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Safety Management Systems Update and Progress

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WELCOME TO SMS DAY!

**NATIONAL TRAINING
AIRCRAFT SYMPOSIUM
(NTAS)**

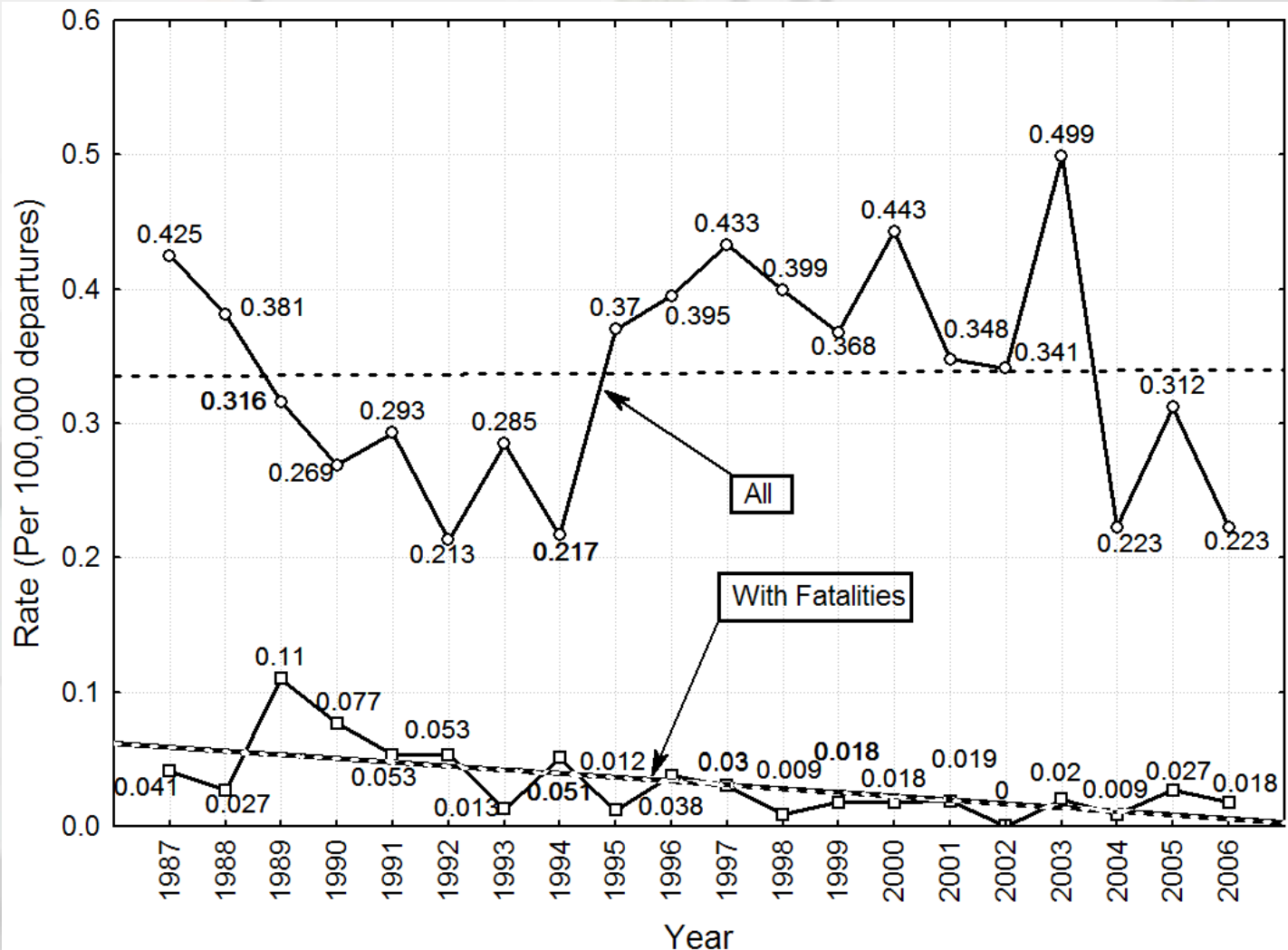
**HELD IN THE COLLEGE OF AVIATION
DAYTONA BEACH CAMPUS**

Panel Charge

Alan Stolzer

Why SMS ?

