NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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National Policy

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2/20/19

SUBJ: COS of Parts 121, 135, and 145 Certificate Holders' SMS/SMSVP and Revised Safety Attributes for SAS Oversight

1. Purpose of This Notice. This notice provides guidance for the Continued Operational Safety (COS) of Title 14 of the Code of Federal Regulations (14 CFR) parts 121, 135, and 145 operations. This notice includes guidance for part 121 certificate holders' Safety Management Systems (SMS) as required by 14 CFR part 5, and for parts 135 and 145 certificate holders' Safety Management System Voluntary Program (SMSVP). This notice also includes guidance for the revised Safety Attributes for all 14 CFR certificate holder oversight in the Safety Assurance System (SAS).

2. Audience. The primary audience for this notice is Flight Standards Service certificate-holding district offices (CHDO) (Flight Standards District Offices (FSDO) or certificate management offices (CMO)), International Field Offices (IFO), principal inspectors (PI), and aviation safety inspectors (ASI) assigned to certificate holders who are authorized to conduct parts 121, 135, and 145 operations. The secondary audience includes all Flight Standards divisions, branches, and offices.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators can find this notice on the Federal Aviation Administration's (FAA) website at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background. The Airline Safety and Federal Aviation Administration Extension Act of 2010 (Public Law 111-216, August 1, 2010) directed the FAA to conduct rulemaking to "… require all part 121 air carriers to implement a safety management system." Certificate holders authorized to conduct operations under part 121 are required to develop and implement an SMS that meets the requirements of part 5 and is acceptable by the Administrator by March 9, 2018.

a. SMS Methodology. Historically, Flight Standards safety oversight has focused on the effectiveness of the certificate holder's "technical processes." Typically, this would include conducting inspections on the airworthiness of an aircraft, the maintenance operations in the hangar, or crewmember operations in flight. With the implementation of an SMS, the focus needs to include not only the "technical process," but also how the certificate holder "manages

safety risks" while conducting the technical process. An important concept to understand is the application of the SMS components (Safety Policy, Safety Risk Management (SRM), Safety Assurance (SA), and Safety Promotion) into an integrated safety oversight approach. This concept brings into focus a new understanding of compliance. A certificate holder with an accepted SMS is held accountable for managing the safe execution of their technical processes and implementing specific management oversight processes (or applications) to verify technical process performance. Oversight methodology must include the review of regulatory compliance with the technical process and the assurance that hazards are identified and associated risks are mitigated to an acceptable level. This method improves the assessment of the certificate holders' safety management capabilities and performance. This approach requires a significant culture change within Flight Standards.

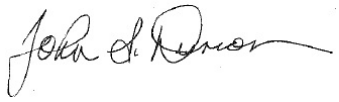
b. Application of SMSs to COS in SAS.

(1) What is an SMS? An SMS is an applied set of management best practices identified by the International Civil Aviation Organization (ICAO) that have been further refined by the FAA. An appropriately implemented SMS scopes required processes in relation to the size and complexity of the organization. Those processes do not have to be extensive with resource obligations, expensive, or sophisticated to meet specified outputs. A properly implemented SMS leverages existing certificate holder processes to satisfy SMS requirements.

(2) After an SMS is Implemented. The Certificate Management Team (CMT) must include safety management oversight in its surveillance of the certificate holder's technical process applications. If an ASI observes a safety or regulatory noncompliance issue, they must ensure the certificate holder takes appropriate corrective action to return to a state of safe operations and/or compliance. To integrate safety management requirements into SAS, each peer group's Master List of Functions (MLF) has been revised to include a new subsystem titled "Safety Management." Data Collection Tools (DCT) were modified to include a new System/Subsystem Performance (SP) DCT and associated Element Performance (EP) DCT questions. These questions not only focus on the technical process, but also include the certificate holder's SMS. Parts 121, 135, and 145 each have their own unique system/subsystem and elements based on peer group and scope of operation. For Peer Group A, part 121 certificate holders, ASIs must validate that part 5 requirements are met by the certificate holder. For parts 135 and 145 with an FAA-accepted SMS under the SMSVP, ASIs must ensure that the SMSVP standard is met, or the certificate holder is subject to losing its "Active Conformance" status under the SMSVP.

