



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

**ORDER
JO 1000.38**

Effective Date:
9/24/2007

SUBJ: Technical Operations Services Safety Management System (SMS) Internal Safety Assurance Program (ISAP)

This order establishes the Technical Operations Services SMS Internal Safety Assurance Program (ISAP). The ISAP provides information and guidance material to be used by Technical Operations Services to develop and implement internal safety assurance procedures. The purpose of the internal safety assurance procedures is to monitor compliance with safety standards and the SMS.

Completion of the ISAP process provides for the accountability and evidence needed to satisfy the Air Traffic Safety Oversight Organization Service (AOV) and the Air Traffic Organization (ATO) Safety Service audit of the Technical Operations Services. This directive establishes guidelines, delegates authority, and assigns responsibility to all organizations within Technical Operations Services to perform annual internal safety assurance evaluations to verify compliance to the following:

- FAA Order 1100.161, Air Traffic Safety Oversight
- FAA Order JO 1000.37, Air Traffic Organization Safety Management System
- Safety Management System Manual Version 1.1

The scope of the internal evaluations addresses the following areas as defined by FAA Order 1100.161, Chapter 4 as: Acquisition and Implementation of New Systems, Air Traffic Control Functions, Equipment and Facility Maintenance Functions, Flight Inspection, Flight Procedure Development, and Aeronautical Charting Functions.

The goal of the ISAP is to provide information to management for accurate safety-related decisions so that changes to the NAS are free from unacceptable risk. Technical Operations Services management believes that the commitment to safety is everyone's responsibility and our mission to improve safety is ongoing.

A handwritten signature in black ink, appearing to read "Steve Zaidman".

Steve Zaidman
Vice President, Technical Operations Services

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Chapter 1. General Information

100. Purpose of This Order. This document establishes the ATO Technical Operations Services Safety Management System (SMS) Internal Safety Assurance Program (ISAP). The ISAP specifies the manner by which Technical Operations Services will monitor compliance with safety standards and the Safety Management System, in accordance with FAA Order 1100.161, Air Traffic Safety Oversight, and FAA Order JO 1000.37, Air Traffic Organization Safety Management System. Existing Technical Operations Services Internal Evaluation Programs that meet the program guidance set forth in this order will be accepted as compliant per the Director's approval. This order provides the following:

- a. Descriptions of the ISAP roles and responsibilities.
- b. A detailed written description of the ISAP.
- c. Procedures to manage the ISAP and carry out the evaluation and analysis steps.
- d. Definitions of terms used in the ISAP.
- e. Guidance material, including tools, templates, and checklists available via <http://qst.tc.faa.gov/corecapabilities/smssm/isap>.

101. Audience. This order applies to all organizations within Technical Operations Services that implement SMS.

102. Where Can I Find This Order. You can find this Order on the Federal Aviation Administration (FAA) public Internet at https://employees.faa.gov/tools_resources.

103. Distribution. This order is distributed to the group level within Technical Operations Services.

104. Background. Internal evaluation is a recognized and agency-endorsed concept for increasing awareness of employees. It promotes continuous compliance with established organizational procedures, policy, directives, regulations, and best safety practices. The internal evaluation process is based on the premise that individual organizations are primarily responsible for continuously monitoring and ensuring that their policies and procedures provide for safety compliance. Internal evaluation programs have been utilized throughout the civil aviation industry as well as within Federal Government and FAA programs as a method for continuous improvement. The Internal Safety Assurance Program (ISAP) follows government and industry Best Practices. The International Civil Aviation Organization (ICAO), the Air Traffic Safety Oversight Organization Service (AOV), and the ATO Safety Service, have formally defined SMS Safety Assurance requirements for ATO implementation. These requirements address the conduct of internal audits and evaluations, and define safety data management standards. In keeping with agency use and endorsement of the internal evaluation concept, Technical Operations Services uses the Internal Safety Assurance Program (ISAP) to meet its responsibility for internal audit and evaluation requirements.

105. Scope. This order applies to the internal review and evaluation of Technical Operations Services Organizations including contracted services that process changes to the NAS in accordance with SMS requirements (FAA Order 1100.161, Air Traffic Safety Oversight, and FAA Order JO 1000.37, Air Traffic Organization Safety Management System). The Internal Safety Assurance Program should be specifically applied to those functions supporting Acquisition and Implementation of New Systems, Air Traffic Control Functions, Equipment and Facility Maintenance Functions, Flight Inspection, Flight Procedure Development, and Aeronautical Charting Functions.

