



*International Civil Aviation Organization*

NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

**Twentieth Meeting of Directors of Civil Aviation of the Eastern Caribbean  
(20<sup>th</sup> E/CAR DCA)**

Miami, Florida, United States 4 to 7 December 2006

20<sup>th</sup> E/CAR DCA-IP/05

21/11/06

**Agenda Item 3:           Air Navigation Matters**  
**3.6       Other Air Navigation issues**

**U.S. APPROACH TO SAFETY MANAGEMENT SYSTEM (SMS)  
IMPLEMENTATION AT AIRPORTS**

(Presented by the United States of America)

**SUMMARY**

The United States Federal Aviation Administration (FAA) fully endorses the ICAO initiative to implement safety management systems (SMSs) for airport operators in accordance with recently adopted amendments to Annex 14. The FAA believes the SMS requirements provide practical tools for systemic risk management. They also provide structured tools to meet requirements of existing U.S. legislation on the part of both government and service providers. To this end, the FAA is developing an airport operator SMS standard.

**1.           Introduction**

1.1           The ICAO Council adopted amendment 7 to Annex 14 requiring airport operators establish a SMS as part of the certification process in 2005. Amendment 7 became effective on 24 March 2005.

1.2           The United States enthusiastically endorsed the concept of SMSs for certificated airport operators. Work is underway to determine requirements for airport operators and to provide an architectural framework for system safety implementation.

1.3           The FAA, along with ICAO, recognizes the need for a more formal approach to safety that identifies and mitigates risks associated with changes in operations and procedures at airports. A key component of SMS is a process to formalize and document safety reviews and decisions.

1.4           Moreover, notwithstanding the FAA's responsibility to promulgate regulations and standards, progress in aviation safety can be enhanced with a more integrated, cooperative relationship. Safety management is more correctly viewed as a shared effort between government and airport operators.

## **2. Discussion**

2.1 Trends in government and airport management indicate that a structured approach to management where clear goals and requirements are set and where management processes are put in place to assure attainment of these goals is essential to continuous improvement in safety. The FAA, is in the process of implementing airport SMS. Both the agency and the airport operators recognize that this transition will not be effective through regulator actions alone. System safety must be infused into the management systems of airport operators if it is to have the desired effect on safety outcomes.

2.2 Airport certification procedures will incorporate the regulatory requirements for SMS and will comply with ICAO Annex 14 standards. FAA regulations are being amended to include SMS as part of the certification process.

2.3 The FAA, in concert with the Transportation Research Board's Airport Cooperative Research Program (ACRP), is conducting research to develop a guide for airport operators to define, establish, and implement an acceptable SMS. This research will enable smaller airport operators to meet FAA regulations and certification standards.

2.4 The FAA also intends to apply the SMS processes of safety risk management and safety assurance to its own activities. The Associate Administrator for Airports plans to infuse these processes into the processes of rulemaking, policy management, strategic planning, and targeting of oversight activities. This will not only allow better capabilities for continuous improvement, it will also improve the agency's ability to promulgate policy and guidance while applying a systems safety approach.

2.5 The FAA will issue an Advisory Circular early next year that will provide a background and introduction to SMS processes and interfaces between the operator's SMS and the FAA oversight system. An appendix to this document will deliver an SMS standard for use by certificated airport operators.

2.6 The foundation of a healthy safety culture is supported through well-designed operational procedures that are harmonized cross-functionally and then fully engrained into employee behaviors using a robust employee training program. This is clearly a responsibility of the airport management team and their policies. The safety risk management and safety assurance processes convert these policies into procedures with embedded risk controls. However, the conduct of operational activities in a safe manner rests on the shoulders of each employee as they perform technical and service-related tasks. The SMS must ensure that organizational structural elements exist to support a sound safety culture.

## **3. Conclusion**

3.1 The FAA has already begun to examine existing airport certification regulations, standards, and policies and is in the process of formulating a strategy to meet the Annex 14 standards. This work will identify any changes to existing regulations or guidance documents that may be needed for SMS implementation. As with other regulatory development, the effort will include participation of airport operators and airport associations

3.2 Starting this year, the FAA will collaborate with airport operators implementing SMS as pilot projects. The results of these concept trials will be used to refine policy and guidance for other airport operators. These trials will employ the SMS standard already developed and will be targeted toward development of implementation procedures, more detailed guidance materials, and improvements to the standard itself.

3.3 The FAA is currently studying methodologies for implementation. At present, a phased implementation is favored where the underlying functions can be implemented over a determined period of time based on the size and complexity of the airport operation.

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