5. Explanation of Policy Changes. Appendix A provides the guidance on how to incorporate SMS oversight and the description of how SMS COS has been built into existing assessments in SAS. Appendix A also provides the revised Safety Attributes and the introduction of a new Safety Attribute, Safety Ownership.

6. Disposition. We will incorporate the information in this notice into FAA Order 8900.1, Volume 10, Safety Assurance System Policy and Procedures, before this notice expires. Direct questions or comments concerning the information in this notice to the Safety Analysis and Promotion Division (AFS-900) Continual Improvement Program Office (CIPO) at 9-AWA-AFS900@faa.gov.



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Appendix A. Continued Operational Safety of a Certificate Holder's SMS

This appendix explains how to incorporate safety management oversight into the Safety Assurance System (SAS) modules. For additional SAS information, refer to Federal Aviation Administration (FAA) Order 8900.1, Volume 10, Safety Assurance System Policy and Procedures.

1. Definitions. The following table contains definitions related to safety management and Continued Operational Safety (COS):

Continued Operational Safety (COS)	Routine recurring Performance Assessments (PA) (i.e., routine surveillance through safety inspections). Also includes certificate management, the management of major changes in operation (i.e., system configuration changes).
Safety Management System (SMS)	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.
Safety Risk Management (SRM)	A component within the SMS composed of describing the system, identifying the hazards, and analyzing, assessing, and controlling safety risk.

2. Safety Attributes. Safety Attributes define the expectations of the FAA's system safety approach to managing safety risks. The integration of these attributes in the certificate holder's process increases the reliability of process outcomes and, as a result, demonstrates that the certificate holder can effectively manage risk.

a. Safety Ownership. The Safety Attributes have been revised and expanded to include a new attribute called "Safety Ownership." The new Safety Attribute and the existing Safety Attributes incorporate new language and requirements that apply to the management of safety. The revised Safety Attributes will apply to all Data Collection Tools (DCT). To assist principal inspectors (PI) in the assessment and evaluation of a certificate holder's safety management, the DCTs include new System/Subsystem Performance (SP) DCT and Element Performance (EP) DCT questions.

b. Revised Definitions. The following table includes the enhanced Safety Attributes and their definitions:

Authority	A clearly identifiable, qualified, and knowledgeable person who has authority to effectively plan, direct, and control resources; change procedures; and make key determinations, including safety risk acceptance decisions.
Controls	Developing and maintaining the need for, and adequacy of, new or revised risk controls into a process to ensure mitigation of unacceptable risk.
Interfaces	Interactions between processes that must be managed in order to ensure the desired outcome.
Procedures	Methods or practices that include checks and restraints that are written or unwritten, regulatory or nonregulatory, designed into a process that a certificate holder/applicant uses to accomplish a desired result. Unwritten methods refer to certificate holders/applicants that are not required by regulation to have documented procedures.
Process Measurement	Monitoring and measuring the outputs and safety performance of a process, and identifying problems or potential problems, in order to take corrective action.
Responsibility	A clearly identified person that is responsible for ensuring resources (financial and human) to ensure the safety and quality performance of a process.
Safety Ownership (new)	The measure of understanding the individual has regarding how his or her performance of safety-related duties contributes to the safety performance of the element.

3. Peer Groups and Master List of Functions (MLF). Peer groups are categorized by Title 14 of the Code of Federal Regulations (14 CFR) part and operational description. Each certificate holder or applicant is placed into one or more peer groups as determined by the type of operation. The integration of safety management principles into the system safety oversight model will impact all peer group MLFs.

a. Safety Management. A new subsystem, titled "1.5 Safety Management," will contain three new elements for operations (OP) and airworthiness (AW) with SP DCTs and EP DCTs to assess the performance of those processes. Element Design (ED) DCTs have not been developed for SMS COS under subsystem 1.5 Safety Management.