106. Definitions.

Approval: The formal act of responding favorably to an evaluation activity, evaluation finding, a corrective action, and corrective action plan.

Change to the NAS: Any modification to the NAS per FAA Order JO 1000.37, Air Traffic Organization Safety Management System.

Compliance: A fulfillment of the requirements of the policy, product and procedure.

Corrective Action: The action to be taken to resolve a noncompliance.

Corrective Action Plan: The plan and schedule for resolving actions identified as a result of safety assurance findings.

Entity: An organization, program or team responsible for performing a function.

Evaluation: An activity performed to determine the existing condition of SMS compliance to safety standards.

Finding: Pertinent statements of fact. Evaluation findings emerge by a process of comparing the current state against the standards.

Initiator: The originator of an internal evaluation.

Improvement: The activity of elevating the performance of a policy, product and/or procedure.

Implementation: A set of activities performed to ensure the actual fulfillment of a standard.

Management Review: The review of internal safety assurance results performed by management.

Oversight: Regulatory supervision to verify compliance to a predefined standard.

Remedial Action: An action used to immediately address a finding that does not warrant formal corrective action.

Requirement: An essential attribute or characteristic of a policy, product and procedure that defines compliance.

Root Cause Analysis: The lowest level of cause for a given condition.

Safety Assurance: The process used to ensure safety of the NAS by evaluating compliance to safety standards and SMS requirements.

Safety Problem: A statement of concern, which addresses the impact on NAS safety.

Safety Representative: The member of the Safety Board that represents the Directorate.

Service Unit: The composite of all Directorates within an ATO line of business accountable for the FAA mission.

Special Evaluations: An evaluation requested as a result of a safety concern expressed by prime safety stakeholder(s).

107. Philosophy.

a. **Benefit.** The ISAP is designed to provide management insight regarding potential problem areas before noncompliance occurs, and allows managers sufficient time to respond in a proactive manner. The program defines the requirement and provides guidance material, including tools, templates, and checklists.

b. **Employee Involvement.** The ISAP relies on all Technical Operations Services employees to take ownership in and responsibility for the organization's commitment to safety. Technical Operations Services management believes that the commitment to safety is all-inclusive and is the responsibility of all organizations.

c. **ISO Concepts.** The International Organization for Standardization (ISO) is an organization consisting of approximately 140 countries that work together to facilitate the development and use of standards, testing, and certification in an effort to facilitate international and domestic trade. The goal of the ISAP is to be consistent with ISO 9000:2000 concepts and processes.

108. Objectives.

a. The objectives of the Technical Operations Services SMS ISAP are as follows:

(1) To perform internal evaluations to verify and validate the compliance to SMS Policy, Architecture, Promotion and Assurance.

(2) To provide information to management for accurate safety-related decisions so that changes to the NAS are free from unacceptable risk.

(3) To verify and validate the efficacy of mitigations and controls before weaknesses result in a safety problem.

(4) To establish streamlined and cost effective processes that ensure effective safety program monitoring.

(5) To apply problem-solving methods designed to identify and correct systemic SMS identified problems.

b. Enhanced Communication. In addition to identifying potential noncompliance areas, the ISAP enhances Technical Operations Services communications across the agency and provides a free flow of information between Directorates. The ISAP fosters an organizational culture that encourages learning and sharing, resulting in increased effectiveness and long-term benefits.

Chapter 2. Program Organization

200. General. This section defines the ISAP organizational infrastructure and key program functions and responsibilities. Figure 1 illustrates the interrelationships between Technical Operations Services management and the ISAP communication process.

201. Roles and Responsibilities. For the ISAP to be effective, it is essential that the highest level of management is involved in the program and fully supports the program's development. The Vice President, the Directors, the Manager of the Safety Office and the SMS Board will have the authority to resolve and take action on critical issues. Their specific roles and responsibilities with respect to the ISAP are as follows:

a. Vice President (VP) of Technical Operations Services. The Vice President of Technical Operations Services has the following role(s) and responsibilities as related to the ISAP:

- (1) Establish an ISAP in accordance with this order.
- (2) Hold the Directorates accountable to annual schedule and recording.
- (3) Provide and support the resources needed to implement and maintain an ISAP.
- (4) Review ISAP activities annually and provide Directorates with pertinent information on Safety and SMS Compliance.

b. Manager, Safety Management Group. The Manager of the Safety Management Group has the following role(s) and responsibilities as related to the ISAP:

- (1) Provides for oversight of the ISAP as delegated by the Vice President of Technical Operations Services and performs safety planning and monitoring.
- (2) Interfaces with AOV and ATO Safety Services management to resolve the result of safety assurance actions and recommendations.
- (3) Acts as the chair of the Technical Operations Services Safety Board to support the resolution of safety issues elevated through the ISAP.
- (4) Reviews annual evaluation plans and special evaluations to ensure priorities are satisfied and resources are available to support the ISAP.
- (5) Facilitates the accomplishment of annual evaluations and follow-up evaluations.
- (6) Ensures that the results of internal safety assurance evaluations are recorded and maintained in the database provided by ATO Safety Service.
- (7) Maintain awareness for internal safety assurance processes in each Directorate.

c. **Technical Operations Services Safety Board.** The Safety Board is comprised of the Safety Manager, Safety Engineer, and Safety Representatives from each Directorate who have the following roles and responsibilities:

- (1) Represent their Directorate as Safety Representative, providing guidance and support of the ISAP.
- (2) Provide the Safety Management Group with ISAP information and performance data.
- (3) Support the implementation of SMS requirements and the ISAP within the Directorate.
- (4) Discuss specific safety concerns and findings related to ISAP evaluations including actions and recommendations with the appropriate Safety Representative.
- (5) Support annual evaluation plans and follow-up or special evaluations to ensure priorities are satisfied and resources are available.
- (6) Support safety issues or program concerns within Technical Operations Services.

d. **Technical Operations Services Director.** The Director has the following roles and responsibilities regarding ISAP:

- (1) Determine the requirement for ISAP evaluations and support the allocation of resources for implementation, and continuous improvement.
- (2) Ensure that ISAP process is implemented in accordance with this order.
- (3) Encourage all employees to participate in the ISAP during evaluations of their own organization, and to participate as team members on evaluations of other organizations.
- (4) Ensure an annual ISAP evaluation is conducted of SMS activities, and results are documented, maintained, tracked and stored in a central repository.
- (5) Assure any concerns and findings related to ISAP evaluations have appropriate actions implemented in a timely matter.

e. **Internal Safety Assurance Program Evaluators.**

(1) **Qualifications.** The evaluator must have completed the SMS Safety Risk Management Operations Practitioner Training, Familiarization to ISAP, and other internal Service Unit process familiarization as required.

(2) **Roles and Responsibilities.** Evaluator duties and responsibilities are as follows:

- (a) Perform evaluations of the organizations using ISAP guidance.

- (b) Identify and record all findings or concerns, and document the evidence necessary to substantiate the finding or concern.
- (c) Document evaluation results in accordance with ISAP guidance.
- (d) Provide additional assistance, such as briefings, at the direction of the Safety Representative.