U.S. Airline
Accident Rate
per 100,000
Departures
from 1987 to
2006 --
'All' and 'With
Fatalities'
14 CFR 121
Scheduled
Service



Why SMS ?

Cognitive Exercise

...think in terms of your association
with an aviation organization



Why SMS?

The background image shows a demolition site. In the foreground, there is a large pile of debris, including metal pipes and twisted metal. An orange excavator is visible in the middle ground, working on a structure. To the left, there is a white building with several windows. The sky is clear and blue.

Answer: Why SMS? So that we can answer these and other questions about safety in our organizations!

Why SMS?

*Excerpt of Testimony of
Nicholas Sabatini,
Associate Administrator
for Aviation Safety, FAA*

*Before the Committee on
Transportation and
Infrastructure,
Subcommittee on
Aviation,
On FAA Oversight*

September 20, 2006

To continue to improve aviation safety we must use every tool at our disposal. The most effective way to improve safety is through Safety Management Systems (SMS). Safety Management Systems enable organizations to identify and manage risk far better than before. With this formalized approach, we can identify issues, fix them, and ensure they stay fixed.

Operating under a Safety Management System assures a disciplined and standardized approach to managing risk. The best part is we can review past experience and address known hazards, and at the same time we can look ahead and rigorously apply Safety Risk Management principles to any changes or introduction of new elements.

Furthermore, under an SMS, the whole process — identifying potential problems and putting corrections in place — is ongoing and the procedure is continuously assessed to make sure it is working.

In short, SMS formalizes risk management, which is imperative as we move from a forensic, or after-the-fact accident investigation approach, to a diagnostic and more prognostic, or predictive, approach. With the accident rate as low as it is, we must get in front of information, analyze trends, and anticipate problems if we are to continue to improve on an already remarkable record of achievement. Operating under a Safety Management System will allow airlines, manufacturers, and the FAA to do this better than before. So that we are all operating from the same approach, FAA must apply the same high standards to ourselves that we require of the entities that we regulate.

What is the Regulator Mandating?

- ICAO has mandated SMS for its member states (by January 1, 2009). FAA filed 'difference' with ICAO
- FAA's current rulemaking effort includes Parts 121 (scheduled air carriers), 135 (on-demand charters), and 145 (repair stations), and...

Question: What about Parts 141 and 142?

SMS for Part 141 and/or 142?

- ICAO Annex 1, Appendix 2, paragraph 4.1, states, in part, that “an approved training organization that is exposed to safety risks during the provision of its services implement [an SMS] acceptable to the State...”

Answer:

- 
- In February 2009, the FAA issued an order creating an Aviation Rulemaking Committee (ARC) for SMS.
 - A **single rule** is envisioned!!
 - An ANPRM has been drafted and is in review

Source: <http://regs.dot.gov/rulemakings/200902/faa.htm>

Report on DOT Significant Rulemaking

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Federal Aviation Administration

1. [Aging Aircraft Program \(Widespread Fatigue Damage\)](#)
2. [Part 145: Repair Stations--Ratings and Quality System](#)
3. [Production and Airworthiness Approvals](#)
4. [Commuter Operations in Very Light Jets \(VLJs\)](#)
5. [Re-registration and Renewal of Aircraft Registration](#)
6. [Activation of Ice Protection](#)
7. [Automatic Dependent Surveillance - Broadcast \(ADS-B\) Equipage Mandate To Support Air Traffic Control Services](#)
8. [Flight Crewmember Duty Limitations and Rest Requirements](#)
9. [Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers](#)
10. [Part 121 Pilot Age Limit](#)
11. [Fire Protection](#)
12. [Airworthiness Standards: Aircraft Engine Standards Overtorque Limits](#)
13. [Safety Management Systems \(SMS\)](#)
14. [Pilot-in-Command Proficiency Check in Single-Piloted Turbojet Airplanes](#)

13. **Safety Management Systems (SMS)** Red

Popular Title: SMS

RIN 2120-AJ15

Stage: ANPRM

Previous Stage:None

Abstract: This rulemaking would require a Safety Management System (SMS) for FAA certificate holders, certain product manufacturers, applicants, and employers. This action is being taken to further enhance the practice of managing safety, conducting risk and system assessments and analysis, undertaking preventive and corrective actions, and creating a safety culture. The intended effect of this action would make the United States compliant with International Civil Aviation Organization (ICAO) annexes.