b. SMSVP Acceptance. Once a 14 CFR part 135 or 145 certificate holder's SMSVP has been accepted, the SMS Program Office (SMSPO) will change the certificate holder's status from "SMSVP Active Participant" to "SMSVP Active Conformance." Once the SMSPO has notified the PI of the status change, the PI will add the SMSVP to the certificate's configuration in Module 1.

c. MLF Items. The following table shows the new MLF items listed under subsystem 1.5:

1.0 Organizational Management
1.1 Safety Programs 1.1.2 (OP) Safety Program (Ground and Flight) 1.1.3 (AW) CASS 1.1.4 (AW) Reliability Program 1.1.6 (AW) Safety Program **1.2 Operations Management** 1.2.1 (OP) Part 119 Required Personnel 1.2.2 (OP) Manual Management 1.2.3 (OP) Computer-Based Recordkeeping System **1.3 Airworthiness Management** 1.3.1 (AW) Part 119 Required Personnel 1.3.2 (AW) Manual Management 1.3.3 (AW) CASE **1.4 Repair Station Management** 1.4.1 (AW) Personnel Records 1.4.2 (AW) Certificate Requirements 1.4.3 (AW) Manuals 1.4.4 (AW) Quality Control System **1.5 Safety Management** 1.5.1 (OP/AW) Accountable Executive 1.5.2 (OP/AW) Emergency Response 1.5.3 (OP/AW) SMS Recordkeeping

d. DCTs. The SP and EP DCTs associated with the subsystem 1.5 Safety Management assessments contain all the new Safety Attribute questions, including those under "Safety Ownership." ED DCTs are not included for SMS COS with respect to subsystem 1.5. If the PI determines that an area requires a Design Assessment (DA), he or she may add an SMS Custom (C) DCT design validation, also known as a National/Regional C DCT.

4. SAS Modules.

a. Module 1, Configuration.

(1) Vitals. A "Safety Management System Voluntary Program" Vitals field has been added to Module 1. This Vitals field applies to certificate holders/applicants operating under parts 135 and 145. The "Safety Management System Voluntary Program" Vitals field is selected when a part 135 or 145 certificate holder receives FAA acceptance for their SMSVP. Once an SMSVP has received an "SMSVP Active Conformance" status from the SMSPO, the PI will select the SMSVP Vital by using the following steps:

(a) For part 135: Configuration Data > Vitals > Scheduled Operations / Maintenance and Reliability Info > Operational Management Systems > Safety Management System Voluntary Program.

(b) For part 145: Configuration Data > Vitals > Agreements and Authorizations > Safety Program > Safety Management System Voluntary Program.

Note: The assessments will autopopulate on the Comprehensive Assessment Plan (CAP) for 14 CFR part 121 certificates.

(2) Safety Risk Management (SRM). When a new system or change to current system is introduced from either an FAA-initiated change or a certificate-holder-initiated change, the PI must ensure the certificate holder's SRM is applied.

(a) SRM must be accomplished in accordance with 14 CFR part 5 subpart C and applies when:

- A certificate holder proposes implementation of new systems,
- Revision of existing systems,
- Development of operational procedures, or
- Identification of hazards or ineffective risk controls through the Safety Assurance (SA) processes.

(b) To meet this requirement, the PI can initiate a change request and select the following assessments in the Configuration Module to validate if the SRM was accomplished:

1. Create a PI C DCT using the safety management SP and/or the associated Safety Attribute EP questions; or

2. Select the Element Design Assessment (EDA) associated with the change.

(c) Select the "Disposition Request" tab and record acknowledgment of the change request, documenting that the change does not require any followup surveillance as the certificate holder has identified "No Hazard or Risk Identified." Then approve/accept request.

b. Module 2, Planning. There may be risk identified within the certificate holder's SMS. For example, the audit process is not detecting obvious nonconformities that require mitigation. If during the planning process a risk such as this is identified in the certificate holder's safety management processes, the PI should select the "Safety Management" risk indicator in the Certificate Holder Assessment Tool (CHAT).