ISAP COMMUNICATION MODEL

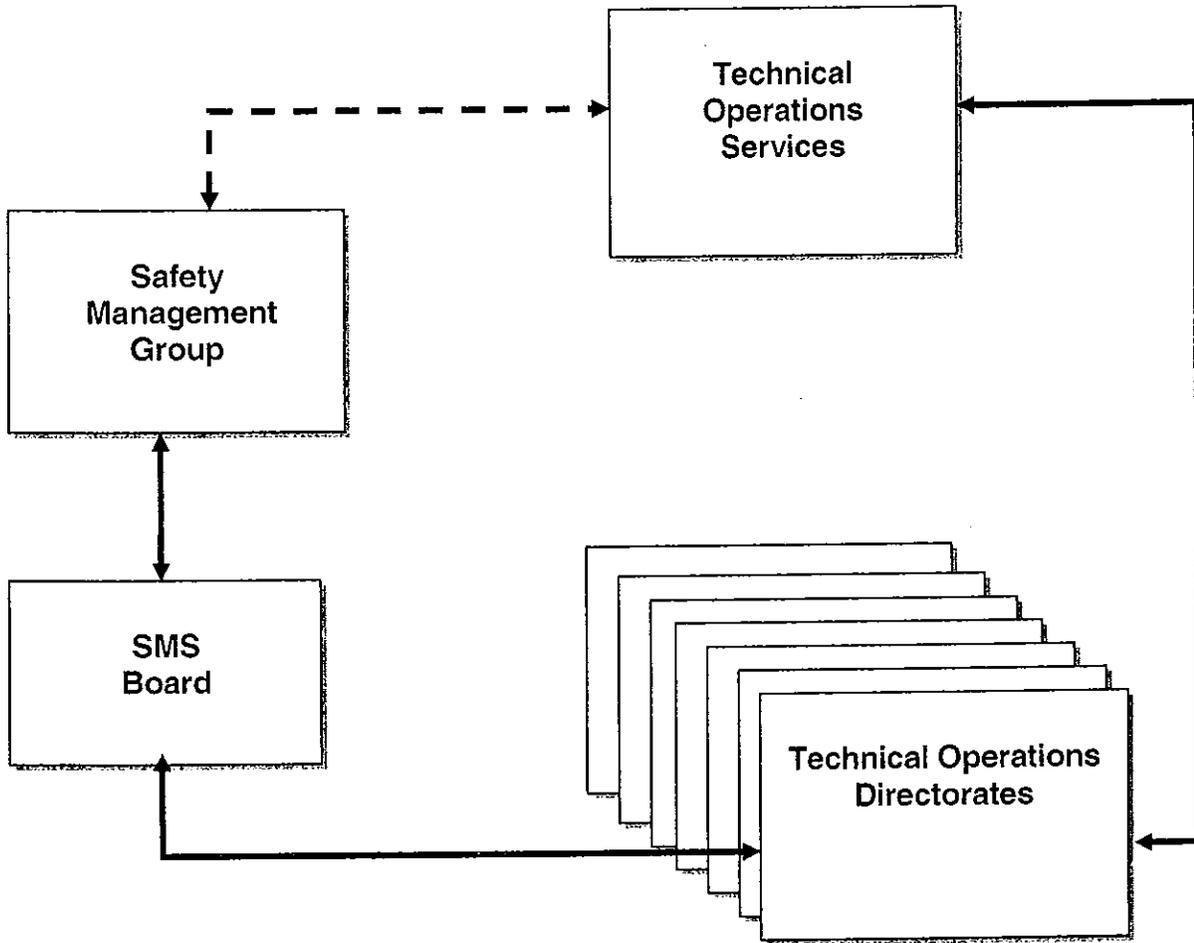


Figure 1. Internal Safety Assurance Program (ISAP) Communication Model

Chapter 3. Program Description

300. **General.** Internal evaluations are performed within the ISAP to ensure continued success and improvement. Figure 2 represents the phases for internal evaluation activities. These phases include: scheduling, planning, evaluation, reporting and analysis, and follow-up. The scope and complexity of the evaluation may require the tailoring of certain phases to meet the requirements of follow-up or special evaluations. The phases also remain consistent for the evaluation methodology that may be performed, such as SRM Document Review, Management Interview, and On-site evaluation. Guidance material is provided via <http://qst.tc.faa.gov/corecapabilities/smssrm/isap> to support the evaluation methodologies.

