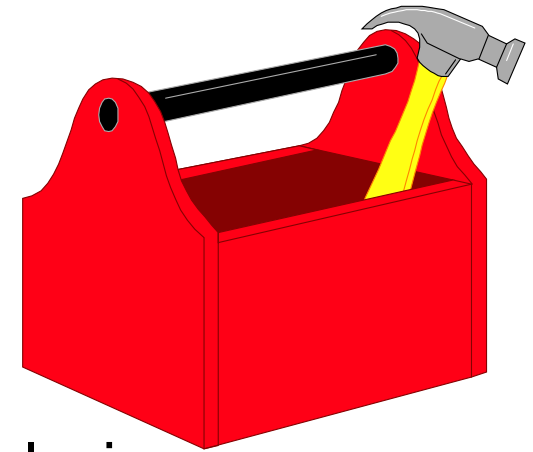
Determines the need for, and adequacy of, new or revised risk controls based on the assessment of acceptable risk

Safety Promotion

Includes training, communication, and other actions to create a positive safety culture within all levels of the workforce



What is SMS?



- **A TOOLBOX for managers**
 - Decision making tools
 - Data collection with methods for analysis
 - Means of continuous improvement
- **A MANAGEMENT system**
- **Focus on OPERATIONAL safety**
- **Facilitates a PROACTIVE approach to safety**

SMS Context



What is FAA ARP required to do?

- **FAA Order 8000.369A requires ARP to:**
 - Integrate SMS concepts into organization (part of the ‘State Safety Program’ and FAA SMS effort)
 - Develop SMS requirement for regulated parties (Part 139 certificated airports)
- **FAA’s efforts will also harmonize with International standards and recommended Practices**
 - ICAO Annex 19, Safety Management
 - ICAO Annex 14, Aerodromes



How are we dealing with these requirements?

- **Dual approach**
 - **Internal SMS** – Also known as ARP SMS; integrating SMS components into ARP organization, processes and programs that impact safety (Implemented through internal FAA Orders and Guidance)
 - **External SMS** – Part 139 SMS requirement (Implementing through Rulemaking)

Internal SMS Efforts



ARP SMS - Implementation

- **FAA Order 5200.11, *FAA Airports Safety Management System*, signed August 30, 2010**
 - Change 1 to Order limited implementation to projects at Large hub airports only (2011)
 - Change 2 harmonized with FAA risk matrix (2013)
 - Change 3 **expanded implementation to applicable projects at** Medium and **Small hub** airports in CY 2015 and **2016** (2014)

ARP SMS - Implementation

- **ARP SMS Desk Reference (2012)**
 - Supplements Order 5200.11
 - Explains procedures for implementing SRM in project approval and standards development; also explains airport sponsor role in our SRM process
- **SOP for SRM (2014)**
 - Used in conjunction with the Order & Desk Reference
- **Over time, we'll update the Order and applicable guidance to conform with FAA Order 8040.4 (FAA SRM Guidance)**

ARP SMS Initiative

- **Industry will be most impacted by our SRM**
 - SRM analysis before FAA takes federal action/approves documents/creates new standards/etc.
 - SRM provides an additional tool to assist FAA decision making
- **FAA Project Manager's responsibilities:**
 - Completes applicable Safety Assessment Screening (SAS) form to determine level of analysis (i.e., whether or not a panel is required)
 - Notifies airport whether a panel will be convened and a facilitator is needed



ARP SMS - Safety Risk Management

- **SRM is required when an ARP decision could impact aviation safety:**
 - Airport planning, environmental, engineering, construction, operations, and maintenance standards in Advisory Circulars
 - Approval of new or updated Airport Layout Plans (ALPs)
 - FAA airspace determinations for construction safety plans
 - FAA airspace determinations of airport sponsor requests for non-construction changes
 - Approval of Part 150 Noise Compatibility Program measures that could affect aviation safety
 - Approval of requests for project-specific Modifications of Standards
- **Triggering action is based on the approval action; NOT whether or not it is AIP funded**
- **Applies to projects at Small hub airports beginning June 1, 2016**



External SMS Efforts



Part 139 SMS Proposal

- **Notice of Proposed Rulemaking published in the Federal Register in October 2010**
 - Available at www.regulations.gov
 - Regulatory Evaluation also available in docket
 - Technical Report and Responses to Clarifying Questions also available in docket
- **Comment period closed July 5, 2011**
 - Offered multiple extensions of time to comment based on industry requests

Part 139 SMS Proposal

- **NPRM Comments**
 - Evaluation of public comments led FAA to reevaluate approach/applicability
 - Changes trigger need to get public comment
 - Rulemaking status changed from Final Rule to Supplemental NPRM (SNPRM)
 - SNPRM scheduled for publication in June 2016

Milestone	Originally Scheduled Date	New Projected Date	Actual Date
To OST	07/22/2013	11/21/2013	11/13/2013
To OMB	08/23/2013	07/24/2015	08/05/2015
OMB Clearance	11/25/2013	06/06/2016	
Publication Date	12/09/2013	06/20/2016	
End of Comment Period	02/10/2014	08/22/2016	

Other External Efforts

- **Published draft Advisory Circular 150/5200-37A, SMS for Airports**
 - Significant revision of 2008 version based on lessons learned, experiences, and NPRM
 - Received many comments from industry
 - Updated draft currently with OMB (to be published with SNPRM for comment)



Other External Efforts

- **TRB ACRP Projects (Completed)**
 - Safety Management Systems for Airports (Volume 1: Overview)
 - Safety Management Systems for Airport (Volume 2: Guidebook)
 - Lessons Learned from the Airport SMS Pilot Studies
 - Legal Issues Related to Developing SMS & SRM
 - Safety Reporting Systems at U.S. Airports
 - Guidebook for Safety Risk Management for Airports
 - Applying SMS Approach to Wildlife Hazard Management
- **Upcoming ACRP Projects**
 - Best Practices for Airport SRM Panels
- **SMS software is AIP eligible**
- **SMS Software Research project by Tech Center**
 - Results to help develop AC on SMS Software



Thank you!

Questions?

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