Effects:

Information Collection

Prompting action: None

Legal Deadline: None

Rulemaking Project Initiated: 09/25/2007

Docket Number:

Dates for ANPRM:

Milestone	Originally Scheduled Date	New Projected Date	Actual Date
To OST	11/25/2008	02/17/2009	
To OMB	12/26/2008	03/17/2009	
OMB Clearance	03/26/2009	06/17/2009	
Publication Date	04/08/2009	06/30/2009	
End of Comment Period	06/08/2009	09/30/2009	

- Draft NPRM published in 2011 or 2012

- Final rule in 2013+

“considering”

“studying the issues”



References

[Link to
Safety
Management
Manual](#) (first
edition)

[Link to
Safety
Management
Manual](#) (second
edition)



References



Advisory Circular

Subject: Introduction to Safety Management Systems for Air Operators

Date: 6/22/06

AC No: 120-92

Initiated by: AFS-800

1. PURPOSE.

a. This advisory circular (AC):

(1) Introduces the concept of a safety management system (SMS) to aviation service providers (for example, airlines, air taxi operators, corporate flight departments, and pilot schools).

(2) Provides guidance for SMS development by aviation service providers.

[Link to
AC 120-92](#)

References



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**
National Policy

**ORDER
8000.369**

Effective Date:
09/30/2008

SUBJ: Safety Management System Guidance

This Order provides guidance for implementation of a common Safety Management System (SMS) within the Federal Aviation Administration (FAA). Specifically, this Order:

Furtheres the practice of managing safety by moving to a more process-oriented system safety approach with an emphasis on managing systems that ensure risk management and safety assurance.

Sets forth basic management principles to guide the FAA in safety management and safety oversight activities. Requires adopting a common approach to implementing an integrated SMS, including safety culture and other attributes as applicable.

Requires the development and implementation of a plan for functions under the SMS, including, where appropriate, the structure of safety oversight relationships with the segment of industry for which it holds safety oversight responsibility.

This order immediately applies to the Aviation Safety Organization, Air Traffic Organization and Office of Airports. This order is written to allow for application to other FAA organizations as deemed appropriate by the Administrator

[Link to
8000.369](#)



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
AVS Policy**

**ORDER
VS
8000.1**

Effective Date:
08/11/2006

SUBJ: SAFETY MANAGEMENT SYSTEM DOCTRINE

SECTION 1. INTRODUCTION

1-1. PURPOSE. This order—

a. Provides a doctrine for Federal Aviation Administration (FAA) Aviation Safety (AVS) services/offices to implement a common AVS Safety Management System (AVSSMS). Specifically, this order—

(1) Furthers the practice of managing safety by moving to a more process-oriented system safety approach that stresses not only promulgation and application of technical standards but an increased emphasis on the management systems that ensure risk management and safety assurance.

(2) Sets forth basic management principles to guide AVS services/offices in their safety management and safety oversight activities, requiring them to adopt a common approach to

[Link to
8000.1](#)

References

[Link to
SMS
Assurance
Guide](#)



SAFETY MANAGEMENT SYSTEM (SMS) ASSURANCE GUIDE

For:

**Voluntary Implementation of Service Provider
SMS Programs**

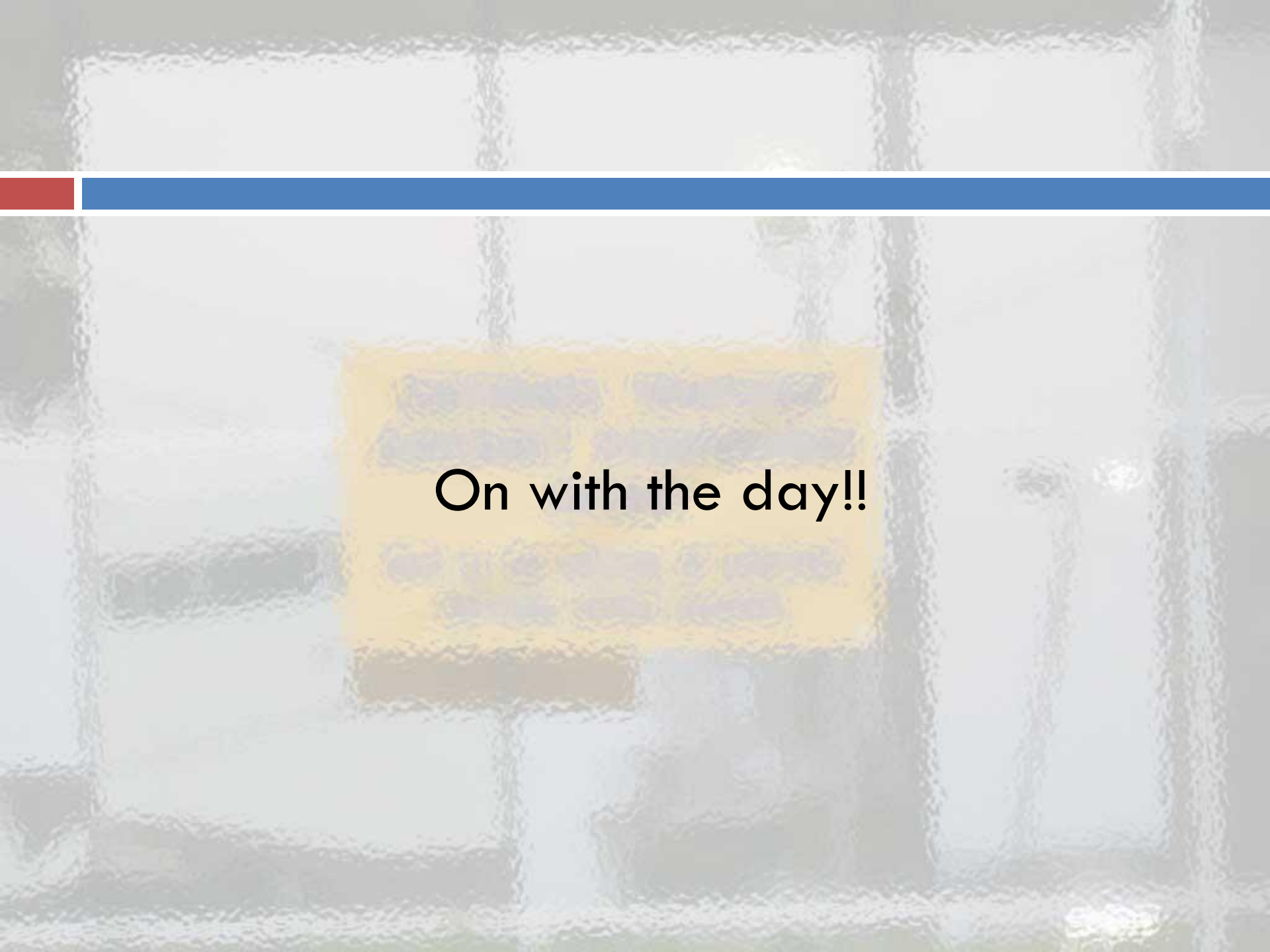
**Federal Aviation Administration
Flight Standards Service - SMS Program Office**

References



What is Today All About?

We have convened this “SMS day” to provide you with references, tools, vocabulary, and encouragement to adopt academic and laboratory curricula that gets your students ready for their careers in an SMS environment.

The background features a light gray grid pattern on a slightly textured, off-white surface. A prominent yellow rectangular highlight is centered in the middle of the page. At the top, there is a horizontal bar consisting of a small red segment on the left and a larger blue segment extending across the rest of the width.

On with the day!!