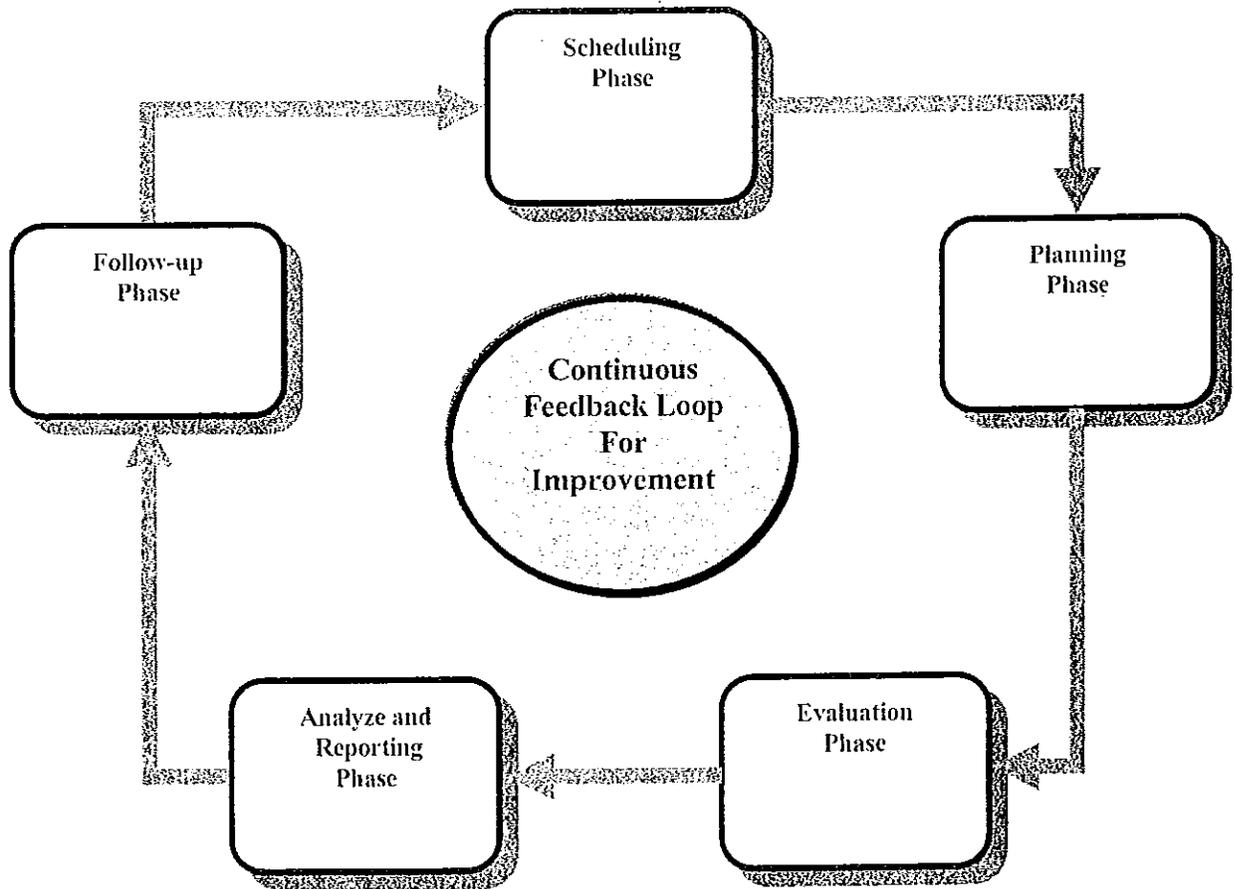


Figure 2. Internal Safety Assurance Program

301. Scheduling Phase.

a. **Schedule.** Each Directorate should develop an annual schedule in accordance with the Internal Safety Assurance Evaluation Program.

b. **Factors Considered.** The following factors are considered in the scheduling process:

- (1) Concerns or problems highlighted in previous evaluations.
- (2) FAA, AOV and/or ATO Safety Service findings.
- (3) Major NAS changes.
- (4) Organization-identified trends.
- (5) Special evaluations requested by management.

c. **Evaluations.** There are three types of evaluations: planned periodic evaluations, special evaluations and follow-up evaluations. Periodic Evaluations are required annually by ISAP. In addition to planned periodic evaluations, the ISAP must accomplish follow-up and special evaluations. Follow-up evaluations are performed to address concerns from previous evaluations. Special evaluations could result from proposed actions taken in response to concerns highlighted in periodic evaluation reports, as well as other events.

302. Planning Phase.

a. **Responsibility.** The planning phase is the responsibility of the Directorate. The planning phase includes the following steps:

- (1) Notify the organization to be evaluated.
- (2) Assign qualified (trained) evaluators to the evaluation.
- (3) Develop, coordinate and approve an evaluation plan and define the scope of evaluations.
- (4) Review and brief evaluators on the previous related findings and any major changes.

b. **Review of Established Safety Standards.** Prior to conducting an evaluation, knowledge of the primary Directorate functions are identified by conducting a thorough review of applicable guidance and requirements. Once primary functions and associated requirements are identified, they are incorporated into the evaluation checklists.

c. **Develop Evaluation Checklists.** Evaluations checklists are developed based on data gathered and are tailored to support the scope and objective of the evaluation. They address the following:

- (1) Responsibility and authority.
- (2) SMS Policy compliance.
- (3) SMS Architecture compliance.
- (4) SMS Assurance compliance.
- (5) SMS Promotion compliance.

303. Evaluation Phase.

a. **Conducting an Evaluation.** The evaluation begins with an entrance briefing. The briefing:

- (1) Explains the scope of the evaluation.
- (2) Introduces evaluation team members.
- (3) Addresses schedules for interviews.
- (4) Identifies an exit-brief date/time.

b. **Evaluation Checklists.** Each area being evaluated has checklists that provide guidance on how to perform the evaluation. Detailed information on these activities can be found in the ISAP guidance materials. The evaluation checklist provides the evaluator with the following:

- (1) The type of evaluation, e.g., Periodic, Special, or Follow-up.
- (2) Additional references related to the subject.
- (3) Specific steps to take before starting the evaluation.
- (4) Specific questions to ask during the evaluation.

c. **Documentation of Results and Exit Briefing.** The evaluator discusses initial findings with the appropriate manager. Findings should be substantiated based on the following:

- (1) The standard that the proposed finding is based on must be identified in sufficient detail, and;
- (2) Objective evidence, e.g., samples, observations, interviews, must present enough information to demonstrate how the finding is different from the requirement. Findings must be traced to requirements.

