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	Day 1 SMS for Av Pros	Day 2 SMS Manager	Day 3 SMS Auditor	Day 4 Safety Leader
Safety Leader Training Course Overview				
Time	SMS Principles	SMS Eval Tools	Auditing	Safety Culture
0900-0950	Intro and Accident Causation Model	SMICG SMS Eval Tool Review	ISO 19011 Principles	Safety Culture Discussion
1000-1050	Safety Policy & Objectives	SMICG SMS Eval Tool Review	Audit Process and Procedures	Safety Culture Presentation
1100-1200	Safety Risk Management	SMICG SMS Eval Tool Review	Audit Process and Procedures	Safety Culture Presentation
1300-1350	Safety Assurance	SMICG SMS Eval Tool Review	Video: NTSB Report Review	Leadership & Management
1400-1450	Safety Assurance	SMICG SMS Eval Tool Review	Root Cause Analysis	Influencing Safety Behavior
1500-1530	Safety Promotion	SMICG SMS Eval Tool Review	Accident/Incident Investigation	Leading Change
1530-1600	Review/Quiz	Review/Quiz	Review/Quiz	Review/Quiz

Day 1: Introductions and Accident Causation Model

This presentation addresses the need for SMS and how it relates to Total Quality Management, ISO 31000, *Risk Management,* and ISO 9001, *Quality Management*. The instructor provides a background of ICAO Standards and Annexes, to include Annex 19, *Safety Management,* and ICAO Doc 9859, *Safety Management Manual*. The instructor facilitates a discussion related to James Reason's accident causation model.

Day 1: Safety Policy and Objectives

The instructor reviews the ICAO requirements and facilitates discussions related to policy and how to develop SMART objectives. The discussion covers the need for a just culture to promote safety reporting as well as how managers should view human error.

Day 1: Safety Risk Management

The instructor facilitates a discussion on developing and maintaining a process to identify hazards associated with aviation products or services. The trainees learn about hazard identification techniques based on a combination of reactive and proactive methods. The instructor facilitates a discussion on developing and maintaining a process that ensures analysis, assessment and control of the safety risks associated with identified hazards. The discussion also includes techniques for predictive methods of safety data analysis.

Day 1: Safety Assurance

The instructor facilitates a discussions related to Annex 19 requirements for SMS Component 3, Safety Assurance with a focus on safety performance monitoring and measurement. The discussions include:

a) techniques related to developing and maintaining the means to verify the effectiveness of safety risk controls;

b) internal evaluation process to monitor compliance with safety regulations and the organization's own policies, processes, and procedures.

c) management of change to ensure that risk controls currently in place will continue to be effective during and after the change.

Day 1: Safety Promotion

The instructor facilitates discussions related to SMS Component 4, Safety Promotion. The discussions include:

a) Ways for the service provider to develop and maintain a safety training program that ensures that personnel are trained and competent to perform their SMS duties.

b) Ways to ensure the scope of the safety training program is appropriate to each individual's involvement in the SMS.

c) Ways to ensure the service provider develops and maintains a formal means for safety communication that:

   1) ensures personnel are aware of the SMS to a degree commensurate with their positions;

   2) conveys safety-critical information;

   3) explains why particular actions are taken to improve safety; and

   4) explains why safety procedures are introduced or changed.

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Day 2 Module: SMICG SMS Evaluation Tool

The instructor facilitates discussions related to the use of the Safety Management International Collaboration Group (SMICG) SMS Evaluation Tool. Understanding this tool is essential for Safety Managers to determine the degree to which they have implemented an effective SMS. The discussions describe how effectiveness looks in all domains. The instructor will review how to use the tool based on the published instructions within the document. For each element of the Evaluation Tool the instructor:

1. Presents the SMICG requirements, comparing and contrasting them to the basic SMS requirements by ICAO. The trainee will notice how the SMICG tool expands on the basic ICAO requirements by adding additional enhancements as described in ICAO Doc 9859 to promote and ensure best practices.

2. From step one, the instructor will highlight the enhanced requirements and lead a discussion on why these additional considerations are important.

3. The instructor will then discuss how an evaluator would score an SMS if any of the features are not present (P), suitable (S), operating (O), or effective (E). Essentially, if basic ICAO requirement is met, but SMICG element is not P, S, O then it is a minor finding. However, if P, S, and O but not E, it is an observation that leads to a recommendation. If the basic ICAO requirement is not documented and implemented, it is a major finding.

4. The "effectiveness" guidance for each SMICG element will be reviewed so the trainee understands what the desired end state should look like.

Day 3: ISO 190011 Audit Principles

During this module, the trainee reviews key audit terms and principles based of ISO 19011, *Guidelines for Auditing Management Systems*. The instructor leads discussions related to the values of integrity, fairness, confidentiality, independence, and evidence-based conclusions. The instructor leads a discussion about population sampling, along with the principles of audit scope and objectives. The instructor introduces various audit criteria which can be applied to a wide variety of organizations, each one having a focus on safety risk management.

Day 3: Audit Process and Procedures.

The six steps of the audit process are presented and discussed to include: initiating, preparing, conducting, audit report preparation, completion, and follow-up. Each step is broken down into its elements so the trainee can appreciate the amount of work involved in conducting internal or external audits. The module presents an example of the workflow for a typical SMS or Wingman audit.

Day 3: Root Cause Analysis

This module explores the various techniques of root cause analysis, to include the US Department of Energy Root Cause Analysis Guidebook. The techniques presented and discussed include: Events and Causal Factor Analysis (ECFA), Change Analysis, Barrier Analysis, 5-Whys, and the Ishikawa Fish Bone Diagram utilizing 8-Ms. Practical examples are provided and discussed, to include a Fishbone example related to a runway excursion.

Day 3: Incident/Accident Investigation

This module explores the purpose and how to investigate following an incident. It examines an OSHA incident/accident investigation guidebook and covers the essential elements to include evidence collection, interviewing witnesses and involved employees, determining and examining contributing factors. The instructor leads discussions that cover the similarities between auditing and incident/accident investigation such that they:

- Collect the facts.

- Analyze for contributing and causal factors (RCA).

- Generate findings and recommendations.

- Improve safety by implementation of improvements based on findings and recommendations.

Day 4: Safety Culture

This module explores the relationship between SMS performance and organizational culture. Trainees learn about the characteristics of a safety culture and how that relates to an organization's overall culture. Key attributes of a safety culture based on the SMICG Safety Culture Evaluation Tool are presented and discussed to include: Commitment, Justness, Information, Awareness, Adaptability, and Behavior. The instructor highlights the relationship between trust, information, and incident rates. The trainee is presented with an example of a safety culture analysis so they can understand what is involved in assessing a safety culture.

Day 4: Management Versus Leadership

This module explores the differences between the concepts of management and leadership. The trainee is reminded that successful leaders must manage and successful managers must lead. This training is a clear and refreshing reminder that anyone can be a leader and leadership is not just for those who hold higher titles. Finally, the four pillars of the SMS are reviewed which clarifies which components require leadership and which require effective management.

Day 4: Influencing Safety Behavior

The instructor facilitates discussions related to the human behavior to include:

- Emotional Intelligence
- Theory of Planned Behavior
- Decision Making Model
- Conflict Management

Day 4: Leading Change

The instructor facilitates a discussion related to leading change via the Prosci ADKAR model (https://www.prosci.com/methodology/adkar)

- Awareness of the need for change
- Desire to participate and support in the change
- Knowledge of what to do during and after the change
- Ability to realize or implement the change as required
- Reinforcement to ensure the results of a change continue