(1) Considerations when selecting the "Safety Management" risk indicator include, but are not limited to:

- Designated safety responsibilities for management personnel;
- Conducting risk assessments before implementing new systems, revising systems/processes, or developing new procedures, or after hazards or deficiencies have been identified in a design;

- Proper identification of hazards;
- Designing and implementing risk controls;
- Internal audits, evaluations, monitoring employee reports, or investigation of operational events; and
- Safety performance of the process and the followup action.

(2) To determine a mitigation strategy, you must consider how the identified risk in the certificate holder's SMS potentially impacts the certificate holder's systems. During the selection of PI options, you should consider which subsystem(s) or element(s) are affected. Consider other interfaces such as training, personnel, and organization. The following PI options can be selected to document actions:

- Adjust priority/resource order of System or Subsystem Performance Assessment (SPA);
- Add an Element Performance Assessment (EPA) for other technical processes and determine whether the specific management system failure is systemic;
- Add C DCTs that focus on the management system process failure and select multiple subsystems or elements to assess;
- Identify a new hazard;
- Initiate a risk management process (RMP); or
- No action required.

c. Module 3, Resource Management. There are no changes for Module 3. Refer to Order 8900.1 Volume 10, Chapter 4, Resource Management, for information regarding resource management.

d. Module 4, Data Collection, Data Reporting, and Data Review. SP DCT and EP DCT questions are based on Safety Attributes.

(1) When SMS part 5 specific regulatory requirements (SRR) apply to five of the seven Safety Attributes—Responsibility, Authority, Controls, Process Measurement, and Safety Ownership—the appropriate reference will be included in each question. The Procedures and Interfaces Safety Attributes have no part 5 references. The Procedures Attribute is reserved for the technical process. The Interfaces Attribute is not impacted by SMS COS.

(2) A SMSVP is expected to meet all program requirements, which encompass the part 5 SRRs, in order to maintain FAA "Active Conformance" recognition. Failure to meet the part 5 SRRs will not result in a Compliance Action or enforcement. When a certificate holder fails to meet SMSVP standards, it becomes an SMSVP Non-Active Participant. (Refer to Order 8900.1 Volume 17, Chapter 3, Continuous Oversight of a Certificate Holder's SMS Processes.)

(a) During Data Collection, aviation safety inspectors (ASI) collect data to ensure the certificate holder's system complies with the intent of the regulations and safety standards.

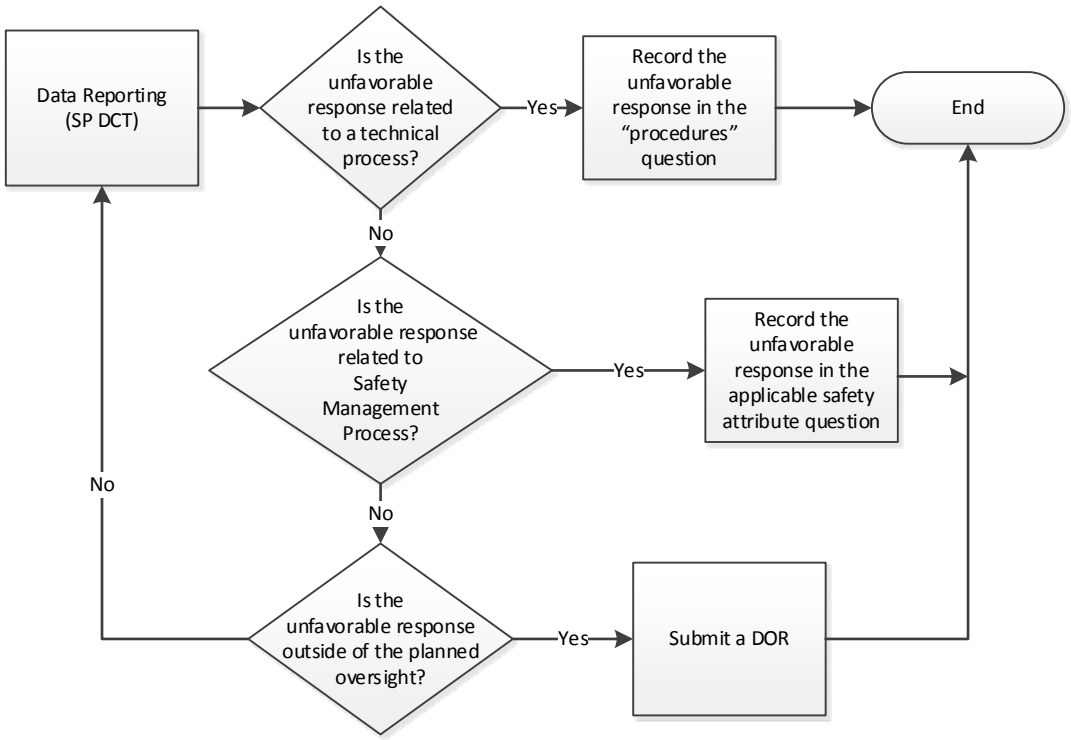
(b) During Data Reporting, explanations must be complete and descriptive so that anyone knowledgeable within the industry can understand the comment without requiring