304. Analysis and Reporting Phase.

a. **Evaluation Report is generated.** Based on the findings of the evaluation, an evaluation report is generated. The report contains an explanation of the requirement and a description of the finding related to the requirement. Findings are classified as either Non Compliance

Finding (NCF), Opportunity For Improvement (OFI), or Positive Observation (POS) based on the nature of the finding and urgency required for implementing corrective action. Details on this activity are documented in the ISAP Implementation Guidelines. The manager works with the organization to determine if remedial or formal corrective action is appropriate and the time period for development of a corrective action plan.

(1) **Remedial Action.** Considered a form of corrective action, remedial action is used to address a finding that does not warrant the resource allocation required by a formal corrective action process. It is used only when the finding has little or no impact on NAS safety. The remedial action is documented in the evaluation report and logged in the corrective action database with a brief explanation and justification of the remedial action. No further corrective action resources and activities are required. Responsible parties monitor the nature of remedial actions to identify any recurring trends that might warrant a formal corrective action.

(2) **Corrective Action Plan.** The responding organization develops a corrective action plan that includes immediate actions taken and actions required to permanently resolve the problem or potential problem. Depending on the severity of the finding, these actions may include:

(a) Corrective action to eliminate the cause of a detected noncompliance to prevent its recurrence.

(b) Improvement action to eliminate the occurrence of a potential nonconformity and/or deficiency.

(c) Root Cause Analysis is performed whenever a noncompliance or major deficiency of has been identified that impacts NAS safety. The root cause determines the corrective action recommended to resolve the problem.

(3) **Directorate.** Tracks and reports actual corrective actions taken following the submission. Any disagreements regarding the finding or the adequacy of the time period allotted for correction are subject to negotiation. The responding office is expected to enter these discussions with a proposal for an alternative classification and/or time for completion.

(a) Directorate should provide an annual summary of ISAP activities to the Safety Manager. The report informs upper management of the following:

1 The number of evaluations that were performed within the Directorate.

2 The areas of interest evaluated.

3 The trends identified.

4 Corrective action status.

5 Recommendations for Improvement.

(4) **Responding Office.** The Directorate ensures that a corrective action plan is developed and returned to the initiator of the evaluation within established timeframe (usually 30 calendar days from receipt). In the event an extension is needed, an extension is properly coordinated.

305. Follow-up Phase.

a. Summary. The following process ensures timely and effective corrective action plans are developed and implemented in response to findings or concerns. The process includes methods to monitor corrective actions and measure effectiveness.

b. Schedule for Corrections. The organization's management facilitates the corrective action process by the following means:

(1) Ensure timely corrective action reports are developed in response to findings or concerns.

(2) Verify final corrective action plans.

(a) Monitor implementation and completion of corrective action plans.

(b) Measure and analyze effectiveness of corrective actions over a sustained period of time to determine effectiveness of systemic solutions.

c. Management Review. The management of the entity evaluated will review results of internal safety assurance evaluations and continuously support improvements.

Chapter 4. Records

400. Records.

a. **Record Maintenance.** The Directorate is responsible for maintaining the records that document the performance and results of an evaluation. The records are essential for analyzing and determining the root causes of findings so that potential areas of noncompliance can be identified.

b. **Filing Process.** The Directorate is responsible for maintaining evaluation records in a central repository for the lifecycle of the NAS change(s) applicable to SMS.

c. **Evaluation Work Products.** The work products consist of, but are not limited to, the following:

- (1) Scheduling documents.
- (2) Planning documents.
- (3) Completed evaluation work products.
- (4) Evaluation Findings Report.
- (5) Follow-up scheduling (if needed).
- (6) Result of the follow-up evaluations.
- (7) Corrective action status.
- (8) Applicable SRM documentation.

Chapter 5. Administrative Information

500. Related Materials.

a. FAA Orders List.

- (1) FAA Order 1100.161, Air Traffic Safety Oversight
- (2) FAA Order JO 1000.37, Air Traffic Organization Safety Management System
- (3) AVN Order VN 1800.1E, Aviation System Standards Internal Evaluation

Program

b. Guidance Materials.

Available via: <http://qst.tc.faa.gov/corecapabilities/smssrm/isap>.

- (1) Tools
- (2) Templates
- (3) Checklists

501. Contact Information for this Order.

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