

LEVEL 1 Safety Leader: Introductory and Fundamentals of SMS

I. Introductory to the Safety Management System: Brief description of the origin of ICAO and the creation of the concept of Safety Management Systems.

1. Origin of ICAO
2. Origin of Safety Management Systems
3. Annex 6 part II
4. ICAO Doc 9859
5. AC 120-92B

II. Fundamentals of the SMS: Description of the 4 components of SMS; Safety Policy and Objectives, Safety Risk Management, Safety Assurance, and Safety Promotion, including a description of the 12 elements.

1. Safety Policy and Objectives

Management commitment and responsibility

Safety Accountabilities

Appointment of key safety personnel

Coordination of emergency response planning

SMS documentation

2. Safety Risk Management

Hazard identification

Safety risk assessment and mitigation

3. Safety Assurance

Safety performance monitoring and measurement

The management of change

Continuous improvement of the SMS

4. Safety Promotion

Training and education

Safety communication

III. SMS Tools

1. Implementation of basic SMS tools

IV. Specific SMS KSA Areas of Training

1. Understanding the Role and Responsibility of the Accountable Executive, Manager of Aviation, Safety Leader, Maintenance Manager, and other key members of the Organization; Note: A template of the roles and responsibilities can be used here to reinforce the R&R in this module. It also stresses the Continuous Improvement process of the SMS and the Safety Leaders role in promoting its advancement.
2. Understanding the Just Culture Concept; This module explores the reasoning behind a just culture and provides insight into practical ways to apply this philosophy both in writing (i.e. policy) and in actual organizational behavior (culture).
3. Running an Effective Safety Meeting; This module explores the essential and universal elements of managing productive meetings. It highlights the importance of earning the reputation of being a skilled meeting facilitator. All aspects are covered from meeting preparation, conducting the meeting, and post-meeting follow-up activities. Also covers organizing a Safety Committee and what size organization should have one and suggestions on who should be represented in the committee. The purpose of a Mission and Vision statement.
4. Safety Risk Management Principles and Process; This module explores hazard identification, risk assessment, risk tolerability, and risk mitigation. It also explores the Safety Risk Profile as the foundation of the SMS, and Safety Performance Indicators and Targets. It addresses human error and deviations, while addressing defenses that can be put in place to prevent an incident or accident. The need and methods of data collection are emphasized here.
5. Implementation of Basic SMS Tools: In this module the student learns how the SMS system is used to report safety events with tools such as the Safety Reports or Hazard Identification and Tracking Tool, Flight Risk Assessment Tool, Maintenance Risk Assessment Tool, Policy Waivers Tool, Change Management Tools, and Internal and External Audit Finding Tools.
6. Emergency Response Plan: This module covers the need for an ERP manual and reasons why it should be updated regularly. It covers the role of the Safety Manager in running an effective ERP exercise and the coordination with internal and external authorities in the event of an incident or accident.
7. Accident Investigation: This module touches on the purpose and tools for investigating an incident or accident. It reinforces the need for the ERP and how to organize the Emergency Operation Center (EOC) and who is involved. It stresses taking the department from normal operations, through a confusing, chaotic and emotional environment after an accident, and back to normal operations again.
8. Case Studies: This module concentrates on aviation accidents and discusses the human, organizational, technical, and environmental factors related to the accidents. (Accidents to be selected). The purpose of the case study is to provide the Safety Manager the organizational methods and tools to analyze the accidents and discuss root causes and present a conclusion.