additional information. Unfavorable responses require an explanation of the "who, what, where, and when" that caused the response. A Safety Attribute unfavorable response indicates that a process did not achieve the desired outcome. With the incorporation of safety management into the oversight process, there may be unfavorable responses for both the technical process and the safety management process.

1. Technical Processes. Technical process unfavorable responses are captured in the Procedures Attribute question, and safety management unfavorable responses are captured in one or more of the following Safety Attribute questions: Controls, Process Measures, Responsibility, and Safety Ownership. For example, if you are conducting an SP DCT 2.3 (Aircraft Equipment) and you notice that a passenger safety information briefing card is missing at an emergency exit seat, you would record your unfavorable response in the SP DCT procedures question. Next, you would determine if the management system process related to detection and correction failed. If you determine the safety management risk Control, Process Measures, Responsibility, or Safety Ownership failed, then record this information with your unfavorable response.

2. The following process chart outlines how to record safety management and technical process unfavorable responses. The certificate holder's SMS supports the ongoing reliability of the technical process. Safety management is not a standalone program, but exists to support every one of the certificate holder's technical processes. The following flowchart demonstrates how to document unfavorable responses in the technical process or the safety management:

Figure A-1. Documenting Unfavorable Responses



(c) Data Review has no changes. For information on the Data Review process, refer to 8900.1, Volume 10, Chapter 5, Section 3, Safety Assurance System: Module 4 Data Review.

e. Module 5, Analysis, Assessment, and Action (AAA). The PI will follow the procedures contained in Order 8900.1, Volume 10, Chapter 6, Section 1, Safety Assurance System: Module 5 Analysis and Assessment; and Section 2, Safety Assurance System: Module 5 Action, for this process. Throughout the surveillance process, there may be indicators regarding the effectiveness of a certificate holder's safety management process and its ability to identify safety hazards or to control and/or mitigate identified risk. If the analysis reveals risk in a certificate holder's safety management process consistent across several technical areas, then the PI should conduct the Assessment and Action in accordance with the guidance provided in this notice. Keep in mind that decisions made in Module 5 may require changes to the certificate holder's Configuration data in Module 1. For example, if the PI determines a certificate holder's safety management process is not performing as it should, then the PI may choose one or more of the following actions:

- Adjust priority/resource order of SPA;
- Add an EPA for other technical processes and determine whether the specific management system failure is systemic;
- Add C DCTs that focus on the management system process failure and select multiple subsystems or elements to assess;
- Identify a new hazard;
- Initiate an RMP; or
- No action required.

f. Other Areas Potentially Impacted.

(1) Certificate Holder Evaluation Process (CHEP). Safety management-related processes can be evaluated at an office or national level. Refer to Order 8900.1, Volume 10, Chapter 8, Certificate Holder Evaluation Process.

(2) Major Changes in Operational Authority. Refer to Order 8900.1, Volume 10, Chapter 11, Major Changes in Operational Authority.

(3) Title 14 CFR Part 121 Certification. Refer to Order 8900.1, Volume 2, Chapter 3, The Certification Process—Title 14 CFR Part 121.